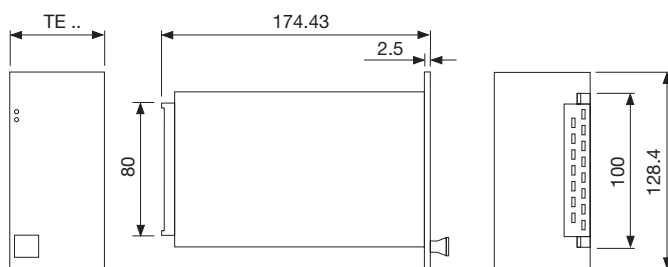


- 19" plug-in module
- Wide range input 94 - 264 VAC with Power factor correction (PFC) in accordance with EN 61000-3-2
- Output SELV according to EN 60950 and permanent short-circuit proof
- Overtemperature and overvoltage protection
- Optional Power-Fail and ACFAIL signal
- Design certification according to EN 60950
- EMC Standards EN 50081-1 and EN 50082-2



**3HE**

Front panel: 14TE - 70.8

Handle: 14TE

ORDER DATA				Order numbers in italics	
Vo1 V	Io1 A	Width TE	Height HE	Type No. with PF-signal	Type No. with ACFAIL-signal
5	0 - 40	14	3	<i>P250-05401PF</i> <i>15.6442.302</i>	<i>P250-05401AC</i> <i>15.6442.304</i>
12	0 - 18	14	3	<i>P250-12181PF</i> <i>15.6442.402</i>	<i>P250-12181AC</i> <i>15.6442.404</i>
15	0 - 15	14	3	<i>P250-15151PF</i> <i>15.6442.502</i>	<i>P250-15151AC</i> <i>15.6442.504</i>
24	0 - 10	14	3	<i>P250-24101PF</i> <i>15.6442.602</i>	<i>P250-24101AC</i> <i>15.6442.604</i>
36	0 - 6	14	3	<i>P250-36061PF</i> <i>15.6442.902</i>	<i>P250-36061AC</i> <i>15.6442.904</i>
48	0 - 5	14	3	<i>P250-48051PF</i> <i>15.6442.702</i>	<i>P250-48051AC</i> <i>15.6442.704</i>
Additionally:					
Front panel (nature anodized)			33.1564.030.011		
Assembly kit for DIN-rail			15.7140.000.190		
Assembly kit for wall mounting			15.7140.000.290		

**AC / DC POWER SUPPLY  
PRIMARY SWITCHED MODE WITH PFC  
SINGLE OUTPUT  
P 250 SERIES**

<b>INPUT</b>	<b>EMC</b>																																		
Input voltage range    94 - 264 VAC, 50/60 Hz Efficiency                80% typ. Input current limitation $\leq 25 A_{peak}$ typ. – in cold state $\leq 35 A_{peak}$ typ. – in hot state Fuse                         6.3 AT	Power factor correction    EN 61000-3-2: 1995 Class D (PFC) Interference suppression/ EN 50082-2: 1997 interference immunity    EN 61000-4-2                Intensity 4 EN 61000-4-3                Noise level 10 V/m EN 61000-4-4                Intensity 4 EN 61000-4-5                Intensity 4 EN 61000-4-11 Interference emission    EN 50081-1: 1992 EN 55011 / EN 55022 Class B, interference transmission depends on assembly																																		
<b>OUTPUT</b>	<b>OPERATING DATA</b>																																		
Adjustment range Vo $\pm 5\%$ Operation indicator        Green LED for Vo Ripple $< 30 mV_{pp}$ Noise voltage $< 50 mV_{pp}$ typ. (band width 20 MHz) Temperature coefficient $\leq 0.055\% / K$ Switch on/switch off performance    No overshooting of Vo (soft-start) Shut down on/off SD        upon request Rise delay time $\leq 1.5 s$ Run-up time $\leq 30 ms$	Temperature range        0...+70°C, at free convection Derating                     2.5% / K at +50°C (see diagram) Power-Factor-Correction    Active PFC with regulated, sinusoidal current input: $\lambda > 0.95$ Weight                        1.1 kg																																		
<b>REGULATION</b>	<b>Ventilation from bottom to top of the power supply and the housing-specific heat radiation must not be obstructed when installing the power supply. Ensure fire protection by means of the surrounding housing system. In general, kindly refer to the MGW user instructions before use.</b>																																		
Line regulation $< 0.1\%$ for Vo at $V_{imin} - V_{imax}$ Load regulation            0.5% Response time $< 1 ms$	<b>MECHANICS</b>																																		
<b>PROTECTION AND CONTROLLING</b>	Dimensions                 19" plug-in module according to DIN 41494 Part 5 Connection                 Connector H 15 / DIN 41612 codable																																		
Overvoltage protection    125% $\pm 5\%$ V <sub>nominal</sub> , automatically repeating Current limitation            typ. 110% I <sub>nominal</sub> , straight characteristic Output permanent short-circuit proof Overtemperature protection    Reduction of output voltage Vo until unit switches off. Return to normal operation after cooling down Mains buffering             20 ms at 100% load Power-Fail (see diagram)    The transistor for the PF-signal is blocked, if the output voltage reached a value $> 95\%$ of the nominal output voltage. The transistor becomes conductive $> 10 ms$ before the output voltage drops. Signals ACFAIL and SYSRESET    open-collector, low-active	<b>PIN CONNECTIONS</b>																																		
<b>SAFETY</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">                             EN 60950 / VDE 0805                              Safety Class I, VDE 0100                              CSA NRTL/C / UL 1950 / CSA 22.2-950                         </td> <td style="width: 50%;"></td> </tr> </table>	EN 60950 / VDE 0805 Safety Class I, VDE 0100 CSA NRTL/C / UL 1950 / CSA 22.2-950																																	
EN 60950 / VDE 0805 Safety Class I, VDE 0100 CSA NRTL/C / UL 1950 / CSA 22.2-950																																			
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">                             H15                              DIN 41612                         </td> <td style="width: 50%; text-align: center;"> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 12.5%; text-align: center;">30</td> <td style="width: 12.5%; text-align: center;">26</td> <td style="width: 12.5%; text-align: center;">22</td> <td style="width: 12.5%; text-align: center;">18</td> <td style="width: 12.5%; text-align: center;">14</td> <td style="width: 12.5%; text-align: center;">10</td> <td style="width: 12.5%; text-align: center;">6</td> </tr> <tr> <td style="text-align: center;">N</td> <td style="text-align: center;">2)</td> <td style="text-align: center;">1)</td> <td style="text-align: center;">-L</td> <td style="text-align: center;">+L</td> <td style="text-align: center;">+F</td> <td style="text-align: center;">PF AC</td> </tr> </table> </td> </tr> <tr> <td style="width: 50%; text-align: center;"> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 12.5%; text-align: center;">32</td> <td style="width: 12.5%; text-align: center;">28</td> <td style="width: 12.5%; text-align: center;">24</td> <td style="width: 12.5%; text-align: center;">20</td> <td style="width: 12.5%; text-align: center;">16</td> <td style="width: 12.5%; text-align: center;">12</td> <td style="width: 12.5%; text-align: center;">8</td> <td style="width: 12.5%; text-align: center;">4</td> </tr> <tr> <td style="text-align: center;">PE ⊕</td> <td style="text-align: center;">L1</td> <td style="text-align: center;">-L</td> <td style="text-align: center;">-L</td> <td style="text-align: center;">+L</td> <td style="text-align: center;">+L</td> <td style="text-align: center;">-F</td> <td style="text-align: center;">SYS</td> </tr> </table> </td> <td style="width: 50%;"></td> </tr> </table>	H15 DIN 41612	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 12.5%; text-align: center;">30</td> <td style="width: 12.5%; text-align: center;">26</td> <td style="width: 12.5%; text-align: center;">22</td> <td style="width: 12.5%; text-align: center;">18</td> <td style="width: 12.5%; text-align: center;">14</td> <td style="width: 12.5%; text-align: center;">10</td> <td style="width: 12.5%; text-align: center;">6</td> </tr> <tr> <td style="text-align: center;">N</td> <td style="text-align: center;">2)</td> <td style="text-align: center;">1)</td> <td style="text-align: center;">-L</td> <td style="text-align: center;">+L</td> <td style="text-align: center;">+F</td> <td style="text-align: center;">PF AC</td> </tr> </table>	30	26	22	18	14	10	6	N	2)	1)	-L	+L	+F	PF AC	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 12.5%; text-align: center;">32</td> <td style="width: 12.5%; text-align: center;">28</td> <td style="width: 12.5%; text-align: center;">24</td> <td style="width: 12.5%; text-align: center;">20</td> <td style="width: 12.5%; text-align: center;">16</td> <td style="width: 12.5%; text-align: center;">12</td> <td style="width: 12.5%; text-align: center;">8</td> <td style="width: 12.5%; text-align: center;">4</td> </tr> <tr> <td style="text-align: center;">PE ⊕</td> <td style="text-align: center;">L1</td> <td style="text-align: center;">-L</td> <td style="text-align: center;">-L</td> <td style="text-align: center;">+L</td> <td style="text-align: center;">+L</td> <td style="text-align: center;">-F</td> <td style="text-align: center;">SYS</td> </tr> </table>	32	28	24	20	16	12	8	4	PE ⊕	L1	-L	-L	+L	+L	-F	SYS	
H15 DIN 41612	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 12.5%; text-align: center;">30</td> <td style="width: 12.5%; text-align: center;">26</td> <td style="width: 12.5%; text-align: center;">22</td> <td style="width: 12.5%; text-align: center;">18</td> <td style="width: 12.5%; text-align: center;">14</td> <td style="width: 12.5%; text-align: center;">10</td> <td style="width: 12.5%; text-align: center;">6</td> </tr> <tr> <td style="text-align: center;">N</td> <td style="text-align: center;">2)</td> <td style="text-align: center;">1)</td> <td style="text-align: center;">-L</td> <td style="text-align: center;">+L</td> <td style="text-align: center;">+F</td> <td style="text-align: center;">PF AC</td> </tr> </table>	30	26	22	18	14	10	6	N	2)	1)	-L	+L	+F	PF AC																				
30	26	22	18	14	10	6																													
N	2)	1)	-L	+L	+F	PF AC																													
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 12.5%; text-align: center;">32</td> <td style="width: 12.5%; text-align: center;">28</td> <td style="width: 12.5%; text-align: center;">24</td> <td style="width: 12.5%; text-align: center;">20</td> <td style="width: 12.5%; text-align: center;">16</td> <td style="width: 12.5%; text-align: center;">12</td> <td style="width: 12.5%; text-align: center;">8</td> <td style="width: 12.5%; text-align: center;">4</td> </tr> <tr> <td style="text-align: center;">PE ⊕</td> <td style="text-align: center;">L1</td> <td style="text-align: center;">-L</td> <td style="text-align: center;">-L</td> <td style="text-align: center;">+L</td> <td style="text-align: center;">+L</td> <td style="text-align: center;">-F</td> <td style="text-align: center;">SYS</td> </tr> </table>	32	28	24	20	16	12	8	4	PE ⊕	L1	-L	-L	+L	+L	-F	SYS																			
32	28	24	20	16	12	8	4																												
PE ⊕	L1	-L	-L	+L	+L	-F	SYS																												
	1) internally connected 2) not connected/near mains																																		
	<b>EXPLANATION</b>																																		
	PE ⊕                         Protective conductor <b>Do not use supply without PE-connection!</b> L1 / N                        Mains phase / neutral conductor L                                Load connection (14 A max. for each contact) F                                Sense connection For a safe operating mode of the device, it is mandatory to connect +L with +F and -L with -F. Maximum voltage compensation of 0.25 V of each line.																																		

