



REDBOX
INTERNATIONAL

RBC5650



MODEL **RBC5650**

Transformer Rectifier Unit for Offshore Applications

The RBC5650 is designed to be extremely user friendly and offer excellent power to weight and size ratio. The RBC5650 is over powered; this means you can guarantee the power this unit offers. The RBC5650 provides up to 600 Amps continuously and up to 2000 Amps peak, it comes in an IP55 case and is capable of working at temperatures from -20°C to +50°C.

The RSC5650 is designed specifically for offshore applications. The case is stainless steel marine coated and all the components are conformal coated.

(all information is based on a standard system,
other variants are available)

FEATURES

- 600 Amp @ 28.5 VDC continuous - up to 2000 Amps Peak.
- Conformal coated components
- All-Weather IP55. Supplied on heavy duty castors.
- High overload capability for engine starts.
- Stainless Steel, marine coated case.
- Low acoustic noise.
- Simple operation with analogue or digital indication.
- Lights for machine Status.
- Illuminated panel for around the clock operation
- Output cable up to 200m below deck operation

OPTIONAL EXTRAS

Control Box

The explosion rated box is fitted with a single output gland for the control cable. The box is fitted with a unit "Ready Lamp" showing the unit has power and is available. A "Start" button switches the output of the unit "On" and a "Power On" lamp illuminates when the power is On. A "Stop" button switches the output off and the "Power Off" lamp extinguishes.

The box is fitted with an "Emergency Stop" mushroom which when pushed will lock and stop the unit from functioning. The "Ready Lamp" then extinguishes.

All Glands, Lamps and Buttons are explosion rated.

Junction Box

The explosion rated box is fitted with 2 input glands for the 2 x 400mm² cables and 4 output gland for the 4 x 70mm² cables.

All Glands are explosion rated.





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TECHNICAL SPECIFICATIONS

INPUT

| | |
|-------------------|--|
| Voltage | 380 TO 460VAC, 3-Phase with or without neutral |
| Frequency | 50Hz or 60Hz, +/- 6% |
| Current Harmonics | EN61000-3-12 EMC – Harmonic Limits |
| Power Factor | 0.93 |
| Inrush | Limited to 50 Amp |
| Connections | 100AMP |

OUTPUT

| | |
|--------------------|--|
| Voltage | 28.5 Volts DC |
| Voltage Regulation | Steady-State +/- 5% |
| Peak Amps | 600V Continuous and 2000A Peak (at unit) |

PROTECTION

| | |
|------------------|--|
| Input Protection | 100 Amp circuit breaker with current limiting |
| Thermal Overload | Thermal sensors located in main rectifier, transformer and power module. |

SYSTEM

| | |
|---------------------------|--|
| Ambient Temperature Range | -20 to +50°C |
| Humidity | Less than 90% non condensing |
| Altitude | All specifications are quoted at less than 2000m above sea level |
| Acoustic Noise | Typically 65dB |
| Efficiency | 85% to 95% |
| EMC | EN61000-3-12 EMC – Harmonic Limits EN61000-6-2 EMC – Immunity for Industrial Environments EN61000-6-4 EMC – Emission Standards for Industrial Environments |
| Casing | Stainless Steel SS316L |
| Case Rating | IP55 EN60529 - IP Ratings for Enclosures |
| Metres | Analogue, or digital for output Amps and Volts |
| Panel | Status lights for input and output conditions, and alarms |

VARIANTS

| | |
|----------------|--|
| Caster Version | Size H1200MM x W850MM x D1500MM 1200mm long with 50mm eye (with trailer version only) |
|----------------|--|