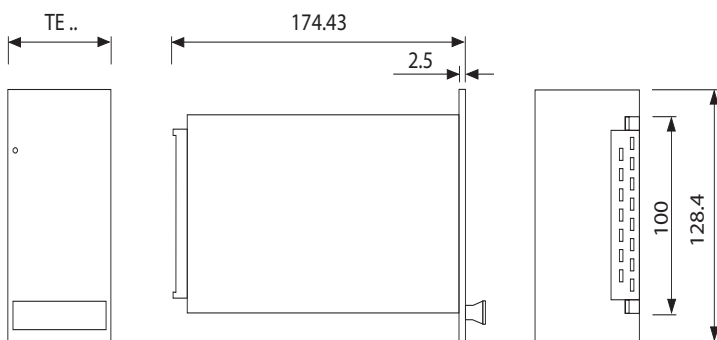




- 150 watts output power
- 19" plug-in module 3U / 8HP
- Wide range input
- Active power factor correction (PFC)
- For n + 1 redundancy operation
- Hot-Swap
- Modern microcontroller technology
- Digital interface (LIN 1.3 / opt.RS485)
- Thermal Load-share or optional Load-share with interface
- Operating data with interface readable (Vo / Io / temperature / status)
- Common, programmable signal output for: Power-Fail (PF), AC-Fail (ACFAIL) and temp alert



C US
CSA 22.2 No. 60950-1-03
UL Std. 60950

CB scheme
certified
SI-2377

3U

Front panel: 8HP - 40,3
Handle width: 3HP



| ORDER DATA | | | ORDER NUMBERS | |
|--|----------------------|-------------|-----------------|----------------------------------|
| Vo V | Io A | Width HP | Height U | Type-No. |
| 5.1 | 0 - 30 | 8 | 3 | P140R-0530 15.9243.300 |
| 7.5 | 0 - 20 | 8 | 3 | P140R-0720 15.9246.200 |
| 12 - 15 | 0 - 12.5 / 0 - 10 | 8 | 3 | P140R-1212 15.9243.700 |
| 24 | 0 - 6.3 | 8 | 3 | P140R-2406 15.9244.100 |
| 48 | 0 - 3.2 | 8 | 3 | P140R-4803 15.9244.500 |
| Additionally: | | | | |
| Front panel (natural anodized) | | | 33.1592.014.011 | |
| Assembly kit for DIN-rail | | | 15.7140.000.190 | |
| Assembly kit for wall mounting | | | 15.7140.000.290 | |
| LIN-Busmastercard LIN -> PMBus -> RS232 (3U/4HP) | | | on enquiry | |

For Hot-Swap operation, there must be a breakeime (1 minute), because the input current inrush.

Ventilation from bottom to top of the power supply and the housing-specific heatradiation must not be obstructed when installing the power supply.

Ensure fire protection by means of the surrounding housing system.

AC / DC POWER SUPPLY PRIMARY SWITCHED · SINGLE OUTPUT P140R SERIES

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|---|--|---|-----------------|-------|----|----|----|----|----|---|--|---|------|------|----|----|----|----|--|----|----|----|----|----|----|---|--|---------|----|----------------|------------|-------|----|----|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|----|
| 1. INPUT | | 6. SAFETY | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AC input range | 100-240Vac ±10%, 50-60 Hz -15% with fan cooling | IEC 60950-1:2005 DIN EN 60950-1:2006 CSA 22.2 Nr. 60950 Safety class 1, VDE 0100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Efficiency | 80-85% typ. | 7. OPERATING DATA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Input current limitation | < 30 A _{peak} typ. - in cold state < 40 A _{peak} typ. - in hot state | Temperature range | -25...70°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Internal fuse | 4AT | Derating | 2.5%/K from +50°C with fan cooling 2.5%/K from +35°C without fan cooling | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2. OUTPUT | | Weight | 1.2 kg | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adjustment range Vo | 5V/7.5V/24V/48V-type: -5/+10% 12V-type: -5/+37% | PFC | Active PFC, cos φ >0.95 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Max. output power | 150W with fan cooling ≥ 1.5m/s | Parallel connection | Yes | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Operation indicator | green LED for Ua / AC good red LED for Ua / AC / Temp. fail | Ventilation from bottom to top of the power supply and the housing-specific heatradiation must not be obstructed when installing the power supply. Ensure fire protection by means of the surrounding housing system. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ripple | < 0.6% V _{nom} (150 KHz band width) | 8. MECHANICS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Noise voltage | < 1.0% V _{nom} (20 MHz band width) | Dimensions | 19" plug-in module according to DIN41494 3 U / 8 HP - Plug-in by PCB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Temperature coefficient | ≤ 0.055% / K | Line Connection | H15 male connector DIN41612 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| switch performance | No overshooting of Vo (soft start) | PIN CONNECTIONS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Start-up delay | approx. 1s (Hot-Swap-Delay) | <table border="1"> <tr> <td>H15 DIN41612</td> <td>30</td> <td>26</td> <td>22</td> <td>18</td> <td>14</td> <td>10</td> <td>6</td> </tr> <tr> <td></td> <td>N</td> <td>n.c.</td> <td>Bus*</td> <td>-L</td> <td>-L</td> <td>-L</td> <td>-L</td> </tr> <tr> <td></td> <td>32</td> <td>28</td> <td>24</td> <td>20</td> <td>16</td> <td>12</td> <td>8</td> </tr> <tr> <td></td> <td>PE ⊕</td> <td>L1</td> <td>PF/AC* FAIL</td> <td>ADR* SD</td> <td>+SBS*</td> <td>+L</td> <td>+L</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>4</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>+L</td> </tr> </table> | | H15 DIN41612 | 30 | 26 | 22 | 18 | 14 | 10 | 6 | | N | n.c. | Bus* | -L | -L | -L | -L | | 32 | 28 | 24 | 20 | 16 | 12 | 8 | | PE ⊕ | L1 | PF/AC* FAIL | ADR* SD | +SBS* | +L | +L | | | | | | | | 4 | | | | | | | | +L |
| H15 DIN41612 | 30 | 26 | 22 | 18 | 14 | 10 | 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | N | n.c. | Bus* | -L | -L | -L | -L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 32 | 28 | 24 | 20 | 16 | 12 | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | PE ⊕ | L1 | PF/AC* FAIL | ADR* SD | +SBS* | +L | +L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | +L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Response time | 1ms typ. at Io 20 - 80% Inom | 9. EXPLANATION | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3. REGULATION | | <p>PE  Protective conductor Do not use without PE-connection!</p> <p>L1 / N +L / -L</p> <p>Mains phase / neutral conductor Load connections (max. 14A / pin)</p> <p>Connection optional:</p> <p>PF/ACFAIL* Signal output power- and AC-Fail +SBS* Stand by voltage ADR* Address LIN-BUS (Slave-resistor) SD* Shut-down (connect to -L) Bus* Digital bus interface (LIN 1.3)</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Line regulation | < 0.1% for Vo bei Vi _{min} - Vi _{max} | * If you need more details, please contact MGV . | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Load regulation | < 0.5% for Io 26 - 100% I _{nom} < 0.5-2% for Io 0 - 26% I _{nom} | Please note: The signal outputs are not short-circuit- and over-voltage-proof. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4. PROTECTION AND CONTROLLING | |  Please refer to the MGV user instructions before use! (also in Internet www.mgv.de) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Overvoltage protection | 120% ± 5% Vo | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Current limitation | 105% Inom typ. (at 12V-type depends on Vo), straight characteristic Output permanent short-circuit proof, at 48V-type: hicup-mode at Vo<1V _{DC} | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Overtemperature protection | Switches in stand by mode, if inside temperature becomes to high | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mains buffering | ≥ 20ms at 100% Load and Vi=115Vac | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Signal output | Transistor output (low activ) max. 60V/100mA with internal pull-up-resistor to Vo | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PF-signal threshold | <85% Vo or >115% Vo (± 1%) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5. EMC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Harmonics (PFC) | EN61000-3-2 (Class A) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EMC Immunity | EN61000-6-2 / EN61204-3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Electrostatic discharge | EN61000-4-2 8/15KV | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Electromagnetic RF field | EN61000-4-3 10V/m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fast transients (Burst) | EN61000-4-4 4KV/2 KV | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Surge (input / output) | EN61000-4-5 4KV/0.5KV (unsym.) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RF field conducted induced | EN61000-4-6 10V | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mains voltage dips | EN61000-4-11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EMC Emission | EN61000-6-3 / EN61204-3 EN55011 Class B Radiation depends on assembly | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Flicker | EN61000-3-3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

