



E SERIES RANGE



ROBUST AND HEAVY DUTY RANGE

The Sigma 'E' Series air conditioner has been designed and developed for robust heavy-duty off road applications. They have been refined to suit the applications of vibration, dust and high ambient. These systems are engineered to suit small cabins rubber tyred & tracked vehicles with all components selected to provide reliable service and designed for ease of serviceability.

- EPR4 Rooftop Package
- EC12H Ceiling Evaporator
- EC12I Internal Evaporator
- EFF4 Internal Evaporator
- EFR 4 Rooftop Evaporator
- EB9EH4X Rooftop Evaporator
- EB9P4X Pressuriser Unit
- EFF5 Floor Mounted Evaporator
- EC22H Ceiling Evaporator
- EC12C Remote Condenser
- EC22C Remote Condenser
- H0204590 Remote Condenser



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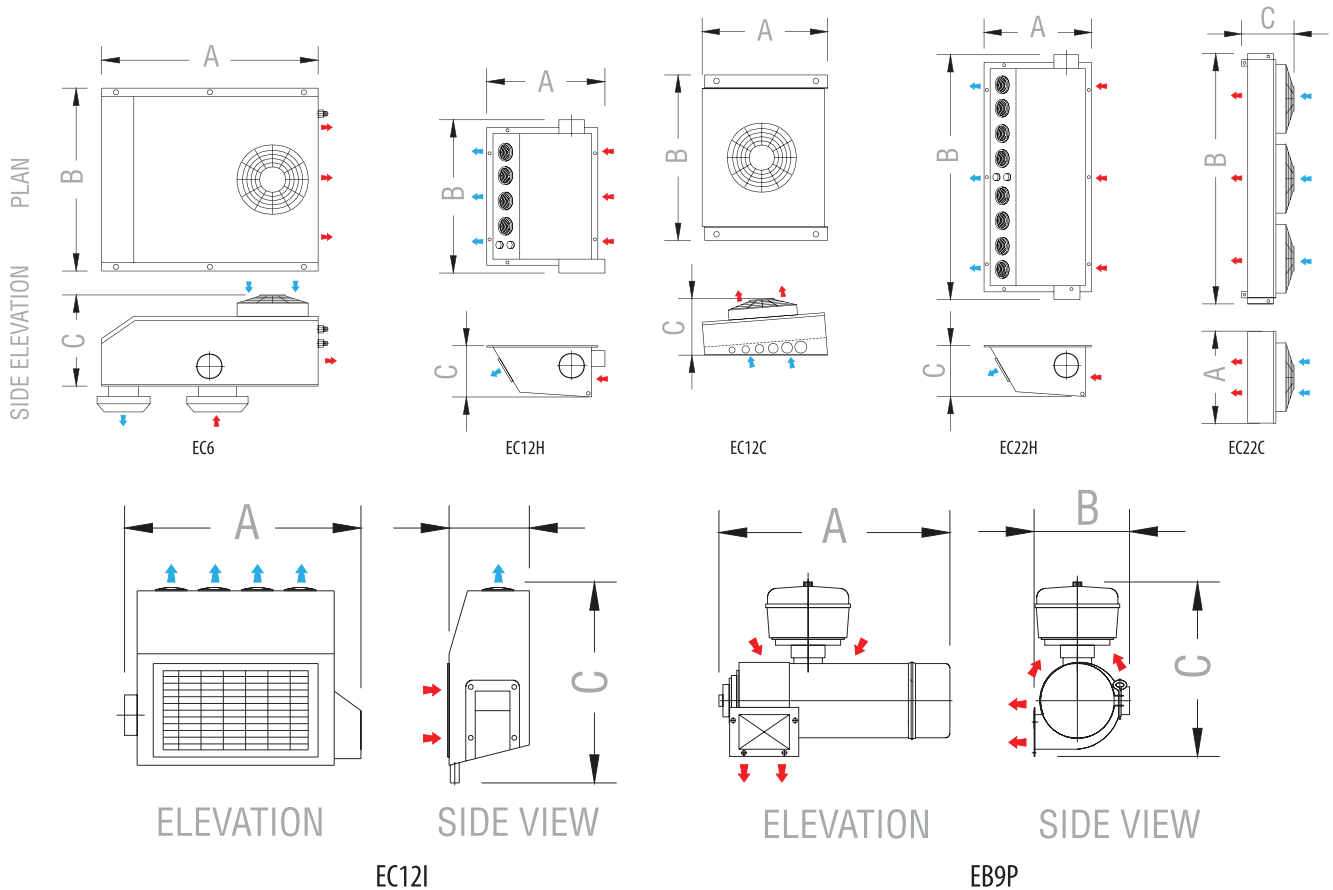
LEADING THERMAL MANAGEMENT SOLUTIONS

BENEFITS

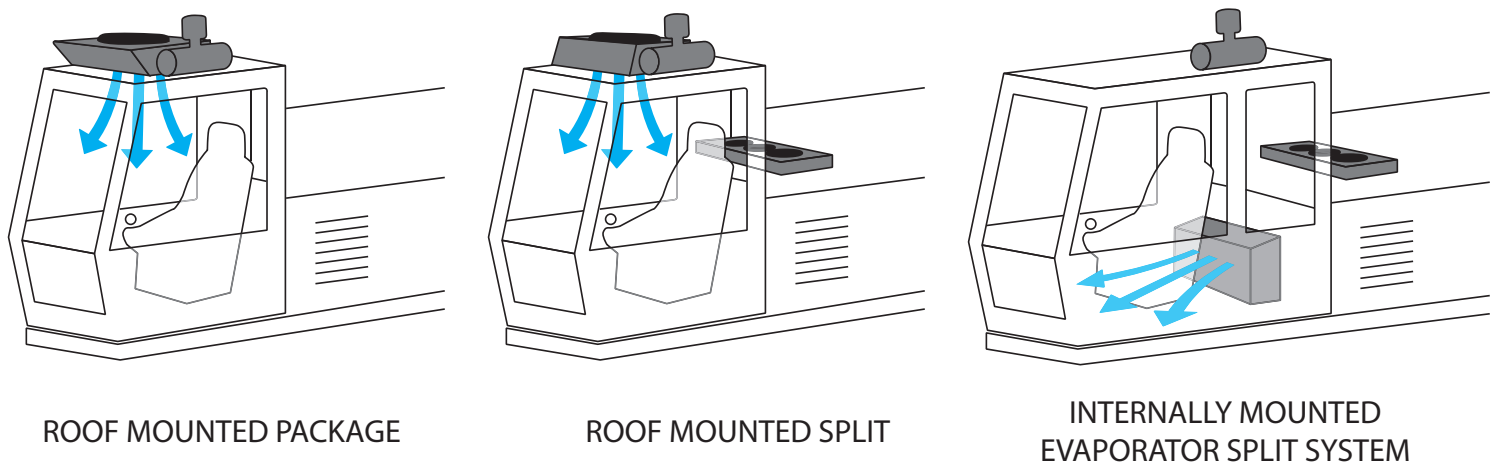
- World class after sales technical and service support
- High ambient operation
- Welded steel powder coated construction
- High quality componentry
- Washable return air filters
- Heavy-duty wide finned heat exchangers
- Common components throughout the range.

OPTIONS

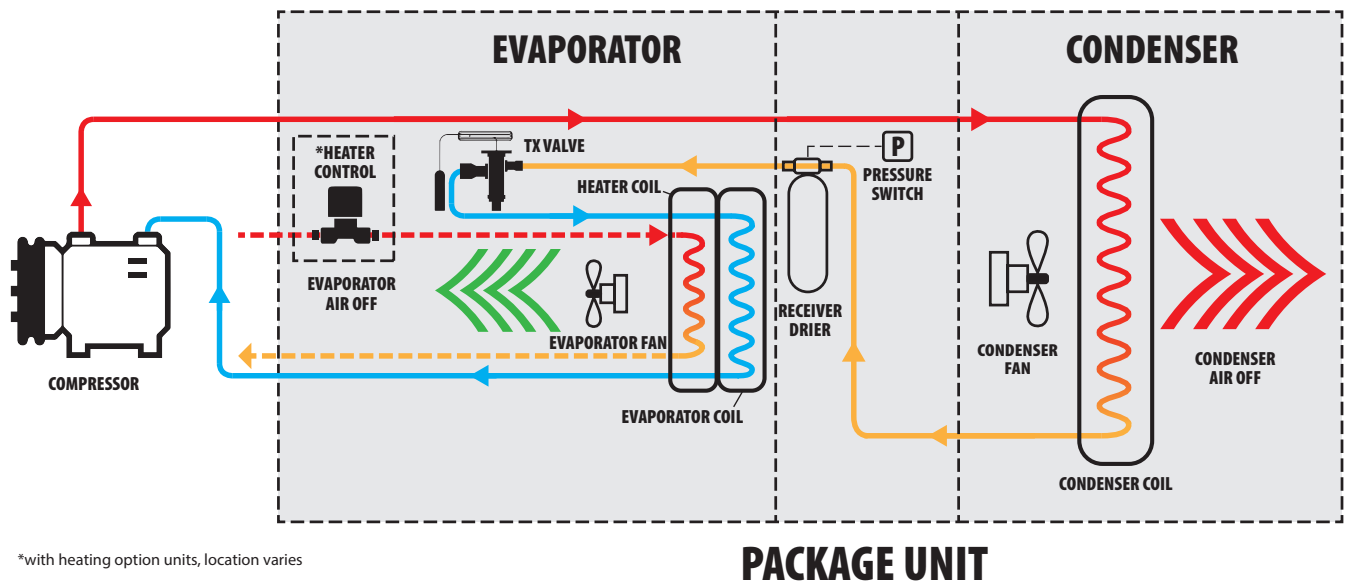
- All necessary installation components
- Stainless steel construction (some models)
- Three stage filtration cabin pressurisation
- Complete system design solutions
- Radiator mounted condensers
- Air purification and high efficiency filtration systems
- Additional corrosion protection
- HEPA Fresh Air filters.



TYPICAL SYSTEM SETUP



REFRIGERATION SCHEMATICS



GENERAL MAINTENANCE SCHEDULE

1x **EVERY MONTH OR 500 HOURS** 500Hr



- Inspect the AC unit mounting



- Observe any obvious damage to pipe work
- Check to see all hoses and wiring are secured correctly and no sign of any damage



- Inspect fan; visually and by hand check that rotors are not loose on motor shaft and that they are running true. Check security of fasteners



- Check return air filter, clean or replace as required

2x **EVERY TWO MONTH OR 1000 HOURS** 1000Hr

In addition to above



- Check the hoses, wiring and pipe work for abrasion and wear
- Check adhesion of insulation and lid seals
- Check compressor belts for wear, tightness and alignment. Replace and adjust as required
- Check pipe work for any sign of leakage at joints. Rectify or replace as required.



- Check if any of the mountings are coming loose. Tighten as required



- Check system charge whilst air conditioner is in operation based on operation pressures and liquid sub cooling for R134a. Note that liquid line sight glass may sometimes have a milky appearance. This does not indicate system undercharge

4x **EVERY FOUR MONTH OR 2000 HOURS** 2000Hr

In addition to above



- Clean the condenser coil. Make sure that excessive pressure is not used which may damage the coil



- Check cleanliness of evaporator coil, clean if required

8x **EVERY EIGHT MONTH OR 4000 HOURS** 4000Hr

In addition to above



- Service the refrigeration system, replace the receiver drier and any other components found compromised



- Check compressor for excessive noise and replace if required



- Remove and clean supply air and condenser fan assemblies and check for bearing wear and noise



- Check for blockage of condensate drains

NOTE: All maintenance details provided are for general information only, this may vary according to the specific equipment/options. Contact SIGMA for more information.



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PRODUCT RANGE

Model No.	EPR4	EC12H	EC12I	EFF4	EFR4	EB9EH4X	EFF5	EC22H	EC12C	EC22C	H0204590
Description	Rooftop Packaged HVAC	Ceiling Mount Evaporator	Internal Evaporator with Heating	Internal Evaporator with Heating	Rooftop Evaporator	Rooftop Evaporator with Heating	Floor Mounted Evaporator with Heating	Ceiling Evaporator with optional Heating	Remote Condenser 4kW 24V	Remote Condenser 6kW 24V	Remote Condenser 8kW 24V
Cooling	4.5 kW 15354 BTU	4.0 kW 13648 BTU	4.0 kW 13648 BTU	4.0 kW 13648 BTU	4.0 kW 13648 BTU	5.0 kW 17060 BTU	5.0 kW 17061 BTU	6.0 kW 20472 BTU	4.0 kW 13648 BTU	6.0 kW 20472 BTU	8 kW 27297 BTU
Heating Capacity	4.0 kW (Optional Kit)	3.5 kW (Optional Kit)	3.5 kW (Optional Kit)	4.5 kW	-	4.6 kW	6.0 kW	3.8 kW (Optional Kit)	-	-	-
	13648 BTU (Optional Kit)	11942 BTU (optional Kit)	11942 BTU (optional Kit)	15354 BTU	-	15695 BTU	20472 BTU	12966 BTU (Optional Kit)	-	-	-
Fan Speeds	3	3	3	3	3	-	3	3	1	1	1
Air Flow	150 l/s	110 l/s	110 l/s	100 l/s	100 l/s	130 l/s	200 l/s	220 l/s	-	-	-
	318 CFM	233 CFM	233 CFM	212 CFM	212 CFM	275 CFM	423 CFM	466 CFM	-	-	-
*Fresh Air	30 l/s	30 l/s	30 l/s	30 l/s	30 l/s	30 l/s	10 l/s	30 l/s	-	-	-
	64 CFM	64 CFM	64 CFM	64 CFM	64 CFM	64 CFM	21 CFM	64 CFM	-	-	-
Power Supply	12 V / 24 V	12 V / 24 V	12 V / 24 V	24 V	24 V	24 V	24 V	12 V / 24 V	12 V / 24 V	12 V / 24 V	24 V
Current Draw	40 A / 20 A	10 A / 5 A	10 A / 5 A	5 A	8 A	7 A	13 A	24 A / 12 A	12 A / 6 A	20 A / 10 A	13 A
Refrigerant	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a
Minimum Ambient Temperature	0°C	0°C	0°C	0°C	0°C	0°C	-10°C	0°C	0°C	0°C	0°C
	32°F	32°F	32°F	32°F	32°F	32°F	14°F	32°F	32°F	32°F	32°F
Maximum Ambient Temperature	46°C	46°C	46°C	46°C	46°C	46°C	46°C	46°C	46°C	46°C	46°C
	115°F	115°F	115°F	115°F	115°F	115°F	115°F	115°F	115°F	115°F	115°F
Weight (nominal)	47.0 kg	10.0 kg	10.0 kg	15.0 kg	25.0 kg	26.0 kg	30.0 kg	14.0 kg	10.0 kg	14.0 kg	18.0 kg
	103.4 lbs	22.00 lbs	22.00 lbs	33.0 lbs	55.0 lbs	57.2 lbs	66.1 lbs	30.8 lbs	22.00 lbs	30.8 lbs	39.6 lbs
Dimension (L x W x H) (B x A x C)	804mm x 650mm x 364mm	513mm x 415mm x 180mm	550mm x 435mm x 180mm	389mm x 209mm x 453mm	470mm x 600mm x 260mm	570mm x 545mm x 250mm	587mm x 536mm x 296mm	886mm x 390mm x 180mm	600mm x 455mm x 225mm	908mm x 332mm x 190mm	700mm x 405mm x 200mm
	31.7in x 25.6in x 14.3in	20.2in x 16.3in x 7.1in	27.7in x 17.1in x 7.1in	15.3in x 8.2in x 17.8in	18.5in x 23.6in x 10.2in	22.4in x 21.5in x 9.8in	23.1in x 21.1in x 11.7in	34.9in x 15.4in x 7.1in	23.6in x 17.9in x 8.9in	35.7in x 13.1in x 7.5in	27.5in x 15.9in x 7.8in

*Optional fresh air with Sigma Model EB9P4X

ALWAYS USE GENUINE SIGMA AUTHORISED PARTS ONLY



www.sigma-hvac.com

FOR MORE INFORMATION

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