



**REDBOX**  
INTERNATIONAL

**RBC4000**

**MODEL RBC4000** *3ph In 1ph Out*  
**FREQUENCY CONVERTERS** (MODELS AVAILABLE FROM 4KVA TO 10KVA)



**Cost-Effective, Compact and Dependable:**

RBC4000 series Frequency Converters provide the most cost-effective and flexible way of providing 400Hz and 60Hz for workshop use. By using the most advanced electronic design, RBC4000 models offer a remarkably compact, quiet and robust converter. This means that personnel may work in close proximity to them without the tiring noise normally associated with 400Hz 60Hz converters.

**Simplicity in Operation:**

Push button control panel with LCD digital display

**Applications:**

RBC4000 series machines are suitable for installations within plant rooms and workshops. These units are commonly used for powering production lines, test and development laboratories and simulators.

**High MTBF, Low MTTR:**

An oversized rectifier and robust IGBT based inverter offer high reliability, while modular construction and a simple lay-out means that access for maintenance and repair is very straight forward.

- **Low Acoustic Noise**
- **Simple Operation**
- **Comprehensive Output Display**

**[www.redboxpower.com](http://www.redboxpower.com) [sales@redboxpower.com](mailto:sales@redboxpower.com)**

**Tel (0) +44 1794 518888 Fax +44 (0) 1794 518848**

## RBC4000 TECHNICAL SPECIFICATIONS

### INPUT

|                        |  |
|------------------------|--|
| Mains Supply Voltage   | 230/400VAC±10% Single or Three Phase (other voltages available on request).      |
| Mains Supply Frequency | 50 or 60Hz±5% (other frequencies available on request).                          |
| Power Factor           | 0.99Pf @ full load.  |
| Input Protection       | MCB to BS EN 60898.  |
| Protections            | DC over-voltage protection, mains low protection and input surge protection.     |
| Technology             | Full wave controlled thyristor / diode bridge with IGBT power factor correction. |

### OUTPUT

|                    |   |
|--------------------|---|
| Voltage            | 115V single phase (other voltages available on request)   |
| Voltage Regulation | Static ±1%, Dynamic ±6%.  |
| Output Wave Form   | Sinusoidal  |
| Frequency          | 50,60 or 400Hz ±0.1% (other frequencies available on request - 16- 850Hz).                              |
| Distortion (THD)   | <3% into linear load.   |
| Load Power Factor  | 0.3 lag to 0.3 lead.  |
| Crest Factor       | 3:1   |
| Overload (KVA)     | 120% continuous 121% for 2 minutes, 160% for 5 seconds without reduction in output voltage.             |
| Efficiency         | 90-93% depending on system.   |
| Protections        | Electronic overload / short circuit, over-temperature, inverter over/under voltage and low DC shutdown. |
| Technology         | High Frequency, pulse width modulated IGBT with isolation transformer.                                  |

### GENERAL

|                               |  |
|-------------------------------|--|
| Noise Level                   | <55dBA @ 1 metre.                      |
| Maximum Relative Air Humidity | 90%, non-condensing                    |
| Maximum Altitude              | 2000m Above sea level before de-rating |
| Max / Min Temperature         | 0-40°C                                 |

### STANDARDS

|                             |
|-----------------------------|
| BS EN 50091-1 (Safety)      |
| BS EN 50091-2 (EMC)         |
| BS EN 61000-3-4 (Harmonics) |

| Model | Power | Weight Kg |
|-------|-------|-----------|
| 4004  | 4KVA  | 170 kg    |
| 4008  | 8KVA  | 240 kg    |
| 4010  | 10KVA | 275 kg    |

### CASE SIZE mm

H1000 X W530 X D750 mm

Dimensions and weights can change without notice

### OPTIONS

OTHER INPUT VOLTAGES

VARIOUS INPUT AND OUTPUT CABLE LENGTHS AND CONECTORS

ADDITIONAL OUTPUT OF 28V DC



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