



DATA CENTERS



E-BUSINESS  
(Servers Farms, ISP/ASP/POP)



TELECOM-MUNICATION DEVICES



INDUSTRIAL PLCS



ELECTRO-MEDICAL DEVICES



EMERGENCY DEVICES  
(Lights/Alarms)



**Eco Power  
Supplies**

# Master Dialog

RM 8-100 kVA three-phase/single-phase

RT 10-80 kVA three-phase/three-phase



Master Dialog RM / RT



MASTER DIALOG provides maximum protection for industrial applications thanks to its outstanding mechanical and electrical design. The load is powered continuously by the inverter with a filtered, stabilised and regulated sinewave supply. The input and output EMI filters considerably increase the immunity of the load to mains disturbances and surges.

MASTER DIALOG is supplied with PowerShield<sup>3</sup> software as standard and can be remotely monitored using the TeleNetGuard system from anywhere in the world. Additional battery extension packs allow the standard battery runtime to be extended up to several hours.

MASTER DIALOG series includes 8-100kVA three/single-phase and 10-

80 kVA three-phase models and uses double conversion on-line technology (VFI) with an isolation transformer on the inverter output.

#### HIGH RELIABILITY

- Extremely high short-circuit current to ensure compatibility with the most difficult transformer applications (lighting, drives and industrial processes) and an isolation transformer on the inverter output.
- Full microprocessor control with no-break static and manual bypasses
- IGBT technology



| RM MODELS   | RM 8  | RM 10      | RM 15         | RM 20      | RM 30 | RM 40         | RM60             | RM 80 | RM 100            |  |
|---|---|------------|---------------|------------|-------|---------------|------------------|-------|-------------------|--|
| POWER (kVA)   | 8   | 10         | 15            | 20         | 30    | 40            | 60               | 80    | 100               |  |
| INPUT   |   |            |               |            |       |               |                  |       |                   |  |
| Rated voltage (V)                                   | 400 Vac three-phase   |            |               |            |       |               |                  |       |                   |  |
| Voltage range                                       | ± 20%   |            |               |            |       |               |                  |       |                   |  |
| Frequency range                                     | 45 ÷ 65 Hz  |            |               |            |       |               |                  |       |                   |  |
| Power factor  | > 0.92 in RM CLEAN version  |            |               |            |       |               |                  |       |                   |  |
| Distortion of the current absorbed                  | < 5% in RM CLEAN version  |            |               |            |       |               |                  |       |                   |  |
| Soft start  | 0-100% in 10"   |            |               |            |       |               |                  |       |                   |  |
| BY PASS   |   |            |               |            |       |               |                  |       |                   |  |
| Rated voltage (V)                                   | 230 Vac single-phase  |            |               |            |       |               |                  |       |                   |  |
| Permitted voltage range                             | ± 15% (selectable from ± 10% to ± 25% from front panel)                                 |            |               |            |       |               |                  |       |                   |  |
| Rated frequency                                     | 50/60 Hz (autorange)  |            |               |            |       |               |                  |       |                   |  |
| Permitted frequency range                           | ± 2% (selectable from ± 1% to ± 5% from front panel)                                    |            |               |            |       |               |                  |       |                   |  |
| Standard features                                   | Back Feed protection; separate bypass line  |            |               |            |       |               |                  |       |                   |  |
| BATTERIES   |   |            |               |            |       |               |                  |       |                   |  |
| Type  | Maintenance-free lead-acid VRLA AGM / GEL; NiCd   |            |               |            |       |               |                  |       |                   |  |
| Maximum recharge current (A)                        | 0.2 x C10   |            |               |            |       |               |                  |       |                   |  |
| RECTIFIER OUTPUT                                    |   |            |               |            |       |               |                  |       |                   |  |
| Maintenance voltage                                 | Variable acc. to temperature (-0.5 Vx°C)  |            |               |            |       |               |                  |       |                   |  |
| Ripple  | < 1%  |            |               |            |       |               |                  |       |                   |  |
| INVERTER OUTPUT                                     |   |            |               |            |       |               |                  |       |                   |  |
| Rated power (kVA)                                   | 8   | 10         | 15            | 20         | 30    | 40            | 60               | 80    | 100               |  |
| Rated voltage (kW)                                  | 6.4   | 8          | 12            | 16         | 24    | 32            | 48               | 64    | 80                |  |
| Number of phases                                    | 1   |            |               |            |       |               |                  |       |                   |  |
| Rated voltage (V)                                   | 230 single-phase  |            |               |            |       |               |                  |       |                   |  |
| Rated current (A)                                   | 35  | 43         | 65            | 87         | 130   | 174           | 261              | 348   | 434               |  |
| Regulation of the output voltage                    | 220 ÷ 244 V (configurable from control panel)   |            |               |            |       |               |                  |       |                   |  |
| Crest factor (I <sub>peak</sub> /I <sub>rms</sub> ) | 3: 1  |            |               |            |       |               |                  |       |                   |  |
| Waveform  | Sinewave  |            |               |            |       |               |                  |       |                   |  |
| Static stability                                    | ± 1%  |            |               |            |       |               |                  |       |                   |  |
| Dynamic stability                                   | ± 5% in 5 ms  |            |               |            |       |               |                  |       |                   |  |
| Frequency   | 50/60 Hz configurable   |            |               |            |       |               |                  |       |                   |  |
| Overload  | 110% 125% 150% of the rated current for 5h/10'/1'                                       |            |               |            |       |               |                  |       |                   |  |
| Frequency stability                                 | ± 0.05% on mains failure; ± 2% (selectable from ± 1% to ± 5%) with mains supply present |            |               |            |       |               |                  |       |                   |  |
| ENVIRONMENTAL                                       |   |            |               |            |       |               |                  |       |                   |  |
| Weight (kg)   | 190 to 460  | 200 to 470 | 220 to 490    | 230 to 500 | 290   | 340           | 440              | 520   | 650               |  |
| Dimensions (HxWxD) (mm)                             | 1200 x 555 x 720  |            |               |            |       |               | 1400 x 800 x 740 |       | 1400 x 1070 x 740 |  |
| Remote signalling                                   | Volt free contacts  |            |               |            |       |               |                  |       |                   |  |
| Remote controls                                     | EPO and Bypass  |            |               |            |       |               |                  |       |                   |  |
| Communication                                       | RS232 + remote contacts   |            |               |            |       |               |                  |       |                   |  |
| Operating temperature                               | 0°C ÷ +40°C   |            |               |            |       |               |                  |       |                   |  |
| Relative humidity                                   | < 95% non condensing  |            |               |            |       |               |                  |       |                   |  |
| Colour  | Light grey RAL 7035   |            |               |            |       |               |                  |       |                   |  |
| Noise   | 54 dBA at 1 m   |            | 60 dBA at 1 m |            |       | 65 dBA at 1 m |                  |       |                   |  |
| Protection rating                                   | IP20  |            |               |            |       |               |                  |       |                   |  |
| Efficiency Smart Mode                               | up to 98%   |            |               |            |       |               |                  |       |                   |  |
| Compliance  | Safety EN 62040-1 EMC EN 62040-2 Directives 2006/95/EC 2004/108/EC; EN 62040-3          |            |               |            |       |               |                  |       |                   |  |
| Internal batteries                                  | yes   | yes        | yes           | yes        | no    | no            | no               | no    | no                |  |

| RT MODELS   | RT 10   | RT 15      | RT 20         | RT 30      | RT 40 | RT 60            | RT 80 |
|---|---|------------|---------------|------------|-------|------------------|-------|
| POWER (kVA)   | 10  | 15         | 20            | 30         | 40    | 60               | 80    |
| <b>INPUT</b>  |   |            |               |            |       |                  |       |
| Rated voltage (V)                                   | 400 Vac three-phase   |            |               |            |       |                  |       |
| Voltage range                                       | ± 20%   |            |               |            |       |                  |       |
| Frequency range                                     | 45 ÷ 65 Hz  |            |               |            |       |                  |       |
| Power factor  | > 0.9 in RT CLEAN version   |            |               |            |       |                  |       |
| Distortion of the current absorbed                  | < 5% in RT CLEAN version  |            |               |            |       |                  |       |
| Soft start  | 0-100% in 10"   |            |               |            |       |                  |       |
| <b>BY PASS</b>                                      |   |            |               |            |       |                  |       |
| Rated voltage (V)                                   | 400 Vac three-phase   |            |               |            |       |                  |       |
| Permitted voltage range                             | ± 15% (selectable from ± 10% to ± 25% from front panel)                                 |            |               |            |       |                  |       |
| Rated frequency                                     | 50/60 Hz auto sensing   |            |               |            |       |                  |       |
| Permitted frequency range                           | ± 2% (selectable from ± 1% to ± 5% from front panel)                                    |            |               |            |       |                  |       |
| Standard features                                   | Back Feed protection; separate bypass line  |            |               |            |       |                  |       |
| <b>BATTERIES</b>                                    |   |            |               |            |       |                  |       |
| Type  | Maintenance-free lead-acid VRLA AGM/GEL; NiCd   |            |               |            |       |                  |       |
| Maximum recharge current (A)                        | 0.2 x C10   |            |               |            |       |                  |       |
| <b>RECTIFIER OUTPUT</b>                             |   |            |               |            |       |                  |       |
| Maintenance voltage                                 | Variable acc. to temperature (-0.5 Vx°C)  |            |               |            |       |                  |       |
| Ripple  | < 1%  |            |               |            |       |                  |       |
| <b>INVERTER OUTPUT</b>                              |   |            |               |            |       |                  |       |
| Rated power (kVA)                                   | 10  | 15         | 20            | 30         | 40    | 60               | 80    |
| Rated voltage (kW)                                  | 8   | 12         | 16            | 24         | 32    | 48               | 64    |
| Number of phases                                    | 3 + N   |            |               |            |       |                  |       |
| Rated voltage (V)                                   | 400   |            |               |            |       |                  |       |
| Rated current (A)                                   | 14  | 22         | 29            | 43         | 58    | 87               | 115   |
| Regulation of the output voltage                    | 348 ÷ 424 V (from control panel)  |            |               |            |       |                  |       |
| Crest factor (I <sub>peak</sub> /I <sub>rms</sub> ) | 3: 1  |            |               |            |       |                  |       |
| Waveform  | Sinewave  |            |               |            |       |                  |       |
| Static stability                                    | ± 1%  |            |               |            |       |                  |       |
| Dynamic stability                                   | ± 5% in 5 ms  |            |               |            |       |                  |       |
| Frequency   | 50/60 Hz configurable   |            |               |            |       |                  |       |
| Overload  | 110% 125% 150% of the rated current for 5h/10'/1'                                       |            |               |            |       |                  |       |
| Frequency stability                                 | ± 0.05% on mains failure; ± 2% (selectable from ± 1% to ± 5%) with mains supply present |            |               |            |       |                  |       |
| <b>ENVIRONMENTAL</b>                                |   |            |               |            |       |                  |       |
| Weight (kg)   | 210 to 480  | 220 to 490 | 230 to 500    | 282 to 552 | 330   | 450              | 555   |
| Dimensions (HxWxD) (mm)                             | 1200 x 555 x 720  |            |               |            |       | 1400 x 800 x 740 |       |
| Remote signalling                                   | Volt free contacts  |            |               |            |       |                  |       |
| Remote controls                                     | EPO and Bypass  |            |               |            |       |                  |       |
| Communication                                       | RS232 + remote contacts   |            |               |            |       |                  |       |
| Operating temperature                               | 0°C ÷ +40°C   |            |               |            |       |                  |       |
| Relative humidity                                   | < 95% non condensing  |            |               |            |       |                  |       |
| Colour  | Light grey RAL 7035   |            |               |            |       |                  |       |
| Noise   | 54 dBA at 1 m   |            | 60 dBA at 1 m |            |       | 62 dBA at 1 m    |       |
| Protection rating                                   | IP20  |            |               |            |       |                  |       |
| Efficiency Smart Mode                               | up to 98%   |            |               |            |       |                  |       |
| Compliance  | Safety EN 62040-1 EMC EN 62040-2 Directives 2006/95/EC 2004/108/EC; EN 62040-3          |            |               |            |       |                  |       |
| Internal batteries                                  | yes   | yes        | yes           | no         | no    | no               | no    |