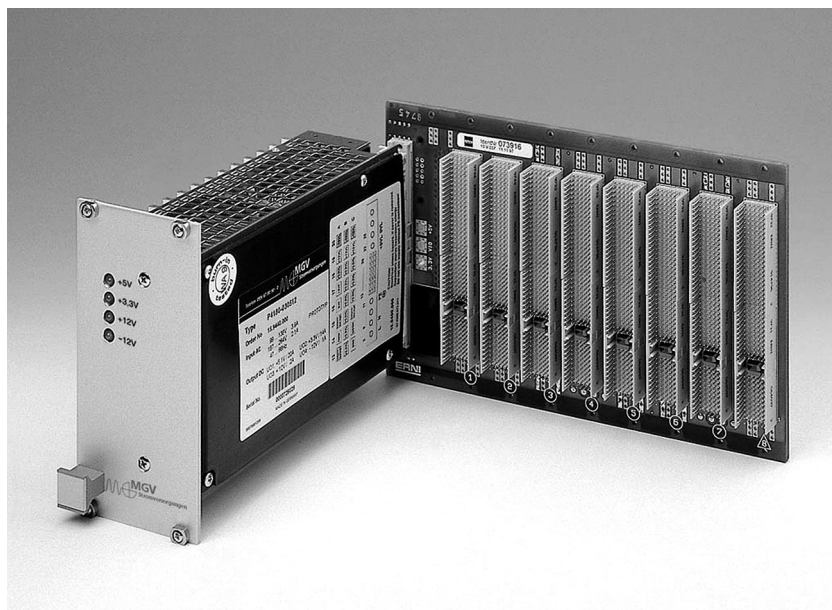


AC / DC POWER SUPPLY for CompactPCI  
 PRIMARY SWITCHED MODE  
 QUADRUPLE OUTPUT  
 P 4180 SERIES



- 19" plug-in module
- Autoranging 120/230 VAC
- EMC standards EN 50081-1 and EN 50082-2
- All outputs permanent short-circuit proof and SELV according to EN 60950
- Primary/secondary overvoltage protection
- Overtemperature protection
- Signal output: DERATE
- Assembly kit for DIN-rail or wall mounting



Front panel: 12TE - 60.6  
 Handle width: 3TE

ORDER DATA										<i>Order numbers in italics</i>
Vo1	Io1	Vo2	Io2	Vo3	Io3	Vo4	Io4	Width	Height	Type-No.
V	A	V	A	V	A	V	A	TE	HE	
+5.1	0 - 20	+3.3	0 - 14	+12	0 - 2	-12	0 - 1	12	3	<b>P4180-030512</b> <i>15.9440.000</i>
Additionally:										
Front panel (nature anodized)				<i>33.1594.000.011</i>						
Assembly kit for DIN-rail				<i>15.7140.000.190</i>						
Assembly kit for wall mounting				<i>15.7140.000.290</i>						

**AC / DC POWER SUPPLY for CompactPCI  
PRIMARY SWITCHED MODE  
QUADRUPLE OUTPUT  
P 4180 SERIES**

<b>INPUT</b>		<b>SAFETY</b>																																							
Input voltage range	AC 187 - 264 V, 50/60 Hz, with autoranging to AC 99 - 138 V	EN 60950 / VDE 0805 Safety Class I, VDE 0100 CSA NRTL/C / UL 1950 / CSA 22.2-950																																							
Efficiency	typ. 82%	<b>OPERATING DATA</b>																																							
Input current limitation	≤ 25 A <sub>peak</sub> typ. – in cold state ≤ 35 A <sub>peak</sub> typ. – in hot state	Temperature range	0...+70°C, at free convection																																						
Fuse	6.3 AT	Derating	2% / K at +50°C (see diagram)																																						
<b>OUTPUT</b>		Weight	1.0 kg																																						
Adjustment range Vo1, Vo2	±5%	<b>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. In general, kindly refer to the MGV user instructions before use.</b>																																							
Operation indicator	Green LED for Vo1, Vo2, Vo3, Vo4	<b>MECHANICS</b>																																							
Ripple	Vo1, Vo2 < 50 mV <sub>pp</sub> , Vo3, Vo4 < 30 mV <sub>pp</sub>	Dimensions	19" plug-in module according to DIN 41494 Part 5																																						
Noise voltage	50 mV <sub>pp</sub> typ. (band width 20 MHz)	Connection	Connector M24/8 / DIN 41612																																						
Temperature coefficient	0.025% / K	<b>PIN CONNECTIONS</b>																																							
Switch on/switch off performance	No overshooting of Vo (soft-start)	<table border="1"> <thead> <tr> <th>13</th> <th>14</th> <th>15</th> <th>16</th> <th>17</th> <th>18</th> <th>19</th> <th>20</th> <th></th> </tr> </thead> <tbody> <tr> <td>1)</td> <td>1)</td> <td>1)</td> <td>OVF</td> <td>+5VF</td> <td>+3.3VL</td> <td>+12VL</td> <td>-12VL</td> <td>A</td> </tr> <tr> <td>+3.3VL</td> <td>+3.3VL</td> <td>+3.3VL</td> <td>+3.3VL</td> <td>+3.3VL</td> <td>+3.3VL</td> <td>+12VL</td> <td>-12VL</td> <td>B</td> </tr> <tr> <td>2)</td> <td>DEG</td> <td>1)</td> <td>+3.3VL</td> <td>+3.3VL</td> <td>+3.3VL</td> <td>+12VL</td> <td>-12VL</td> <td>C</td> </tr> </tbody> </table>				13	14	15	16	17	18	19	20		1)	1)	1)	OVF	+5VF	+3.3VL	+12VL	-12VL	A	+3.3VL	+3.3VL	+3.3VL	+3.3VL	+3.3VL	+3.3VL	+12VL	-12VL	B	2)	DEG	1)	+3.3VL	+3.3VL	+3.3VL	+12VL	-12VL	C
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2)	DEG	1)	+3.3VL	+3.3VL	+3.3VL	+12VL	-12VL	C																																	
Rise-delay time	< 0.5 s	<b>1) internally connected</b> <b>2) has to be connected with OVF or OVL</b>																																							
Run-up time	≤ 50 ms	<table border="1"> <thead> <tr> <th>2*</th> <th>5*</th> <th>11*</th> <th>13</th> <th>.....</th> <th>20</th> <th>22</th> <th>25</th> </tr> </thead> <tbody> <tr> <td>●</td> <td>●</td> <td>○</td> <td>●</td> <td>□□□□□□□□</td> <td>□□□□□□□□</td> <td>●</td> <td>●</td> <td>○</td> <td>○</td> </tr> <tr> <td>L1</td> <td>N</td> <td>PE</td> <td colspan="4"></td> <td>+5VL</td> <td>OVL</td> <td colspan="2"></td> </tr> </tbody> </table>				2*	5*	11*	13	.....	20	22	25	●	●	○	●	□□□□□□□□	□□□□□□□□	●	●	○	○	L1	N	PE					+5VL	OVL									
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L1	N	PE					+5VL	OVL																																	
<b>REGULATION</b>		<b>EXPLANATION</b>																																							
Line regulation	< 0.2% for Vo1, Vo2 < 0.5% for Vo3, Vo4	<b>PE</b> ⊕ Protective conductor <b>L1 / N</b> Mains phase / neutral conductor <b>L</b> Load connection <b>(Pin 13 ..... 20 max. 2 A for each contact)</b> <b>F</b> Sense connection <b>OVL</b> Common ground for Vo1, Vo2, Vo3, Vo4 <b>Sense lines at 5 V</b> <b>For a safe operating mode of the device, it is mandatory to connect +5VL with +5VF and OVL with OVF. Maximum voltage compensation of 0.25 V of each line.</b>																																							
Load regulation	< 0.1% for Vo1 < 1% for Vo2 < 5% for Vo3, Vo4																																								
Response time	< 0.5 ms at lo 20 - 80%																																								
<b>PROTECTION AND CONTROLLING</b>																																									
Oversvoltage protection	125% ±5% for Vo1, Vo2 125% ±10% for Vo3, Vo4 automatically repeating																																								
Current limitation	typ. 110% I <sub>nominal</sub> for Vo1, Vo2 typ. 140% I <sub>nominal</sub> for Vo3, Vo4 Effective for all outputs Outputs permanent short-circuit proof																																								
Overtemperature protection	Switches off when inside temperature becomes too high, switches on again with hysteresis.																																								
Mains buffering	> 20 ms at 100% load																																								
Signal DEG (Derate)	Open-Collector, I <sub>max</sub> = 48 mA Low during start-up of Vo High 100 - 200 ms after start-up of Vo Low ≥ 5 ms before break-down of Vo (mains failure)																																								
<b>EMC</b>																																									
Interference suppression/interference immunity	EN 50082-2: 1992 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 VDE 0160 (with switch-off and restart)																																								
Interference emission	EN 50081-1: 1992 EN 55011 / EN 55022 Class B, interference transmission depends on assembly																																								

