



RED BOX
INTERNATIONAL®

RBC6000 RANGE

FREQUENCY CONVERTERS IN FIXED OR MOBILE, ALL WEATHER FORMATS
(OPTIONAL SECONDARY 28.5V DC OUTPUTS)



MODELS AVAILABLE FROM 6KVA TO 90KVA

- MILITARY AND CIVIL MODELS
- OPTIONAL ALL-WEATHER IP54 TRAILER CABINET
- AIRCRAFT INTERLOCK WITH MANUAL OVERRIDE
- ULTRA COMPACT AND LIGHT WEIGHT

- LOW ACOUSTIC NOISE
- SIMPLE OPERATION
- COMPREHENSIVE ANALOGUE OUTPUT DISPLAY
- OPTIONAL SECONDARY 28V DC OUTPUTS

Cost-Effective, Compact and Dependable:

RBC6000 series Frequency Converters provide the most cost-effective and flexible way of providing 400Hz and 60Hz all-weather ground power for helicopters, military jets, civil aircraft and workshop use. By using the most advanced electronic design, RBC6000 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:

'Two button' operation and large, clear analogue meters mean minimal operator training. An emergency stop is also fitted.

28.5VDC Output and Aircraft Interlocks:

All models may be ordered with an additional 28.5VDC output (up to 600 Amps). This may be supplied to be used either concurrently with the 400Hz output or independently. Aircraft interlocks for both military and civil aircraft may also be ordered and a manual interlock override is standard.

Applications:

RBC6000 series machines are suitable for static installations within plant rooms, hangars and workshops. Besides supplying aircraft they may also be used for powering production lines, test and development laboratories and simulators.

All-Weather, Stainless Steel Cabinet.

60, 75 and 90KVA units are supplied as standard with in an all weather stainless steel cabinet. This is optional with all other units. The high quality cabinet is made entirely of stainless steel and the immense strength and corrosion resistance of this material ensures a long product life.

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.

Ver No:- TC3000A50-4_01

www.redboxpower.com Tel +44 (0) 1794 518888 Fax +44 (0) 1794 518848 sales@redboxpower.com

TECHNICAL SPECIFICATIONS

INPUT:

- Input Voltage..... 200 to 460VAC , 3-Phase + N
- Input Frequency..... 50 or 60Hz, +/- 6%
- Input Current Harmonics..... IEC 1000-3-4
- Input Power Factor..... >0.98
- Rectifier Inrush..... 10 second walk-in, max current < In x 1.2
- Input Connections..... 10 metre 5-core cable with BS4343 plug or H/W or hardwired
- Input Protection..... Circuit breaker

OUTPUT:

- Output Voltage..... 115/200V or 120/208V, 3-Phase + N
- Output Voltage Regulation..... Steady-state: +/-2%, dynamic 0-100% step load: +/-5% recovering to steady-state within 10mS
- Total Harmonic Distortion..... <3% linear load
- Output Frequency..... 400Hz +/- 0.1%, quartz generated (60Hz option)
- Output Phase Angle Accuracy..... 120 deg. +/- 1%
- Permissible Load Power Factor..... -0.6 to 1
- Out put cable..... Lengths available from 10 metres

28.5V DC OUTPUT:

- 28.5V DC power supply optional, offering 600 Amps continuous and 2000 Amps peak

SECURITY:

- Permissible Overload..... 10% @ 10 min, 50% @ 10 s, 150% @ 1 s
- Output Overvoltage Cutout..... 130V L-N on any one phase
- Output Undervoltage Cutout..... 100V L-N on any one phase
- Thermal Overload..... Thermal sensors located in rectifier, inverter and output transformer

ENVIRONMENT & EQUIPMENT:

- Ambient Temperature Range..... -15 to 50 deg C
- Humidity..... <90%, non-condensing
- Altitude..... All specifications quoted at < 2000m above sea level
- Acoustic Noise..... < 55dBA @ 1m
- Overall Efficiency..... 85 to 93% model dependant
- EMC..... EN55-022B for fixed or small castor options EN61000-6-2/4, VDE0875 (optional MIL-STD 461) for large castor or trailer options
- Cabinet..... Zinc plated steel, powder coated RAL 7032 or option
- Cabinet Protection..... IP21 or IP45 for fixed or small castor options, IP54 for large castor or trailer options
- Meters..... Analogue Volts and Amps

Model	6006	6008	6010	6015	6020	6025	6030	6040	6050	6060	6075	6090
Power	6KVA	8KVA	10KVA	15KVA	20KVA	25KVA	30KVA	40KVA	50KVA	60KVA	75KVA	90KVA
Weight Kg	45Kg	55Kg	63Kg	95Kg	120Kg	150Kg	190Kg	230Kg	270Kg	315Kg	330Kg	360Kg

POWER	CASE SIZE mm	CASTOR / TRAILER
6KVA – 10KVA	H700 X W310 X D620 mm	Small castors
15KVA – 25KVA	H800 X W360 X D800 mm	Small castors
30KVA – 50KVA	H1200 X W420 X D850 mm	Small castors
60KVA – 90KVA	H1300 X W650 X D1000 mm	Large, heavy duty castors

*ALL UNITS CAN BE UPGRADED TO THE H1300 X W650 X D1000MM IP54 CASE OR TRAILER UNIT ON REQUEST

OPTIONS

OTHER INPUT VOLTAGES
VARIOUS INPUT AND OUTPUT CABLE LENGTHS AND CONECTORS
MILITARY AND MARINE VARIANTS
ADDITIONAL OUTPUT OF 28V DC

