



HVAC SPARE PARTS CATALOGUE



SPECIAL VEHICLES



KNORR-BREMSE

SPC30622

SIGMA
BUILT FOR THE TOUGHEST AIR CONDITIONS

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ZERO FAILURE

Zero Failure is at the core of everything we do from the engineering design, manufacturing, service, maintenance and overhauls.

This ensures maximum up time, increased productivity and Customer Confidence.

Special Vehicles are built for specific tasks and conditions, every part must be tested, trusted and maintained to perform to the highest standards in the toughest environments.

Ongoing service, maintenance and smart thinking upgrades are all part of the ongoing life cycle of achieving Zero Failure and include:

- Genuine OEM Spare Parts**
Manufactured to the original standards and specifications set by SIGMA.
- HVAC Service Kits**
Tailored spare part kits to support services. Designed to be task specific and efficient.
- Maintenance Programs**
Preventative maintenance programs built to ensure maximum efficiency and up time.
- Exchange and Overhaul**
Timely solutions for longer life and lower costs.

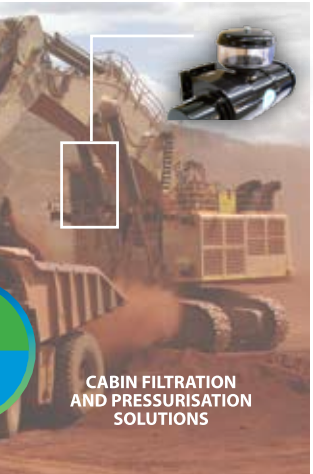
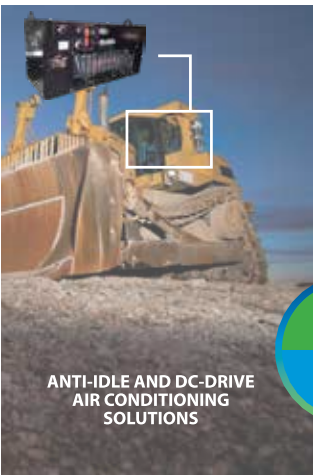
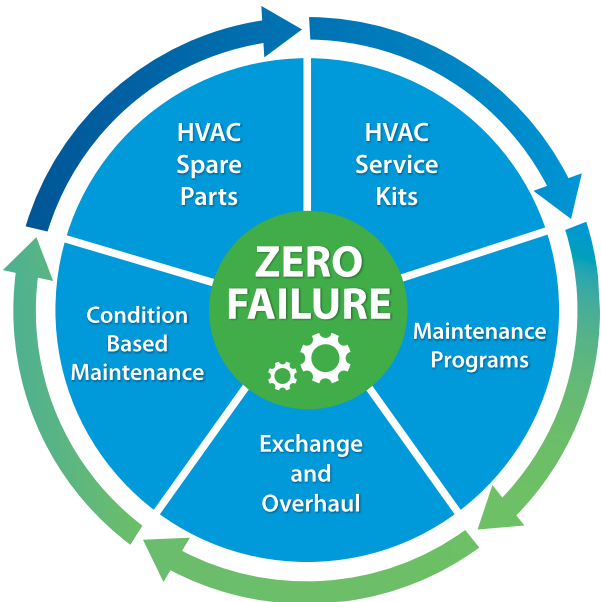
Condition Based Maintenance
Engineering efficiency and zero failure.

ZERO WASTE

Anti Idle and DC-Drive air conditioning solutions reduce fuel costs and prolong engine life and service intervals.

ZERO HARM

Cabin filtration and pressurisation solutions protect the human working space from outside forces of heat, vibration and dust.




RAIL VEHICLE SYSTEMS.

COMMERCIAL VEHICLE SYSTEMS.


The Rail Vehicle Systems division of this long established company equips mass transit and long distance rail vehicles with highly advanced products. Along with braking systems these include intelligent entrance systems, HVAC systems, auxiliary power supply systems, control components and windscreen wiper systems, platform screen doors, friction material, driver assistance systems and control technology.

The Commercial Vehicle Systems division offers braking systems for trucks, buses, trailers and agricultural machinery. Knorr-Bremse is a leading player in electronic brake controls, driver assistance systems and air supply systems, thus making an important contribution to road safety. Powertrain systems are another product area, including torsional vibration dampers for diesel engines.

Knorr-Bremse is represented across the globe. Our employees are there for you at over 100 locations.

We are where you are. Knorr-Bremse has a presence in over 30 countries around the world. Locally-based, highly qualified employees who speak the local languages and are familiar with the region's cultural conventions and country specific product requirements give Knorr-Bremse and its business partners a crucial advantage: proximity to the respective markets and customers.

RAIL VEHICLE SYSTEMS

COMMERCIAL VEHICLE SYSTEMS

MINING SYSTEMS.

INDUSTRIAL SYSTEMS.


SIGMA mining equipment is designed to the highest of industry standards to suit the harshest of mining conditions. Designed and engineered to withstand extreme ambient temperatures, punishing shock & vibration loads and dust saturated atmospheres.

The SIGMA range of industrial air conditioning equipment is specifically designed to operate in dust laden corrosive atmospheres and very high ambient temperatures of up to 75°C (185°F). Environments include aluminium smelters, refinery operated cabins, earthmoving equipment, ports, construction, cranes, switch rooms and other mobile industrial equipment.


DEFENCE SYSTEMS.

The SIGMA brand comprises a complete range of customized air conditioning equipment, with a product to suit specific defence projects and application. SIGMA offer unique equipment to suit both static and mobile applications for a specific purpose within the defence industry.


TRACK MAINTENANCE.

Drivers' comfort is an important aspect to ensure the safe operation of rolling stock networks globally. SIGMA's locomotive driver's cab air conditioning systems have been designed to operate in some of the harshest conditions both around the world and in Australia where outside temperatures reach as high as 50°C.

SIGMA Air conditioning is part of the Knorr- Bremse Group, based in Munich Germany, the world's leading provider of system solutions for rail and commercial vehicles. Sigma Air Conditioning products are designed and manufactured with over 50 years of specialised HVAC experience.








Sigma Air Conditioning is a leading global company in the development of Heavy Duty HVAC Systems for the Rail, Mining, Industrial and Defence markets and an OEM supplier to key mining brands.

Sigma Air Conditioning is an ISO9001 certified company and has extensive Research and Development facilities to ensure SIGMA's equipment delivers maximum performance, value and reliability with minimum overall life cycle cost to our customers.

MINING








EQUIPMENT GUIDE








OVERVIEW
PRESSURISERS
E SERIES
H SERIES
M SERIES
T SERIES
PILOT CONTROL BOXES
SERVICABLE PARTS
UNDERSTANDING HVAC
POLICIES

DRAGLINE	PACKAGED UNIT			PRESSURISER			
							
	MPR25MX1	MPR20MX1	MPR9MX1	EB9P4X	FPS55 (H0111417)	FVV100MR1	PVV50M2
DESCRIPTION	RECOMMENDED FOR POWER CONTROL ROOM & HIGH AMBIENT	RECOMMENDED FOR CABIN	RECOMMENDED FOR REDUNDANT SYSTEMS	HEPA OPTION WHEN USING MPR9MX1	HEPA OPTION	STANDARD WHEN USING MPR20MX1 AND MPR25MX1	HEPA UPGRADED OPTION
HVAC PAGE REFERENCE	PAGE 126	PAGE 120	PAGE 100	PAGE 30	PAGE 32	PAGE 42	PAGE 46
1570	○	○	○	○	○	○	○
2570	○	○	○	○	○	○	○
7400	○	○	○	○	○	○	○
7450	○	○	○	○	○	○	○
7500	○	○	○	○	○	○	○
7800	○	○	○	○	○	○	○
7820	○	○	○	○	○	○	○
7920	○	○	○	○	○	○	○
8050	●	●	○	○	○	●	○
8200	●	●	○	○	○	●	○
8400	○	○	○	○	○	○	○
8700	○	○	○	○	○	○	○
8750	●	●	○	○	○	●	○
1250W	○	○	○	○	○	○	○
1260W	○	○	○	○	○	○	○
1300W	●	●	○	○	○	●	○
1350W	●	●	○	○	○	●	○
1360W	○	○	○	○	○	○	○
1370W	●	●	○	○	○	●	○
1450W	○	○	○	○	○	○	○
1500W	○	○	○	○	○	○	○
195M	○	○	○	○	○	○	○
2550W	○	○	○	○	○	○	○
380W	○	○	○	○	○	○	○
480W	○	○	○	○	○	○	○
500W	○	○	○	○	○	○	○
680W	○	○	○	○	○	○	○
770B	○	○	○	○	○	○	○
W700	○	○	○	○	○	○	○

● Solution Available ○ Contact us for a custom solution








NOTE: Some of the Sigma HVAC models listed against each of the Original Equipment Manufacturers may be Sigma Original design or an Aftermarket option. Some additional parts may be required for installation. Please consult with the Sigma Technical Sales team to confirm HVAC selection and suitability. Contact details can be found on the back of this catalogue.









SHOVEL	PACKAGED UNIT			PRESSURISER			
							
	MPR25MX1	MPR20MX1	MPR9MX1	EB9P4X	FPS55 (H0111417)	FVV100MR1	PVV50M2
DESCRIPTION	RECOMMENDED FOR POWER CONTROL ROOM & HIGH AMBIENT	RECOMMENDED FOR CABIN	RECOMMENDED FOR REDUNDANT SYSTEMS	HEPA OPTION WHEN USING MPR9MX1	HEPA OPTION	HEPA OPTION WHEN USING MPR20MX1 AND MPR25MX1	HEPA UPGRADED OPTION
HVAC PAGE REFERENCE	PAGE 126	PAGE 120	PAGE 100	PAGE 30	PAGE 32	PAGE 42	PAGE 46
150B	○	○	○	○	○	○	○
181M	○	○	○	○	○	○	○
190B	○	○	○	○	○	○	○
191M	○	○	○	○	○	○	○
195B	○	○	○	○	○	○	○
201M	○	○	○	○	○	○	○
295B	○	○	○	○	○	○	○
295HR	○	○	○	○	○	○	○
301M	○	○	○	○	○	○	○
351M	○	○	○	○	○	○	○
395B	●	●	○	○	○	●	○
395HR	●	●	●	●	○	●	●
495B	●	●	●	●	○	●	●
495HD	●	●	●	●	○	●	●
495HF	●	●	●	●	○	●	●
495HR	●	●	●	●	○	●	●
595B	○	○	○	○	○	○	○
7295	○	○	○	○	○	○	○
7495	●	●	●	●	○	●	●








DRILL	PACKAGED UNIT				EVAPORATOR		
							
	RECOMMENDED FOR ELECTRIC DRILL	RECOMMENDED FOR DIESEL DRILL	RECOMMENDED FOR DIESEL DRILL	RECOMMENDED FOR DIESEL DRILL	RECOMMENDED FOR DIESEL DRILL WITH ENGINE HOT WATER HEATING	RECOMMENDED FOR ELECTRIC DRILL WITH HEATING	RECOMMENDED FOR DIESEL DRILL WITH ENGINE HOT WATER HEATING
HVAC PAGE REFERENCE	PAGE 100	PAGE 156	PAGE 156	PAGE 150	PAGE 166	PAGE 166	PAGE 174
35	○	○	○	○	○	○	○
37HR	○	○	○	○	○	○	○
39	○	○	○	○	○	○	○
45R	○	○	○	○	○	○	○
47R	○	○	○	○	○	○	○
49R	○	○	○	○	○	○	○
50R	○	○	○	○	○	○	○
59	○	○	○	○	○	○	○
60R	○	○	○	○	○	○	○
61R	○	○	○	○	○	○	○
MD6240 (SKFX)	○	●	●	○	○	○	○
MD6290 (SKF)	○	●	●	○	○	○	○
MD6420	○	●	●	○	○	○	○
MD6540	○	○	○	○	○	○	○
MD6640 (49HR)	○	○	○	○	○	○	○
MD6750	○	○	○	○	○	○	○
SK25	○	○	○	○	○	○	○
SK35	○	○	○	○	○	○	○
SK40	○	○	○	○	○	○	○
SK45I	○	○	○	○	○	○	○
SK50	○	○	○	○	○	○	○
SK60	○	○	○	○	○	○	○
SK75	○	○	○	○	○	○	○
SKF (MD6290)	○	○	○	○	●	○	●
SKF-11	○	○	○	○	●	○	●
SKF-11.5	○	○	○	○	●	○	●
SKF-12	○	○	○	○	●	○	●
SKF-15	○	○	○	○	●	○	●
SKS-12	○	○	○	○	●	○	●
SKS-15	○	○	○	○	●	○	●
SKS-16	○	○	○	○	●	○	●
SKSS	○	●	●	○	●	○	●
SKSS-12	○	○	○	○	●	○	●
SKSS-13	○	○	○	○	●	○	●
SKSS-15	○	○	○	○	●	○	●
SKSS-16	○	●	●	○	●	○	●
SKS-W	○	●	●	○	●	○	●
SKT	○	○	○	○	○	○	○







● Solution Available ○ Contact us for a custom solution

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DRILL	CONDENSER		PRESSURISER				COMPRESSOR
							
	RECOMMENDED FOR DIESEL DRILL	RECOMMENDED FOR DIESEL DRILL	HEPA OPTION FOR MPR9MX1, TFR7BX2	STANDARD FOR TDR7BX2	RECOMMENDED FOR DIESEL DRILL WITH ENGINE HOT WATER HEATING	HEPA UPGRADED OPTION DC LOW VOLTAGE	ENHANCED INSTALL AND PERFORMANCE
HVAC PAGE REFERENCE	PAGE 146	PAGE 144	PAGE 30	PAGE 36	PAGE 44	PAGE 46	PAGE 82
35	○	○	○	○	○	○	○
37HR	○	○	○	○	○	○	○
39	○	○	○	○	○	○	○
45R	○	○	○	○	○	○	○
47R	○	○	○	○	○	○	○
49R	○	○	○	○	○	○	○
50R	○	○	○	○	○	○	○
59	○	○	○	○	○	○	○
60R	○	○	○	○	○	○	○
61R	○	○	○	○	○	○	○
MD6240 (SKFX)	○	○	●	○	○	○	○
MD6290 (SKF)	○	○	●	○	○	○	○
MD6420	○	○	●	○	○	○	○
MD6540	○	○	○	○	○	○	○
MD6640 (49HR)	○	○	○	○	○	○	○
MD6750	○	○	○	○	○	○	○
SK25	○	○	○	○	○	○	○
SK35	○	○	○	○	○	○	○
SK40	○	○	○	○	○	○	○
SK45I	○	○	○	○	○	○	○
SK50	○	○	○	○	○	○	○
SK60	○	○	○	○	○	○	○
SK75	○	○	○	○	○	○	○
SKF (MD6290)	○	○	○	○	○	○	○
SKF-11	●	●	●	○	○	○	○
SKF-11.5	●	●	●	○	○	○	○
SKF-12	●	●	●	○	○	○	○
SKF-15	●	●	●	○	○	○	○
SKS-12	●	●	●	○	○	○	○
SKS-15	●	●	●	○	○	○	○
SKS-16	●	●	●	○	○	○	○
SKSS	●	●	●	○	○	○	○
SKSS-12	●	●	●	○	○	○	○
SKSS-13	●	●	●	○	○	○	○
SKSS-15	●	●	●	○	○	○	○
SKSS-16	●	●	●	○	○	○	○
SKS-W	●	●	●	○	○	○	○
SKT	○	○	○	○	○	○	○






		EVAPORATOR		CONDENSER	PRESSURISER			COMPRESSOR
HYDRAULIC EXCAVATOR								
	DESCRIPTION	STANDARD WITH ENGINE HOT WATER HEATING	COLD CLIMATE OPTION WITH ELECTRIC HEATING	STANDARD REFITMENT	HEPA OPTION	HEPA OPTION	HEPA OPTION	ENHANCED INSTALL AND PERFORMANCE
HYDRAULIC EXCAVATOR	HVAC PAGE REFERENCE	PAGE 166	PAGE 166	PAGE 146	PAGE 30	PAGE 32	PAGE 44	PAGE 82
	6030	●	●	●	○	○	●	○
	6040	●	●	●	○	○	●	○
	6050	●	●	●	○	○	●	○
	6060	●	●	●	○	○	●	●
	6090	●	●	●	○	○	●	●
	RH90C	○	○	○	○	○	○	○
	RH120	●	●	●	○	○	●	○
	RH170	●	●	●	○	○	●	○
	RH200	●	●	●	○	○	●	●
	RH340	●	●	●	○	○	●	●
	RH400	●	●	●	○	○	●	●

		EVAPORATOR		PRESSURISER			
DOZER							
	DESCRIPTION	COOLING AND HEATING	COOLING AND HEATING	HEPA OPTION WITH TFR7BX2	STANDARD WITH TFR6BX3	HEPA OPTION	HEPA OPTION
DOZER	HVAC PAGE REFERENCE	PAGE 174	PAGE 172	PAGE 30	PAGE 36	PAGE 32	PAGE 44
	690	○	○	●	○	○	○
	790G	○	○	○	○	○	○
	834H	○	○	●	○	○	○
	844K	○	○	●	○	○	○
	854G	○	○	●	○	○	○
	854K	○	○	●	○	○	○
	D8	○	○	●	○	○	●
	D9	○	○	●	○	○	●
	D10	○	○	●	○	○	●
	D11	○	○	●	○	○	●

		EVAPORATOR	CONDENSER	PRESSURISER		
WHEEL LOADER						
	DESCRIPTION	COOLING AND HEATING	STANDARD REFITMENT	HEPA OPTION WITH TFR7BX2	HEPA OPTION	HEPA OPTION
WHEEL LOADER	HVAC PAGE REFERENCE	PAGE 174	PAGE 144	PAGE 30	PAGE 32	PAGE 44
	992	○	○	●	○	●
	994	○	○	●	○	●
	993K	○	○	●	○	●
	994K	○	○	●	○	●

		EVAPORATOR		CONDENSER	PRESSURISER		
TRUCK							
	DESCRIPTION	COOLING AND HEATING	INTERNAL EVAPORATOR	STANDARD REFITMENT	HEPA OPTION FOR TFR7BX2	HEPA OPTION	HEPA OPTION
TRUCK	HVAC PAGE REFERENCE	PAGE 174	PAGE 70	PAGE 144	PAGE 30	PAGE 32	PAGE 44
	776	○	○	○	●	○	○
	777	○	○	○	●	○	○
	784	○	○	○	●	○	○
	785	○	○	○	●	○	○
	788	○	○	○	○	○	○
	789	○	○	○	●	○	○
	793	○	○	○	●	○	○
	794	○	○	○	○	○	○
	797	○	○	○	●	○	○
	795F AC	○	○	○	○	○	○
	BD180	○	○	○	○	○	○
	BD240	○	○	○	○	○	○
	BD270	○	○	○	○	○	○
	M100	○	○	○	○	○	○
	MK24	○	○	○	○	○	○
	MK36	○	○	○	○	○	○
	MT3000	○	○	○	○	○	○
	MT3600	○	○	○	●	○	●
	MT3700	○	○	○	●	○	●
	MT4000	○	○	○	○	○	○
	MT4400	○	○	○	●	○	●
	MT5300D AC	○	○	○	○	○	○
	MT5500	○	○	○	○	○	○
	MT6300AC	○	○	○	●	○	●







EPIROC (ATLAS COPCO)









DRILL	PACKAGED UNIT		EVAPORATOR			
						
	TDR10BX2	TDR7BX2	TFR7BX2	TFC8BX1	TFC6BX1	
DESCRIPTION	RECOMMENDED FOR DIESEL DRILL	RECOMMENDED FOR DIESEL DRILL	COOLING AND HEATING	RECOMMENDED FOR DIESEL DRILL WITH ENGINE HOT WATER HEATING	CEILING MOUNT COOL / HEAT	
HVAC PAGE REFERENCE	PAGE 156	PAGE 152	PAGE 174	PAGE 166	PAGE 162	
DM25	○	●	○	○	○	
DM30	○	○	○	○	○	
DM45	○	●	○	○	○	
DM50	○	○	○	○	○	
DMH	○	●	○	○	○	
DML	○	●	●	○	○	
DMM	○	●	●	○	●	
PV235	○	○	○	○	○	
PV270	○	○	○	○	○	
PV271	○	○	○	○	○	
PV275	○	○	○	○	○	
PV316	○	○	○	○	○	
PV351E	○	○	○	○	○	

● Solution Available ○ Contact us for a custom solution

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EPIROC (ATLAS COPCO)









DRILL	CONDENSER		PRESSURISER			
						
	TCF8BX2	TCF7BX2	EB9P4X	FVV50B4	FPS55 (H0111417)	PVV50B2
DESCRIPTION	STANDARD REFITMENT	STANDARD REFITMENT	HEPA OPTION FOR TFR7BX2	STANDARD WITH TDR7BX2	HEPA OPTION	HEPA OPTION
HVAC PAGE REFERENCE	PAGE 146	PAGE 144	PAGE 30	PAGE 36	PAGE 32	PAGE 44
DM25	○	○	●	○	○	○
DM30	○	○	○	○	○	○
DM45	○	○	●	○	○	○
DM50	○	○	○	○	○	○
DMH	○	○	○	●	○	○
DML	○	○	●	●	○	○
DMM	●	●	●	●	○	○
PV235	○	○	○	○	○	○
PV270	○	○	○	○	○	○
PV271	○	○	○	○	○	○
PV275	○	○	○	○	○	○
PV316	○	○	○	○	○	○
PV351E	○	○	○	○	○	○










		EVAPORATOR		CONDENSER		PRESSURISER		
 EXCAVATOR								
DESCRIPTION		WITH SOLENOID VALVE FRONT MOUNTED	WITH SOLENOID VALVE REAR MOUNTED	CAPTIVE O-RING	STANDARD O-RING	HEPA OPTION	HEPA OPTION	HEPA OPTION
HYDRAULIC EXCAVATOR	HVAC PAGE REFERENCE	PAGE 170	PAGE 170	PAGE 150	PAGE 150	PAGE 30	PAGE 32	PAGE 44
	EX1800	●	●	●	●	●	○	○
	EX1900	●	●	●	●	●	○	○
	EX2500	●	●	●	●	●	○	○
	EX2600	●	●	●	●	●	○	○
	EX3500	●	●	●	●	●	○	○
	EX3600	●	●	●	●	●	○	○
	EX5500	●	●	●	●	●	○	○
	EX5600	●	●	●	●	●	○	○
	EX8000	●	●	●	●	●	○	○

































































































● Solution Available ○ Contact us for a custom solution







NOTE: Some of the Sigma HVAC models listed against each of the Original Equipment Manufacturers may be Sigma Original design or an Aftermarket option. Some additional parts may be required for installation. Please consult with the Sigma Technical Sales team to confirm HVAC selection and suitability. Contact details can be found on the back of this catalogue.






		EVAPORATOR	CONDENSER		PRESSURISER		
 TRUCK							
DESCRIPTION		INTERNAL EVAPORATOR COOL / HEAT	CAPTIVE O-RING	STANDARD O-RING	HEPA OPTION	HEPA OPTION	HEPA OPTION
TRUCK	HVAC PAGE REFERENCE	PAGE 70	PAGE 150	PAGE 150	PAGE 30	PAGE 32	PAGE 44
	CH120	○	○	○	○	○	○
	CH145	○	○	○	○	○	○
	EH1600	○	○	○	○	○	○
	EH1700	○	○	○	●	○	○
	EH1700-3	○	○	○	●	○	○
	EH3000	○	○	○	●	○	○
	EH3500	○	○	○	●	○	○
	EH3500AC-3	○	○	○	●	○	○
	EH3500ACII	○	○	○	●	○	○
	EH4000	○	○	○	●	○	○
	EH4000AC-3	○	○	○	●	○	○
	EH4000ACII	○	○	○	●	○	○
	EH4500	○	○	○	●	○	○
	EH4500-2	○	○	○	●	○	○
	EH5000	○	○	○	●	○	○
	EH5000AC-3	○	○	○	●	○	○
	EH5000ACII	○	○	○	●	○	○
	R130	○	○	○	○	○	○
	R170	○	○	○	○	○	○
	R190	○	○	○	○	○	○
	R90C	○	○	○	○	○	○







	PACKAGED UNIT			PRESSURISER					
DRAGLINE									
	MPR25MX1	MPR20MX1	MPR9MX1	EB9P4X	FVV100MR1	FPS55 (H0111417)	FPS955 (H0111418)	PVV50M2	
DESCRIPTION	RECOMMENDED FOR POWER CONTROL ROOM AND HIGH AMBIENT	RECOMMENDED FOR CABIN	RECOMMENDED FOR REDUNDANT SYSTEMS	HEPA OPTION WITH MPR9MX1	HEPA OPTION WHEN USING MPR20MX1 AND MPR25MX1	HEPA OPTION	HEPA OPTION	HEPA OPTION	
DRAGLINE	HVAC PAGE REFERENCE	PAGE 126	PAGE 120	PAGE 100	PAGE 30	PAGE 42	PAGE 32	PAGE 34	PAGE 46
	752	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	757	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	2355	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
	9020	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>







		PACKAGED UNIT			PRESSURISER				
ELECTRIC SHOVEL	 SHOVEL	 MPR25MX1	 MPR20MX1	 MPR9MX1	 EB9P4X	 FVV100MR1	 FPS55 (H0111417)	 FPS955 (H0111418)	 PVV50M2
	DESCRIPTION	RECOMMENDED FOR POWER CONTROL ROOM AND HIGH AMBIENT	RECOMMENDED FOR CABIN	RECOMMENDED FOR REDUNDANT SYSTEMS	HEPA OPTION WITH MPR9MX1	HEPA OPTION WHEN USING MPR20MX1 AND MPR25MX	HEPA OPTION	HEPA OPTION	HEPA OPTION
	HVAC PAGE REFERENCE	PAGE 126	PAGE 120	PAGE 100	PAGE 30	PAGE 42	PAGE 32	PAGE 34	PAGE 46
	1900	○	○	○	○	○	○	○	○
	2100	○	○	○	○	○	○	○	○
	4100	●	●	○	○	●	○	●	●
	2300XP	○	○	○	○	○	○	○	○
	2800XP	●	●	●	●	●	○	○	○











	EVAPORATOR	CONDENSER	PRESSURISER			
 EXCAVATOR	 TFR7BX2	 TCF7BX2	 EB9P4X	 FPS55 (H0111417)	 PVV50M2	
DESCRIPTION	COOLING AND HEATING	STANDARD REFITMENT	HEPA OPTION FOR TFR7BX2	HEPA OPTION	HEPA OPTION	
HYDRAULIC EXCAVATOR	HVAC PAGE REFERENCE	PAGE 174	PAGE 144	PAGE 30	PAGE 32	PAGE 46
	1550					
	2250A					
	H185					
	H241					
	H255					
	H285					
	H455					
	H485					
	H655S					
	H685S					
	PC1600SP					
	PC1800					
	PC2000					
	PC3000					
	PC4000					
	PC5500					
	PC7000					
	PC8000					

	EVAPORATOR		CONDENSER		PRESSURISER	
 TRUCK	 EC12I4	 EFF4BX1	 EC22C	 TDR7BX2	 EB9P4X	 PVV50B2
DESCRIPTION	INTERNAL WALL EVAPORATOR 24V COOL / HEAT	INTERNAL EVAPORATOR COOL / HEAT	LIGHT DUTY CONDENSER 24VDC	ROOF MOUNT COOL / HEAT	HEPA OPTION	HEPA OPTION
HVAC PAGE REFERENCE	PAGE 60	PAGE 70	PAGE 62	PAGE 152	PAGE 30	PAGE 44
120	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
150CT	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
170	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
325M	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
330M	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
445E	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
510E	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
530M	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
630E	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
685E	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
730E	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
830E	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
930E	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
960E	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
980E	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
HD1500	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
HD785	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
HD985	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>








	EVAPORATOR		CONDENSER	PRESSURISER		
DOZER	 EC12I4	 TFR7BX2	 TCF7BX2	 EB9P4X	 PVV50B2	
DESCRIPTION	INTERNAL WALL EVAPORATOR 24V COOL / HEAT	COOLING AND HEATING	STANDARD REFITMENT	HEPA OPTION	HEPA OPTION	
DOZER	HVAC PAGE REFERENCE	PAGE 60	PAGE 174	PAGE 144	PAGE 30	PAGE 44
	D355A	○	○	○	○	○
	D375A	○	●	○	●	○
	D455A	○	○	○	○	○
	D475A	○	●	○	●	○
	D575A	○	●	○	●	○
	D950	○	○	○	○	○
	TD40	○	○	○	○	○
	WD600-1A	○	●	●	●	○
	WD900	○	●	●	●	○
WD900	○	●	●	●	○	

	EVAPORATOR	CONDENSER	PRESSURISER			
 WHEEL LOADER	 TFR7BX2	 TCF7BX2	 EB9P4X	 FPS55 (H0111417)	 PVV50B2	
DESCRIPTION	COOLING AND HEATING	STANDARD REFITMENT	HEPA OPTION FOR TFR7BX2	HEPA OPTION	HEPA OPTION	
WHEEL LOADER	HVAC PAGE REFERENCE	PAGE 174	PAGE 144	PAGE 30	PAGE 32	PAGE 44
	L1000	○	○	○	○	○
	L1100	○	○	○	○	○
	L1150	○	○	○	○	○
	L1350	○	○	○	○	○
	L1400	○	○	○	○	○
	L1800	○	○	○	○	○
	L1850	○	○	○	○	○
	L2350	○	○	○	○	○
	L950	○	○	○	○	○
	WA1200	●	●	●	○	●
	WA800	●	●	●	○	●
	WA900	●	●	●	○	●

		EVAPORATOR	CONDENSER	PRESSURISER		
TRUCK	 TRUCK	 TFR7BX2	 AU1102401	 EB9P4X	 FPS55 (H0111417)	 PVV50B2
	DESCRIPTION	COOLING AND HEATING	RADIATOR MOUNTED CONDENSER	HEPA OPTION FOR TFR7BX2	HEPA OPTION	HEPA OPTION
	HVAC PAGE REFERENCE	PAGE 170		PAGE 30	PAGE 32	PAGE 44
	T252	○	○	○	○	○
	T262	○	○	○	○	○
	T282	●	●	●	○	○
	T282B	●	●	●	○	○
	T282C	●	●	●	○	○
	T284	○	○	○	○	○

		PACKAGE UNIT			EVAPORATOR	CONDENSER	PRESSURISER			
DRILL	 DRILL	 TDR10BX2	 TDR7BX2	 HPR6BX1	 TFC6BX2	 TCF6BX2	 EB9P4X	 FVV50B3	 FPS55 (H0111417)	 PVV50B2
	DESCRIPTION	ROOF MOUNT COOL / HEAT	ROOF MOUNT COOL / HEAT	ROOF MOUNT COOL / HEAT	CEILING MOUNT COOL / HEAT	24VDC CONDENSER	HEPA OPTION	HEPA OPTION FOR TDR7BX2	HEPA OPTION	HEPA OPTION
	HVAC PAGE REFERENCE	PAGE 158	PAGE 152		PAGE 164	PAGE 142	PAGE 30	PAGE 36	PAGE 32	PAGE 44
	1190E	○	○	○	○	○	○	○	○	○
	C40K	○	○	○	○	○	○	○	○	○
	C55SP	○	○	○	○	○	○	○	○	○
DRILL	C75K	○	○	○	○	○	○	○	○	○
	D245KS	○	○	○	○	○	○	○	○	○
	D25KS	○	●	○	○	○	●	●	○	○
	D40K	○	●	○	○	○	●	●	○	○
	D45K	○	●	○	○	○	●	●	○	○
	D50	○	●	○	○	○	●	●	○	○
	D55SP	○	●	○	○	○	●	●	○	○
	D60	○	●	○	○	○	●	●	○	○
	D75	○	●	○	○	○	●	●	○	○
	D80K	○	●	○	○	○	●	●	○	○
	D90K	○	●	○	○	○	●	●	○	○
	DR460	○	●	○	○	○	●	●	○	○
	DR410i	○	○	○	●	●	●	○	○	○
	DR412i	○	○	○	●	●	●	○	○	○
	DR416i	○	○	○	●	●	●	○	○	○





TEREX


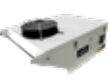




		EVAPORATOR			CONDENSER	PRESSURISER	
CRANE							
	DESCRIPTION	UNIT EB9E 24V 134A COOL / HEAT	ROOF EVAPORATOR UNIT COOL ONLY	EVAPORATOR WALL MOUNTED 24VDC COOL / HEAT	RADIATOR MOUNTED CONDENSER	INTERNAL EVAPORATOR COOL / HEAT	HEPA OPTION
	HVAC PAGE REFERENCE	PAGE 52	PAGE 74	PAGE 72		PAGE 70	PAGE 30
	AT15	●	○	○	●	○	●
	AT22	●	○	○	●	○	●
CRANE	MAC25	○	●	○	●	●	●
	AT40	○	○	●	●	○	●

BIS

		EVAPORATOR		CONDENSER		PRESSURISER
TRUCK						
	DESCRIPTION	ROOF EVAPORATOR UNIT COOL ONLY	EVAPORATOR WALL MOUNTED 24VDC COOL / HEAT	LIGHT DUTY CONDENSER 24VDC	RADIATOR MOUNTED CONDENSER	HEPA OPTION
	HVAC PAGE REFERENCE	PAGE 74	PAGE 72	PAGE 62		PAGE 30
TRUCK	REXX	●	●	●	●	●

OMEGA

		EVAPORATOR		CONDENSER
REACH STACKER				
	DESCRIPTION	INTERNAL WALL EVAPORATOR 24V COOL / HEAT	INTERNAL WALL EVAPORATOR 24V COOL / HEAT	WALL MOUNTED CONDENSER
	HVAC PAGE REFERENCE			PAGE 628
REACH STACKER	RS65	●	●	●

			EVAPORATOR			CONDENSER
FORKLIFT TRUCK						
	DESCRIPTION	ROOFTOP PACKAGED HVAC 4.5KW 24V	INTERNAL WALL EVAPORATOR 24V COOL / HEAT WITH SWITCHES	INTERNAL WALL EVAPORATOR 24V COOL / HEAT	INTERNAL WALL EVAPORATOR 24V COOL / HEAT	WALL MOUNTED CONDENSER
	HVAC PAGE REFERENCE	PAGE 76				PAGE 68
FORKLIFT TRUCK	14-16T	●	○	○	○	●
	16-12T	●	●	●	○	●
	28-36D	○	●	●	●	●
	42-54E	○	○	●	●	●
	ECH	○	○	●	●	●

PRESSURISERS

Developed for environments containing gaseous or fibrous contaminants, the filter/pressuriser systems contain upto five (5) stages of filtration. The first two (2) stages of filtration efficiently remove sub-micron particulate from outside air, following by stage 3 customised filtration media to remove the specific gaseous or fibrous contaminant and finally stage 5 HEPA filtration.



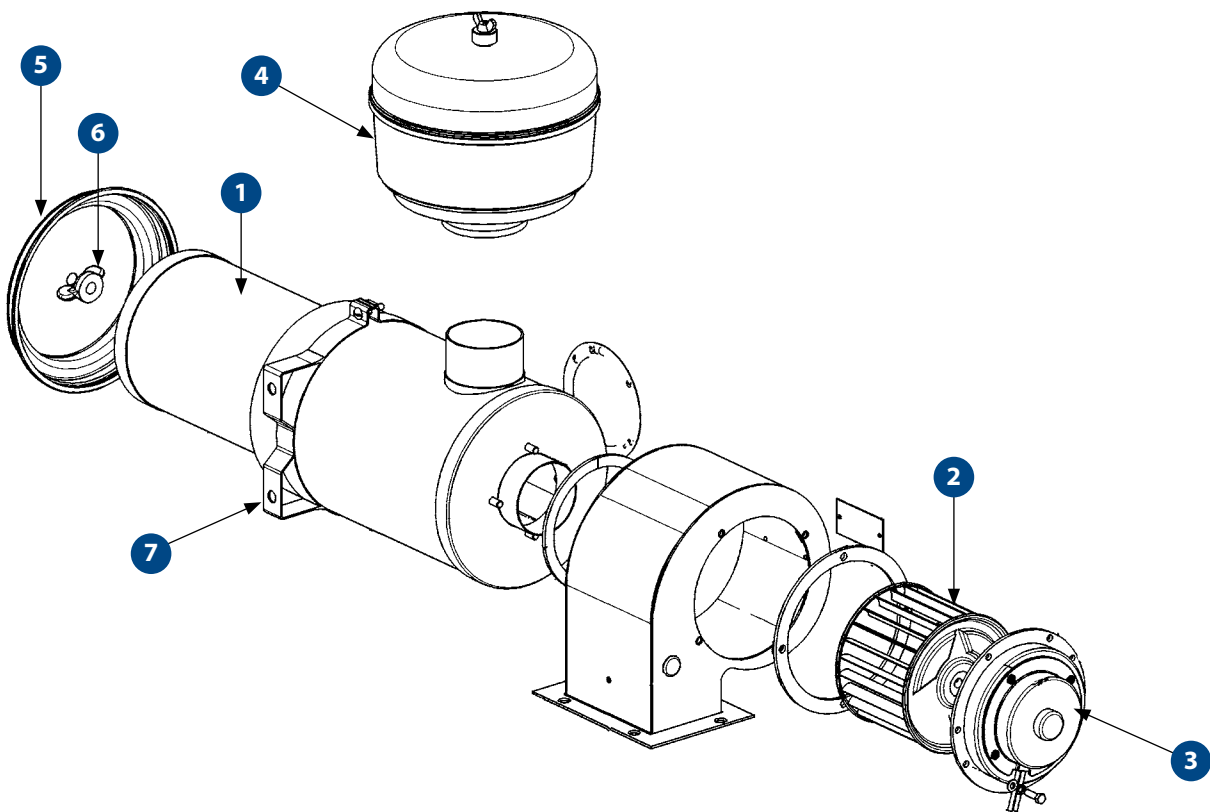
EB9P*

PRESSURISER

EB9P2*
Fresh Air Pressuriser 30 l/s 12V

EB9P4*
Fresh Air Pressuriser 30l/s 24V

* HVAC obsolete, spares support only



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 AU460706	FILTER ASSEMBLY ROUND 133MM - STANDARD	1
AU460080	FILTER CART ENDURANCE FVV50B	1
* Note: Sites which have both EB9P4 and EB9P4X can use KNHV80005 to suit both unit		
2 AU410337	BLOWER 120D x 89W x 5/8 COUNTER CLOCKWISE SINGLE INLET	1
3 UE327	MOTOR 70W 12VDC PANCAKE (EB9P2)	1
H0175266	MOTOR 70W 24VDC ASSEMBLY (EB9P4)	1
4 AU460725	FILTER PRE-CLEANER 186MM - STANDARD	1
5 AU460709	FILTER END CAP	1
6 AU460721	FILTER WING NUT	1
7 AU870001	MOUNTING BAND AIR CLEANER 6.5" DIA	1
AU460707	FILTER END COVER (PREVIOUS DESIGN)	1
AU460708	FILTER CAP RUB BAFFLE (PREVIOUS DESIGN)	1
S3750100	SEAL GASKET MOTOR	1
S3750102	SEAL GASKET CANISTER	1

SPECIFICATIONS

	METRIC	IMPERIAL
Fan Speeds	1	1
Fresh Air	30 l/s	64 CFM
Power Supply	12V / 24V	12V / 24V
Current Draw	3 A / 1.5 A	3 A / 1.5 A
Weight (nominal)	8.0 Kg	17.6 lbs
Technical Manual Reference	SM496-5065	SM496-5065
Dimension L X W X H	462mm X 364mm X 192mm	18.2in X 14.3in X 7.6in

MAINTENANCE

MONTHLY / 300 HOURS	
AU460706	FILTER ASSEMBLY ROUND 133MM - STANDARD
AU460080	FILTER CART ENDURANCE FVV50B
KNHV80005*	FILTER KIT
ANNUAL / 3,600 HOURS	
UE327 (EB9P2)	MOTOR 70W 12VDC PANCAKE
H0175266 (EB9P4)	MOTOR 70W 24VDC ASSEMBLY
3 YEARS / 10,800 HOURS	
AU410337	BLOWER 120D x 89W x 5/8 COUNTER CLOCKWISE SINGLE INLET
AU460725	FILTER PRE-CLEANER 186MM - STANDARD
Please contact SIGMA for more information including details on an overhaul scope and interval. Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.	



EB9P2X / 4X

PRESSURISER

EB9P2X

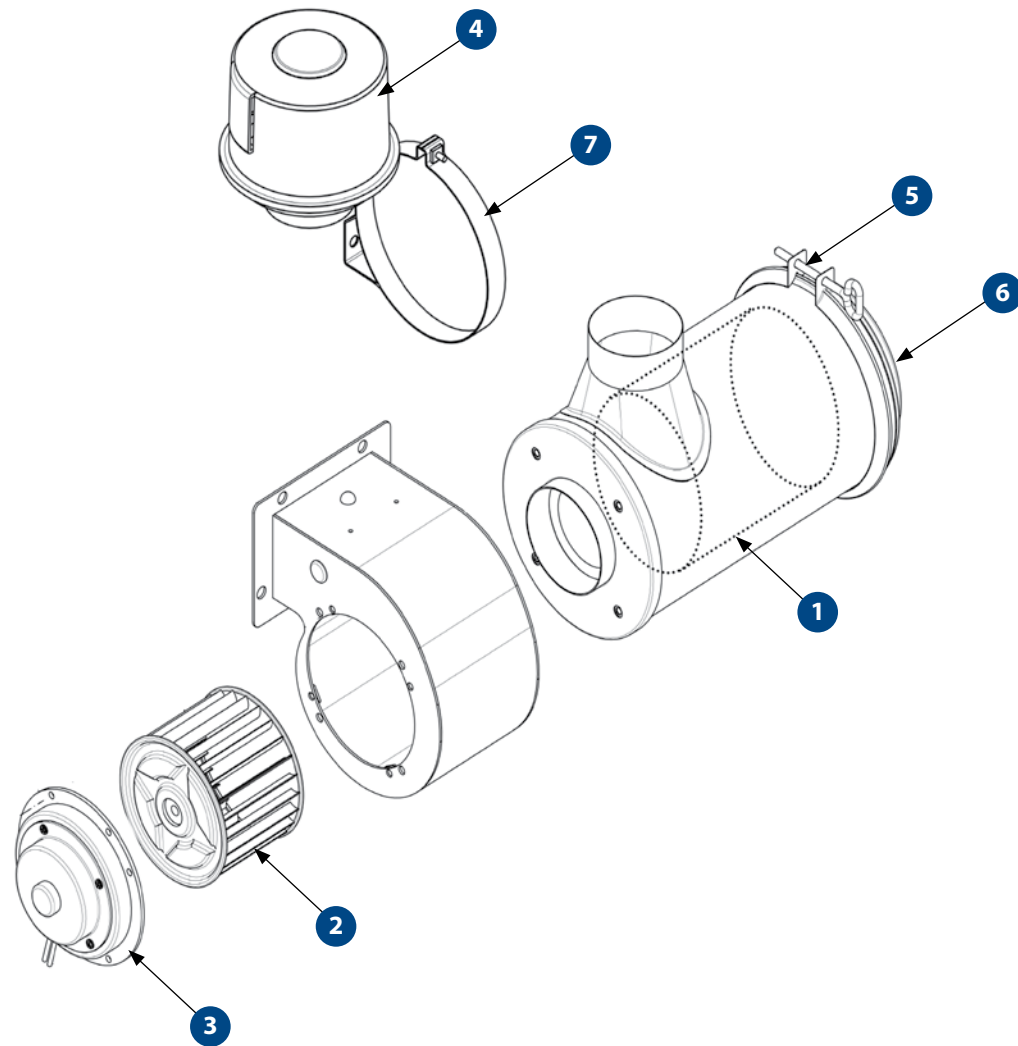
Fresh Air Pressuriser 31 l/s 12V

EB9P4X

Fresh Air Pressuriser 31 l/s 24V

EB9P4XL

Fresh Air Pressuriser 35 l/s 24V



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 AU460083 AU460082	FILTER CARTRIDGE ENDURANCE (EB9P4X) FILTER CARTRIDGE ENDURANCE (EB9P4XL)	1 1
* Note: Sites which have both EB9P4 and EB9P4X can use KNHV80005 to suit both unit		
2 AU410337	BLOWER 120D x 89W x 5/8 COUNTER CLOCKWISE SINGLE INLET	1
3 UE327 H0175266	MOTOR 80W 12V FOR EB9P2X MOTOR 70W 24V ASSEMBLY FOR EB9P4X & EB9P4XL	1 1
4 AU460963	PRE CLEANER TS 3" INLET SMALL	1
5 H0056158	CLAMP ASSEMBLY 168MM INTERNAL DIAMETER	1
6 H0056157	COVER ASSEMBLY	1
7 AU870001	MOUNTING BAND AIR CLEANER 6.5" DIA	1

HEPA FILTRATION OPTION

PARTICULARS	DESCRIPTION
PART NO.	H0202671 (FOR EB9P2X & EB9P4X)
HEPA GRADE	H13
TEST STANDARD	EN 1822 or equivalent
FILTRATION EFFICIENCY	*99.95% for particles diameter 0.3 µm
FILTER DIMENSION	138mm OD x 292 mm

*on qualified cabins

SPECIFICATIONS

	METRIC	IMPERIAL
Fan Speeds	1	1
Fresh Air	31 l/s	65 CFM
Power Supply	12V / 24V	12V / 24V
Current Draw	6 A / 3 A	6 A / 3 A
Weight (nominal)	8.0 Kg	17.6 lbs
Technical Manual Reference	SM496-5065	SM496-5065
Dimension L X W X H	462mm X 364mm X 192mm	18.2in X 14.3in X 7.6in

MAINTENANCE

MONTHLY / 300 HOURS	
AU460083	FILTER CARTRIDGE ENDURANCE (EB9P4X)
AU460082	FILTER CARTRIDGE ENDURANCE (EB9P4XL)
KNHV80005	FILTER KIT
6 MONTHS / 1800 HOURS	
H0202671	H13 HEPA FILTER OPTION FOR EB9P2X & EB9P4X (FOR UPGRADED UNIT)
ANNUAL / 3600 HOURS	
UE327	MOTOR 80W 12V FOR EB9P2X
H0175266	MOTOR 70W 24V ASSEMBLY FOR EB9P4X & EB9P4XL
3 YEARS / 10,800 HOURS	
AU410337	BLOWER 120D X 89W X 5/8 CCW SI
AU460963	PRE CLEANER TS 3" INLET SMALL
Please contact SIGMA for more information including details on an overhaul scope and interval. Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.	

COMPANION ITEMS

PART NO.	DESCRIPTION
H0202671	H13 HEPA FILTER OPTION FOR EB9P2X & EB9P4X
H0202677	HEPA UPGRADE KIT WITH PRESSURE MONITORING



FPS55B

FRESH AIR PRESSURISER UNIT

H0111416
Compact HEPA Filtration Pressuriser System 12 VDC

H0111417
Compact HEPA Filtration Pressuriser System 24 VDC

SPARE PARTS

PART NO.	DESCRIPTION	QTY
1	H0116836 FILTER 16 / 79ID x 206OD x 288H EN15695	1
2	AU460748 CENTRIFUGAL PRE-CLEANER	1
3	H0133899 2-1/2 INCH ADAPTOR	1
4	H0133903 24V MOTOR W / MOTOR MOUNTING	1
	H0133904 12V MOTOR W / MOTOR MOUNTING	1
5	H0133900 FILTER ACCESS PANEL, SERIES SS	1
6	H0133905 3 INCH INLET ADAPTOR	1

SPECIFICATIONS

	METRIC	IMPERIAL
Fan Speeds	1	1
Fresh Air	22 l/s	50 CFM
Power Supply	12V / 24V	12V / 24V
Current Draw	3 A / 1.6 A	3 A / 1.6 A
Weight (nominal)	20.0 Kg	44.0 lbs
Dimension L X W X H	400mm X 240mm X 370 mm	15.75in X 9.45in X 14.57in

MAINTENANCE

6 MONTHLY / 1800 HOURS	
H0116835	FILTER 16 / 79ID X 206OD X 288 H
H0116836	FILTER 16 / 79ID X 206OD X 288 H EN15695
ANNUAL / 3,600 HOURS	
AU460748	CENTRIFUGAL PRE-CLEANER
3 YEARS / 10,800 HOURS	
H0133903	24V MOTOR W / MOTOR MOUNTING
H0133904	12V MOTOR W / MOTOR MOUNTING
Please contact SIGMA for more information including details on an overhaul scope and interval. Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.	

HEPA FILTRATION OPTION

PARTICULARS	DESCRIPTION
PART NO.	H0116836
HEPA GRADE	H13
FILTRATION EFFICIENCY	*99.95% for particles diameter 0.3 µm
FILTER DIMENSION	206 mm OD x 288 mm

*on qualified cabins

COMPANION ITEMS

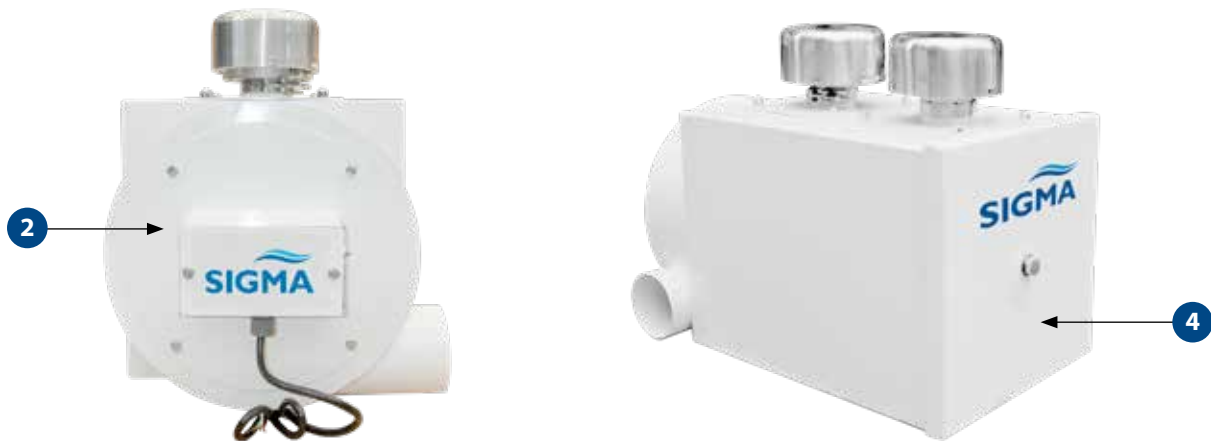
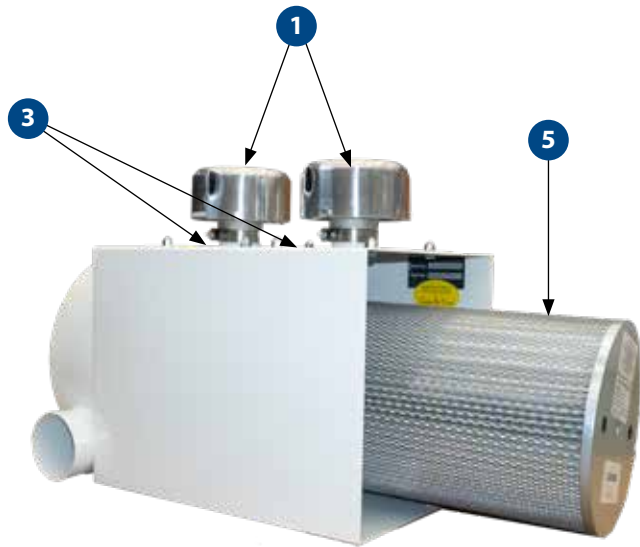
PART NO.	DESCRIPTION
H0116835	FILTER 16 / 79ID x 206OD x 288H
H0133905	3 Inch Inlet Adaptor
KNHV90073	Generic site install kit





FPS955-220VAC
COMPACT FILTRATION PRESSURISER

H0111418
Compact HEPA Filtration Pressuriser System FPS955
220VAC



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 AU460748	CENTRIFUGAL PRE-CLEANER 2-1/2 INCH ID	2
2 H0133898	220 V MOTOR AND MOUNTING PLATE	1
3 H0133899	2-1/2 INCH ADAPTOR	2
4 H0133901	FILTER ACCESS PANEL SERIS FPS955	1
5 H0116837	FILTER 16/87ID X 273OB X 417H (H13 GRADE)	1

HEPA FILTRATION OPTION

PARTICULARS	DESCRIPTION
PART NO.	H0116837
HEPA GRADE	H13
FILTRATION EFFICIENCY	*99.95% for particles diameter 0.3 µm
FILTER DIMENSION	273mm OD x 417 mm

*on qualified cabins

SPECIFICATIONS

	METRIC	IMPERIAL
Fan Speeds	1	1
Fresh Air	70 l/s	150 CFM
Power Supply	220 VAC	220 VAC
Weight (nominal)	40.0 Kg	88.0 lbs
Dimension L X W X H	400mm X 680mm X 400 mm	19.3in X 26.8in X 15.7in

MAINTENANCE

6 MONTHLY / 1800 HOURS	
H0116837	FILTER 16 / 87ID X 273OD X 417H (H13 GRADE)
ANNUAL / 3,600 HOURS	
AU460747	FILTER PRE-CLEANER 8.5" FULL VIEW
AU460748	CENTRIFUGAL PRE-CLEANER
3 YEARS / 10,800 HOURS	
H0133898	220 V MOTOR AND MOUNTING PLATE
Please contact SIGMA for more information including details on an overhaul scope and interval. Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.	

COMPANION ITEMS

PART NO.	DESCRIPTION
AU460747	Centrifugal Pre-Cleaner 3 inch ID
H0133905	3 Inch Inlet Adaptor
KNHV90073	Generic site install kit

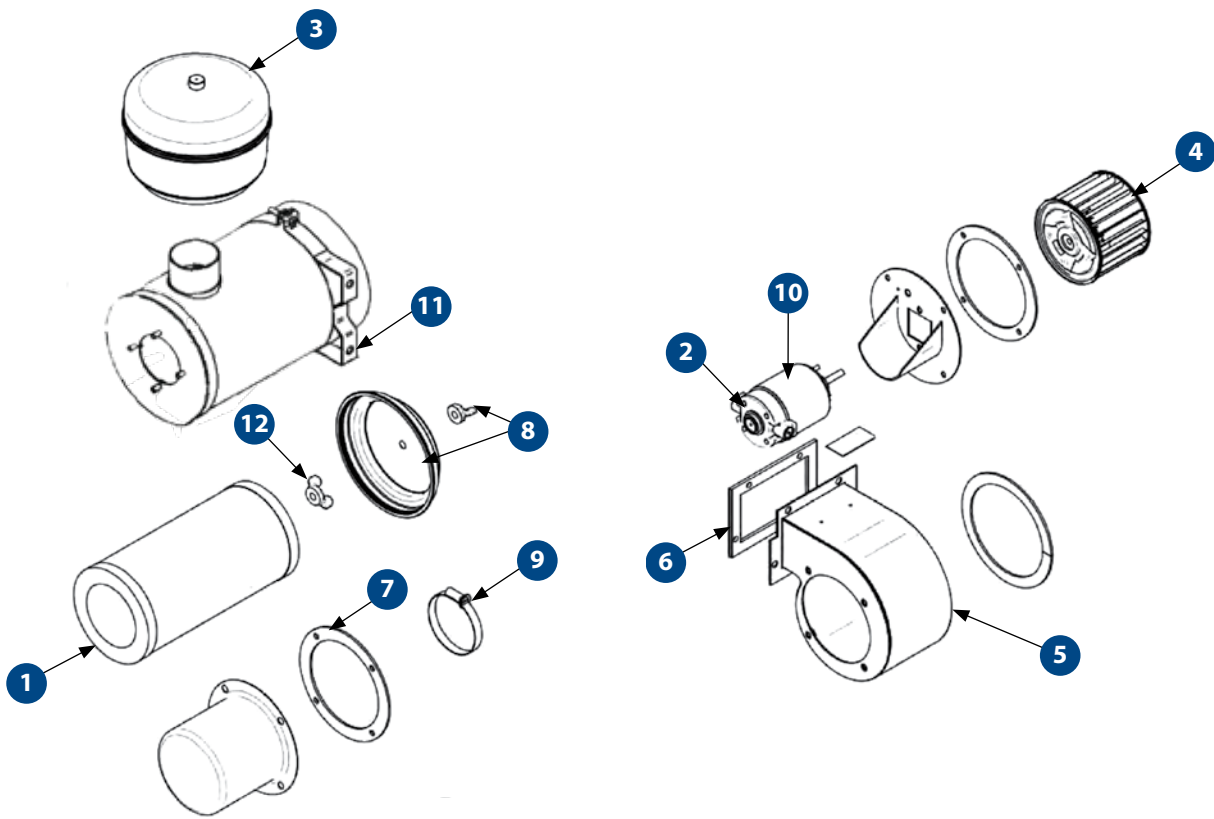
FVV50B
FRESH AIR PRESSURISER UNIT



FVV50B3
Fresh Air Pressuriser 30 l/s 24V
(Right hand version)



FVV50B4
Fresh Air Pressuriser 30 l/s 24V
(Left hand version)



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 AU460706	FILTER ASSEMBLY ROUND 133MM - STANDARD	1
2 AU320028	MOTOR BRUSH KIT - ASSEMBLY + HOLDER	1
3 AU460725	FILTER PRE-CLEANER 186MM - STANDARD	1
4 AU410605	BLOWER 120D x 89W x 5/16 SINGLE INLET FOR FVV50B3	1
AU410337	BLOWER 120D x 89W x 5/8 SINGLE INLET FOR FVV50B4	1
5 AM184909	FRESH AIR BLOWER WITH ASSEMBLY	1
6 AU861071	SEAL FRESH AIR 153MM X 160MM TDR6	1
7 AU861072	GASKET FRESH AIR FAN 160MM	2
8 AU460709	FILTER END CAP	1
9 AU553626	CLAMP	1
10 AU320C007	MOTOR SINGLE SHAFT	1
11 AU870001	MOUNTING BAND AIR CLEANER 6.5" DIA	1
12 AU460721	FILTER WING NUT	1

SPECIFICATIONS

	METRIC	IMPERIAL
Fan Speeds	1	1
Air Flow	30 l/s	64 CFM
Power Supply	24VDC	24VDC
Current Draw	3 A	3 A
Weight (nominal)	20.0 Kg	44.0 lbs
Dimension L X W X H	550mm X 200mm X 357 mm	21.7in X 7.9in X 14.1in

MAINTENANCE

MONTHLY / 300 HOURS	
AU460706	FILTER ASSEMBLY ROUND 133MM - STANDARD
AU460080	FILTER CARTRIDGE ENDURANCE FVV50B (FOR UPGRADTED UNIT)
AU320028	MOTOR BRUSH KIT - ASSEMBLY + HOLDER
ANNUAL / 3,600 HOURS	
AU320C007	MOTOR SINGLE SHAFT
3 YEARS / 10,800 HOURS	
AU460725	FILTER PRE-CLEANER 186MM - STANDARD
AU460964	PRE-CLEANER TS 2.5" INLET SMALL
AU410605	BLOWER 120D x 89W x 5/16 CLOCKWISE SINGLE INLET (FVV50B3)
AU410337	BLOWER 120D x 89W x 5/8 COUNTER CLOCKWISE SINGLE INLET (FVV50B4)

Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

COMPANION ITEMS

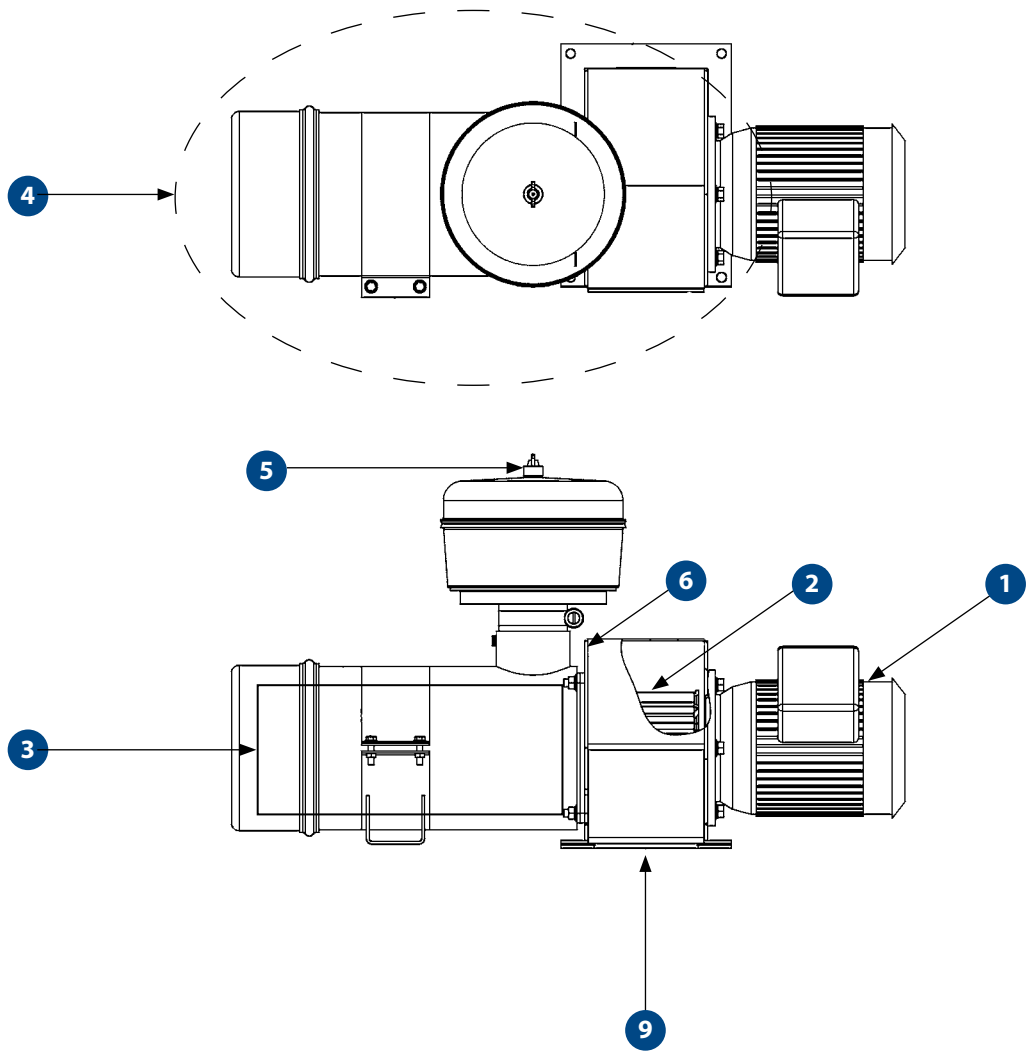
PART NO.	DESCRIPTION
AU460964	Pre-Cleaner 2.5" Inlet Small
AU460080	Filter Cartridge Endurance



FVV50M1

FRESH AIR PRESSURISER UNIT

FVV50M1
Fresh Air Pack MS Series AC



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 AU304150	MOTOR 0.55KW 415V 71 FL 2P	1
2 AU410606	BLOWER 120D X 89W X 14MM CW SINGLE INLET	1
3 AU460706	FILTER CARTRIDGE 133MM - STANDARD	1
4 AU460720	FILTER CYCLONE 6" METAL	1
5 AU460725	FILTER PRE-CLEANER 186MM - STANDARD	1
6 F1626010	GASKET FRESH AIR UNIT	1
7 F1626039	GASKET FRESH AIR UNIT	1

SPECIFICATIONS

	METRIC	IMPERIAL
Fan Speeds	1	1
Air Flow	50 l/s	106 CFM
Power Supply	415 VAC	415 VAC
Weight (nominal)	23.0 Kg	50.7 lbs
Dimension L X W X H	700mm X 210mm X 350mm	27.5in X 8.3in X 13.7in

MAINTENANCE

MONTHLY / 300 HOURS	
AU460080	FILTER CART ENDURANCE FVV50B
AU460706	FILTER CARTRIDGE 133MM - STANDARD (FOR UPGRATEFD UNIT)
AU460725	FILTER PRE-CLEANER 186MM - STANDARD
3 YEARS / 10,800 HOURS	
AU410606	BLOWER 120D X 89W X 14MM CW SINGLE INLET
AU460725	FILTER PRE-CLEANER 186MM - STANDARD

Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

COMPANION ITEMS

PART NO.	DESCRIPTION
AU460964	Pre-Cleaner TS 2.5" Inlet Small (Old Version)
AU460080	Filter Cart Endurance FVV50B

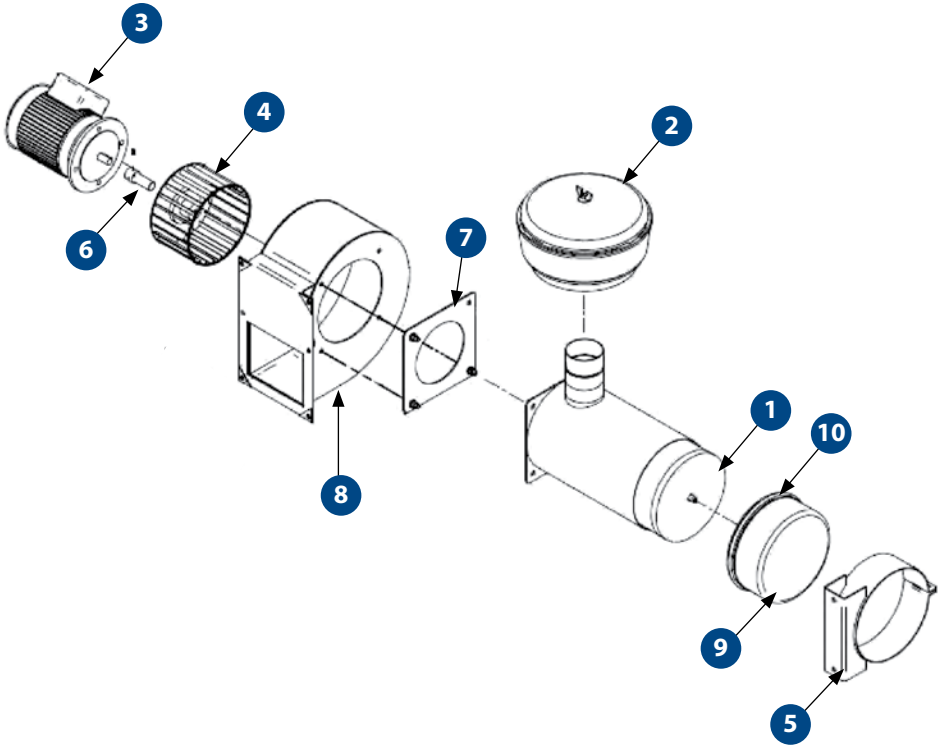


FVV80*

FRESH AIR PRESSURISER UNIT

FVV80MR1*
Fresh Air Pressuriser 80 l/s 415 VAC

* HVAC obsolete, spares support only



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1	AU460734 FILTER ELEMENT SUIT FVV80 & FVV100	1
2	AU460728 FILTER PRE-CLEANER 186MM FULL VIEW	1
3	AU304150 MOTOR 0.55KW 415V 71 FL 2P	1
4	AU410525 BLOWER 178D X 76W X 19MM	1
5	AS162611 FILTER SUPPORT CLAMP ASSEMBLY	1
6	AU872011 SHAFT EXTENSION 14MM F X 19MM M	1
7	R1626026 GASKET FVV100 INLET 200MM X 200MM 140MM DIAMETER	1
8	AS162614 FAN HOUSING ASSEMBLY	1
9	AU460768 END CAP AU460762 RUBBER BAFFLE	1 1
10	AU460765 CLAMP ASSEMBLY	1

HEPA FILTRATION OPTION

PARTICULARS	DESCRIPTION
PART NO.	H0174977
HEPA GRADE	H13
TEST STANDARD	EN 1822 or equivalent
FILTRATION EFFICIENCY	*99.95% for particles diameter 0.3 µm
FILTER DIMENSION	152mm OD x 305 mm
*on qualified cabins	

SPECIFICATIONS

	METRIC	IMPERIAL
Fan Speeds	1	1
Air Flow	80 l/s	170 CFM
Power Supply	415 VAC	415 VAC
Current Draw	1.3 A	1.3 A
Maximum Ambient Temperature Range	46°C	115°F
Weight (nominal)	22.0 Kg	48.4 lbs
Dimension L X W X H	724mm X 333mm X 495mm	28.5in X 13.1in X 19.5in

MAINTENANCE

MONTHLY / 300 HOURS	
AU460734	FILTER ELEMENT SUIT FVV80 & FVV100
AU460081	FILTER CARTRIDGE ENDURANCE (FOR UPGRADED UNIT)
H0174977	HEPA CARTRIDGE (FOR UPGRADED UNIT)
3 YEARS / 10,800 HOURS	
AU460728	FILTER PRE-CLEANER 186MM FULL VIEW
AU410525	BLOWER 178D X 76W X 19MM CCW SINGLE INLET

Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

COMPANION ITEMS

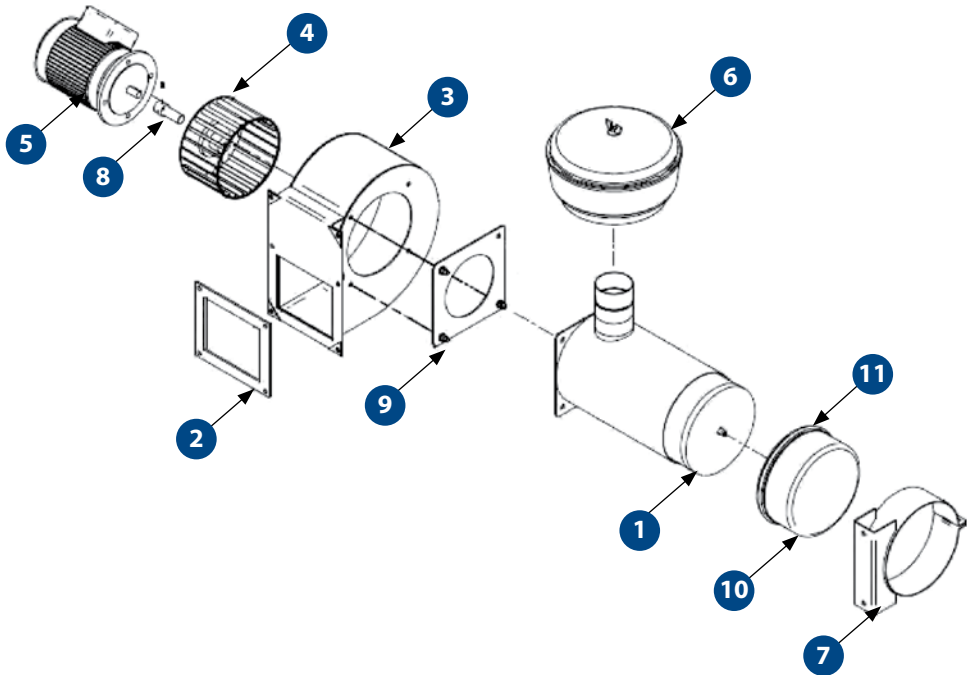
PART NO.	DESCRIPTION
AU460964	Pre-Cleaner TS 2.5" Inlet Small (Old Version)
AU460081	Filter Cartridge Endurance
H0174977	HEPA FILTER CARTRIDGE



FVV100

FRESH AIR PRESSURISER UNIT

FVV100MR1
Fresh Air Pressuriser 100 l/s 415 VAC



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 AU460734	FILTER ELEMENT SUIT FVV80 & FVV100	1
2 R1626027	GASKET OUTLET 206MM X 178MM	1
3 AS162608	FAN HOUSING	1
4 AU410520	BLOWER 178D X 102W X 19MM	1
5 UE800	MOTOR 0.37kW BEEW FL 2900RPM 240V (FVV100K1)	1
AU304150	MOTOR 0.55KW 415V 71 FL 2P (FVV100MR1)	1
6 AU460729	FILTER PRE-CLEANER 270MM - STANDARD	1
7 AS162611	FILTER SUPPORT CLAMP ASSEMBLY	1
8 AU872011	SHAFT EXTENSION 14MM F X 19MM M	
9 R1626026	GASKET FVV100 INLET 200MM X 200MM 140MM DIAMETER	1
AU460768	END CAP	1
AU460762	RUBBER BAFFLE	1
11 AU460765	CLAMP ASSEMBLY	1

HEPA FILTRATION OPTION

PARTICULARS	DESCRIPTION
PART NO.	H0174977
HEPA GRADE	H13
TEST STANDARD	EN 1822 or equivalent
FILTRATION EFFICIENCY	*99.95% for particles diameter 0.3 µm
FILTER DIMENSION	152mm OD x 305 mm
*on qualified cabins	

SPECIFICATIONS

	METRIC	IMPERIAL
Fan Speeds	1	1
Air Flow	100 l/s	212 CFM
Power Supply	415 VAC	415 VAC
Current Draw	1.3 A	1.3 A
Weight (nominal)	22.0 Kg	48.4 lbs
Dimension (L X W X H)	755mm X 333mm X 495mm	29.7in X 13.in X 19.5in

MAINTENANCE

MONTHLY / 300 HOURS	
AU460734	FILTER ELEMENT SUIT FVV80 & FVV100
AU460081	FILTER CARTRIDGE ENDURANCE
6 MONTHS / 1800 HOURS	
H0174977	H13 HEPA FILTER
3 YEARS / 10,800 HOURS	
AU460729	FILTER PRE-CLEANER 270MM - STANDARD
AU410520	BLOWER 178D X 102W X 19MM

Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

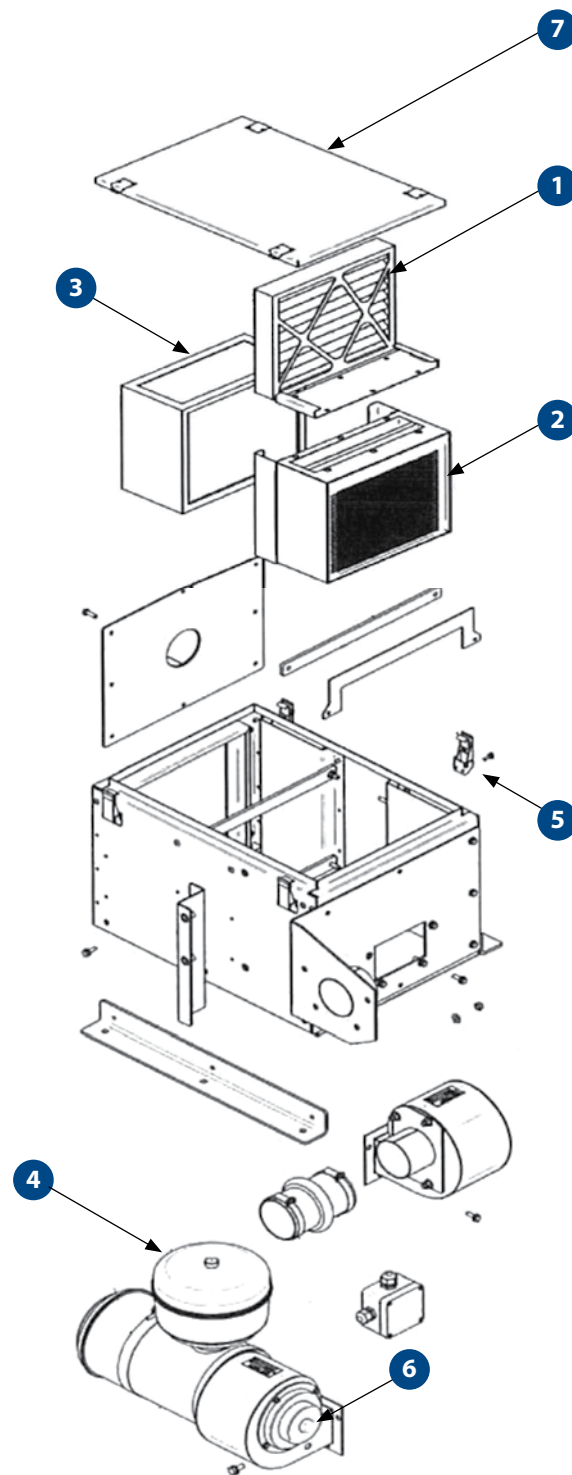
COMPANION ITEMS

PART NO.	DESCRIPTION
AU460965	Pre-Cleaner TS 2.5" Inlet Small (Old Version)
AU460081	Filter Cartridge Endurance
H0174977	HEPA FILTER CARTRIDGE



PVV50B2 PRESSURISER

PVV50B2
Fresh Air Multi Stage Filtration (HEPA) and Pressuriser
30 l/s 24V



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 AU460628	FILTER CARTRIDGE PLEAT 305MM X 305MM X 50MM	1
AS3505127	FILTRATION MODULE ASSEMBLY	1
AU480004	MEDIA ACT ALUMINA	1
AU480010	MEDIA ACT CARBON	1
AU480011	MEDIA IMPREG CARBON	1
3 AU460863	FILTER 305MM X 305MM X 149MM METAL CASE (HEPA FILTER)	1
4 AU460963	PRE CLEANER TS 3" INLET SMALL	1
5 UC310	CATCH TOGGLE OVERCENTRE SS	4
6 H0175266	MOTOR 70W 24VDC ASSEMBLY	2
7 AS5242124	LID ASSEMBLY	1
AU460706	FILTER ASSEMBLY ROUND 133MM - STANDARD	1
AU460083	FILTER CART ENDURANCE FVV50B2	1
AU410337	BLOWER 120D x 89W x 5/8 COUNTER CLOCKWISE SINGLE INLET	2
AU862211	SEAL RUBBER	2
S3750100	SEAL GASKET MOTOR	1
S3750101	SEAL GASKET CANISTER	1
UC369	CATCH STRIKER STAINLESS STEEL	4
AU635405	TERMINAL BLOCK	1
AU460083	FILTER CARTRIDGE ENDURANCE FOR EB9P4X	1
H0056158	CLAMP ASSEMBLY 168MM INTERNAL DIAMETER	1
H0056157	COVER ASSEMBLY	1
AU870001	MOUNTING BAND AIR CLEANER 6.5" DIAMETER	1

HEPA FILTRATION

PARTICULARS	DESCRIPTION
PART NO.	AU460863
HEPA GRADE	H13 / US HEPA / AS4260 (GRADE 2)
TEST STANDARD	EN 1822 or equivalent
FILTRATION EFFICIENCY	*99.95% for particles diameter 0.3 µm
FILTER DIMENSION	305mm x 305mm x 149mm

*on qualified cabins

SPECIFICATIONS

	METRIC	IMPERIAL
Fan Speeds	1	1
Fresh Air	30 l/s	64 CFM
Power Supply	24V	24V
Current Draw	6 A	6 A
Weight (nominal)	60.0 Kg	132.0 lbs
Dimension L X W X H	695mm X 364mm X 520mm	27.4in X 14.3in X 20.5in

MAINTENANCE

3 MONTHS / 900 HOURS	
AU4600083	FILTER CARTRIDGE ENDURANCE FOR PVV50B2
AU460628	FILTER CARTRIDGE PLEAT 305MM X 305MM X 50MM
AU480004	MEDIA ACT ALUMINA
AU480010	MEDIA ACT CARBON
AU480011	MEDIA IMPREG CARBON
ANNUAL / 3,600 HOURS	
AU460863	FILTER 305MM X 305MM X 149MM METAL CASE
H0175266	MOTOR 70W 24VDC ASSEMBLY
3 YEARS / 10,8000 HOURS	
AU460963	PRE CLEANER TS 3" INLET SMALL
AU410337	BLOWER 120D x 89W x 5/8 COUNTER CLOCKWISE SINGLE INLET

Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

COMPANION ITEMS

PART NO.	DESCRIPTION
KNHV90007	Field Service Kit PVV50 24VDC – Excl Med
KNHV90073	Generic site install kit

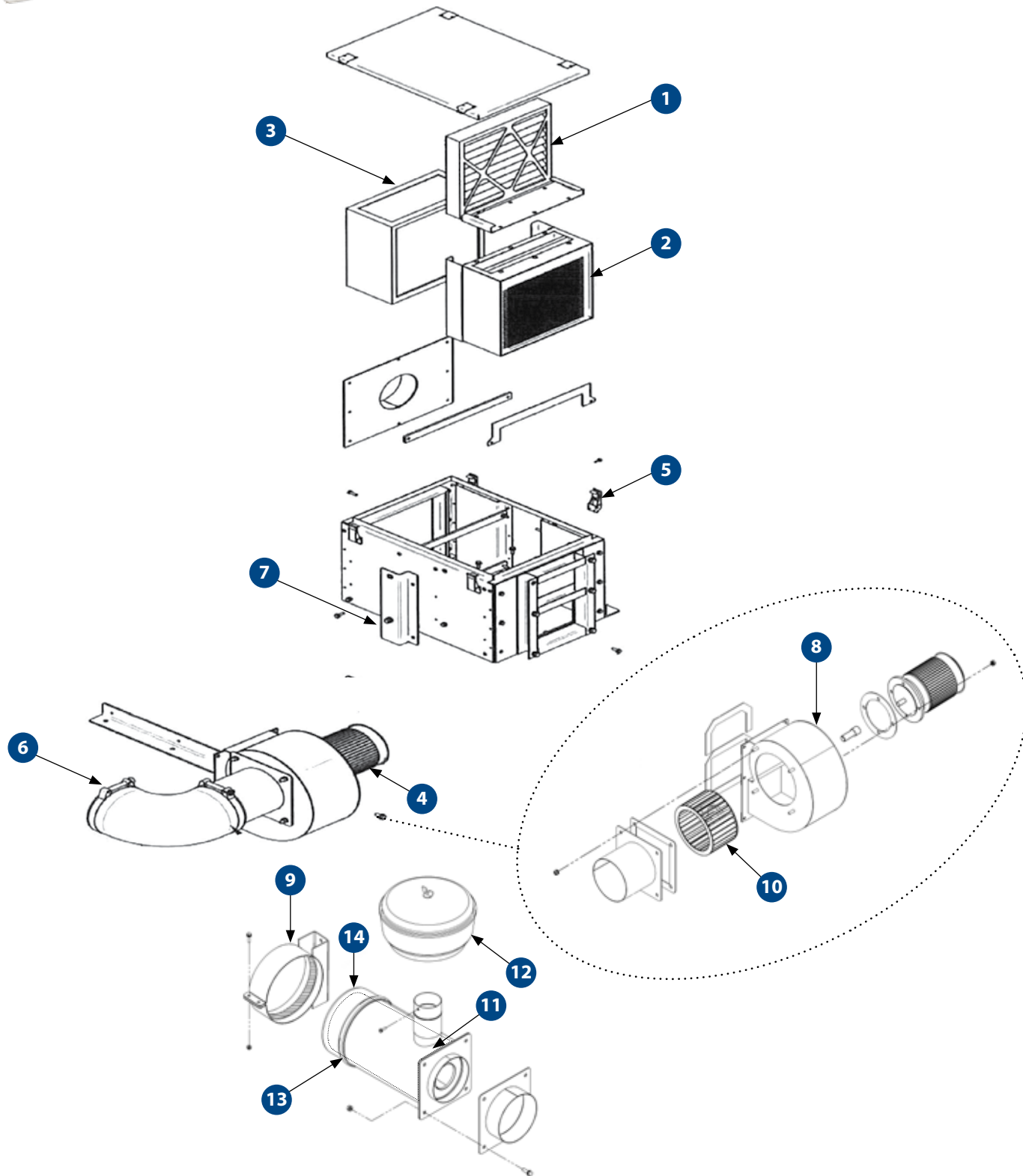




PVV50M2

PRESSURISER

PVV50M2
Fresh Air Multi Stage Filtration (HEPA) and
Pressuriser 50 l/s 415 VAC



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 AU460628	FILTER CARTRIDGE PLEAT 305MM X 305MM X 50MM	1
AS3505127	FILTRATION MODULE ASSEMBLY	1
AU480004	MEDIA ACT ALUMINA	1
AU480010	MEDIA ACT CARBON	1
AU480011	MEDIA IMPREG CARBON	1
3 AU460863	FILTER 305MM X 305MM X 149MM METAL CASE (HEPA FILTER)	1
4 AU304150	MOTOR 0.55KW 415V 71 FL 2P	1
5 UC310	CATCH TOGGLE OVERCENTRE SS	4
6 UC265	ELBOW RUBBER 90DEG 6"	1
7 AS3505146	CANISTER MOUNTING BRACKET ASSEMBLY	1
8 AS162608	FAN HOUSING	1
9 AS162611	FILTER SUPPORT CLAMP ASSEMBLY	1
10 AU410520	BLOWER 178D X 102W X 19MM CCW SINGLE INLET	1
11 AU460734	FILTER ELEMENT SUIT FVV80 & FVV100 (STD)	1
AU460081	FILTER CARTRIDGE ENDURANCE FVV100 (OPT)	1
12 AU460729	FILTER PRE-CLEANER 270MM	1
13 AU460765	CLAMP ASSEMBLY	1
14 AU460762	RUBBER BAFFLE	1
AU460768	END CAP	1
AU862121	GASKET OUTLET 206MM X 178MM	1
AU862211	SEAL RUBBER	2
AU872011	SHAFT EXTENSION 14MM F X 19MM M	1
R1626026	GASKET FVV100 INLET 200MM X 200MM 140MM DIAMETER	1
UC266	CLAMP SUIT UC265	2

HEPA FILTRATION

PARTICULARS	DESCRIPTION
PART NO.	AU460863
HEPA GRADE	H13 / US HEPA / AS4260 (GRADE 2)
TEST STANDARD	EN 1822 or equivalent
FILTRATION EFFICIENCY	99.95% for particles diameter 0.3 µm
FILTER DIMENSION	305mm x 305mm x 149mm

SPECIFICATIONS

	METRIC	IMPERIAL
Fan Speeds	1	1
Fresh Air	50 l/s	106 CFM
Power Supply	415 VAC	415 VAC
Current Draw	6 A	6 A
Weight (nominal)	60.0 Kg	132.0 lbs
Dimension L X W X H	695mm X 364mm X 520mm	27.4in X 14.3in X 20.5in

MAINTENANCE

3 MONTHS / 900 HOURS	
AU460081	FILTER CARTRIDGE ENDURANCE
AU460628	FILTER CARTRIDGE PLEAT 305MM X 305MM X 50MM
AU480004	MEDIA ACT ALUMINA
AU480010	MEDIA ACT CARBON
AU480011	MEDIA IMPREG CARBON
ANNUAL / 3,600 HOURS	
AU460863	FILTER 305MM X 305X149MM METAL CASE
3 YEARS / 10,800 HOURS	
AU460729	FILTER PRE-CLEANER 270MM
AU410520	BLOWER 178D X 102W X 19MM CCW SNGLE INLET

Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

COMPANION ITEMS

PART NO.	DESCRIPTION
KNHV90073	Generic site install kit

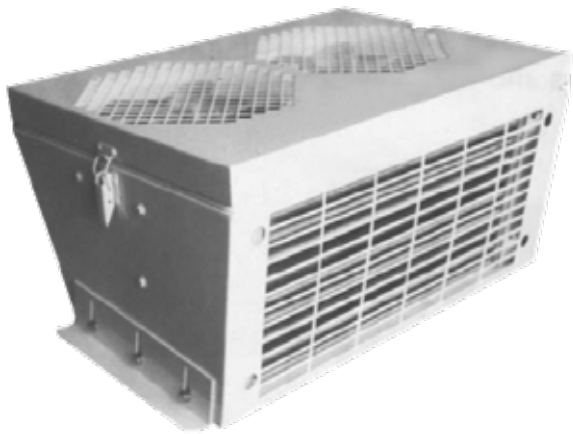
The SIGMA E SERIES air conditioner range has been designed and developed for robust duty off road applications.

They have been refined to suit the applications of vibration, dust and high ambient temperature.

These systems are engineered to suit small cabin rubber tyred vehicles and tracked vehicles with all components selected to provide reliable service and designed for ease of serviceability.

E

SERIES

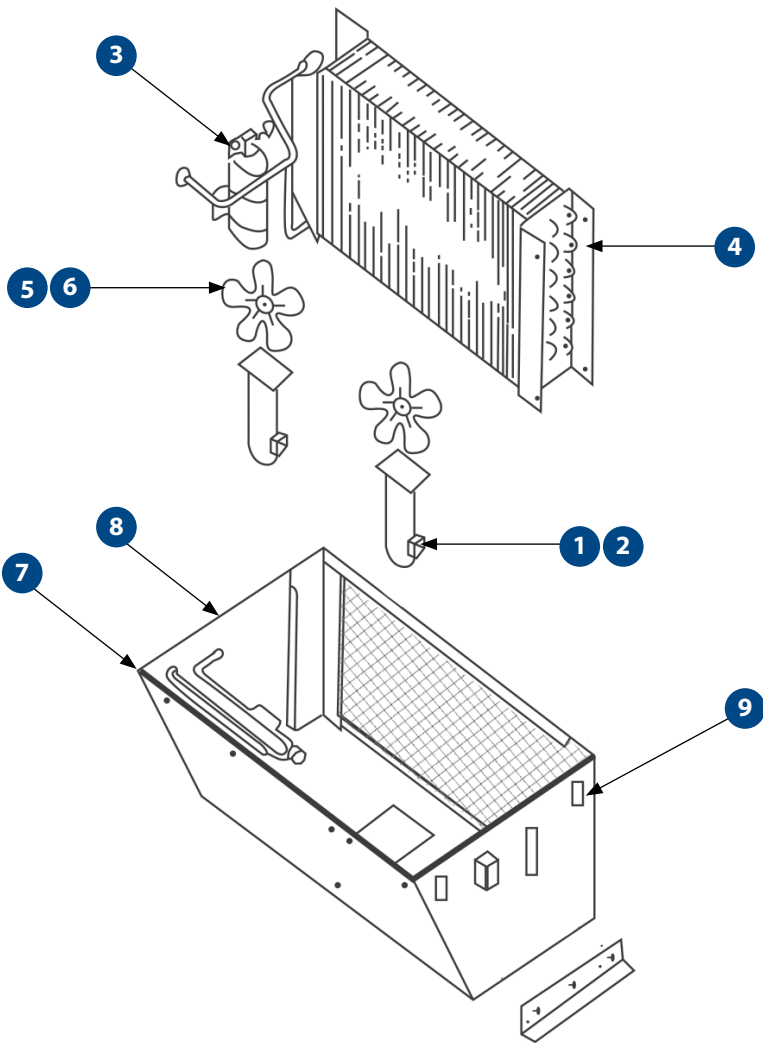


EB9C*
CONDENSER

EB9C2X*
Rooftop Condenser 5kW 12V

EB9C4X*
Rooftop Condenser 5kW 24V

* HVAC obsolete, spares support only



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 AU320028	MOTOR BRUSH KIT - ASSEMBLY + HOLDER	2
2 AU320027	MOTOR 12V (EB9C2)	1
AU320C007	MOTOR 24V (EB9C4)	1
3 AU531411	RECEIVER DRIER 3/8" 24UNF165MM HIGH	1
4 UR039	CONDENSER COIL	1
5 AU420020	FAN AXIAL 203MM CW 5 BLADES	2
6 UC306	SHAFT EXTENSION 3/8" F X 5/16" M	2
7 UR009	BULKHEAD FITTING 3/8" MF #6	1
8 UR008	BULKHEAD FITTING 1/2" MF	1
9 UC048	LATCH TOGGLE OVER-CENTRE	2
UE700	CIRCUIT BREAKER 40A STUD TYP MANUAL	1
UC318	MOTOR MOUNT T SERIES ALUMINIUM	2
UC047	KEEPER PLATE ZP	2
UE064	DPC 1/4" MF HIGH PRESSURE 2206kPa LOW PRESSURE 196kPa	1

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	5.0 kW	17060 BTU
Power Supply	12V / 24V	12V / 24V
Current Draw	20 A / 10 A	20 A / 10 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	46°C	115°F
Weight (nominal)	29.0 Kg	63.8 lbs
Technical Manual Reference	SM144-2071	SM144-2071
Dimension L X W X H	875mm X 810mm X 320mm	34.4in X 31.9in X 12.6in

MAINTENANCE

6 MONTHS / 1,800 HOURS	
AU320028	MOTOR BRUSH KIT - ASSEMBLY + HOLDER
ANNUAL / 3,600 HOURS	
AU320027	MOTOR 12V (EB9C2)
AU320C007	MOTOR 24V (EB9C4)
AU531411	RECEIVER DRIER 3/8" 24UNF165MM HIGH

Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

COMPANION ITEMS

PART NO.	DESCRIPTION
EB9EH4X	Evaporator
EB9P4X	Pressuriser
HDC150	Hydraulic Compressor
AU2961001	Electric Compressor 24 V
AU270306	Engine Driven Compressor
AU270307	Engine Driven Compressor



EB9E

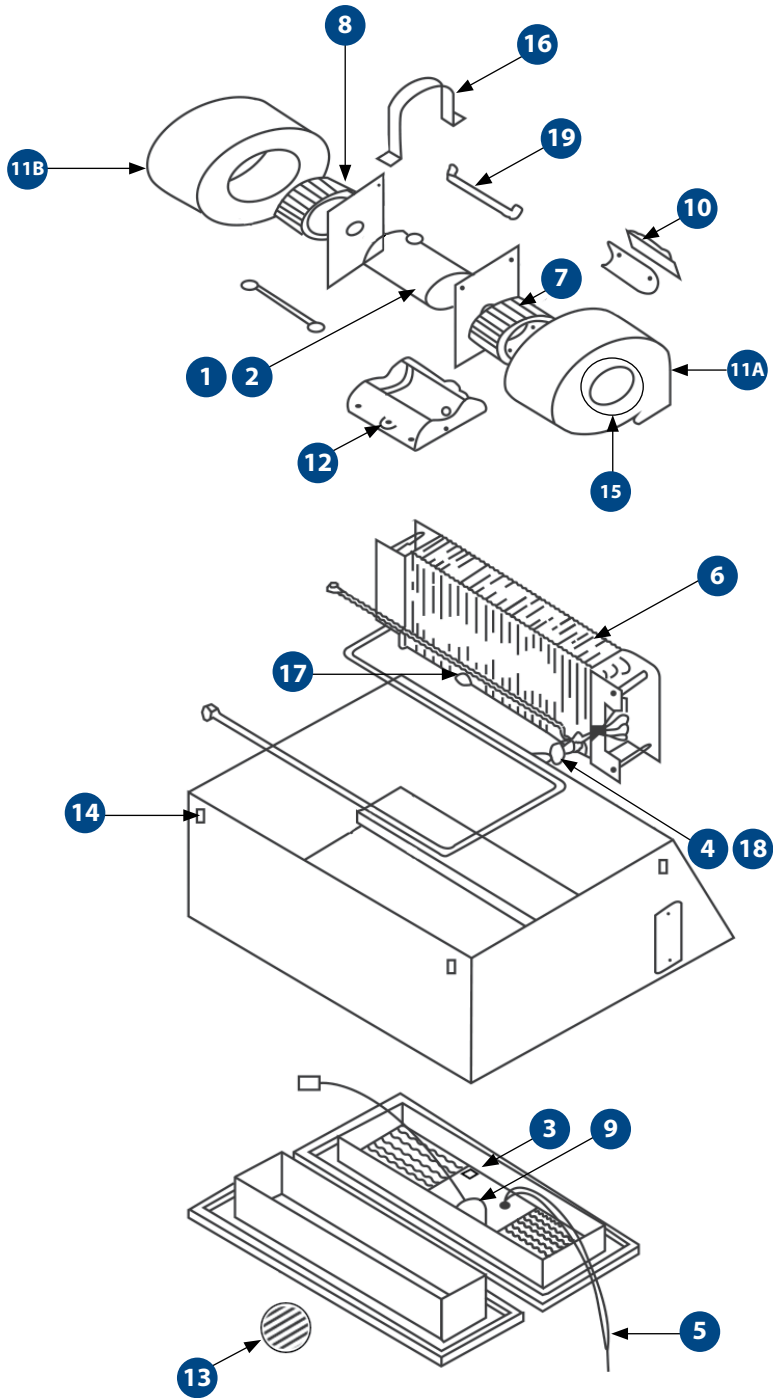
ROOFTOP EVAPORATOR

EB9EH2X*
Rooftop Evaporator 5kW 12V with Heating (4.6kW)

EB9EH4X
Rooftop Evaporator 5kW 24V with Heating (4.6kW)

EB9EH4XSS*
Rooftop Evaporator 5kW 24V with Heating (4.6kW)
Stainless Steel Case

* HVAC obsolete, spares support only



SPARE PARTS

PART NO.	DESCRIPTION	QTY	
1	AU320621 UE048	BRUSH SET FOR MOTOR 24VDC EACH BRUSH SET FOR MOTOR 12VDC EACH	2 2
2	UE022 UE023	MOTOR 12VDC D/S (EB9EH2) MOTOR 24VDC D/S (EB9EH4)	1 1
3	UE016	THERMOSTAT DEICE STUD	1
4	AU521923	TX VALVE 1.5T 3/8" IN 1/2" OUT 1/4" EQ	1
5	UC042	CABLE PUSH/PULL F/DRIVE 1500MM	1
6	UR036	EVAPORATOR COIL ASSEMBLY	1
7	UF017	BLOWER 121D X 76W X 3/8" CCW SINGLE INLET	1
8	UF018	BLOWER 121D X 76W X 3/8" CW SINGLE INLET	1
9	AU663095	ROTARY SWITCH OFF HI L	1
10	UE185	RESISTOR 0.5 OHM 50W 12 & 24V	1
11A	UF040	HOUSING SUPPLY AIR FAN CCW	1
11B	UF041	HOUSING SUPPLY AIR FAN CW	1
12	UC027	EVAPORATOR MOTOR MOUNT	1
13	AU821704	DIFFUSER ROUND 92MM PVC	5
14	UC048	LATCH TOGGLE OVER-CENTRE	4
15	UF034	INLET RING 103.5MM	1
16	S5006029	MOTOR MOUNT CLAMP 97MM	1
17	UR042	PRESSURE CONTROL ADAPTOR	2
18	UR173	CLAMP TX VALVE BULB 5/8 X 3/8	1
19	S5006030	FAN SET BRACE	2
	UR032	TX VALVE STRAINER FOR AU521923	1
	UR037	HEATER COIL 354MM X 178MM X 32MM 2RW EB9	1
	UE183	RESISTOR 3 OHM 50W 24V	1
	UE700	CIRCUIT BREAKER 40A STUD TYP MANUAL	1
	AU744827	VALVE WATER 16MM	1
	AU517502	VALVE ACCESS 1/4" 1/4" & 3/8"OD SOLDER	1
	UE064	DPC 1/4" MF HIGH PRESSURE 2206kPa LOW PRESSURE 196kPa	1
	UF089	FAN DECK 24V EB9	1
	BC036	SEAL CAB TO CASE 360MM X 422MM	1
	UC047	KEEPER PLATE ZP	4
	UR011	BULKHEAD FITTING 5/8" MF #10	1
	UR009	BULKHEAD FITTING 3/8" MF #6	1

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	5.0 kW	17060 BTU
Heating Capacity	4.6 kW	15695 BTU
Air Flow	130 l/s	275 CFM
Fresh Air	30 l/s	64 CFM
Power Supply	24V / 12V	24V / 12V
Current Draw	7 A / 14 A	7 A / 14 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	46°C	115°F
Weight (nominal)	26.0 Kg	57.2 lbs
Technical Manual Reference	SM144-2071	SM144-2071
Dimension L X W X H	570mm X 545mm X 250mm	22.4in X 21.5in X 9.8in

MAINTENANCE

6 MONTHS / 2,500 HOURS	
UE048	BRUSH SET FOR MOTOR 12VDC EACH
AU320621	BRUSH SET FOR MOTOR 24VDC EACH
ANNUAL / 5,000 HOURS	
UE022	MOTOR 12VDC D/S (EB9EH2)
UE023	MOTOR 24VDC D/S (EB9EH4)
3 YEARS / 15, 000 HOURS	
UE016	THERMOSTAT DEICE STUD
UE064	DPC 1/4" MF HIGH PRESSURE 2206kPa LOW PRESSURE 196kPa
AU521923	TX VALVE 1.5T 3/8" IN 1/2" OUT 1/4" EQ
UR032	TX VALVE STRAINER FOR AU521923

Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

COMPANION ITEMS

PART NO.	DESCRIPTION
EB9C4X	Electric Condenser
EB9P4X	Pressuriser
HDC150	Hydraulic Compressor
AU2961001	Electric Compressor
AU110388	Radiator Condenser
AU270306E	Engine Driven Compressor
AU270307E	Engine Driven Compressor
AU270311E	Engine Driven Compressor
AU270312E	Engine Driven Compressor
AU531422	Receiver Drier
KNHV80001	Installation Kits
KNHV80011	Installation Kits



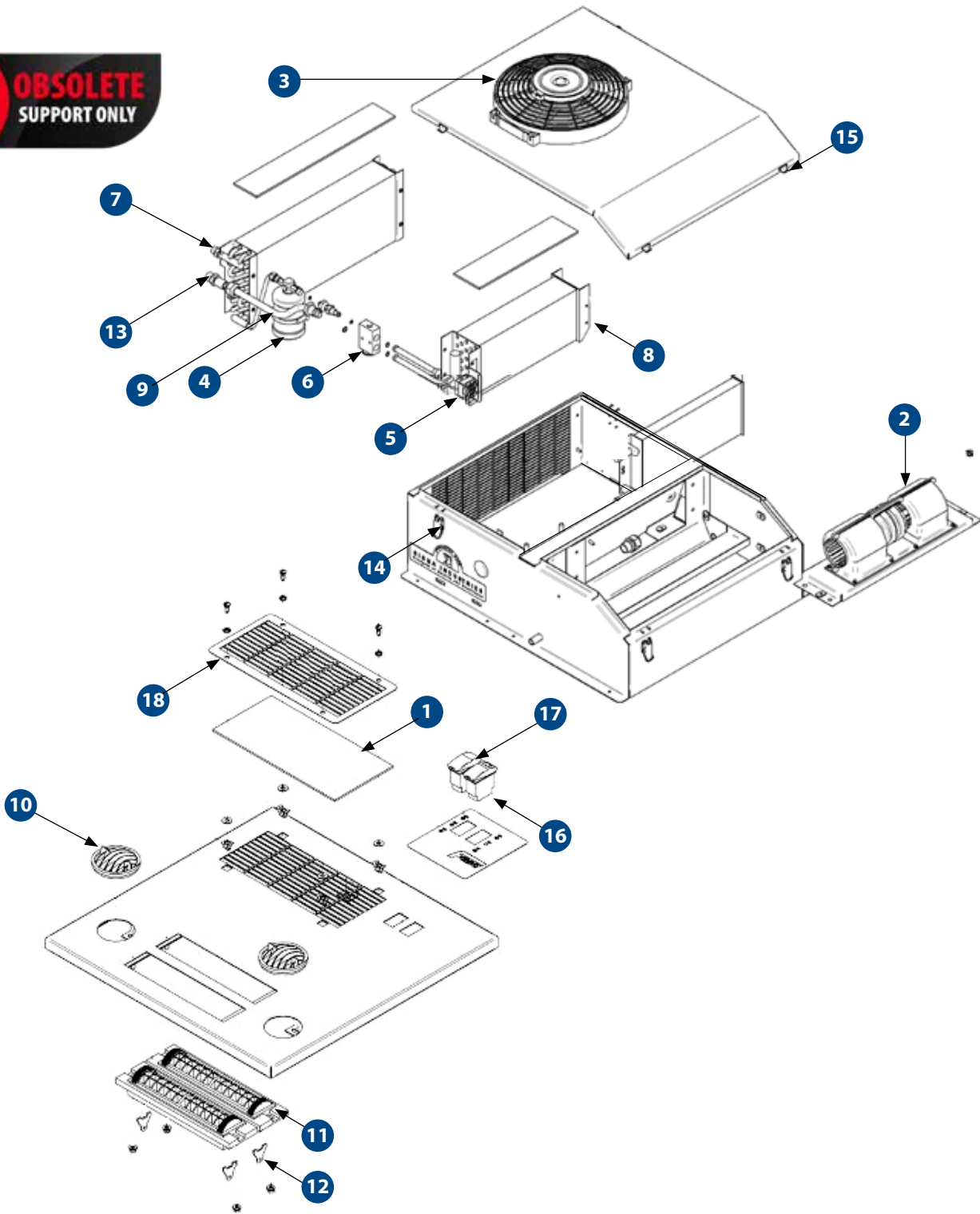
EC12*

ROOFTOP PACKAGED HVAC UNIT

EC122*
Rooftop Packaged HVAC 4kW 12V

EC124*
Rooftop Packaged HVAC 4kW 24V

* HVAC obsolete, spares support only



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1	S2501180 RETURN AIR FILTER MEDIA	1
2	AU400035 FAN DECK 12V 3SPD (EC122) AU400034 FAN DECK 24V 3SPD (EC124)	1 1
3	AU420052 FAN AXIAL ASSEMBLY 330MM 12VDC (EC122) AU420053 FAN AXIAL ASSEMBLY 330MM 24VDC (EC124)	1 1
4	AU531422 RECEIVER DRIER 3/8" MIOR 160MM HIGH	1
5	UE016 THERMOSTAT DEICE STUD	1
6	H0092214 THERMAL EXPANSION VALVE BLOCK 1.5T R134a	1
7	AU110415 CONDENSER COIL 485MM X 203MM X 79MM 5RW EDR4	1
8	AU120465 EVAPORATOR COIL 345X152X79 4RW EC9 EC124	1
9	AS250148 SUCTION LINE TX VALVE TO BULKHEAD FITTING	1
10	AU821708 LOUVRE ROUND 3" HOLE	2
11	S2501107 DIFFUSER 252MM X 62MM	2
12	S2501074 DIFFUSER INTERFACE	4
13	AU512C067 BULKHEAD FITTING O-RING 5/8"	1
14	UC048 LATCH TOGGLE OVER-CENTRE	4
15	UC047 KEEPER PLATE ZP	4
16	AU662968 SWITCH ROCKER IP68 24V 15A GREEN LED AU662970 SWITCH ROCKER IP68 12V 20A GREEN LED	1 1
17	AU662969 SWITCH ROCKER IP68 24V 15A AU662971 SWITCH ROCKER IP68 12V 20A	1 1
18	S2501172S RETURN AIR FILTER COVER	1
	AU661482 RELAY 30A 12VDC 5 PIN	1
	AU661483 RELAY 20A 24VDC 5 PIN	1
	UE064 DDPC 1/4" MF HIGH PRESSURE 2206kPa LOW PRESSURE 196kPa	1
	UC020 HOSE CLEAR PVC 12 5MM INTERNAL DIAMETER	5
	AS250147 LIQUID LINE RECEIVER TO TX VALVE	1
	S2501207 GRILLE 344X100MM	1
	UC504 DRAIN NOZZLE 13MM	2
	AU643213 FUSE BLADE MINI 15A AUTO	1
	AU643116 FUSE HOLDER MINI CRIMP 30A	1
	AU643100 FUSE BLADE MINI 25A AUTO	1

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	4.0 kW	13648 BTU
Heating Capacity (with Optional Kits)	3.5 kW	11942 BTU
Fan Speeds	3	3
Air Flow	110 l/s	233 CFM
Power Supply	12V / 24V	12V / 24V
Current Draw	25 A / 12.5 A	25 A / 12.5 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	46°C	115°F
Weight (nominal)	35.0 Kg	77.0 lbs
Technical Manual Reference	SM266-2494	SM266-2494
Dimension L X W X H	760mm X 600mm X 330mm	29.9in X 23.6in X 13in

MAINTENANCE

MONTHLY / 300 HOURS	
S2501180	RETURN AIR FILTER MEDIA
ANNUAL / 3,600 HOURS	
AU400035	FAN DECK 12V 3SPD
AU400034	FAN DECK 24V 3SPD
AU420052	FAN AXIAL ASSEMBLY 330MM 12VDC
AU420053	FAN AXIAL ASSEMBLY 330MM 24VDC
AU531422	RECEIVER DRIER 3/8" MIOR 160MM HIGH
3 YEARS / 10,800 HOURS	
UE016	THERMOSTAT DEICE STUD
AU661482	RELAY 30A 12VDC 5 PIN
AU661483	RELAY 20A 24VDC 5 PIN
UE064	DDPC 1/4" MF HIGH PRESSURE 2206kPa LOW PRESSURE 196kPa
H0092214	THERMAL EXPANSION VALVE BLOCK 1.5T R134a
Please contact SIGMA for more information including details on an overhaul scope and interval. Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.	

COMPANION ITEMS

PART NO.	DESCRIPTION
EB9P4X	Pressuriser
HDC150	Hydraulic Compressor
AU2961001	Electric Compressor 24V
AU270306E	Engine Driven Compressor
AU270307E	Engine Driven Compressor
AU270311E	Engine Driven Compressor
AU270312E	Engine Driven Compressor
KIT25011	Heater Kit

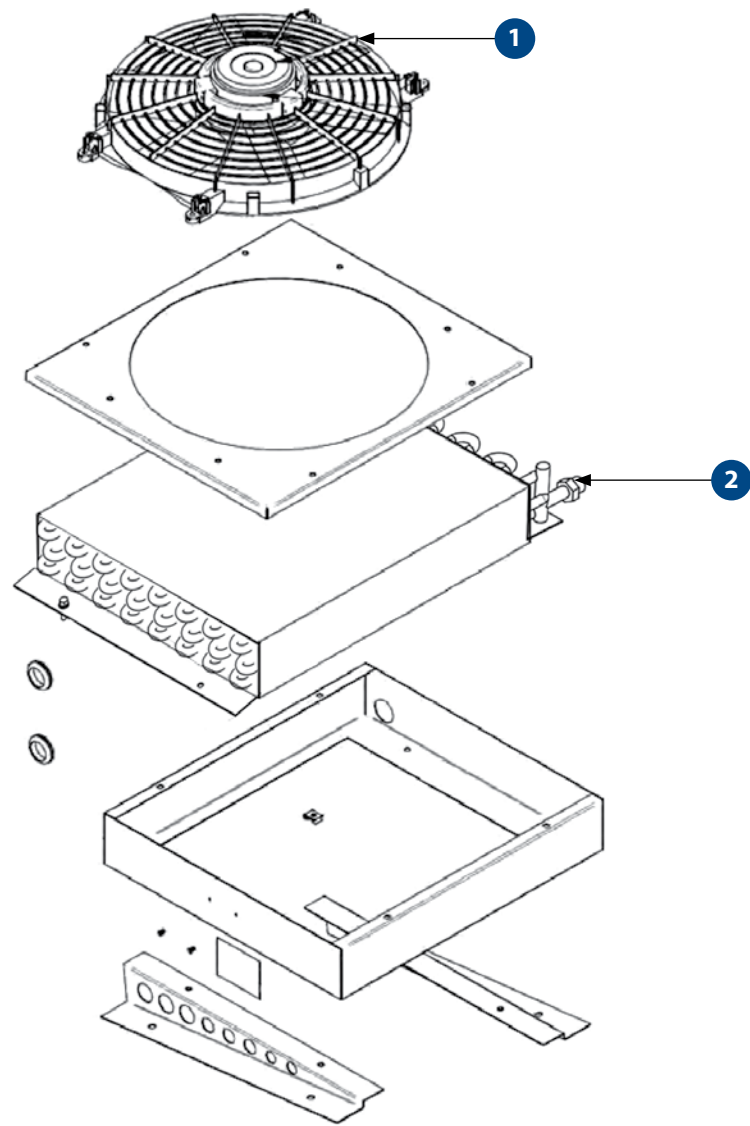


EC12C

REMOTE CONDENSER

EC12C2
Remote Condenser 4kW 12V

EC12C4
Remote Condenser 4kW 24V



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1	AU420064 FAN AXIAL ASSEMBLY 400MM 12VDC (EC12C2)	1
	AU420063 FAN AXIAL ASSEMBLY 400MM 24VDC (EC12C4)	1
2	AU110312 CONDENSER COIL 390MM X 406MM X 66MM 3RW	1
	AU110316 CONDENSER COIL 390X406X66 3RW (EC12C4SS)	1

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	4.0 kW	13648 BTU
Fan Speeds	1	1
Power Supply	24V / 12V	24V / 12V
Current Draw	10 A / 20 A	10 A / 20 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	46°C	115°F
Weight (nominal)	10.0 Kg	22.0 lbs
Technical Manual Reference	SM260-2494	SM260-2494
Dimension L X W X H	600mm X 455mm X 225mm	23.6in X 17.9in X 8.9in

MAINTENANCE

ANNUAL / 3,600 HOURS

AU420064 FAN AXIAL ASSEMBLY 400MM 12VDC

AU420063 FAN AXIAL ASSEMBLY 400MM 24VDC

Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

COMPANION ITEMS

PART NO.	DESCRIPTION
EC1214	Internal Wall Evaporator
EC12H4	Hood Liner Evaporator
EFF4BX1	Evaporator
EB9P4X	Pressuriser
HDC150	Hydraulic Compressor
AU2961001	Electric Compressor 24V
AU270306E	Engine Driven Compressor
AU270307E	Engine Driven Compressor
AU270311E	Engine Driven Compressor
AU270312E	Engine Driven Compressor
AU531422	Receiver Drier



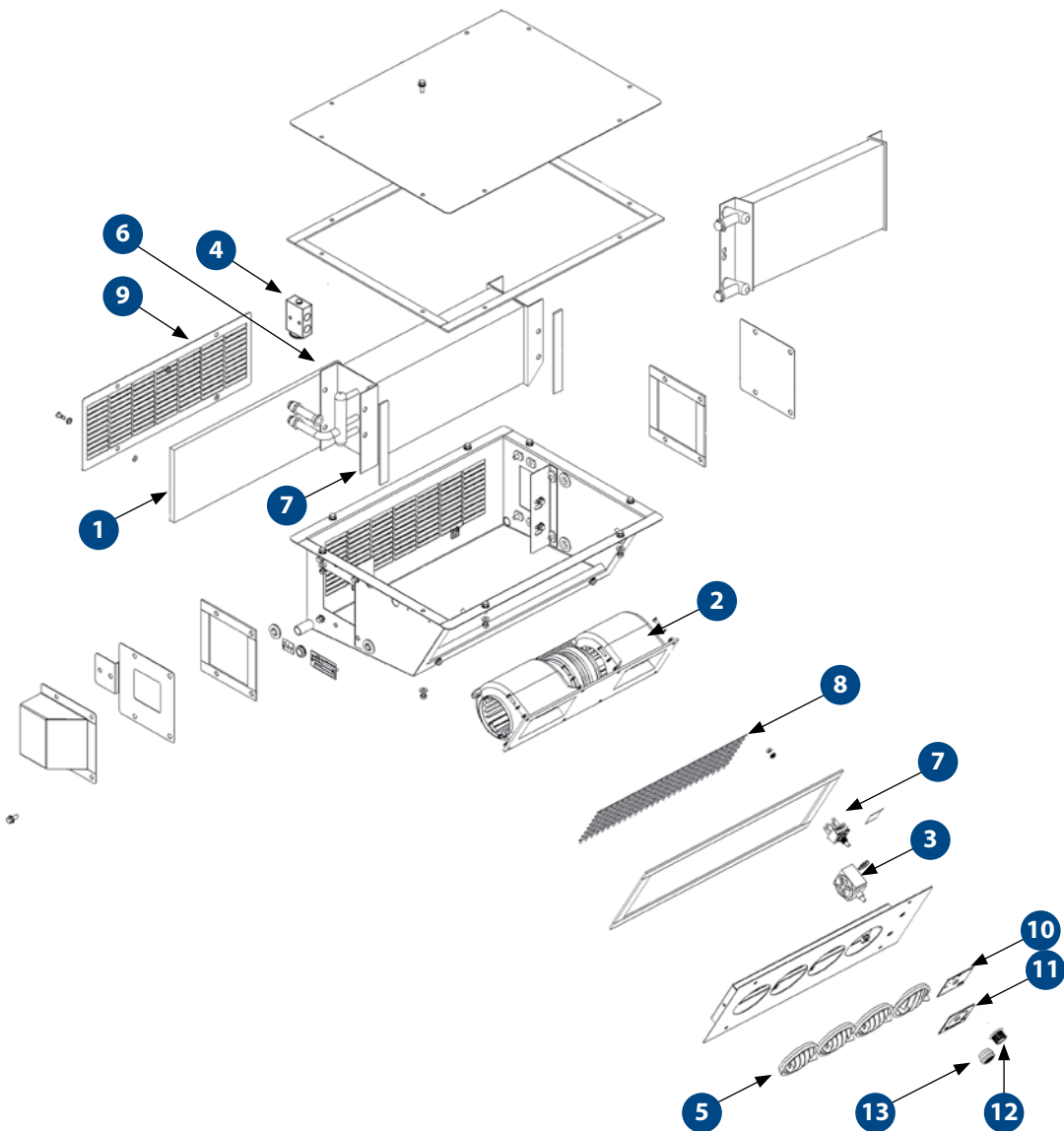
EC12H

CEILING MOUNT EVAPORATOR

EC12H2
Ceiling Mount Evaporator 4kW 12V

EC12H4
Ceiling Mount Evaporator 4kW 24V

EC12H4SS
Ceiling Mount Evaporator 4kW 24V Stainless Steel



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 S2501182S	EVAPORATOR FILTER MEDIA 385MM X 145MM	1
2 AU400035	FAN DECK 12V 3SPD (EC12H2)	1
AU400034	FAN DECK 24V 3SPD (EC12H4) (EC12H4SS)	1
3 UE016	THERMOSTAT DEICE STUD	1
4 AU521946	THERMAL EXPANSION VALVE BLOCK 2T 3/8" IN 1/2" OUT R134A	1
5 AU821708	LOUVRE ROUND 3" HOLE	4
AU120506	EVAPORATOR COIL 345MM X 152MM X 79MM (EC12H4SS)	1
6 AU120480	EVAPORATOR COIL 345MM X 152MM X 79MM (EC12H2/EC12H4)	1
7 UE335	ROTARY SWITCH 3-SPEED C/W NUT	1
8 S2501207	GRILLE 344MM X 100MM	1
9 S2501026	FILTER COVER	1
10 AU854350	LABEL FAN SWITCH	1
11 AU854351	LABEL THERMOSTAT	1
12 UC451	KNOB 1/4 BLACK PLASTIC 21MM DIAMETER	1
13 UC022	KNOB SNOWFLAKE 6.35MM	1
UC504	DRAIN NOZZLE 13MM	2
AU552403	O-RING 134A SIZE 13/32" #8	2
AU643213	FUSE BLADE MINI 15A AUTO	1

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	4.0 kW	13648 BTU
Heating Capacity (Optional)	3.5 kW	11942 BTU
Air Flow	110 l/s	233 CFM
Fresh Air	30 l/s	64CFM
Power Supply	12V / 24V	12V / 24V
Current Draw	10 A / 5 A	10 A / 5 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	46°C	115°F
Weight (nominal)	10.0 Kg	22.0 lbs
Technical Manual Reference	SM260-2494	SM260-2494
Dimension L X W X H	513mm X 415mm X 180mm	20.2in X 16.3in X 7.1in

MAINTENANCE

MONTHLY / 300 HOURS	
S2501182S	RETURN AIR FILTER MEDIA
ANNUAL / 3,600 HOURS	
AU400035	FAN DECK 12V 3SPD
AU400034	FAN DECK 24V 3SPD
3 YEARS / 10,800 HOURS	
UE016	THERMOSTAT DEICE STUD
UE335	ROTARY SWITCH 3 SPEED COMPLETE WITH NUT
AU521946	THERMAL EXPANSION VALVE BLOCK 2T 3/8" IN 1/2" OUT R134A

Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

COMPANION ITEMS

PART NO.	DESCRIPTION
EC12C4	Electric Condenser
EB9P4X	Pressuriser
HDC150	Hydraulic Compressor
AU2961001	Electric Compressor 24V
AU110316	Radiator Condenser
AU270306E	Engine Driven Compressor
AU270307E	Engine Driven Compressor
AU270311E	Engine Driven Compressor
AU270312E	Engine Driven Compressor
KIT25014	Heater Kit

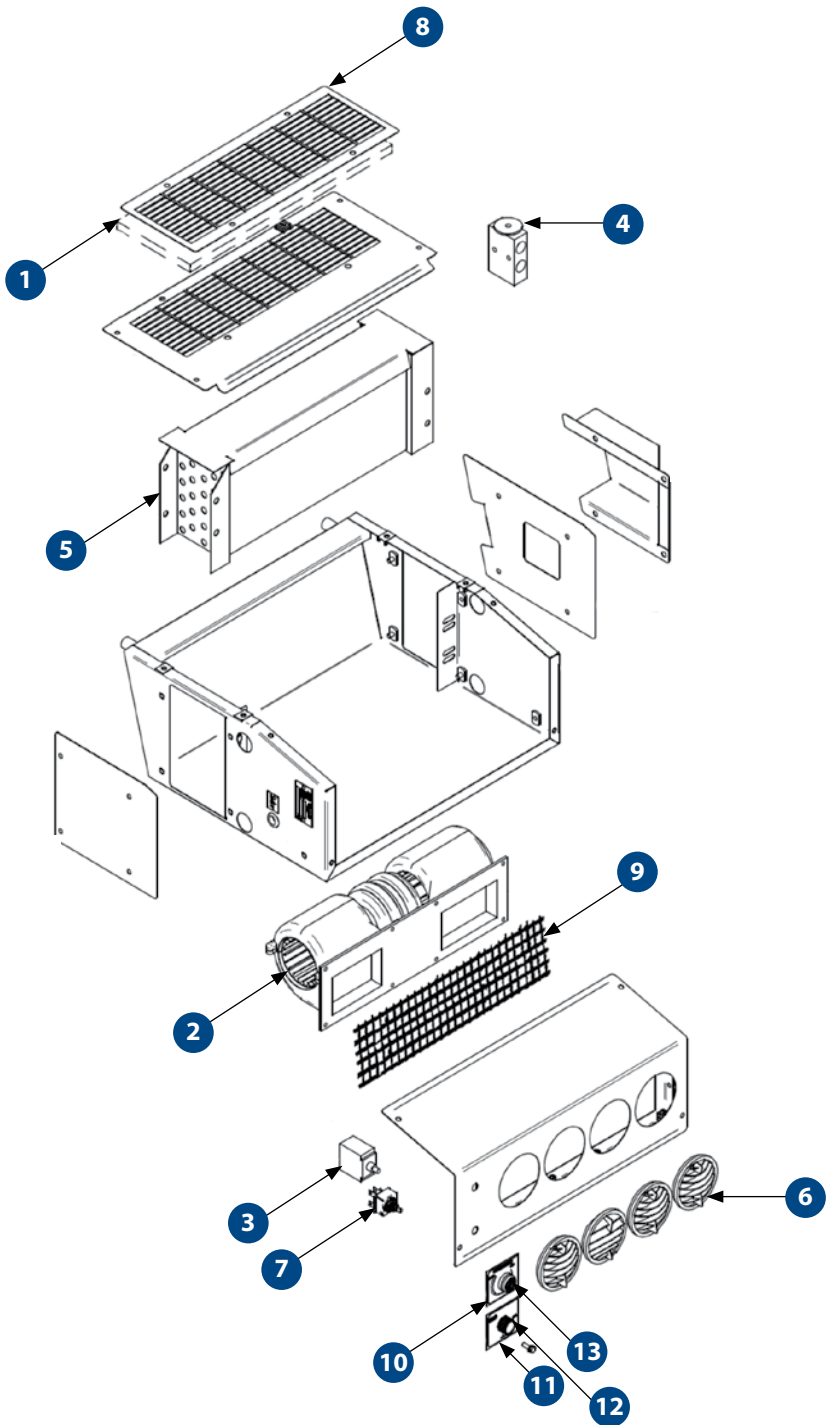


EC12I

INTERNAL EVAPORATOR

EC12I2
Internal Wall Mount Evaporator 4kW 12V

EC12I4
Internal Wall Mount Evaporator 4kW 24V



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 S25011825	EVAPORATOR FILTER MEDIA 385MM X 145MM	1
2 AU400035 AU400034	FAN DECK 12V 3SPD (EC12I2) FAN DECK 24V 3SPD (EC12I4)	1 1
3 UE016	THERMOSTAT DEICE STUD	1
4 AU521946	THERMAL EXPANSION VALVE BLOCK 2T 3/8" IN 1/2" OUT R134A	1
5 AU120480	EVAPORATOR COIL 345MM X 152MM X 79MM 4RW	1
6 AU821708	LOUVRE ROUND 3" HOLE	4
7 UE335	ROTARY SWITCH 3 SPEED COMPLETE WITH NUT	1
8 S2501021	FILTER COVER	1
9 S2501207	GRILLE 344MM X 100MM	1
10 AU854351	LABEL STANDARD THERMOSTAT	1
11 AU854350	LABEL AUTOMOTIVE FAN SWITCH	1
12 UC451	KNOB 1/4 BLACK PLASTIC 21MM DIAMETER	1
13 UC022	KNOB SNOWFLAKE 6.35MM	1
UC504	DRAIN NOZZLE 13MM	4
AU552403	O RING 134A SIZE 13/32" #8	2
AU643100	FUSE BLADE MINI 25A AUTO	1
AU643213	FUSE BLADE MINI 15A AUTO	1

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	4.0 kW	13648 BTU
Heating Capacity (Optional)	3.5 kW	11942 BTU
Air Flow	110 l/s	233 CFM
Fresh Air	30 l/s	64 CFM
Power Supply	12V / 24V	12V / 24V
Current Draw	10 A / 5 A	10 A / 5 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	46°C	115°F
Weight (nominal)	10.0 Kg	22.0 lbs
Technical Manual Reference	SM260-2494	SM260-2494
Dimension L X W X H	550mm X 435mm X 180mm	21.7in X 17.1in X 7.1in

MAINTENANCE

MONTHLY / 300 HOURS	
S25011825	EVAPORATOR FILTER MEDIA 385X145MM
ANNUAL / 3,600 HOURS	
AU400034	FAN DECK 24V 3SPD
AU400035	FAN DECK 12V 3SPD
3 YEARS / 10,800 HOURS	
UE016	THERMOSTAT DEICE STUD
UE335	ROTARY SWITCH 3 SPEED COMPLETE WITH NUT
AU521946	THERMAL EXPANSION VALVE BLOCK 2T 3/8" IN 1/2" OUT R134A

Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

COMPANION ITEMS

PART NO.	DESCRIPTION
EC12C4	Electric Condenser
EB9P4X	Pressuriser
HDC150	Hydraulic Compressor
AU2961001	Electric Compressor 24V
AU110388	Radiator Condenser
AU270306E	Engine Driven Compressor
AU270307E	Engine Driven Compressor
AU270311E	Engine Driven Compressor
AU270312E	Engine Driven Compressor
AU531422	Receiver Drier
KIT25014	Heater Kit





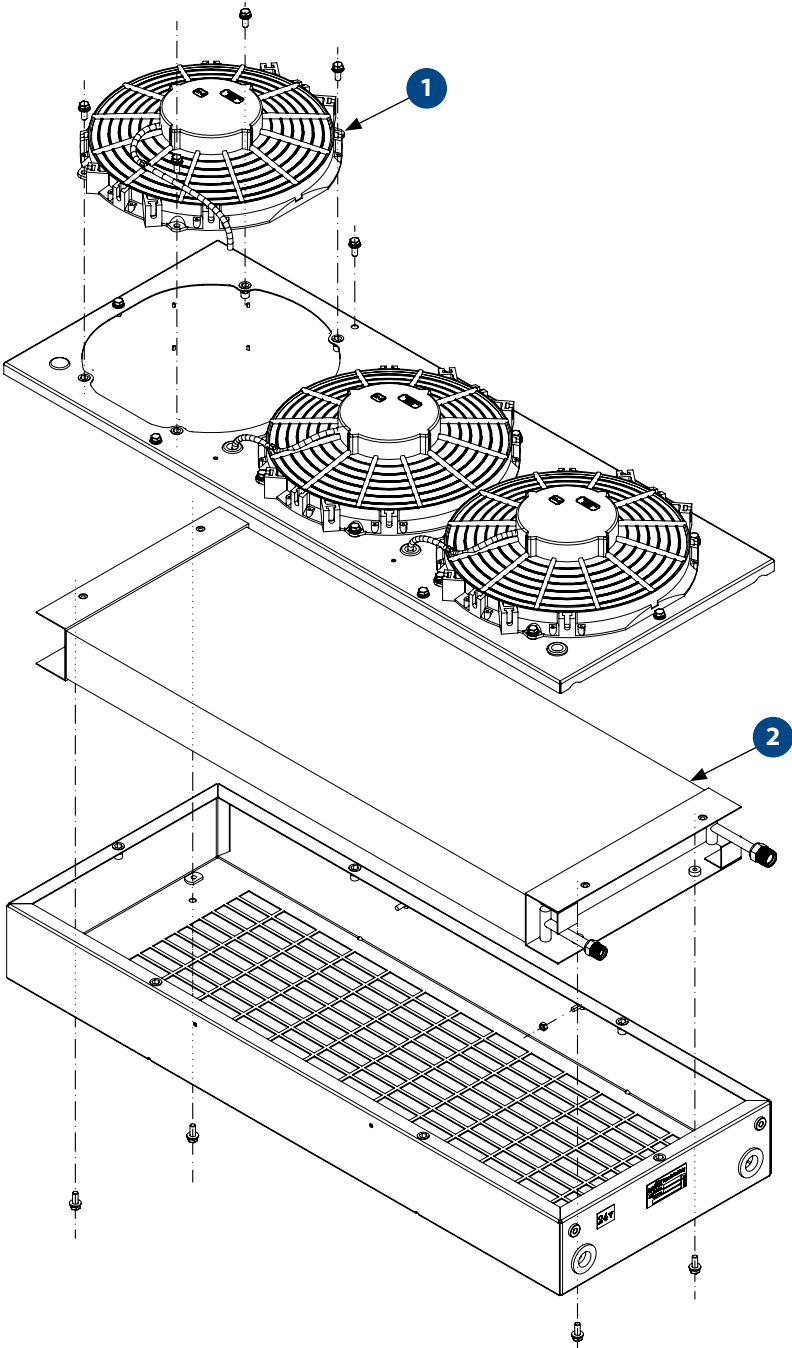
EC22C

REMOTE CONDENSER

EC22C2
Remote Condenser 6kW 12V

EC22C4
Remote Condenser 6kW 24V

EC22C4SS
Remote Condenser 6kW 24V Stainless Steel



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1	H0212292 FAN AXIAL ASSEMBLY 260MM 12VDC (EC22C2)	3
	H0214932 FAN AXIAL ASSEMBLY 260MM 24VDC (EC22C4)	3
2	AU110389 CONDENSER (EC22C4SS)	1
	AU110388 CONDENSER (EC22C2 EC22C4)	1

UPGRADE OPTION

PART NO.	DESCRIPTION	QTY
H0250349	CONDENSER COVER, ASSEMBLY 12v	1
H0250666	CONDENSER COVER, ASSEMBLY 24v	1
H0249473	CONDENSER COVER, ASSEMBLY SS	1

NOTE: To upgrade unit with AU420050 or AU420051 (previous generation fans) to our new fan system without any modification to lid, one of the assembly listed above can be used based on your unit variant. This assemble includes one (1) panel, three (3) fans & wiring

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	6.0 kW	20472 BTU
Fan Speeds	1	1
Power Supply	24V / 12V	24V / 12V
Current Draw	13 A / 26 A	13 A / 26 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	46°C	115°F
Weight (nominal)	14.0 Kg	30.8lbs
Technical Manual Reference	SM260-2494	SM260-2494
Dimension L X W X H	908mm X 332mm X 190mm	35.7in X 13.1in X 7.5in

MAINTENANCE

ANNUAL / 3,600 HOURS	
H0212292	FAN AXIAL ASSEMBLY 260MM 12VDC
H0214932	FAN AXIAL ASSEMBLY 260MM 24VDC
Please contact SIGMA for more information including details on an overhaul scope and interval. Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.	

COMPANION ITEMS

PART NO.	DESCRIPTION
EC22H4	Hoodliner Evaporator
EB9P4X	Pressuriser
HDC150	Hydraulic Compressor
AU270306E	Engine Driven Compressor
AU270307E	Engine Driven Compressor
AU270311E	Engine Driven Compressor
AU270312E	Engine Driven Compressor
AU531422	Receiver Drier

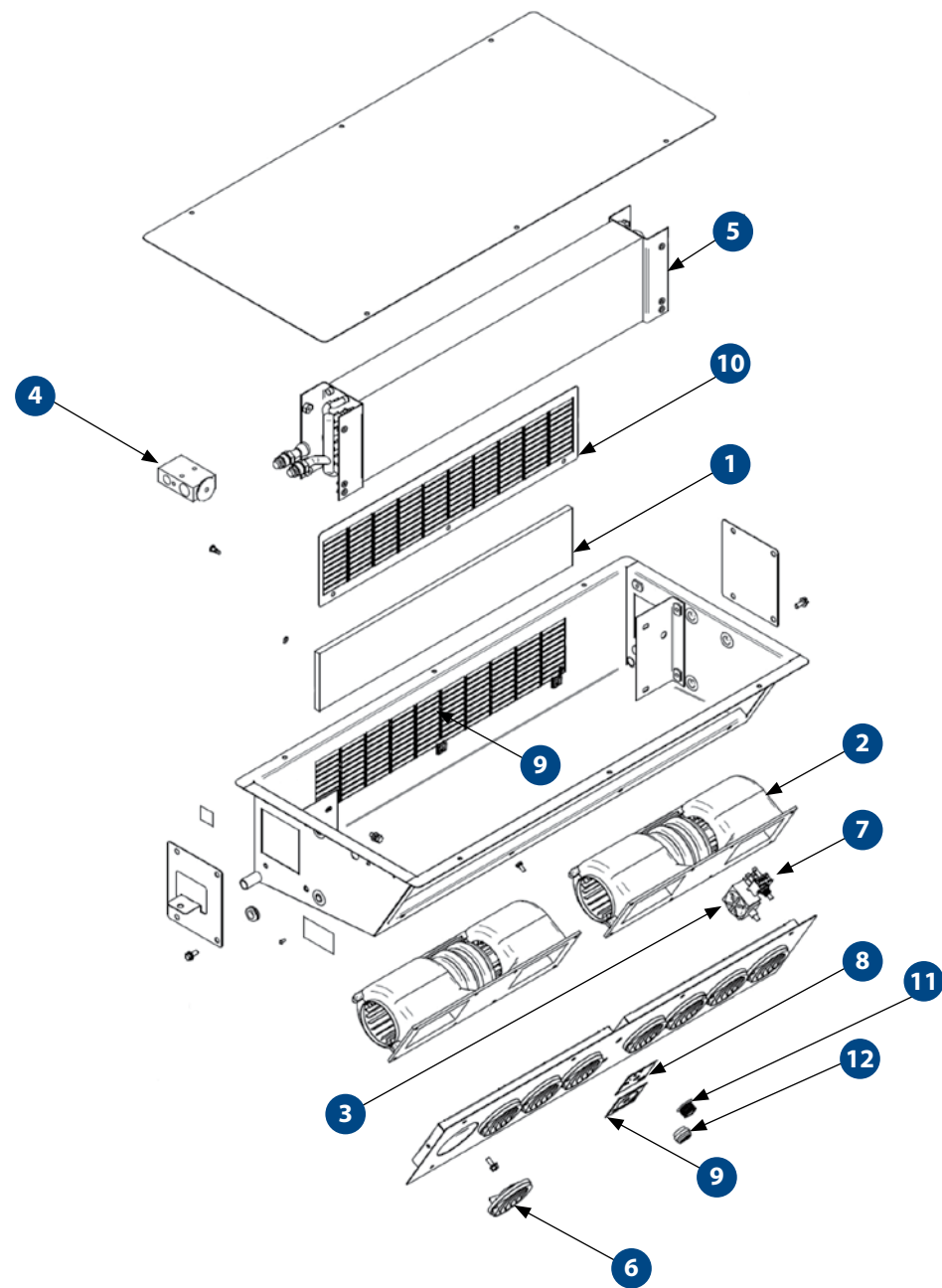


EC22H

CEILING EVAPORATOR

EC22H2
Ceiling Evaporator 6kW 12V

EC22H4
Ceiling Evaporator 6kW 24V



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 S2502084	FILTER MEDIA	1
2 AU400035 AU400034	FAN DECK 12V 3SPEED (EC22H2) FAN DECK 24V 3SPEED (EC22H4)	2 2
3 UE016	THERMOSTAT DEICE STUD	1
4 AU521946	THERMAL EXPANSION VALVE BLOCK 2T 3/8" IN 1/2" OUT R134A	1
5 AU120660	EVAPORATOR COIL 600MM X 152MM X 63MM 4RW EC22H	1
6 AU821708	LOUVRE ROUND 3" HOLE	8
7 UE335	ROTARY SWITCH 3 SPEED COMPLETE WITH NUT	1
8 AU854350	LABEL AUTOMOTIVE FAN SWITCH	1
9 AU854351	LABEL STANDARD THERMOSTAT	1
10 S2502024	FILTER COVER	1
11 UC451	KNOB 1/4 BLACK PLASTIC 21MM DIAMETER	1
12 UC022	KNOB SNOWFLAKE 6.35MM	1
UC504	DRAIN NOZZLE 13MM	2
AU552403	O RING 134A SIZE 13/32" #8	2

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	6.0 kW	20472 BTU
Heating Capacity (with Optional Kit)	3.8 kW	12966 BTU
Fan Speeds	3	3
Air Flow	220 l/s	466 CFM
Power Supply	12V / 24V	12V / 24V
Current Draw	24 A / 12 A	24 A / 12 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	46°C	115°F
Weight (nominal)	14.0 Kg	30.8 lbs
Technical Manual Reference	SM260-2494	SM260-2494
Dimension L X W X H	886mm X 390mm X 180mm	34.9in X 15.4in X 7.1in

MAINTENANCE

MONTHLY / 300 HOURS	
S2502084	RETURN AIR FILTER MEDIA
ANNUAL / 3,600 HOURS	
AU400035	FAN DECK 12V 3SPD
AU400034	FAN DECK 24V 3SPD
3 YEARS / 10,800 HOURS	
UE016	THERMOSTAT DEICE STUD
UE335	ROTARY SWITCH 3 SPEED COMPLETE WITH NUT
AU521946	THERMAL EXPANSION VALVE BLOCK 2T 3/8" IN 1/2" OUT R134A

Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

COMPANION ITEMS

PART NO.	DESCRIPTION
EC22C4	Electric Condenser
EB9P4X	Pressuriser
HDC150	Hydraulic Compressor
AU2961001	Electric Compressor 24V
AU110388	Radiator Condenser
AU270306E	Engine Driven Compressor
AU270307E	Engine Driven Compressor
AU270311E	Engine Driven Compressor
AU270312E	Engine Driven Compressor
AU531422	Receiver Drier
KIT25021	EC22H Heater Kit
KNHV90019	Vertical Mount Drain Tray



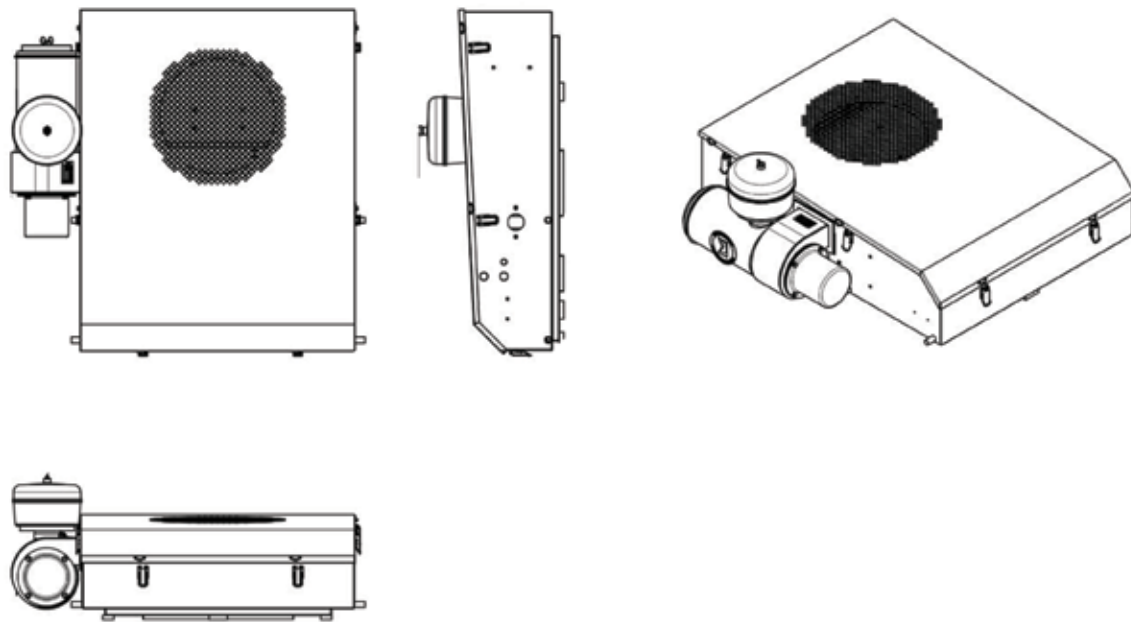
EC64X*

MEDIUM DUTY OFF ROAD ROOFTOP PACKAGED HVAC UNIT

EC64X*
Rooftop Packaged HVAC 6kW 24V with Heating (6kW)

EC64XSS*
Rooftop Packaged HVAC 6kW 24V with Heating (6kW)
Stainless Steel Case

* HVAC obsolete, spares support only



SPARE PARTS

PART NO.	DESCRIPTION	QTY
MC044S	RETURN AIR FILTER ASSEMBLY E&T SERIES	1
AU320621	BRUSH SET FOR MOTOR 24VDC EACH	2
UE023	MOTOR 24VDC D/S	1
UE026	MOTOR 24VDC S/S	1
AU531411	RECEIVER DRIER 3/8" 24UNF 165MM HIGH	1
UE016	THERMOSTAT DEICE STUD	1
UE072	RELAY 24VDC 70A AUTOMOTIVE	1
AU521923	TX VALVE 1.5T 3/8" IN 1/2" OUT 1/4" EQ	1
UR032	TX VALVE STRAINER FOR AU521923	1
UR396	CONDENSER COIL 600MM X 229MM X 110MM	1
UR532	EVAPORATOR COIL 600MM X 152MM X 79MM +32 5+2RW	1
AU420229	FAN AXIAL 300MM 3 BLADES LB	1
UF173	BLOWER HOUSING LEFT HAND	1
UF174	BLOWER HOUSING RIGHT HAND	1
UF171	BLOWER 121D X 127W X 3/8" DUAL INLET	2
UC028	CONDENSER MOTOR MOUNT	2
AS500625	CONDENSER COIL ASSEMBLY EC6	1
AS500607	EVAPORATOR COIL ASSEMBLY EC6	1
UE183	RESISTOR 3 OHM 50W 24V	1
UE700	CIRCUIT BREAKER 40A STUD TYP MANUAL	1
UC027	EVAPORATOR MOTOR MOUNT	1
UE064	PRESSURE SWITCH	1
AU460807	FILTER MEDIA 12MM G2	1
AU821704	DIFFUSER ROUND 92MM PVC	5
AU663564	ROTARY SWITCH OFF LO HI LO	1
AU853507	LEAF SPRING 105MM X 13MM	1
UC504	DRAIN NOZZLE 13MM	2
UF034	INLET RING 103.5MM	1
ERF032	FUSE BOX - 6 WAY BLADE	1
AS500610	LIQUID LINE - DRIER TO TX VALVE	1
AU872873	BULKHEAD FITTING 5/8SLF X 3/4MF	1
AS500609	LIQUID LINE - COIL TO DRIER	1
S5006029	MOTOR MOUNT CLAMP 97MM	1
S5006034	LIQUID LINE (COIL TO DRIER)	1
UC048	LATCH TOGGLE OVER-CENTRE	6
UC047	KEEPER PLATE ZP	6
AU643210	FUSE BLADE 25A AUTO	1
UC020	HOSE CLEAR PVC 12 5MM ID	6

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	6.0 kW	20472 BTU
Heating Capacity	6.0 kW	20472 BTU
Fan Speeds	2	2
Air Flow	250 l/s	530 CFM
Fresh Air	30 l/s	64 CFM
Power Supply	24V	24V
Current Draw	18 A	18 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	46°C	115°F
Weight (nominal)	35.0 Kg	77.0 lbs
Technical Manual Reference	SM150-5006	SM150-5006
Dimension L X W X H	945mm X 750mm X 260mm	37.2in X 29.5in X 10.2in

MAINTENANCE

MONTHLY / 300 HOURS	
MC044S	RETURN AIR FILTER ASSEMBLY E&T SERIES
6 MONTHLY / 1,800 HOURS	
AU320621	BRUSH SET FOR MOTOR 24VDC EACH
ANNUAL / 3,600 HOURS	
UE023	MOTOR 24VDC D/S
UE026	MOTOR 24VDC S/S
AU531411	RECEIVER DRIER 3/8" 24UNF 165MM HIGH
3 YEARS / 10,800 HOURS	
UE072	RELAY 24VDC 70A AUTOMOTIVE
AU521923	TX VALVE 1.5T 3/8" IN 1/2" OUT 1/4" EQ
UR032	TX VALVE STRAINER FOR AU521923
UF171	BLOWER 121D X 127W X 3/8" DI
AU420229	FAN AXIAL 300MM 3 BLADES LB
AU663564	ROTARY SWITCH OFF LO HI LO
UE183	RESISTOR 3 OHM 50W 24V
UE016	THERMOSTAT DEICE STUD
UE064	PRESSURE SWITCH

Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

COMPANION ITEMS

PART NO.	DESCRIPTION
EB9P4X	Pressuriser
HDC150	Hydraulic Compressor
AU270306E	Engine Driven Compressor (24V)
AU270307E	Engine Driven Compressor
AU270311E	Engine Driven Compressor
AU270312	Engine Driven Compressor



ECW6BX1

WALL MOUNTED CONDENSER

H0204590
Wall mounted Condenser 6.5kW 24 VDC

SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 H0204604	CONDENSER COIL	1
2 H0207769	CONDENSER FAN ASSEMBLY	2

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	6.5kW	22,180 BTU
Fan Speeds	1	1
Power Supply	24VDC	24VDC
Current Draw	15 A	15 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	46°C	115 °F
Weight (nominal)	19.5 Kg	42.9lbs
Technical Manual Reference		
Dimension L X W X H	700mm X 405mm X 200mm	27.5 in X 15.9in X 7.8in

MAINTENANCE

ANNUAL / 3,600 HOURS	
H0207769	CONDENSER FAN ASSEMBLY

Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

COMPANION ITEMS

PART NO.	DESCRIPTION
EC22H4	Hoodliner Evap
EFF5BX3	Evap Floor Mounted
HDC170	Hydraulic Driven Compressor
AU270306	Engine Driven Compressor
AU270307	Engine Driven Compressor
AU531422	Receiver Drier
AU531601	Receiver Drier

DRAGLINE & SHOVEL

DRILL

EXCAVATOR

DOZER

TRUCK

WHEEL LOADER

CONSTRUCTION

UNDERGROUND EQUIPMENT

INDUSTRIAL

SMELTERS

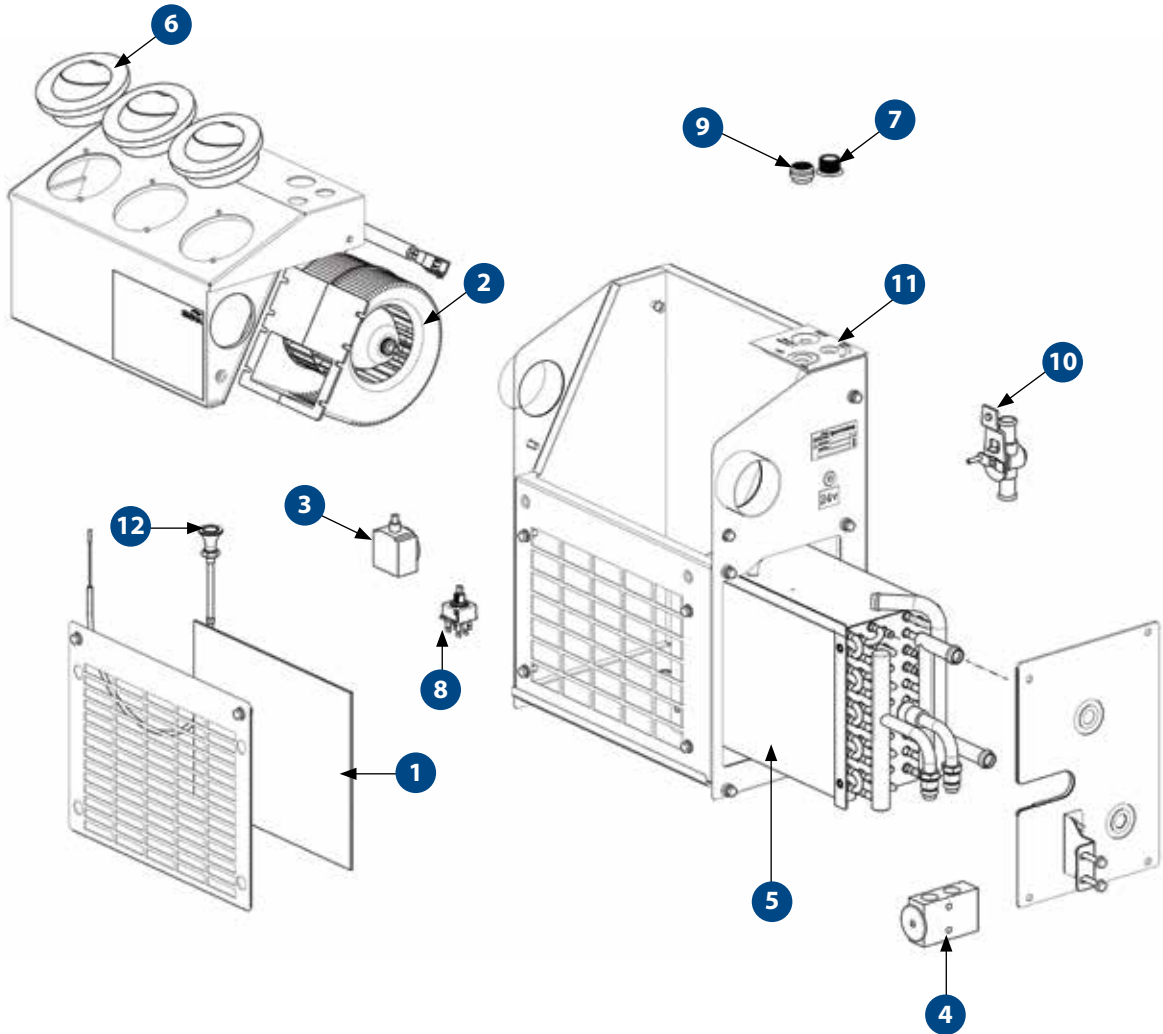
RAIL SPECIAL VEHICLES



EFF4

INTERNAL EVAPORATOR

EFF4BX1
Internal Evaporator 4kW 24V with Heating (4.5kW)



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1	S3938009 FILTER MEDIA	1
2	AU4001001 FAN DECK 24V 3SPEED	1
3	UE016 THERMOSTAT DEICE STUD	1
4	AU521946 TX VALVE	1
5	AU1201012 EVAPORATOR + HEATER COIL 250MM X 190MM X 66MM	1
6	AU821301 DIFFUSER ROUND 75MM PLASTIC	3
7	UC451 KNOB 1/4 BLACK PLASTIC 21MM DIAMETER	1
8	UE335 ROTARY SWITCH 3-SPEED C/W NUT	1
9	UC022 KNOB SNOWFLAKE 6.35MM	1
10	AU744827 VALVE WATER 16MM	1
11	H0001668 LABEL - EVAPORATOR CONTROL	1
12	UC042 CABLE PUSH/PULL F/DRIVE 1500MM	1
	UC504 DRAIN NOZZLE 13MM	2
	AU552403 O-RING 134A SIZE 13/32" #8	2
	UC020 HOSE CLEAR PVC 12 5MM ID	1

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	4.0 kW	13648 BTU
Heating Capacity	4 kW	13648 BTU
Fan Speeds	3	3
Air Flow	100 l/s	212 CFM
Power Supply	24V	24V
Current Draw	6 A	6 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	46°C	115°F
Weight (nominal)	15.0 Kg	33.0 lbs
Technical Manual Reference	SM518-3938	SM518-3938
Dimension L X W X H	390mm X 210mm X 455mm	15.3in X 8.2in X 17.9in

MAINTENANCE

MONTHLY / 500 HOURS	
S3938009	FILTER MEDIA
ANNUALLY / 5,000 HOURS	
AU4001001	FAN DECK 24V 3SPEED
3 YEARS / 15,000 HOURS	
UE016	THERMOSTAT DEICE STUD
AU521946	TX VALVE
UE335	ROTARY SWITCH 3 SPEED COMPLETE WITH NUT

Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

COMPANION ITEMS

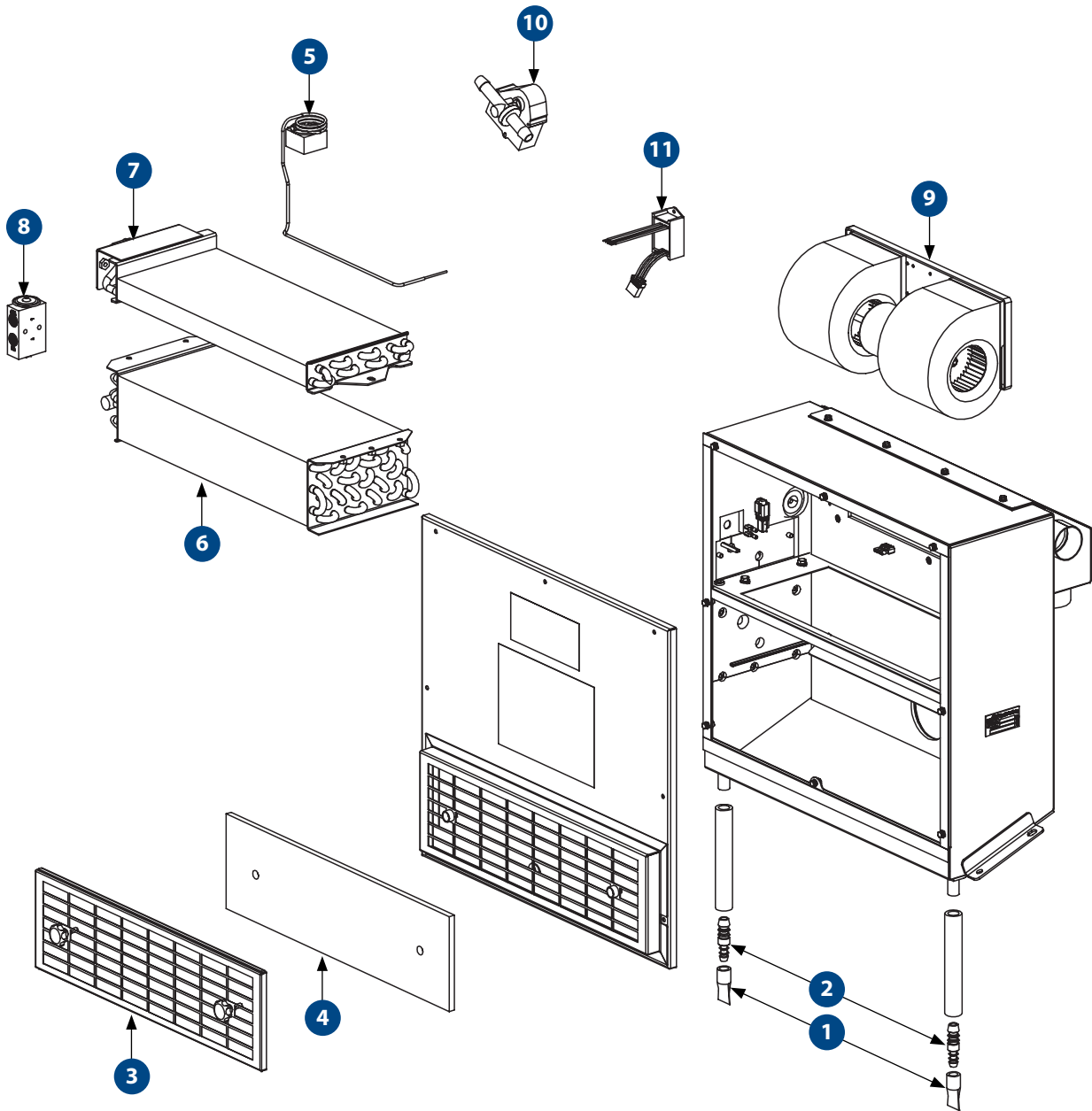
PART NO.	DESCRIPTION
EC12C4	Electric Condenser
EB9P4X	Pressuriser
HDC150	Hydraulic Compressor
AU2961001	Electric Compressor 24V
AU110388	Radiator Condenser
AU270306E	Engine Driven Compressor
AU270307E	Engine Driven Compressor
AU270311E	Engine Driven Compressor
AU270312E	Engine Driven Compressor
AU531422	Receiver Drier



EFF5

FLOOR MOUNTED EVAPORATOR

EFF5BX3
Floor Mounted Evaporator 5kW 24V with Heating (6kW)



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 UC504	DRAIN NOZZLE 13MM	2
2 H0122713	HOSE JOINER 5/8 X 1/2 BARB PLASTIC	2
3 H0290673	RETURN AIR FILTER PANEL ASSEMBLY	1
4 H0093153	RETURN AIR FILTER	1
5 UE016	THERMOSTAT DEICE STUD	1
6 H0092745	EVAPORATOR COIL 416MM X 178MM X 95MM 6 ROW	1
7 H0092744	HEATER COIL 416MM X 178MM X 32MM 2 ROW	1
8 AU521946	THERMAL EXPANSION VALVE BLOCK 2T 3/8" IN 1/2" OUT R134A	1
9 AU400051	FAN DECK 24V 3SPEED	1
10 AU5221004	2-PORT 5/8" ELECTRIC HEATER CONTROL VALVE	1
11 AU6811008	HEATER VALVE CONTROL MODULE	1
AU663118	ROTARY SWITCH 2 POSITION 45 DEGREE	1
UC451	KNOB 1/4 BLACK PLASTIC 21MM DIAMETER	1
UE335	ROTARY SWITCH 3 SPEED COMPLETE WITH NUT	1
H0147952	POTENTIOMETER ASSEMBLY	1

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling (Nominal)	5.0 kW	17061 BTU
Heating Capacity	6.0 kW	20473 BTU
Fan Speeds	3	3
Air Flow	200 l/s	424 CFM
Fresh Air	upto 30 l/s	upto 63.5 CFM
Power Supply	24VDC	24VDC
Current Draw	13 A	13 A
Refrigerant	R134a	R134a
Minimum Ambient Temperature	-10°C	14°F
Maximum Ambient Temperature	54°C	129.2°F
Weight (nominal)	30 Kg	66.14 lbs

MAINTENANCE

MONTHLY / 300 HOURS	
H0093153	RETURN AIR FILTER
3 YEARS / 10,800 HOURS	
UE016	THERMOSTAT DEICE STUD
AU521946	TX VALVE BLOCK 2T 3/8" IN 1/2" OUT R134A
AU400051	FAN DECK 24V 3SPEED
AU5221004	2-PORT 5/8" ELECTRIC HEATER CONTROL VALVE
UE335	ROTARY SWITCH 3-SPEED COMPLETE WITH NUT

Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

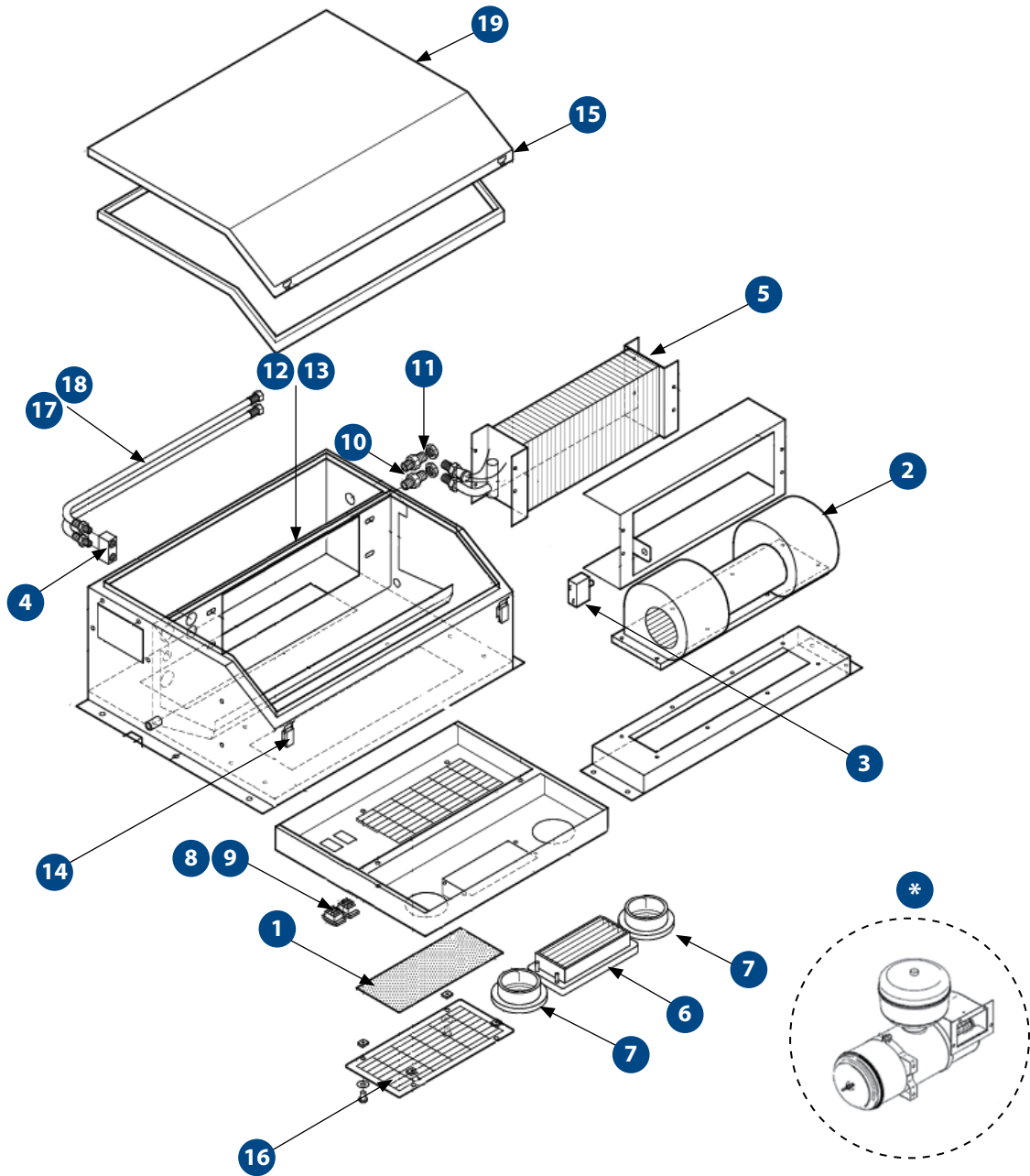
COMPANION ITEMS

PART NO.	DESCRIPTION
EB9P4X	Pressuriser (24VDC)
HDC150	Hydraulic Driven Compressor 150
AU110388	Condenser Coil 770X282X70 4RW
AU270306	Compressor UP170 2A 24V VMO 132 OD PAG
AU270307	Compressor UP170 1B 24V VMO 135 PAG
AU270311	Compressor UP150 2A 24V VMO 132 OD PAG
AU270312	Compressor UP150 1B 24V VMO 135 OD PAG
AU531422	Receiver Drier with Sight Glass
EC22C4	Light Duty Condenser (24VDC)



EFR4 EVAPORATOR

EFR4BX1
Rooftop Evaporator 4kW 24V



* SEE EB9P4 (PAGE 29) AND EB9P4X (PAGE 31) FOR PRESSURISER SPARE PARTS AND MAINTENANCE

SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 S2501180	RETURN AIR FILTER MEDIA	1
2 AU400034	FAN DECK 24V 3SPEED	1
3 UE016	THERMOSTAT DEICE STUD	1
4 AU521946	TX VALVE	1
5 AU120480	EVAPORATOR COIL 345MM X 152MM X 79MM 4RW EC12	1
6 AU821707	DIFFUSER 196MM X 83MM PLASTIC	1
7 AU821708	LOUVRE ROUND 3" HOLE	2
8 AU662969	SWITCH ROCKER IP68 24V 15A	1
9 AU662968	SWITCH ROCKER IP68 24V 15A GREEN LED	1
10 AU512C067	BULKHEAD FITTING O-RING 5/8"	1
11 AU512C065	BULKHEAD FITTING O-RING 3/8"	1
12 AU862213	SEAL RUBBER	1
13 AU862211	SEAL RUBBER	3
14 UC048	LATCH TOGGLE OVER-CENTRE	4
15 UC047	KEEPER PLATE ZP	4
16 S25011725	RETURN AIR FILTER COVER	1
17 AU5551004	SUCTION LINE HOSE ASSEMBLY #10	1
18 AU5551005	LIQUID LINE HOSE ASSEMBLY #6	1
19 H0340232	EVAPORATOR COVER	1

* SEE EB9P4 (PAGE 29) AND EB9P4X (PAGE 31) FOR PRESSURISER SPARE PARTS AND MAINTENANCE

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	4.0 kW	13648 BTU
Fan Speeds	3	3
Air Flow	100 l/s	212 CFM
Fresh Air	30 l/s	64 CFM
Power Supply	24VDC	24VDC
Current Draw	8 A	8 A
Refrigerant	R134A	R134A
Maximum Ambient Temperature	46°C	115°F
Weight (nominal)	25.0 Kg	55.0 lbs
Dimension L X W X H	470mm X 600mm X 260mm	18.5in X 23.6in X 10.2in

MAINTENANCE

MONTHLY / 300 HOURS

S2501180 RETURN AIR FILTER MEDIA

ANNUAL / 3,600 HOURS

AU400034 FAN DECK 24V 3SPEED

3 YEARS / 10,800 HOURS

UE016 THERMOSTAT DEICE STUD

AU521946 TX VALVE

Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

COMPANION ITEMS

PART NO.	DESCRIPTION
HDC150	Hydraulic Compressor
AU2961001	Electric Compressor (24V)
AU110388	Radiator Condenser
AU270306E	Engine Driven Compressor
AU270307E	Engine Driven Compressor
AU270311 E	Engine Driven Compressor
AU531422	Receiver Drier
AU1101021	Radiator Condenser

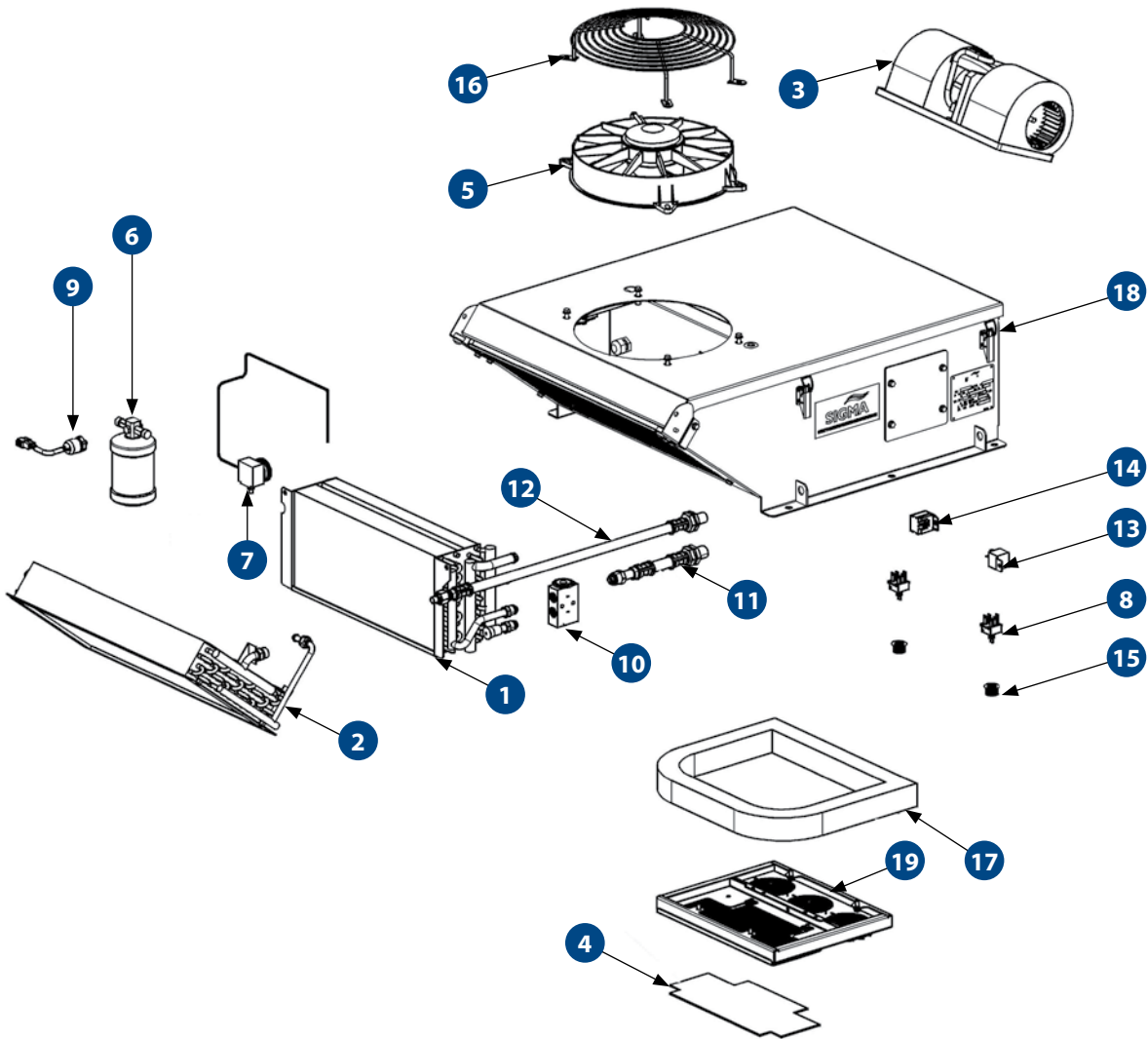


EPR4

ROOFTOP PACKAGED HVAC UNIT

EPR4AX1
Rooftop Packaged HVAC 4.5kW 12V

EPR4BX1
Rooftop Packaged HVAC 4.5kW 24V



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1	H0032385 EVAPORATOR HEATER COIL	2
2	H0002358 CONDENSER COIL	2
3	AU400050 BLOWER ASSEMBLY 3SPEED 12V (EPR4AX1) H0088451 BLOWER ASSEMBLY 3SPEED 24V (EPR4BX1)	1 1
4	H0044857 PLENUM RETURN AIR FILTER MEDIA	1
5	H0097521 CONDENSER FAN ASSEMBLY 280MM 12V (EPR4AX1) H0088425 CONDENSER FAN ASSEMBLY 280MM 24V (EPR4BX1)	1 2
6	AU531422 RECEIVER DRIER 134A	2
7	UE016 THERMOSTAT DEICE STUD	2
8	UE335 SWITCH 3-SPEED C/W NUT	2
9	UE064 HIGH / LOW PRESSURE SWITCH	1
10	H0092214 TX VALVE BLK 1.5T R134A	1
11	H0052679 FLEX HOSE #10 MOR-FTG B/HD & STR	1
12	H0052678 FLEX HOSE #8 MOR-FTG B/HD & STR	1
13	AU661482 RELAY 30A 12V (EPR4AX1) AU661483 RELAY 20A 24V (EPR4BX1)	3 1
14	ERR023 RELAY BASE 5 PIN (PANEL MOUNT) AX1 RELAY BASE 5 PIN (PANEL MOUNT) BX1	3 1
15	UC451 KNOB 1/4 BLACK PLASTIC 21MM DIAMETER	2
16	H0047048 CONDENSER FAN GUARD	1
17	H0042481 EPR4 ROOF SEAL	1
18	UC048 TOGGLE	4
19	AU821704 DIFFUSER ROUND 92MM PVC	1
	H0283545 DIODE FOR EPR4AX1	1

COMPANION ITEMS

PART NO.	DESCRIPTION
H0038939	Heater Kit (24V)
H0097524	Heater Kit (12V)
EB9P4X	Pressuriser (24V)
HDC150	Hydraulic Compressor
AU2961001	Electric Compressor (24V)
AU270306E	Engine Driven Compressor
AU270307E	Engine Driven Compressor
AU270311E	Engine Driven Compressor

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	4.5 kW	15354 BTU
Heating Capacity (with Optional Kit)	4.0 kW	13648 BTU
Fan Speeds	3	3
Air Flow	150 l/s	318 CFM
Power Supply	12V / 24V	12V / 24V
Current Draw	40 A / 20 A	40 A / 20 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	46°C	115°F
Weight (nominal)	47 kgs	103.4 lbs
Technical Manual Reference	HD0019477	HD0019477
Dimension (L X W X H)	804mm X 650mm X 364mm	31.7in X 25.6in X 14.3in

MAINTENANCE

MONTHLY / 300 HOURS	
H0044857	PLENUM RETURN AIR FILTER MEDIA
ANNUAL / 3,600 HOURS	
AU400050	BLOWER ASSEMBLY 3SPEED 12V (EPR4AX1)
H0088451	BLOWER ASSEMBLY 3SPEED 24V (EPR4BX1)
H0097521	CONDENSER FAN ASSEMBLY 280MM 12V (EPR4AX1)
H0088425	CONDENSER FAN ASSEMBLY 280MM 24V (EPR4BX1)
AU531422	RECEIVER DRIER 134A
3 YEARS / 10,800 HOURS	
UE016	THERMOSTAT DEICE STUD
UE335	SWITCH 3-SPEED C/W NUT
UE064	HIGH / LOW PRESSURE SWITCH
H0092214	THERMAL EXPANSION VALVE BLOCK 1.5T R134a
H0002358	CONDENSER COIL
H0032385	EVAPORATOR HEATER COIL

Please contact SIGMA for more information including details on an overhaul scope and interval. Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

The SIGMA H SERIES are high performance compact air conditioning compressor systems driven by an hydraulic motor.

They have been designed to meet the requirements of the SIGMA industrial range of products while maintaining quiet and smooth operation.

They are available as either standalone assemblies, packaged in an easy to fit housing inclusive of basic controls, or integrated into the SIGMA E & T SERIES.

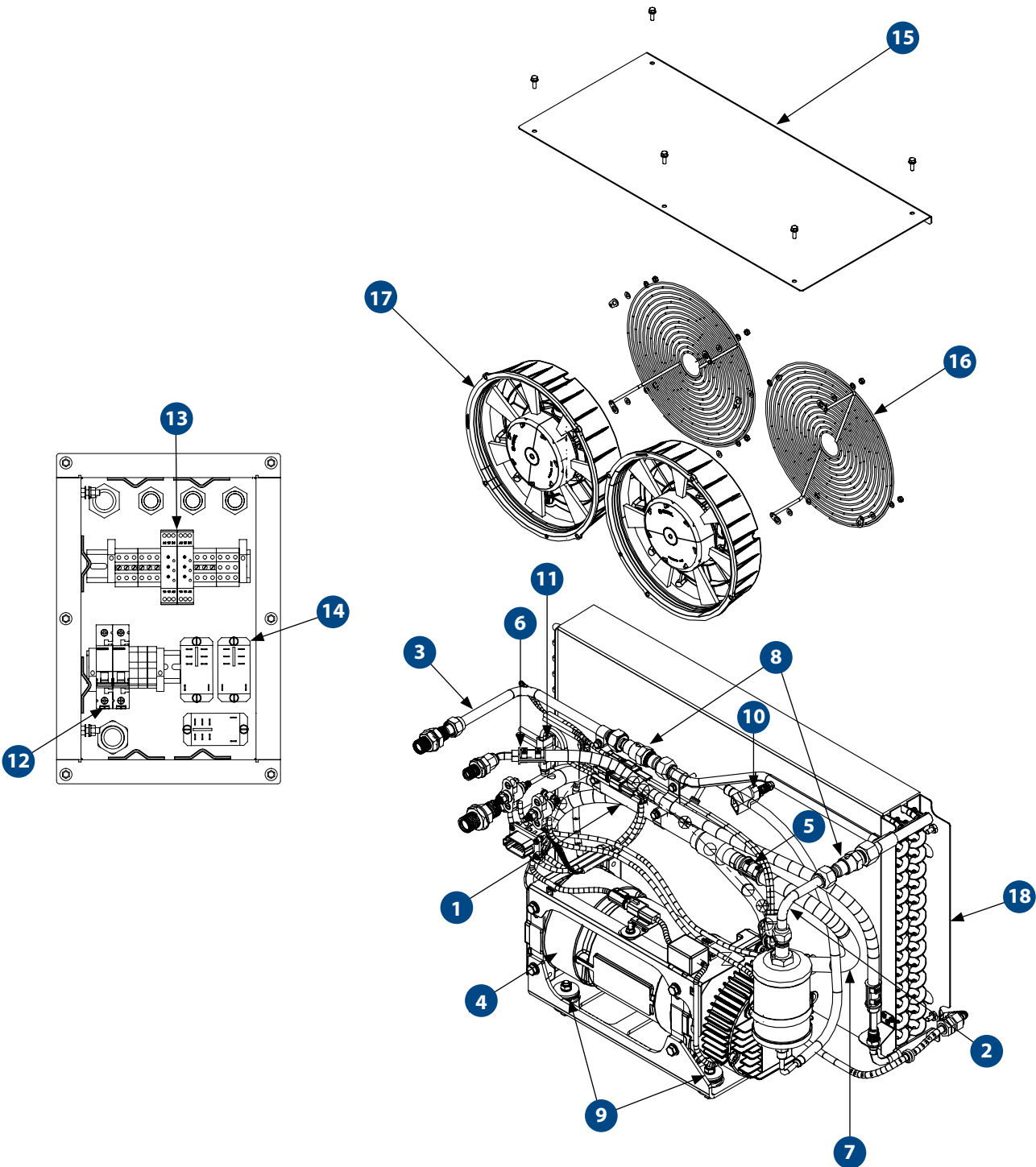
H SERIES



HCF6BX3

SIMPLIFIED ANTI IDLE

H0269011
Floor Mounted Condenser 24VDC



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1	AS3993048 SUCTION LINE ASSEMBLY - BULKHEAD TO COMP	1
2	AS3993052 CHECK VALVE TO OIL SEPARATOR ASSEMBLY	1
3	AS3993054 DISCHARGE ASSEMBLY - BULKHEAD TO CHECK VALVE	1
4	AU2961001 COMPRESSOR 24VDC	1
5	AU5551001 OIL SEPARATOR HOSE	1
6	AU5551009 HOSE ASSEMBLY - DISCHARGE ECF6BX1	1
7	AU5551010 HOSE ASSEMBLY - SUCTION ECF6BX1	1
8	H0014480 VALVE CHECK 1/2" MF	2
9	H0102227 VIB MNT SCHR35 RUBBER 55SH	4
10	H0148597 HIGH PRESSURE SWITCH ASSEMBLY HARNESS	1
11	H0152017 ASSEMBLY LOW PRESSURE SWITCH	1
12	AU641119 CIRCUIT BREAKER 16A 1 POLE	2
13	AU672500 TIMER ON DELAY 24VDC 0.1SEC-100HR 1 POLE	2
14	H0269190 RELAY FOR 24V DC	3
15	H0279106 TOP COVER PANEL ASSEMBLY	1
16	H0279389 FAN GUARD ASSEMBLY	2
17	H0281808 FAN ASSEMBLY BRUSHLESS 24VDC DIA 305MM	2
18	H0017305 CONDENSER COIL	1

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity (Remote off-engine compressor)	5 kW	17060 BTU
Cooling Capacity (Integrated DC Compressor)	3.6 kW	12280 BTU
Fan Speeds	1	1
Air Flow	670 l/s	1419 CFM
Power Supply	24VDC	24VDC
Current Draw	70 A	70 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	54°C	129°F
Weight (nominal)	60 kgs	132.2 lbs
Technical Manual Reference	SM508-3993	SM508-3993
Dimension (L X W X H)	752mm X 429mm X 480mm	29.6in X 16.8in X 18.8in

MAINTENANCE

3 YEARS / 10,800 HOURS	
AU2961001	COMPRESSOR 24VDC
H0102227	VIB MNT SCHR35 RUBBER 55SH
H0281808	FAN ASSEMBLY BRUSHLESS 24VDC DIA 305MM

Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

COMPANION ITEMS

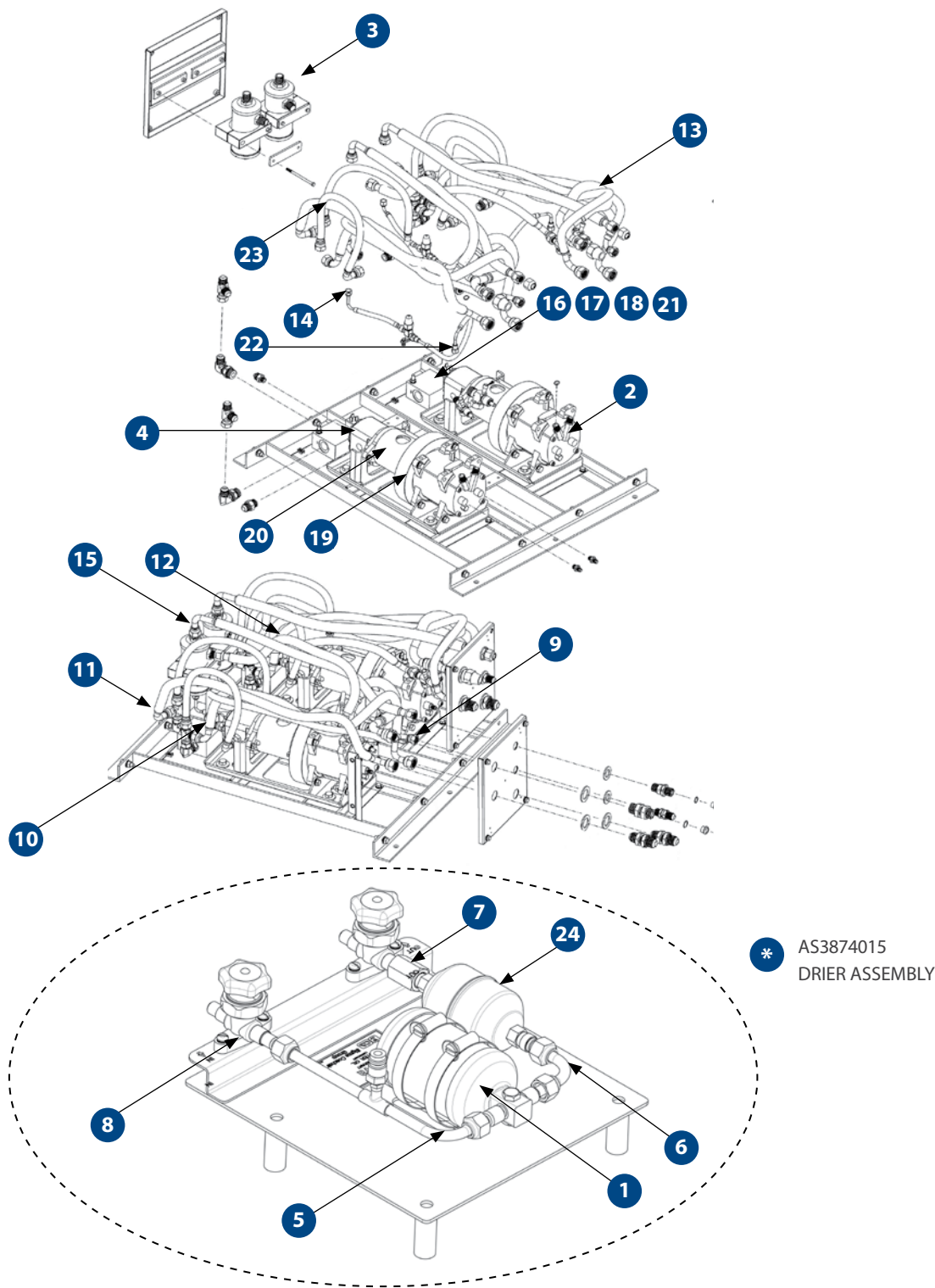
PART NO.	DESCRIPTION
EC22H4	HOODLINER EVAPORATOR COMP 24V
TFR7BX2	ROOFTOP EVAPORATOR 24V (7KW)
EFF4BX1	FLOOR MOUNTED 4KW EVAPORATOR



HDC400

DUAL HYDRAULIC COMPRESSOR ASSEMBLY

HDC400
Dual Hydraulic Compressor Assembly (Floor Mounted) 24V



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1	AU531411 RECEIVER DRIER 3/8" 24UNF 165MM HIGH	2
2	AU270019E COMPRESSOR VMO NO CLUTCH	2
3	AU270344 OIL SEPARATOR 7/8" 14UNF 0.52 L/MIN	2
4	AU340000 MOTOR HYDRAULIC DRIVE 14CC	2
5	H0098531 LIQUID LINE ASSEMBLY - VALVE TO RECEIVER	2
6	H0098529 LIQUID LINE ASSEMBLY - RECEIVER TO DRIER	2
7	AU512406 UNION 3/8" FF X 3/8" FF	2
8	AU517004 VALVE 3/8" MF 2 WAY	4
9	AS3874501 HOSE - HYDRAULIC MOTOR DRAINAGE	2
10	AS3874502 HOSE - SOLENOID VALVE IN	2
11	AS3874503 HOSE - SOLENOID VALVE OUT	2
12	AS3874504 HOSE - HYDRAULIC COMPRESSOR DISCHARGE	2
13	AS3874505 HOSE - HYDRAULIC COMPRESSOR SUCTION	2
14	AS3874506 HOSE - ISOLATION VALVE TO OIL SEPARATOR	2
15	AS3874507 HOSE - DISCHARGE TO OIL SEPARATOR	2
16	AU522000 SOLENOID VALVE CARTRIDGE SIZE 12	2
17	AU522003 SOLENOID VALVE BODY SIZE 12 3/4" BSPP	2
18	AU522001 SOLENOID VALVE COIL	2
19	AS509746 ADAPTOR PLATE COMPRESSOR	2
20	AS509727 COMPRESSOR MOTOR HOUSING	2
21	AU631452 PLUG SOLENOID VALVE COIL 24VDC	2
22	AS160182 HP FLEXIBLE HOSE ASSEMBLY	2
23	AS3754116 HOSE - HYDRAULIC MOTOR IN	4
24	658004A INLINE DRIER	2
AU230644	VALVE SERVICE 5/8" WITH ACCESS PORT	2
AU523655	HIGH PRESSURE SWITCH 1/4" FF 2415kPa	2
AU523365	LOW PRESSURE SWITCH 1/4" FF 205kPa	2
AU230C011	VALVE 1/2 TUBE #8 R134A DISCHARGE	2
AU517202	PCAV 1/4" MF	2
H0130377	ADAPTOR SHAFT AND MALE COUPLING	2
AU851590	TOGGLE CLAMP RUBBER	4
AU519080	INSERT M O-RING TO MF #10	2
AS509742	COUPLING MALE MOTOR	2
AS509744	COUPLING FEMALE	2
AU512C067	BULKHEAD FITTING O-RING 5/8"	2
AU517502	VALVE ACCESS 1/4" 1/4" & 3/8" OD SOLDER	2
AU519074	ADAPTOR 134A 1/4" HIGH SIDE RED	2
AU519099	INSERT M O-RING TO MF #12	2

SPECIFICATIONS

	METRIC	IMPERIAL
Power Supply	24VDC/Hydraulic	24VDC/Hydraulic
Refrigerant	R134a	R134a
Technical Manual Reference	SM4858-3874	SM4858-3874
Dimension (L X W X H)	760mm X 1055 mm X 1230mm	29.9in X 41.5in X 48.4in

MAINTENANCE

ANNUAL / 3,600 HOURS	
AU230644	VALVE SERVICE 5/8" WITH ACCESS PORT
AU531411	RECEIVER DRIER 3/8" 24UNF 165MM HIGH
3 YEARS / 10,800 HOURS	
AU523655	HIGH PRESSURE SWITCH 1/4" FF 2415kPa
AU523365	LOW PRESSURE SWITCH 1/4" FF 205kPa
AU270019E	COMPRESSOR VMO NO CLUTCH
AU230C011	VALVE 1/2 TUBE #8 R134a DISCHARGE
Please contact SIGMA for more information including details on an overhaul scope and interval. Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.	

COMPANION ITEMS

PART NO.	DESCRIPTION
TFC8BX1	Electric Condenser
TCF8BX2	Electric Condenser
EB9P4X	Pressuriser

The SIGMA M SERIES heavy duty industrial mains powered air conditioner range has been designed to provide controlled space conditions for crane operators cabins, control rooms, switch rooms and other applications where heavy to severe shock loads, vibration and dust laden corrosive environments are experienced and the applications require a high cooling and heating capacity.

M
SERIES

OVERVIEW
PRESSURISERS
E SERIES
H SERIES
M SERIES
T SERIES
PILOT CONTROL BOXES
SERVICABLE PARTS
UNDERSTANDING HVAC
POLICIES

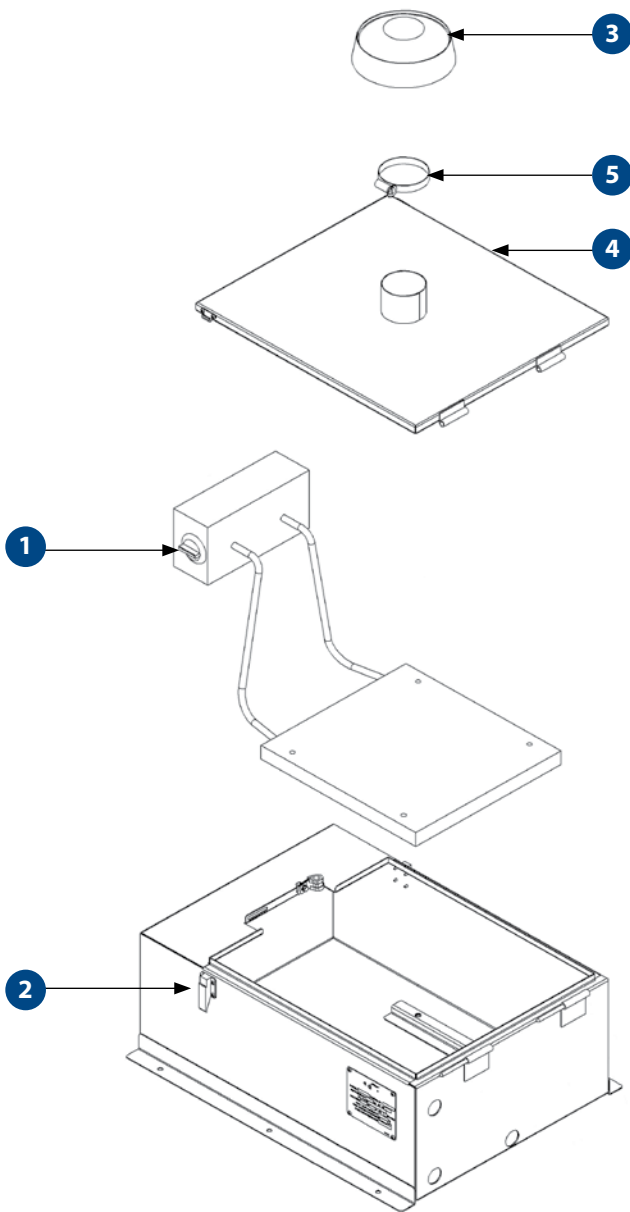


MHF2M2*

CONDENSATE EVAPORATOR HEATER UNIT

MHF2M2*
Condensate Evaporator Heater Unit 1.8kW 415VAC

* HVAC obsolete, spares support only



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 AU691283	HEATER CONDENSATE 1.75KW 415V	1
2 AU851500	LATCH	2
3 AU871070	AIR HOOD TO FIT 2.5" OD PIPE	1
4 AS213220	CONDENSATE LID ASSEMBLY	1
5 AU553656	CLAMP UTILUX	1
AU851501	LATCH STRIKER	1

SPECIFICATIONS

	METRIC	IMPERIAL
Heating Capacity	1.8 kW	5971 BTU
Power Supply	415 VAC 50Hz	415 VAC 50Hz
Current Draw	5 A	5 A
Weight (nominal)	16.0 Kg	35.2 lbs
Dimension (L X W X H)	570mm X 400 mm X 350mm	22.4in X 15.7in X 13.8in

- DRAGLINE & SHOVEL
- DRILL
- EXCAVATOR
- DOZER
- TRUCK
- WHEEL LOADER
- CONSTRUCTION
- UNDERGROUND EQUIPMENT
- INDUSTRIAL
- SMELTERS
- RAIL SPECIAL VEHICLES

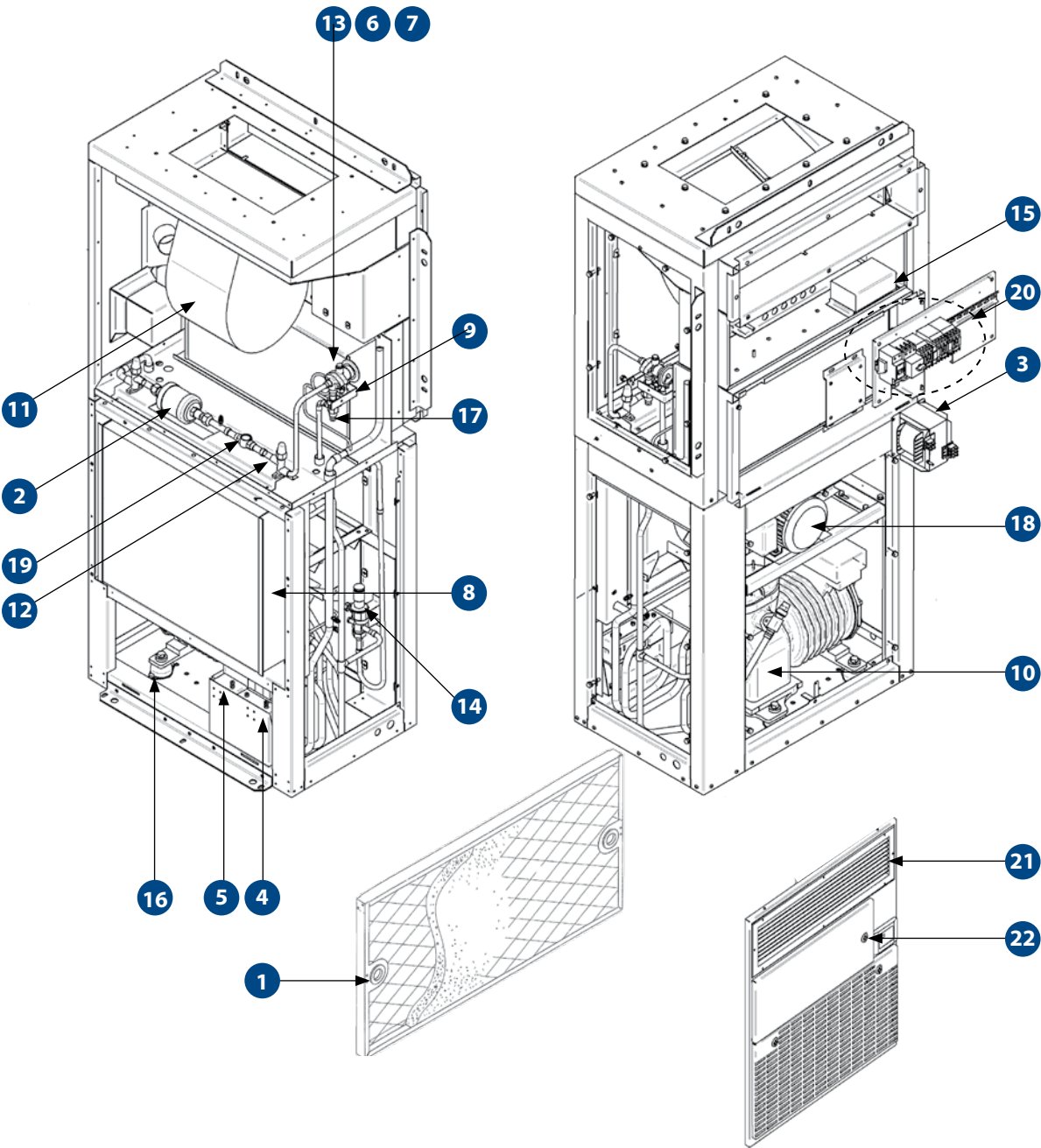


MPF5MZ4*

CRANE CAB HVAC UNIT

MPF5MZ4*
Floor Mounted Upright Packaged HVAC 5kW 415VAC
for Hi-Ambient (Gas R124) without Pressuriser

* HVAC obsolete, spares support only



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1	AS242745 RETURN AIR FILTER ASSEMBLY	1
2	AU531358 DRIER 5/8" MF	1
3	AU666026 TRANSFORMER 415/240/24V 500VA	1
4	AU523112 DUAL PRESSURE CONTROL LP AUTO HP AUTO	1
5	AU523606 HP CONTROL AUTO	1
6	AU521235 TX POWER ELEMENT 5' 1/4" EQ R124	1
7	AU521589 TX VALVE CAGE R747	1
8	AU110429 CONDENSER COIL 600MM X 508MM X 110MM 4RW MPF	1
9	AU120284 EVAPORATOR COIL 610X318X110 4RW MPF	1
10	AU260205 COMPRESSOR 400VAC 50Hz	1
11	AU410503 BLOWER ASSEMBLY 240V 50HZ	1
12	AU517258 PCLV 5/8" SOLDER	2
13	AU521400 TX VALVE BODY 1/2" IN X 5/8" OUT 90 DEG	1
14	AU526015 VALVE HOT GAS BYPASS 1/2" ODS SLIMLINE	1
15	H0152931 THERMOSTAT LE75 CONTROL KIT	1
16	UC269 ANTI VIBRATION MOUNT 1/2"-20UNF	4
17	AU526036 HOT GAS MIXER NV 24MM	1
18	AU310277 MOTOR 0.37/0.12KW 80B 4/6P	1
19	AU533556 LMI 5/8" SOLDER	1
20	AU641390 CIRCUIT BREAKER 4A 2 POLE	1
	AU641496 CIRCUIT BREAKER 11.0-16.0A 3 POLE	1
	AU641501 CIRCUIT BREAKER AUX 1CO	1
	AU651303 CONTACTOR 9A 240VAC 3 POLE 1NO 1NC	3
	AU651316 CONTACTOR INTERLOCK	1
21	AU821136 LOUVRE 646MM X 136MM OPEN AREA DOUBLE DEFLECT	1
22	AU851566 LATCH 1/4 TURN 8MM SQUARE	3
H0017184 VALVE SHUT OFF SUCTION		1
H0017209 GASKET DISCHARGE VALVE		1
H0017215 VALVE SHUT OFF DISCHARGE		1
H0017217 GASKET SUCTION VALVE		1
AU420252 FAN AXIAL 400MM 9 BLADES		1
AU517501 VALVE ACCESS 1/4" 60MM SHORT TAIL		1
AU517502 VALVE ACCESS 1/4" 1/4" & 3/8" OD SOLDER		1
AU662410 SWITCH KEYED 20A		1
S2427088 RETURN AIR MEDIA		1
AU613047 TERMINAL BOX 80MM X 80MM		1
AU851567 KEY 8MM SQUARE SUIT AU851566		1
AU862211 SEAL RUBBER		0.3
S2427088 FILTER MEDIA		1

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	5.0 kW	17060 BTU
Air Flow	270 l/s	572 CFM
Power Supply	415 VAC	415 VAC
Current Draw	9 A	9 A
Refrigerant	R124	R124
Maximum Ambient Temperature	65°C	149°F
Weight (nominal)	295.0 Kg	649 lbs
Technical Manual Reference	SM401-2427	SM401-2427
Dimension (L X W X H)	1000mm X 680 mm X 480mm	39.4in X 26.8in X 18.9in

MAINTENANCE

MONTHLY / 450 HOURS	
AS242745	RETURN AIR FILTER ASSEMBLY
ANNUAL / 5,400 HOURS	
AU531358	DRIER 5/8" MF
3 YEARS / 16,200 HOURS	
AU523112	DUAL PRESSURE CONTROL LP AUTO HP AUTO
AU523606	HP CONTROL AUTO
H0017184	VALVE SHUT OFF SUCTION
H0017209	GASKET DISCHARGE VALVE
H0017215	VALVE SHUT OFF DISCHARGE
H0017217	GASKET SUCTION VALVE
UC269	ANTI VIBRATION MOUNT 1/2"-20UNF
AU521235	TX POWER ELEMENT 5' 1/4" EQ R124
AU521589	TX VALVE CAGE R747
AU523112	DUAL PRESSURE CONTROL LP AUTO HP AUTO
AU523606	HP CONTROL AUTO

Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

COMPANION ITEMS

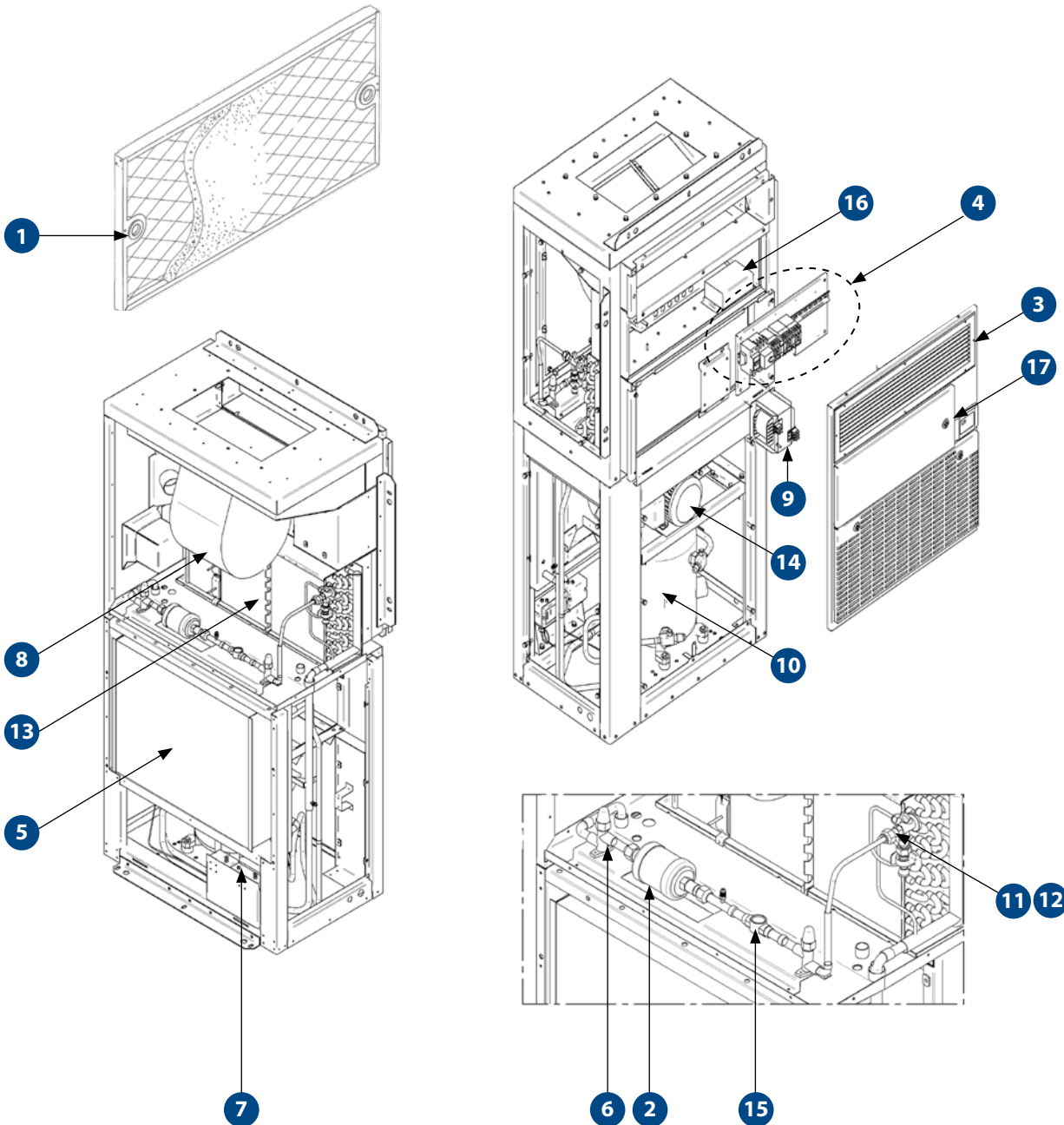
PART NO.	DESCRIPTION
FVV50M1	Pressuriser



MPF6MX10

FLOOR MOUNTED UPRIGHT HVAC UNIT

MPF6MX10
Floor Mounted Upright Packaged HVAC 6kW 415VAC without Pressuriser



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 AS242745	RETURN AIR FILTER ASSEMBLY	1
2 AU531358	DRIER 5/8" MF	1
3 AU821136	LOUVRE 646MM X 136MM OPEN AREA DOUBLE DEFLECT	1
AU641390	CIRCUIT BREAKER 4A 2 POLE	1
4 AU641496	CIRCUIT BREAKER 11.0-16.0A 3 POLE	1
AU651303	CONTACTOR 9A 240VAC 3 POLE 1NO 1NC	2
5 AU110429	CONDENSER COIL 600 X 508 X 110 4RW MPF	1
6 AU517258	PCLV 5/8" SOLDER	2
7 AU523112	DUAL PRESSURE CONTROL LP AUTO HP AUTO	1
8 AU410503	BLOWER ASSEMBLY 240V 50HZ	1
9 AU666026	TRANSFORMER 415V 240V 24V 500VA	1
10 AU230346	COMPRESSOR 246MM X 200MM X 372MM 3 PHASE ROTALOK	1
11 AU521505	TX ORIFICE 2T R22 #05	1
12 AU521509	TX VALVE 2T 3/8" IN 1/2" OUT 1/4" EQ R134A	1
13 AU120284	EVAPORATOR COIL 610MM X 318MM X 110MM 4RW MPF	1
14 AU310214	MOTOR 0.75KW 80P FT 4P	1
15 AU533556	LMI 5/8" SOLDER	1
16 H0152931	THERMOSTAT CONTROL KIT	1
17 AU851566	LATCH 1/4 TURN	3
AU420252	FAN AXIAL 400MM 9 BLADES	1
AU662410	SWITCH KEYED 20A	1
S2427088	FILTER MEDIA	1
AU517502	VALVE ACCESS 1/4" 1/4" & 3/8" OD SOLDER	1
AU862213	SEAL RUBBER	1

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	6.0 kW	20472 BTU
Fan Speeds	3	3
Air Flow	270 l/s	572 CFM
Power Supply	415 VAC / 50Hz 3 Phase	415 VAC / 50Hz 3 Phase
Current Draw	12 A	12 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	54°C	129°F
Weight (nominal)	295.0 Kg	649.0 lbs
Technical Manual Reference	SM408-2427	SM408-2427
Dimension (L X W X H)	1512mm X 1145 mm X 970mm	59.5in X 45.1in X 38.2in

MAINTENANCE

MONTHLY / 450 HOURS	
AS242745	RETURN AIR FILTER ASSEMBLY
ANNUAL / 5,400 HOURS	
AU531358	DRIER 5/8" MF
3 YEARS / 16,200 HOURS	
AU521509	TX VALVE 2T 3/8" IN 1/2" OUT 1/4" EQ R134A
AU523112	DUAL PRESSURE CONTROL LP AUTO HP AUTO
AU521505	TX ORIFICE 2T R22 #05
Please contact SIGMA for more information including details on an overhaul scope and interval. Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.	

COMPANION ITEMS

PART NO.	DESCRIPTION
FVV50M1	Pressuriser

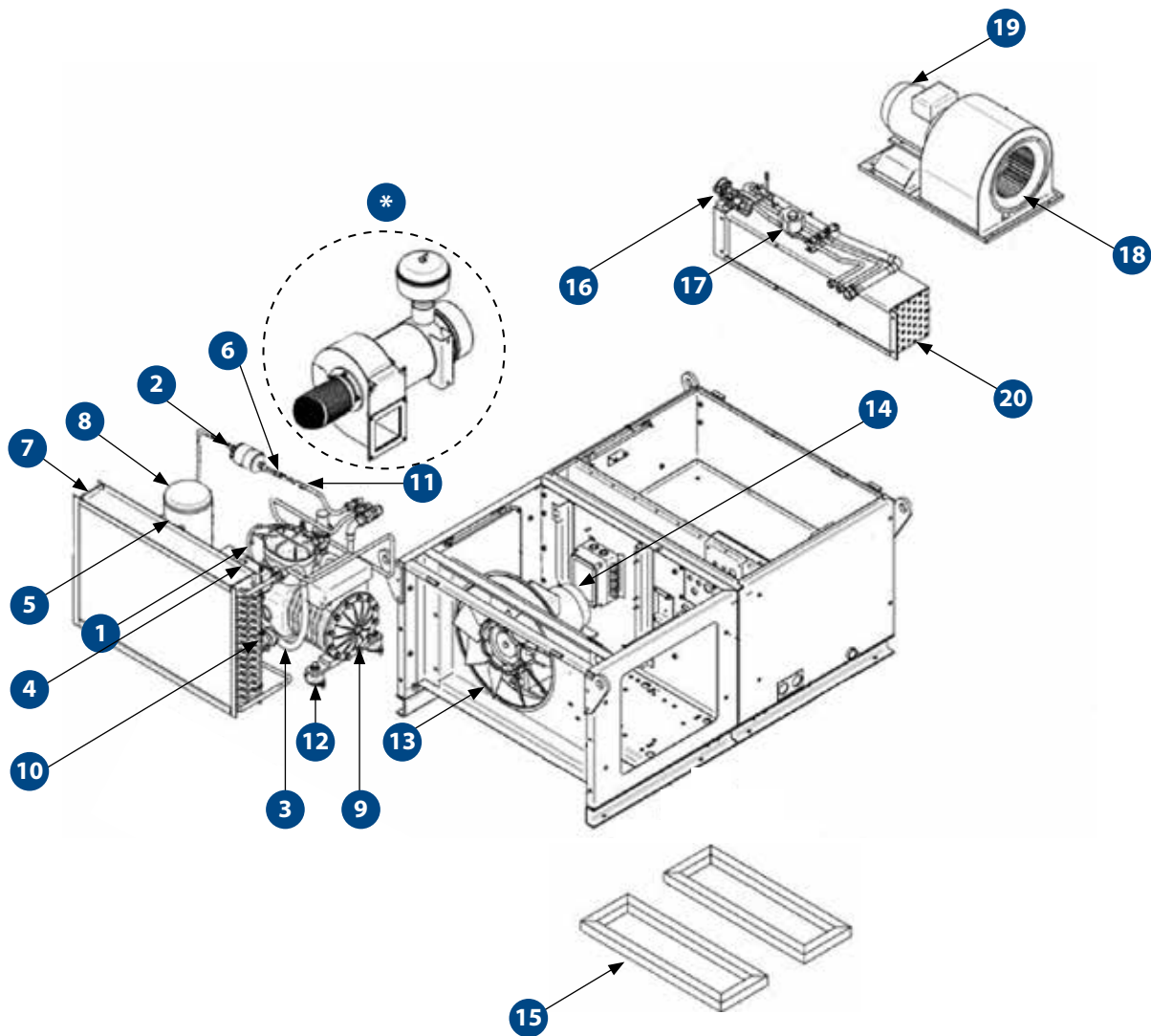


MPR7MX1 - EVAPORATOR/ CONDENSER

ROOFTOP PACKAGED HVAC UNIT

MPR7MX1

Rooftop Packaged HVAC 7kW 415VAC with Heating (3kW)
(Gas R134a)



* SEE FVV80MR1 (PAGE 41) FOR PRESSURISER SPARE PARTS AND MAINTENANCE

SPARE PARTS

PART NO.	DESCRIPTION	QTY
1	AS160182 HP FLEXIBLE HOSE ASSEMBLY	2
2	AU531356 DRIER 1/2" MF	1
3	AS213490 DISCHARGE HOSE ASSEMBLY	1
4	AU523111 DUAL PRESSURE CONTROL LP AUTO HP MANUAL	1
5	AU527126 RELIEF VALVE 3/8" MNPT X 2.7MPa	1
6	AU533559 LMI 1/2" FF X 1/2" MF	1
7	AU110336 CONDENSER COIL 735X476X110 4RW M7	1
8	AU160009 LIQ REC 5.4L 1½ SL X 1½ ROTALOCK	1
9	AU260201 COMPRESSOR 400VAC 50Hz	1
10	H0124651 VALVE 1/4" MF 3 WAY	2
11	AU517256 PPCAV 1/2" SOLDER	2
12	UC269 ANTI VIBRATION MOUNT 1/2"-20UNF	4
13	UF125 FAN AXIAL 450MM 8 BLADES	1
14	AU310114 MOTOR 0.75KW 80 FT 4P	1
15	AU861900 SEAL SUPPLY & RETURN 600MM X 150MM ID	2
16	AU521505 TX ORIFICE 2T R22 #05	1
17	AU521509 TX VALVE 2T 3/8" IN 1/2" OUT 1/4" EQ R134A	1
18	AU522042 SOLENOID VALVE 1/2" SOLDER NC	1
19	UE453 COIL SOLENOID 110VAC	1
20	AU410130 BLOWER 250D X 242W X 19MM CW DI	1
21	UE322 MOTOR 1.1/0.37kW 90L 4/6P FT	1
22	UR524 EVAPORATOR COIL 796MM X 191MM X 165MM 8RW	1
23	AU542026 REFRIGERATION OIL	3
24	AU517501 VALVE ACCESS 1/4" 60MM SHORT TAIL	2
25	H0017184 VALVE SHUT OFF SUCTION	1
26	H0017209 GASKET DISCHARGE VALVE	1
27	H0017215 VALVE SHUT OFF DISCHARGE	1
28	H0017217 GASKET SUCTION VALVE	1
29	AU519074 ADAPTOR 134A 1/4" HIGH SIDE RED	1
30	AU519075 ADAPTOR 134A 1/4" LOW SIDE BLUE	1
31	UC310 CATCH TOGGLE OVERCENTRE SS	4
32	AS21341555 RETURN AIR FILTER ASSEMBLY (STANDARD)	1
33	AU4601006 FILTER ASSEMBLY 400MM X 185MM X 20MM (OPTIONAL)	1
34	AU460605 FILTER MEDIA	0.2
35	AU681020 THERMOSTAT T5 50°C SPST N/C AUTO	1
36	UC342 DIFFUSER 500MM X 200MM OPEN AREA DOUBLE DEFLECTION	1
37	UE470 HEATER W SHAPE 1.0kW 240VAC 200MM FIN	3
38	AU862211 SEAL RUBBER	7
39	AU872025 SHAFT EXTENSION 24MM F X 19MM M	1
40	AS213417 EVAPORATOR LID ASSEMBLY	1
41	AS213411 CONDENSER LID ASSEMBLY	1
42	UR468 UNION 1 5/16"	1
43	UR114 BULKHEAD FITTING 1-5/16" JIC	1
44	UR008 BULKHEAD FITTING 1/2" MF	1

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MPR7MX1 - EVAPORATOR / CONDENSER

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	7.0 kW	23884 BTU
Heating Capacity	3.0 kW	10236 BTU
Fan Speeds	2	2
Air Flow	320 l/s	678 CFM
Fresh Air	80 l/s	170 CFM
Power Supply	415 VAC 3Phase-50Hz	415 VAC 3Phase-50Hz
Current Draw	12 A	12 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	55°C	131°F
Packaged Weight (nominal)	454.0 Kg	998.8 lbs
Technical Manual Reference	SM277-2136	SM277-2136
Dimension (L X W X H)	1490mm X 1250 mm X 665mm	58.7in X 49.2in X 26.2in

MAINTENANCE

MONTHLY / 450 HOURS	
AS21341555	RETURN AIR FILTER ASSEMBLY (STANDARD)
AU4601006	FILTER ASSEMBLY 400MM x 185MM x 20MM (OPTIONAL)
ANNUAL / 5,400 HOURS	
AU531356	DRIER 1/2" MF
3 YEARS / 16,200 HOURS	
AS160182	HP FLEXIBLE HOSE ASSEMBLY
AS213490	DISCHARGE HOSE ASSEMBLY
AU523111	DUAL PRESSURE CONTROL LP AUTO HP MANUAL
UC269	ANTI VIBRATION MOUNT 1/2"-20UNF
AU542026	REFRIGERATION OIL
AU521505	TX ORIFICE 2T R22 #05
AU521509	TX VALVE 2T 3/8" IN 1/2" OUT 1/4" EQ R134A
AU862211	SEAL RUBBER
H0124651	HAND VALVE
H0017215	VALVE SHUT OFF DISCHARGE
H0017184	VALVE SHUT OFF SUCTION
H0017209	GASKET DISCHARGE VALVE
H0017217	GASKET SUCTION VALVE

Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

* SEE FVV80MR1 (PAGE 41) FOR PRESSURISER SPARE PARTS AND MAINTENANCE

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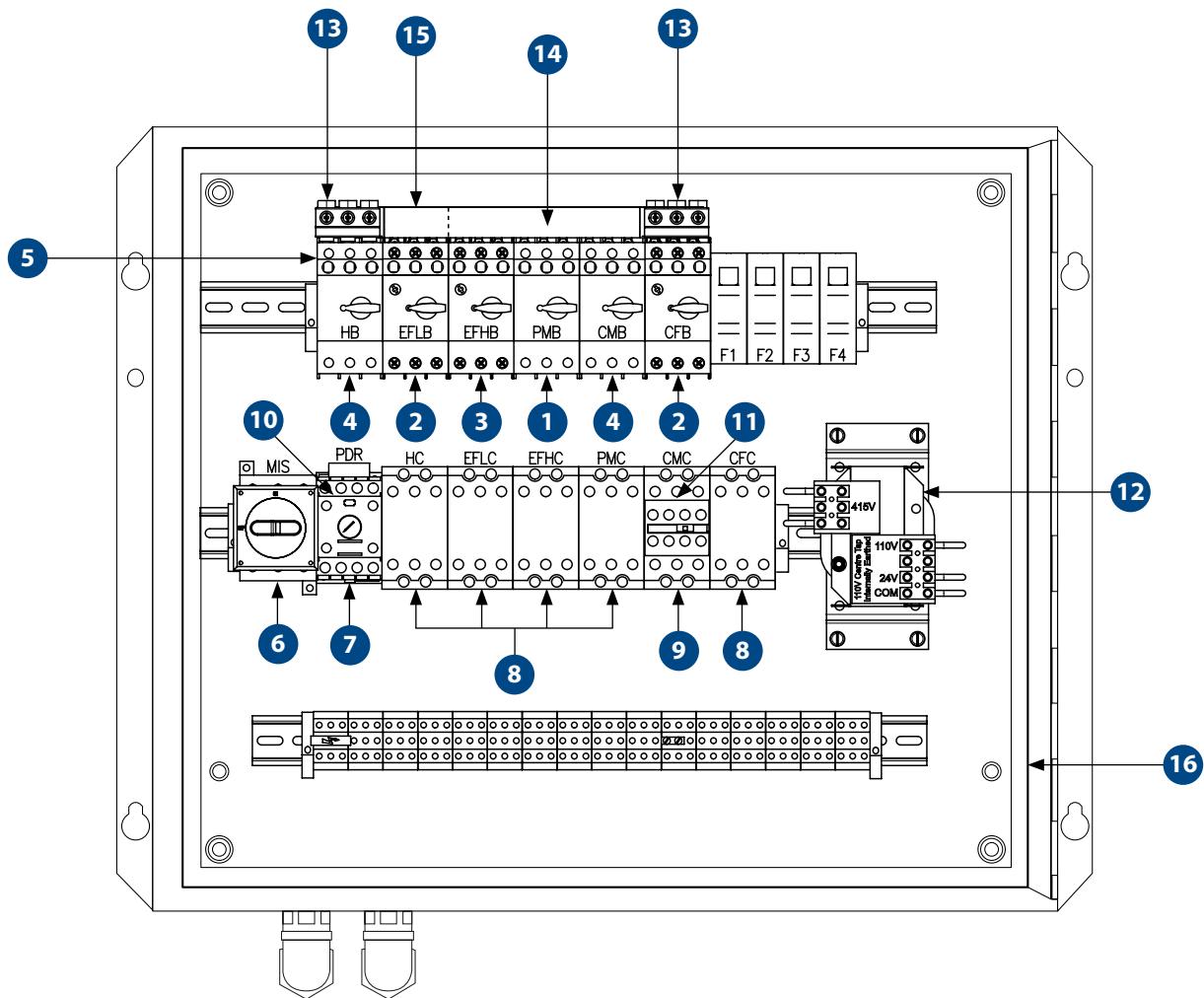
MPR7MX1 - EVAPORATOR / CONDENSER



MPR7MX1 - ELECTRICAL

ROOFTOP PACKAGED HVAC UNIT

MPR7MX1
Rooftop Packaged HVAC 7kW 415VAC with Heating (3kW)
(Gas R134a)



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1	AU641486 CIRCUIT BREAKER 1.1-1.6A 3 POLE	1
2	AU641488 CIRCUIT BREAKER 1.8-2.5A 3 POLE	2
3	AU641490 CIRCUIT BREAKER 2.8-4.0A 3 POLE	1
4	AU641494 CIRCUIT BREAKER 7.0-10.0A 3 POLE	2
5	AU641501 CIRCUIT BREAKER AUX 1CO	6
6	AU642070 SWITCH ISOLATION ROTARY 80A	1
7	AU651035 CONTACTOR 12A 3 POLE 110VAC	1
8	AU651173 CONTACTOR 17A 110VAC 3 POLE 1NO 1NC	5
9	AU651174 CONTACTOR 25A 110VAC 3 POLE 1NO 1NC	1
10	AU653505 TIMER (3-30 SECONDS)	1
11	AU653602 AUXILIARY CONTACT 2NO 2NC	1
12	UE104 TRANSFORMER 415V 110V 24V 115W SCREEN	1
13	642E10063 BUSBAR TERMINAL	2
14	AU635609 BUSBAR 5 BREAKER 3RV	1
15	AU635610 BUSBAR 2 BREAKER 3RV	1
16	AU862211 SEAL RUBBER	2.5m

SPARE PARTS LIST CONTINUED ON PREVIOUS PAGE

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	7.0 kW	23884 BTU
Heating Capacity	3.0 kW	10236 BTU
Fan Speeds	2	2
Air Flow	320 l/s	678 CFM
Fresh Air	80 l/s	170 CFM
Power Supply	415 VAC 3Phase-50Hz	415 VAC 3Phase-50Hz
Current Draw	12 A	12 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	55°C	131°F
Packaged Weight (nominal)	454.0 Kg	998.8 lbs
Technical Manual Reference	SM277-2136	SM277-2136
Dimension (L X W X H)	1490mm X 1250 mm X 665mm	58.7in X 49.2in X 26.2in

MAINTENANCE

3 YEARS / 16,200 HOURS	
AU651035	CONTACTOR 12A 3 POLE 110VAC
AU653505	TIMER (3-30 SECONDS)
Please contact SIGMA for more information including details on an overhaul scope and interval. Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.	

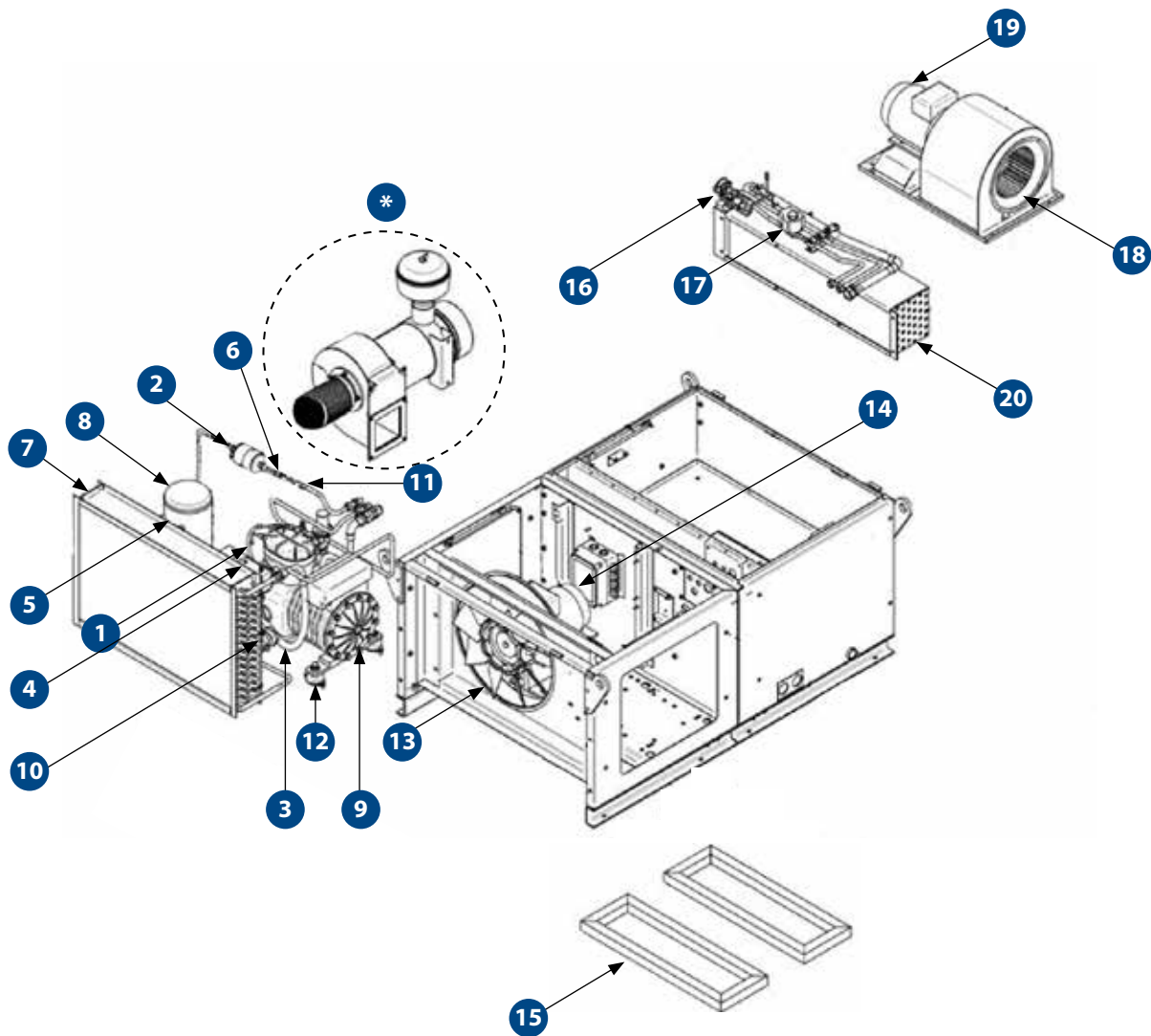
- DRAGLINE & SHOVEL
- DRILL
- EXCAVATOR
- DOZER
- TRUCK
- WHEEL LOADER
- CONSTRUCTION
- UNDERGROUND EQUIPMENT
- INDUSTRIAL
- SMELTERS
- RAIL SPECIAL VEHICLES



MPR7MZ1 - EVAPORATOR/ CONDENSER

ROOFTOP PACKAGED HVAC UNIT

MPR7MZ1
Rooftop Packaged HVAC 5kW 415VAC with Heating (3kW)
for Hi-Ambient (Gas R124)



* SEE FVV80MR1 (PAGE 41) FOR PRESSURISER SPARE PARTS AND MAINTENANCE

SPARE PARTS

PART NO.	DESCRIPTION	QTY
AS21341555	RETURN AIR FILTER ASSEMBLY (STANDARD)	1
1 AS160182	HP FLEXIBLE HOSE ASSEMBLY	2
2 AU531356	DRIER 1/2" MF	1
3 AS213490	DISCHARGE HOSE ASSEMBLY	1
4 AU523111	DUAL PRESSURE CONTROL LP AUTO HP MANUAL	1
5 AU527126	RELIEF VALVE 3/8" MNPT X 2.7MPa	1
6 AU533559	LMI 1/2" FF X 1/2" MF	1
7 AU110338	CONDENSER COIL 735MM X 476MM X 110MM	1
8 AU160009	LIQ REC 5.4L 1 1/2 SL X 1 1/2 ROTALOCK	1
9 AU260205	COMPRESSOR 400VAC 50Hz	1
10 AU517102	VALVE 1/4" MF 3 WAY	2
11 AU517256	PCAV 1/2" SOLDER	2
12 UC269	ANTI VIBRATION MOUNT 1/2"-20UNF	4
13 AU420157	FAN AXIAL 450MM 8 BLADES	1
14 AU319032	MOTOR 0.75KW 80 FT 4P	1
15 AU861900	SEAL SUPPLY & RETURN 600X150MM ID	2
AU521235	TX POWER ELEMENT 5' 1/4" EQ R124	1
16 AU521400	TX VALVE BODY 1/2" IN X 5/8" OUT 90 DEG	1
AU521589	TX VALVE CAGE R747	1
17 AU522042	SOLENOID VALVE 1/2" SOLDER NC	1
UE453	COIL SOLENOID 110VAC	1
18 AU410130	BLOWER 250D X 242W X 19MM CW DI	1
19 UE322	MOTOR 1.1/0.37kW 90L 4/6P FT	1
20 AU120015	EVAPORATOR COIL 796MM X 191MM X 165MM	1
AU523606	HP CONTROL AUTO	1
AU517501	VALVE ACCESS 1/4" 60MM SHORT TAIL	2
AU526030	VALVE HOT GAS BYPASS ANGLE 1/2" SOLDER	1
AS203342	HOSE ASSEMBLY SS H/P CONTROL	1
AU526036	HOT GAS MIXER NV 24MM	1
AU4601006	FILTER ASSEMBLY 400MM X 185MM X 20MM	2
AU460605	FILTER MEDIA	0.2
AU681020	THERMOSTAT T5 50°C SPST N/C AUTO	1
UC342	DIFFUSER 500MM X 200MM OPEN AREA DOUBLE DEFLECTION	1
UE470	HEATER W SHAPE 1.0kW 240VAC 200MM FIN	3
AU862211	SEAL RUBBER	2.4m
AU872025	SHAFT EXTENSION 24MM F X 19MM M	1
UC310	CATCH TOGGLE OVERCENTRE SS	4
AU542005	REFRIGERATION OIL	3
AS213417	EVAPORATOR LID ASSEMBLY	1
AS213411	CONDENSER LID ASSEMBLY	1
UR468	UNION 1 5/16"	1
UR114	BULKHEAD FITTING 1-5/16" JIC	1
UR008	BULKHEAD FITTING 1/2" MF	2
H0017215	VALVE SHUT OFF DISCHARGE	1
H0017184	VALVE SHUT OFF SUCTION	1
H0017209	GASKET DISCHARGE VALVE	1
H0017217	GASKET SUCTION VALVE	1

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SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	5.0 kW	17060 BTU
Heating Capacity	3.0 kW	10236 BTU
Fan Speeds	2	2
Air Flow	320 l/s	678 CFM
Fresh Air	80 l/s	170 CFM
Power Supply	415 VAC 3Phase-50Hz	415 VAC 3Phase-50Hz
Current Draw	12 A	12 A
Refrigerant	R124	R124
Maximum Ambient Temperature	65°C	149°F
Packaged Weight (nominal)	454.0 Kg	998.8 lbs
Technical Manual Reference	SM277-2136	SM277-2136
Dimension (L X W X H)	1490mm X 1250 mm X 665mm	58.7in X 49.2in X 26.2in

MAINTENANCE

MONTHLY / 450 HOURS

AS21341555	RETURN AIR FILTER ASSEMBLY (STANDARD)
AU4601006	FILTER ASSEMBLY 400MM X 185MM X 20MM

ANNUAL / 5,400 HOURS

AU531356	DRIER 1/2" MF
----------	---------------

3 YEARS / 16,200 HOURS

AS160182	HP FLEXIBLE HOSE ASSEMBLY
AS213490	DISCHARGE HOSE ASSEMBLY
AU523111	DUAL PRESSURE CONTROL LP AUTO HP MANUAL
UC269	ANTI VIBRATION MOUNT 1/2"-20UNF
AU523606	HP CONTROL AUTO
AS203342	HOSE ASSEMBLY SS H/P CONTROL
AU521235	TX POWER ELEMENT 5' 1/4" EQ R124
AU521589	TX VALVE CAGE R747
AU862211	SEAL RUBBER
AU542005	REFRIGERATION OIL
AU517102	HAND VALVE
H0017215	VALVE SHUT OFF DISCHARGE
H0017184	VALVE SHUT OFF SUCTION
H0017209	GASKET DISCHARGE VALVE
H0017217	GASKET SUCTION VALVE

Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

* SEE FVV80MR1 (PAGE 41) FOR PRESSURISER SPARE PARTS AND MAINTENANCE

SPARE PARTS LIST CONTINUED NEXT PAGE

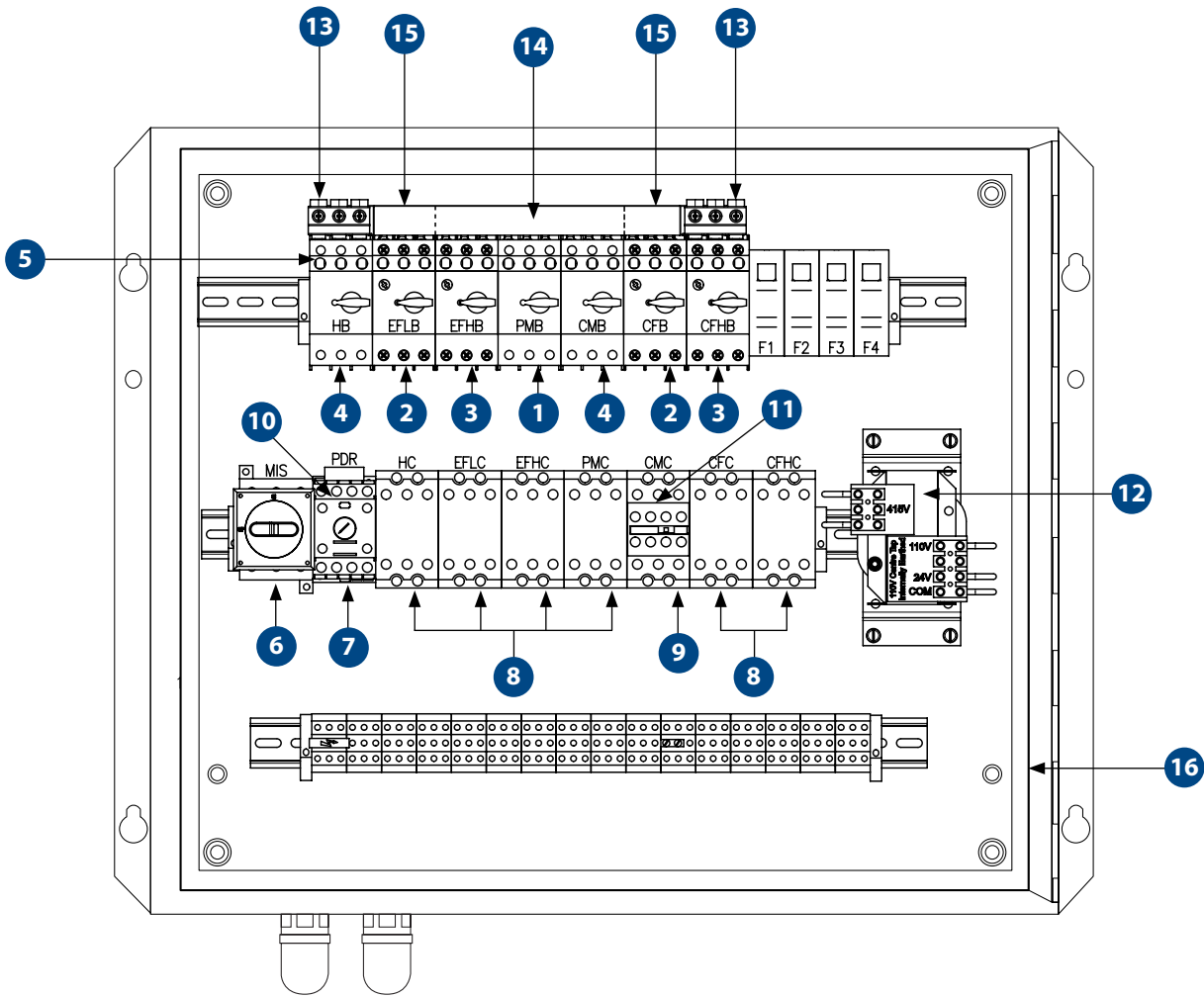
- DRAGLINE & SHOVEL
- DRILL
- EXCAVATOR
- DOZER
- TRUCK
- WHEEL LOADER
- CONSTRUCTION
- UNDERGROUND EQUIPMENT
- INDUSTRIAL
- SMELTERS
- RAIL SPECIAL VEHICLES



MPR7MZ1 - ELECTRICAL

ROOFTOP PACKAGED HVAC UNIT

MPR7MZ1
Rooftop Packaged HVAC 5kW 415VAC with Heating (3kW) for Hi-Ambient (Gas R124)



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 AU641486	CIRCUIT BREAKER 1.1-1.6A 3 POLE	1
2 AU641488	CIRCUIT BREAKER 1.8-2.5A 3 POLE	2
3 AU641490	CIRCUIT BREAKER 2.8-4.0A 3 POLE	2
4 AU641494	CIRCUIT BREAKER 7.0-10.0A 3 POLE	2
5 AU641501	CIRCUIT BREAKER AUX 1CO	7
6 AU642070	SWITCH ISOLATION ROTARY 80A	1
7 AU651035	CONTACTOR 12A 3 POLE 110VAC	1
8 AU651173	CONTACTOR 17A 110VAC 3 POLE 1NO 1NC	6
9 AU651174	CONTACTOR 25A 110VAC 3 POLE 1NO 1NC	1
10 AU653505	TIMER (3-30 SECONDS)	1
11 AU653602	AUXILIARY CONTACT 2NO 2NC	1
12 UE104	TRANSFORMER 415V 110V 24V 115W SCREEN	1
13 642E10063	BUSBAR TERMINAL	2
14 AU635609	BUSBAR 5 BREAKER 3RV	1
15 AU635610	BUSBAR 2 BREAKER 3RV	2
16 AU862211	SEAL RUBBER	2.5m

SPARE PARTS LIST CONTINUED ON PREVIOUS PAGE

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	5.0 kW	17060 BTU
Heating Capacity	3.0 kW	10236 BTU
Fan Speeds	2	2
Air Flow	320 l/s	678 CFM
Fresh Air	80 l/s	170 CFM
Power Supply	415 VAC 3Phase-50Hz	415 VAC 3Phase-50Hz
Current Draw	12 A	12 A
Refrigerant	R124	R124
Maximum Ambient Temperature	65°C	149°F
Packaged Weight (nominal)	454.0 Kg	998.8 lbs
Technical Manual Reference	SM277-2136	SM277-2136
Dimension (L X W X H)	1490mm X 1250 mm X 665mm	58.7in X 49.2in X 26.2in

MAINTENANCE

3 YEARS / 16,200 HOURS	
AU651035	CONTACTOR 12A 3 POLE 110VAC
AU653505	TIMER (3-30 SECONDS)

Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

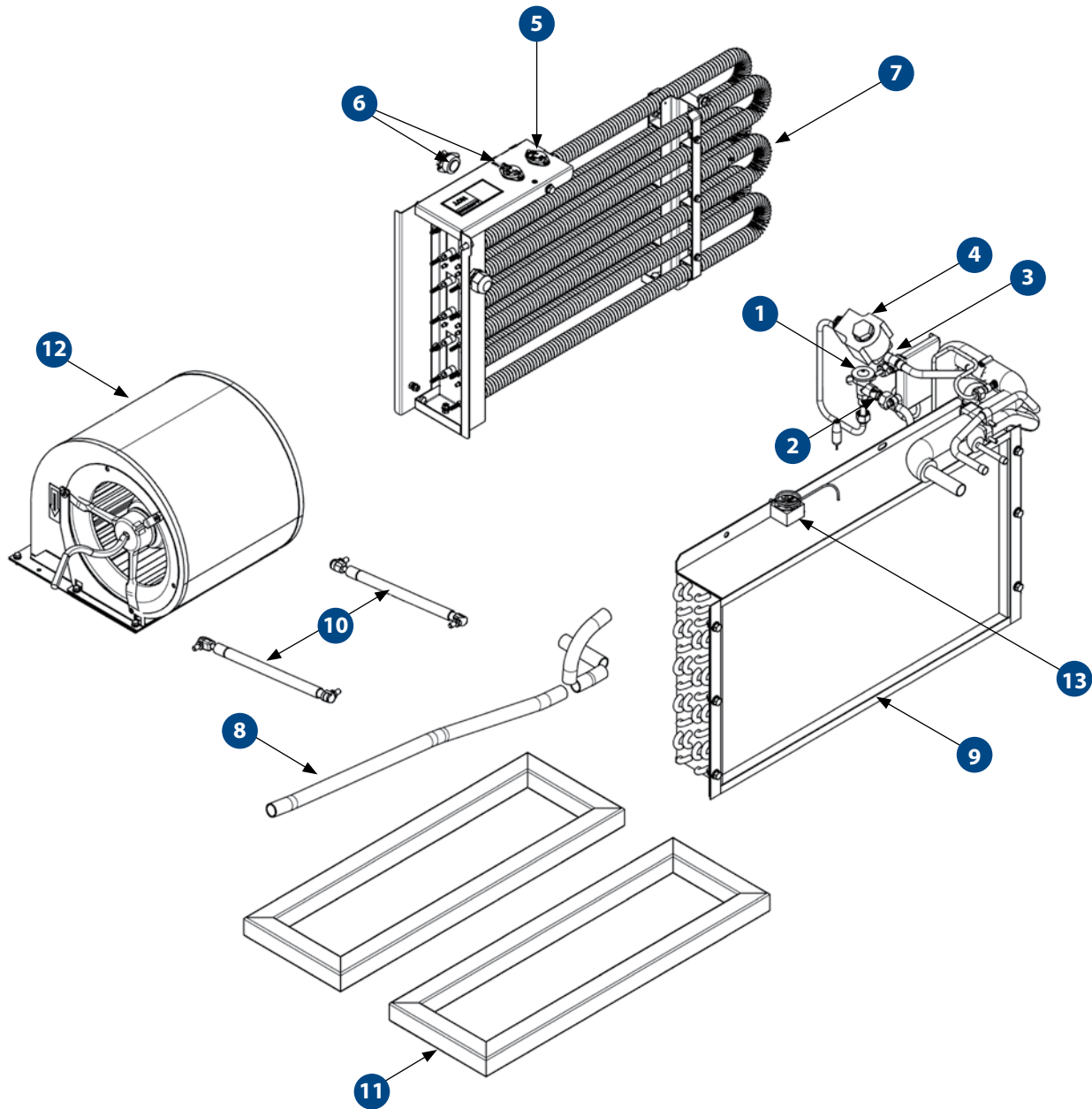
- DRAGLINE & SHOVEL
- DRILL
- EXCAVATOR
- DOZER
- TRUCK
- WHEEL LOADER
- CONSTRUCTION
- UNDERGROUND EQUIPMENT
- INDUSTRIAL
- SMELTERS
- RAIL SPECIAL VEHICLES



MPR9MX1 - EVAPORATOR

ROOFTOP PACKAGED HVAC UNIT

MPR9MX1
Rooftop Packaged HVAC 10kW 415VAC with Heating (12kW)



SPARE PARTS

PART NO.	DESCRIPTION	QTY
AS2134155S	RETURN AIR FILTER ASSEMBLY (OPTIONAL)	1
H0082092	RETURN AIR FILTER ASSEMBLY COIL MOUNT (OPTIONAL)	2
1 AU521508	TX ORIFICE #06	1
2 AU521509	TX VALVE 2T 3/8" IN 1/2" OUT 1/4" EQ R134A	1
3 AU522042	SOLENOID VALVE 1/2" SOLDER NC	1
4 AU668140	COIL SOLENOID 24VDC TYPE 1	1
5 AU681009	KLIXON TEMPERATURE SENSOR 1	1
6 AU6811013	TAT KLIXON 40°C N/C AUTO	2
7 AU691C041	HEATER ELEMENT 277V 2500W	6
8 H0064347	HOSE PVC 20MM BORE BRAIDED	1.1m
9 H0070297	EVAPORATOR COIL	1
10 H0080806	GAS STRUT	2
11 H0080812	RA/SA OPENING SEAL	2
12 H0082201	SUPPLY AIR FAN ASSEMBLY	1
13 UE016	THERMOSTAT DEICE STUD	1
KNHV30016	MPR9MX1 PIPE KIT	1
AU862211	SEAL RUBBER	4.5m

SPARE PARTS LIST CONTINUED NEXT PAGE

COMPANION ITEMS

PART NO.	DESCRIPTION
EB9P4X	*Right Hand Pressuriser Assembly 24V
H0081203	*Left Hand Pressuriser Assembly 24V EB9
H0146199	Adapter Frame Assembly
H0107836	Supply Air Damper Assembly
H0184867	Air Duct Front Panel
H0082091	RA Filter Assembly - Coil Mount MPR9
H0087360	Spigot Supply Air M9 (152-203)
H0099206	Spigot Return Air M9 (152-203)
H0099206	Supply Air Plenum Assembly
H0099206	Return Air Plenum C/W Filter

*looking from evap end of unit

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	10.0 kW	34120 BTU
Heating Capacity	12.0 kW	40944 BTU
Fan Speeds	2 (man. control) / 3 (elec. control)	2 (man. control) / 3 (elec. control)
Air Flow	610 l/s	1293 CFM
Fresh Air	22 l/s	47 CFM
Power Supply	415/460 VAC/ 3 Phase, 50/60Hz	415/460 VAC/ 3 Phase, 50/60Hz
Current Draw	30 A	30 A
Refrigerant	R134a	R134a
Minimum Ambient Temperature	-10°C	14°F
Maximum Ambient Temperature	54°C	129°F
Packaged Weight (nominal)	457.0 Kg	1005.4 lbs
Technical Manual Reference	HD0031057	HD0031057
Dimension (L X W X H)	1512mm X 1145 mm X 980mm	59.5in X 45.1in X 28.6in

MAINTENANCE

MONTHLY / 450 HOURS	
AS2134155S	RETURN AIR FILTER ASSEMBLY (OPTIONAL)
H0082092	RETURN AIR FILTER ASSEMBLY COIL MOUNT (OPTIONAL)
ANNUAL / 5,400 HOURS	
AU531356	LIQUID LINE FILTER
3 YEAR / 16,200 HOURS	
UE016	THERMOSTAT DEICE STUD
AU521509	TX VALVE 2T 3/8" IN 1/2" OUT 1/4" EQ R134A
AU521508	TX ORIFICE #06
AU862211	SEAL RUBBER

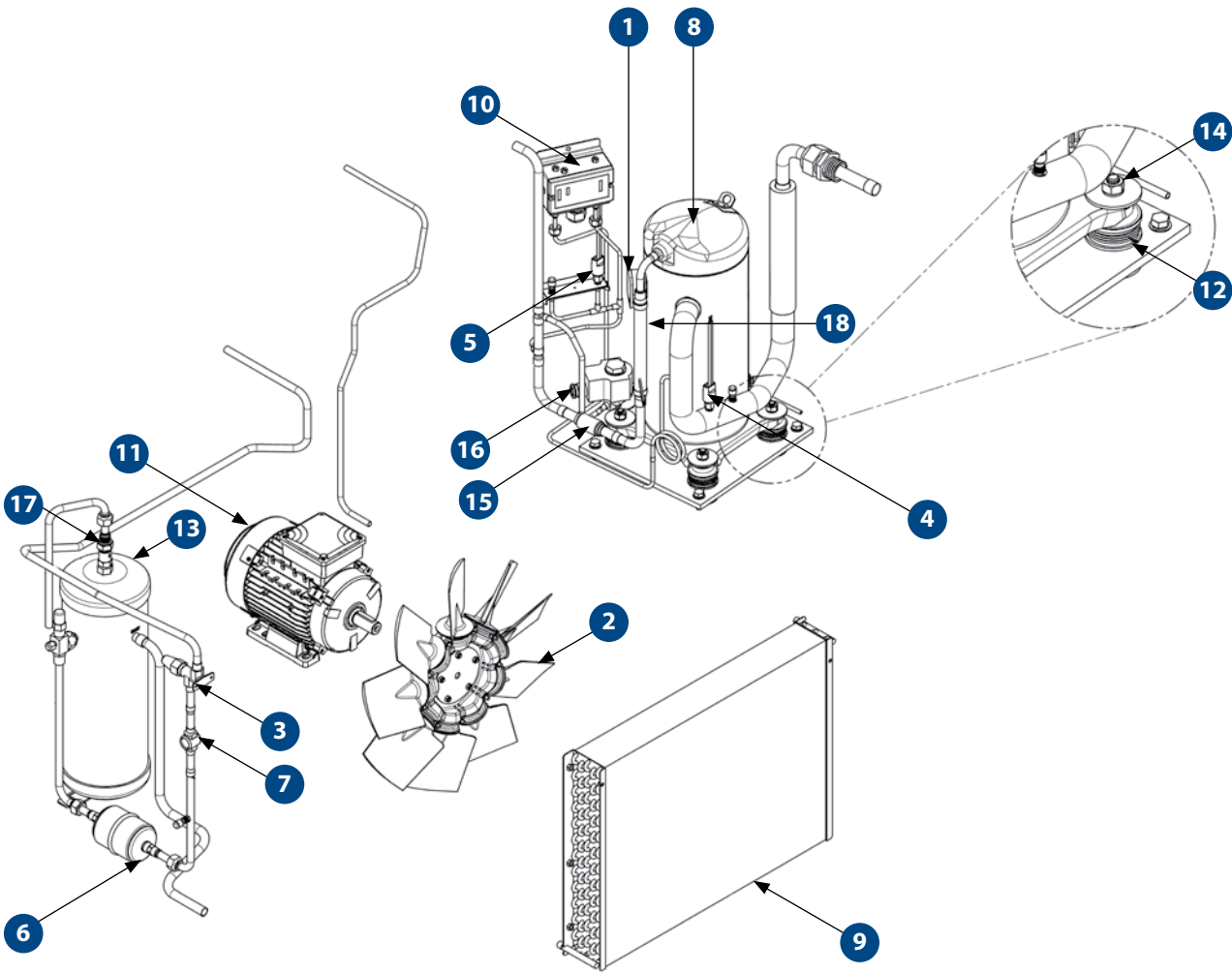
Please contact SIGMA for more information including details on an overhaul scope and interval. Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.



MPR9MX1 - CONDENSER

ROOFTOP PACKAGED HVAC UNIT

MPR9MX1
Rooftop Packaged HVAC 10kW 415VAC with Heating (12kW)



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 AU230818	COMPRESSOR LEAD	1
2 AU420157	CONDENSER FAN	1
3 AU517256	PCAV 1/2 SOLDER	1
4 AU523365	LOW PRESSURE SWITCH 1/4" FF 205kPa	1
5 AU523655	HIGH PRESSURE SWITCH 1/4" FF 2415kPa	1
6 AU531356	LIQUID LINE FILTER	1
7 AU533136	LIQUID MOISTURE INDICATOR	1
8 652A20006	COMPRESSOR ASSEMBLY	1
9 H0072613	CONDENSER COIL	1
10 AU523112	DUAL PRESSURE CONTROL	1
11 H0080329	CONDENSER FAN MOTOR	1
12 H0103172	VIBRATION MOUNT	4
13 AU160C012	RECEIVER LIQUID VERT 6 X 18 MP	1
14 H0093856	COMPRESSOR SPACER WASHER	4
15 AU517622	VALVE CHECK 5/8" SOLDER STRAIGHT	1
16 AU522021 AU668140	SOLENOID VALVE 3/8" SOLDER NC COIL SOLENOID 24VDC TYPE 1	1 1
17 AU527126	RELIEF VALVE 3/8" MNPT X 2.7MPa	1
18 H0080748	VIBRATION ELIMINATOR	1
KNHV30016	MPR9MX1 PIPE KIT	1
AU542026	REFRIGERANT OIL	1

SPARE PARTS LIST CONTINUED NEXT PAGE

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	10.0 kW	34120 BTU
Heating Capacity	12.0 kW	40944 BTU
Fan Speeds	2 (man. control) / 3 (elec. control)	2 (man. control) / 3 (elec. control)
Air Flow	610 l/s	1293 CFM
Fresh Air	22 l/s	47 CFM
Power Supply	415/460 VAC/ 3 Phase, 50/60Hz	415/460 VAC/ 3 Phase, 50/60Hz
Current Draw	30 A	30 A
Refrigerant	R134a	R134a
Minimum Ambient Temperature	-10°C	14°F
Maximum Ambient Temperature	54°C	129°F
Packaged Weight (nominal)	457.0 Kg	1005.4 lbs
Technical Manual Reference	HD0031057	HD0031057
Dimension (L X W X H)	1512mm X 1145 mm X 980mm	59.5in X 45.1in X 28.6in

MAINTENANCE

ANNUAL / 5,400 HOURS	
AU531356	LIQUID LINE FILTER
3 YEARS / 16,200 HOURS	
AU523365	LOW PRESSURE SWITCH 1/4" FF 205kPa
AU523655	HIGH PRESSURE SWITCH 1/4" FF 2415kPa
H0103172	VIBRATION MOUNT
AU542026	REFRIGERANT OIL
AU523112	DUAL PRESSURE CONTROL
H0080748	VIBRATION ELIMINATOR
AU517622	VALVE CHECK 5/8" SOLDER STRAIGHT

Please contact SIGMA for more information including details on an overhaul scope and interval. Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

- DRAGLINE & SHOVEL
- DRILL
- EXCAVATOR
- DOZER
- TRUCK
- WHEEL LOADER
- CONSTRUCTION
- UNDERGROUND EQUIPMENT
- INDUSTRIAL
- SMELTERS
- RAIL SPECIAL VEHICLES



MPR9MX1 - ELECTRICAL

ROOFTOP PACKAGED HVAC UNIT

MPR9MX1
Rooftop Packaged HVAC 10kW 415VAC with Heating (12kW)

SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 642E058	SURGE SUPPRESSOR	8
2 AU635446	END PLATE	1
3 AU641332	3A CIRCUIT BREAKER	1
4 AU641336	16A CIRCUIT BREAKER	1
5 AU641337	6A CIRCUIT BREAKER	2
6 AU651544	ABB CONTACTOR	8
7 AU661040	24V 2 POLE RELAY	5
8 AU661041	RELAY BASE	5
9 AU661044	24V 4 POLE RELAY	1
10 AU661045	RELAY BASE	1
11 AU672500	MULTIFUNCTION TIMER	2
12 AU674022	SUPPRESSOR DIODE	1
13 AU674040	25VAC VARISTOR	1
14 AU674101	SUPPRESSION FILTER	1
15 AU674401	DIODE TERMINAL BLOCK	4
16 H0082714	AUXILIARY CONTACT BLOCK	2
17 H0082715	AUXILIARY CONTACT BLOCK	4
18 H0082717	240W POWER SUPPLY	1
19 H0093336	ABB CIRCUIT BREAKER	1
20 H0100159	BUSBAR	1
21 AU641330	SHUNT TRIP	1
22 H0170133	PHASE DETECTION RELAY	1
TTP5322	MECHANICAL INTERLOCK	2
AU862211	SEAL RUBBER	2.5m

* SEE H0134546 (PAGE 183) OR H0082302 (PAGE 184)
FOR PILOT CONTROL SPARE PARTS

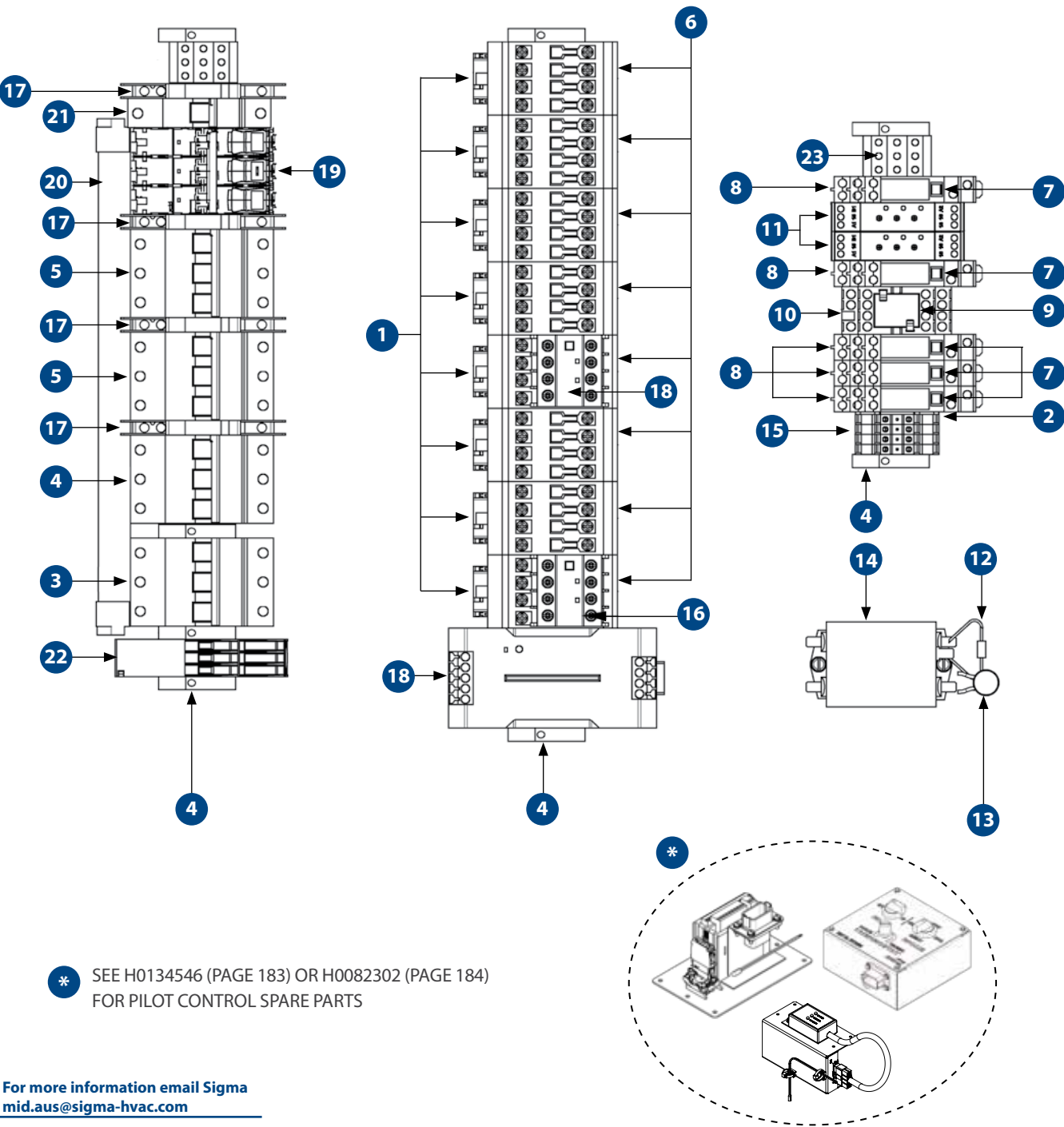
SPARE PARTS LIST CONTINUED ON PREVIOUS PAGE

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	10.0 kW	34120 BTU
Heating Capacity	12.0 kW	40944 BTU
Fan Speeds	2 (man. control) / 3 (elec. control)	2 (man. control) / 3 (elec. control)
Air Flow	610 l/s	1293 CFM
Fresh Air	22 l/s	47 CFM
Power Supply	415/460 VAC/ 3 Phase, 50/60Hz	415/460 VAC/ 3 Phase, 50/60Hz
Current Draw	30 A	30 A
Refrigerant	R134a	R134a
Minimum Ambient Temperature	-10°C	14°F
Maximum Ambient Temperature	54°C	129°F
Packaged Weight (nominal)	457.0 Kg	1005.4 lbs
Technical Manual Reference	HD0031057	HD0031057
Dimension (L X W X H)	1512mm X 1145 mm X 980mm	59.5in X 45.1in X 28.6in

COMPANION ITEMS

PART NO.	DESCRIPTION
H0134546	Manual Control Unit
H0082302	Electronic Control Unit
H0264933	Custom Operators Seat Control Option



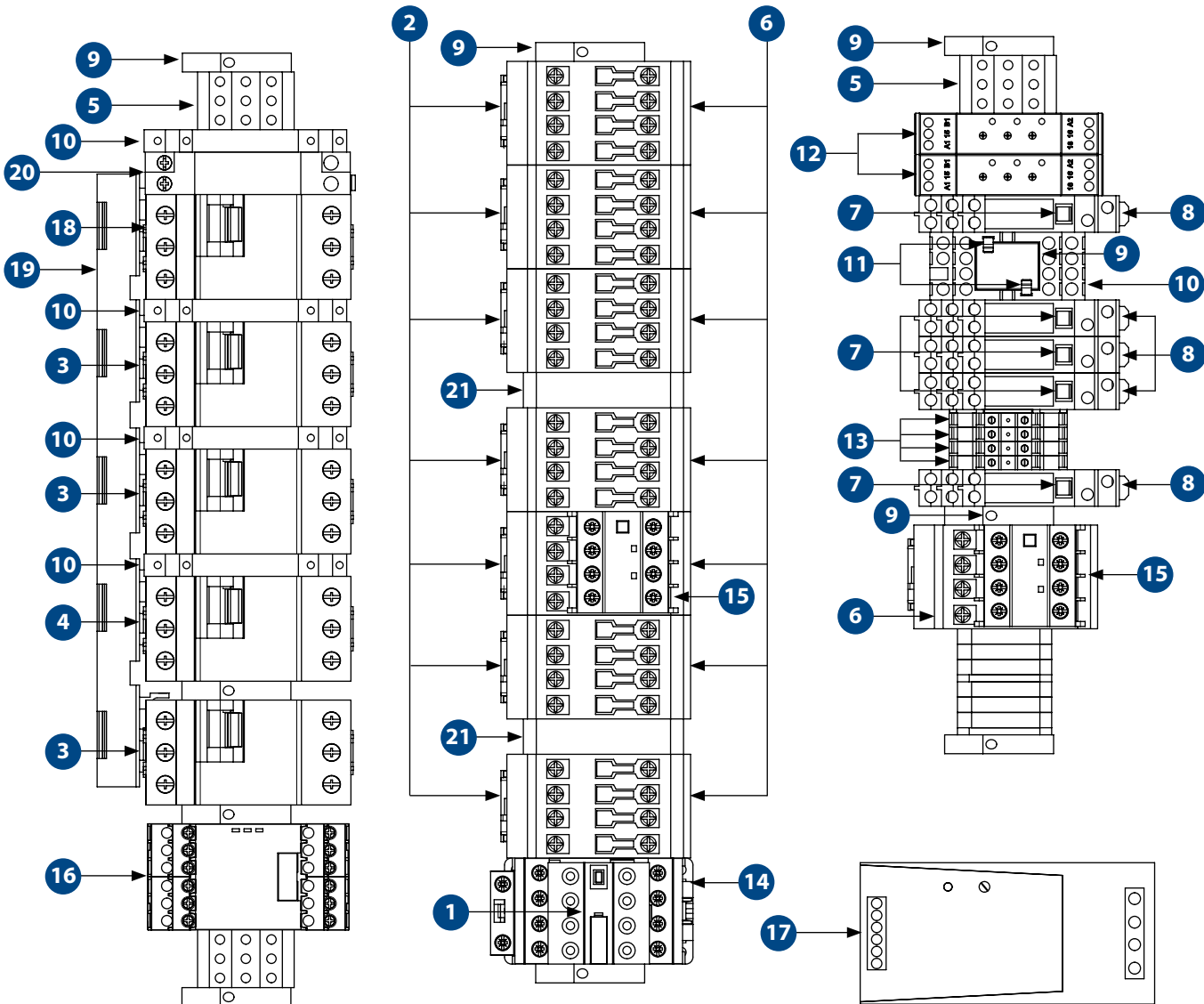
* SEE H0134546 (PAGE 183) OR H0082302 (PAGE 184)
FOR PILOT CONTROL SPARE PARTS



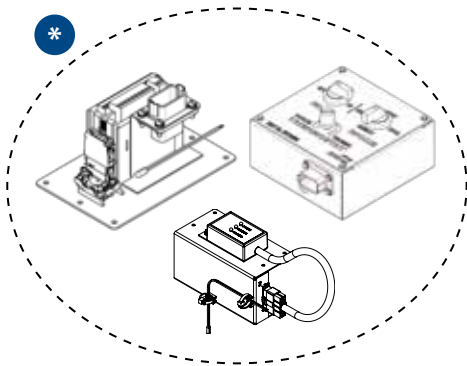
MPR9MX1 - NEW ELECTRICAL

ROOFTOP PACKAGED HVAC UNIT

MPR9MX1
Rooftop Packaged HVAC 10kW 415VAC with Heating (12kW)



* SEE H0134546 (PAGE 183) OR H0082302 (PAGE 184)
FOR PILOT CONTROL SPARE PARTS



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 642B20039	AUX. CONTACT. 2NO+2NC ABB AF CONTACTORS	1
2 642E058	SURGE SUPPRESSOR	8
3 642M076	CIRCUT BREAKER 6A	3
4 642M279	CIRCUT BREAKER 18A	1
5 AU641454	CIRCUIT BREAKER	4
6 AU651544	ABB CONTACTOR	8
7 AU661040	RELAY 8 PIN 24VDC 2 POLES	5
8 AU661041	RELAY BASE	5
9 AU661044	24V 4 POLE RELAY	1
10 AU661045	RELAY BASE	1
11 AU661046	RELAY CLIPS	2
12 AU672500	TIMER ON DELAY 24VDC 0.1SEC-100HR 1 POLE	2
13 AU674401	DIODE TERMINAL BLOCK	4
14 H0060331	CONTACTOR	1
15 H0082714	AUXILIARY CONTACT BLOCK	2
16 H0170133	PHASE DETECTION RELAY	1
17 H0222338	CONVERTER	1
18 H0222339	CIRCUIT BREAKER	1
19 H0222341	SIDE MOUNTED BUSBAR	1
20 H0236005	SHUNT TRIP, 380-400VAC 50HZ	1
21 TTP5322	MECHANICAL INTERLOCK	2
AU862211	SEAL RUBBER	2.5m

* SEE H0134546 (PAGE 183) OR H0082302 (PAGE 184)
FOR PILOT CONTROL SPARE PARTS

SPARE PARTS LIST CONTINUED ON PREVIOUS PAGE

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	10.0 kW	34120 BTU
Heating Capacity	12.0 kW	40944 BTU
Fan Speeds	2 (man. control) / 3 (elec. control)	2 (man. control) / 3 (elec. control)
Air Flow	610 l/s	1293 CFM
Fresh Air	22 l/s	47 CFM
Power Supply	415/460 VAC/ 3 Phase, 50/60Hz	415/460 VAC/ 3 Phase, 50/60Hz
Current Draw	30 A	30 A
Refrigerant	R134a	R134a
Minimum Ambient Temperature	-10°C	14°F
Maximum Ambient Temperature	54°C	129°F
Packaged Weight (nominal)	457.0 Kg	1005.4 lbs
Technical Manual Reference	HD0031057	HD0031057
Dimension (L X W X H)	1512mm X 1145 mm X 980mm	59.5in X 45.1in X 28.6in

COMPANION ITEMS

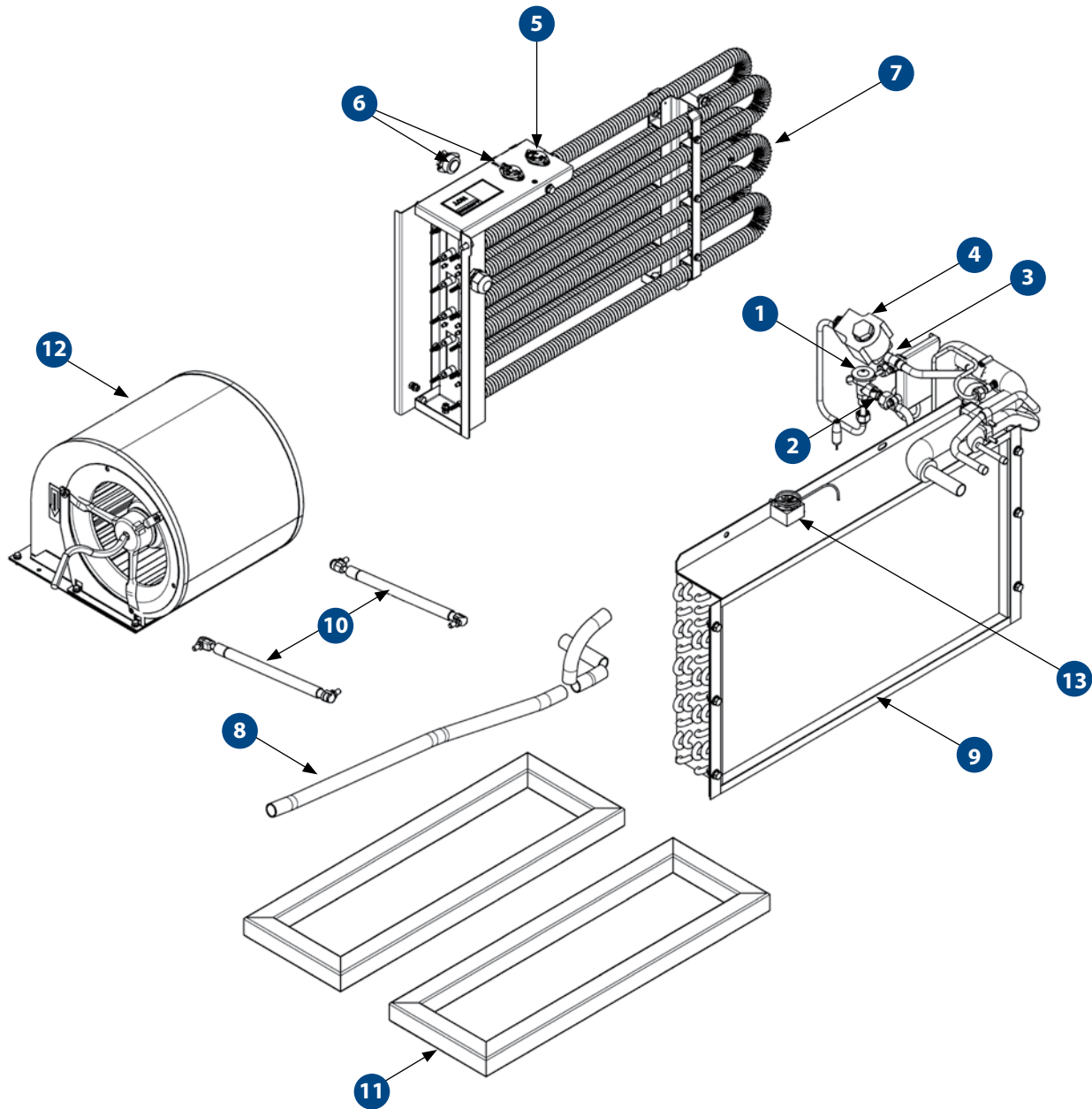
PART NO.	DESCRIPTION
H0134546	Manual Control Unit
H0082302	Electronic Control Unit
H0264933	Custom Operators Seat Control Option



MPR9VX1 - EVAPORATOR

ROOFTOP PACKAGED HVAC UNIT

MPR9VX1
Rooftop Packaged HVAC 10kW 575VAC with Heating (12kW)



SPARE PARTS

PART NO.	DESCRIPTION	QTY
AS2134155S	RETURN AIR FILTER ASSEMBLY (OPTIONAL)	1
H0082092	RETURN AIR FILTER ASSEMBLY COIL MOUNT (OPTIONAL)	2
1 AU521508	TX ORIFICE #06	1
2 AU521509	TX VALVE 2T 3/8" IN 1/2" OUT 1/4" EQ R134A	1
3 AU522042	SOLENOID VALVE 1/2" SOLDER NC	1
4 AU668140	COIL SOLENOID 24VDC TYPE 1	1
5 AU681009	KLIXON TEMPERATURE SENSOR 1	1
6 AU6811013	TAT KLIXON 40°C N/C AUTO	2
7 AU691C041	HEATER ELEMENT 277V 2500W	6
8 H0064347	HOSE PVC 20MM BORE BRAIDED	1.1m
9 H0070297	EVAPORATOR COIL	1
10 H0080806	GAS STRUT	2
11 H0080812	RA/SA OPENING SEAL	2
12 H0082201	SUPPLY AIR FAN ASSEMBLY	1
13 UE016	THERMOSTAT DEICE STUD	1
KNHV30016	MPR9MX1 PIPE KIT	1
AU862211	SEAL RUBBER	4.5m

SPARE PARTS LIST CONTINUED NEXT PAGE

COMPANION ITEMS

PART NO.	DESCRIPTION
EB9P4X	*Right Hand Pressuriser Assembly 24V
H0081203	*Left Hand Pressuriser Assembly 24V EB9
H0146199	Adapter Frame Assembly
H0107836	Supply Air Damper Assembly
H0184867	Air Duct Front Panel
H0082091	RA Filter Assembly - Coil Mount MPR9
H0087360	Spigot Supply Air M9 (152-203)
H0099206	Spigot Return Air M9 (152-203)
H0099206	Supply Air Plenum Assembly
H0099206	Return Air Plenum C/W Filter

*looking from evap end of unit

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	10.0 kW	34120 BTU
Heating Capacity	15.0 kW	51182 BTU
Fan Speeds	2 (man. control) / 3 (elec. control)	2 (man. control) / 3 (elec. control)
Air Flow	610 l/s	1293 CFM
Fresh Air	22 l/s	47 CFM
Power Supply	415/460 VAC/ 3 Phase, 50/60Hz	415/460 VAC/ 3 Phase, 50/60Hz
Current Draw	30 A	30 A
Refrigerant	R134a	R134a
Minimum Ambient Temperature	-10°C	14°F
Maximum Ambient Temperature	54°C	129°F
Packaged Weight (nominal)	457.0 Kg	1005.4 lbs
Technical Manual Reference	HD0031057	HD0031057
Dimension (L X W X H)	1512mm X 1145 mm X 980mm	59.5in X 45.1in X 28.6in

MAINTENANCE

MONTHLY / 450 HOURS	
AS2134155S	RETURN AIR FILTER ASSEMBLY (OPTIONAL)
H0082092	RETURN AIR FILTER ASSEMBLY COIL MOUNT (OPTIONAL)
ANNUAL / 5,400 HOURS	
AU531356	LIQUID LINE FILTER
3 YEAR / 16,200 HOURS	
UE016	THERMOSTAT DEICE STUD
AU521509	TX VALVE 2T 3/8" IN 1/2" OUT 1/4" EQ R134A
AU521508	TX ORIFICE #06
AU862211	SEAL RUBBER

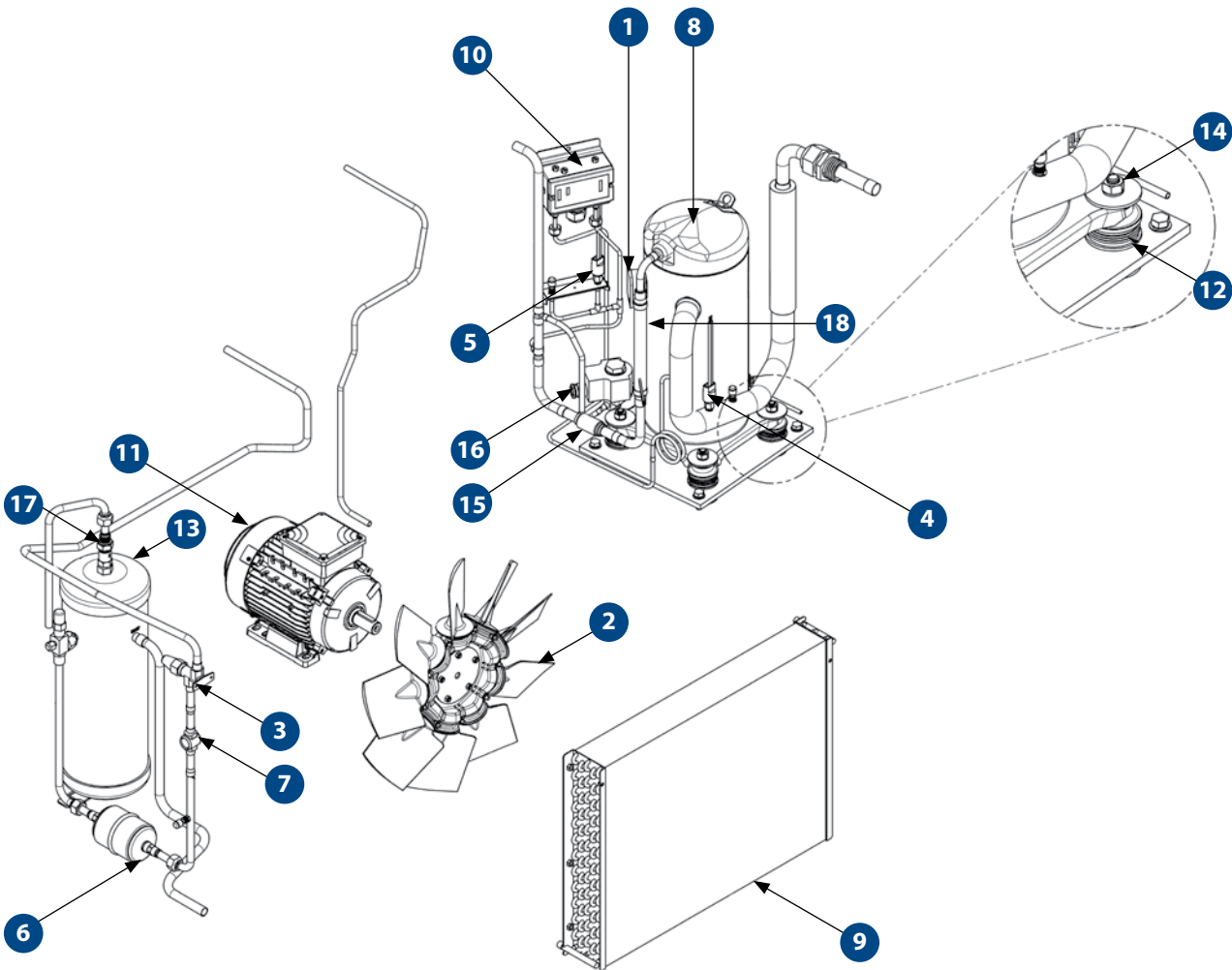
Please contact SIGMA for more information including details on an overhaul scope and interval. Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.



MPR9VX1 - CONDENSER

ROOFTOP PACKAGED HVAC UNIT

MPR9VX1
Rooftop Packaged HVAC 10kW 575VAC with Heating (12kW)



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 AU230818	COMPRESSOR LEAD	1
2 AU420157	CONDENSER FAN	1
3 AU517256	PCAV 1/2 SOLDER	1
4 AU523365	LOW PRESSURE SWITCH 1/4" FF 205kPa	1
5 AU523655	HIGH PRESSURE SWITCH 1/4" FF 2415kPa	1
6 AU531356	LIQUID LINE FILTER	1
7 AU533136	LIQUID MOISTURE INDICATOR	1
8 652A20006	COMPRESSOR ASSEMBLY	1
9 H0072613	CONDENSER COIL	1
10 AU523112	DUAL PRESSURE CONTROL	1
11 H0080329	CONDENSER FAN MOTOR	1
12 H0103172	VIBRATION MOUNT	4
13 AU160C012	RECEIVER LIQUID VERT 6 X 18 MP	1
14 H0093856	COMPRESSOR SPACER WASHER	4
15 AU517622	VALVE CHECK 5/8" SOLDER STRAIGHT	1
16 AU522021 AU668140	SOLENOID VALVE 3/8" SOLDER NC COIL SOLENOID 24VDC TYPE 1	1
17 AU527126	RELIEF VALVE 3/8" MNPT X 2.7MPa	1
18 H0080748	VIBRATION ELIMINATOR	1
KNHV30016	MPR9MX1 PIPE KIT	1
AU542026	REFRIGERANT OIL	1

SPARE PARTS LIST CONTINUED NEXT PAGE

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	10.0 kW	34120 BTU
Heating Capacity	15.0 kW	51182 BTU
Fan Speeds	2 (man. control) / 3 (elec. control)	2 (man. control) / 3 (elec. control)
Air Flow	610 l/s	1293 CFM
Fresh Air	22 l/s	47 CFM
Power Supply	415/460 VAC/ 3 Phase, 50/60Hz	415/460 VAC/ 3 Phase, 50/60Hz
Current Draw	30 A	30 A
Refrigerant	R134a	R134a
Minimum Ambient Temperature	-10°C	14°F
Maximum Ambient Temperature	54°C	129°F
Packaged Weight (nominal)	457.0 Kg	1005.4 lbs
Technical Manual Reference	HD0031057	HD0031057
Dimension (L X W X H)	1512mm X 1145 mm X 980mm	59.5in X 45.1in X 28.6in

MAINTENANCE

ANNUAL / 5,400 HOURS

AU531356 LIQUID LINE FILTER

3 YEARS / 16,200 HOURS

AU523365 LOW PRESSURE SWITCH 1/4" FF 205kPa
AU523655 HIGH PRESSURE SWITCH 1/4" FF 2415kPa
H0103172 VIBRATION MOUNT
AU542026 REFRIGERANT OIL
AU523112 DUAL PRESSURE CONTROL
H0080748 VIBRATION ELIMINATOR
AU517622 VALVE CHECK 5/8" SOLDER STRAIGHT

Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

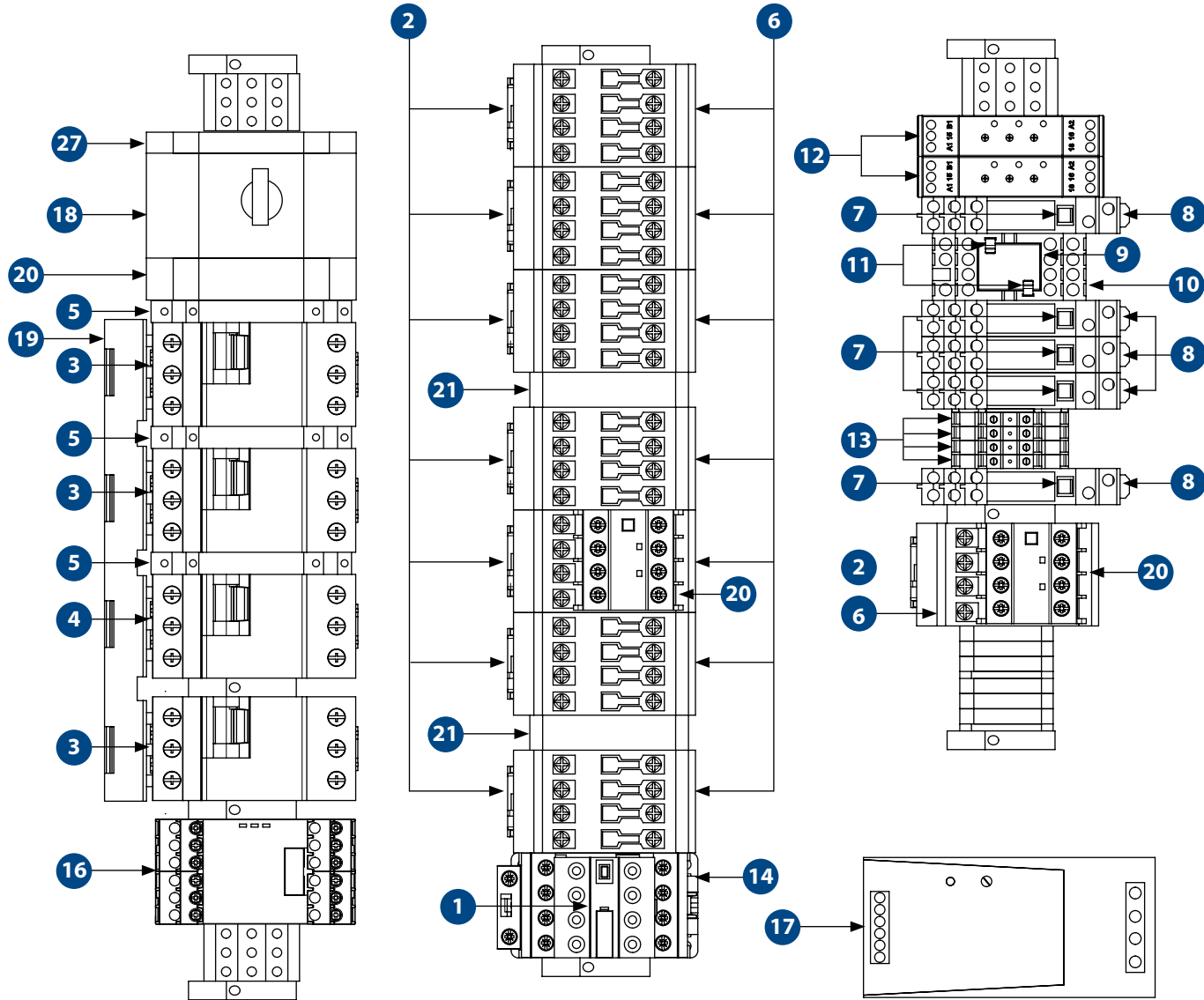
- DRAGLINE & SHOVEL
- DRILL
- EXCAVATOR
- DOZER
- TRUCK
- WHEEL LOADER
- CONSTRUCTION
- UNDERGROUND EQUIPMENT
- INDUSTRIAL
- SMELTERS
- RAIL SPECIAL VEHICLES



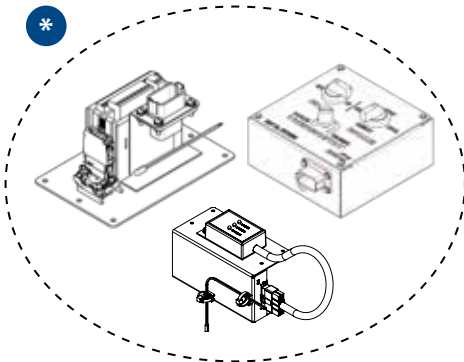
MPR9VX1 - ELECTRICAL

ROOFTOP PACKAGED HVAC UNIT

MPR9VX1
Rooftop Packaged HVAC 10kW 575VAC with Heating (12kW)



* SEE H0134546 (PAGE 183) OR H0082302 (PAGE 184)
FOR PILOT CONTROL SPARE PARTS



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 642B20039	AUX. CONTACT. 2NO+2NC ABB AF CONTACTORS	1
2 642E058	SURGE SUPPRESSOR	8
3 642M076	INT.AUTOM.TRIP 6A GV2-LE10	3
4 642M279	DISYUNTOR MAGNETOTERMICO GV2-LE20	1
5 AU641454	CIRCUIT BREAKER	4
6 AU651544	ABB CONTACTOR	8
7 AU661040	RELAY 8 PIN 24VDC 2 POLES	5
8 AU661041	RELAY BASE	5
9 AU661044	24V 4 POLE RELAY	1
10 AU661045	RELAY BASE	1
11 AU661046	RELAY CLIPS	2
12 AU672500	TIMER ON DELAY 24VDC 0.1SEC-100HR 1 POLE	2
13 AU674401	DIODE TERMINAL BLOCK	4
14 H0060331	CONTACTOR	1
15 H0082714	AUXILIARY CONTACT BLOCK	2
16 H0170133	PHASE DETECTION RELAY	1
17 H0222338	CONVERTER	1
18 H0222339	CIRCUIT BREAKER	1
19 H0222341	SIDE MOUNTED BUSBAR	1
20 H0236005	SHUNT TRIP, 380-400VAC 50HZ	1
21 TTP5322	MECHANICAL INTERLOCK	2
22 H0249472	CIRCUIT BREAKER	1
AU862211	SEAL RUBBER	2.5m

* SEE H0134546 (PAGE 183) OR H0082302 (PAGE 184)
FOR PILOT CONTROL SPARE PARTS

SPARE PARTS LIST CONTINUED ON PREVIOUS PAGE

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	10.0 kW	34120 BTU
Heating Capacity	15.0 kW	51182 BTU
Fan Speeds	2 (man. control) / 3 (elec. control)	2 (man. control) / 3 (elec. control)
Air Flow	610 l/s	1293 CFM
Fresh Air	22 l/s	47 CFM
Power Supply	415/460 VAC/ 3 Phase, 50/60Hz	415/460 VAC/ 3 Phase, 50/60Hz
Current Draw	30 A	30 A
Refrigerant	R134a	R134a
Minimum Ambient Temperature	-10°C	14°F
Maximum Ambient Temperature	54°C	129°F
Packaged Weight (nominal)	457.0 Kg	1005.4 lbs
Technical Manual Reference	HD0031057	HD0031057
Dimension (L X W X H)	1512mm X 1145 mm X 980mm	59.5in X 45.1in X 28.6in

COMPANION ITEMS

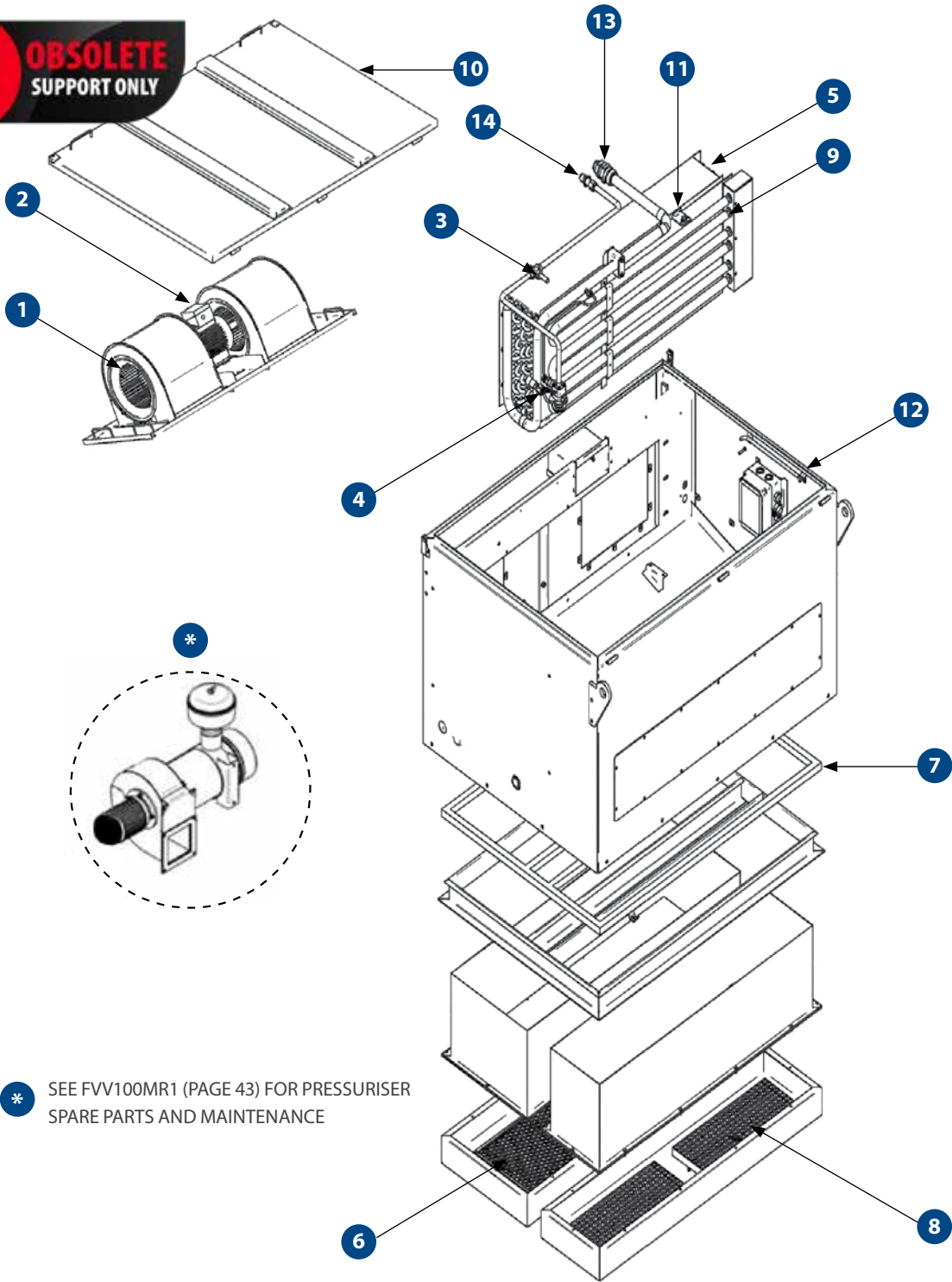
PART NO.	DESCRIPTION
H0134546	Manual Control Unit
H0082302	Electronic Control Unit
H0264933	Custom Operators Seat Control Option



MPR15MX1 - EVAPORATOR*
ROOFTOP PACKAGED HVAC UNIT

MPR15MX1*
Rooftop Packaged HVAC 15kW 415VAC with Heating (9kW)

* HVAC obsolete, spares support only



* SEE FVV100MR1 (PAGE 43) FOR PRESSURISER
SPARE PARTS AND MAINTENANCE

SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 AU410130	BLOWER 250D X 242W X 19MM CW DI	2
2 UE321	MOTOR 1.1/0.37kW 90L 4/6P D/S	1
AU668135	COIL SOLENOID 110VAC	1
3 AU522127	SOLENOID VALVE 200RB 5/8" SOLDER	1
AU631451	PLUG PG9 SOL COIL 240VAC 10A	1
AU521512	TX VALVE 5T ANGLE 1/2" IN 5/8" OUT R134A	1
4 AU521511	TX THERMOSTAT ELEM 5T R134A	1
UR348	TX ORIFICE #02	1
5 UR268	EVAPORATOR COIL 990MM X 318MM X 137MM 5 RW	1
6 AS503103S	RETURN AIR FILTER 477MM X 312MM M15 (STANDARD)	2
7 AU08379	ROOF SEAL	1
8 UC342	DIFFUSER 500MM X 200MM OPEN AREA DOUBLE DEFLECTION	2
9 UE272	HEATER U SHAPE 3KW 240V 975MM FIN	3
10 AS508307	EVAPORATOR LID	1
11 AU681020	HEATER OVER TEMPERATURE SWITCH	1
12 AU862211	SEAL RUBBER	5m
UR296	BULKHEAD 1 5/8" MJIC	1
13 UR302	UNION 1 5/8" FJIC X 1 1/2 SL	1
14 UR011	BULKHEAD 5/8" MF	1
AU746906	DRAIN TRAP	1

* SEE FVV100MR1 (PAGE 43) FOR PRESSURISER SPARE PARTS
AND MAINTENANCE

SPARE PARTS LIST CONTINUED NEXT PAGE

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	15.0 kW	51180 BTU
Heating Capacity	9.0 kW	30708 BTU
Fan Speeds	2	2
Air Flow	800 l/s	1695 CFM
Fresh Air	100 l/s	212 CFM
Power Supply	415 VAC 3Phase-50Hz	415 VAC 3Phase-50Hz
Current Draw	27 A	27 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	54°C	129°F
Packaged Weight (nominal)	685.0 Kg	1507.0 lbs
Dimension (L X W X H)	1920mm X 1670 mm X 895mm	75.6in X 65.7in X 35.2in

MAINTENANCE

MONTHLY / 450 HOURS

AS503103S RETURN AIR FILTER 477MM X 315MM
M15 (STANDARD)

3 YEARS / 16,200 HOURS

AU521511 TX THERMOSTAT ELEM 5T R134A

UR348 TX ORIFICE #02

AU862211 SEAL RUBBER

Please contact SIGMA for more information including details
on an overhaul scope and interval.
Maintenance periods and scope are dependent on application
and site conditions, and are to be used as a guide.

COMPANION ITEMS

PART NO.	DESCRIPTION
AU460866	FILTER CARTRIDGE PLEAT 505MM X 330MM X 50MM

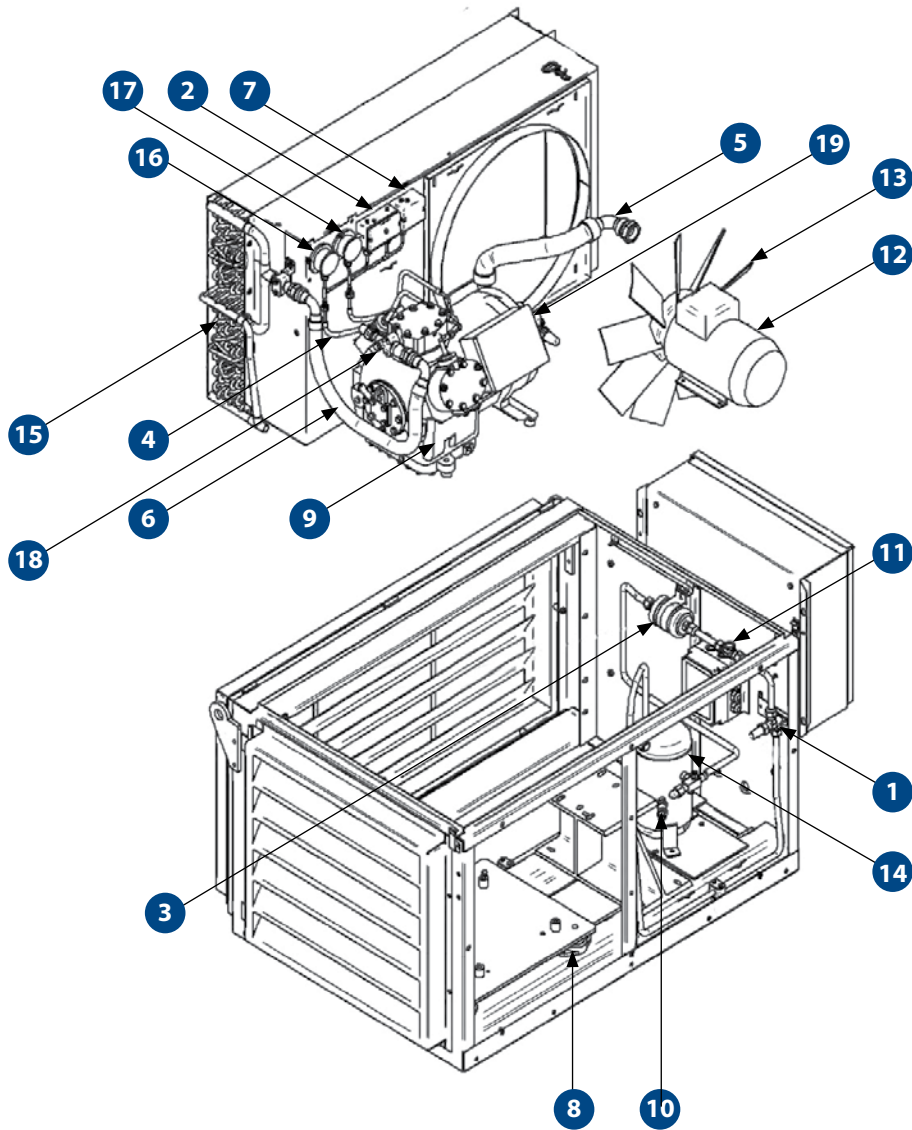


MPR15MX1 - CONDENSER*

ROOFTOP PACKAGED HVAC UNIT

MPR15MX1*
Rooftop Packaged HVAC 15kW 415VAC with Heating (9kW)

* HVAC obsolete, spares support only



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1	AU517208 PCLV 5/8" MF	1
2	AU523111 DUAL PRESSURE CONTROL LP AUTO HP MANUAL	1
3	AU531358 DRIER 5/8" MF	1
4	AS160182 HP FLEXIBLE HOSE ASSEMBLY	2
5	AS508426 SUCTION LINE HOSE	1
6	AS508432 HOSE DISCHARGE LINE	1
7	AU523606 HP CONTROL AUTO	1
8	AU845032 ANTI VIBRATION MOUNT	4
9	AU200089 COMPRESSOR WITH PRESSURE UNLOADER	1
10	AU527126 RELIEF VALVE 3/8"	1
11	AU533408 SIGHT GLASS	1
12	UE322 MOTOR 1.1/0.37kW 90L 4/6P FT	1
13	UF076 FAN AXIAL 560MM 10 BLADES	1
14	UR022 RECEIVER 330X168MM 5/8" SL X 5/8" ROTALOK	1
15	UR267 CONDENSER COIL 1135MM X 635MM X 110MM 4RW	1
16	AU532331 GAUGE 63MM R134A 100 TO 1900 kPa	1
17	AU532330 GAUGE 63MM R134A 0 TO 2500kPa	1
18	AU200105 VALVE DISCHARGE 7/8"	1
19	AU200109 VALVE DISCHARGE GASKET 7/8"	1
	AU519074 ADAPTOR 134a 1/4" HIGH SIDE RED	1
	AU519075 ADAPTOR 134a 1/4" LOW SIDE BLUE	1
	AU200079 CRANKCASE HEATER 415V 75W	1
	AS508425 LID ASSEMBLY	1
	AU542026 REFRIGERANT OIL	4.4
	AU200045 VALVE UNLOADER PRESSURE	1
	AU200061 VALVE UNLOADER ELECTRICAL	1
	AU200105 VALVE DISCHARGE 7/8"	1
	AU200109 VALVE SUCTION 1 1/8"	1
	AU200135 VALVE DISCHARGE GASKET 7/8"	1

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	15.0 kW	51180 BTU
Heating Capacity	9.0 kW	30708 BTU
Fan Speeds	2	2
Air Flow	800 l/s	1695 CFM
Fresh Air	100 l/s	212 CFM
Power Supply	415 VAC 3Phase-50Hz	415 VAC 3Phase-50Hz
Current Draw	27 A	27 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	54°C	129°F
Packaged Weight (nominal)	685.0 Kg	1507.0 lbs
Dimension (L X W X H)	1920mm X 1670 mm X 895mm	75.6in X 65.7in X 35.2in

MAINTENANCE

ANNUAL / 5,400 HOURS	
AU531358	DRIER 5/8" MF
3 YEARS / 16,200 HOURS	
AU523111	DUAL PRESSURE CONTROL LP AUTO HP MANUAL
AS160182	HP FLEXIBLE HOSE ASSEMBLY
AS508426	SUCTION LINE HOSE
AS508432	HOSE DISCHARGE LINE
AU523606	HP CONTROL AUTO
AU845032	ANTI VIBRATION MOUNT
AS3386352	VALVE DISCHARGE WITH FITTING
AS3386351	VALVE SUCTION WITH FITTING
AU542026	REFRIGERANT OIL
Please contact SIGMA for more information including details on an overhaul scope and interval. Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.	

SPARE PARTS LIST CONTINUED NEXT PAGE

117 For more information email Sigma
mid.aus@sigma-hvac.com

MPR15MX1 - CONDENSER

116 For more information email Sigma
mid.aus@sigma-hvac.com

MPR15MX1 - CONDENSER

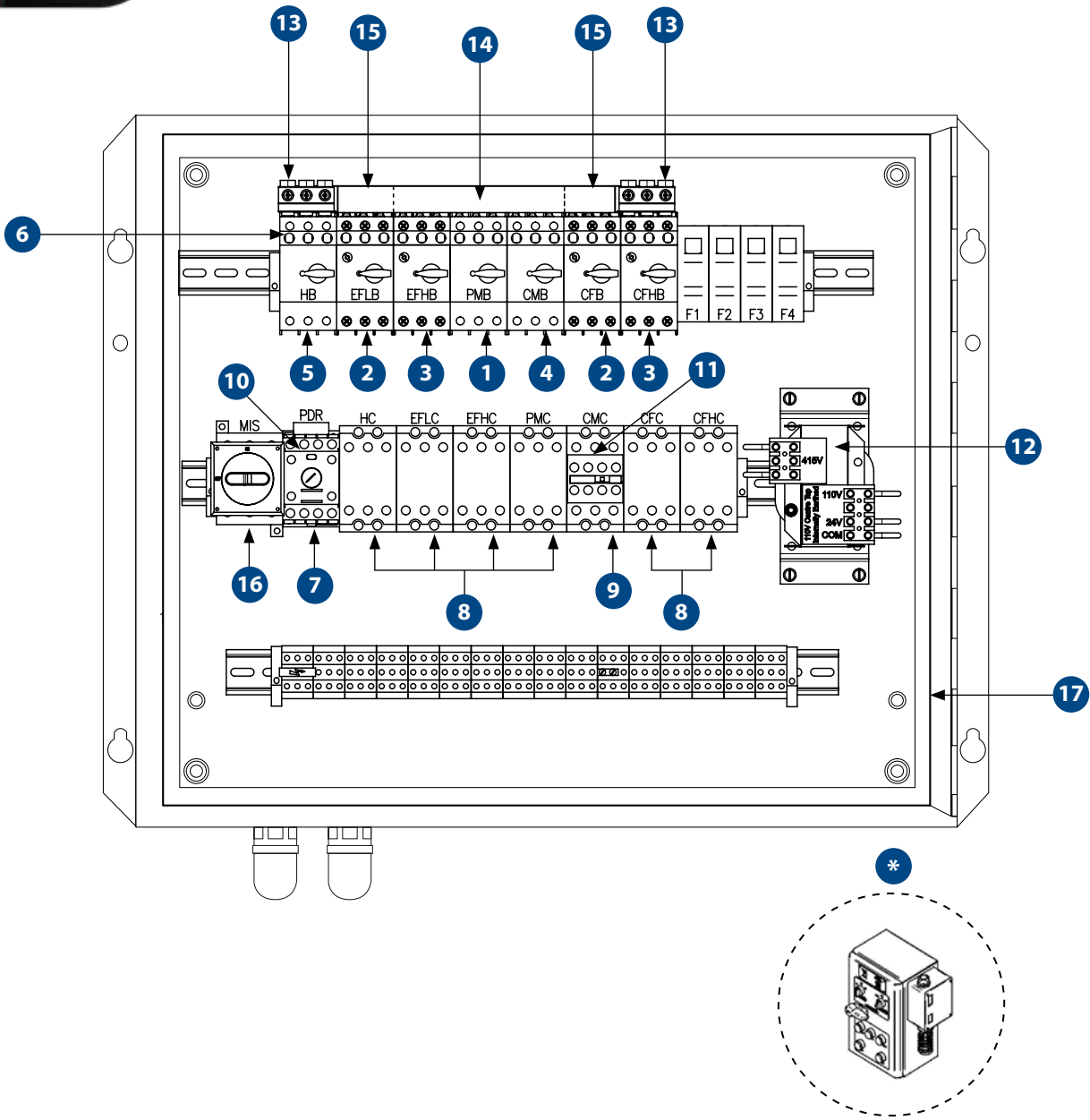


MPR15MX1 - ELECTRICAL*

ROOFTOP PACKAGED HVAC UNIT

MPR15MX1*
Rooftop Packaged HVAC 15kW 415VAC with Heating (9kW)

* HVAC obsolete, spares support only



* SEE MEWH1/MEWI1 (PAGE 182) PILOT CONTROL BOX FOR SPARE PARTS

SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 AU641486	CIRCUIT BREAKER 1.1-1.6A 3 POLE	1
2 AU641488	CIRCUIT BREAKER 1.8-2.5A 3 POLE	2
3 AU641490	CIRCUIT BREAKER	2
4 AU641499	CIRCUIT BREAKER 20.0-25.0A 3 POLE	1
5 AU641496	CIRCUIT BREAKER 11.0-16.0A 3 POLE	1
6 AU641501	CIRCUIT BREAKER AUX 1CO	7
7 AU651035	CONTACTOR 12A 3 POLE 110VAC	1
8 AU651173	CONTACTOR 17A 110VAC 3 POLE 1NO 1NC	6
9 AU651174	CONTACTOR 25A 110VAC	1
10 AU653505	TIMER (3-30 SECONDS))	1
11 AU653602	AUXILIARY CONTACT 2NO 2NC	1
12 UE104	TRANSFORMER 415V 110V 24V 115W SCREEN	1
13 642E10063	BUSBAR TERMINAL	2
14 AU635609	BUSBAR 5 BREAKER 3RV	1
15 AU635610	BUSBAR 2 BREAKER 3RV	2
16 AU642070	SWITCH ISOLATION ROTARY 80A	1
17 AU862211	SEAL RUBBER	2.5m
AU851556	LATCH 1/4 TURN DOUBLE WING 5MM PIN	2
AU851588	KEY DOUBLE WING 5MM PIN SUIT AU851556	1

* SEE MEWH1/MEWI1 (PAGE 182) PILOT CONTROL BOX FOR SPARE PARTS

SPARE PARTS LIST CONTINUED ON PREVIOUS PAGE

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	15.0 kW	51180 BTU
Heating Capacity	9.0 kW	30708 BTU
Fan Speeds	2	2
Air Flow	800 l/s	1695 CFM
Fresh Air	100 l/s	212 CFM
Power Supply	415 VAC 3Phase-50Hz	415 VAC 3Phase-50Hz
Current Draw	27 A	27 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	54°C	129°F
Packaged Weight (nominal)	685.0 Kg	1507.0 lbs
Dimension (L X W X H)	1920mm X 1670 mm X 895mm	75.6in X 65.7in X 35.2in

MAINTENANCE

3 YEARS / 16,200 HOURS

AU653505 TIMER (3-30 SECONDS)

AU651035 CONTACTOR 12A 3 POLE 110VAC

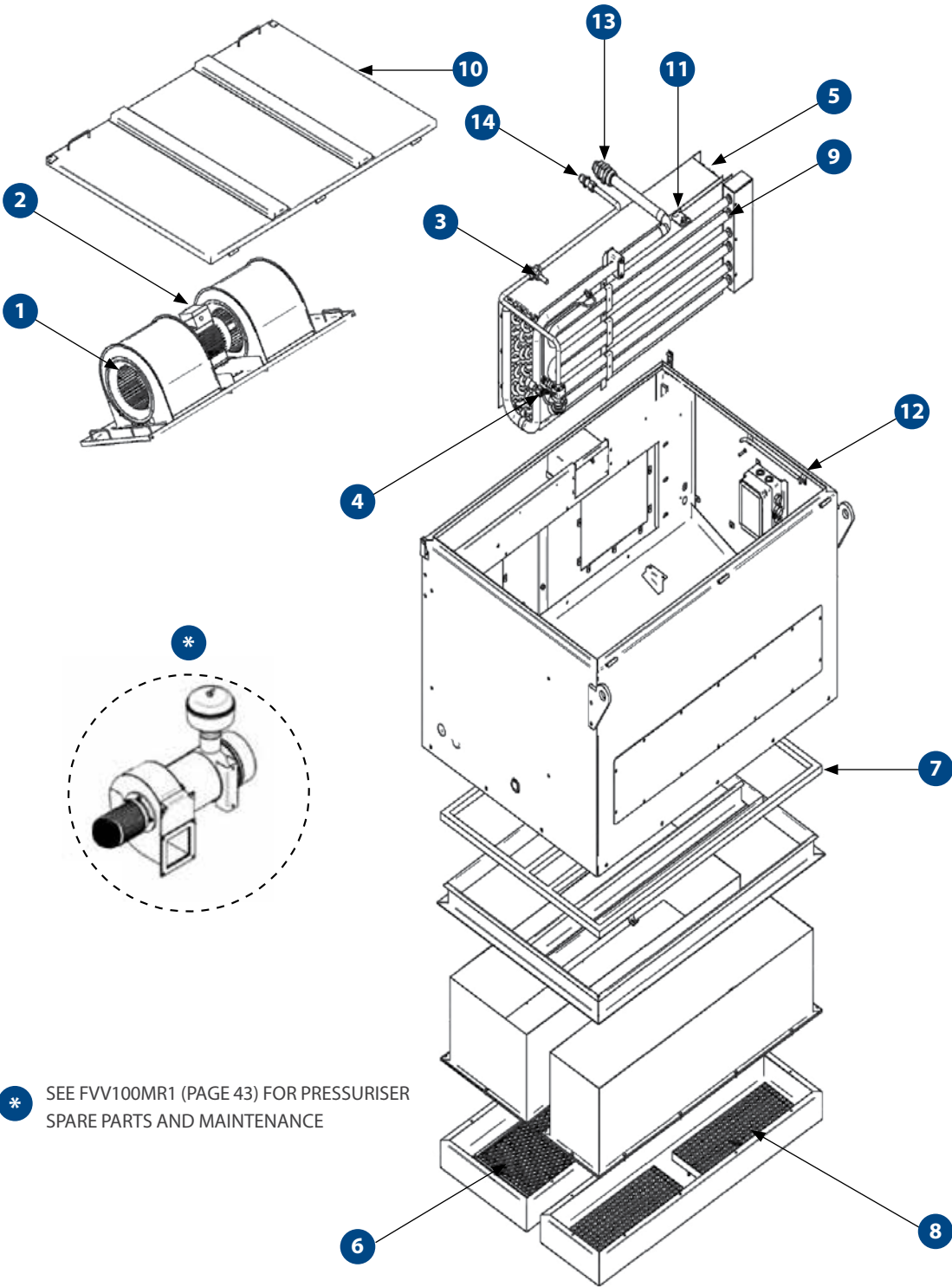
Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.



MPR20MX1 - EVAPORATOR

ROOFTOP PACKAGED HVAC UNIT

MPR20MX1
Rooftop Packaged HVAC 20kW 415VAC with Heating (9kW)



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 AU410130	BLOWER 250D X 242W X 19MM CW DI	2
2 UE321	MOTOR 1.1/0.37kW 90L 4/6P D/S	1
AU668134	COIL SOLENOID 24VAC ¹	1
3 AU522127	SOLENOID VALVE 200RB 5/8" SOLDER	1
AU631451	PLUG PG9 SOL COIL 240VAC 10A	1
AU521512	TX VALVE 5T ANGLE 1/2" IN 5/8" OUT R134A	1
4 AU521511	TX THERMOSTAT ELEM 5T R134A	1
AU521515	TX ORIFICE 5T R134a #04	1
5 AU120484	EVAPORATOR COIL 990 X 318 X 137 5 RW M20	1
6 AS503103S	RETURN AIR FILTER 477MM X 312MM M15 (STANDARD)	2
7 AU08379	ROOF SEAL	1
8 UC342	DIFFUSER 500MM X 200MM OPEN AREA DOUBLE DEFLECTION	2
9 UE272	HEATER U SHAPE 3KW 240V 975MM FIN	3
10 AS508307	EVAPORATOR LID	1
11 AU681020	HEATER OVER TEMPERATURE SWITCH	1
12 AU862211	SEAL RUBBER	5m
13 UR296	BULKHEAD 1 5/8" MJIC	1
UR302	UNION 1 5/8" FJIC X 1 1/2 SL	1
14 UR011	BULKHEAD 5/8" MF	1
AU746906	DRAIN TRAP	1

¹ Older MPR20 unit may have 110V Coil AU668135

* SEE FVV100MR1 (PAGE 43) FOR PRESSURISER SPARE PARTS AND MAINTENANCE

SPARE PARTS LIST CONTINUED NEXT PAGE

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	20.0 kW	68240 BTU
Heating Capacity	9.0 kW	30708 BTU
Fan Speeds	2	2
Air Flow	900 l/s	1907 CFM
Fresh Air	100 l/s	212 CFM
Power Supply	415 VAC 3Phase-50Hz	415 VAC 3Phase-50Hz
Current Draw	33 A	33 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	54°C	129°F
Packaged Weight (nominal)	760.0 Kg	1672.0 lbs
Dimension (L X W X H)	1920mm X 1670 mm X 895mm	75.6in X 65.7in X 35.2in

MAINTENANCE

MONTHLY / 450 HOURS	
AS503103S	RETURN AIR FILTER 477MM X 312MM M15
3 YEARS / 16,200 HOURS	
AU521511	TX THERMOSTAT ELEM 5T R134A
AU521515	TX ORIFICE 5T R134A #04
AU862211	SEAL RUBBER

Please contact SIGMA for more information including details on an overhaul scope and interval.

Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

COMPANION ITEMS

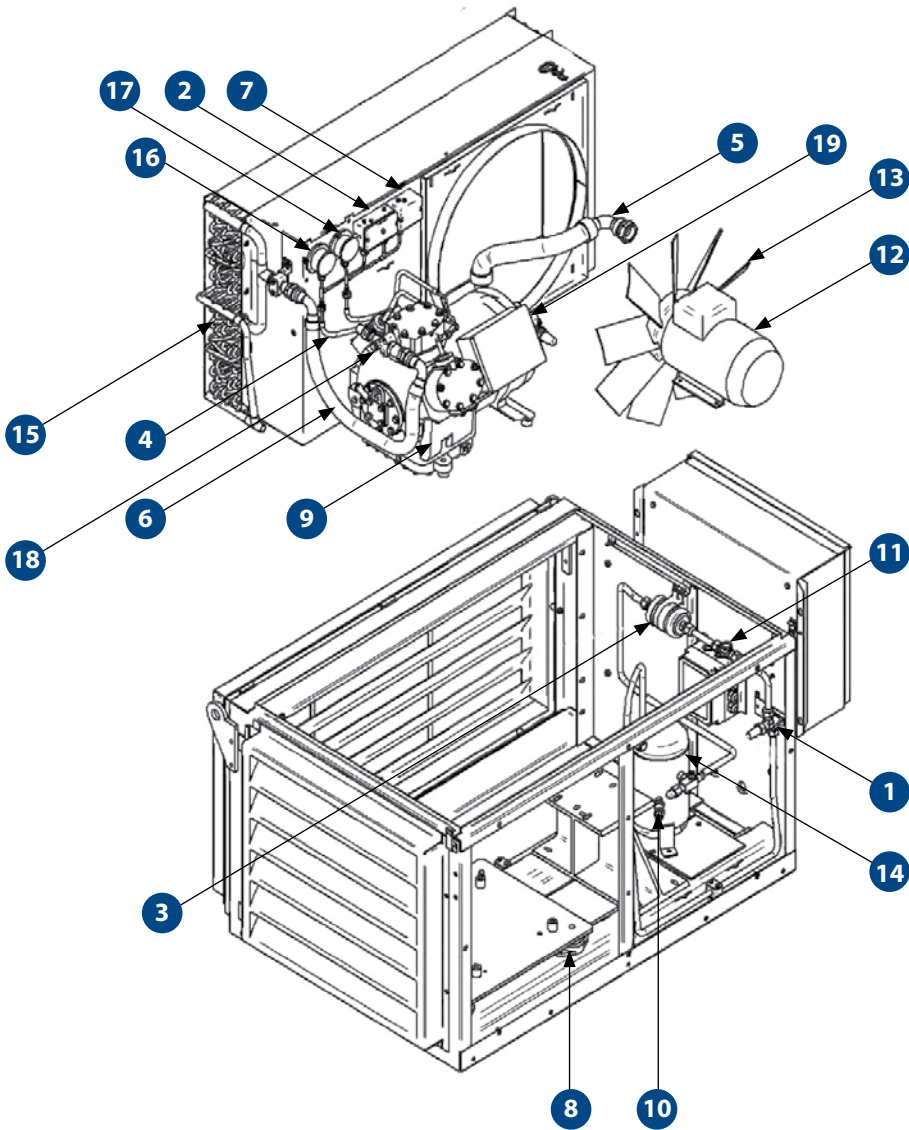
PART NO.	DESCRIPTION
AU460866	FILTER CARTRIDGE PLEAT 505MM X 330MM X 50MM (OPTIONAL)



MPR20MX1 - CONDENSER

ROOFTOP PACKAGED HVAC UNIT

MPR20MX1
Rooftop Packaged HVAC 20kW 415VAC with Heating (9kW)



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 AU517208	PCLV 5/8" MF	1
2 AU523111	DUAL PRESSURE CONTROL LP AUTO HP MANUAL	1
3 AU531358	DRIER 5/8" MF	1
4 AS160182	HP FLEXIBLE HOSE ASSEMBLY	2
5 AS508426	SUCTION LINE HOSE	1
6 AS508432	HOSE DISCHARGE LINE	1
7 AU523606	HP CONTROL AUTO	1
8 AU845032	ANTI VIBRATION MOUNT	4
9 AU200014	COMPRESSOR WITH 2 ELECTRIC UNLOADER	1
10 AU527126	RELIEF VALVE 3/8"	1
11 AU533408	SIGHT GLASS	1
12 AU319037	MOTOR 1.85/0.55KW 100L 4/6P	1
13 AU420277	FAN AXIAL 560MM 9 BLADES	1
14 UR022	RECEIVER 330 X 168MM 5/8" SL X 5/8" ROTALOK	1
15 AU110428	CONDENSER COIL 1135MM X 635MM X 138MM	1
16 AU532331	GAUGE 63MM R134A 100 TO 1900 kPa	1
17 AU532330	GAUGE 63MM R134A 0 TO 2500kPa	1
18 AS3386352	VALVE DISCHARGE WITH FITTING	1
19 AS3386351	VALVE SUCTION WITH FITTING	1
AU517507	VALVE ACCESS 1/4"	1
AU200045	VALVE UNLOADER PRESSURE	1
AU200079	CRANKCASE HEATER 415V 75W	1
AU519074	ADAPTOR 134A 1/4" HIGH SIDE RED	1
AU519075	ADAPTOR 134A 1/4" LOW SIDE BLUE	1
AS508425	LID ASSEMBLY	1
AU542026	REFRIGERANT OIL	4.4
AU200045	VALVE UNLOADER PRESSURE	1
AU200061	VALVE UNLOADER ELECTRICAL	1

SPARE PARTS LIST CONTINUED NEXT PAGE

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	20.0 kW	68240 BTU
Heating Capacity	9.0 kW	30708 BTU
Fan Speeds	2	2
Air Flow	900 l/s	1907 CFM
Fresh Air	100 l/s	212 CFM
Power Supply	415 VAC 3Phase-50Hz	415 VAC 3Phase-50Hz
Current Draw	33 A	33 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	54°C	129°F
Packaged Weight (nominal)	760.0 Kg	1672.0 lbs
Dimension (L X W X H)	1920mm X 1670 mm X 895mm	75.6in X 65.7in X 35.2in

MAINTENANCE

ANNUAL / 5,400 HOURS	
AU531358	DRIER 5/8" MF
3 YEARS / 16,200 HOURS	
AU523111	DUAL PRESSURE CONTROL LP AUTO HP MANUAL
AS160182	HP FLEXIBLE HOSE ASSEMBLY
AS508426	SUCTION LINE HOSE
AS508432	HOSE DISCHARGE LINE
AU523606	HP CONTROL AUTO
AU845032	ANTI VIBRATION MOUNT
AS3386352	VALVE DISCHARGE WITH FITTING
AS3386351	VALVE SUCTION WITH FITTING
AU542026	REFRIGERANT OIL

Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

COMPANION ITEMS

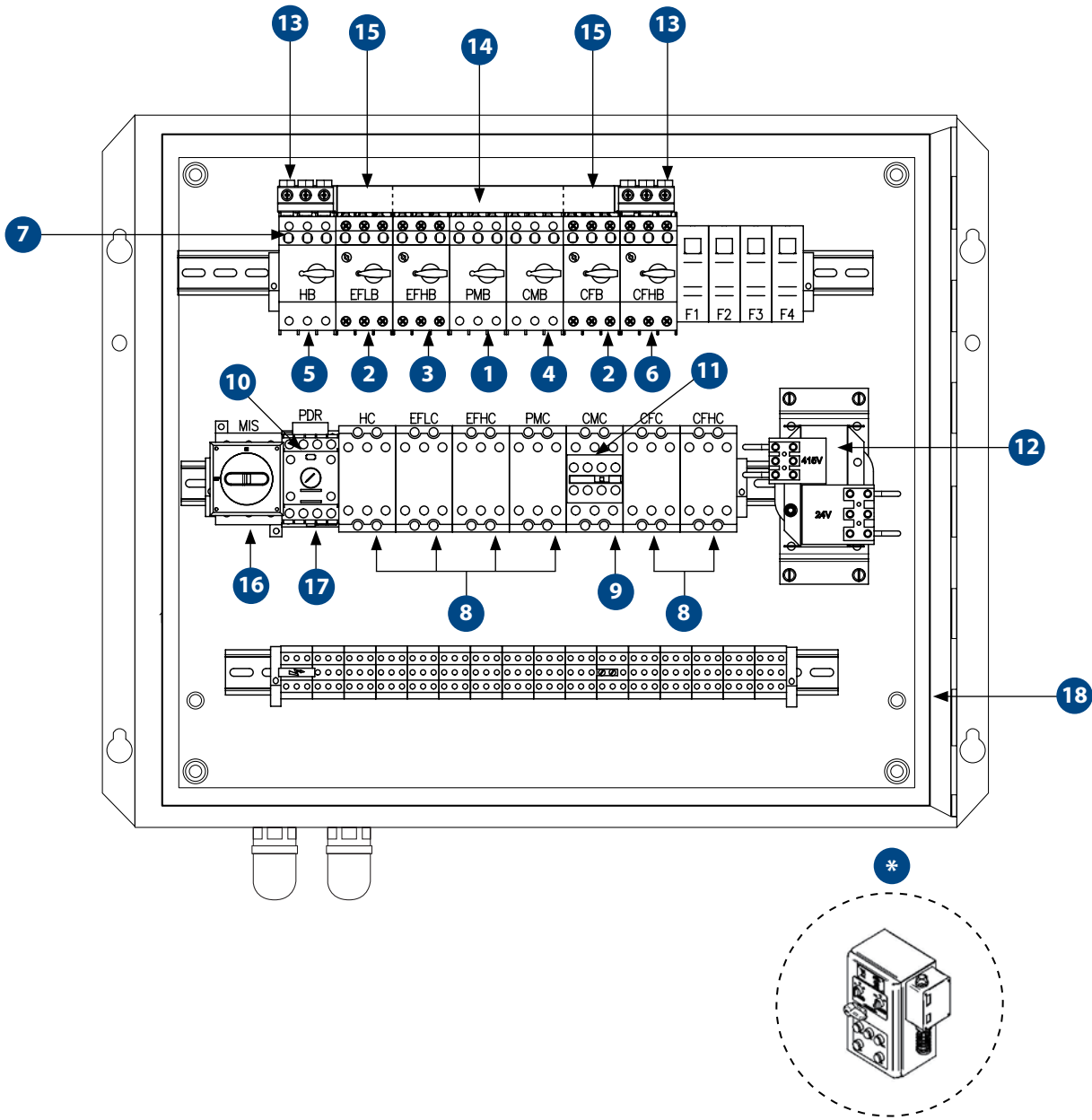
PART NO.	DESCRIPTION
FVV100MR1	Pressuriser



MPR20MX1 - ELECTRICAL

ROOFTOP PACKAGED HVAC UNIT

MPR20MX1
Rooftop Packaged HVAC 20kW 415VAC with Heating (9kW)



* SEE MEWH1/MEWI1 (PAGE 182) PILOT CONTROL BOX FOR SPARE PARTS

SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 AU641486	1.1-1.6A 3 POLE	1
2 AU641488	CIRCUIT BREAKER 1.8-2.5A 3 POLE	2
3 AU641490	CIRCUIT BREAKER 2.8-4.0A 3 POLE	1
4 AU641499	CIRCUIT BREAKER 20.0-25.0A 3 POLE	1
5 AU641496	CIRCUIT BREAKER 11.0-16.0A 3 POLE	1
6 AU641492	CIRCUIT BREAKER 4.5-6.3A 3 POLE	1
7 AU641501	CIRCUIT BREAKER AUX 1CO	7
8 AU651151	CONTACTOR 17A 24VAC 3 POLE 1NO 1NC	6
9 AU651178	CONTACTOR 25A 24VAC	1
10 AU653505	TIMER (3-30 SECONDS)	6
11 AU653602	AUXILIARY CONTACT 2NO 2NC	1
12 AU666089	TRANSFORMER 415V 24V 140VA 115W	1
13 642E10063	BUSBAR TERMINAL	2
14 AU635609	BUSBAR 5 BREAKER 3RV	1
15 AU635610	BUSBAR 2 BREAKER 3RV	2
16 AU642070	SWITCH ISOLATION ROTARY 80A	1
17 AU651056	CONTACTOR 12A 3 POLE 24VAC 1NC	1
18 AU862211	SEAL RUBBER	2.5m
AU851556	LATCH 1/4 TURN DOUBLE WING 5MM PIN	2
AU851588	KEY DOUBLE WING 5MM PIN SUIT AU851556	1

* SEE MEWH1/MEWI1 (PAGE 182) PILOT CONTROL BOX FOR SPARE PARTS

SPARE PARTS LIST CONTINUED ON PREVIOUS PAGE

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	20.0 kW	68240 BTU
Heating Capacity	9.0 kW	30708 BTU
Fan Speeds	2	2
Air Flow	900 l/s	1907 CFM
Fresh Air	100 l/s	212 CFM
Power Supply	415 VAC 3Phase-50Hz	415 VAC 3Phase-50Hz
Current Draw	33 A	33 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	54°C	129°F
Packaged Weight (nominal)	760.0 Kg	1672.0 lbs
Dimension (L X W X H)	1920mm X 1670 mm X 895mm	75.6in X 65.7in X 35.2in

MAINTENANCE

3 YEARS / 16,200 HOURS

AU653505 TIMER (3-30 SECONDS)

AU651056 CONTACTOR 12A 3 POLE 24VAC 1NC

Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

COMPANION ITEMS

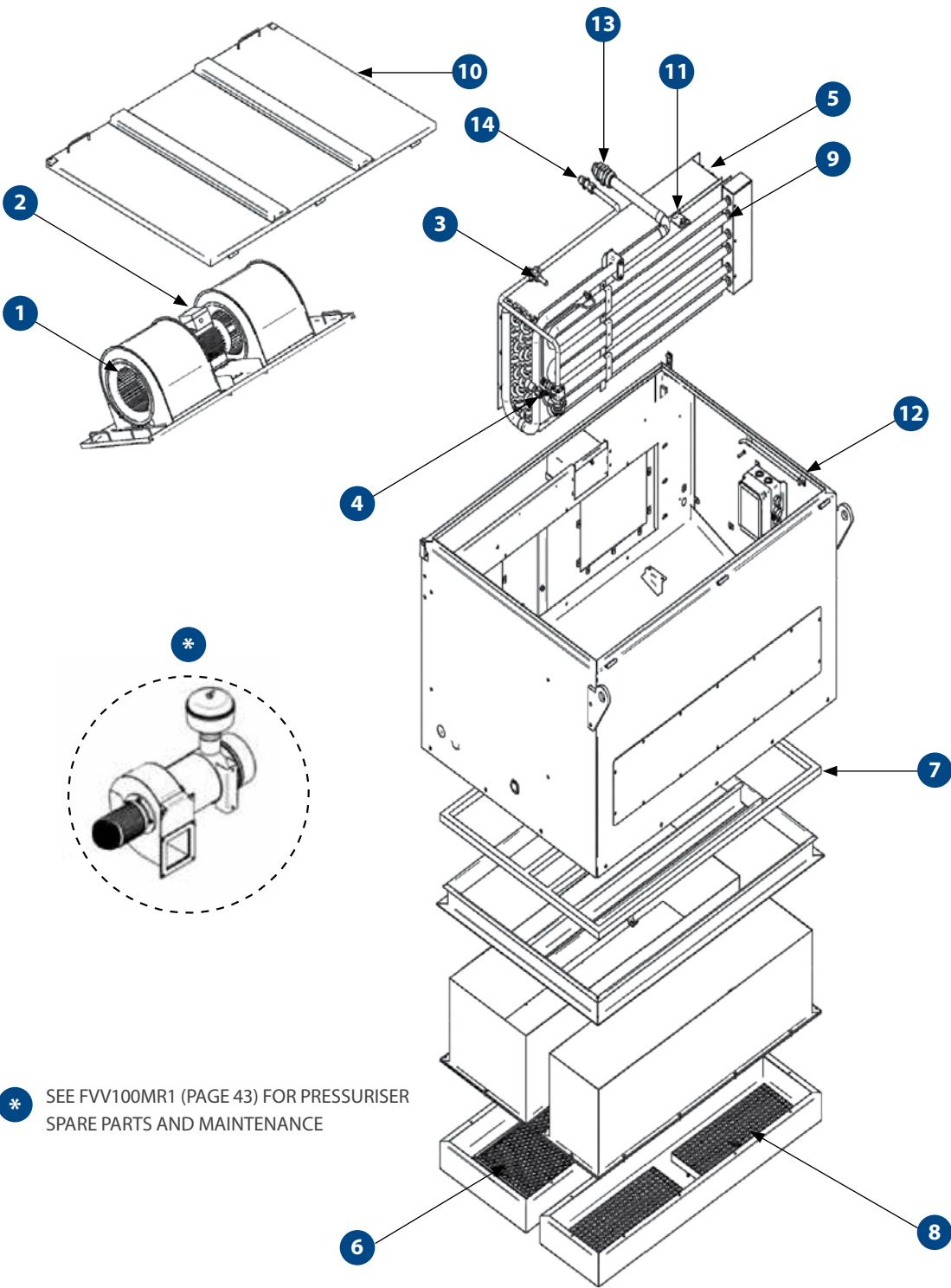
PART NO.	DESCRIPTION
FVV100MR1	Pressuriser



MPR25MX1 - EVAPORATOR

ROOFTOP PACKAGED HVAC UNIT

MPR25MX1
Rooftop Packaged HVAC 25kW 415VAC with Heating (9kW)



* SEE FVV100MR1 (PAGE 43) FOR PRESSURISER SPARE PARTS AND MAINTENANCE

SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 AU410130	BLOWER 250D X 242W X 19MM CW DI	2
2 UE321	MOTOR 1.1/0.37kW 90L 4/6P D/S	1
AU668134	COIL SOLENOID VALVE	1
3 AU522127	SOLENOID VALVE 200RB 5/8" SOLDER	1
AU631451	PLUG PG9 SOL COIL 240VAC 10A	1
AU521512	TX VALVE 5T ANGLE 1/2" IN 5/8" OUT R134A	1
4 AU521511	TX THERMOSTAT ELEM 5T R134A	1
AU521515	TX ORIFICE 5T R134a #04	1
5 AU120161	EVAPORATOR COIL 990MM X 318MM X 137MM 6 RW M20A	1
6 AS503103S	RETURN AIR FILTER 477MM X 312MM M15 (STANDARD)	2
7 AU08379	ROOF SEAL	1
8 UC342	DIFFUSER 500MM X 200MM OPEN AREA DOUBLE DEFLECTION	2
9 UE272	HEATER U SHAPE 3KW 240V 975MM FIN	3
10 AS508307	EVAPORATOR LID	1
11 AU681020	HEATER OVER TEMPERATURE SWITCH	1
12 AU862211	SEAL RUBBER	5m
13 UR296	BULKHEAD 1 5/8" MJIC	1
UR302	UNION 1 5/8" FJIC X 1 1/2 SL	1
14 UR011	BULKHEAD 5/8" MF	1
AU746906	DRAIN TRAP	1

* SEE FVV100MR1 (PAGE 43) FOR PRESSURISER SPARE PARTS AND MAINTENANCE

SPARE PARTS LIST CONTINUED NEXT PAGE

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	25.0 kW	85300 BTU
Heating Capacity	9.0 kW	30708 BTU
Fan Speeds	2	2
Air Flow	900 l/s	1907 CFM
Fresh Air	100 l/s	212 CFM
Power Supply	415 VAC 3Phase-50Hz	415 VAC 3Phase-50Hz
Current Draw	33 A	33 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	54°C	129°F
Packaged Weight (nominal)	760.0 Kg	1672.0 lbs
Technical Manual Reference	SM277-2136	SM277-2136
Dimension (L X W X H)	1920mm X 1670 mm X 895mm	75.6in X 65.7in X 35.2in

MAINTENANCE

MONTHLY / 450 HOURS

AS503103S RETURN AIR FILTER 477MM X 315MM M15

3 YEARS / 16,200 HOURS

AU521511 TX THERMOSTAT ELEM 5T R134A

AU521515 TX ORIFICE 5T R134A #04

AU862211 SEAL RUBBER

Please contact SIGMA for more information including details on an overhaul scope and interval. Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

COMPANION ITEMS

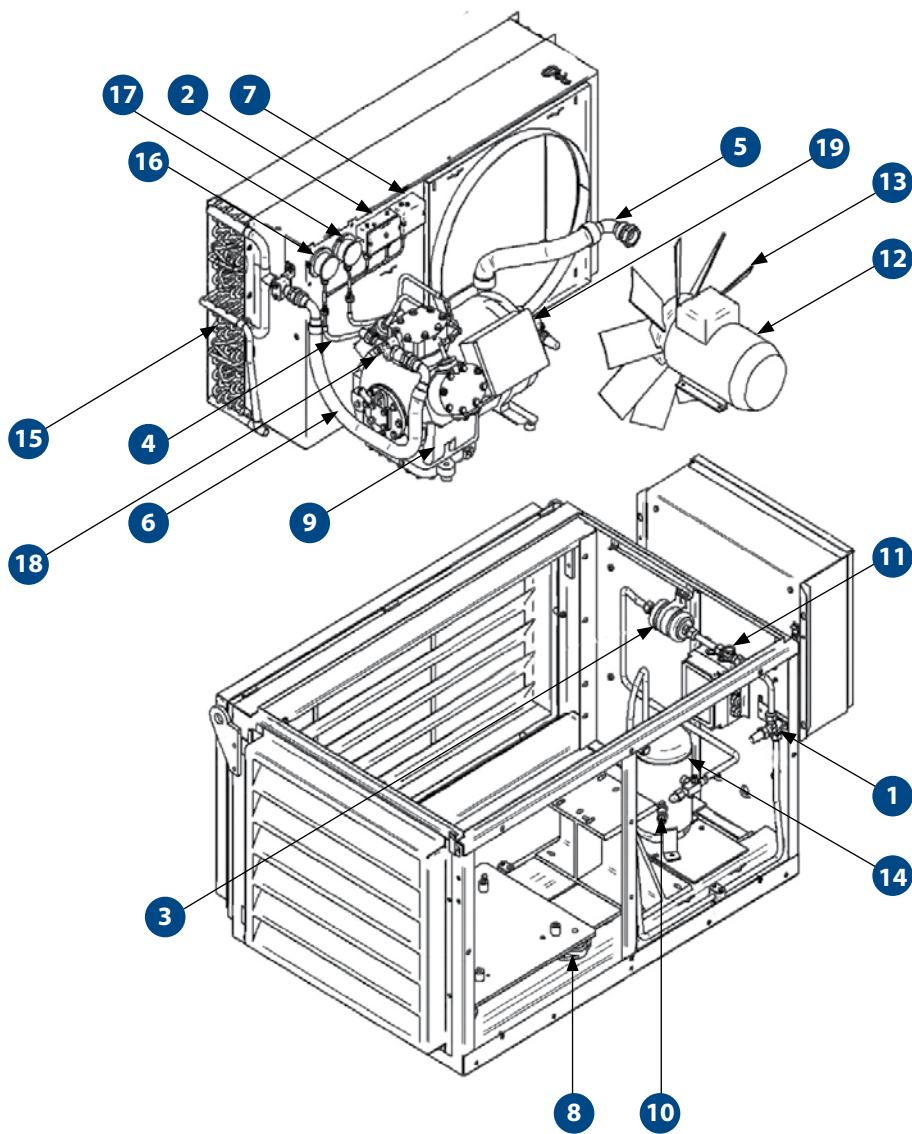
PART NO.	DESCRIPTION
AU460866	Filter Card Pleat



MPR25MX1 - CONDENSER

ROOFTOP PACKAGED HVAC UNIT

MPR25MX1
Rooftop Packaged HVAC 25kW 415VAC with Heating (9kW)



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 AU517208	PCLV 5/8" MF	1
2 AU523111	DUAL PRESSURE CONTROL LP AUTO HP MANUAL	1
3 AU531358	DRIER 5/8" MF	1
4 AS160182	HP FLEXIBLE HOSE ASSEMBLY	2
5 AS508426	SUCTION LINE HOSE	1
6 AS317814	HOSE DISCHARGE LINE	1
7 AU523606	HP CONTROL AUTO	1
8 AU845032	ANTI VIBRATION MOUNT	4
9 AU200014	COMPRESSOR WITH 2 ELECTRIC UNLOADER	1
10 AU527126	RELIEF VALVE 3/8"	1
11 AU533408	SIGHT GLASS	1
12 AU319037	MOTOR 1.85/0.55KW 100L 4/6P	1
13 AU420277	FAN AXIAL 560MM 9 BLADES	1
14 UR022	RECEIVER 330MM X 168MM 5/8" SL X 5/8" ROTALOK	1
15 AU110162	CONDENSER COIL 1135MM X 635MM X 132MM 6RW M25	1
16 AU532331	GAUGE 63MM R134A 100 TO 1900 kPa	1
17 AU532330	GAUGE 63MM R134A 0 TO 2500kPa	1
18 AS3386352	VALVE DISCHARGE WITH FITTING	1
19 AS3386351	VALVE SUCTION WITH FITTING	1
AU517507	VALVE ACCESS 1/4"	1
AS231075	LID ASSEMBLY LOUVRE	1
AU200079	CRANKCASE HEATER 415V 75W	1
AU517501	VALVE ACCESS 1/4" 60MM SHORT TAIL	1
AU519074	ADAPTOR 134A 1/4" HIGH SIDE RED	1
AU519075	ADAPTOR 134A 1/4" LOW SIDE BLUE	1
AU542026	REFRIGERANT OIL	4.4
AU200045	VALVE UNLOADER PRESSURE	1
AU200061	VALVE UNLOADER ELECTRICAL	1

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	25.0 kW	85300 BTU
Heating Capacity	9.0 kW	30708 BTU
Fan Speeds	2	2
Air Flow	900 l/s	1907 CFM
Fresh Air	100 l/s	212 CFM
Power Supply	415 VAC 3Phase-50Hz	415 VAC 3Phase-50Hz
Current Draw	33 A	33 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	54°C	129°F
Packaged Weight (nominal)	760.0 Kg	1672.0 lbs
Technical Manual Reference	SM277-2136	SM277-2136
Dimension (L X W X H)	1920mm X 1670 mm X 895mm	75.6in X 65.7in X 35.2in

MAINTENANCE

ANNUAL / 5,400 HOURS	
AU531358	DRIER 5/8" MF
3 YEARS / 16,200 HOURS	
AU523111	DUAL PRESSURE CONTROL LP AUTO HP MANUAL
AS160182	HP FLEXIBLE HOSE ASSEMBLY
AS508426	SUCTION LINE HOSE
AS317814	HOSE DISCHARGE LINE
AU845032	ANTI VIBRATION MOUNT
AS3386352	VALVE DISCHARGE WITH FITTING
AS3386351	VALVE SUCTION WITH FITTING
AU542026	REFRIGERANT OIL
AU523606	HP CONTROL AUTO
Please contact SIGMA for more information including details on an overhaul scope and interval. Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.	

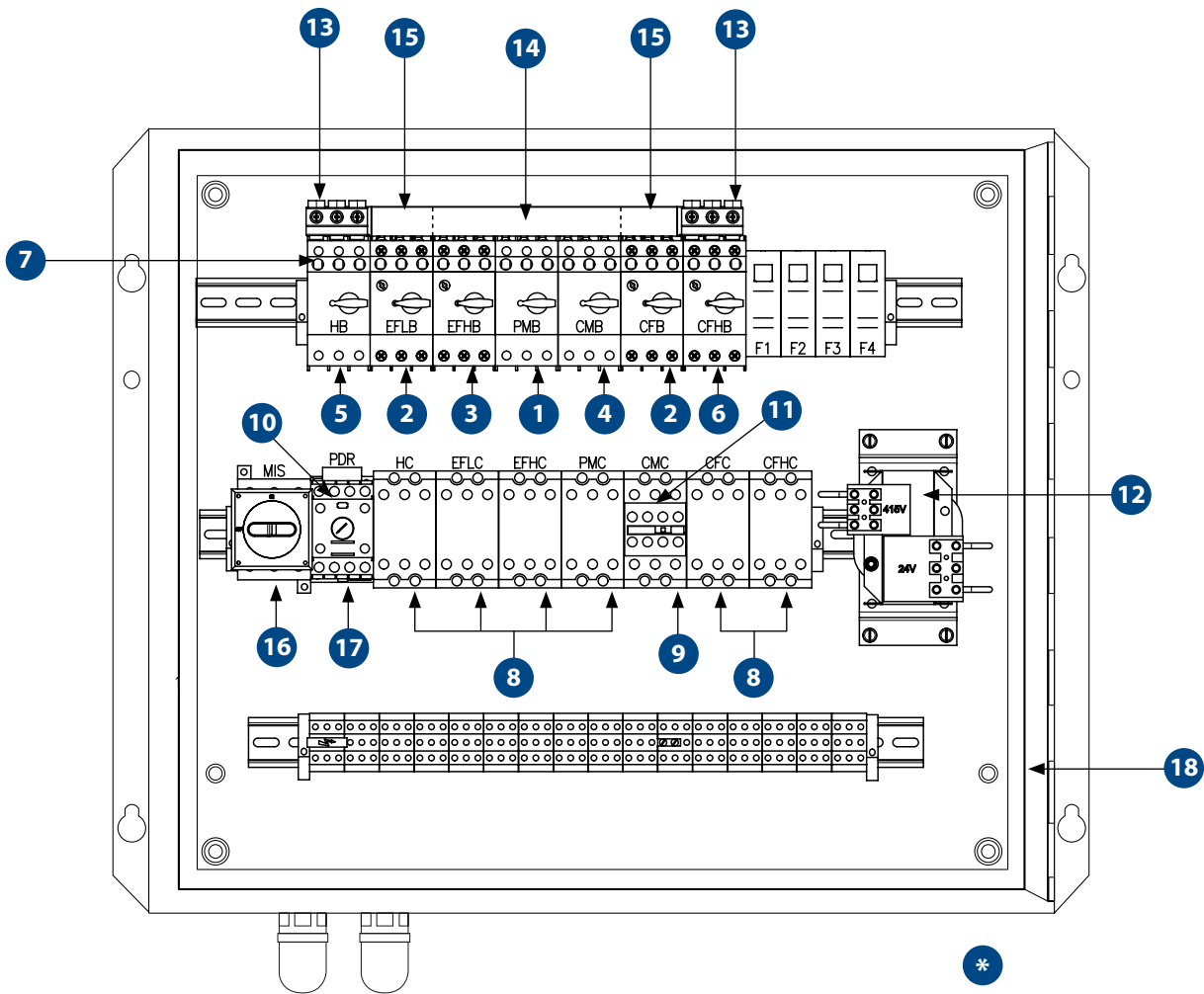
SPARE PARTS LIST CONTINUED NEXT PAGE



MPR25MX1 - ELECTRICAL

ROOFTOP PACKAGED HVAC UNIT

MPR25MX1
Rooftop Packaged HVAC 25kW 415VAC with Heating (9kW)



* SEE MEWH1/MEWI1 (PAGE 182) PILOT CONTROL BOX FOR SPARE PARTS

SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 AU641486	1.1-1.6A 3 POLE	1
2 AU641488	CIRCUIT BREAKER 1.8-2.5A 3 POLE	2
3 AU641490	CIRCUIT BREAKER 2.8-4.0A 3 POLE	1
4 AU641499	CIRCUIT BREAKER 20.0-25.0A 3 POLE	1
5 AU641496	CIRCUIT BREAKER 11.0-16.0A 3 POLE	1
6 AU641492	CIRCUIT BREAKER 4.5-6.3A 3 POLE	1
7 AU641501	CIRCUIT BREAKER AUX 1CO	7
8 AU651151	CONTACTOR 17A 24VAC 3 POLE 1NO 1NC	6
9 AU651178	CONTACTOR 25A 24VAC	1
10 AU653505	TIMER (3-30 SECONDS)	6
11 AU653602	AUXILIARY CONTACT 2NO 2NC	1
12 AU666089	TRANSFORMER 415V 24V 140VA 115W	1
13 642E10063	BUSBAR TERMINAL	2
14 AU635609	BUSBAR 5 BREAKER 3RV	1
15 AU635610	BUSBAR 2 BREAKER 3RV	2
16 AU642070	SWITCH ISOLATION ROTARY 80A	1
17 AU651056	CONTACTOR 12A 3 POLE 24VAC 1NC	1
18 AU862211	SEAL RUBBER	2.5m
AU851556	LATCH 1/4 TURN DOUBLE WING 5MM PIN	2
AU851588	KEY DOUBLE WING 5MM PIN SUIT AU851556	1

* SEE MEWH1/MEWI1 (PAGE 182) PILOT CONTROL BOX FOR SPARE PARTS

SPARE PARTS LIST CONTINUED ON PREVIOUS PAGE

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	25.0 kW	85300 BTU
Heating Capacity	9.0 kW	30708 BTU
Fan Speeds	2	2
Air Flow	900 l/s	1907 CFM
Fresh Air	100 l/s	212 CFM
Power Supply	415 VAC 3Phase-50Hz	415 VAC 3Phase-50Hz
Current Draw	33 A	33 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	54°C	129°F
Packaged Weight (nominal)	760.0 Kg	1672.0 lbs
Technical Manual Reference	SM277-2136	SM277-2136
Dimension (L X W X H)	1920mm X 1670 mm X 895mm	75.6in X 65.7in X 35.2in

MAINTENANCE

3 YEARS / 16,200 HOURS

AU653505 TIMER (3-30 SECONDS)

AU651056 CONTACTOR 12A 3 POLE 24VAC 1NC

Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

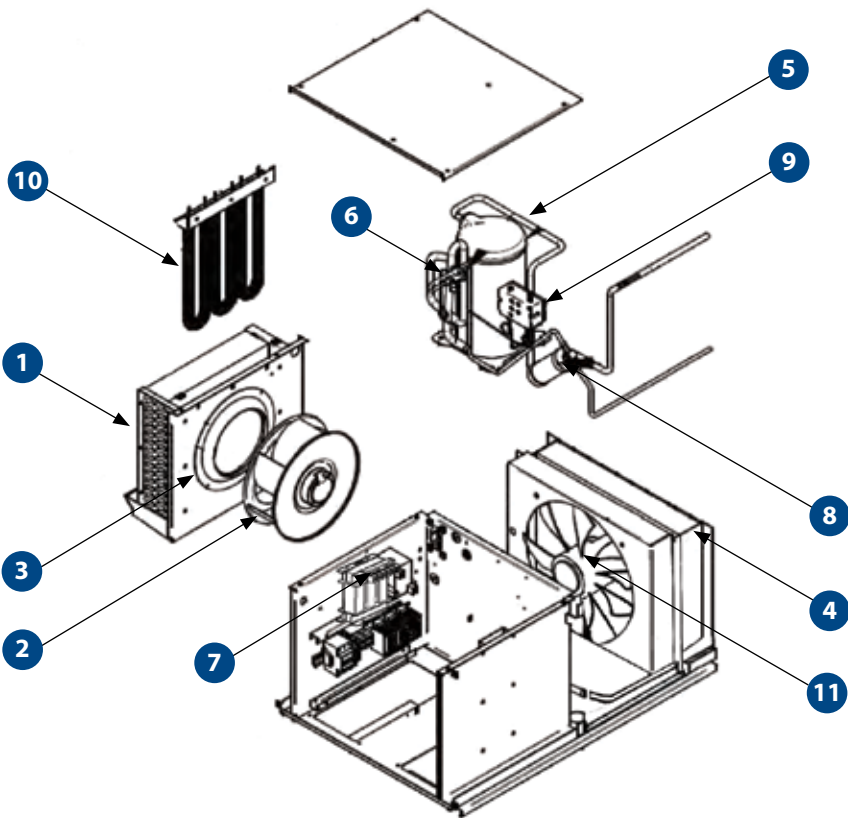


MPV5MX1*

ROOFTOP PACKAGED HVAC UNIT

MPV5MX1
Horizontal Rooftop Packaged HVAC 5kW 415VAC with Heating (3kW) Single Speed without Pressuriser

* HVAC obsolete, spares support only



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 AU120492	EVAPORATOR COIL 380MM X 381MM X 88MM 4 RW MPV5	1
2 AU411041	BLOWER IMPELLER 310D X 154W 415V 50HZ	1
3 AU410956	INLET RING 200MM	1
4 AU110397	CONDENSER COIL 540X381X79 5RW MPV5	1
5 AU230806	COMPRESSOR 400VAC 50HZ 460VAC 60HZ	1
6 AU521509	TX VALVE 2T 3/8" IN 1/2" OUT 1/4EQ R134A	1
AU521504	TX ORIFICE 2T R22 #04	1
7 UE104	TRANSFORMER 415V/110VAC 115W SCREEN	1
8 AU531415	RECEIVER DRIER 3/8" MF 193MM HIGH	1
9 AU523112	DUAL PRESSURE CONTROL LP AUTO HP AUTO	1
10 AU691104	HEATER U SHAPE 1.0KW 240V 365MM BRS FIN	3
11 AU421019	FAN AXIAL 400MM 400VAC 50Hz	1
AS534142	RETURN AIR FILTER ASSEMBLY	1
UC151	FILTER MATT 10MM GREY G2	0.1
AU517501	VALVE ACCESS 1/4" 60MM SHORT TAIL	1
UE016	THERMOSTAT DEICE STUD	1
UE283	THERMOSTAT C28 0-100C MPV5	1
AU421020	FAN GRILLE SUIT 400MM	1
AU641003	CIRCUIT BREAKER 16A 3 POLE	1
AU641016	CIRCUIT BREAKER 2A 1 POLE	1
AU651032	CONTACTOR 9A 3 POLE 110VAC	3
AU663094	ROTARY SWITCH OFF VENT COOL HEAT	1
AU681020	THERMOSTAT T5 50°C SPST N/C AUTO	1
AU845248	ANTI VIBRATION MOUNT	4
AU821170	LOUVRE 390MM X 140MM	1

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	5.0 kW	17060 BTU
Heating Capacity	3.0 kW	10236 BTU
Fan Speeds	1	1
Air Flow	190 l/s	403 CFM
Fresh Air (Optional)	50 l/s	106 CFM
Power Supply	415 VAC 3Phase - 50 Hz	415 VAC 3Phase - 50 Hz
Current Draw	10 A	10 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	54°C	129°F
Weight (nominal)	150.0 Kg	330.0 lbs
Technical Manual Reference	SM347-5341	SM347-5341
Dimension (L X W X H)	1000mm X 680mm X 495mm	39.4in X 26.8in X 19.5in

MAINTENANCE

MONTHLY / 450 HOURS	
AS534142	RETURN AIR FILTER ASSEMBLY
ANNUAL / 5,400 HOURS	
AU531415	RECEIVER DRIER 3/8" MF 193MM HIGH
3 YEARS / 16,200 HOURS	
AU521509	TX VALVE 2T 3/8" IN 1/2" OUT 1/4" EQ R134A
AU521504	TX ORIFICE 2T R22 #04
AU523112	DUAL PRESSURE CONTROL LP AUTO HP AUTO
UE016	THERMOSTAT DEICE STUD
AU845248	ANTI VIBRATION MOUNT

Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

COMPANION ITEMS

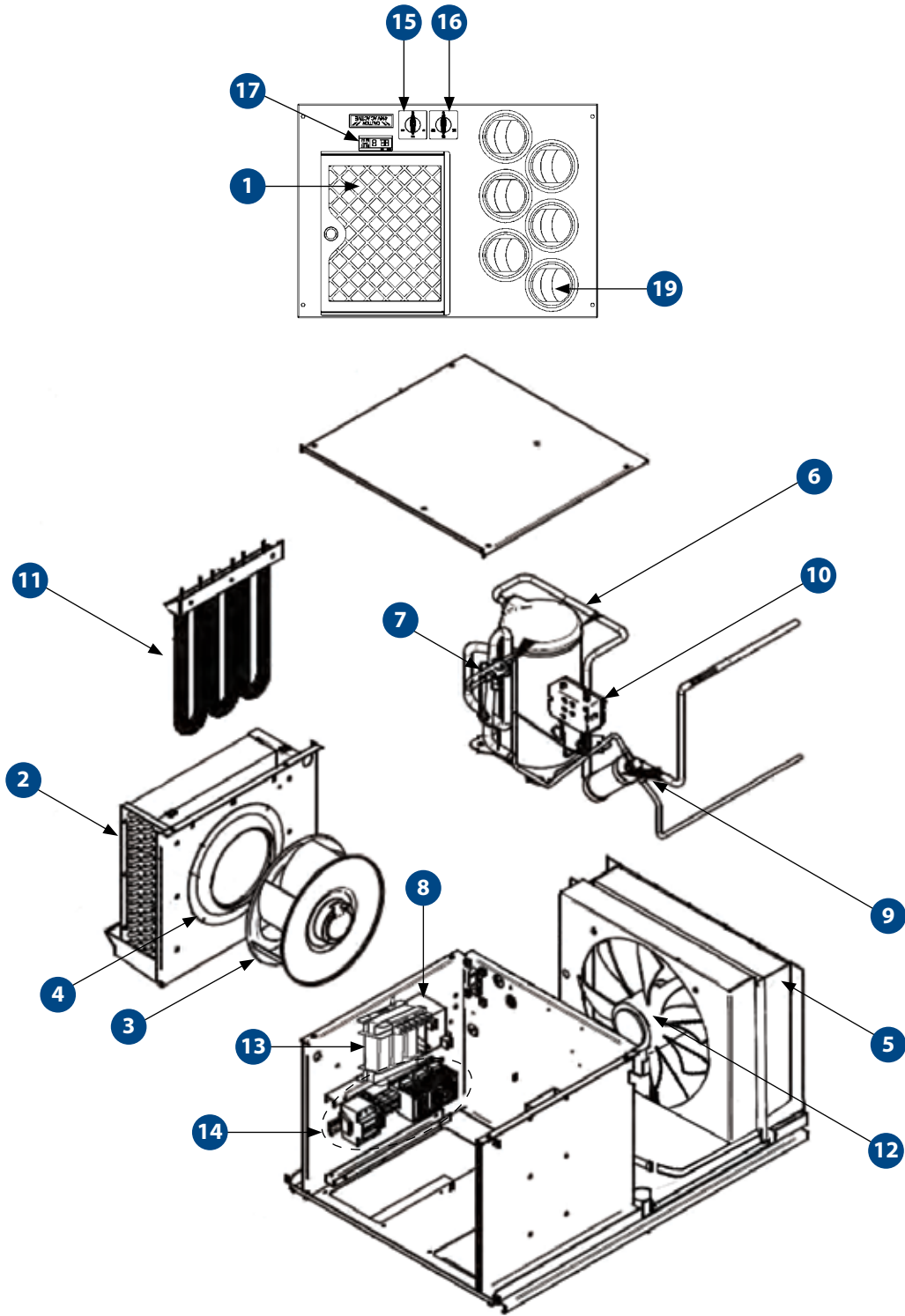
PART NO.	DESCRIPTION
FVV50M1	Fresh Air Pressuriser 50 l/s 415VAC



MPV5MX2

ROOFTOP PACKAGED HVAC UNIT

MPV5MX2
Horizontal Rooftop Packaged HVAC 5kW 415VAC with Heating (3kW) without Pressuriser



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1	AU4601005 FILTER	1
2	AU120492 EVAPORATOR COIL 380MM X 381MM X 88MM 4 RW MPV5	1
3	AU411041 BLOWER IMPELLER 310D X 154W 415V 50HZ	1
4	AU410956 INLET RING 200MM	1
5	AU110397 CONDENSER COIL 540X381X79 5RW MPV5	1
6	AU230806 COMPRESSOR 400VAC 50HZ 460VAC 60HZ	1
7	AU521509 TX VALVE 2T 3/8" IN 1/2" OUT 1/4EQ R134A	1
8	AU521504 TX ORIFICE 2T R22 #04	1
9	UE104 TRANSFORMER 415V/110VAC 115W SCREEN	1
10	AU531415 RECEIVER DRIER 3/8" MF 193MM HIGH	1
11	AU523112 DUAL PRESSURE CONTROL LP AUTO HP AUTO	1
12	AU691104 HEATER U SHAPE 1.0KW 240V 365MM BRS FIN	3
13	AU4201004 FAN AXIAL 400MM 400VAC	1
14	AU421020 FAN GRILLE SUIT 400MM	1
15	AU666090 TRANSFORMER 415-240V	1
16	AU651032 CONTACTOR 9A 3 POLE 110VAC	2
17	AU6511002 CONTACTOR 9A 110V	3
18	AU6511001 AUX CONTACT	3
19	AU641093 CIRCUIT BREAKER 16A 3 POLE	1
	AU641096 CIRCUIT BREAKER 2A 1 POLE	1
	AU6531003 MECHANICAL INTERLOCK	1
15	AU681020 THERMOSTAT T5 50°C SPST N/C AUTO	1
16	AU6631001 ROTARY SWITCH MODE	1
17	AU663004 ROTARY SWITCH FAN	1
18	AU681960 THERMOSTAT DIGITAL 24V	1
19	AU681961 SENSOR PROPE	1
19	AU821300 DIFFUSER ROUND	4
	AU517502 VALVE ACCESS 1/4" 1/4" & 3/8"OD SOLDER	1
	UE016 THERMOSTAT DEICE STUD	1
	AU845248 ANTI VIBRATION MOUNT	4

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	5.0 kW	17060 BTU
Heating Capacity	3.0 kW	10236 BTU
Fan Speeds	3	3
Air Flow	190 l/s	403 CFM
Fresh Air (Optional)	50 l/s	106 CFM
Power Supply	415 VAC 3Phase - 50 Hz	415 VAC 3Phase - 50 Hz
Current Draw	10 A	10 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	54°C	129°F
Weight (nominal)	150.0 Kg	330.0 lbs
Technical Manual Reference	SM347-5341	SM347-5341
Dimension (L X W X H)	1000mm X 680mm X 495mm	39.4in X 26.8in X 19.5in

MAINTENANCE

MONTHLY / 450 HOURS	
AU4601005	FILTER
ANNUAL / 5,400 HOURS	
AU531415	RECEIVER DRIER 3/8" MF 193MM HIGH
3 YEARS / 16,200 HOURS	
AU521509	TX VALVE 2T 3/8"IN 1/2" OUT 1/4" EQ R134A
AU521504	TX ORIFICE 2T R22 #04
AU523112	DUAL PRESSURE CONTROL LP AUTO HP AUTO
UE016	THERMOSTAT DEICE STUD
AU845248	ANTI VIBRATION MOUNT

Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

COMPANION ITEMS

PART NO.	DESCRIPTION
FVV50M1	Fresh Air Pressuriser 50 l/s 415VAC
MKRP3	Outer Case Roof MTD
MKWP1	Outer Case Wall MTD

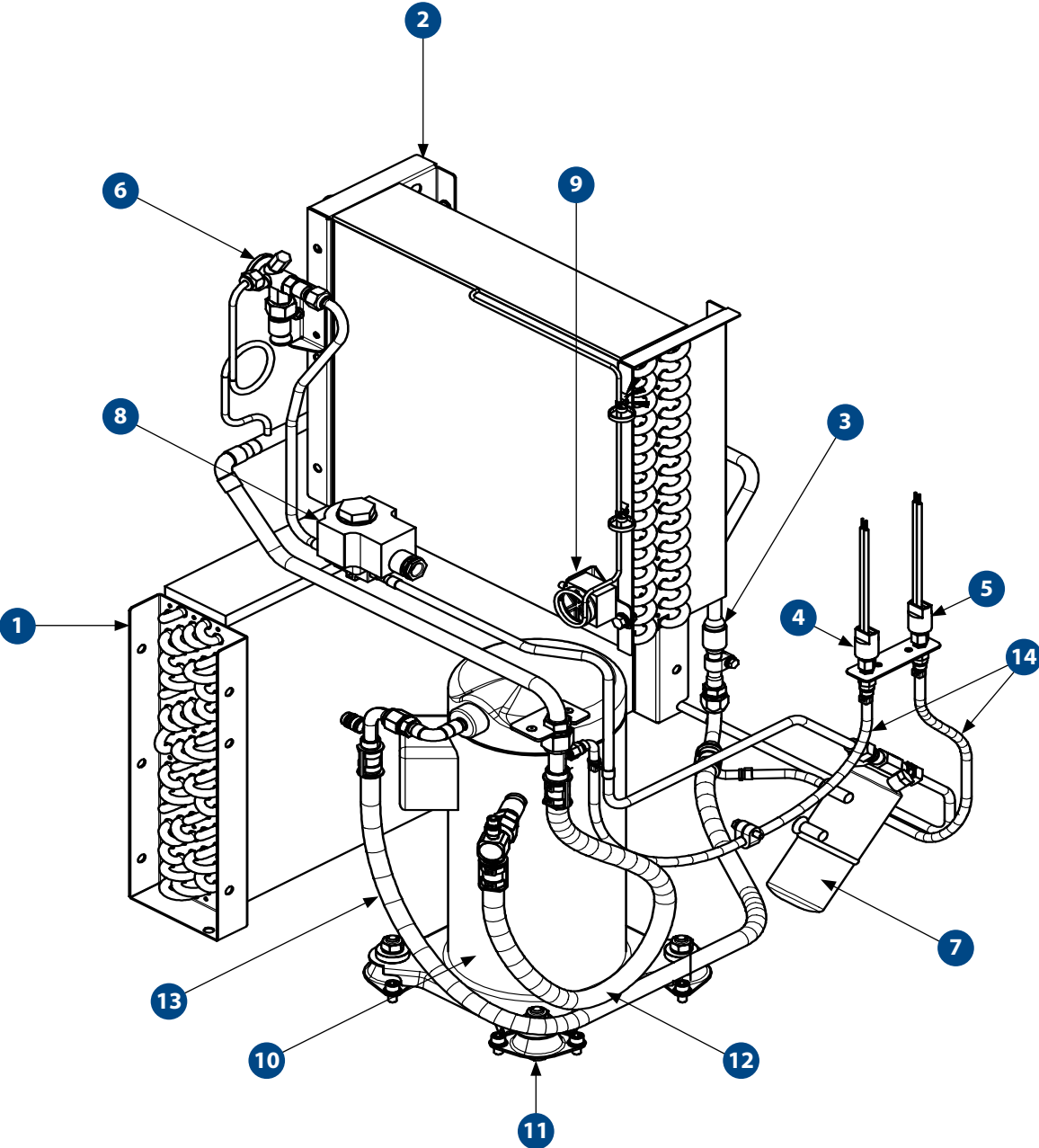


MPW5MX1 - REFRIGERATION / GENERAL ASSEMBLY

5KW PACKAGE WALL AC UNIT

MPW5MX1

Wall Mount Packaged HVAC 5kW 415VAC with Heating (3kW) with Pressuriser



SPARE PARTS

PART NO.	DESCRIPTION	QTY
H0028308	FILTER MEDIA	1
1 AU110397	CONDENSER COIL 540MM X 381MM X 79MM 5RW MPV5	1
2 AU120492	EVAPORATOR COIL 380MM X 381MM X 88MM 4 RW MPV5	1
3 AU517621	VALVE CHECK 1/2SL STRAIGHT	1
4 AU523365	LOW PRESSURE SWITCH	1
5 AU523655	HIGH PRESSURE SWITCH	1
6 AU521509	TX VALVE 2T 3/8" IN 1/2" OUT 1/4" EQ R134A	1
AU521504	TX ORIFICE 2T R22 #04	1
7 AU531415	RECEIVER DRIER 3/8" MF 193MM HIGH	1
8 AU522021	SOLENOID VALVE	1
AU668140	COIL SOLENOID 24VDC TYPE 1	1
9 UE016	THERMOSTAT DEICE STUD	1
10 H0304197	COMPRESSOR ASSEMBLY	1
11 AU845248	ANTI VIBRATION MOUNT	4
12 H0227316	SUCTION HOSE ASSEMBLY	1
13 H0227314	DISCHARGE HOSE ASSEMBLY	1
14 H0227302	PRESSURE SWITCH HOSE ASSEMBLY	2
AU821301	DIFFUSER ROUND 75MM PLASTIC	2
AU861125	SEAL D 489X365 ID	2
AU862211	SEAL RUBBER	1
AU517502	VALVE ACCESS 1/4"	1

SPARE PARTS LIST CONTINUED NEXT PAGE

COMPANION ITEMS

PART NO.	DESCRIPTION
KNHV90029	Installation Kits
PVV50M2	Pressuriser
EB9P4X	Pressuriser
AU679519	Controller
AU6811015	Temperature Sensor

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	5.0 kW	17060 BTU
Heating Capacity	3.0 kW	10236 BTU
Fan Speeds	3	3
Air Flow	200 l/s	424 CFM
Fresh Air (Optional)	30 l/s	64 CFM
Power Supply	415 VAC 3Phase - 50 Hz	415 VAC 3Phase - 50 Hz
Current Draw	17 A	17 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	54°C	129°F
Packaged Weight (nominal)	160.0 Kg	352.0 lbs
Technical Manual Reference	SM519-4077	SM519-4077

MAINTENANCE

MONTHLY / 450 HOURS	
H0028308	FILTER MEDIA
ANNUAL / 5,400 HOURS	
AU531415	RECEIVER DRIER 3/8" MF 193MM HIGH
3 YEARS / 16,200 HOURS	
AU521509	TX VALVE 2T 3/8" IN 1/2" OUT 1/4" EQ R134a
UE016	THERMOSTAT DEICE STUD
AU521504	TX ORIFICE 2T R22 #04
AU845248	ANTI VIBRATION MOUNT
H0227316	SUCTION HOSE ASSEMBLY
H0227314	DISCHARGE HOSE ASSEMBLY
H0227302	PRESSURE SWITCH HOSE ASSEMBLY

Please contact SIGMA for more information including details on an overhaul scope and interval. Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

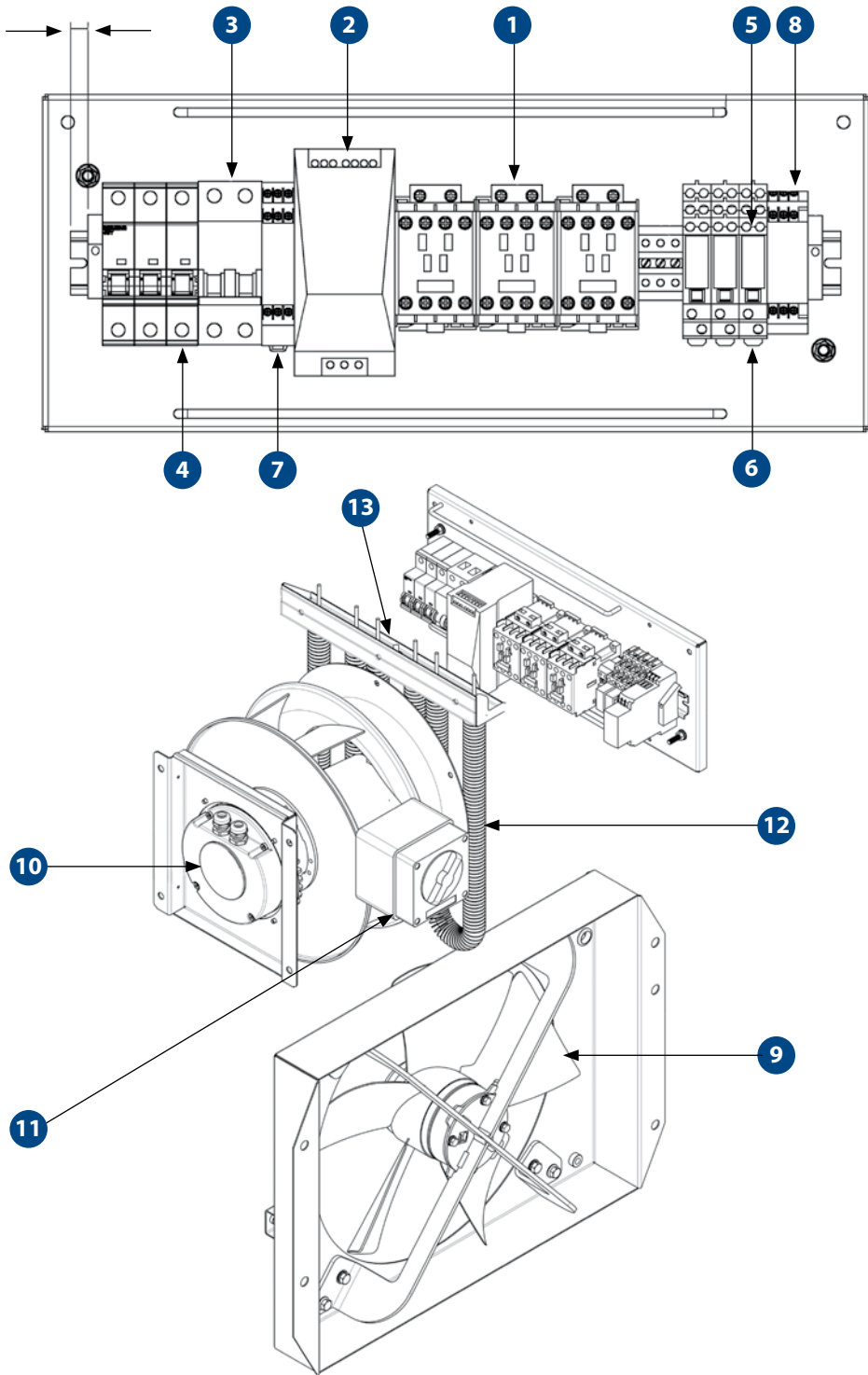




MPW5MX1 - ELECTRICAL

5KW PACKAGE WALL AC UNIT

MPW5MX1
Wall Mount Packaged HVAC 5kW 415VAC with Heating (3kW) with Pressuriser



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 AU651047	CONTACTOR 12A 3 POLE 24VDC 1NO	3
2 AU677142	CONVERTER AC/DC IN 24VDC OUT 3A	1
3 AU641390	CIRCUIT BREAKER 4A 2 POLE	1
4 AU641093	CIRCUIT BREAKER 16A 3 POLE	1
5 AU661040	RELAY 8 PIN 24VDC 2 POLES	3
6 AU661041	RELAY BASE 8 PIN	3
7 AU661043	RELAY POWER FAILURE 3 PHASE	1
8 AU672500	TIMER ON DELAY 24VDC 0.1SEC-100HR 1 POLE	1
9 AU4201004	FAN AXIAL 400MM 400VAC	1
10 H0023291	BLOWER IMPELLER 307D X 222W 240VAC	1
11 H0023701	SWITCH	1
12 AU691104	HEATER U SHAPE 1.0KW 240V 365MM BRS FIN	3
13 AU681020	THERMOSTAT T5 50°C SPST N/C AUTO	1
AU679519	CONTROLLER ELECTRICAL 24VDC DISPLAY	1
AU6811015	THERMOSTAT SENSOR NTC -50 TO 105°C	1

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	5.0 kW	17060 BTU
Heating Capacity	3.0 kW	10236 BTU
Fan Speeds	3	3
Air Flow	200 l/s	424 CFM
Fresh Air (Optional)	30 l/s	64 CFM
Power Supply	415 VAC 3Phase - 50 Hz	415 VAC 3Phase - 50 Hz
Current Draw	17 A	17 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	54°C	129°F
Packaged Weight (nominal)	160.0 Kg	352.0 lbs
Technical Manual Reference	SM519-4077	SM519-4077
Dimension (L X W X H)	696mm X 665mm X 969mm	27.4in X 26.2in X 38.1in

COMPANION ITEMS

PART NO.	DESCRIPTION
KNHV90029	Installation Kits

SPARE PARTS LIST CONTINUED ON PREVIOUS PAGE

The SIGMA T SERIES severe-duty range of mobile air conditioners are designed for applications where very high levels of shock, vibration and dust laden corrosive environments are experienced and the applications require high cooling and heating capacity. They suit production critical earthmoving, quarry and mining equipment.



SERIES

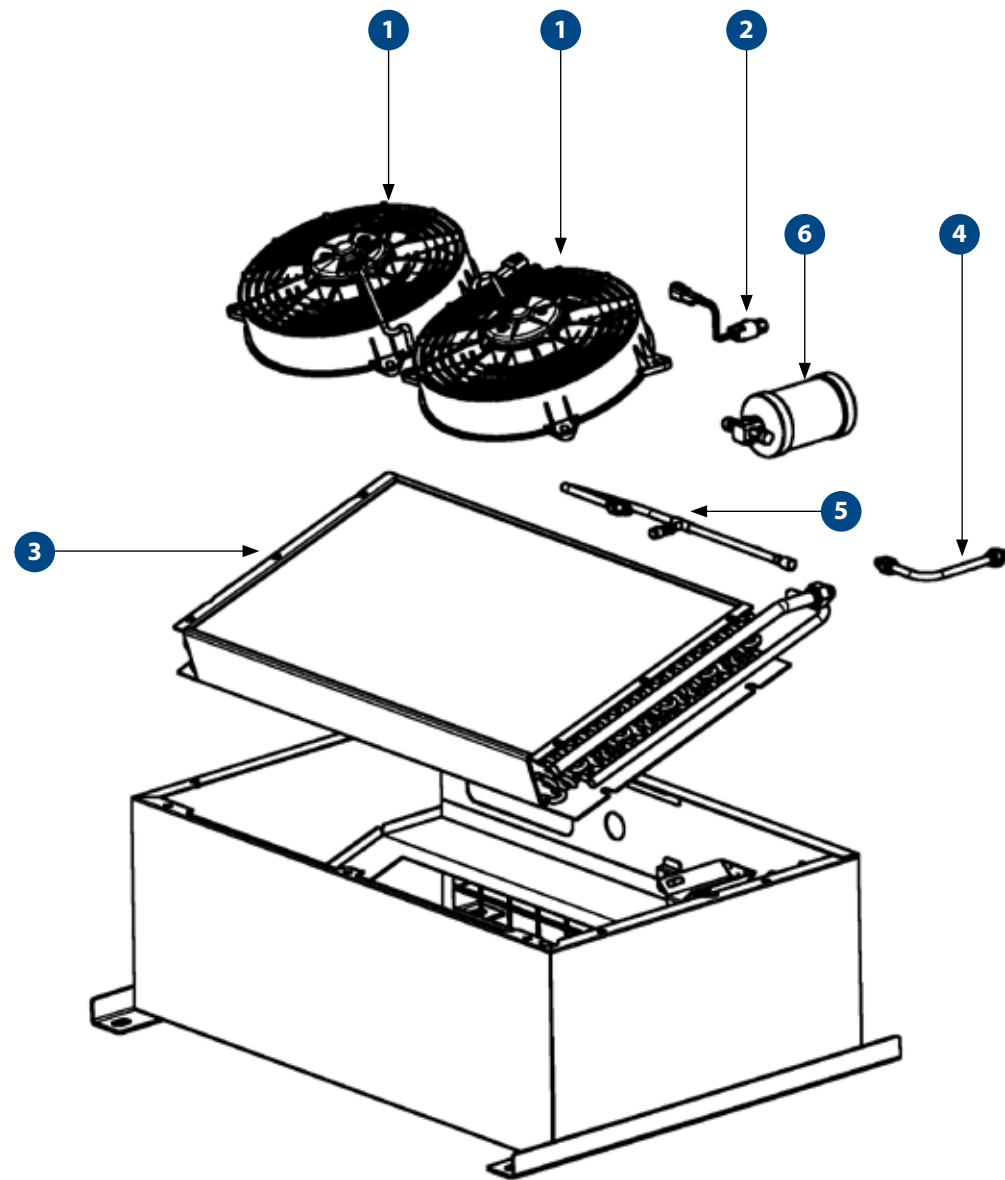
OVERVIEW
PRESSURISERS
E SERIES
H SERIES
M SERIES
T SERIES
PILOT CONTROL BOXES
SERVICABLE PARTS
UNDERSTANDING HVAC
POLICIES



TCF6BX2

ROOFTOP CONDENSER

H0095174
Wall Mount Condenser 6kW 24V



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 H0144118	CONDENSER FAN ASSEMBLY	2
2 H0148597	HIGH PRESSURE SWITCH ASSEMBLY	1
3 H0095176	CONDENSER COIL 650MM X 381MM X 66MM 4R	1
4 H0095336	LIQUID LINE ASSEMBLY - RECEIVER DRIER OUT	1
5 H0095339	LIQUID LINE ASSEMBLY - RECEIVER DRIER IN	1
6 AU531422	RECEIVER DRIER	1

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	6.0 kW	20472 BTU
Fan Speeds	1	1
Power Supply	24 V	24 V
Current Draw	11 A	11 A
Refrigerant	R134a	R134a
Minimum Ambient Temperature	-10°C	14°F
Maximum Ambient Temperature	54°C	129°F
Weight (nominal)	35.0 Kg	77.0 lbs
Dimension (L X W X H)	792mm X 515mm X 377mm	31.2in X 20.3in X 14.8in

MAINTENANCE

ANNUAL / 4,800 HOURS

AU531422	RECEIVER DRIER
H0144118	CONDENSER FAN ASSEMBLY

3 YEARS / 14,400 HOURS

H0148597	HIGH PRESSURE SWITCH ASSEMBLY
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Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

COMPANION ITEMS

PART NO.	DESCRIPTION
TFC6BX2	Rooftop Evaporator (6kW)
EB9P4X	Fresh Air Pressuriser
H0017481	Hydraulic Compressor

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	7.0 kW	23884 BTU
Fan Speeds	1	1
Air Flow	650 l/s	1377 CFM
Power Supply	24V	24V
Current Draw	20 A	20 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	54°C	129°F
Weight (nominal)	35.0 Kg	77.0 lbs
Dimension (L X W X H)	523mm X 856mm X 311mm	20.6in X 33.7in X 12.2in

MAINTENANCE

6 MONTHS / 2,400 HOURS

AU320621 BRUSH SET FOR MOTOR 24VDC EACH

ANNUAL / 4,800 HOURS

AU531357 DRIER 3/8" MF

AU531411 RECEIVER DRIER 3/8" 24UNF165MM HIGH

UE026 MOTOR 0.14W 24VDC S/S

3 YEARS / 14,400 HOURS

AU523655 HIGH PRESSURE SWITCH 1/4" FF 2415kPa

Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

COMPANION ITEMS

PART NO.	DESCRIPTION
TFR7BX2	Rooftop Evaporator (7kW)
EB9P4X	Pressuriser
H0017479	Hydraulic Compressor
H0017481	Hydraulic Compressor
AU270307E	Engine Driven Compressor
AU2790311E	Engine Driven Compressor
AU270312E	Engine Driven Compressor

SPARE PARTS

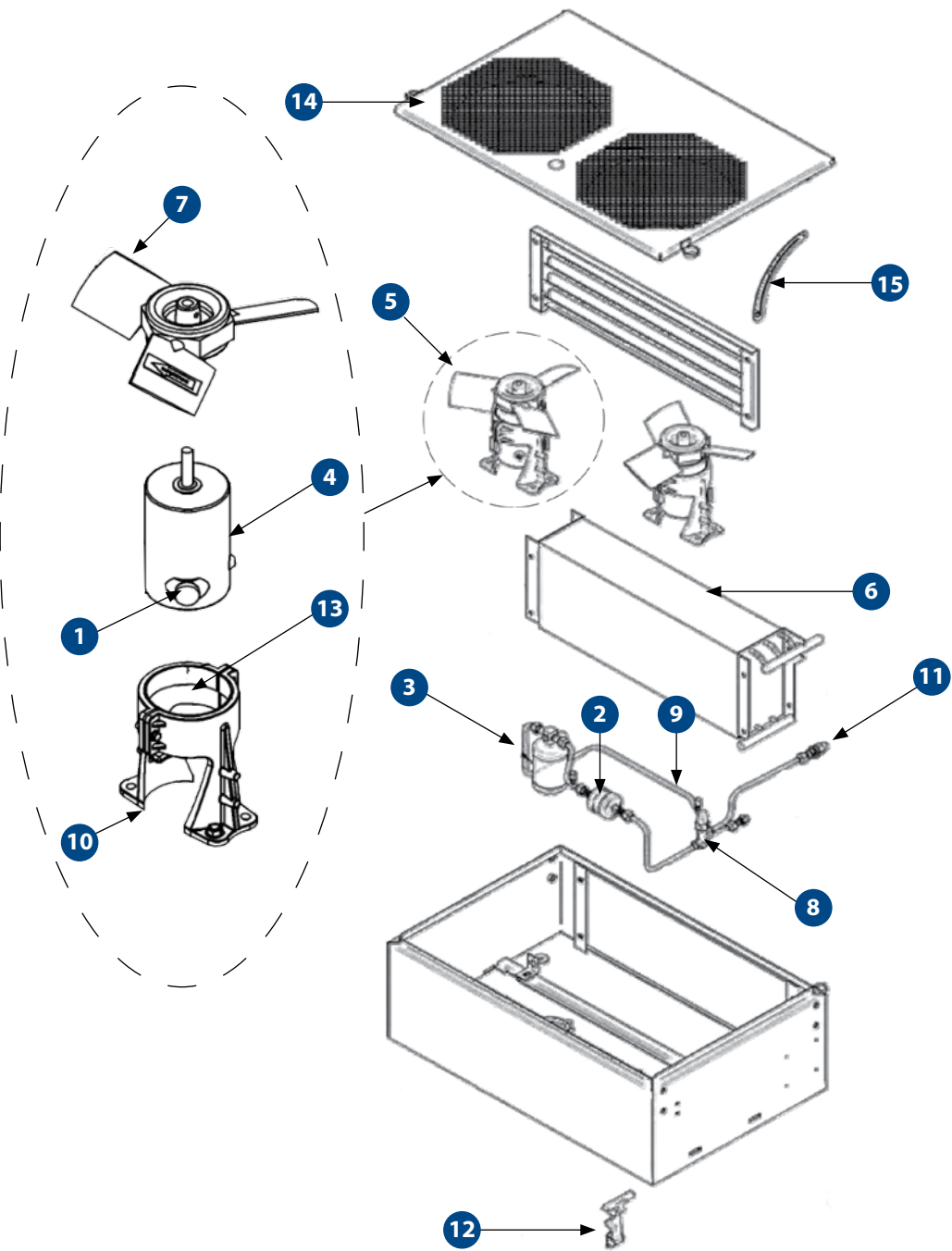
PART NO.	DESCRIPTION	QTY
1 AU320621	BRUSH SET FOR MOTOR 24VDC EACH	4
2 AU531357	DRIER 3/8" MF	1
3 AU531411	RECEIVER DRIER 3/8" 24UNF 165MM HIGH	1
4 UE026	MOTOR 0.14kW 24VDC S/S	2
5 AS5000170	CONDENSER FAN ASSEMBLY 24V	2
AU110631	CONDENSER COIL 600 MM X 229MM X 132MM 6RW (TCF7BX1)	1
6 AU110029	CONDENSER COIL 600MM X 229MM X 132MM 6R (TCF7BX2)	1
7 AU420229	FAN AXIAL 300MM 3 BLADES LB	2
8 AU517254	PCAV 3/8" SOLDER	2
9 AU517505	VALVE ACCESS 1/4" 1/8" OD SOLDER	1
10 UC028	CONDENSER MOTOR MOUNT	4
11 UR009	BULKHEAD FITTING 3/8" MF #6 (TCF7BX1)	1
AU512C065	BULKHEAD FITTING O-RING 3/8" (TCF7BX2)	1
12 AU851590	TOGGLE CLAMP RUBBER (TCF7BX2)	2
13 AU935432	FLAT NEOPRENE EXTRUSION	2
14 AS5000125	CONDENSER LID W/ASSEMBLY	1
15 S5000149	LID PROP	1
AU523655	HIGH PRESSURE SWITCH 1/4" FF 2415kPa	1
AS515203	LIQUID LINE VALVE TO DRIER	3
AS515204	LIQUID LINE DRIER TO RECEIVER	3
AS515205	LIQUID LINE RECEIVER TO VALVE	3

TCF7 ROOFTOP CONDENSER

TCF7BX1*
Rooftop Condenser 7kW 24V with Flare Fittings

TCF7BX2
Rooftop Condenser 7kW 24V with O-Ring Fittings

* HVAC obsolete, spares support only





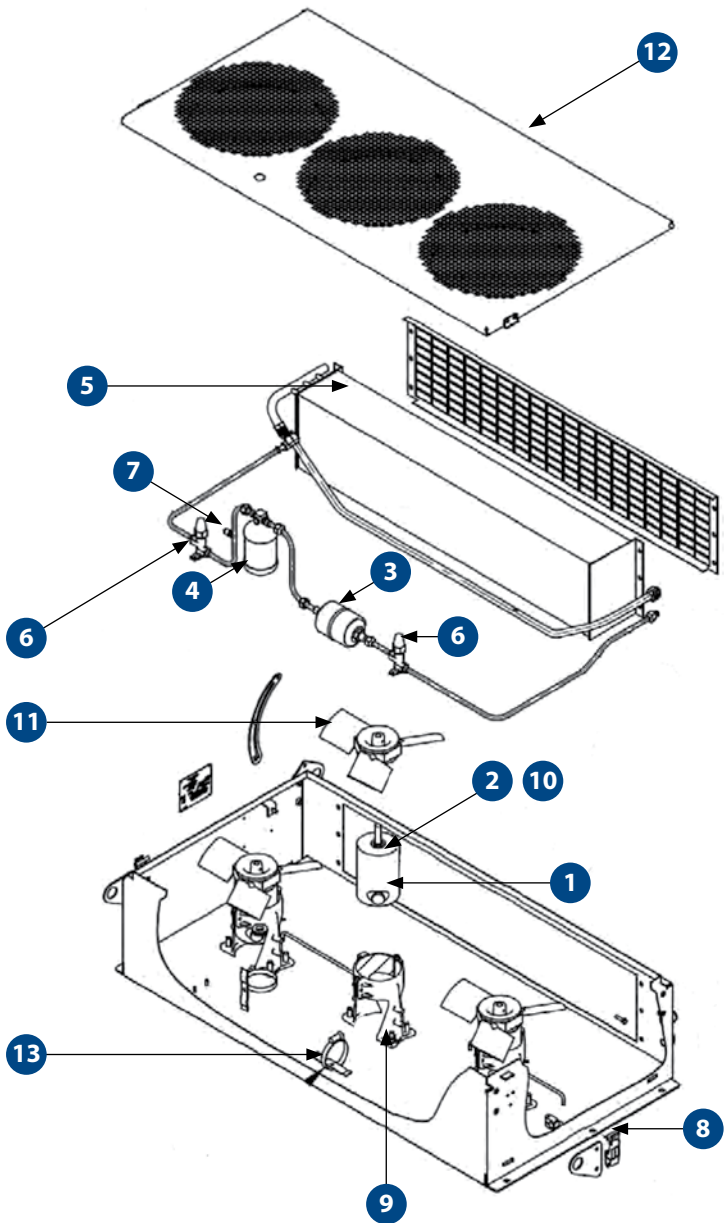
TCF8

FLOOR MOUNTED CONDENSER

TCF8BX1*
Floor Mounted Condenser 8kW 24V Hinged Lid

TCF8BX2
Floor Mounted Condenser 8kW 24V Removable Lid

* HVAC obsolete, spares support only



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 AU320622	BRUSH MOTOR 24VDC EACH HEAVY DUTY	6
2 H0039230	MOTOR UE026 WITH UPGRADED BRUSH	3
3 AU531138	DRIER 3/8" MF	1
4 AU531411	RECEIVER DRIER 3/8" 24UNF 165MM HIGH	1
5 AU110009	CONDENSER COIL 946MM X 203MM X 132MM 6RW TCF8	1
6 AU517254	PCAV 3/8" SOLDER	2
7 AU517505	VALVE ACCESS 1/4" 1/8" OD SOLDER	1
8 AU851593	LATCH TOGGLE WITH MANUAL SAFETY LOCK (TCF8BX1) LATCH TOGGLE WITH MANUAL SAFETY LOCK (TCF8 BX2)	2 4
9 UC028	CONDENSER MOTOR MOUNT-SUIT UE025/26	6
10 UE026	MOTOR 0.14W 24VDC S/S	3
11 AU420229	FAN AXIAL 300MM 3 BLADES LB	3
12 AS520725 AS327833	LID ASSEMBLY (TCF8BX1) LID ASSEMBLY (TCF8BX2)	1 1
13 AU553654	CLAMP UTILUX NO 4 SS	2
AS327817	LIQUID LINE - COIL TO VALVE ASSEMBLY	1
AS327818	LIQUID LINE - VALVE TO FILTER ASSEMBLY	1
AS327825	LIQUID LINE - FILTER TO VALVE ASSEMBLY	1
AU523655	HIGH PRESSURE SWITCH 1/4" FF 2415kPa	1

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	8.0 kW	27296 BTU
Fan Speeds	1	1
Air Flow	980 l/s	2077 CFM
Power Supply	24V	24V
Current Draw	30 A	30 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	54°C	129°F
Weight (nominal)	50.0 Kg	110.0 lbs
Technical Manual Reference	SM278-2715	SM278-2715
Dimension (L X W X H)	1236mm X 600mm X 294 mm	48.7in X 23.6in X 11.6in

MAINTENANCE

6 MONTHS / 2,400 HOURS

AU320622 BRUSH MOTOR 24VDC EACH HEAVY DUTY

ANNUAL / 4,800 HOURS

H0039230 MOTOR UE026 WITH UPGRADED BRUSH

AU531138 DRIER 3/8" MF

AU531411 RECEIVER DRIER 3/8" 24UNF165MM HIGH

3 YEARS / 14,400 HOURS

AU523655 HIGH PRESSURE SWITCH 1/4" FF 2415kPa

Please contact SIGMA for more information including details on an overhaul scope and interval. Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

COMPANION ITEMS

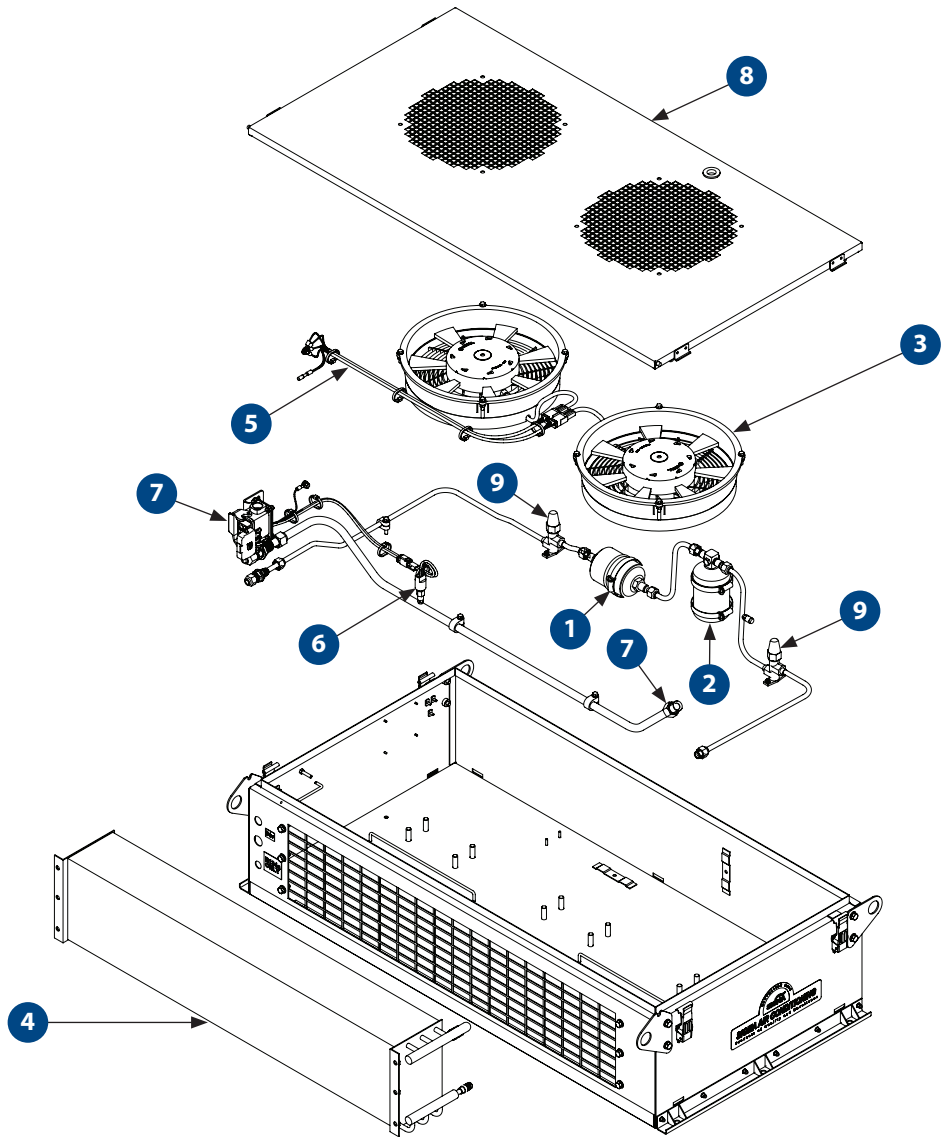
PART NO.	DESCRIPTION
TFC8BX1	8kW Evaporator Unit 24VDC
TFC8BX2	8kW Evaporator Unit 24VDC C/W 415 Heating
EB9P4X	Pressuriser
H0017489	Hydraulic Compressor
H0017493	Hydraulic Compressor
AU260203	Compressor 3Ph
H0193262	Brushless Fan Assembly Kit



TCF8BX6

FLOOR MOUNTED CONDENSER

H0235424
Floor Mounted Condenser 8kW 24V Removable Lid with Brushless fan



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 AU531138	DRIER 3/8" MF	1
2 AU531411	RECEIVER DRIER 3/8" 24UNF 165MM HIGH	1
3 H0192021	AXIAL BRUSHLESS FAN 24VDC DIA 305MM	1
4 AU110009	CONDENSER COIL 946X203X132MM 6RW	1
5 H0184113	WIRING HARNESS ASSEMBLY	1
6 AU523655	HIGH PRESSURE SWITCH 1/4" FF 2415KPA	1
7 H0234526	BULKHEAD HOUSING, SIDE ENTRY	1
8 H0192013	CONDENSER COVER ASSEMBLY	1
9 AU517254	PCAV 3/8" SOLDER	2
AS327820	BULKHEAD TO VALVE LINE ASSEMBLY	1
AS327818	LIQUID LINE - VALVE TO FILTER ASSMBLY	1
AS327821	DISCHARGE LINE ASSEMBLY	1
AS327817	LIQUID LINE - COIL TO VALVE ASSEMBLY	1
AS327819	VALVE TO FILTER TUBE ASSEMBLY	1
AS327825	LIQUID LINE - FILTER TO VALVE ASSEMBLY	1

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	8.0 kW	27296 BTU
Fan Speeds	1	1
Air Flow	980 l/s	2077 CFM
Power Supply	24V	24V
Current Draw	30 A	30 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	54°C	129°F
Weight (nominal)	50.0 Kg	110.0 lbs
Dimension (L X W X H)	1236mm X 600mm X 294 mm	48.7in X 23.6in X 11.6in

MAINTENANCE

ANNUAL / 4,800 HOURS	
AU531138	DRIER 3/8" MF
AU531411	RECEIVER DRIER 3/8" 24UNF165MM HIGH
3 YEARS / 14,400 HOURS	
AU523655	HIGH PRESSURE SWITCH 1/4" FF 2415kPa
H0193262	FAN BRUSHLESS 24VDC Ø305mm

Please contact SIGMA for more information including details on an overhaul scope and interval. Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

COMPANION ITEMS

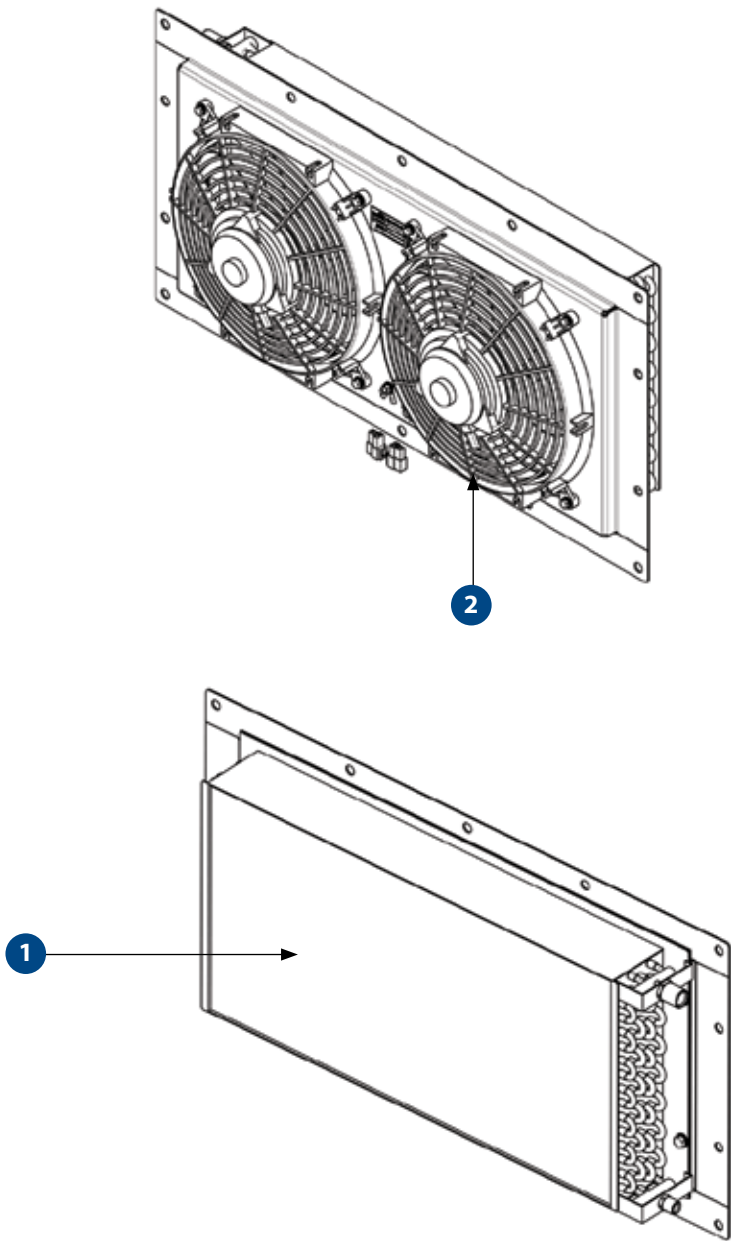
PART NO.	DESCRIPTION
TFC8BX1	8kW Evaporator Unit 24VDC
TFC8BX2	8kW Evaporator Unit 24VDC C/W 415 Heating
EB9P4X	Pressuriser
H0017489	Hydraulic Compressor
H0017493	Hydraulic Compressor
AU260203	Compressor 3Ph 60Hz
H0415158	Mating Plug Kit



TCW5

WALL MOUNTED CONDENSER

TCW5BX1
Wall Mounted Condenser 5kW 24V Captive 'O'Ring



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1	H0039196 CONDENSER COIL 600MM X 305MM X 66MM 4RW (TCW5BX1)	1
	H0095147 CONDENSER COIL 600MM X 305MM X 66MM 4RW (TCW5B2)	1
2	H0051777 FAN AXIAL ASSEMBLY 280MM 24VDC	2

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	4.0 kW	13648 BTU
Fan Speeds	1	1
Air Flow	500 l/s	1059 CFM
Power Supply	24 VDC	24 VDC
Current Draw	8 A	8 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	54°C	129°F
Weight (nominal)	19.0 Kg	41.9 lbs
Technical Manual Reference	-	-
Dimension (L X W X H)	780mm X 400mm X 196mm	30.7in X 15.7in X 7.7in

MAINTENANCE

ANNUAL / 4,800 HOURS	
H0051777	FAN AXIAL ASSEMBLY 280MM 24VDC
Please contact SIGMA for more information including details on an overhaul scope and interval. Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.	

COMPANION ITEMS

PART NO.	DESCRIPTION
TFF5BX1	5kW Evaporator Floor Mounted 12V
TFF5BX2	5kW Evaporator Floor Mounted 24V
EB9P4X	Pressuriser
HDC150	Hydraulic Compressor
AU2961001	Electric Compressor
AU270312	Engine Driven Compressor
AU270311	Engine Driven Compressor
H0081855	Receiver Drier
AU531422	Receiver Drier
KNHV90043	Fitting Kit
KNHV90044	Installation Kits



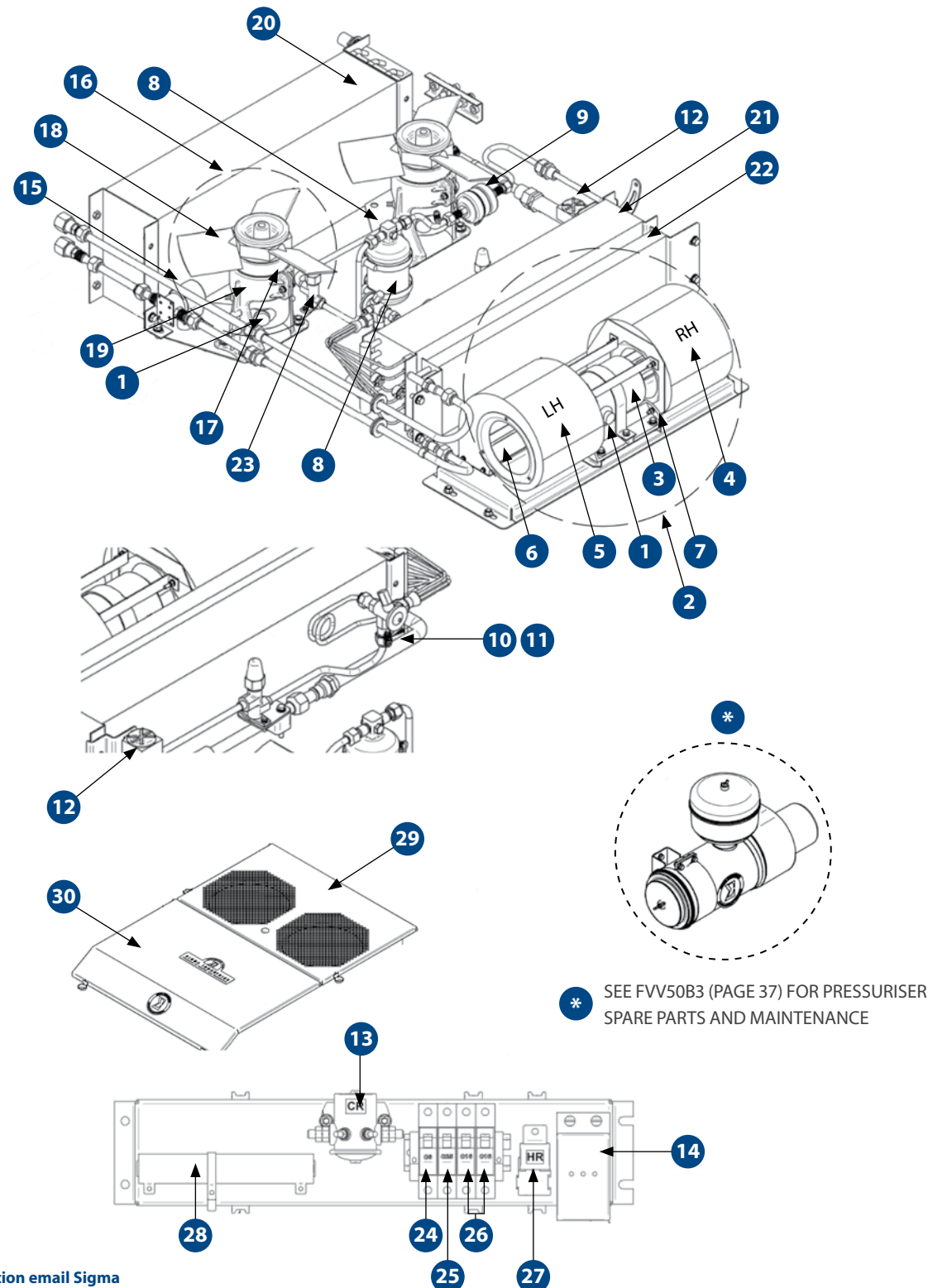
TDR7

TRUCK ROOFTOP HVAC UNIT

TDR7BX1*
Rooftop Packaged Evaporator and Condenser 7kW
24V Heating (10kW) with Heating (6kW) Flare Fittings

TDR7BX2
Rooftop Packaged Evaporator and Condenser 7kW
24V Heating (10kW) with Heating (6kW) O-Ring Fittings

* HVAC obsolete, spares support only



SPARE PARTS

PART NO.	DESCRIPTION	QTY
MC0445	RETURN AIR FILTER ASSEMBLY	1
1 AU320621	BRUSH SET FOR MOTOR 24VDC EACH	6
2 AS5000224	EVAPORATOR FAN ASSEMBLY 24V	1
3 UE023	MOTOR 0.14W 24VDC D/S	1
4 AS5000222	BLOWER HOUSING W/ASSEMBLY RH	1
5 AS5000223	BLOWER HOUSING W/ASSEMBLY LH	1
6 UF171	BLOWER 121D X 127W X 3/8" DUAL INLET	2
7 UC027	EVAPORATOR MOTOR MOUNT SUIT	1
8 AU531411	RECEIVER DRIER 3/8" 24UNF165MM HIGH	1
9 AU531357	DRIER 3/8" MF	1
10 AU521509	TX VALVE 2T 3/8" IN 1/2" OUT 1/4" EQ R134A	1
11 AU521508	TX ORIFICE 2T R22 #06	1
12 UE016	THERMOSTAT DEICE STUD	1
13 UE072	RELAY 24VDC 70A AUTOMOTIVE	1
14 AU681925	THERMOSTAT 12 - 24 VDC WITH SENSOR + POT	1
15 UE057	VALVE SOLENOID 1/4" BSP 24VDC WATER	1
16 AS5000170	CONDENSER FAN ASSEMBLY 24V	2
17 UE026	MOTOR 0.14W 24VDC S/S	2
18 AU420229	FAN AXIAL 300MM 3 BLADES LB	2
19 UC028	CONDENSER MOTOR MOUNT SUIT UE025/26	4
20 AU110631	CONDENSER COIL 600 X 229 X 132 6RW (TDR7BX1)	1
AU110029	CONDENSER COIL 600 X 229 X 123 6RW (TDR7BX2)	1
21 AU120954	EVAPORATOR COIL 570MM X 152MM X 95MM 6RW	1
22 AU130002	HEATER COIL 570 X 152 X 32 2RW	1
23 AU517254	PCAV 3/8" SOLDER	2
24 AU641091	CIRCUIT BREAKER 6A 1 POLE	1
25 AU641092	CIRCUIT BREAKER 25A 1 POLE	1
26 AU641119	CIRCUIT BREAKER 16A 1 POLE	2
* SEE FVV50B3 (PAGE 37) FOR PRESSURISER SPARE PARTS AND MAINTENANCE		

SPARE PARTS LIST CONTINUED NEXT PAGE

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SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	7.0 kW	23884 BTU
Heating Capacity	6.0 kW	20472 BTU
Fan Speeds	3	3
Air Flow	250 l/s	530 CFM
Fresh Air	30 l/s	64 CFM
Power Supply	24V	24V
Current Draw	33.5 A	33.5 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	54°C	129°F
Weight (nominal)	110.0 Kg	242.0 lbs
Technical Manual Reference	SM395-5000	SM395-5000
Dimension (L X W X H)	1100mm X 800mm X 288mm	43.3in X 31.5in X 11.3in

MAINTENANCE

MONTHLY / 400 HOURS

MC0445 RETURN AIR FILTER ASSEMBLY

6 MONTHS / 2,400 HOURS

AU320621 BRUSH SET FOR MOTOR 24VDC EACH
AU320028 MOTOR BRUSH KIT - ASSEMBLY + HOLDER

ANNUAL / 4,800 HOURS

UE023 MOTOR 0.14W 24VDC D/S
AU531411 RECEIVER DRIER 3/8" 24UNF165MM HIGH
AU531357 DRIER 3/8" MF
UE026 MOTOR 0.14W 24VDC S/S
AU320C007 MOTOR SINGLE SHAFT

3 YEARS / 14,400 HOURS

AU521509 TX VALVE 2T 3/8"IN 1/2"OUT 1/4"EQ R134a
AU521508 TX ORIFICE 2T R22 #06
UE016 THERMOSTAT DEICE STUD
UE072 RELAY 24VDC 70A AUTOMOTIVE
AU681925 THERMOSTAT 12-24VDC WITH SENSOR + POT
AU523655 HIGH PRESSURE SWITCH 1/4" FF 2415kPa
AU523365 LOW PRESSURE SWITCH 1/4" FF 205kPa
AU862211 LID RUBBER SEAL

Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

COMPANION ITEMS

PART NO.	DESCRIPTION
H0017479	Hydraulic Compressor
H0017481	Hydraulic Compressor
AU270306	Engine Driven Compressor
AU270307	Engine Driven Compressor



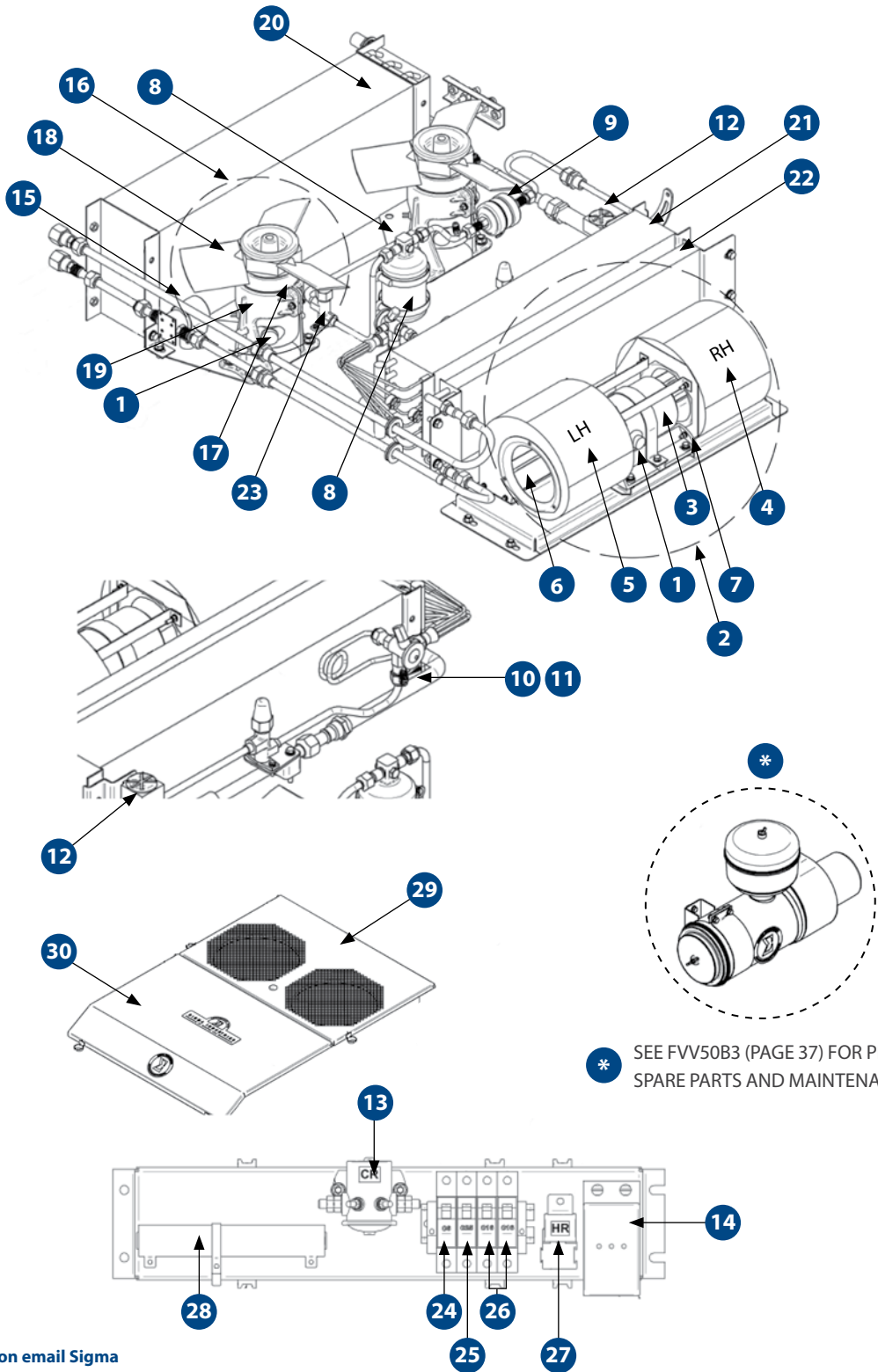
TDR7

TRUCK ROOFTOP HVAC UNIT

TDR7BX1*
Rooftop Packaged Evaporator and Condenser 7kW
24V Heating (10kW) with Heating (6kW) Flare Fittings

TDR7BX2
Rooftop Packaged Evaporator and Condenser 7kW
24V Heating (10kW) with Heating (6kW) O-Ring Fittings

* HVAC obsolete, spares support only



SPARE PARTS

PART NO.	DESCRIPTION	QTY
27	AU661483 RELAY 20A 24VDC 5 PIN	1
28	AU692105 RESISTOR 2 OHM 100W 1 CLIPS ADJUSTABLE	1
29	AS5000123 LID ASSEMBLY CONDENSER	1
30	AS5000124 LID ASSEMBLY EVAPORATOR	1
AU523655	HIGH PRESSURE SWITCH 1/4" FF 2415kPa	1
AU523365	LOW PRESSURE SWITCH 1/4" FF 205kPa	1
AU862211	LID RUBBER SEAL	6.2
AU663562	ROTARY SWITCH A B C D MODE	1
AU663563	ROTARY SWITCH A B C D FAN	1
UC901	DIFFUSER 246MM X 104MM	2
UE700	CIRCUIT BEAKER 40A STUD TYP MANUAL	1
AU517502	VALVE ACCESS 1/4" 1/4" & 3/8" OD SOLDER	1
AU519074	ADAPTOR 134A 1/4" HIGH SIDE RED	1
AU519075	ADAPTOR 134A 1/4" LOW SIDE BLUE	1
AU635485	END BRACKET KLIPPON	2
AU851590	TOGGLE CLAMP RUBBER	4
AU853507	LEAF SPRING 105MM X 13MM	1
AU935432	FLAT NEOPRENE EXTRUSION	0.20
S5000159	UNIT TO CAB SEAL	1
S5006029	MOTOR MOUNT CLAMP 97MM	1
UC020	HOSE CLEAR PVC 12 5MM ID	6
UC504	DRAIN NOZZLE 13MM	4
UF034	INLET RING 103.5MM	1
AU320028	MOTOR BRUSH KIT - ASSEMBLY + HOLDER	1

* SEE FVV50B3 (PAGE 37) FOR PRESSURISER SPARE PARTS AND MAINTENANCE

SPARE PARTS LIST CONTINUED ON PREVIOUS PAGE

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SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	7.0 kW	23884 BTU
Heating Capacity	6.0 kW	20472 BTU
Fan Speeds	3	3
Air Flow	250 l/s	530 CFM
Fresh Air	30 l/s	64 CFM
Power Supply	24V	24V
Current Draw	33.5 A	33.5 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	54°C	129°F
Weight (nominal)	110.0 Kg	242.0 lbs
Technical Manual Reference	SM395-5000	SM395-5000
Dimension (L X W X H)	1100mm X 800mm X 288mm	43.3in X 31.5in X 11.3in

MAINTENANCE

MONTHLY / 400 HOURS	
MC0445	RETURN AIR FILTER ASSEMBLY
6 MONTHS / 2,400 HOURS	
AU320621	BRUSH SET FOR MOTOR 24VDC EACH
AU320028	MOTOR BRUSH KIT - ASSEMBLY + HOLDER
ANNUAL / 4,800 HOURS	
UE023	MOTOR 0.14W 24VDC D/S
AU531411	RECEIVER DRIER 3/8" 24UNF165MM HIGH
AU531357	DRIER 3/8" MF
UE026	MOTOR 0.14W 24VDC S/S
AU320C007	MOTOR SINGLE SHAFT
3 YEARS / 14,400 HOURS	
AU521509	TX VALVE 2T 3/8"IN 1/2"OUT 1/4"EQ R134a
AU521508	TX ORIFICE 2T R22 #06
UE016	THERMOSTAT DEICE STUD
UE072	RELAY 24VDC 70A AUTOMOTIVE
AU681925	THERMOSTAT 12-24VDC WITH SENSOR + POT
AU523655	HIGH PRESSURE SWITCH 1/4" FF 2415kPa
AU523365	LOW PRESSURE SWITCH 1/4" FF 205kPa
AU862211	LID RUBBER SEAL

Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

COMPANION ITEMS

PART NO.	DESCRIPTION
H0017479	Hydraulic Compressor
H0017481	Hydraulic Compressor
AU270306	Engine Driven Compressor
AU270307	Engine Driven Compressor

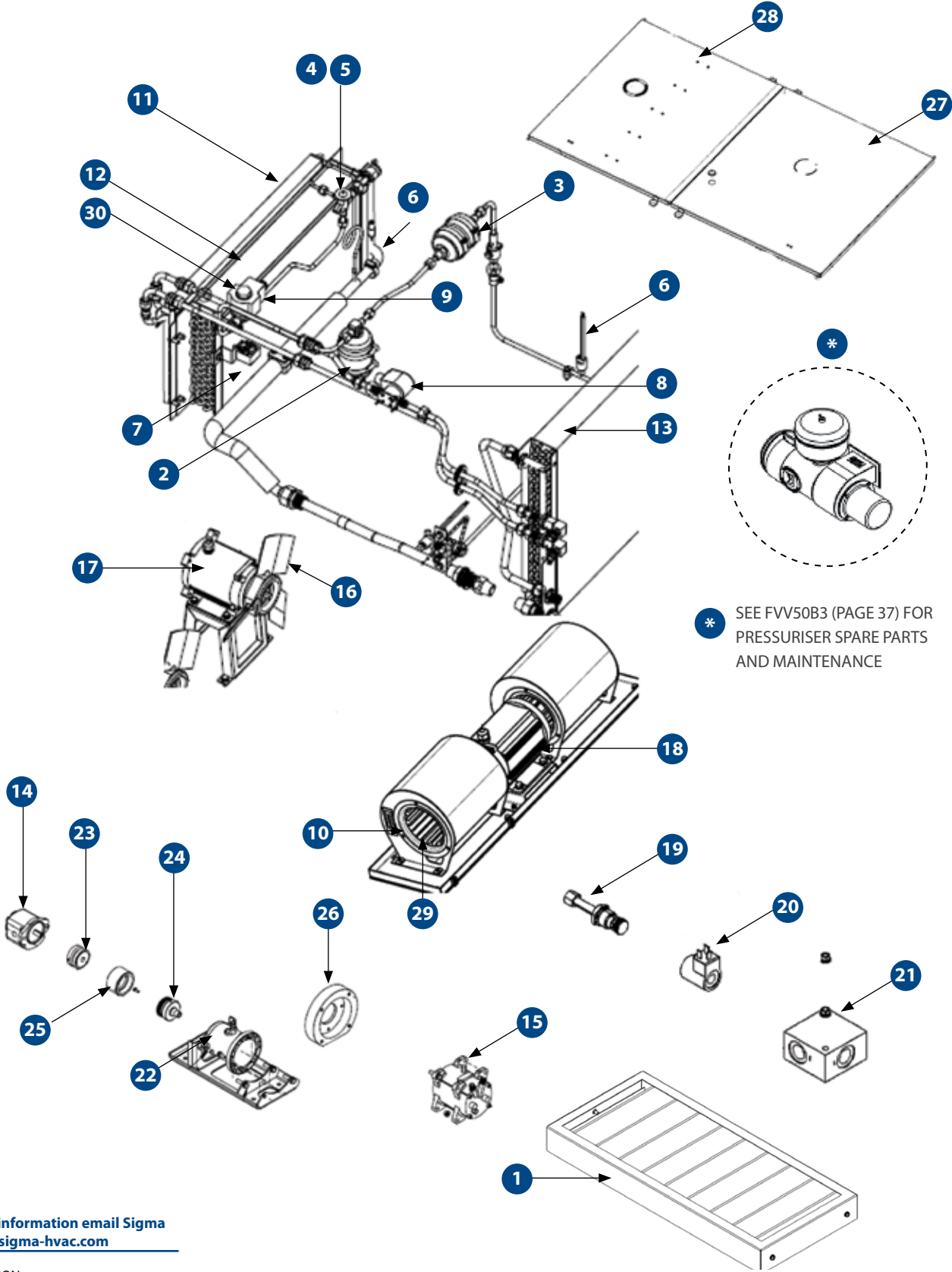
154 For more information email Sigma
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TDR10 - REFRIGERATION & ASSEMBLY

TRUCK ROOFTOP HVAC UNIT

TDR10BX1
Rooftop Packaged Evaporator and Condenser HVAC 10kW
24V Heating (10kW) without Hydraulic Compressor

TDR10BX2
Rooftop Packaged Evaporator and Condenser HVAC 10kW
24V Heating (10kW) and Hydraulic Compressor



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 AS3754056 S3754098	RETURN AIR FILTER ASSEMBLY RETURN AIR FILTER MEDIA	1 1
2 AU531411	RECEIVER DRIER 3/8" 24UNF 165MM HIGH	1
3 AU531138	DRIER 3/8" MF	1
4 AU521509	TX VALVE 2T 3/8" IN 1/2" OUT 1/4" EQ R134A	1
5 AU521508	TX ORIFICE 2T R22 #06	1
6 AU523655	HIGH PRESSURE SWITCH 1/4" FF 2415kPa	1
7 UE016	THERMOSTAT DEICE STUD	1
8 UE057	VALVE SOLENOID 1/4" BSP 24VDC WATER	1
9 AU522021	SOLENOID VALVE 3/8" SOLDER NC	1
10 AU410902	INLET RING 105MM	4
11 AU130036	HEATER COIL 570MM X 305MM X 33MM 2RW TDR10	1
12 AU120036	EVAPORATOR COIL 570MM X 305MM X 83MM 5RW TDR10BX1	1
13 AU110036	CONDENSER COIL 650MM X 533MM X 66MM 4RW TDR10	1
14 AU340000	MOTOR HYDRAULIC DRIVE 14CC	1
15 AU270019E	COMPRESSOR VMO NO CLUTCH (TDR10BX2)	1
16 AU420227	FAN AXIAL 300MM 3 BLADES RA	2
17 AU320032	MOTOR 0.15kW 71 FT 4P 24VDC S/S	2
18 AU320033	MOTOR 0.37kW 71 FT 4P 24VDC D/S	1
19 AU522000	SOLENOID VALVE CARTRIDGE SIZE 12 (BX2)	1
20 AU522001	SOLENOID VALVE COIL (BX2)	1
21 AU522003	SOLENOID VALVE BODY SIZE 12 3/4" BSPP (BX2)	1
22 AS509727	COMPRESSOR MOTOR HOUSING (TDR10BX2)	1
23 AS509742	COUPLING MALE MOTOR (TDR10BX2)	1
24 H0130377	COUPLING MALE-COMPRESSOR (TDR10BX2)	1
25 AS509744	COUPLING FEMALE (BX2)	1

* SEE FVV50B3 (PAGE 37) FOR PRESSURISER SPARE PARTS AND MAINTENANCE

SPARE PARTS LIST CONTINUED NEXT PAGE

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	10.0 kW	34120 BTU
Heating Capacity	10.0 kW	34120 BTU
Fan Speeds	3	3
Air Flow	350 l/s	742 CFM
Fresh Air	30 l/s	64 CFM
Power Supply	24V	24V
Current Draw	33 A	33 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	54°C	129°F
Weight (nominal)	220.0 Kg	484.0 lbs
Technical Manual Reference	SM478-3754	SM478-3754
Dimension (L X W X H)	1484mm X 833mm X 650mm	58.4in X 32.8in X 25.6in

MAINTENANCE

MONTHLY / 400 HOURS	
AS3754056	RETURN AIR FILTER ASSEMBLY
ANNUAL / 4,800 HOURS	
AU531411	RECEIVER DRIER 3/8" 24UNF165MM HIGH
AU531138	DRIER 3/8" MF
3 YEARS / 14,400 HOURS	
AU521509	TX VALVE 2T 3/8"IN 1/2"OUT 1/4"EQ R134A
AU521508	TX ORIFICE 2T R22 #06
AU523655	HIGH PRESSURE SWITCH 1/4" FF 2415kPa
AU523365	LOW PRESSURE SWITCH 1/4" FF 205kPa
UE016	THERMOSTAT DEICE STUD
UE057	VALVE SOLENOID 1/4" BSP 24VDC WATER
AU522021	SOLENOID VALVE 3/8" SOLDER NC
AU862211	LID RUBBER SEAL
UC269	ANTI VIBRATION MOUNT 1/2"-20UNF

Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

COMPANION ITEMS

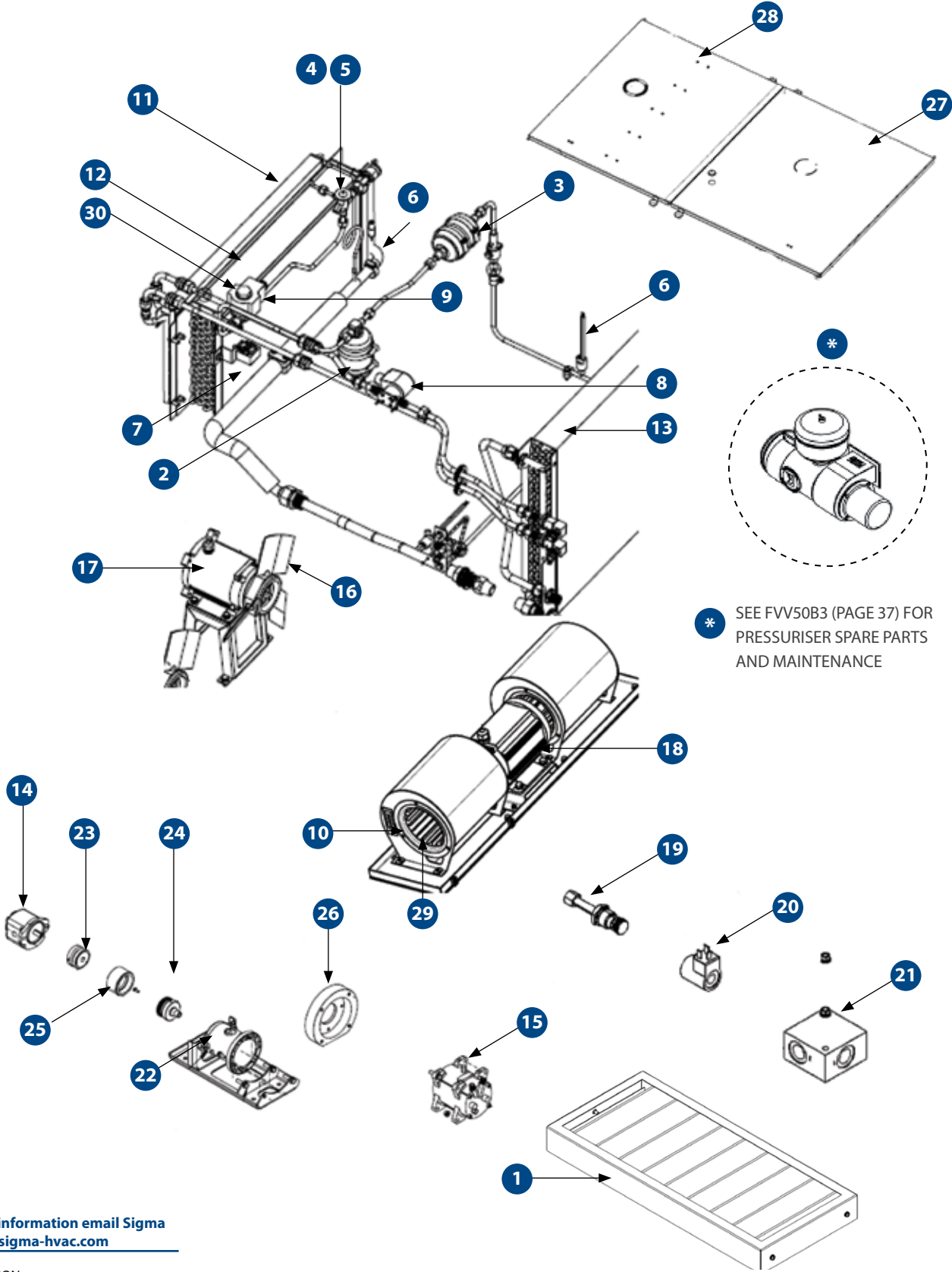
PART NO.	DESCRIPTION
H0017489	Hydraulic Compressor (TDR10BX1)
H0017493	Hydraulic Compressor (TDR10BX1)
AU270314E	Engine Driven Compressor (TDR10BX1)
AU270318E	Engine Driven Compressor (TDR10BX1)
KIT375401	Installation Kits

TDR10 - REFRIGERATION & ASSEMBLY

TRUCK ROOFTOP HVAC UNIT

TDR10BX1
Rooftop Packaged Evaporator and Condenser HVAC 10kW
24V Heating (10kW) without Hydraulic Compressor

TDR10BX2
Rooftop Packaged Evaporator and Condenser HVAC 10kW
24V Heating (10kW) and Hydraulic Compressor



SPARE PARTS

PART NO.	DESCRIPTION	QTY
26	AS509746 ADAPTOR PLATE COMPRESSOR (TDR10BX2)	1
27	AS3754045 COVER ASSEMBLY CONDENSER SECTION	1
28	AS3754044 COVER ASSEMBLY EVAPORATOR SECTION	1
29	AU410105 BLOWER 120D X 178W X 3/8 CW DUAL INLET	2
30	AU668140 COIL SOLENOID 24VDC TYPE 1	1
AU523365	LOW PRESSURE SWITCH 1/4" FF 205kPa	1
UC901	DIFFUSER 246MM X 104MM	4
UC269	ANTI VIBRATION MOUNT 1/2"-20UNF	4
AS3754102	HOSE - HYDRAULIC MOTOR DRAINAGE (TDR10BX2)	1
AS3754103	HOSE - SOLENOID VALVE IN (TDR10BX2)	1
AS3754104	HOSE - SOLENOID VALVE OUT (TDR10BX2)	1
AS3754106	HOSE - HYDRAULIC COMP DISCHARGE (TDR10BX2)	2
AS3754107	HOSE - HYDRAULIC COMP SUCTION (TDR10BX2)	1
AS3754116	HOSE - HYDRAULIC MOTOR IN (TDR10BX2)	1
UC504	DRAIN NOZZLE 13MM	4
AU517502	VALVE ACCESS 1/4" 1/4" & 3/8" OD SOLDER	1
AU517712	VALVE BALL 3/8" SOLDER	1
AU519074	ADAPTOR 134A 1/4" HIGH SIDE RED	1
AU519075	ADAPTOR 134A 1/4" LOW SIDE BLUE	1
AU519080	INSERT M O-RING TO MF #10	1
AU519099	INSERT M O-RING TO MF #12	1
AU851590	TOGGLE CLAMP RUBBER	4
AU853507	LEAF SPRING 105MM X 13MM	1
AU862211	LID RUBBER SEAL	7
AU230644	VALVE SERVICE 5/8" WITH ACCESS PORT (TDR10BX2)	1
AU230C011	VALVE 1/2 TUBE #8 R134A DISCHARGE (TDR10BX2)	1

* SEE FVV50B3 (PAGE 37) FOR PRESSURISER SPARE PARTS AND MAINTENANCE

SPARE PARTS LIST CONTINUED NEXT PAGE

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	10.0 kW	34120 BTU
Heating Capacity	10.0 kW	34120 BTU
Fan Speeds	3	3
Air Flow	350 l/s	742 CFM
Fresh Air	30 l/s	64 CFM
Power Supply	24V	24V
Current Draw	33 A	33 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	54°C	129°F
Weight (nominal)	220.0 Kg	484.0 lbs
Technical Manual Reference	SM478-3754	SM478-3754
Dimension (L X W X H)	1484mm X 833mm X 650mm	58.4in X 32.8in X 25.6in

MAINTENANCE

MONTHLY / 400 HOURS	
AS3754056	RETURN AIR FILTER ASSEMBLY
ANNUAL / 4,800 HOURS	
AU531411	RECEIVER DRIER 3/8" 24UNF165MM HIGH
AU531138	DRIER 3/8" MF
3 YEARS / 14,400 HOURS	
AU521509	TX VALVE 2T 3/8"IN 1/2"OUT 1/4"EQ R134A
AU521508	TX ORIFICE 2T R22 #06
AU523655	HIGH PRESSURE SWITCH 1/4" FF 2415kPa
AU523365	LOW PRESSURE SWITCH 1/4" FF 205kPa
UE016	THERMOSTAT DEICE STUD
UE057	VALVE SOLENOID 1/4" BSP 24VDC WATER
AU522021	SOLENOID VALVE 3/8" SOLDER NC
AU862211	LID RUBBER SEAL
UC269	ANTI VIBRATION MOUNT 1/2"-20UNF

Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

COMPANION ITEMS

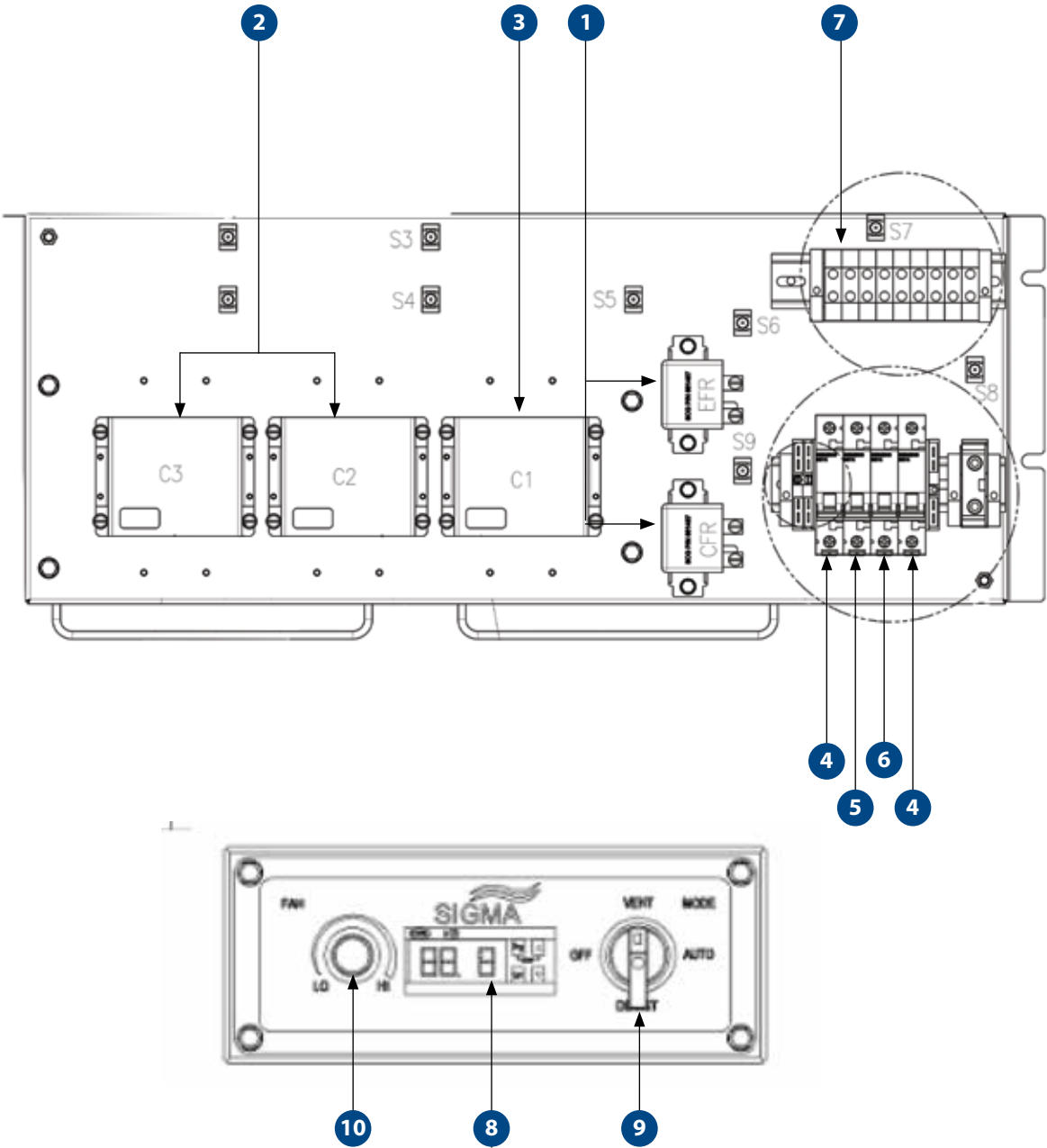
PART NO.	DESCRIPTION
H0017489	Hydraulic Compressor (TDR10BX1)
H0017493	Hydraulic Compressor (TDR10BX1)
AU270314E	Engine Driven Compressor (TDR10BX1)
AU270318E	Engine Driven Compressor (TDR10BX1)
KIT375401	Installation Kits

TDR10 - ELECTRICAL

TRUCK ROOFTOP HVAC UNIT

TDR10BX1
Rooftop Packaged Evaporator and Condenser HVAC 10kW
24V Heating (10kW) without Hydraulic Compressor

TDR10BX2
Rooftop Packaged Evaporator and Condenser HVAC 10kW
24V Heating (10kW) and Hydraulic Compressor



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 AU661487	RELAY 50A 24VDC 1 POLE	2
2 AU6761003	MOTOR CONTROL CONDENSER 24V 30A	2
3 AU6761004	MOTOR CONTROL EVAPORATOR 24V 30A	1
4 AU641092	CIRCUIT BREAKER 25A 1POLE	2
5 AU641091	CIRCUIT BREAKER 6A 1POLE	1
6 AU641090	CIRCUIT BREAKER 10A 1POLE	1
7 AU635521	TERM BLOCK 6MM² M4 SCREW	9
8 AU681960	THERMOSTAT DIGITAL 24V 2 STAGE	1
9 AU663117	ROTARY SWITCH 4 POSITION	1
10 AU6791057	CABLE JST- POTENTIOMETER 22K	1
AU641070	CIRCUIT BREAKER 63A 1POLE	1
AU681961	THERMOSTAT SENSOR PROBE NTC WITH LEAD	1
AU635616	BUSBAR TERMINAL	1
AU641172	BUSBAR 10MM²	1
AU674014	DIODE 1000V 1A	2
AU861071	SEAL FRESH AIR 153MM X 160MM	1
AU861072	GASKET FRESH AIR FAN 160MM	2

* SEE FVV50B3 (PAGE 37) FOR PRESSURISER PARTS AND MAINTENANCE

SPARE PARTS LIST CONTINUED ON PREVIOUS PAGE

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	10.0 kW	34120 BTU
Heating Capacity	10.0 kW	34120 BTU
Fan Speeds	3	3
Air Flow	350 l/s	742 CFM
Fresh Air	30 l/s	64 CFM
Power Supply	24 V	24 V
Current Draw	33A	33A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	54°C	129°F
Weight (nominal)	220.0 Kg	484.0 lbs
Technical Manual Reference	SM478-3754	SM478-3754
Dimension (L X W X H)	1484mm X 833mm X 650mm	58.4in X 32.8in X 25.6in

MAINTENANCE

3 YEARS / 14,400 HOURS

AU661487	RELAY 50A 24VDC 1 POLE
AU681960	THERMOSTAT DIGITAL 24V 2 STAGE

Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

COMPANION ITEMS

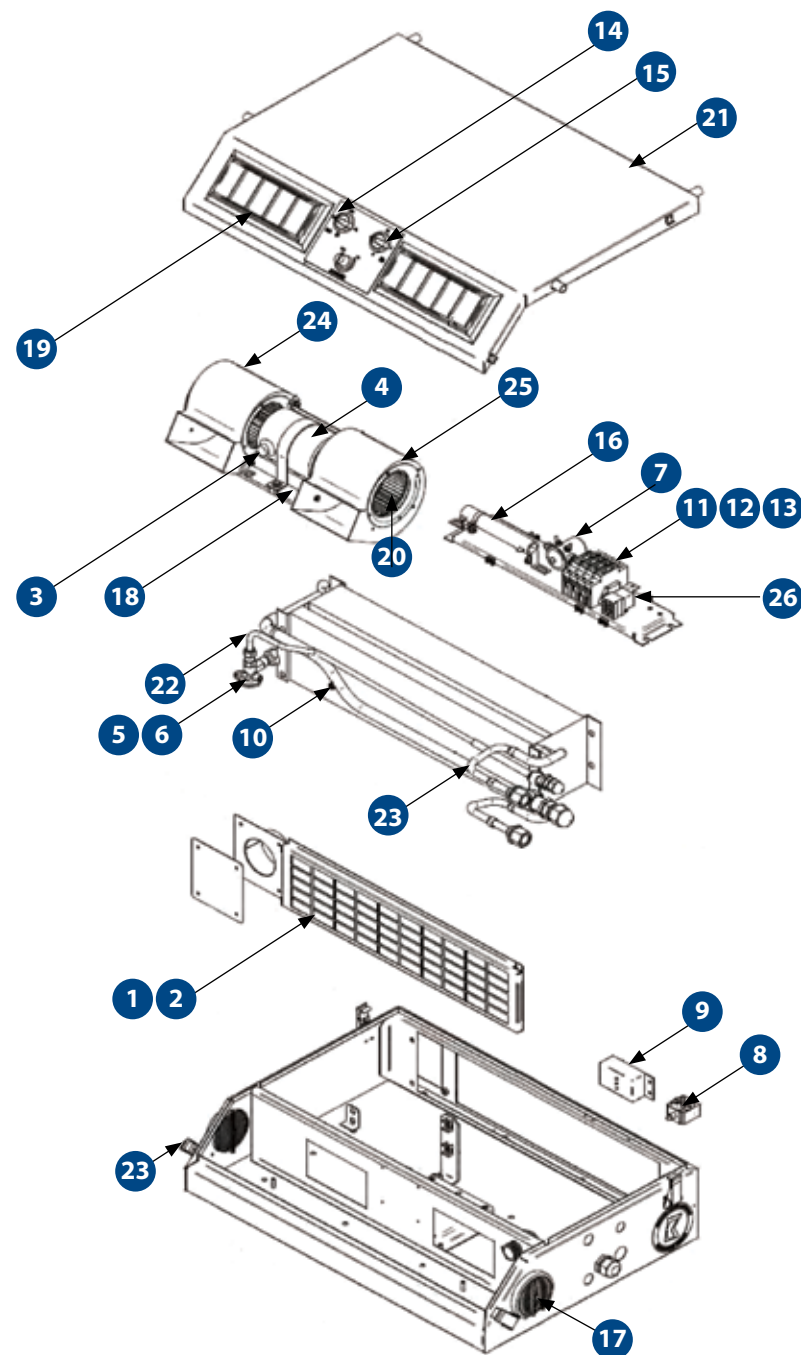
PART NO.	DESCRIPTION
H0017489	Hydraulic Compressor
H0017493	Hydraulic Compressor
KIT375401	Installation Kits
AU270314E	Engine Driven Compressor
AU270318E	Engine Driven Compressor



TFC6

CEILING EVAPORATOR

TFC6BX1
Ceiling Evaporator 6kW 24V with Heating (6kW)



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1	AS502003S RETURN AIR FILTER	1
2	UC151 FILTER MEDIA 10MM GREY G2	1
3	AU320621 BRUSH SET FOR MOTOR 24VDC EACH	1
4	UE023 MOTOR 0.14KW 24VDC D/S	1
5	AU521509 TX VALVE 2T 3/8" IN 1/2" OUT 1/4" EQ R134A	1
6	AU521505 TX ORIFICE 2T R22 #05	1
7	UE072 RELAY 24VDC 70A AUTOMOTIVE	1
8	UE016 THERMOSTAT DEICE STUD	1
9	AU681925 THERMOSTAT 12-24VDC WITH SENSOR + POT	1
10	AU523365 LOW PRESSURE SWITCH 1/4" FF 205kPa	1
11	AU641091 CIRCUIT BREAKER 6A 1POLE	1
12	AU641092 CIRCUIT BREAKER 25A 1POLE	2
13	AU641119 CIRCUIT BREAKER 16A 1 POLE	1
14	AU663562 ROTARY SWITCH A B C D MODE	1
15	AU663563 ROTARY SWITCH A B C D FAN	1
16	AU692107 RESISTOR 2 OHM 100W 3 CLIPS ADJUSTABLE	2
17	AU821704 DIFFUSER ROUND 92MM PVC	2
18	UC027 EVAPORATOR MOTOR MOUNT	2
19	UC901 DIFFUSER 246MM X 104MM	1
20	UF048 BLOWER 108D X 104W X DUAL INLET	2
21	AS502018 LID ASSEMBLY	1
22	AS502036 SUCTION LINE - COIL TO BULKHEAD	1
AS502038	LIQUID LINE - TX VALVE TO BULKHEAD	1
23	UC310 CATCH TOGGLE OVERCENTRE SS	1
24	AS502009 FAN HOUSING ASSEMBLY L H TFC6	1
25	AS502010 FAN HOUSING ASSEMBLY R H TFC6	1
26	AU661483 RELAY 20A 24VDC 5 PIN	1
AU681926	POT LINEAR 10kOHM WITH PLUG	1
UE057	VALVE SOLENOID 1/4" BSP 24VDC WATER	1
UC310	CATCH TOGGLE OVERCENTRE SS	1
AU853507	LEAF SPRING 105MM X 13MM	1
AU935432	FLAT NEOPRENE EXTRUSION	0.2
S5006029	MOTOR MOUNT CLAMP 97MM	1
UC020	HOSE CLEAR PVC 125MM ID	6
UC096	FTG P3 5/8 STR BRB X 1/4 MBSPT	2
UC311	CATCH STRIKER SS FOR UC310	4
UR008	BULKHEAD FITTING 1/2" MF	1
UR009	BULKHEAD FITTING 3/8" MF	1
UR010	BULKHEAD FITTING 3/4" MF	1
AU517502	VALVE ACCESS 1/4" 1/4" & 3/8" OD SOLDER	1
AU120603	EVAPORATOR+HEATER COIL 600x153x79+33	1
AU854034	CONTROL LABEL	1

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SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	6.0 kW	20472 BTU
Heating Capacity	6.0 kW	20472 BTU
Fan Speeds	3	3
Air Flow	250 l/s	530 CFM
Fresh Air	30 l/s	64 CFM
Power Supply	24V	24V
Current Draw	10.5 A	10.5 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	54°C	129°F
Weight (nominal)	36.0 Kg	79.2 lbs
Technical Manual Reference	SM395-5000	SM395-5000
Dimension (L X W X H)	743mm X 530mm X 210mm	29.3in X 20.9in X 8.3in

MAINTENANCE

MONTHLY / 400 HOURS	
AS502003S	RETURN AIR FILTER
UC151	FILTER MEDIA 10MM GREY G2
AU320621	BRUSH SET FOR MOTOR 24VDC EACH
ANNUAL / 4,800 HRS	
UE023	MOTOR 0.14W 24VDC D/S
3 YEARS / 14,400 HRS	
AU521509	TX VALVE 2T 3/8"IN 1/2"OUT 1/4"EQ R134a
AU521505	TX ORIFICE 2T R22 #05
AU523365	LOW PRESSURE SWITCH 1/4" FF 205kPa
UE016	THERMOSTAT DEICE STUD
UE072	RELAY 24VDC 70A AUTOMOTIVE
AU661483	RELAY 20A 24VDC 5 PIN
UE057	VALVE SOLENOID 1/4" BSP 24VDC WATER
AU681925	THERMOSTAT 12-24VDC WITH SENSOR + POT

Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

COMPANION ITEMS

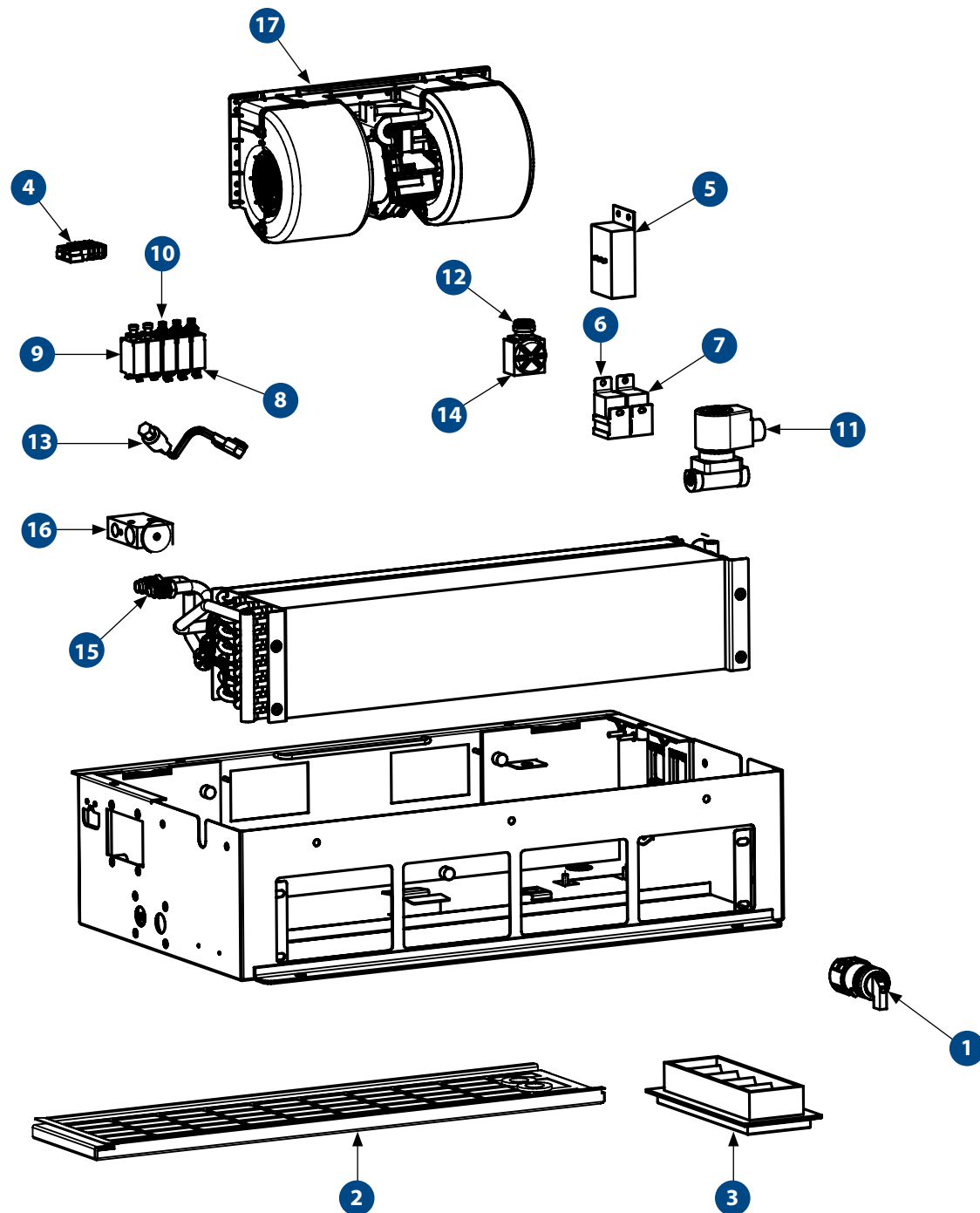
PART NO.	DESCRIPTION
TCF7BX2	Electric Condenser
EB9P4X	Pressuriser
H0017479	Hydraulic Compressor
H0017481	Hydraulic Compressor
AU270306	Engine Driven Compressor
AU270307	Engine Driven Compressor
AU531411	Receiver Drier
AU531422	Receiver Drier



TFC6BX2

CEILING EVAPORATOR

H0094278
Rooftop Evaporator 6kW 24V with Heating (6kW)



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 AU663562	ROTARY SWITCH	1
2 AS502003	RETURN AIR FILTER	1
3 UC901	DIFFUSER 246MM X 104MM	1
4 AU631547	CONNECTOR 2 WAY 50A HEAVY DUTY	1
5 AU681925	THERMOSTAT 12-24 VDC WITH SENSOR + POT	1
6 AU661483	RELAY 20A 24VDC 5 PIN	2
7 ERR023	RELAY BASE 5 PIN (PANEL MOUNT)	2
8 AU641C107	CIRCUIT BREAKER 10A PUSH PULL	2
9 AU641C110	CIRCUIT BREAKER 15A PUSH PULL	1
10 AU641065	CIRCUIT BREAKER 25A PUSH PULL	2
11 H0112397	SOLENOID VALVE 24VDC 1/2" BSP WATER	1
12 UC022	KNOB SNOWFLAKE 6.35MM	1
13 H0152017	LP SWITCH ASSEMBLY	1
14 UE016	THERMOSTAT DEICE STUD	1
15 H0094351	EVAPORATOR + HEATER COIL 600MM X 133MM	1
16 AU521946	TX VALVE BLOCK 2T 3/8" IN 1/2" OUT R134A	1
17 H0088451	BLOWER ASSEMBLY - 24VDC 3 SPEED	

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	6.0 kW	20472 BTU
Heating Capacity	7.0 kW	23884 BTU
Fan Speeds	3	3
Air Flow	200 l/s	424 CFM
Fresh Air	40 l/s	85 CFM
Power Supply	24V	24V
Current Draw	13 A	13 A
Refrigerant	R134a	R134a
Minimum Ambient Temperature	-10°C	14°F
Maximum Ambient Temperature	54°C	129°F
Weight (nominal)	35.0 Kg	77.0 lbs
Technical Manual Reference	HD0041895	HD0041895
Dimension (L X W X H)	735mm X 528mm X 190mm	28.9in X 20.8in X 7.5in

MAINTENANCE

MONTHLY / 400 HOURS	
AS502003	RETURN AIR FILTER
ANNUAL / 4,800 HRS	
H0088451	BLOWER ASSEMBLY - 24VDC 3 SPEED
3 YEARS / 14,400 HRS	
AU681925	THERMOSTAT 12-24 VDC WITH SENSOR + POT
AU661483	RELAY 20A 24VDC 5 PIN
H0112397	SOLENOID VALVE 24VDC 1/2" BSP WATER
UE016	THERMOSTAT DEICE STUD
AU521946	TX VALVE BLOCK 2T 3/8" IN 1/2" OUT R134A
H0152017	LP SWITCH ASSEMBLY

Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

COMPANION ITEMS

PART NO.	DESCRIPTION
TCF7BX2	Rooftop Wallmount Condenser 6kW 24V
EB9P4X	Pressuriser
H0123925	Evaporator to Switch Loom
H0124104	Switch Panel Remote Assembly

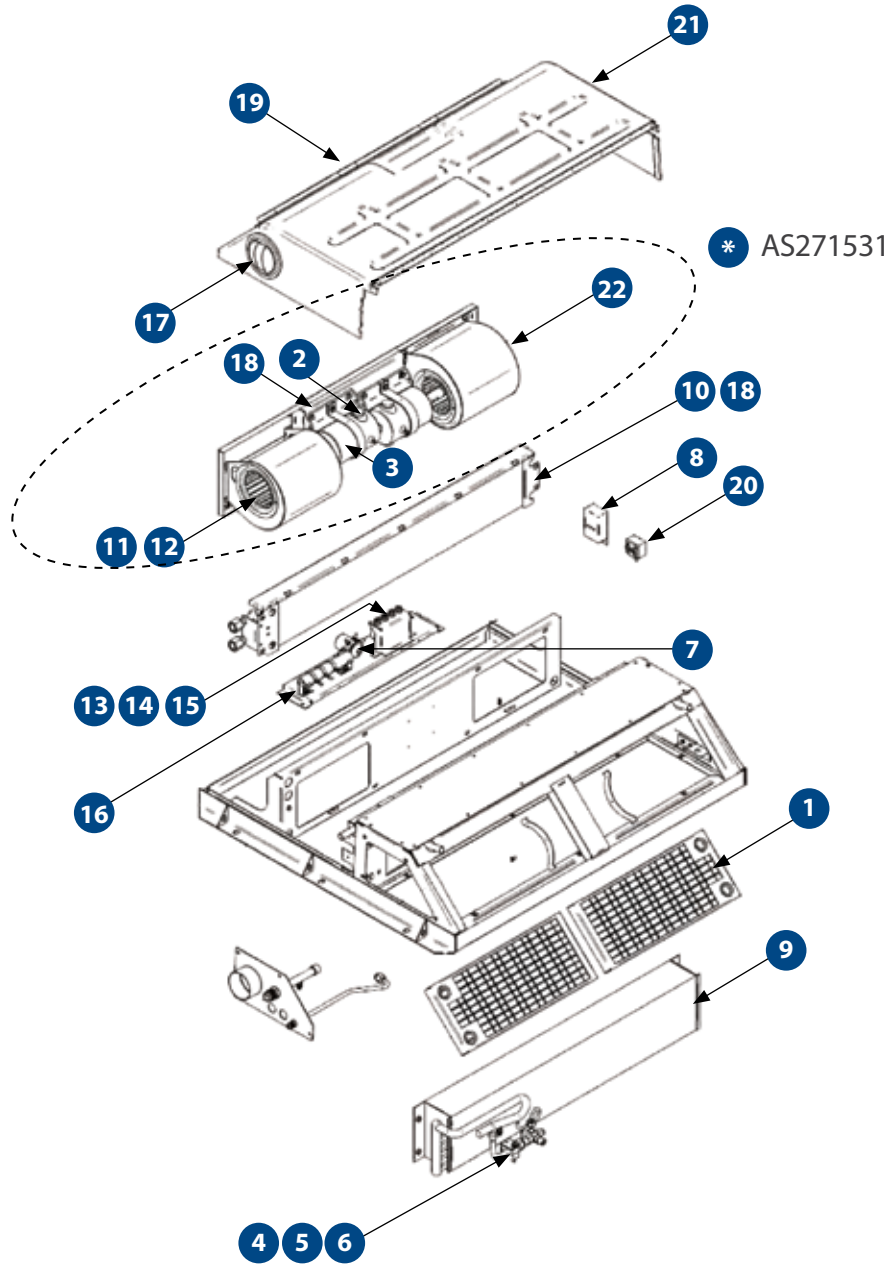


TFC8

CEILING EVAPORATOR

TFC8BX1
Ceiling Evaporator 8kW 24V

TFC8BX2
Ceiling Evaporator 8kW 24V with Electric Heating



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 AS271535	RETURN AIR FILTER	2
AS271535S	RETURN AIR FILTER - DISPOSABLE OPTION	2
2 AU320622	BRUSH MOTOR 24VDC EACH HEAVY DUTY	4
3 H0039230	MOTOR UE026 WITH UPGRADED BRUSH	2
4 AU521509	TX VALVE 2T 3/8" IN 1/2" OUT 1/4" EQ R134A	1
5 AU521508	TX ORIFICE 2T R22 #06	1
6 AU523365	LOW PRESSURE SWITCH 1/4" FF 205kPa	1
7 UE072	RELAY 24VDC 70A AUTOMOTIVE	1
8 AU681925	THERMOSTAT 12-24VDC WITH SENSOR + POT	1
9 AU120394	EVAPORATOR COIL 864MM X 166MM X 95MM 4RW TFC8	1
10 AU130009	HEATER COIL 864MM X 152MM X 32MM 2RW TFC8	1
11 AU410105	BLOWER 120D X 178W X 3/8 CW DUAL INLET	2
12 AU410902	INLET RING 105MM	4
13 AU641065	CIRCUIT BREAKER 25A PUSH PULL	1
14 AU641067	CIRCUIT BREAKER 35A PUSH PULL	1
15 AU641C111	CIRCUIT BREAKER 5A PUSH PULL	2
16 AU692107	RESISTOR 2 OHM 100W 3 CLIPS ADJUSTABLE	1
17 AS271531	DIFFUSER ROUND 120MM POLYAMIDE	2
18 UC027	EVAPORATOR MOTOR MOUNT	2
19 UC901	DIFFUSER 246 X 104MM	3
20 UE016	THERMOSTAT DEICE STUD	1
21 S271531	TFC8 EVAPORATOR COVER PLASTIC	1
22 AS198603	SUPPLY AIR BLOWER ASSEMBLY	2
AS271531	SUPPLY AIR FAN ASSEMBLY	
AS271576	HEATER ASSEMBLY (TFC8BX2)	1

SPARE PARTS LIST CONTINUED NEXT PAGE

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	8.0 kW	27296 BTU
Heating Capacity	10.0 kW / 6kW	34120 BTU / 20473 BTU
Fan Speeds	3	3
Air Flow	325 l/s	689 CFM
Fresh Air	30 l/s	64 CFM
Power Supply	24V	24V
Current Draw	30 A	30 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	54°C	129°F
Weight (nominal)	70.0 Kg	154.0 lbs
Technical Manual Reference	SM278-2715	SM278-2715
Dimension (L X W X H)	1100mm X 900mm X 221mm	43.3in X 35.4in X 8.7in

MAINTENANCE

MONTHLY / 500 HOURS	
AS271535	RETURN AIR FILTER
AS271535S	RETURN AIR FILTER - DISPOSABLE OPTION
6 MONTHS / 2,400 HOURS	
AU320622	BRUSH MOTOR 24VDC EACH HEAVY DUTY
ANNUAL / 4,800 HOURS	
H0039230	MOTOR UE026 WITH UPGRADED BRUSH
3 YEARS / 14,400 HOURS	
AU521509	TX VALVE 2T 3/8" IN 1/2" OUT 1/4" EQ R134a
AU521508	TX ORIFICE 2T R22 #06
AU523365	LOW PRESSURE SWITCH 1/4" FF 205kPa
UE072	RELAY 24VDC 70A AUTOMOTIVE
UE057	VALVE SOLENOID 1/4" BSP 24VDC WATER
AU681925	THERMOSTAT 12-24VDC WITH SENSOR + POT
Please contact SIGMA for more information including details on an overhaul scope and interval. Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.	

COMPANION ITEMS

PART NO.	DESCRIPTION
TFC8BX2	Electric Condenser
EB9P4X	Pressuriser
H0017489	Hydraulic Compressor
H0017493	Hydraulic Compressor
AU110240	Radiator Condenser
AU1102401	Radiator Condenser
AU270306	Engine Driven Compressor
AU270307	Engine Driven Compressor
AU270314	Engine Driven Compressor
AU2701001	Engine Driven Compressor
AU531411	Receiver Drier
AU531422	Receiver Drier

TFC8

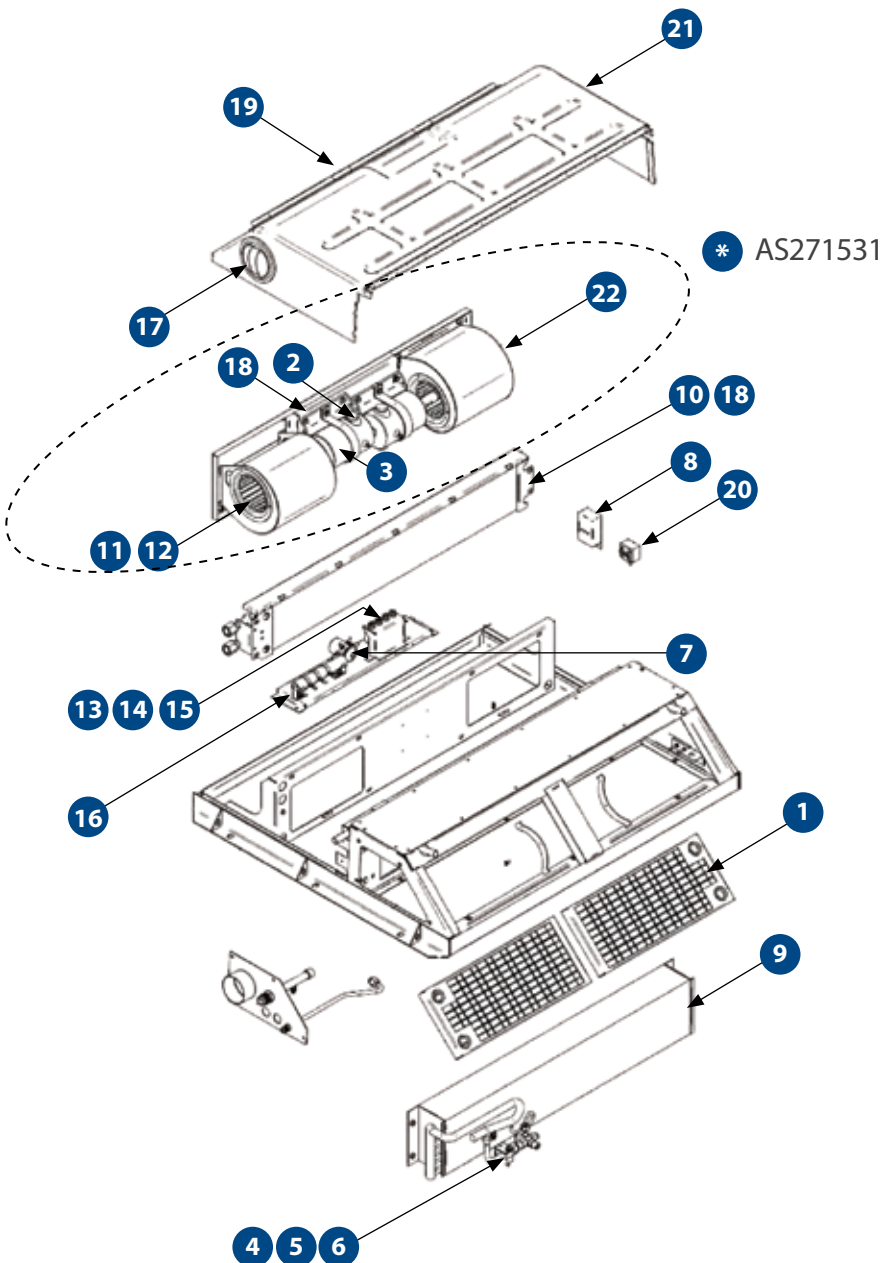
CEILING EVAPORATOR

TFC8BX1

Ceiling Evaporator 8kW 24V

TFC8BX2

Ceiling Evaporator 8kW 24V with Electric Heating



SPARE PARTS

PART NO.	DESCRIPTION	QTY
AU641601	CIRCUIT BREAKER 6.3-10A 3 POLE (TFC8BX2)	1
AU641612	CIRCUIT BREAKER 16A 3POLE (TFC8BX2)	1
UE699	CIRCUIT BREAKER 60A STUD TYP MANUAL (TFC8BX1)	1
AU651346	CONTACTOR 12A 24VDC 3 POLE 1NO 1NC (TFC8BX2)	2
AU663563	ROTARY SWITCH A B C D FAN	1
AU663569	ROTARY SWITCH MODE	1
AU681065	THERMOSTAT T3 80°C SPST AUTO (TFC8BX2)	1
AU691191	HEATER U SHAPE 2.0kW 240V 675MM SS FIN (TFC8BX2)	3
AU681926	POTENTIOMETER	1
UE057	VALVE SOLENOID 1/4" BSP 24VDC WATER	1
AU662410	SWITCH KEYED 20A	1
AU517502	VALVE ACCESS 1/4" 1/4" & 3/8" OD SOLDER	1
AU635302	TERM BLK SIE 3 POLE 2 5MMSQ (TFC8BX2)	3
AU636255	TERM BLK BRIDGE SIE 4WAY 2 5MM (TFC8BX2)	1
AU853505	LEAF SPRING 145MM X 25 MM	2
AU872135	SHAFT EXTENSION 1/2" FEMALE X 1/2" MALE	2
AU935432	FLAT NEOPRENE EXTRUSION	1
S5006029	MOTOR MOUNT CLAMP 97MM	2
UC020	HOSE CLEAR PVC 12 5MM ID	10
UC031	FASTENER ASSEMBLY 1/4 TURN - STUD & RECEPT	3
UC096	FITTING P3 5/8 STR BRB X 1/4 MBSPT (TFC8BX1)	2
UC504	DRAIN NOZZLE 13MM	4

SPARE PARTS LIST CONTINUED ON PREVIOUS PAGE

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	8.0 kW	27296 BTU
Heating Capacity	10.0 kW / 6kW	34120 BTU / 20473 BTU
Fan Speeds	3	3
Air Flow	325 l/s	689 CFM
Fresh Air	30 l/s	64 CFM
Power Supply	24V	24V
Current Draw	30 A	30 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	54°C	129°F
Weight (nominal)	70.0 Kg	154.0 lbs
Technical Manual Reference	SM278-2715	SM278-2715
Dimension (L X W X H)	1100mm X 900mm X 221mm	43.3in X 35.4in X 8.7in

MAINTENANCE

MONTHLY / 500 HOURS

AS271535 RETURN AIR FILTER

AS271535S RETURN AIR FILTER - DISPOSABLE OPTION

6 MONTHS / 2,400 HOURS

AU320622 BRUSH MOTOR 24VDC EACH HEAVY DUTY

ANNUAL / 4,800 HOURS

H0039230 MOTOR UE026 WITH UPGRADED BRUSH

3 YEARS / 14,400 HOURS

AU521509 TX VALVE 2T 3/8" IN 1/2" OUT 1/4" EQ R134a

AU521508 TX ORIFICE 2T R22 #06

AU523365 LOW PRESSURE SWITCH 1/4" FF 205kPa

UE072 RELAY 24VDC 70A AUTOMOTIVE

UE057 VALVE SOLENOID 1/4" BSP 24VDC WATER

AU681925 THERMOSTAT 12-24VDC WITH SENSOR + POT

Please contact SIGMA for more information including details on an overhaul scope and interval.

Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

COMPANION ITEMS

PART NO.	DESCRIPTION
TCF8BX2	Electric Condenser
EB9P4X	Pressuriser
H0017489	Hydraulic Compressor
H0017493	Hydraulic Compressor
AU110240	Radiator Condenser
AU1102401	Radiator Condenser
AU270306	Engine Driven Compressor
AU270307	Engine Driven Compressor
AU270314	Engine Driven Compressor
AU2701001	Engine Driven Compressor
AU531411	Receiver Drier
AU531422	Receiver Drier



DRAGLINE & SHOVEL



DRILL



EXCAVATOR



DOZER



TRUCK



WHEEL LOADER



CONSTRUCTION



UNDERGROUND EQUIPMENT



INDUSTRIAL



SMELTERS



RAIL SPECIAL VEHICLES

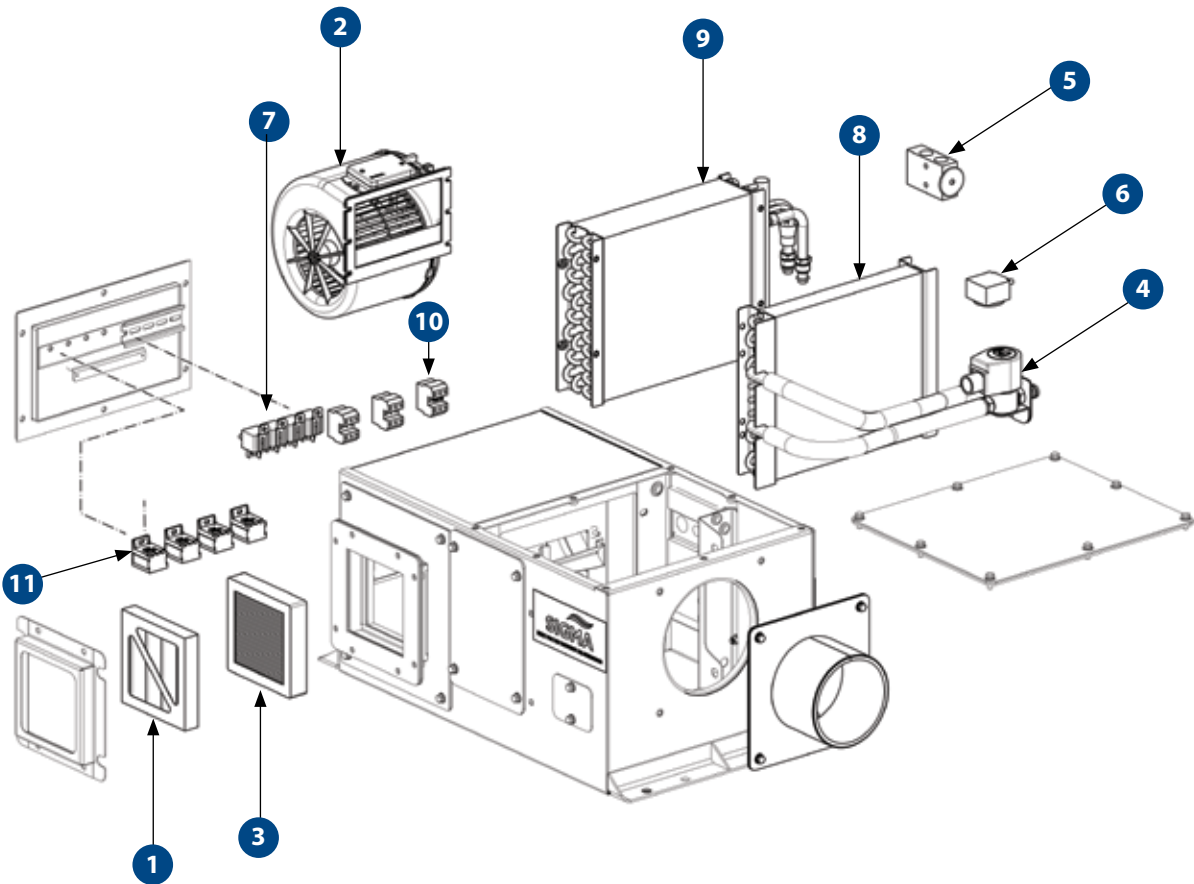


TFF5

FLOOR MOUNTED EVAPORATOR

TFF5BX1
Floor Mounted Evaporator 5kW 24V with Heating (4kW) Solenoid Valve Front Mounted

TFF5BX2
Floor Mounted Evaporator 5kW 24V with Heating (4kW) Solenoid Valve Rear Mounted



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 AU4601021	FILTER PLEATED 30/30 130MM X 130MM X 22MM	1
2 AU4301014	FAN DECK	1
3 AU4601020	FILTER HEPA 95% EFF 130MM X 130MM X 27MM	1
4 UE057	SOLENOID VALVE 24VDC 1/4BSP WATER	1
5 H0081856	TX VALVE BLK PARKER 2T R134A	1
6 UE016	THERMOSTAT DEICE STUD	1
7 H0076255	RELAY 24V 40A-DIODE PROTECTED	4
8 AU1301002	HEATER COIL 250MM X 228MM X 33MM 2ROW	1
9 AU1201014	EVAPORATOR COIL 250MM X 228MM X 66MM 4ROW	1
10 AU635300	TERMINAL BLOCK SIE 8WA1011-3DH21	3
11 ERR023	RELAY BASE 5 PIN (PANEL MOUNT)	1
H0037067	FILTER - OPTIONAL	1
AU679519	CONTROLLER ELECTRICAL 24VDC DISPLAY	1
AU674003	DIODE P600M 1000V 6A	4
AU635485	END BRACKET KLIPPON EW35 038356	2
UC020	HOSE CLEAR PVC 12 5MM ID X 3MM W	2

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	5.0 kW	17060 BTU
Heating Capacity	4.0 kW	13648 BTU
Fan Speeds	3	3
Air Flow	125 l/s	265 CFM
Fresh Air	10 l/s	21 CFM
Power Supply	24V	24V
Current Draw	20 A	20 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	54°C	129°F
Weight (nominal)	30.0 Kg	66.0 lbs
Technical Manual Reference	SM510-4044	SM510-4044
Dimension (L X W X H)	690mm X 441mm X 295mm	27.2in X 17.4in X 11.6 in

MAINTENANCE

MONTHLY / 400 HOURS	
AU4601021	FILTER PLEATED 30/30 130 X 130 X 22MM
H0037067	FILTER - OPTIONAL
ANNUAL /4,800 HOURS	
AU4301014	FAN DECK
AU4601020	FILTER HEPA 95% EFF 130MM X 130MM X 27MM
3 YEARS / 14,400 HOURS	
UE057	SOLENOID VALVE 24VDC 1/4BSP WATER
H0081856	TX VALVE BLK PARKER 2T R134A
UE016	THERMOSTAT DEICE STUD
H0076255	RELAY 24V 40A-DIODE PROTECTED
AU679519	CONTROLLER ELECTRICAL 24VDC DISPLAY

Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

COMPANION ITEMS

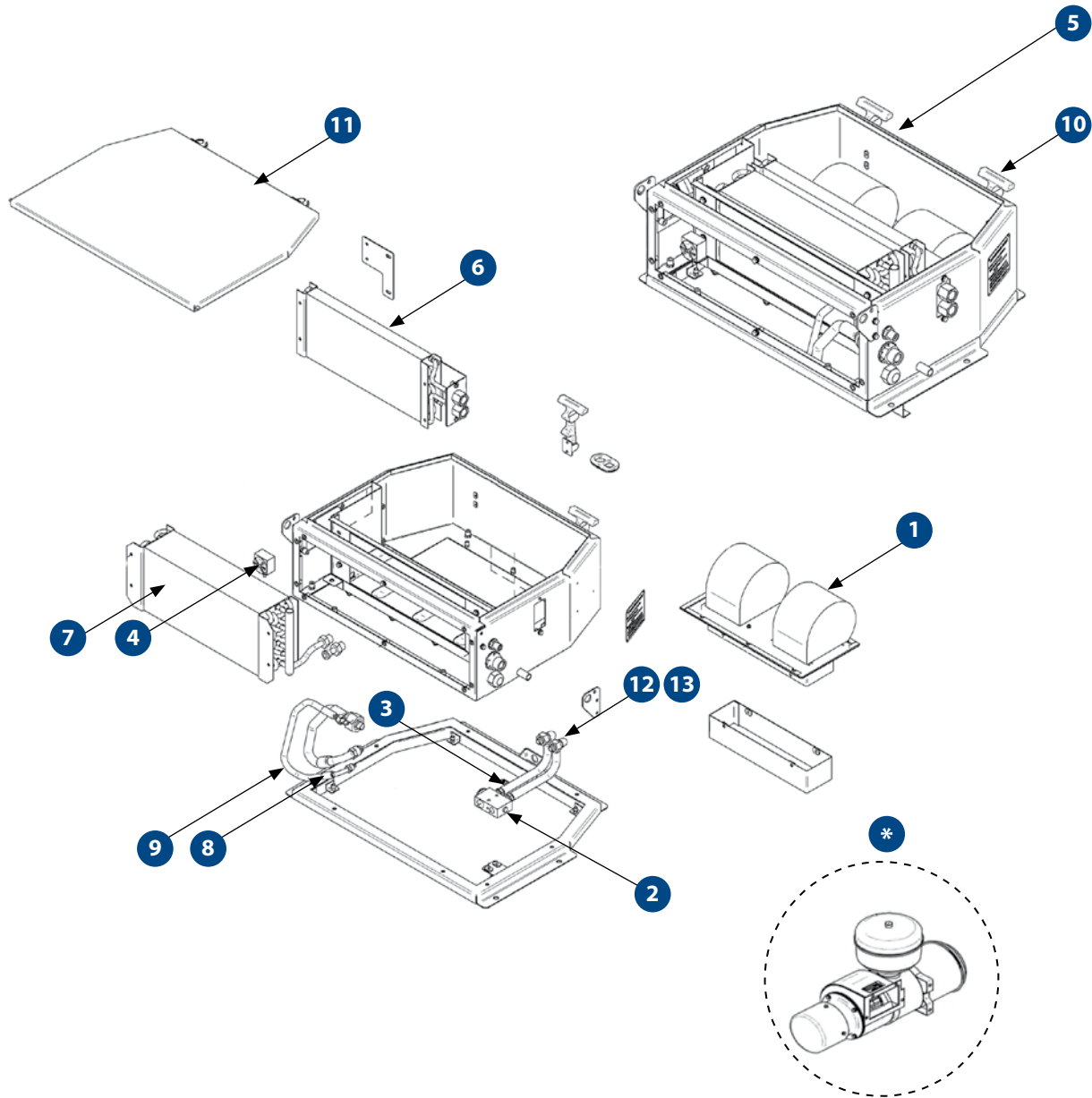
PART NO.	DESCRIPTION
TCW5BX1	Electric Condenser
TCW5BX2	Electric Condenser
EB9P4X	Pressuriser
HDC150	Hydraulic Compressor
AU2961001	Electric Compressor
AU270311	Engine Driven Compressor
AU270312	Engine Driven Compressor
H0081855	Receiver Drier
KNHV90043	TX Valve Fitting Kit
KNHV90044	R/A Box Duct Kit
AU531422	Receiver Drier
H0023631	Return Air Box - 6
AS4044301	Return Air Duct - 5



TFR6

ROOFTOP EVAPORATOR

TFR6BX3
Rooftop Evaporator 5kW 24V with Heating (4.5kW)



* SEE FVV50B3 (PAGE 37) FOR PRESSURISER SPARE PARTS AND MAINTENANCE

SPARE PARTS

PART NO.	DESCRIPTION	QTY
MC044S	RETURN AIR FILTER ASSEMBLY E&T SERIES	1
1 AU400051	FAN DECK 24V 3SPEED	1
2 AU521946	TX VALVE BLOCK 2T 3/8" IN 1/2" OUT R134A	1
3 AU523365	LOW PRESSURE SWITCH 1/4" FF 205kPa	1
4 UE016	THERMOSTAT DEICE STUD	1
5 AU862213	SEAL RUBBER	2
6 AU130024	HEATER COIL 376MM X 178MM X 32MM 2RW TFR6BX3	1
7 AU120853	EVAPORATOR COIL 376 X 178 X 95 6RW (TFR6BX3)	1
8 AS3337059	FLEXIBLE HOSE ASSEMBLY SUCTION TFR6	1
9 AS3337058	FLEXIBLE HOSE ASSEMBLY LIQUID LINE TFR6	1
10 AU851590	TOGGLE CLAMP RUBBER	2
11 AS3337050	LID ASSEMBLY	1
12 AS3337056	PIPE ASSEMBLY TX TO EVAPORATOR SUCTION	1
13 AS3337057	PIPE ASSEMBLY TX TO EVAPORATOR DISCHARGE	1
UE057	VALVE SOLENOID 1/4" BSP 24VDC WATER	1
AU661487	RELAY 50A 24VDC 1 POLE	1
AU681925	THERMOSTAT 12-24VDC WITH SENSOR + POT	1
AU862217	SEAL EMKA	1
AU663563	ROTARY SWITCH	1
AU663569	ROTARY SWITCH 1 2 3 4 WITH DUST BOOT	1
AU641C107	CIRCUIT BREAKER 10A PUSH PULL	1
AU641065	CIRCUIT BREAKER 25A PUSH PULL	1
AU821707	DIFFUSER 196MM X 83MM PLASTIC	2
AU641C110	CIRCUIT BREAKER 15A PUSH PULL	1
AU641C111	CIRCUIT BREAKER 5A PUSH PULL	1
UC504	DRAIN NOZZLE 13MM	4
UC020	HOSE CLEAR PVC 12 5MM ID	6
AU681925	THERMOSTAT 12 - 24 VDC WITH SENSOR + POT	1
AU681926	POT 10K WITH PLUG	1
S3337060	CASE SEAL (TFR6BX3)	1

* SEE PVV50B3 (PAGE 37) FOR PRESSURISER SPARE PARTS AND MAINTENANCE

173 For more information email Sigma mid.aus@sigma-hvac.com

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	6.0 kW	20472 BTU
Heating Capacity	4.5 kW	15354 BTU
Fan Speeds	3	3
Air Flow	170 l/s	360 CFM
Fresh Air	30 l/s	64 CFM
Power Supply	24V	24V
Current Draw	13.5 / 27 A	13.5 / 27 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	54°C	129°F
Weight (nominal)	75.0 Kg	165.0 lbs
Technical Manual Reference	SM395-5000	SM395-5000
Dimension L X W X H	774mm X 600mm X 266mm	30.5in X 23.6in X 10.5in

MAINTENANCE

MONTHLY / 400 HOURS

MC044S RETURN AIR FILTER ASSEMBLY E&T SERIES

ANNUAL / 4,800 HOURS

AU400051 FAN DECK 24V 3SPEED

3 YEARS / 14,400 HOURS

AU521946 TX VALVE BLOCK 2T 3/8" IN 1/2" OUT R134A

AU523365 LOW PRESSURE SWITCH 1/4" FF 205kPa

UE016 THERMOSTAT DEICE STUD

AU661487 RELAY 50A 24V DC 1 POLE

UE057 VALVE SOLENOID 1/4" BSP 24VDC WATER

AU681925 THERMOSTAT 12-24VDC WITH SENSOR + POT

AU862213 SEAL RUBBER

AU862217 SEAL EMKA

Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

COMPANION ITEMS

PART NO.	DESCRIPTION
TCF7BX2	Electric Condenser
EB9P4X	Pressuriser
H0017479	Hydraulic Compressor
H0017481	Hydraulic Compressor
AU1102401	Radiator Condenser
AU270306	Engine Driven Compressor
AU270307	Engine Driven Compressor
AU2790311	Engine Driven Compressor
AU270312	Engine Driven Compressor
AU531422	Receiver Drier

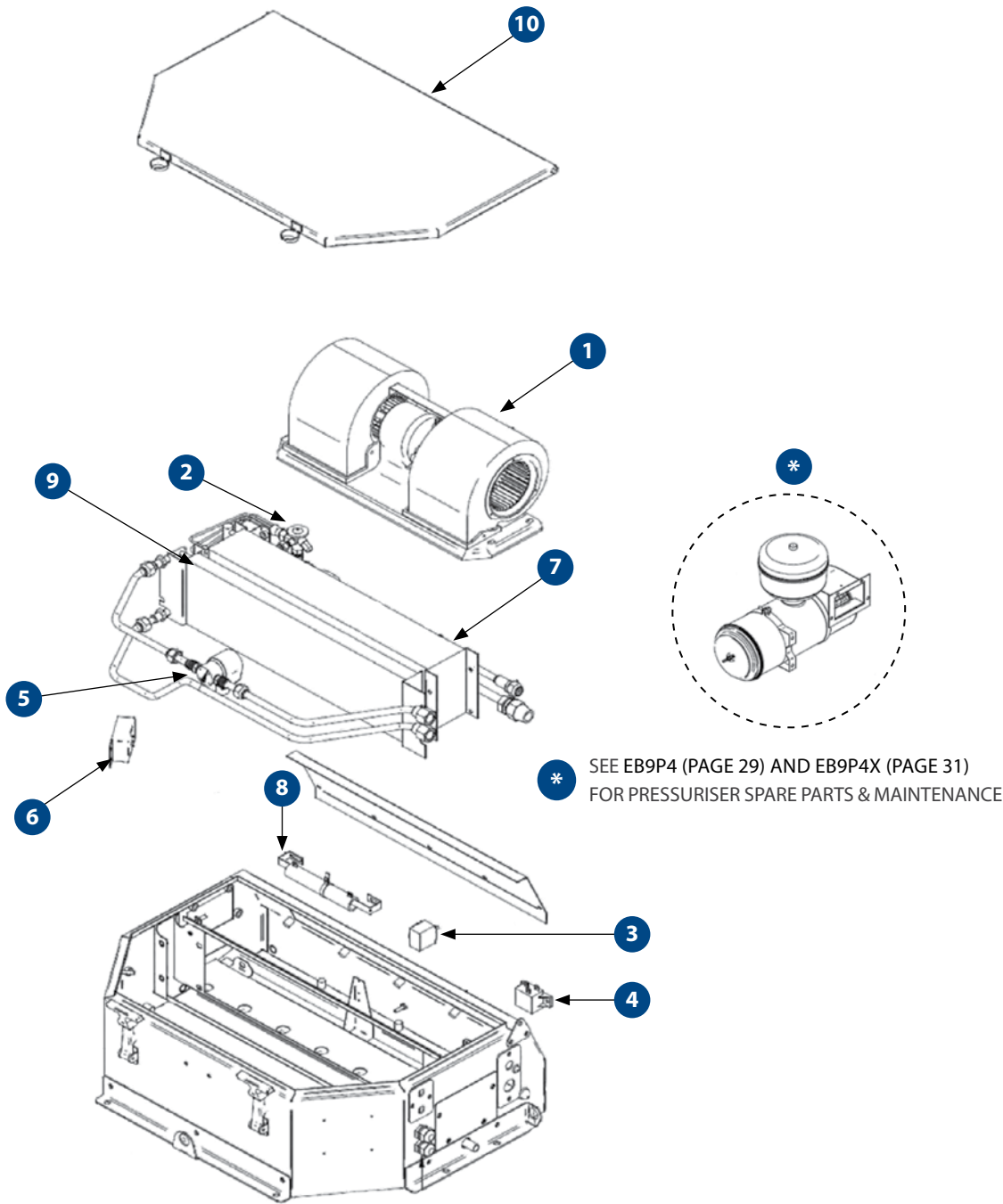
- DRAGLINE & SHOVEL
- DRILL
- EXCAVATOR
- DOZER
- TRUCK
- WHEEL LOADER
- CONSTRUCTION
- UNDERGROUND EQUIPMENT
- INDUSTRIAL
- SMELTERS
- RAIL SPECIAL VEHICLES



TFR7

ROOFTOP EVAPORATOR

TFR7BX2
Rooftop Evaporator 7kW 24V with Heating (6kW)



SPARE PARTS

PART NO.	DESCRIPTION	QTY
MC044S	RETURN AIR FILTER ASSEMBLY E&T SERIES	1
1 AS500037	SUPPLY FAN ASSEMBLY	1
AU320C053	MOTOR 3450-263 27VDC D/S	1
UF171	BLOWER 121D X 127W X 3/8" DI	2
UF173	BLOWER HOUSING LEFT HAND	1
UF174	BLOWER HOUSING RIGHT HAND	1
AU320028	MOTOR BRUSH KIT - ASSEMBLY + HOLDER	1
UF034	INLET RING 103.5MM	1
2 AU521509	TX VALVE 2T 3/8"IN 1/2" OUT 1/4" EQ R134A	1
AU521508	TX ORIFICE 2T R22 #06	1
3 UE016	THERMOSTAT DEICE STUD	1
4 AU661487	RELAY 50A 24VDC 1 POLE	1
5 UE057	VALVE SOLENOID 1/4" BSP 24VDC WATER	1
6 AU681925	THERMOSTAT 12-24VDC WITH SENSOR + POT	1
7 AU120954	EVAPORATOR COIL 570MM X 152MM X 95MM 6RW TDR6	1
8 AU692105	RESISTOR 2 OHM 100W 1 CLIPS ADJUSTABLE	1
9 AU130014	HEATER COIL 570 X 152 X 32 2RW TFR6BX2	1
10 AS247423	LID ASSEMBLY	1
AU862213	SEAL 1011-10 RUBBER	1
AU851590	TOGGLE CLAMP RUBBER	2
AU641065	CIRCUIT BREAKER 25A PUSH PULL	1
AU641C110	CIRCUIT BREAKER 15A PUSH PULL	1
AU821300	DIFFUSER ROUND 120MM POLYAMIDE	4
AU517505	VALVE ACCESS 1/4" 1/8" OD SOLDER	1
UC020	HOSE CLEAR PVC 12 5MM ID	6.00
UC504	DRAIN NOZZLE 13MM	4
AU523365	LOW PRESSURE SWITCH 1/4" FF 205kPa	1
AU663563	ROTARY SWITCH FAN	1
AU663569	ROTARY SWITCH MODE	1
AU681926	POT 10K WITH PLUG	1
*	SEE EB9P4 (PAGE 29) AND EB9P4X (PAGE 31) FOR PRESSURISER SPARE PARTS AND MAINTENANCE	

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	7.0 kW	23884 BTU
Heating Capacity	6.0 kW	20472 BTU
Fan Speeds	3	3
Air Flow	170 l/s	360 CFM
Fresh Air	30 l/s	64 CFM
Power Supply	24V	24V
Current Draw	13.5 A	13.5 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	54°C	129°F
Weight (nominal)	80.0 Kg	176.0 lbs
Technical Manual Reference	SM395-5000	SM395-5000
Dimension L X W X H	774mm X 600mm X 266mm	30.5in X 23.6in X 10.5in

MAINTENANCE

MONTHLY / 400 HOURS	
MC044S	RETURN AIR FILTER ASSEMBLY E&T SERIES
ANNUALLY / 4,800 HOURS	
AU320C053	MOTOR 3450-263 27VDC D/S
3 YEARS / 14,400 HOURS	
AU521509	TX VALVE 2T 3/8"IN 1/2"OUT 1/4"EQ R134A
AU521508	TX ORIFICE 2T R22 #06
UE016	THERMOSTAT DEICE STUD
AU661487	RELAY 50A 24VDC 1 POLE
UE057	VALVE SOLENOID 1/4" BSP 24VDC WATER
AU681925	THERMOSTAT 12-24VDC WITH SENSOR + POT
AU862213	SEAL EMKA 1011-10 RUBBER
Please contact SIGMA for more information including details on an overhaul scope and interval. Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.	

COMPANION ITEMS

PART NO.	DESCRIPTION
TCF7BX2	Electric Condenser
EB9P4X	Pressuriser
H0017479	Hydraulic Compressor
H0017481	Hydraulic Compressor
AU1102401	Radiator Condenser
AU270306	Engine Driven Compressor
AU270307	Engine Driven Compressor
AU2790311	Engine Driven Compressor
AU270312	Engine Driven Compressor
AU531411	Receiver Drier
AU531422	Receiver Drier
AU523655	HP Switch

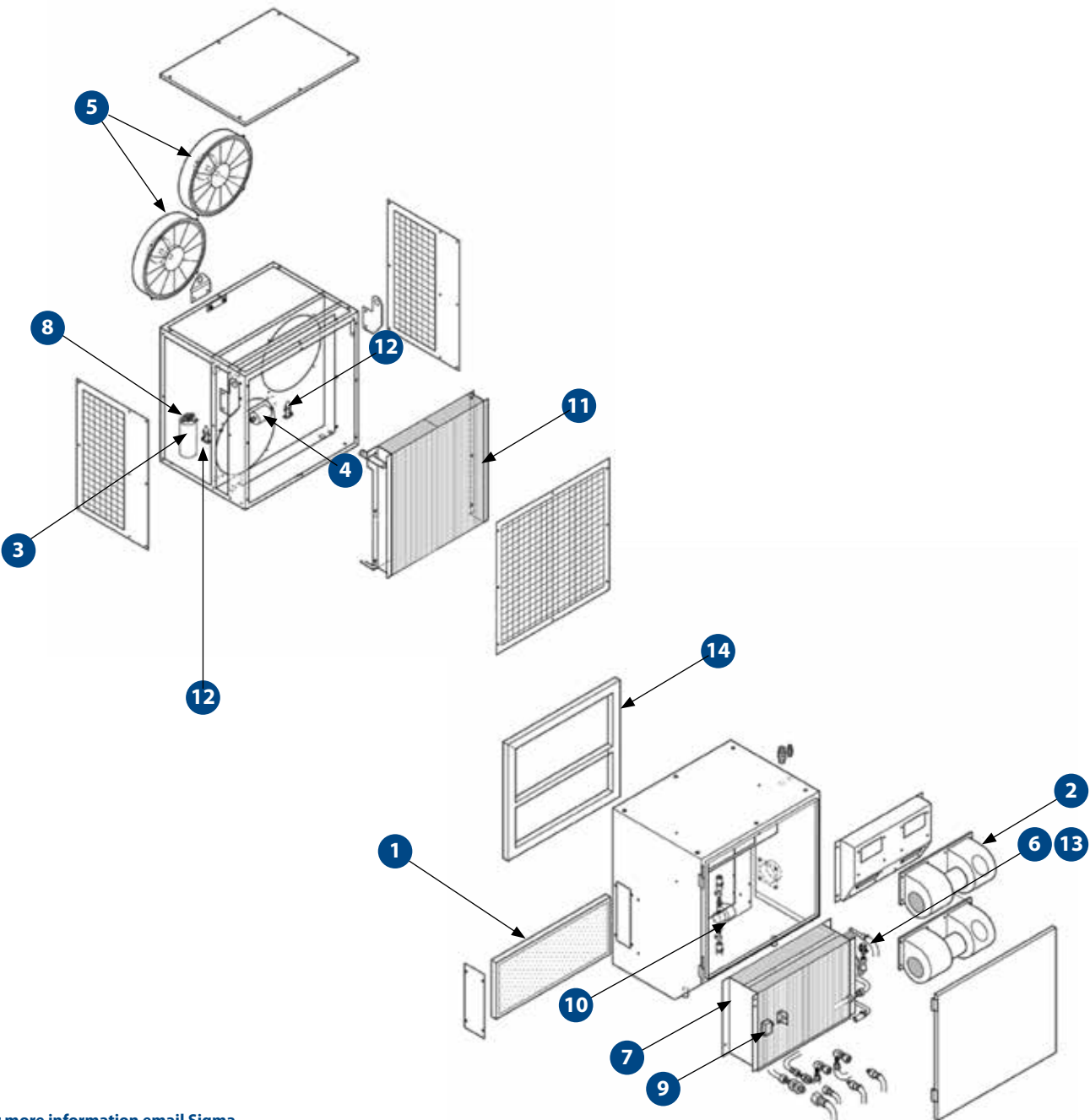


TPW8

WALL MOUNTED HVAC UNIT

TPW8BX1*
Wall Mount Packaged HVAC 8kW 24V with Heating (6kW)

* HVAC obsolete, spares support only



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 AU4601012	FILTER CARTRIDGE PLEAT 577MM X 250MM X 25MM RA	1
2 AU400051	FAN DECK 24V 3SPEED	2
3 AU531411	RECEIVER DRIER 3/8" 24UNF 165MM HIGH	1
4 AU531138	DRIER 3/8" MF	1
5 AU4301010	FAN AXIAL 24VDC 315MM	2
6 AU521509	TX VALVE 2T 3/8" IN 1/2" OUT 1/4" EQ R134A	1
7 AU1201008	EVAPORATOR+HEATER COIL 470MM X 332MM X 66MM +44	1
8 UE064	DPC 1/4" MF HIGH PRESSURE 2206kPa LOW PRESSURE 196kPa	1
9 UE016	THERMOSTAT DEICE STUD	1
10 UE057	VALVE SOLENOID 1/4" BSP 24VDC WATER	1
11 AU1101013	CONDENSER COIL 490MM X 555MM X 66MM 4RW	1
12 AU517254	PCAV 3/8" SOLDER	2
13 AU521508	TX ORIFICE 2T R22 #06	1
14 AU8621003	SEAL CABIN SA & RA INTERFACE	1
AU230C012	VALVE 5/8 TUBE #10 R134A SUCTION	1
AU230C011	VALVE 1/2 TUBE #8 R134A DISCHARGE	1
AU5551003	HOSE ASSEMBLY - SUCTION	1
AU5551002	HOSE ASSEMBLY - DISCHARGE	1
AU862211	LID RUBBER SEAL	1.20

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	8.0 kW	27296 BTU
Heating Capacity	6.0 kW	20472 BTU
Fan Speeds	3	3
Air Flow	400 l/s	848 CFM
Fresh Air	30 l/s	64 CFM
Power Supply	24V	24V
Current Draw	35 A	35 A
Refrigerant	R134a	R134a
Maximum Ambient Temperature	54°C	129°F
Weight (nominal)	110.0 Kg	242.0 lbs
Dimension L X W X H	1300mm X 500mm X 465mm	51.2in X 19.7in X 18.3in

MAINTENANCE

MONTHLY / 400 HOURS

AU4601012 FILTER CARD PLEAT 577MM X 250MM X 25MM RA

ANNUAL / 4,800 HOURS

AU400051 FAN DECK 24V 3SPEED
AU531411 RECEIVER DRIER 3/8" 24UNF 165MM HIGH
AU531138 DRIER 3/8" MF
AU4301010 FAN AXIAL 24VDC 315MM

3 YEARS / 14,400 HOURS

AU521508 TX ORIFICE 2T R22 #06
AU521509 TX VALVE 2T 3/8" IN 1/2" OUT 1/4" EQ R134A
UE064 DPC 1/4" MF HIGH PRESSURE 2206kPa LOW PRESSURE 196kPa
UE016 THERMOSTAT DEICE STUD
UE057 VALVE SOLENOID 1/4" BSP 24VDC WATER

Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

COMPANION ITEMS

PART NO.	DESCRIPTION
EB9P4X	Pressuriser
H0017489	Hydraulic Compressor
H0017493	Hydraulic Compressor
AU270314	Engine Driven Compressor

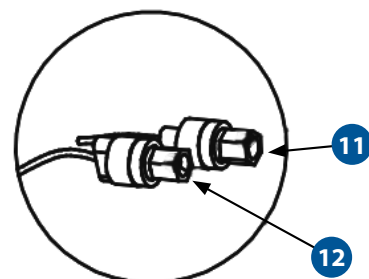
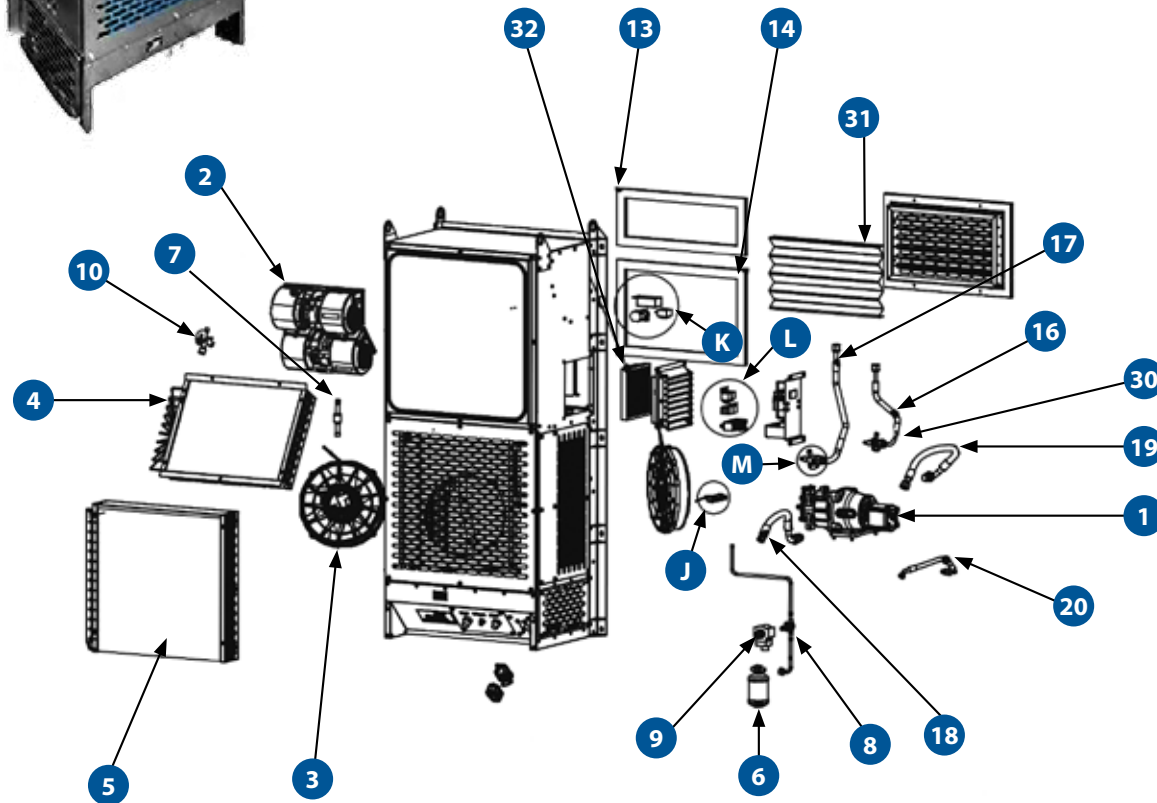


TPW10BX1

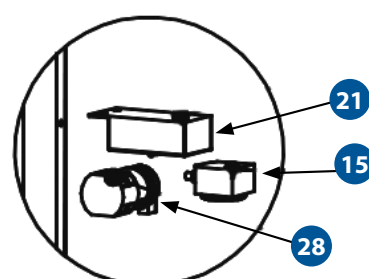
WALL MOUNT PACKAGED UNIT

H0145650

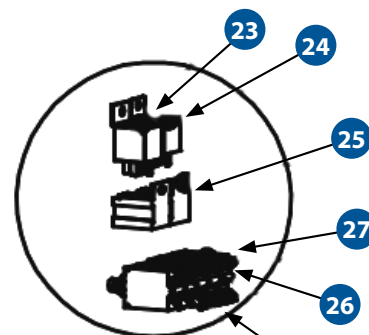
Wall Mount Packaged HVAC10kW 24V without heating



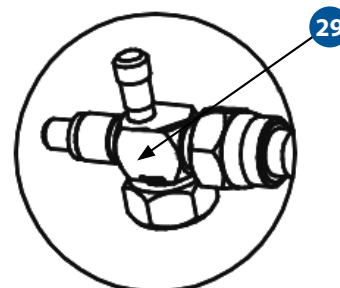
DETAIL J



DETAIL K



DETAIL L



DETAIL M

SPARE PARTS

PART NO.	DESCRIPTION	QTY
1	H0017489 COMPRESSOR, FLEX COUPLING, HOUSING HYD MOTOR ASSEMBLY	1
2	H0156797 EVAPORATOR FAN ASSEMBLY	2
3	H0156798 CONDENSER FAN ASSEMBLY	1
4	H0139217 EVAPORATOR COIL	1
5	H0139972 CONDENSER COIL	1
6	AU531411 RECEIVER DRIER 3/8" 24UNF 165MM HIGH	1
7	654D003 CHECK VALVE	1
8	654098 SOLENOID VALVE BODY	1
9	AU668140 SOLENOID VALVE COIL	1
10	AU521537 TX VALVE	1
11	H0156794 HIGH PRESSURE SWITCH	1
12	H0156795 LOW PRESSURE SWITCH	1
13	H0139910 SEALING RUBBER SUPPLY AIR	1
14	H0139909 SEALING RUBBER RETURN AIR	1
15	UE016 THERMOSTAT DEICE STUD	1
16	H0141844 DISCHARGE REFRIGERANT HOSE	1
17	H0141843 SUCTION REFRIGERANT HOSE	1
18	H0173490 PRESSURE OIL HOSE	1
19	H0173492 RETURN OIL HOSE	1
20	H0141060 DRAIN OIL HOSE	1
21	AU681925 THERMOSTAT 12-24VDC WITH SENSOR+POT	1
22	AU641065 CIRCUIT BREAKER 25A PUSH PULL	1
23	AU661484 RELAY 20A 24VDC 5 PIN CHANGEOVER	1
24	AU661483 RELAY 20A 24VDC 5 PIN	1
25	ERR023 RELAY BASE 5 PIN (PANEL MOUNT)	1
26	AU641C107 CIRCUIT BREAKER 10A PUSH PULL	1
27	AU641C110 CIRCUIT BREAKER 15A PUSH PULL	1
28	H0143675 SELECTOR SWITCH	1
29	AU230C012 VALVE 5/8 TUBE #10 R134a SUCTION	1
30	AU230C011 VALVE 1/2 TUBE #8 R134a DISCHARGE	1
31	H0143292 RETURN AIR FILTER MEDIA G3	1
32	H0142578 AIR FILTER ELEMENT	1

SPECIFICATIONS

	METRIC	IMPERIAL
Cooling Capacity	10.0 kW	34120 BTU
Fan Speeds	3	3
Air Flow	350 l/s	742 CFM
Fresh Air	100 l/s	212 CFM
Power Supply	24V	24V
Current Draw	43 A	43 A
Refrigerant	R134a	R134a
Minimum Ambient Temperature	25°C	77°F
Maximum Ambient Temperature	54°C	129°F
Weight (nominal)	160.0 Kg	352.7.0 lbs
Technical Manual Reference	HD0030589	HD0030589
Dimension (L X W X H)	770mm X 500mm X 1550mm	30.3in X 19.7in X 61.0in

MAINTENANCE

3 MONTHS / 500 HOURS

H0142578	AIR FILTER ELEMENT
H0143292	RETURN AIR FILTER MEDIA G3

ANNUAL / 2,000 HOURS

AU531411	RECEIVER DRIER 3/8" 24UNF 165MM HIGH
H0156797	EVAPORATOR FAN ASSEMBLY
H0156798	CONDENSER FAN ASSEMBLY

3 YEARS / 6,000 HOURS

AU230C011	VALVE 1/2 TUBE #8 R134a DISCHARGE
AU681925	THERMOSTAT 12-24VDC WITH SENSOR + POT
H0156794	HIGH PRESSURE SWITCH
H0156795	LOW PRESSURE SWITCH
UE016	THERMOSTAT DEICE STUD

Please contact SIGMA for more information including details on an overhaul scope and interval.
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

COMPANION ITEMS

PILOT CONTROL BOXES

OVERVIEW
PRESSURISERS
E SERIES
H SERIES
M SERIES
T SERIES
PILOT CONTROL BOXES
SERVICABLE PARTS
UNDERSTANDING HVAC
POLICIES



MEWH1/MEWI1

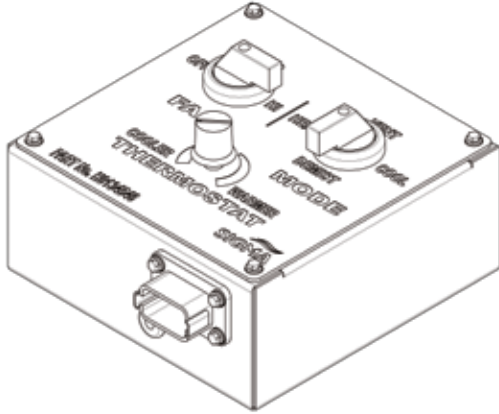
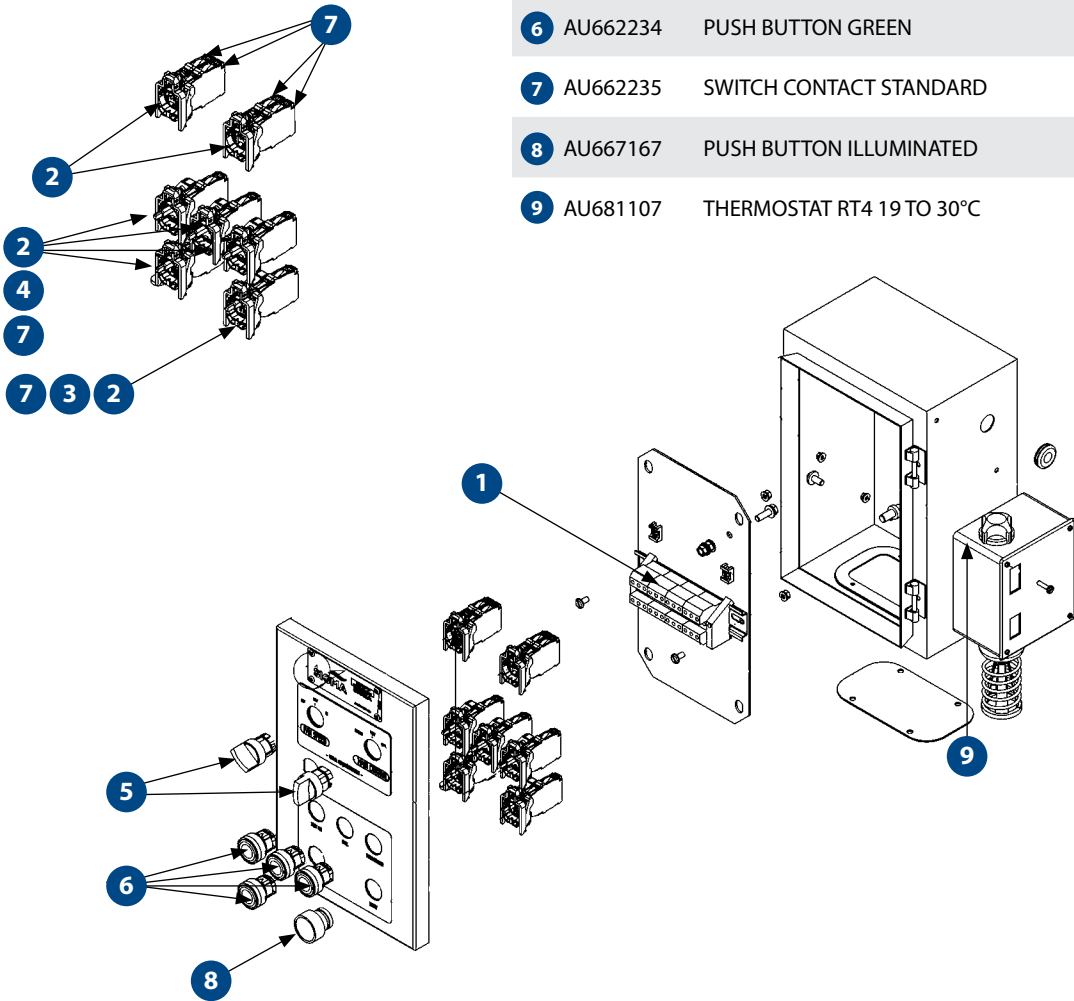
PILOT CONTROL BOX

MEWH1
Pilot Control Box M7 Series 110V

MEWI1
Pilot Control Box M20/25 Series 24V

SPARE PARTS

PART NO.	DESCRIPTION	QTY
1	AU635300 TERMINAL BLOCK	4
2	AU662230 PUSH BUTTON SWITCH BASE	7
3	AU665452 LED RED	1
4	AU665451 LED GREEN	4
5	AU662233 ROTARY SWITCH 3 WAY	2
6	AU662234 PUSH BUTTON GREEN	4
7	AU662235 SWITCH CONTACT STANDARD	9
8	AU667167 PUSH BUTTON ILLUMINATED	1
9	AU681107 THERMOSTAT RT4 19 TO 30°C	1

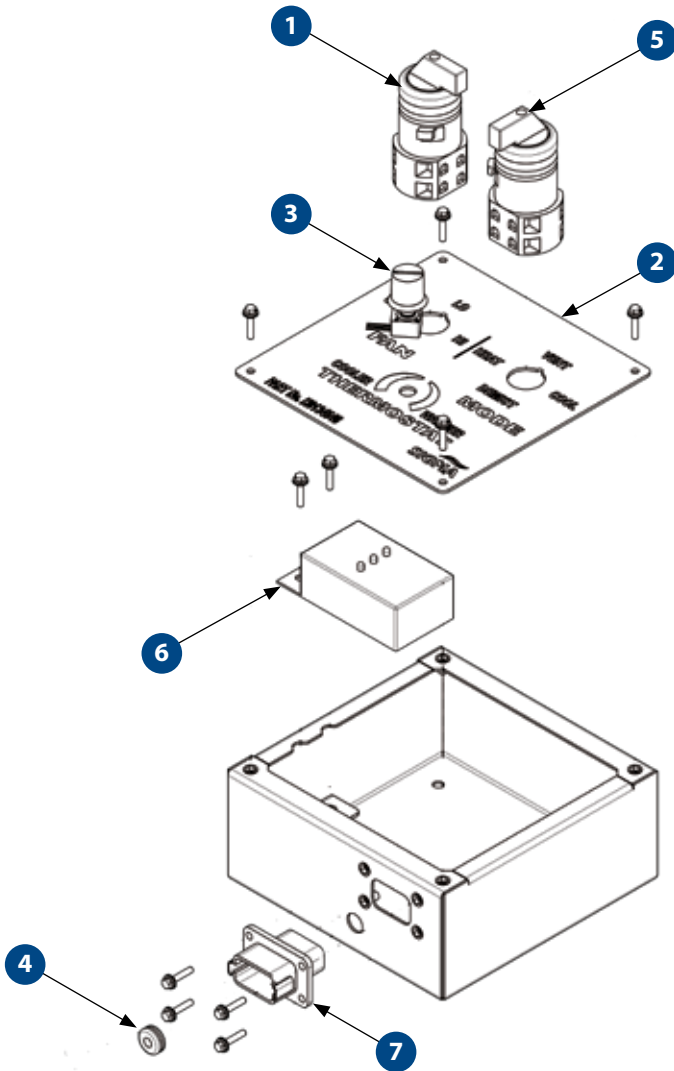


H0134546

MANUAL CONTROL BOX

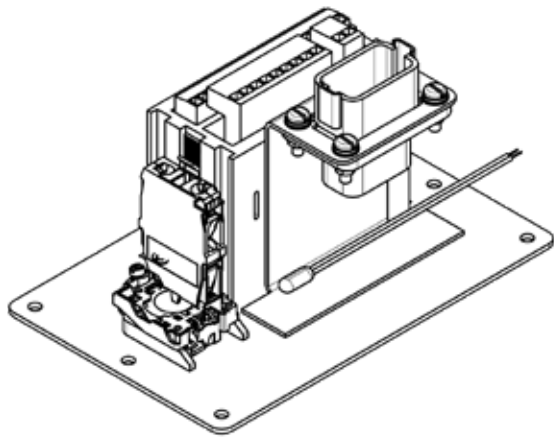
SPARE PARTS

PART NO.	DESCRIPTION	QTY
1	H0129836 ROTARY SWITCH 3 POSITION	1
2	H0134548 REMOTE CONTROL BOX LABEL COVER	1
3	AU681927 POTENTIOMETER	1
4	AU971036 GROMMET	1
5	AU663562 ROTARY SWITCH	1
6	AU681925 THERMOSTAT 12-24VDC WITH SENSOR + POT	1
7	AU632383 RECPT 12 PIN FLANGE + WEDGE	1



- DRAGLINE & SHOVEL
- DRILL
- EXCAVATOR
- DOZER
- TRUCK
- WHEEL LOADER
- CONSTRUCTION
- UNDERGROUND EQUIPMENT
- INDUSTRIAL
- SMELTERS
- RAIL SPECIAL VEHICLES

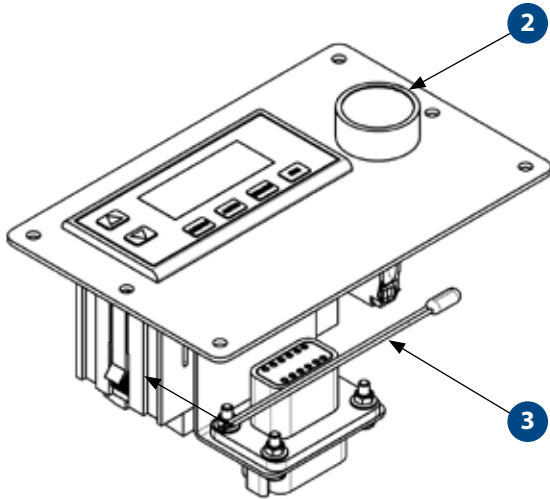
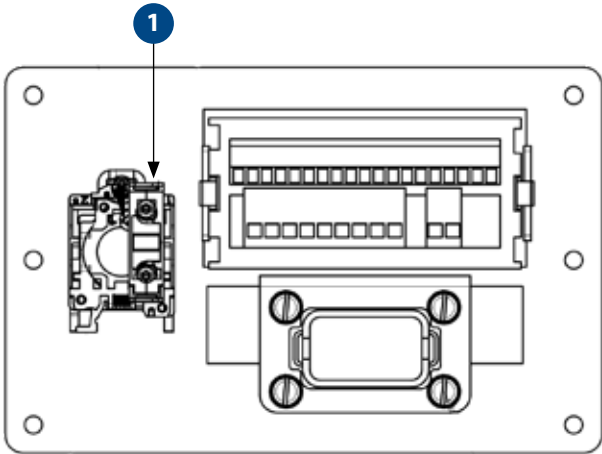
- DRAGLINE & SHOVEL
- DRILL
- EXCAVATOR
- DOZER
- TRUCK
- WHEEL LOADER
- CONSTRUCTION
- UNDERGROUND EQUIPMENT
- INDUSTRIAL
- SMELTERS
- RAIL SPECIAL VEHICLES



H0082302
ELECTRONIC CONTROL BOX

SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 AU662235	SWITCH CONTACT STANDARD	1
2 AU667167	PUSH BUTTON ILLUMINATED	1
3 AU6811015	THERMOSTAT SENSOR	1



SIGMA SERVICEABLE PARTS RANGE

SERVICEABLE PARTS

DRAGLINE & SHOVEL

DRILL

EXCAVATOR

DOZER

TRUCK

WHEEL LOADER

CONSTRUCTION

UNDERGROUND EQUIPMENT

INDUSTRIAL

SMELTERS

RAIL SPECIAL VEHICLES

OVERVIEW	
PRESSURISERS	
E SERIES	
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T SERIES	
PILOT CONTROL BOXES	
SERVICEABLE PARTS	
UNDERSTANDING HVAC	
POLICIES	

AIR GRILLE DIFFUSERS

PART NO.	DESCRIPTION	APPLICATIONS			
		E SERIES	M SERIES	T SERIES	PRESSURISER
AU821136	LOUVRE 646MM X 136MM		MPF5MZ4 MPF6MX10		
AU821300	DIFFUSER ROUND 120MM POLYAMIDE		MPV5MX2 MPR9MX1 (OPTIONAL)	TFR7BX2 TFC8BX1 TFC8BX2	
AU821301	DIFFUSER ROUND 75MM PLASTIC	EFF4BX1	MPW5MX1		
AU821704	DIFFUSER ROUND 92MM PVC	EB9EH2X EB9EH4X EB9EH4XSS EC64X EC64XSS EPR4AX1 EPR4BX1		TFC6BX1	
AU821707	DIFFUSER 196MM X 83MM PLASTIC	EFR4BX1		TFR6BX3	
AU821708	LOUVRE ROUND 3" HOLE	E122 E124 EC12H2 EC12H4 EC12H4SS EC12I2 EC12I4 EC22H2 EC22H4 EFR4BX1			
S2501107	DIFFUSER 252MM X 62MM	E122 E124			
UC342	DIFFUSER 500MM X 200MM OPEN AREA DOUBLE DEFLECTION		MPR7MX1 MPR7MZ1 MPR9MX1 MPR15MX1 MPR20MX1 MPR25MX1		
UC901	DIFFUSER 246MM X 104MM			TCF6BX2 TDR7BX1 TDR7BX2 TDR10BX1 TDR10BX2 TFC6BX1 TFC8BX1 TFC8BX2	

BLOWER WHEELS

PART NO.	DESCRIPTION	APPLICATIONS			
		E SERIES	M SERIES	T SERIES	PRESSURISER
AU400050	BLOWER ASSEMBLY	EPR4AX1			
AU410105	BLOWER 120D X 178W X 3/8 CW DI			TDR10BX1 TDR10BX2 TFC8BX1 TFC8BX2	
AU410130	BLOWER 250D X 242W X 19MM CW DI		MPR7MX1 MPR7MZ1 MPR15MX1 MPR20MX1 MPR25MX1		
AU410337	BLOWER 120D X 89W X 5/8 CCW SI				EB9P2 EB9P4 EB9P2X EB9P4X EB9P4XL PVV50B2 FVV50B4 PVV50B2
AU410520	BLOWER 178D X 102W X 19MM				FVV100MR1 PVV50M2
AU410525	BLOWER 178D X 76W X 19MM CCW SI				FVV80MR1
AU410605	BLOWER 120D X 89W X 5/16" CW SI				FVV50B3
AU410606	BLOWER 120D X 89W X 14MM CW SI				FVV50M1
UF017	BLOWER 121D X 76W X 3/8" CCW SI	EB9EH2X EB9EH4X EB9EH4XSS			
UF018	BLOWER 121D X 76W X 3/8" CW SI	EB9EH2X EB9EH4X EB9EH4XSS			
UF048	BLOWER 108D X 104W X DI			TFC6BX1	
UF171	BLOWER 121D X 127W X 3/8" DI	EC64X EC64XSS		TDR7BX1 TDR7BX2 TFR7BX2	

BRUSHES

PART NO.	DESCRIPTION	APPLICATIONS			
		E SERIES	M SERIES	T SERIES	PRESSURISER
AU320028	BRUSH KIT MOTOR - ASSEMBLY + HOLDER	EB9C2X EB9C4X			FVV50B3 FVV50B4
AU320621	BRUSH SET FOR MOTOR 24VDC EACH	EB9EH2X EB9EH4X EB9EH4XSS EC64X EC64XSS		TCF7BX1 TCF7BX2 TDR7BX1 TDR7BX2 TFC6BX1	
AU320622	BRUSH MOTOR 24VDC EACH HEAVY DUTY			TCF8BX1 TCF8BX2 TFC8BX1 TFC8BX2	

COMPRESSORS

PART NO.	DESCRIPTION	APPLICATIONS				
		E SERIES	H SERIES	M SERIES	T SERIES	PRESSURISER
652A2006	COMPRESSOR SCROLL ZR61			MPR9MX1		
AU200014	COMPRESSOR WITH 2 ELECTRIC UNLOADER			MPR20MX1 MPR25MX1		
AU200089	COMPRESSOR WITH PRESSURE UNLOADER			MPR15MX1		
AU230346	COMPRESSOR 246MM X 200MM X 372MM 3 PHASE ROTALOK			MPF6MX10		
AU230806	COMPRESSOR 400VAC 50Hz 460VAC 60Hz			MPV5MX1 MPV5MX2 MPW5MX1		
AU260201	COMPRESSOR 400VAC 50Hz			MPR7MX1		
AU260205	COMPRESSOR 400VAC 50Hz			MPF5MZ4 MPR7MZ1		
AU270019E	COMPRESSOR VMO NO CLUTCH		HDC400		TDR10BX1 TDR10BX2	
H0017489	COMPRESSOR, FLEX COUPLING, HOUSING HYD MOTOR ASSEMBLY				TPW10BX1 (H0145650)	
H0304197	COMPRESSOR ASSEMBLY			MPW5MX1		

CONDENSER COILS

PART NO.	DESCRIPTION	APPLICATIONS			
		E SERIES	M SERIES	T SERIES	PRESSURISER
AS317841	CONDENSER COIL ASSEMBLY M25		MPR25MX1		
AS500625	CONDENSER COIL ASSEMBLY EC6	EC64X EC64XSS			
AU110009	CONDENSER COIL 946MM X 203MM X 132MM 6RW			TCF8BX1 TCF8BX2 TCF7BX1 TCF7BX2	
AU110029	CONDENSER COIL 600MM X 229MM X 123MM 6RW			TCF7BX1 TDR7BX2 TCF7BX2	
AU110036	CONDENSER COIL 650MM X 533MM X 66MM 4RW			TDR10BX1 TDR10BX2	
AU1101013	CONDENSER COIL 490MM X 555MM X 66MM 4RW			TPW8BX1	
AU110162	CONDENSER COIL 1135MM X 635MM X 132MM 6RW		MPR25MX1		
AU110312	CONDENSER COIL 390MM X 406MM X 66MM 3RW	EC12C2 EC12C4			
AU110316	CONDENSER COIL 390MM X 406MM X 66MM 3RW	EC12C2 EC12C4			
AU110336	CONDENSER COIL 735MM X 476MM X 110MM 4RW		MPR7MX1		
AU110338	CONDENSER COIL 735MM X 476MM X 110M 4RW		MPR7MZ1		
AU110388	CONDENSER COIL 770MM X 282MM X 70MM 4RW	EC22C2 EC22C4			
AU110389	CONDENSER COIL 770MM X 282MM X 70MM 4RW	EC22C4SS			
AU110397	CONDENSER COIL 540MM X 381MM X 79MM 5RW		MPV5MX1 MPW5MX1		
AU110415	CONDENSER COIL 485MM X 203MM X 79MM 5RW	EC122 EC224			
AU110428	CONDENSER COIL 1135MM X 635MM X 138MM 5R		MPR20MX1		
AU110429	CONDENSER COIL 600MM X 508MM X110MM 4RW		MPF5MZ4 MPF6MX10		
AU110631	CONDENSER COIL 600MM X 229MM X 132MM			TCF7BX1 TDR7BX1	
H0002358	CONDENSER COIL	EPR4AX1 EPR4BX1			
H0039196	CONDENSER COIL 600MM X 305MM X 66MM 4RW			TCW5BX1	
H0072613	CONDENSER COIL		MPR9MX1		
H0095147	CONDENSER COIL 600MM X 305MM X 66 4RW			TCW5BX2	
H0095176	CONDENSER COIL 650MM X 381MM x 66MM 4R			TCF6BX2 (H0095174)	
H0139972	CONDENSER COIL			TPW10BX1 (H0145650)	
UR039	CONDENSER COIL	EB9C2X EB9C4X			
UR267	CONDENSER COIL 1135MM X 635MM X 110MM 4RW		MPR15MX1		

DRIERS

PART NO.	DESCRIPTION	APPLICATIONS			
		E SERIES	H SERIES	M SERIES	T SERIES
658004A	INLINE DRIER			MPR9MX1	
AU531138	DRIER 3/8" MF				TCF8BX1 TCF8BX2 TDR10BX1 TDR10BX2 TPW8BX1
AU531356	DRIER 1/2" MF			MPR7MX1 MPR7MZ1	
AU531357	DRIER 3/8" MF				TCF7BX1 TCF7BX2 TDR7BX1 TDR7BX2
AU531358	DRIER 5/8" MF			MPF5MZ4 MPF6XM10 MPR15MX1 MPR20MX1 MPR25MX1	
AU531411	RECEIVER DRIER 3/8" 24UNF165MM HIGH	EB9C2X EB9C4X EC64	HDC400		TCF7BX1 TCF7BX2 TCF8BX1 TCF8BX2 TDR7BX1 TDR7BX2 TDR10BX1 TDR10BX2 TPW8BX1 TPW10BX1
AU531415	RECEIVER DRIER 3/8" MF 193MM HIGH			MPV5MX1 MPV5MX2 MPW5MX1	
AU531422	RECEIVER DRIER 3/8" MIOR 160MM HIGH	EC122 EC124 EPR4AX1 EPR4BX1 EC122			TCFBX2 (H0095174)

EVAPORATOR COILS

PART NO.	DESCRIPTION	APPLICATIONS			
		E SERIES	M SERIES	T SERIES	PRESSURISER
AU120015	EVAPORATOR COIL 796MM X 191MM X 165MM 6RW		MPR7MZ1		
AU120036	EVAPORATOR COIL 570MM X 305MM X 83MM			TRD10BX1 TDR10BX2	
AU1201008	EVAPORATOR + HEATER COIL 470MM X 332MM 66MM + 44MM			TPW8BX1	
AU1201012	EVAPORATOR + HEATER COIL 250MM X 190MM X 66MM + 33MM	EFF4BX1			
AU1201014	EVAPORATOR COIL 250MM X 228MM X 66MM			TFF5BX1 TFF5BX2	
AU120161	EVAPORATOR COIL 990MM X 381MM X 132MM 6RW		MPR25MX1		
AU120284	EVAPORATOR COIL 610MM X 318MM X 110MM 4RW		MPF6MX10 MPF5MZ4		
AU120394	EVAPORATOR COIL 864MM X 166MM X 95MM 4RW			TFC8BX1 TFC8BX2	
AU120465	EVAPORATOR COIL 345MM X 152MM X 79MM 4RW	EC122 EC224			
AU120480	EVAPORATOR COIL 345MM X 152MM X 79MM 4RW	EC12H2 EC12H4 EC12I2 EC12I4 EFR4BX1			
AU120484	EVAPORATOR COIL 990MM X 381MM X 137MM 5RW		MPR20MX1		
AU120492	EVAPORATOR COIL 380MM X 381MM X 88MM 4RW		MPV5MX1 MPV5MX2 MPW5MX1		
AU120506	EVAPORATOR COIL 345MM X 152MM X 79MM	EC12H4SS			
AU120603	EVAPORATOR+HEATER COIL 600MM X 153MM 79MM + 33			TFC6BX1	
AU120660	EVAPORATOR COIL 600MM X 152MM X 63MM 4RW	EC22H2 EC22H4			
AU120853	EVAPORATOR COIL 376MM X 178MM X 95MM 6RW			TFR6BX3	
AU120954	EVAPORATOR COIL 570MM X 152MM X 95MM 6RW			TFR7BX2 TDR7BX1 TDR7BX2	
AU668140	COIL SOLENOID 24VDC TYPE 1		MPW5MX1	TDR10BX1 TDR10BX2 TPW10BX1	
H0032385	EVAPORATOR HEATER COIL	EPR4AX1 EPR4BX1			
H0070297	EVAPORATOR COIL 686MM X 381MM X 88MM		MPR9MX1		
H0092745	EVAPORATOR COIL 416MM X 178MM X 95MM	EFF5BX3			
H0094351	EVAPORATOR + HEATER COIL 600MM x 133MM X 99MM + 33MM			TFC6BX2 (H0094278)	
H0139217	EVAPORATOR COIL			TPW10BX1 (H0145650)	
UR145	EVAPORATOR COIL 356MM X 178MM X 92MM 5RW	EB9EH2X EB9EH4X EC12H4SS			
UR268	EVAPORATOR COIL 990MM X 318MM X 137MM 5RW		MPR15MX1		
UR524	EVAPORATOR COIL 796MM X 191MM X165MM 8RW		MPR7MX1		

FAN ASSEMBLIES - CONDENSER

PART NO.	DESCRIPTION	APPLICATIONS			
		E SERIES	M SERIES	T SERIES	PRESSURISER
AS5000170	CONDENSER FAN ASSEMBLY 24V			TDR7BX1 TDR7BX1 TCF7BX1 TCF7BX2	
AU420050	FAN AXIAL ASSEMBLY 260MM 12VDC	EC22C2			
AU420051	FAN AXIAL ASSEMBLY 260MM 24VDC	EC22C4			
AU420052	FAN AXIAL ASSEMBLY 330MM 12VDC	EC122			
AU420053	FAN AXIAL ASSEMBLY 330MM 24VDC	EC124			
AU420063	FAN AXIAL ASSEMBLY 400MM 24VDC	EC12C4			
AU420064	FAN AXIAL ASSEMBLY 400MM 12VDC	EC12C2			
AU4201004	FAN AXIAL 400MM 400VAC		MPV5MX2 MPW5MX1		
AU421019	FAN AXIAL 400MM 400VAC 50Hz		MPV5MX1		
AU4301010	FAN AXIAL 24VDC 315MM			TPW8BX1	
H0051777	FAN AXIAL ASSEMBLY 280MM 24VDC			TCW5BX1 TCW5BX2	
H0088425	FAN ASSEMBLY - 24VDC 280M	EPR4BX1			
H0097521	FAN ASSEMBLY - 12VDC 280M	EPR4AX1			
H0144118	CONDENSER FAN ASSEMBLY			TCF6BX2 (H0095174)	
H0156798	CONDENSER FAN ASSEMBLY			TPW10BX1 (H0145650)	

FAN ASSEMBLIES - EVAPORATOR

PART NO.	DESCRIPTION	APPLICATIONS			
		E SERIES	M SERIES	T SERIES	PRESSURISER
AS271531	SUPPLY FAN ASSEMBLY			TFC8BX1 TFC8BX2	
AS500037	SUPPLY AIR FAN ASSEMBLY			TFR7BX2	
AS5000224	EVAPORATOR FAN ASSEMBLY 24V			TDR7BX1 TDR7BX2	
AU400034	FAN DECK 24V 3SPEED	EC124 EC12H4 EC12H4SS EC12I4 EC22H4 EFR4BX1			
AU400035	FAN DECK 12V 3SPEED	EC122 EC12H2 EC12I2 EC22H2			
AU400050	BLOWER ASSEMBLY 3 SPEED 12V	EPR4AX1			
AU400051	FAN DECK 24V 3SPEED	EFF4BX3		TFR6BX3 TPW8BX1	
AU4001001	FAN DECK 24V 3SPEED	EFF4BX1			
AU410503	SUPPLY FAN ASSEMBLY		MPF5MZ4 MPF6MX10		
AU411041	BLOWER IMPELLER 318D		MPV5MX1 MPV5MX2		
AU4301014	FAN DECK		MPF5MZ4 MPF6MX10	TFF5BX1 TFF5BX2	
H0023291	BLOWER IMPELLER 307D		MPW5MX1		
H0082201	BLOWER EVAPORATOR		MPR9MX1		
H0088451	BLOWER ASSEMBLY	EPR4BX1		TFC6BX2 (H0094278)	

FAN BLADES - CONDENSER

PART NO.	DESCRIPTION	APPLICATIONS			
		E SERIES	M SERIES	T SERIES	PRESSURISER
AU420020	FAN AXIAL 203MM CW 5 BLADES	EB9C2X EB9C4X			
AU420157	FAN AXIAL 450MM 9 BLADES		MPR7MZ1 MPR9MX1		
AU420227	FAN AXIAL 300MM 3 BLADES RA			TDR10BX1 TDR10BX2	
AU420229	FAN AXIAL 300MM 3 BLADES LB			TCF7BX1 TCF7BX2 TCF8BX1 TCF8BX2 TDR7BX1 TDR7BX2	
AU420252	FAN AXIAL 400MM 9 BLADES		MPF5MZ4 MPF6MX10		
AU420277	FAN AXIAL 560MM 9 BLADES		MPR20MX1 MPR25MX1		
UF076	FAN AXIAL 560MM 10 BLADES		MPR15MX1		
UF125	FAN AXIAL 450MM 8 BLADES		MPR7MX1		

FILTERS

PART NO.	DESCRIPTION	APPLICATIONS			
		E SERIES	M SERIES	T SERIES	PRESSURISER
AS2134155S	RETURN AIR FILTER ASSEMBLY		MPR9MX1(OPT) MPR7MX1 MPR7MZ1		
AS242745	RETURN AIR FILTER ASSEMBLY		MPF5MZ4 MPF6MX10		
AS271535S	RETURN AIR FILTER ASSEMBLY			TFC8BX1 TFC8BX2	
AS3754056	RETURN AIR FILTER ASSEMBLY			TDR10BX1 TDR10BX2	
AS502003	RETURN AIR FILTER			TFC6BX2	
AS502003S	RETURN AIR FILTER TFC6			TFC6BX1	
AS503103S	RETURN AIR FILTER 477MM X 312MM M15		MPR15MX1 MPR20MX1 MPR25MX1		
AS534142	RETURN AIR FILTER ASSEMBLY		MPV5MX1		
AU460080	FILTER CARTRIDGE ENDURANCE				FVV50B FVV50K PVV50B2
AU460081	FILTER CARTRIDGE ENDURANCE				FVV100MR1 FVV80MR1 PVV50M2
AU460082	FILTER CARTRIDGE ENDURANCE				EB9P4XL
AU460083	FILTER CARTRIDGE ENDURANCE				EB92PX EB9P4X
AU4601005	FILTER		MPV5MX2		
AU460706	FILTER ASSEMBLY ROUND 133MM - STANDARD				FVV50M1
AU4601005	FILTER CARTRIDGE PLEAT 356MM X 305MM X 25MM		MPV5MX2		
AU4601012	FILTER CARTRIDGE PLEAT 577MM X 250MM X 25MM RA			TPW8BX1	
AU460706	FILTER ASSEMBLY ROUND 133MM - STANDARD				EB9P2 EB9P4 FVV50B3 FVV50B4 FVV50M1 PVV50B2
AU460734	FILTER ELEMENT SUIT FVV80 & FVV100				FVV100MR1 FVV80MR1 PVV50M2
AU460863	FILTER 305MM X 305MM X 149MM METAL CASE				PVV50B2 PVV50M2
H0028308	FILTER MEDIA 10MM - 330MM		MPW5MX1		
H0044908	RETURN AIR FILTER ASSEMBLY	EPR4			
H0082092	RETURN AIR FILTER (OPTION)		MPR9MX1		
H0093153	RETURN AIR FILTER	EFF5BX3			EFF5BX3
H0116835	FILTER 16 / 79ID X 206OD X 288H				FPS55 (H0111416) FPS55 (H0111417)
H0116836	FILTER 16 / 79ID X 206OD X 288H EN15695				FPS55 (H0111416) FPS55 (H0111417)
H0116837	FILTER 16 / 87ID X 273OB X 417H (H13 GRADE)				FPS955 (H0111418)
H0142578	AIR FILTER ELEMENT			TPW10BX1 (H0145650)	

FILTERScontinued

PART NO.	DESCRIPTION	APPLICATIONS			
		E SERIES	M SERIES	T SERIES	PRESSURISER
H0143292	RETURN AIR FILTER MEDIA G3			TPW10BX1 (H0145650)	
KNHV80005	ENDURANCE FILTER ELEMENT KIT				EB9P2X EB9P4X
MC0445	RETURN AIR FILTER ASSEMBLY	EC64X EC64XSS		TDR7BX1 TDR7BX2 TFR6BX3 TFR7BX2	

HEATER COILS

PART NO.	DESCRIPTION	APPLICATIONS			
		E SERIES	M SERIES	T SERIES	PRESSURISER
AU130002	HEATER COIL 570MM X 152MM X 32MM 2RW			TDR7BX1 TDR7BX2	
AU130009	HEATER COIL 864MM X 152MM X 32MM 2RW			TFC8BX1 TFC8BX2	
AU130014	HEATER COIL 570MM X 152MM X 32MM 2RW			TFR7BX2	
AU130024	HEATER COIL 376MM X 178MM X 32MM 2RW			TFR6BX3	
AU130036	HEATER COIL 570MM X 305MM X 33MM 2RW			TDR10BX1 TDR10BX2	
AU1301002	HEATER COIL 250MM X 228MM X 33MM 2RW			TFF5BX1	
H0092744	HEATER COIL 416MM X 178MM X 32MM 2 ROW	EFF5BX3			
UR037	HEATER COIL 354MM X 178MM X 32MM 2RW	EB9EH2X EB9EH4X EB9EH4XSS			

MOTORS

PART NO.	DESCRIPTION	APPLICATIONS			
		E SERIES	M SERIES	T SERIES	PRESSURISER
AU304150	MOTOR 0.55KW 415V 71 FL 2P				FVV50M1 FVV80 FVV100
AU310114	MOTOR 0.75KW 80 FT 4P		MPR7MX1		
AU310214	MOTOR 0.75KW 80P FT 4P		MPF6MX10		
AU310277	MOTOR 0.37/0.12KW 80B 4/6P		MPF5MZ4		
AU319032	MOTOR 0.55/0.18KW 90 FT 4/6P		MPR7MZ1		
AU319037	MOTOR 1.85/0.55KW 100L 4/6P		MPR20MX1 MPR25MX1		
AU320027	MOTOR 12V	EB9C2X			

MOTORScontinued

PART NO.	DESCRIPTION	APPLICATIONS				
		E SERIES	H SERIES	M SERIES	T SERIES	PRESSURISER
AU320032	MOTOR 0.15kW 71 FT 4P 24VDC S/S				TDR10BX1 TDR10BX2	
AU320033	MOTOR 0.37kW 71 FT 4P 24VDC D/S				TDR10BX1 TDR10BX2	
AU320C007	MOTOR 650 ESX 24VDC S/S				TFR6BX3 TDR7BX2	FVV50B3 FVV50B4
AU320C053	MOTOR 3450-263 27VDC D/S				TFR7BX2	
AU340000	MOTOR HYDRAULIC DRIVE 14CC		HDC400		TDR10BX1 TDR10BX2	
H0039230	MOTOR UE026 WITH UPGRADED BRUSH				TCF7BX1 TCF7BX2 TCF8BX1 TCF8BX2 TDR7BX2 TFC8BX1 TFC8BX2	
H0080329	MOTOR 1.1 / 0B7			MPR9MX1		
H0133898	220V MOTOR AND MOUNTING PLATE					FPS955 (H0111418)
H0133903	24V MOTOR W/ MOTOR MOUNTING PLATE					FPS55 (H0111417)
H0133904	12V MOTOR W/ MOTOR MOUNTING PLATE 1050					FPS55 (H0111416)
UE022	MOTOR 0.14W 12VDC D/S	EB9EH2X				
UE023	MOTOR 0.14W 24VDC D/S	EB9EH4X EC64X EC64XSS			TDR7BX1 TDR7BX2 TFC6BX1	
UE026	MOTOR 0.14W 24VDC S/S	EC64X EC64XSS			TCF7BX1 TCF7BX2 TCF8BX1 TCF8BX2 TDR7BX1 TDR7BX2 TFC8BX1	
UE048	BRUSH MOTOR 12VDC	EB9EH2X		MPR15MX1 MPR20MX1 MPR25MX1		
UE321	MOTOR 1.1/0.37kW 90L 4/6P D/S			MPR15MX1 MPR20MX1 MPR25MX1		
UE322	MOTOR 1.1/0.37kW 90L 4/6P FT			MPR15MX1 MPR7MX1 MPR7MZ1		
UE325	MOTOR 70W 24VDC PANCAKE			MPR9MX1	TFR7BX2	EB9P4 EB9P4X EB9P4XL PVV30B1 PVV50B2
UE327	MOTOR 70W 12VDC PANCAKE					EB9P2 EB9P2X
UE800	MOTOR 0.37kW BEEW FL 2900RPM					FVV50K1 FVV80MR1 FVV100K1

MOTOR CONTROLLERS BRUSHLESS

PART NO.	DESCRIPTION	APPLICATIONS				
		E SERIES	H SERIES	M SERIES	T SERIES	PRESSURISER
AU6761003	MOTOR CONTROLLER CONDENSER				TDR10BX1 TDR10BX2	
AU6761004	MOTOR CONTROLLER EVAPORATOR				TDR10BX1 TDR10BX2	

PRESSURE SWITCHES

PART NO.	DESCRIPTION	APPLICATIONS				
		E SERIES	H SERIES	M SERIES	T SERIES	PRESSURISER
AU523111	DUAL PRESSURE CONTROL LP AUTO HP MANUAL			MPR7MX1 MPR15MX1 MPR20MX1 MPR25MX1		
AU523112	DUAL PRESSURE CONTROL LP AUTO HP AUTO			MPF5MZ4 MPF6XM10 MPR9MX1 MPV5MX1 MPW5MX1		
AU523365	LOW PRESSURE SWITCH 1/4" FF 205kPa		HDC400	MPR9MX1	TDR7BX1 TDR7BX2 TDR10BX1 TDR10BX2 TFC6BX1 TFC8BX1 TFC8BX2 TFR6BX3 TFR7BX2	
AU523606	HP CONTROL AUTO			MPF5MZ4 MPR7MZ1 MPR20MX1 MPR25MX1		
AU523655	HIGH PRESSURE SWITCH 1/4" FF 2415kPa		HDC400	MPR9MX1	TCF7BX1 TCF7BX2 TCF8BX1 TCF8BX2 TDR10BX1 TDR10BX2 TDR7BX1 TDR7BX2	
H0148597	HIGH PRESSURE SWITCH ASSEMBLY				TFC6BX2 (H0095174)	
H0152017	LP SWITCH ASSEMBLY				TFC6BX2 (H0094278)	
H0156794	HP SWITCH				TPW10BX1 (H0145650)	
H0156795	LP SWITCH				TPW10BX1 (H0145650)	
UE064	DPC 1/4" MF HP 2206kPa LP 196kPa	EB9EH2X EB9EH4X EC12 EC22 EPR4			TPW8BX1	

PRE-CLEANER

PART NO.	DESCRIPTION	APPLICATIONS				
		E SERIES	H SERIES	M SERIES	T SERIES	PRESSURISER
AU460725	FILTER PRE-CLEANER 186MM					EB9P FVV50B3 FVV50B4 FVV50M1
AU460728	FILTER PRE-CLEANER 186MM FULL VIEW					FVV80MR1
AU460729	FILTER PRE-CLEANER 270MM					FVV100MR1 PVV50M2
AU460747	FILTER PRE-CLEANER 8.5" FULL VIEW					
AU460748	CENTRIFUGAL PRE-CLEANER					FPS55B (H0111416) (H0111417) FPS955 (H0111418)
AU460963	PRE CLEANER TS 3" INLET SMALL					EB9P2X EB9P4X EB9P4XL PVV50B2
AU460964	PRE-CLEANER 2.5" INLET SMALL					FVV50B3 FVV50B4 FVV50M1 FVV80MR1
AU460965	PRE CLEANER TS 3 INLET LARGE					FVV100MR1 (OPT)
AU460715	PRE CLEANER					

VALVES

PART NO.	DESCRIPTION	APPLICATIONS				
		E SERIES	H SERIES	M SERIES	T SERIES	PRESSURISER
654D003	CHECK VALVE					TPW10BX1 (H0145650)
654098	SOLENOID VALVE BODY					TPW10BX1 (H0145650)
AS3386351	VALVE SUCTION WITH FITTING M25			MPR20MX1 MPR25MX1		
AS3386352	VALVE DISCHARGE WITH FITTING M25			MPR20MX1 MPR25MX1		
AU200045	VALVE UNLOADER PRESSURE			MPR15MX1 MPR20MX1 MPR25MX1		
AU200061	VALVE UNLOADER ELECTRICAL			MPR15MX1 MPR20MX1 MPR25MX1		
AU200105	VALVE DISCHARGE 7/8"			MPR15MX1		
AU200109	VALVE SUCTION 1 1/8"			MPR15MX1		
AU200135	VALVE DISCHARGE GASKET 7/8"			MPR15MX1		
AU230644	VALVE SERVICE 5/8" WITH ACCESS PORT		HDC400		TDR10BX1 TDR10BX2 TPW8BX1	
AU230C011	VALVE 1/2 TUBE #8 R134A DISCHARGE		HDC400		TPW8BX1 TDR10BX2 TPW10BX1	
AU517004	VALVE 3/8" MF 2 WAY					
AU517202	PCAV 1/4" MF		HDC400			
AU517208	PCLV 5/8" MF			MPR15MX1 MPR20MX1 MPR25MX1		
AU517254	PCAV 3/8" SOLDER				TCF7BX1 TCF7BX2 TCF8BX1 TCF8BX2 TDR7BX1 TDR7BX2 TPW8BX1	

VALVES continued

PART NO.	DESCRIPTION	APPLICATIONS			
		E SERIES	H SERIES	M SERIES	T SERIES
AU517256	PCAV 1/2" SOLDER		MPR7MX1 MPR7MZ1 MPR9MX1		
AU517258	PCLV 5/8" SOLDER		MPF5MZ4 MPF6XM10		
AU517501	VALVE ACCESS 1/4" 60MM SHORT TAIL		MPF5MZ4 MPR20MX1 MPR25MX1 MPF5MZ4 MPR7MX1 MPR7MZ1 MPV5MX1		
AU230C012	VALVE 5/8 TUBE #10 R134a SUCTION				TPW10BX1 (H0145650)
AU517502	VALVE ACCESS 1/4" 1/4" & 3/8" OD SOLDER			MPF6MX10 MPF5MZ4 MPV5MX2 MPW5MX1	TDR7BX1 TDR7BX2 TDR10BX1 TDR10BX2 TFC6BX1 TFC8BX1 TFC8BX2
AU517505	VALVE ACCESS 1/4" 1/8" OD SOLDER				TCF7BX1 TCF7BX2 TCF8BX1 TCF8BX2 TFR7BX2
AU517507	VALVE ACCESS 1/4" 1/4" MNPT			MPR20MX1 MPR25MX1	
AU517622	VALVE CHECK 5/8" SOLDER STRAIGHT			MPR9MX1	
AU522000	SOLENOID VALVE CARTRIDGE SIZE 12		HDC400		TDR10BX2
AU522001	SOLENOID VALVE COIL		HDC400		TDR10BX2
AU522003	SOLENOID VALVE BODY SIZE 12 3/4" BSPP		HDC400		TDR10BX2
AU522021	SOLENOID VALVE 3/8" SOLDER NC			MPR9MX1 MPW5MX1	TDR10BX1 TDR10BX2
AU522042	SOLENOID VALVE 1/2" SOLDER NC			MPR7MX1 MPR7MZ1 MPR9MXZ	
AU522127	SOLENOID VALVE 200RB 5/8" SOLDER			MPR15MX1 MPR20MX1 MPR25MX1	
AU526015	VALVE HOT GAS BYPASS 1/2" ODS SLIMLINE			MPF5MZ4	
AU526030	VALVE HOT GAS BYPASS ANGLE 1/2" SOLDER			MPR7MZ1	
AU527126	RELIEF VALVE 3/8" MNPT x 2.7MPa			MPR15MX1 MPR20MX1 MPR25MX1 MPR7MX1 MPR7MZ1 MPR9MX1	
AU631452	PLUG SOLENOID VALVE COIL 24VDC		HDC400		
AU668140	COIL SOLENOID 24VDC TYPE 1			MPW5MX1	TDR10BX1 TDR10BX2
H0017184	VALVE SHUT OFF SUCTION			MPF5MZ4 MPR7MX1 MPR7MZ1	
H0017209	GASKET DISCHARGE VALVE			MPF5MZ4 MPR7MX1 MPR7MZ1	
H0017215	VALVE SHUT OFF DISCHARGE			MPF5MZ4 MPR7MX1 MPR7MZ1	
H0017217	GASKET SUCTION VALVE			MPF5MZ4 MPR7MX1 MPR7MZ1	

VALVEScontinued

PART NO.	DESCRIPTION	APPLICATIONS			
		E SERIES	M SERIES	T SERIES	PRESSURISER
UE057	VALVE SOLENOID 1/4" BSP 24VDC WATER			TDR7BX1 TDR7BX2 TDR10BX1 TDR10BX2 TFC6BX1 TFC8BX1 TFC8BX2 TFF5BX1 TFF5BX2 TFR6BX3 TFR7BX2 TPW8BX1	

THERMOSTATS

PART NO.	DESCRIPTION	APPLICATIONS			
		E SERIES	M SERIES	T SERIES	PRESSURISER
AU679519	CONTROLLER ELECTRICAL 24VDC DISPLAY		MER9 (ELEC OPT) MPR9 (ELEC OPT) MPW5MX1 MPR7MX1 MPR7MZ1 MPR15MX1 MPR20MX1 MPR25MX1 MPV5MX1 MPV5MX2 MPW5MX1	TFF5BX1 TFF5BX2	
AU681020	THERMOSTAT T5 50°C SPST N/C AUTO		MPR15MX1 MPR20MX1 MPR25MX1 MPV5MX1 MPV5MX2 MPW5MX1		
AU681107	THERMOSTAT 19 TO 30°C		MPR15MX1 MPR20MX1 MPR25MX1 MPR7MX1 MPR7MZ1		
H0152931	THERMOSTAT CONTROL KIT		MPF5MZ4 MPF6XM10		
AU681925	THERMOSTAT 12-24VDC WITH SENSOR + POT		MER9 (MANUAL OPT) MPR9 (MANUAL OPT)	TDR7BX1 TDR7BX2 TFC6BX1 TFC6BX2 (H0094278) TFC8BX1 TFC8BX2 TFR6BX3 TFR7BX2 TPW10BX1 TDR10BX1 TDR10BX2	
AU681960	THERMOSTAT DIGITAL 24V 2 STAGE			TDR7BX1 TDR7BX2 TDR10BX1 TDR10BX2 TFC6BX1 TFC6BX2 (H0094278) TFC8BX1 TFC8BX2 TFF5BX1 TFF5BX2 TFR6BX3 TFR7BX2 TPW8BX1 TPW10BX1	
UE016	THERMOSTAT DEICE STUD	EB9E EC12 EC12H EC12I EC22H EC64X EFF4 EFF5 EFR4 EPR4	MPR9MX1 MPW5MX1 MPV5MX2 MPV5MX1 MPW5MX1		
UE283	THERMOSTAT C28 0-100C MPV5		MPV5MX1		

TX VALVES

PART NO.	DESCRIPTION	APPLICATIONS			
		E SERIES	M SERIES	T SERIES	PRESSURISER
AS502038	LIQUID LINE - TX VALVE TO BULKHEAD			TFC6BX1	
AU521400	TX VALVE BODY 1/2" IN x 5/8" OUT 90 DEG		MPF5MZ4 MPR7MZ1		
AU521504	TX ORIFICE 2T R22 #04		MPV5MX1 MPV5MX2 MPW5MX1		
AU521505	TX ORIFICE 2T R22 #05		MPF6XM10 MPR7MX1	TFC6BX1	
AU521508	TX ORIFICE 2T R22 #06		MPR9MX1	TDR7BX1 TDR7BX2 TFC8BX1 TFC8BX2 TDR10BX1 TDR10BX2 TPW8BX1 TFR7BX2	
AU521509	TX VALVE 2T 3/8" IN 1/2" OUT 1/4" EQ R134A		MPF6MX10 MPR9MX1 MPR7MX1 MPV5MX1 MPV5MX2 MPW5MX1	TDR7BX1 TDR7BX2 TDR10BX1 TDR10BX2 TFC6BX1 TFC8BX1 TFC8BX2 TFR7BX2 TPW8BX1	
AU521511	TX TAT ELEM 5T R134a		MPR15MX1 MPR20MX1 MPR25MX1		
AU521512	TX VALVE 5T ANGLE 1/2"IN 5/8"OUT R134A		MPR15MX1 MPR20MX1 MPR25MX1		
AU521515	TX ORIFICE 5T R134A #04		MPR20MX1 MPR25MX1		
AU521537	TX VALVE			TPW10BX1 (H0145650)	
AU521589	TX VALVE CAGE R747		MPF5MZ4 MPR7MZ1		
AU521923	TX VALVE 1.5T 3/8" IN 1/2" OUT 1/4" EQ	EC64 EC64X EB9EH2X EB9EH4X			
AU521946	TX VALVE BLOCK 2T 3/8" IN 1/2" OUT R134A	EC22H2 EC22H4		TFC6BX2 (H0094278) TFR6BX3	
H0081856	TX VALVE BLK PARKER 2T R134A			TFF5BX1 TFF5BX2	
H0092214	TX VALVE BLK 1.5T R134A	EC122 EC124 EC12H EC12I EFF4BX1 EFR4BX1 EPR4AX1 EPR4BX1			
UR032	TX VALVE STRAINER FOR AU521923	EB9EH2X EB9EH4X			
UR348	TX ORIFICE #02		MPR15MX1		

UNDERSTANDING
HVAC

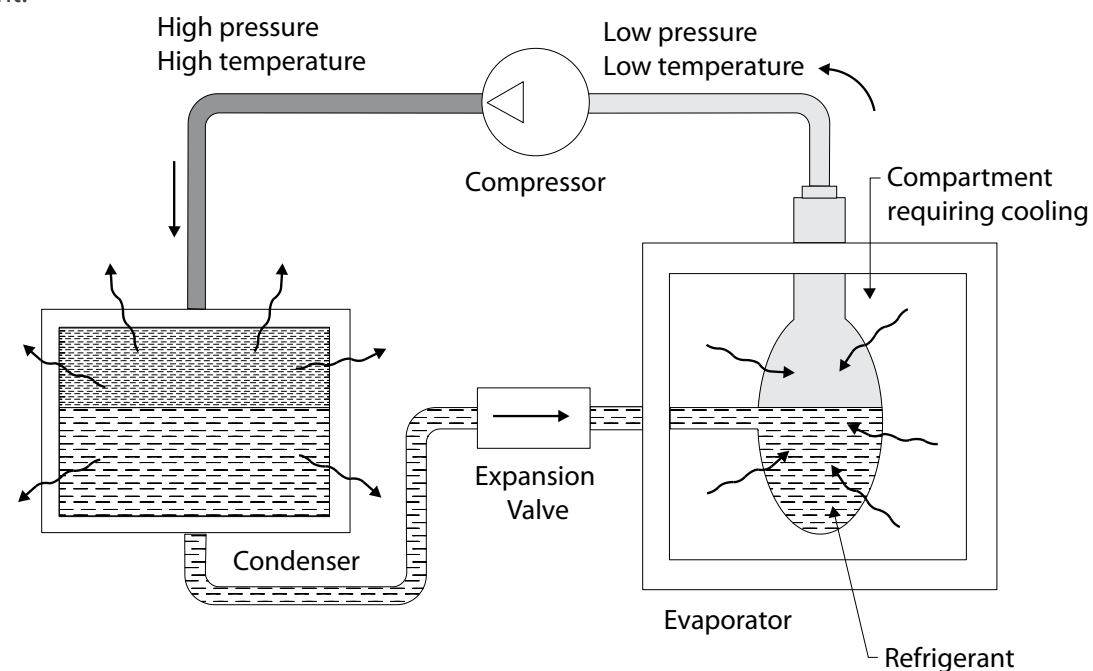
A BASIC AIR CONDITIONING SYSTEM CONSISTS OF FOUR MAJOR PARTS AS ILLUSTRATED IN THE FIGURE BELOW. THESE ARE:

1. Evaporator
2. Compressor
3. Condenser
4. Expansion Valve

Each of these components have an important role to play to achieve a controlled environment. The refrigerant flowing in the pipes connecting various components is used as a medium to move heat around the system.

The liquid refrigerant passes through an expansion valve before entering the evaporator coil. The thermal expansion (valve) process of the refrigerant is associated with lowering the pressure and temperature of the refrigerant. The cold liquid refrigerant flowing through the coil pipes absorbs a lot of heat from the air passing through the evaporator coil and boils off to vapour. Thus the passing air through the evaporator coil becomes cold. This vapour refrigerant is then drawn-in by the compressor, compressing vapour to raise its pressure and thus temperature. The high temperature refrigerant now passes through condenser coil to discard its heat to the cooler surrounding atmosphere, condensing in the process to a high-pressure liquid. The high-pressure liquid is ready for expansion valve for next cycle.

The cold air from evaporator coil is pushed into the cabin through supply blowers and returns back as warm air to the evaporator coil picking up the heat from the cabin. This cycle goes on till the cabin temperature reaches its set point.



BASIC REFRIGERATION CIRCUIT

1. EVAPORATOR UNIT

EVAPORATOR FAN BLOWER

It is part of the evaporator unit drawing cabin air through the filter and evaporator coil. Heater coil.

EVAPORATOR COIL

The evaporator coil ensures to cool the air when coming in contact with cold refrigerant flowing inside coil tubes.

EXPANSION VALVE

Expansion valve also known as thermal expansion valve (or TX valve) allows sudden expansion of the liquid refrigerant when it passes through orifice. The low pressure, low temperature refrigerant flowing through evaporator coil absorbs a lot of heat from the air stream making it cold supply air. It also regulates refrigerant flowing through the evaporator coil.

THERMOSTAT

The thermostat is a key feature of the HVAC as it ensures to start the AC unit in heating or cooling as required depending upon the cabin temperature. The cabin temperature sensor is to be located close to the return air.

VENTS/DIFFUSER

The vents are the outlets which transfer the heated or cooled air from the duct system into the cabin or mining machine.

OPTIONAL HEATER

A heater coil can be fitted to evaporator unit utilising hot engine water controlled by the thermostat operated valve in the water supply line. Electrical heating can be used if electric power is available.

2. CONDENSER UNIT

COMPRESSOR

Compressor is the heart of the AC unit. It pumps refrigerant and circulates it in the refrigeration circuitry. A high-pressure, high temperature refrigerant entering condenser coil, condenses to liquid by rejecting heat to cooler atmosphere. A variable speed compressor may be used for capacity control.

CONDENSER COIL

Condenser coil takes up the hot, high pressure refrigerant from the compressor and condenses it to a high-pressure liquid rejecting a lot of heat in the process to the cooler environment.

CONDENSER FAN

For efficient heat transfer from condenser coil to the environment, a fan is required to ensure airflow over the condenser coil.

REFRIGERANT LINES

Refrigerant is carried through the refrigerant lines connecting various components of the refrigeration system. The sizes of these lines vary depending upon the system capacity and routing.



SIGMA PART NUMBERING STRUCTURE EXPLAINED

MODEL NUMBER DESIGNATION

T	F	C	8	B	X	1
						Sequence Number
						Refrigerant
						Voltage
						Cooling Capacity
						Mounting Type
						System Component
						Product Code

LETTER 1: NORMAL APPLICATION

E	Economy Series
F	Filtration (without odour removal)
H	Hybrid Systems
M	Multipurpose
P	Purification (with or without filtration)
R	Railcar
S	Special/Switch Room
T	Truck, Tractor (off highway)

LETTER 2: COMPONENT TYPE

B	Compressor
C	Air Cooled Condensing Unit
D	Evaporator/Condenser Package (with remote compressor)
F	Fan Coil Unit (evaporator & fan)
P	Packaged One Piece
R	Refrigerated Box
V	Ventilation/Fresh Air

LETTER 3: NORMAL MOUNTING

C	Ceiling (under)
F	Floor (above)
R	Roof (above)
V	Various
W	Wall

LETTER 4: COOLING CAPACITY (IN kW)

LETTER 5: VOLTAGE

Voltage DC	Voltage AC
12V = A	24V 50Hz Single Phase = I
24V = B	110V 50Hz Single Phase = H
74V = C	115V 60Hz Single Phase = Z
96V = D	208V 50Hz Three Phase = R
110V = E	220V 50Hz Three Phase = Q
230V = F	220V 60Hz Single Phase = U
600V = G	220V 60Hz Three Phase = J
750V = X	240V 50Hz Single Phase = K
	250V 60Hz Single Phase = W
	380V 50Hz Three Phase = L
	415V 50Hz Single Phase = O
	415V 50Hz Three Phase = M
	440V 60Hz Three Phase = N
	460V 50Hz Three Phase = S
	480V 60Hz Three Phase = Y
	525V 50Hz Three Phase = T

LETTER 6: REFRIGERANT

A = R407c	R = R12	W = R502
M = R125	S = R22	X = R134a
N = Blend 747	T = R114	Y = Blend 12
O = Air	V = R747	Z = R124 (Replaces 114)

LETTER 7: VARIATION REFERENCE NUMBER



TROUBLESHOOTING - HVAC

SYSTEM PRODUCES NO COOLING

INDICATION	POSSIBLE CAUSE	REMEDY
No Electric Power.	Blown fuse. Broken or disconnected electrical wire.	Replace fuse. Check all terminals for loose connections. Check wiring for hidden breaks.
Compressor clutch inoperative.	Clutch coil burnt out or disconnected.	Check current flow to clutch. Replace if inoperative. Also check compressor as it may have stalled and caused clutch to fail. Replace as required.
	Check thermostat and if contacts remain open.	Replace thermostat.
	HP/LP control tripped.	Check for total refrigerant loss (LP cuts out). Check for inoperable condenser fan motor (HP cuts out). Replace if faulty.
Evaporator fan motor inoperative.	Motor disconnected or required service.	Check current flow to motor. Repair or replace if inoperative.
Compressor not turning.	Loose or broken drive belt.	Replace drive belt and/or tighten to specification.
Compressor pulley slips on belt and will not turn when clutch is engaged.	Compressor partially or completely frozen.	Remove compressor for service or replacement.
Only slight variation of both gauge readings at any engine speed.	Compressor reed valves inoperative or head gasket blown.	Service or replace compressor / reed valves. Replace head gasket.
Haze in sight glass.	Leak in system.	Apply static charge, leak test system, and repair leak as necessary.
No pressure on high or low gauges.		
Clutch and front of compressor oily.	Compressor shaft seal leaking.	Replace compressor shaft seal.
System low or out of refrigerant.		
High gauge normal or may read high.	Clogged screen in receiver drier or TX valve.	Replace receiver drier and inline drier if indicated.
Low gauge usually show vacuum or very low pressure reading.		
Frosting usually occurs at point of blockage.	Partial or complete blockage at some other point.	Determine type and location of blockage and remove.



TROUBLESHOOTING - HVAC

SYSTEM WILL NOT PRODUCE SUFFICIENT COOLING

INDICATION	POSSIBLE CAUSE	REMEDY
Small quantity of air from supply diffusers /duct.	Blower motor sluggish in operation.	Remove blower motor for service or replacement.
Blower motor possibly noisy.	Incorrect rotation.	Check for correct assembly and rotation of rotors.
	Clogged evaporator coil. Clogged return air filter.	Clean evaporator coil. Service or replace filter.
Compressor clutch slipping and sparking with grating noise.	Low voltage to clutch.	Check voltage to clutch. If correct remove clutch assembly for service or replacement.
Bubbles in sight glass. High gauge reading excessively low.	Insufficient refrigerant in system.	Recharge system until bubbles disappear and gauge readings stabilise to specifications. Check for leakages and repair.
Excessive high pressure gauge reading.	Insufficient air circulation over condenser coils.	Check condenser fan motor, service or replace.
	Fins clogged with dirt.	Hose condenser coils.
Gauge readings may be normal or may show slightly increased head pressure and low suction pressure.	Partially clogged screen in receiver drier or TX valve.	Remove TX valve if indicated and clean screen.
Air output temperature higher than normal. Frosting usually occurs at point of partial blockage.		Replace receiver drier and inline drier.
Excessively low gauge readings.	TX valve thermal bulb has lost charge.	Replace TX valve.
Excessive head pressure. Sight glass shows bubbles or is cloudy.	Air in system.	Evacuate and charge system.
Head pressure normal, suction pressure high and evaporator flooding. Icing on suction service valve.	TX valve stuck in open position.	Replace TX valve.



TROUBLESHOOTING - HVAC

SYSTEM COOLS INTERMITTENTLY

INDICATION	POSSIBLE CAUSE	REMEDY
Intermittent electrical power.	Defective switch or blower motor.	Remove defective part for service or replacement.
	Internal icing up may be caused by moisture in system.	Replace receiver drier and inline drier.
		Evacuate for prolonged period and recharge.
Evaporator coil ices up.	Coil sensing thermostat adjusted too low.	Adjust thermostat as necessary or turn thermostat to warmer setting.
	Defective de-ice thermostat.	Replace if faulty



TROUBLESHOOTING - PRESSURISER

Following is a list of possible fault symptoms for the unit, for which fault finding charts have been made.

DUST IN CABIN

INDICATION	POSSIBLE CAUSE	REMEDY
Fan not operating.	Blown fuse. Broken or disconnected electrical wire.	Replace fuse. Check all terminals for loose connections. Check wiring for hidden breaks.
	No power from AC unit.	Check unit gets power whenever AC fans are switched on.
	Motor disconnected or require service.	Check current flow to motor. Repair or replace if inoperative.
Leaks in cabin.	Damage or poor maintenance.	Reseal cabin and test to ensure positive pressurisation levels.
Full Pre-cleaner	Filters dirty.	Clean and / or replace pre-cleaner and all filter elements.
Damaged casing or Ducting.	Drawing in unfiltered air.	Repair unit as required.

UNIT NOISY

INDICATION	POSSIBLE CAUSE	REMEDY
Unit noisy.	Blower rubbing on fan cowl.	Realign blower.



PRESSURE/TEMPERATURE CHART

TEMP oC	R12		R134A		SP34E		R409A		R22		R410A		R419A		R407C		R502		R404A		R408A		R507							
	kPa	psig	kPa	psig	kPa	psig	kPa	psig	kPa	psig	kPa	psig	kPa	psig	kPa	psig	kPa	psig	kPa	psig	kPa	psig	kPa	psig						
-70	-91	27	-96	28.2					-81	23.9	-74	21.8			-89	26.3	-74	21.9	-83	24.5			69.5	20.5						
-66	-86	25.7	-92	27.2					-75	22.2	62.1	18.3			-83.8	24.7	-67	19.8	-73	21.6			61.9	18.3						
-62	-82	24.3	-88	26.1					-68	20.1	48.7	14.4			-77.7	22.9	-57	16.8	-62	18.4			52.8	15.6						
-58	-76	22.6	-84	24.7					-59	17.5	-33.3	9.8			-70.4	20.8	-47	6.8	-50	14.8			-52	7.5	-43	12.3				
-54	-70	20.7	-79	23.2					-49	14.2	-15.6	4.6			-61.7	18.2	-35	5.1	-36	10.7			-40	5.8	-29	8.4				
-50	-62	18.4	-72	21.3					-71	20.9	-36	10.7			4.9	0.7	-52	7.5	-52	15.2			-20	2.9	-20	5.9	-27	3.9	-13	3.7
-46	-53	15.8	-64	19.0					-64	18.7	-22	6.5			28.7	4.2	-40	5.8	-40	11.5			-3	0.4	-2	0.5	-10	1.5	6	0.9
-42	-43	12.7	-55	16.3					-55	16.0	-6	1.6			56.2	8.2	-26	3.8	-24.6	7.2			17	2.5	18	2.6	9	1.3	27	3.9
-38	-30.9	9.1	-45	13.2	-44.6	13.1	-44	12.9	14	2.0	87.9	12.7	-9	1.3	-7.5	2.2	40	5.8	42	6.1	30	4.4	52	7.5						
-34	-17	5.0	-32	9.4	-31.9	9.4	-32	9.1	36	5.2	130	18.9	10	1.5	12.4	1.8	67	9.7	69	10.0	55	8.0	81	11.7						
-30	-1	0.3	-17	5.0	-17	5	-17	4.8	62	9.0	172	24.9	32	4.6	35	5.1	97	14.1	99	14.4	84	12.2	113	16.4						
-28	8	1.1	-9	2.6	-8.6	2.5	-9	2.3	76	11.0	194	28.1	45	6.5	48	7.0	113	16.4	116	16.8	100	14.5	131	19.0						
-26	17	2.5	0	0.0	0.5	0.1	0.7	0.1	92	13.3	219	31.8	58	8.4	62	9.0	131	19.0	134	19.4	117	17.0	150	21.8						
-24	27	3.9	10	1.5	10.1	1.5	9	1.3	108	15.7	244	35.4	73	10.6	77	11.2	149	21.6	154	22.3	135	19.6	170	24.7						
-22	38	5.5	20	2.9	20.5	3	19	2.8	125	18.1	272	39.5	88	12.8	93	13.5	169	24.5	174	25.2	154	22.3	192	27.8						
-20	50	7.3	31	4.5	31.7	4.6	29	4.2	143	20.7	301	43.7	104	15.1	110	16.0	190	27.6	196	28.4	174	25.2	214	31.0						
-18	62	9.0	43	6.2	43.5	6.3	41	5.9	163	23.6	332	48.2	122	17.7	128	18.6	212	30.7	219	31.8	195	28.3	238	34.5						
-16	75	10.9	56	8.1	56.3	8.2	53	7.7	184	26.7	364	52.8	140	20.3	148	21.5	235	34.1	243	35.2	218	31.6	264	38.3						
-14	88	12.8	69	10.0	69.9	10.1	66	9.6	205	29.7	398	57.7	160	23.2	169	24.5	260	37.7	269	39.0	242	35.1	291	42.2						
-12	103	14.9	84	12.2	84.3	12.2	80	11.6	229	33.2	435	63.1	181	26.3	191	27.7	286	41.5	296	42.9	267	38.7	319	46.3						
-10	118	17.1	99	14.4	99.7	14.5	95	13.8	253	36.7	473	68.6	203	29.4	214	31.0	313	45.4	324	47.0	294	42.6	349	50.6						
-8	134	19.4	115	16.7	116.1	16.8	111	16.1	279	40.5	513	74.4	227	32.9	239	34.7	342	49.6	355	51.5	322	46.7	380	55.1						
-6	151	21.9	133	19.3	133.6	19.4	127	18.4	306	44.4	556	80.6	252	36.5	265	38.4	372	54.0	387	56.1	352	51.1	414	60.0						
-4	169	24.5	151	21.9	152	22	145	21.0	334	48.4	601	87.2	278	40.3	293	42.5	404	58.6	420	60.9	383	55.5	448	65.0						
-2	187	27.1	171	24.8	171.7	24.9	164	23.8	365	52.9	648	94.0	306	44.4	322	46.7	437	63.4	455	66.0	416	60.3	485	70.3						
0	207	30.0	191	27.7	192.4	27.9	184	26.7	396	57.4	697	101.1	336	48.7	353	51.2	472	68.5	493	71.5	450	65.3	524	76.0						
2	228	33.1	213	30.9	214.5	31.1	205	29.7	429	62.2	749	108.6	367	53.2	386	56.0	508	73.7	532	77.2	487	70.6	564	81.8						
4	250	36.3	236	34.2	237.8	34.5	227	32.9	464	67.3	803	116.5	400	58.0	420	60.9	547	79.3	572	83.0	525	76.1	606	87.9						
6	273	39.6	260	37.7	262.3	38	250	36.3	501	72.7	860	124.7	434	62.9	457	66.3	587	85.1	615	89.2	565	81.9	651	94.4						
8	297	43.1	286	41.5	288.3	41.8	275	39.9	539	78.2	919	133.3	471	68.3	495	71.8	628	91.1	660	95.7	606	87.9	697	101.1						
10	322	46.7	313	45.4	315.6	45.8	301	43.7	579	84.0	982	142.4	509	73.8	534	77.5	672	97.5	707	102.5	650	94.3	746	108.2						
12	348	50.5	341	49.5	344.4	49.9	328	47.6	621	90.1	1047	151.9	549	79.6	576	83.5	717	104.0	756	109.6	696	100.9	797	115.6						
14	376	54.5	371	53.8	374.6	54.3	357	51.8	665	96.5	1115	161.7	591	85.7	620	89.9	765	111.0	808	117.2	744	107.9	850	123.3						
16	404	58.6	402	58.3	406.4	58.9	387	56.1	711	103.1	1186	172.0	636	92.2	666	96.6	814	118.1	862	125.0	794	115.2	905	131.3						
18	434	62.9	435	63.1	439.6	63.8	419	60.8	759	110.1	1260	182.7	682	98.9	715	103.7	865	125.5	918	133.1	846	122.7	963	139.7						
20	466	67.6	470	68.2	470.4	68.2	452	65.6	808	117.2	1338	194.1	731	106.0	765	111.0	918	133.1	976	141.6	900	130.5	1023	148.4						
22	498	72.2	506	73.4	508.2	73.7	487	70.6	860	124.7	1418	205.7	781	113.3	818	118.6	974	141.3	1037	150.4	957	138.8	1086	157.5						
24	533	77.3	544	78.9	556.6	80.7	524	76.0	915	132.7	1502	217.8	835	121.1	873	126.6	1031	149.5	1101	159.7	1016	147.4	1151	166.9						
26	568	82.4	583	84.6	594.7	86.3	562	81.5	971	140.8	1590	230.6	890	129.1	931	135.0	1091	158.2	1167	169.3	1078	156.4	1219	176.8						
28	605	87.7	625	90.6	622.7	90.3	602	87.3	1029	149.2	1681	243.8	948	137.5	991	143.7	1153	167.2	1236	179.3	1142	165.6	1290	187.1						
30	643	93.3	668	96.9	650.6	94.4	644	93.4	1090	158.1	1776	257.6	1009	146.3	1054	152.9	1218	176.7	1308	189.7	1208	175.2	1364	197.8						
32	683	99.1	713	103.4	698.4	101.3	687	99.6	1154	167.4	1874	271.8	1072	155.5	1119	162.3	1284	186.2	1382	200.4	1278	185.4	1440	208.9						
34	725	105.2	761	110.4	746.2	108.2	733	106.3	1219	176.8	1976	286.6	1138	165.1	1188	172.3	1353	196.2	1460	211.8	1350	195.8	1520	220.5						
36	768	111.4	810	117.5	792.1	114.9	781	113.3	1288	186.8	2082	302.0	1206	174.9	1259	182.6	1425	206.7	1540	223.4	1424	206.5	1602	232.4						
38	813	117.9	861	124.9	836.1	121.3	830	120.4	1359	197.1	2193	318.1	1278	185.4	1333	193.3	1499	217.4	1624	235.5	1502	217.8	1688	244.8						
40	859	124.6	915	132.7	880.2	127.7	882	127.9	1432	207.7	2307	334.6	1352	196.1	1411	204.6	1576	228.6	1711	248.2	1583	229.6	1777	257.7						
42	907	131.5	970	140.7	926.9	134.4	936	135.8	1508	218.7	2426	351.9	1430	207.4	1491	216.3	1655	240.0	1800	261.1	1666	241.6	1869	271.1						
44	957	138.8	1028	149.1	976.6	141.6	992	143.9	1587	230.2	2549	369.7	1510	219.0	1575	228.4	1737	251.9	1894	274.7	1753	254.3	1964	284.9						
46	1009	146.3	1089	157.9	1026	148.8	1051	152.4	1669	242.1	2676	388.1	1594	231.2	1663	241.2	1822	264.3	1990	288.6	1842	267.2	2063	299.2						
48	1062	154.0	1151	166.9	1078.3	156.4	1111	161.1	1753	254.3	2808	407.3	1681																	

POLICIES

OVERVIEW
PRESSURISERS
E SERIES
H SERIES
M SERIES
T SERIES
PILOT CONTROL BOXES
SERVICABLE PARTS
UNDERSTANDING HVAC
POLICIES

“More than one billion people worldwide rely on Knorr-Bremse systems every day.”

That’s why safety comes first for Knorr-Bremse and SIGMA. By developing, producing, guaranteeing and delivering the highest quality, each one of us shares the ongoing responsibility for ensuring the safety of people who rely on our products. Our commitment to safety, quality and the environment guides and assists us everyday, in everything we do.

SAFETY



- We develop and provide products and systems with high reliability for the safe operation of vehicles based on the needs of our customers and adapted from sustainable principles.
- We strive to be the technology and market leader for product safety throughout the entire product life cycle.
- Management assumes responsibility for ensuring SIGMA products comply with safety requirements.
- We are committed to creating the organisational conditions needed to achieve our safety objective.
- We are actively involved in the relevant committees and boards and meet the requirements of all necessary safety standards.
- We provide a safe and healthy work environment and promote the prevention of illness and injury.

QUALITY



- We strive to design and produce products and systems with zero defects through the entire supply chain and being the industry benchmark in quality and product safety.
- We are committed to continuously improve the quality of our products and services.
- We comply with the requirements and continually improve the effectiveness of our quality management system.

ENVIRONMENT



- We are committed to the protection of the environment through a sustainable use of natural resources and energy.
- We promote the procurement of energy efficient products and services.
- We will prevent / minimise the impact of our processes, services and products on the environment, and improve the energy efficiency of our products both in manufacture and in application.
- We integrate energy and environmental considerations into our business processes and product design by consistently supporting the development and dissemination of safe and environmentally-friendly technologies.
- We are committed to continuously improving our energy and environmental performance through the establishment and communication of measurable goals, ensuring that the necessary personnel, technical and financial resources are provided.
- We openly communicate the energy and environmental impacts of our products and operations to employees, suppliers, customers, government and the public.
- We develop and support our suppliers and partners to adopt our approach to corporate responsibility.
- We establish company standard practices, where laws or regulations are not adequately protective or do not exist.

Knorr-Bremse has implemented a uniform, process-oriented and integrated management system. In order to regularly monitor whether these requirements are implemented in accordance with the specifications, Knorr-Bremse and SIGMA conduct independent internal audits as well as external certification audits on a regular basis. Some of the external certifications include the following:

BUREAU VERITAS CERTIFICATIONS



ISO 9001:2015

This certification establishes that SIGMA are able to consistently provide products and services that ensures customer satisfaction through effective processes and conformity to statutory and regulatory requirements.

ISO 14001:2015

ISO 14001:2004 sets out a criteria for an Environmental Management System (EMS) to enable organisations to develop and implement a policy that meet legal requirements. It only applies to the environmental aspects that the organisation can identify within their control and which it can influence.



OHSAS 18001:2007

Compliance with it enables organisations to demonstrate that they have a system in place for occupational health and safety. SIGMA sees this as a critical element as we consider employees as the highest asset to the organisation.

AS-NZS 4801:2001

This certification demonstrates that SIGMA has processes and policies in place to ensure the protection of the health and safety of all employees. SIGMA sees this as a critical element as we consider employees as the highest asset to the organisation.



KNORR EXCELLENCE

In 2007, Knorr-Bremse Group developed an Excellence model which describes the vision in which the company progresses from “very good” to “excellent” in reaching its strategic goals. The Knorr-Bremse Excellence (KE) is particularly important given that quality is the top requirement for Knorr-Bremse as a manufacturer of safety-critical systems.

CLIMATE STRATEGY 2030

CLIMATE STRATEGY 2030

The climate strategy we have adopted for 2030 supersedes the climate protection objectives set in 2015. Knorr-Bremse aims to halve its sites' CO2 emissions by 2030. In addition, we are committed to the goal of carbon neutrality for our sites from 2021 onward.



PEOPLE EXCELLENCE

PEX – People Excellence – initiative was first launched in 2010 with a clear focus on strengthening personnel development processes and tools. PEX remains a constant focus to maintain our position as an attractive employer, contribute to sustainability through flexible work arrangements and enhance Human Resource values.



Q-FIRST

Safety, reliability and quality of our products are essential for a successful future of Knorr-Bremse. Seemingly minor oversights from the vendor in development or production can jeopardise the success of Knorr-Bremse and SIGMA. As a manufacturer of active vehicle safety systems, it is our highest obligation to deliver error-free products. The Q-First initiative ensures our quality control procedures are a top priority.



SUPPLY CHAIN EXCELLENCE

The over-arching supply chain is the operational processes for reliable delivery to our customers. The “Supply Chain Excellence” initiative is central to achieving the Knorr Excellence performance benchmark. The motto of SCE is “Simple, fast, direct, reliable.”



SIX SIGMA

The Six Sigma program was introduced at Knorr-Bremse to focus on continuous process improvement, improve our customer experience and build better leaders. From 2003 more than 100 Black Belts and more than 400 Green Belts have been trained around the globe. The savings from certified improvement projects has exceeded €6 million in cost reduction & avoidance.

CORPORATE RESPONSIBILITY

Knorr-Bremse Global is consistently working on developing innovative products and solutions that combine a high level degree of customer value with a contribution to sustainable development. Safety is always our overriding goal.



We work closely with our customers and suppliers to jointly ensure continuous improvement of product quality and minimal undesirable impact on the environment and society.

Knorr-Bremse would like to ensure that its commitment to responsible conduct is also found in the supply chain. For this reason we have started to integrate sustainability aspects into the Group's procurement structures.

Suppliers of direct material must comply with the relevant quality management guidelines for the business unit concerned as well as the technical specifications set out by engineering. This ensures Knorr-Bremse and SIGMA are able to supply components that meets specified performance requirements for the manufacturing of our HVAC equipment and to support Aftermarket requirements.

KNORR EXCELLENCE - GLOBAL

Putting the Knorr Excellence into practice has drawn considerable praise and appreciation from a range of International industries and manufacturers.



Knorr-Bremse, global market leader for braking systems and a leading supplier of other rail and commercial vehicle systems, has received positive assessments for its sustainable corporate governance from two independent rating organisations

ISS-oekom awards Knorr-Bremse Prime Status for its sustainability strategy



EcoVadis honours Knorr-Bremse's supplier management system with Gold Status



As Ralph Heuwing, CFO of Knorr-Bremse AG and Member of the Executive Board responsible for Corporate Responsibility explains: "Our mission to achieve safe, eco-efficient mobility is closely linked to our sustainable governance goals. These positive ratings from ISS-oekom and EcoVadis reflect our ongoing efforts to meet these aims."

Stefan Bräuherr, Head of Corporate Responsibility at Knorr-Bremse adds: "Responsible behaviour includes such issues as working conditions, human rights, environmental protection and safety, business ethics and compliance in all parts of the company. Rating organizations like ISS-oekom and EcoVadis provide our stakeholders with transparency on these matters and spur us on to further improvements."

In this case, assessment of the company's ongoing sustainability performance serves two groups: The rating agency ISS-oekom provides information to help investors appraise the company; and the supplier platform EcoVadis supports business customers in their decision-making processes.

ISS-oekom in Munich analyses the environmental, social and governance (ESG) performance of the world's leading share and bond issuers. For 2018 the prestigious agency ranked Knorr-Bremse amongst the top 20% in the "Machinery" sector and awarded it Prime Status.

EcoVadis uses its platform to make its CSR assessment of suppliers to global supply chains available to Knorr-Bremse's customers and partners. Criteria relating to the environment, social affairs, ethics and sustainable procurement are analysed and assessed. 2018 saw Knorr-Bremse improve its rating for sustainable supplier relations and become one of the 5% top performers.

- I. General**
 1. Only the Terms of Sale and Delivery as printed herein shall be applicable.
 2. Any deviations from our Terms of Sale and Delivery shall not be valid, unless confirmed by us in writing. Any discordant terms are herewith expressly contradicted.
- II. Offers and Orders**
 1. Our offers are submitted without engagement. Cost estimates, if any, are to be understood without any obligation. All declarations of acceptance and purchase orders must be confirmed in writing by fax (order acknowledgement) to have legal effect. The same shall be applicable to any supplements, modifications or collateral covenants.
- III. Prices**
 1. Our prices are based on the costs valid at the time our written order acknowledgement according to chapter II is issued. The prices are to be understood for delivery ex works, without packing and insurance, unless otherwise agreed upon, and are subject to the addition of Goods and Services Tax (GST).
 2. To the extent that we are obliged to take back the packing material used for transport, the purchaser shall bear the cost for the return of the packing material used and all appropriate cost for its recycling or, should this be feasible or be deemed advisable by us, the appropriate cost accruing additionally for its repeated use.
 3. In the event of a change in cost, we reserve the right to proceed with a modification in prices.
- IV. Delivery**
 1. Delivery periods agreed upon shall be considered as having started at the time our written order acknowledgement according to chapter II has been sent, but not before the fulfilment of any existing obligations to cooperate on the part of the purchaser. The delivery period shall be considered as having been observed if by the date of its expiration the goods delivered have left the works or if an advice informing of their readiness for shipment had been issued.
 2. Cases of force majeure and other events beyond our influence, in particular defaults in delivery on the part of our suppliers, traffic breakdowns, interruptions of production, industrial disputes, shortages of material and energy, action of government authorities as well as import or export restrictions, which could jeopardise the unimpeded performance of the order, entitle us to postpone the delivery date accordingly or to withdraw from the contract partly or totally if, as a consequence of said events, the performance of the contract should be seriously endangered or made impossible, without the purchaser being able to raise any damage claims arising therefrom. This shall also be applicable if said events should occur at a moment when we are in default.
 3. In the event of the shipment being entirely or partly delayed at the request or on the initiative of the purchaser, the latter shall be charged, beginning one week after the purchaser or carrier has been advised that the goods were ready for shipment, all costs caused by the delay, in particular the storage costs, but not less than 0.5% per month of the invoiced value of the goods transported, unless the purchaser or carrier entrusted by the latter should refuse the goods to be transported in a way that can be expected from him other than the manner that had been agreed upon. We shall be entitled, however to dispose of the goods to be delivered in another way and to supply the purchaser within an appropriately extended period if an adequate grace period granted for taking delivery has expired without result.
 4. Partial deliveries with corresponding accounts being drawn up shall be permissible.
 5. At the request of the purchaser, we shall be prepared to insure the goods transported at the latter's own expense, against all risks from damage to the goods caused by theft, breakage, transport, fire or water as well as against all other insurable risks.
- V. Passing of risk**
 1. The risk shall pass to the purchaser at the latest as soon as the purchaser has been advised that the goods are ready for shipment or have been surrendered to the carrier or have left out stock for shipment. This shall also be applicable for partial deliveries or when we have assumed the

- performance of other services also, such as shipment, delivery to domicile or erection. In the event of the shipment being delayed or rendered impossible through the fault of the purchaser, the risk shall pass to the purchaser at the moment the purchaser or carrier acting on the latter's behalf is notified that the goods are ready for shipment.
- VI. Terms of payment**
 1. As regards the due date of payment of the purchase price, the conditions in our order acknowledgement according to chapter II shall be binding. Should the latter not contain any such data, the purchase price shall be due 30 days after the date in which the invoice is issued. In the event of the purchaser failing to observe the stipulated date of payment or his being in default although having been duly served a reminder, we shall be entitled to claim interest on arrears at a rate of 4% above the bank rate of the Reserve Bank of Australia rate valid at the respective moment, unless the purchaser should evidence that the loss has been smaller.
 2. Even if otherwise provided by the purchaser, we shall be authorised to set off payment against any pending liabilities of the purchaser which were due at former date and shall inform the latter of the manner in which the set-off has been made. Should any expense or interest have accrued formerly, we shall be authorised to set off payment first against the expenses, then against the interest and finally against the primary liability.
 3. The purchaser shall not be entitled to any set off or retention or payment, unless any counterclaims on his part have been established in a final court decision or are uncontroversial. In case the purchaser should, contrary to the aforementioned provision, have made a set-off payment against our receivables and default in payment, we shall be authorised in particular to claim interest on arrears according to the provision in chapter VI 1.
 - VII. Retention of title**
 1. We reserve title to the goods delivered pending settlement by the purchaser of all and any claims resulting from the business relationship and pending payment of all cheques, bills or notes. This shall also be applicable to all and any current account balance claims.
 2. In the event of the purchaser becoming proprietor of a new object through processing or incorporation of the goods delivered by us into that object, the purchaser shall with a view to securing our claims grant us already now the co-property of the new object in the proportion of the invoice value of our goods to the other goods incorporated in the new object and he shall keep the objects subject to our co-property for us in custody free of charge.
 3. We shall be authorised to insure the goods delivered, at the expense of the purchaser, against all risks from damage caused by theft, breakage, fire, water or other damage, unless the purchaser has evidence to have effected an insurance himself.
 4. The purchaser shall be authorised to resell the goods delivered in the ordinary course of business, subject to our revocation. This right shall extinguish if the purchaser should suspend payments or if he should otherwise contravene his contractual obligations. The purchaser shall assign to us already now all accounts receivable with ancillary rights due to him, deriving from the resale. The accounts receivable assigned to us are destined to secure all claims resulting from the retention of title. The purchaser shall be entitled to collect the receivables assigned to us as long as the respective authorisation has not been withdrawn by us. Such authorisation shall extinguish without having expressly been withdrawn if the purchaser should suspend payments. On our request, the purchaser shall inform us expressly and immediately to whom the goods have been sold and what receivables are due to him resulting from the resale.
 5. In case the value of goods for which we hold title as per the foregoing provisions should exceed the claims to be secured by more than 20%, we undertake, at the purchaser's request, to release securities accordingly.
 6. We reserve all property right and copyrights for any parts of documentation, in particular drawings, figures, weight and measurement particulars and other performance data; such documentation must not be made available to any third party without our prior written consent.
 7. The purchaser shall not be entitled to pledge the goods delivered or the receivable, which are sue to him in exchange or to assign said goods for security. The purchaser undertakes to notify us immediately of any distraints of the goods delivered or of any other impairments of his rights.

8. In the event of the purchaser contravening his contractual obligations, in particular by defaulting in payment or in case of a substantial deterioration of his financial conditions, we shall, after having duly served him a reminder, be entitled to reclaim and the purchaser shall be obliged to surrender the goods delivered. The withdrawal or distraint of goods subject to retention of title by us shall not be considered a withdrawal from the contract.
- VIII. Warranty**
 1. We warrant the goods delivered to be free from faults or defects according to the respective state of technology as well as to feature properties that had expressly been promised, by way of repair or replacement of the product claimed to be faulty, whichever we prefer. The costs arising from repair or replacement shall be borne by us, the transport charges at our expense being limited to those incurred for the cheapest shipping and reshipping mode. In the event of the repair or replacement failing to be effective within a reasonable period of time, the purchase shall be entitled to reduce the purchase price or to withdraw from the contract.
 2. Warranty claims, if any, shall be excluded if the purchaser does not notify us in writing of the discernible faults or defect immediately after receipt of the goods delivered, while presenting the defective goods to us. Any faults or defects that cannot be discovered within this period even when subjecting them to a careful exam, shall be communicated to us in writing immediately after they have been discovered.
 3. If the right of the purchaser to assert a warranty claim should related to a defect inherent to a purchased product, our liability shall be limited to the assignment of the rights that we may claim against our supplier. The purchaser shall be entitled to assert any warranty claims against us only if he has previously asserted such claims unsuccessfully by taking legal action against our supplier.
 4. The warranty period shall be one year from the date of delivery. In the case of components installed in motor vehicles, construction machines or building material machinery, the warranty period shall be one year from the date of commissioning. It shall expire prematurely, but not before a period of six months has elapsed from the date of delivery, once 1200 service hours have been reached or, in the case of brake or compressor units, once a total mileage of 50,000km has been covered. The warranty period shall expire 18 months after the date of delivery at the latest.
 5. Our liability for any repair work performed on the goods delivered or the delivery of replacement goods shall be governed by the foregoing provisions. The warranty period for the above shall be limited, however, to three months; it shall terminate at the earliest at the date of expiration of the original warranty period.
 6. We shall not assume any liability for consequences resulting from any modifications or repair work performed on the goods by the purchaser or third parties without our prior consent.
 7. Any further claims shall be excluded. We shall not assume any liability for claims of the purchaser with respect to damage occurred to other than the goods delivered themselves. The exclusion of liability shall likewise not be applicable in the case of absence of qualities that had expressly been warranted if such warranty had the explicit purpose of protecting the purchaser against any damage that has not occurred to the goods delivered themselves. The exclusion of liability shall likewise not be applicable in case of damage caused wilfully or by gross negligence on the part of our statutory representatives or executive personnel.

- IX. Damage Claims**

Claims for damages as a result of any violation of contractual or extra-contractual obligations can only be asserted if such violation has been done wilfully or in case of gross negligence on the part of our statutory representatives or executive personnel. In the event of damage having been caused by non-executive personnel, we shall be held liable only if the attainment of the objective pursued with the conclusion of the endangered by such wilful action or gross negligence.
- X. Liability for collateral obligations**

In case that the object delivered should, through our fault, not be comparable or being utilised in accordance with the terms of the contract, pursuant to the missing or insufficient compliance with proposals submitted or advise furnished prior or subsequent to the conclusion of the contract or other collateral contractual obligations, in particular instructions for us and maintenance of the object delivered, the provisions of the chapter VII 7 and IX shall be applicable analogously, to the exclusion of any further claims of the purchaser.
- XI. Partial invalidity**

Should any of the provisions of the present Terms and conditions of Sale and Delivery be void, the validity of the remaining provisions shall not be affected thereby. In case one or several provisions of the present Terms and conditions of sale and delivery should be void, the parties hereto shall replace the void by a valid provision coming as close as possible economically to the void provision.
- XII. Applicable law, place or performance and venue**
 1. The present Terms and conditions of sale and delivery as well as the entire legal relationship between the purchaser and ourselves shall be governed by the law of New South Wales. The application of the United Nations Convention on Contracts for the International Sale of Goods shall be excluded.
 2. The price of performance and venue shall be in the state of New South Wales or the respective place of business of our branch offices if action was taken by the latter. This stipulation of venue shall however, be applicable only if the purchase is a merchant possessing full commercial capacity, a legal person or a special fund under public law. We shall also be entitled to institute legal proceedings before the court that is competent for the place of business or the branch office of the purchaser or the jurisdiction of which results from other statutory regulations.

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