## Joule range

## Combined mains and emergency lighting ballasts for single compact lamps

Features:

- Combined electronic ballast and emergency modules for compact lamps
- Incorporating our PERFERM ${ }^{\text {™ }}$ technology to ensure optimum operation of low mercury and amalgam construction lamps from both 'cold start' and warm start applications
- The electronic ballast circuit has a lamp failure protection circuit to prevent damage occurring to the ballast when a lamp falls
- Sine-wave output in emergency prevents unpleasant visual lamp effects and ensures maximum lamp cathode life
- Advanced battery charging circuit exploits energy absorption charging technology which reduces power losses in the unit, is reverse polarity protected and provides stable charge conditions to maximise battery life
- Joule combined units have Deep Discharge Protection to further help in preventing damaging operating conditions for the battery pack and are suitable for use with Ni-Cad and Ni-MH cells
- Designed to comply with the requirements of the European product standards EN 60924, EN 60925, EN 60929, EN55015, ENG1000.3.2, EN 61547, EN61347-2-7 and EN 61347-2-3
- Produced in our UK manufacturing plant which is registered and audited by BSI to BS EN ISO 9001:2008

| Cat No. | Cells | $\mathbf{1 6 W} \mathbf{~ 2 D}$ | Single <br> $\mathbf{1 8 W}$ TC-D | $\mathbf{2 2 W}$ T5C | S6W TC-D | 28W 2D | 36W TC-F | 38W 2D | 40W T5 C |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MCP4100P3 | $3 \times 4 A H$ | 15 | - | - | - | - | - | - | - |
| MCP4097P3 | $3 \times 4 A H$ | - | 19 | - | - | 12 | - | - | - |
| MCP4099P3 | $4 \times 4 A H$ | 21 | - | - | 18 | - | - | - | - |
| MCP4098P3 | $4 \times 4 A H$ | - | 21 | 17 | - | 15 | - | - | - |
| MCP4101P3 | $5 \times 4 A H$ | - | - | - | - | - | 10 | 13 | 12 |

*' Cold start' deemed to be temperatures above $10^{\circ} \mathrm{C}$
All modules supplied with green LED.
All of the products are for 3 hour duration, for other durations, specify the required time period e.g. P3 becomes P1 for 1 hour duration
Dimensions: $180 \mathrm{~mm} \times 70 \mathrm{~mm} \times 35 \mathrm{~mm}$
Fixing Centres: 170 mm
Weight: 0.54 Kg

