

Introducing Rencool's extensive range of 12V and 24V DC Compressors and Systems to CoolDrive's Air Conditioning Product Range.

New Product Bulletin 16



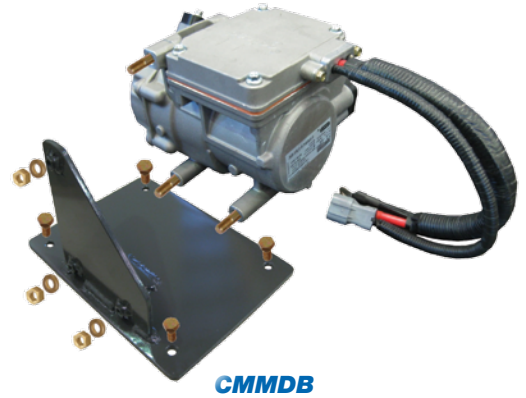
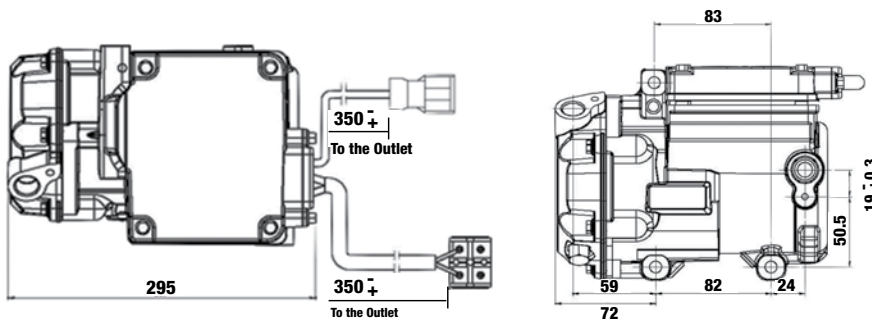
*Designed and manufactured for the:
Truck and transport industry, mining,
construction, rail, marine, civil aviation,
telecommunications, solar power
plants and defence sectors.*

The innovative DC voltage compressor designs are united with quality proven RedDOT assemblies & Jayair underdash evaporators & remote condensers to provide a solution for any no idle application.

MD-18 & MD-24 Series

12V & 24V DC Air Conditioning Compressor

- 18cc to 24cc displacement
- 2000 to 6000 RPM operating range
- Soft start function
- Internal digital controller
- Brushless technology
- Compact design
- IP68 rated



CMMDB

Optional Mounting Bracket

12V and 24V electric scroll compressors have 3 types of specifications for basic performance parameters see table below

Part Number	CMMD182	CMMD184	CMMD24
Voltage range	10V-16V	20V-31V	24V-31V
Displacement	18cc	18cc	24cc
RPM / Amp draw	2000rpm / 30A	2000rpm / 15A	2000rpm / 20A
	4000rpm / 55A	4000rpm / 30A	4000rpm / 42A
	6000rpm / 96A	6000rpm / 50A	6000rpm / 65A

Above data test condition (cooling)

Suction pressure: 0.196MPa

Discharge pressure: 1.47MPa

Super-heating: 10°C

Super-cooling: 5°C

CoolDrive Part No.	Description	Dimensions (mm)	Weight (kg)
CMMD182	MD18 12V 18cc DC electric compressor	192 x 135 x 153	6
CMMD184	MD18 24V 18cc DC electric compressor	192 x 135 x 153	6
CMMD24	MD24 24V 24cc DC electric compressor	192 x 135 x 153	6

*Minimum battery requirements for **No Engine Run**: 2 x 125 Amp hr (AGM) batteries



Acacia Ridge:
Tel: (07) 3277 9100

Adelaide:
Tel: (08) 8440 7900

Albury:
Tel: (02) 6025 3344

Alexandria:
Tel: (02) 9519 6922

Brisbane:
Tel: (07) 3623 2133

Cairns:
Tel: (07) 4034 0200

Canberra:
Tel: (02) 6280 4755

Darwin:
Tel: (08) 8944 3200

Geelong:
Tel: (03) 5241 6888

Hallam:
Tel: (03) 9796 3155

Launceston:
Tel: (03) 6344 8833

Melbourne:
Tel: (03) 9896 7333

Newcastle:
Tel: (02) 4954 2500

Perth:
Tel: (08) 9453 0900

Rockhampton:
Tel: (07) 4923 7333

Sydney:
Tel: (02) 8811 1288

Thomastown:
Tel: (03) 9460 7300

Toowoomba:
Tel: (07) 4634 0566

Townsville:
Tel: (07) 4755 2111

CoolDrive Export:
Tel: (07) 3623 2155

RDK7-24

24V DC Air Conditioning Compressor

- Use as anti-idle or in conjunction with OEM engine drive system
- Ideal for mining, military and heavy machine sector
- Brushless technology
- 3mm stainless steel casing
- Suits systems up to 23,000 BTU's
- Bolt on, plug & play design
- Water and vibration proof digital controller
- Includes oil separator



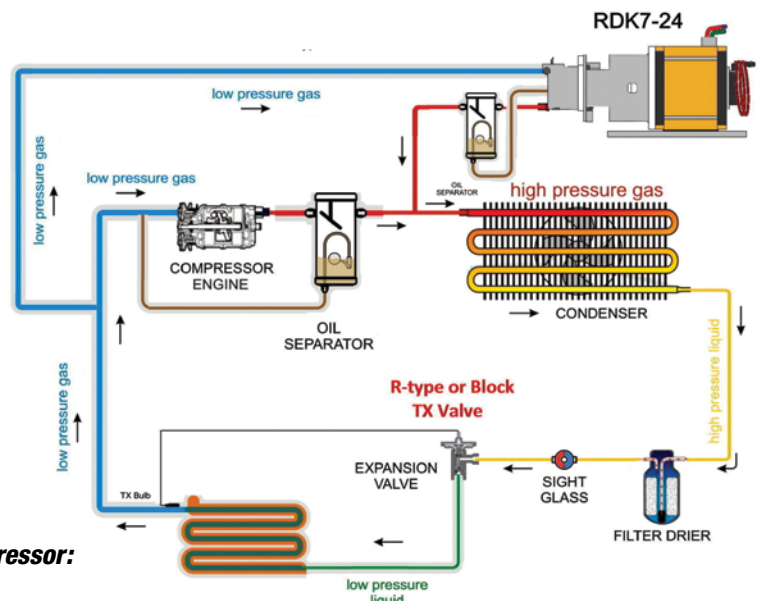
CMRDK792SS

	CMRDK745	CMRDK792	CMRDK7120
RPM / Amp	2000rpm / 28-45A	2000rpm / 42-65A	2000rpm / 60-90A

DRK7-RDK7- Motor Specifications

- RDK7: IP Rating: 66
- Motor: Brushless 1.5kw & 2kw
- MTBF: 50,000 hrs
- Motor efficiency:
Main shaft: 92%
- Motor Crank Sensor:
Programmable Encoder Digital
- BLDC Controller:
Programmable for Torque, Speed
- BLDC Controller:
18.3 to 29.9 voltage allowance
- BLDC Controller:
High temp cut-out (+125°C)
- Compressors:
45, 92 & 120cc (5 & 10) Piston
- Amps free load:
3.8amps with 4% variation @24volt
- Amps max load at 10 Nm torque with 92cc compressor:
60A @ 24volt @ +40°C
- Max programmable speed under load 2200 RPM
@ 24volt @ 10Nm torque

Dual Compressor Circuit 24V RDK7 Compressor & OEM Engine Compressor



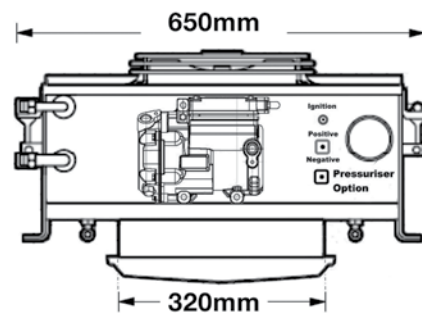
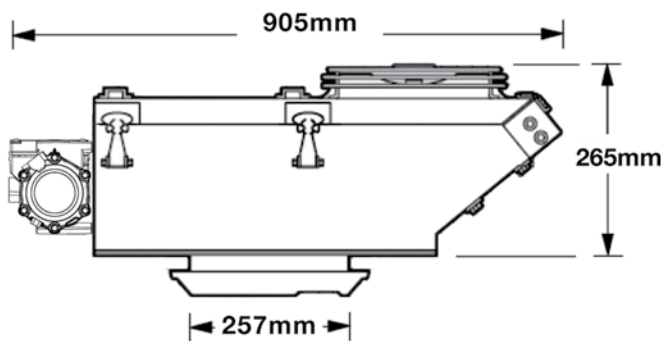
CoolDrive Part No.	Description	Dimensions (mm)	Weight (kg)
CMRDK745SS	DRK7 24V 45cc DC electric comp in stainless steel enclosure.	670 x 360 x 342	79
CMRDK792SS	DRK7 24V 92cc DC electric comp in stainless steel enclosure.	670 x 360 x 342	79
CMRDK7120SS	DRK7 24V 120cc DC electric comp in stainless steel enclosure.	670 x 360 x 342	79
CMRDK745CY	DRK7 24V 45cc DC electric comp in Caterpillar yellow enclosure.	670 x 360 x 342	79
CMRDK792CY	DRK7 24V 92cc DC electric comp in Caterpillar yellow enclosure.	670 x 360 x 342	79
CMRDK7120CY	DRK7 24V 120cc DC electric comp in Caterpillar yellow enclosure.	670 x 360 x 342	79

*Minimum battery requirements for **No Engine Run**: 2 x 165 Amp hr (AGM) batteries

MD-9727

12V & 24V DC Self Contained Rooftop Air Conditioner

- Quality RedDOT R-9727 technology combined with small to medium displacement electric drive compressors make it ideal for endless applications
- Ideal for when no engine drive options exist
- 12V & 24V applications
- 18cc & 24cc options available
- Conserve Power by varying compressor RPM (2000-6000 RPM)
- 6830 – 13660 BTU rated
- Bolt on, plug & play design
- Standard RedDOT remote mount filters and pressurisers are adaptable
- Use as anti-idle or in conjunction with OEM engine drive system
- Easy installation



CoolDrive Part No.	Description	Dimensions (mm)	Weight (kg)
EVMD97272	MD-9727 with 12V 18cc DC electric comp, pregassed.	905 x 650 x 265	55
EVMD97274	MD-9727 with 24V 18cc DC electric comp, pregassed.	905 x 650 x 265	55
EVMD97274C	MD-9727 with 24V 24cc DC electric comp, pregassed.	905 x 650 x 265	55

NB: For all DC voltage components – the power source requirement needs to be calculated for individual applications and is dependent on the compressor rpm and ambient conditions. Please refer individual component specifications.

The total amp draw of a system can be calculated by adding the amp draw of the evaporator and condenser fans with that of the DC electric compressor. Most common fans run an average of 10-12 amps @12V and 8-12 amps @24V.

A minimum of 2B&S copper insulated cabling **MUST BE** used. Failing to use the recommended cabling will result in high current consumption, high resistance and overall poor performance from the entire DC voltage HVAC system. Length of cabling **MUST BE** calculated so resistance is kept to a minimum.

It is important to note the amperage draw of each unit. If extended run time is required with engine off, CoolDrive highly recommend installation of a secondary battery system.

Rencool is Australian Owned and Operated and manufactures high quality air conditioning systems for distribution into the local and export markets.

Rencool specialize in low power full DC voltage systems that operate without the need for an engine driven compressor.

MD-6100

12V & 24V DC Self Contained Rooftop Air Conditioner

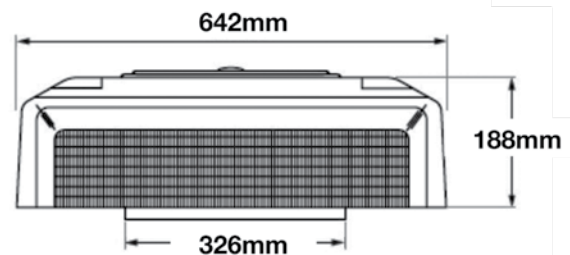
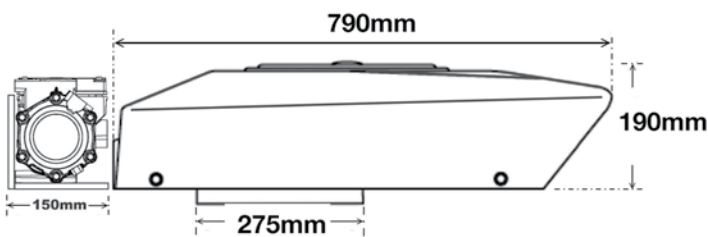
- Adapted to the R-6100 RedDOT unit, the electric compressor allows the system to be fitted to an endless variation of no-idle applications
- 18cc and 24cc options available
- Conserve Power by varying compressor RPM (2000-6000 RPM)
- 12V & 24V applications
- Bolt on, plug & play design
- Option to mount the compressor up to 6 metres from the unit
- 6800 – 13660 BTU rated
- Easy installation



EVMD61002



EVMD6100B2



CoolDrive Part No.	Description	Dimensions (mm)	Weight (kg)
EVMD61002	MD-6100 with 12V 18cc DC electric comp, pre-gassed.	950 x 650 x 170	38
EVMD61004	MD-6100 with 24V 18cc DC electric comp, pre-gassed.	950 x 650 x 170	38
EVMD61004C	MD-6100 with 24V 24cc DC electric comp, pre-gassed.	950 x 650 x 170	38
EVMD6100B2	MD-6100 with bracket mounted 12V 18cc DC electric comp, pre-gassed.	950 x 650 x 170	44
EVMD6100B4	MD-6100 with bracket mounted 24V 18cc DC electric comp, pre-gassed.	950 x 650 x 170	44
EVMD6100B4C	MD-6100 with bracket mounted 24V 24cc DC electric comp, pre-gassed.	950 x 650 x 170	44
EVMD6100R2	MD-6100 with 12V 18cc DC electric comp for remote mount + 5m hoses.	N/A	N/A
EVMD6100R4	MD-6100 with 24V 18cc DC electric comp for remote mount + 5m hoses.	N/A	N/A
EVMD6100R4C	MD-6100 with 24V 24cc DC electric comp for remote mount + 5m hoses.	N/A	N/A



DCSS

12V & 24V DC Sleeper Cab Kit

- Ideal no-idle sleeper cab unit
- Incorporates EV2208 & EV2209 evaporator units
- Use as anti-idle or in conjunction with OEM engine drive system
- 8538 to 13660 BTU rated
- Conserve Power by varying compressor RPM (2000-6000 RPM)
- 12V & 24V applications



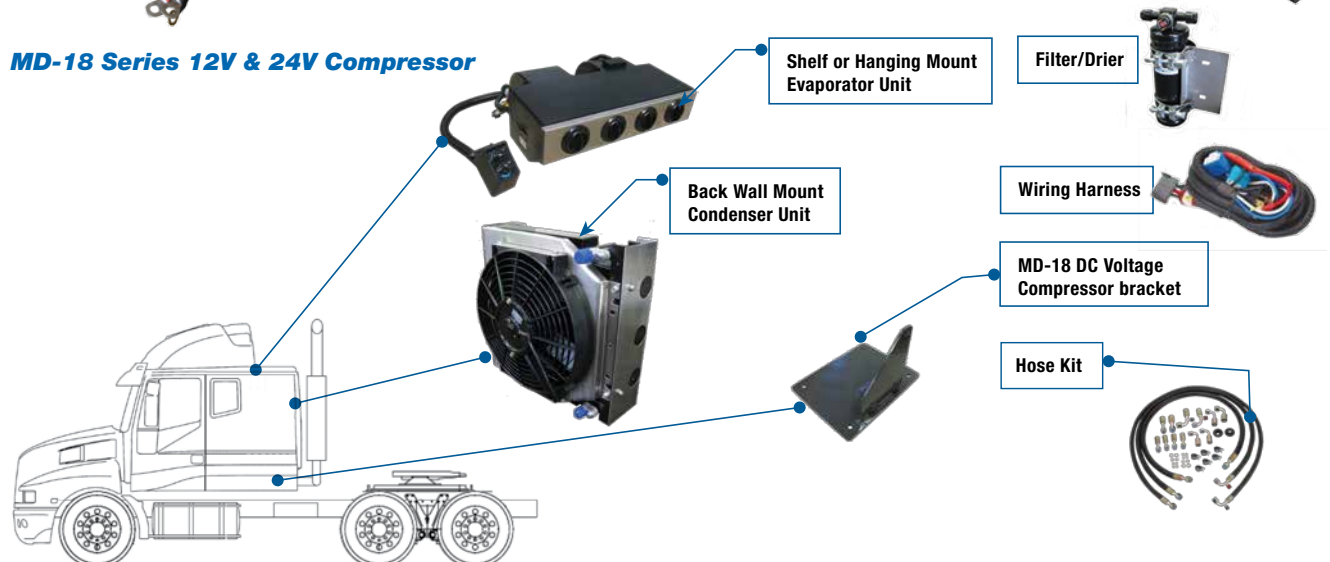
**EV2208 (12V)
EV2209 (24V)**



**RNC-105 Condenser Unit
(CNA105 Condenser/shroud only)**



MD-18 Series 12V & 24V Compressor



CoolDrive Part No.	Description	Dimensions (mm)
EVD CSS2	DCSS A/C kit with 12V 18cc DC electric comp, no hoses or wiring included	RNC-105 379 x 354 x 44 EV2208 462 x 342 x 165
EVD CSS4	DCSS A/C kit with 24V 18cc DC electric comp, no hoses or wiring included	RNC-105 379 x 354 x 44 EV2209 462 x 342 x 165
EVD CSS4C	DCSS A/C kit with 24V 24cc DC electric comp, no hoses or wiring included	RNC-105 379 x 354 x 44 EV2209 462 x 342 x 165
EVD CSS2HW	DCSS A/C kit with 12V 18cc DC electric comp inc hoses & wiring harness	RNC-105 379 x 354 x 44 EV2208 462 x 342 x 165
EVD CSS4HW	DCSS A/C kit with 24V 18cc DC electric comp inc hoses & wiring harness	RNC-105 379 x 354 x 44 EV2209 462 x 342 x 165
EVD CSS4CHW	DCSS A/C kit with 24V 24cc DC electric comp inc hoses & wiring harness	RNC-105 379 x 354 x 44 EV2209 462 x 342 x 165

RCS3

12V & 24V DC Sleeper Cab Kit 2 Piece Split System

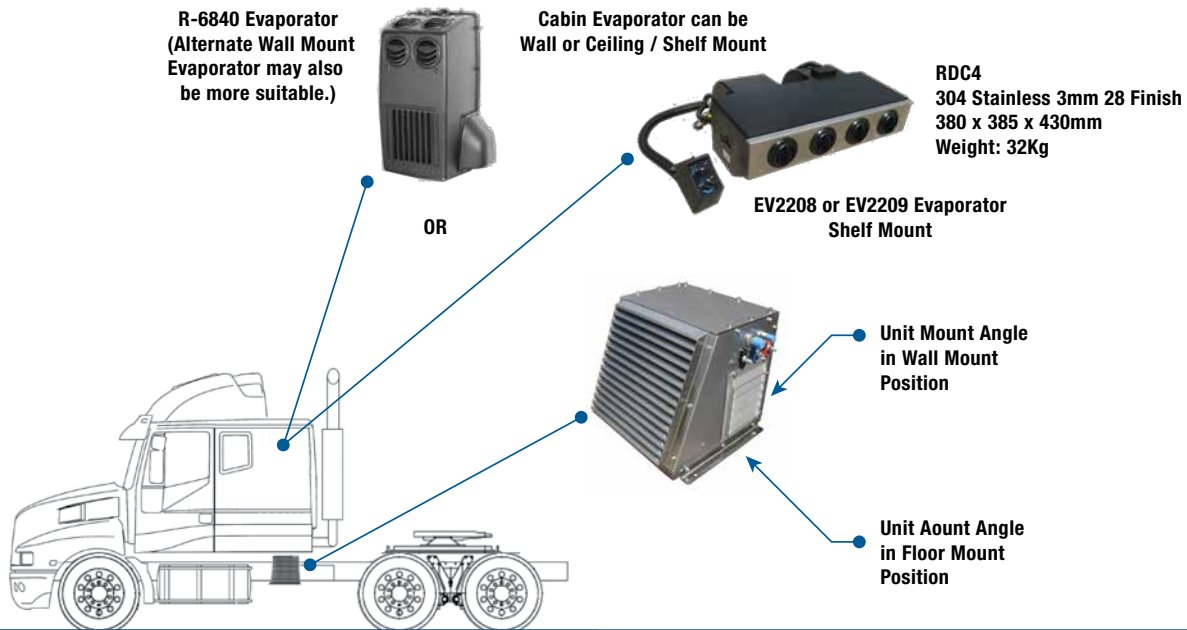
- Ideal no-idle sleeper cab unit
- Use as anti-idle or in conjunction with OEM engine drive system
- Benefit from fuel savings while driving
- 304 Stainless Steel
- Conserve Power by varying compressor RPM (2000-6000 RPM)
- Limited Servicing required
- No Vibration – No engine operation
- Built in Australia for Aussie Conditions
- 12V & 24V applications
- Incorporates EV2208 & EV2209 evaporator units
- 10245 -13660 BTU rated



CNRDC42



EV2208 (12V)
EV2209 (24V)



CoolDrive Part No.	Description	Dimensions (mm)
EVRC32	RCS3 A/C kit with 12V 18cc DC electric compressor	RDC4 385 x 380 x 430 EV2208 462 x 342 x 165
EVRC34	RCS3 A/C kit with 24V 18cc DC electric compressor	RDC4 385 x 380 x 430 EV2209 462 x 342 x 165
EVRC34C	RCS3 A/C kit with 24V 24cc DC electric compressor	RDC4 385 x 380 x 430 EV2209 462 x 342 x 165



CDD PART #	RENCool PART #	DESCRIPTION	SPECIFICATIONS	IMAGE	DIMENSIONS	WEIGHT	BTU Rating
DC ELECTRIC COMPRESSORS							
CMDRK745	DRK7-45	ELECTRIC COMPRESSOR DRK7	24V, 45cc		410 x 190 x 220mm	28kg	13,660
CMDRK792	DRK7-92	COMPRESSOR DRIVE	24V, 92cc				20,491
CMDRK7120	DRK7-120		24V, 120cc				27,321
CONDENSER / COMPRESSOR UNITS							
CNRDC42	RDC4-2	SELF CONTAINED CONDENSER /	12V, 18cc @2000rpm		385 x 380 x 430mm	32kg	6,830
CNRDC44	RDC4-4	COMPRESSOR ELECTRIC SYSTEM	24V, 18cc @4000rpm				8,538
CNRDC44C	RDC4-4C		24V, 24cc @6000rpm				11,953
CMMDR42	MD-RC4-2	SELF CONTAINED CONDENSER /	12V, 18cc @2000rpm		830 x 311 x 279mm	28kg	6,830
CMMDR44	MD-RC4-4	COMPRESSOR ELECTRIC SYSTEM	24V, 18cc @4000rpm				10,245
CMMDR44C	MD-RC4-4C		24V, 24cc @6000rpm				13,660
CMMDR52	MD-RC5-2	SELF CONTAINED CONDENSER /	12V, 18cc @2000rpm		650 x 406 x 257mm	32kg	6,830
CMMDR54	MD-RC5-4	COMPRESSOR ELECTRIC SYSTEM	24V, 18cc @4000rpm				10,245
CMMDR54C	MD-RC5-4C		24V, 24cc @6000rpm				13,660
SELF CONTAINED DC SYSTEMS							
EVRC32	RCK3-2	ROOFTOP ELECTRIC MD-18	12V, 18cc @2000rpm		900 x 700 x 170mm	47kg	10,245
EVRC34	RCK3-4	COMPRESSOR COMBINATION	24V, 18cc @4000rpm				11,953
EVRC34C	RCK3-4C	PREGASSED	24V, 24cc @6000rpm				13,660
EVDRK972745	DRK-9727-45	ROOFTOP ELECTRIC DRK7	24V, 45cc		1060 x 625 x 265mm	87kg	17,075
EVDRK972792	DRK-9727-92	COMPRESSOR COMBINATION	24V, 92cc				20,491
EVDRK9727120	DRK-9727-120	PREGASSED	24V, 120cc				27,321
ROOFTOP UNITS							
EVRTK42	RTK4-2	ROOFTOP UNIT - 4Kw	12V		695 x 700 x 176mm	27kg	13,660
EVRTK44	RTK4-4		24V				13,660
EVRTK52	RTK5-2	ROOFTOP UNIT - 5Kw	12V		743 x 735 x 190mm	47kg	17,075
EVRTK54	RTK5-4		24V				17,075
EVRTK82	RTK8-2	ROOFTOP UNIT - 8Kw	12V		1020 x 970 x 180mm	62kg	27,321
EVRTK84	RTK8-4		24V				27,321
EVRTK11S2	RTK11-S-2	ROOFTOP UNIT - 11Kw,	12V		1520 x 1100 x 174mm	80kg	37,567
EVRTK11S4	RTK11-S-4	STAINLESS STEEL FINISH	24V				37,567
EVRTK11P2	RTK11-P-2	ROOFTOP UNIT - 11Kw,	12V		1520 x 1100 x 174mm	80kg	37,567
EVRTK11P4	RTK11-P-4	POWDER COATED FINISH	24V				37,567
DC VOLTAGE HEAVY DUTY RANGE OF ELECTRIC SYSTEMS							
EVBCA645	BCA-6-45	ANTI IDLE DUAL UNIT WITH DRK7	24V, 45cc		915 x 475 x 400mm	93kg	13,660
EVBCA692	BCA-6-92	COMPRESSOR & CONDENSER	24V, 92cc				20,491
EVBCA6120	BCA-6-120		24V, 120cc				27,321
EVBSU645	BSU-6-45	ANTI IDLE SPLIT SYSTEM WITH BCA-6	24V, 45cc		BCA6 915 x 475 x 400mm EVK6 620 x 199 x 705mm	125kg	13,660
EVBSU692	BSU-6-92	CONDENSER/COMPRESSOR	24V, 92cc				20,491
EVBSU6120	BSU-6-120	& EVK6 EVAPORATOR	24V, 120cc				27,321
EVTR62445	TR-624-45	COMPLETE ELECTRIC SYSTEM	24V, 45cc		REFER	N/A	13,660
EVTR62492	TR-624-92	WITH DRK7 COMPRESSOR, EVK6	24V, 92cc				20,491
EVTR624120	TR-624-120	EVAPORATOR & RCK6 CONDENSER	24V, 120cc				27,321
CNRCK62	RCK6-2	REMOTE MOUNT CONDENSER UNIT	12V		830 x 360 x 230mm	28kg	20,491
CNRCK64	RCK6-4	IN 3mm STAINLESS STEEL FINISH	24V				20,491
EVEVK42	EVK4-2	EVAPORATOR UNIT IN	12V		450 x 520 x 190mm	18kg	13,660
EVEVK44	EVK4-4	STAINLESS STEEL FINISH	24V				13,660
EVEVK62	EVK6-2	MINE SPEC EXTERNAL	12V		620 x 199 x 705mm	32kg	20,491
EVEVK64	EVK6-4	EVAPORATOR UNIT IN 3mm STAINLESS STEEL FINISH	24V				20,491
MISC COMPONENTS							
EVPR6002	PR-600-2	CABIN PRESSURISER - 2mm	12V		PRESSURISER BOX 300 x 200 x 200	5kg	N/A
EVPR6004	PR-600-4	POWDER COATED STEEL FINISH, 800CFM OUTPUT AIR FLOW	24V				
HASD242	SD-24-2	ELECTRIC DUCTED HEATER INSTANT	12V		300 x 127 x 103mm	1.5kg	N/A
HASD244	SD-24-4	HEAT & DEFROST - 14,028 BTU CAPACITY	24V				
TOEVC12	EVC-12	TWO STAGE ROTARY EVACUATION	12V		240 x 115 x 230mm	6kg	N/A
TOEVC24	EVC-24	PUMP	24V				