



## **DRK4**

Copyright © All rights reserved Patents Pending 2010901844

### **DC Electric Air Conditioning Compressor Drive Unit**

The DRK4 is an electric compressor drive system for mobile or stationary equipment for suitable air conditioners up to 16 000BTU/hr with the standard DRK4 system. On clients request motor power can be increased to produce up to 35 000BTU in a voltage range of 12, 24, 48, and 72VDC.

The unit is easily adaptable to most Roof mount and split systems that fall into the units specifications for optimal cooling capacity. For clients wanting maximum cooling capacity with no concerns of high-energy use, the DRK4 can be manufactured to suit the application with a higher capacity BLDC motor and our larger Rotary compressor units. Physical size only varies slightly for a larger cooling capacity system, this type of system can be configured up to 35 000BTU if the client's application allows our system to use the available electrical energy needed to run this high output DC cooling system.

The unit can be supplied with a full stainless steel enclosure for a bolt in / plug & play system for a straight forward easy installation. The 4-piece mounting assembly gives the unit simplicity with the given strength to handle any type of harsh application. All components of the DRK4 are manufactured and designed for this application including the BLDC motor and our custom compressor.

High strength grade (6061) aluminium mounting system and precession alignment for the compressor drive assembly making it low noise and no vibration. Simple electrical connection hook-up with industry standard MIOR air conditioning fittings for the Suction & Discharge. The Controller has single LED diagnostics and no programming required for the installation, which gives the DRK4 a true plug and play experience. Controller is waterproof sealed and installed into a Heatsink to combat the wet and hot climates.

This 2-piece **Patented** design gives the DRK4 much greater installation options for those air conditioner installs deemed impossible. The DRK4 has a soft start implement in our software from the controller, so high inrush currents can be avoided. The brushless motor controller delivers the correct amount of input power to maintain the demanded performance when needed.

The DRK4 can be used on all types of applications; system is designed for use while the vehicle is running & stopped or from standby power such as batteries and solar.

### Most popular Applications

- Machinery & Plant equipment
- Mining Industry
- Military Equipment
- Locomotives
- Aircraft / Helicopters
- Trucking (Single & Dual systems)
- Telecommunications Shelters
- Marine
- Recreational Vehicles
- Any type of specialized equipment

### Available Voltage Options

12 volt : with standard BLDC Motor & Rotary vane compressor

24 volt : " "

48 volt : " "

72 volt : " "

\*Positive earth units by order only

### Available Cooling capacity options

Standard: 11500BTU/hr @ 12 volt **DRK-4**

Max Load : 90amps @40deg C

Standard: 23000BTU/hr @ 24 volt **DRK-7**

Max Load : 55amps @40deg C

Client's requests above standard cooling capacity

In 24,48 & 72 Volt by special order only

### Physical Specifications

DRK4 unit :(LxWxH) 435mm x 181mm x 230mm - Weight 19kg

Controller unit :(LxWxH) 250mm x 200mm x 70mm - Weight 4kg



### DC voltage Operation

**RENCOOL™**

**DC voltage Cooling Systems**

Brisbane QLD  
Australia.

