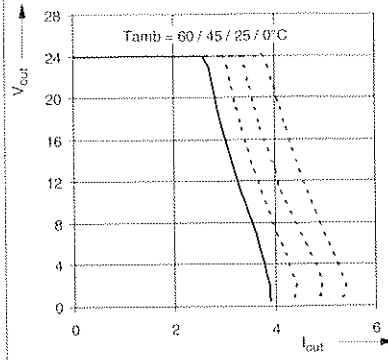


Fig. 1: V_{out} vs. I_{out} (typ.)



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PU-293.012.20-10A



DRP Power Supplies

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DRP-60-1

Technische Daten
 Technical Data
 Données Techniques
 Datos Técnicos
 Dati Tecnici

DRP-60-1: Technical Data



Connection to Mains (ACin)		Output (DCout)																						
Input Voltage V_{in} ³ <ul style="list-style-type: none"> Switch at 230V 115V Nominal AC 230 V AC115 V Frequency 47-63 Hz AC continuously 176-264 85-132 V DC continuously 160-375 -¹ V 		Rated Voltage V_{out} 24 V +5% -1% <ul style="list-style-type: none"> Accuracy of regulation 2% Ripple/Noise² < 25 mV_{pp} 																						
Input Current I_{in} <ul style="list-style-type: none"> Nominal < 0.7 A < 1.3 A Inrush current < 25 A < 25 A (typ., at cold start) 		Permissible Load I_{out} @ $T_{amb} = +10^{\circ}\text{C} \dots +60^{\circ}\text{C} (45^{\circ}\text{C})$ <table border="1"> <thead> <tr> <th>AC/DCin</th> <th>Selector</th> <th>I_{out}</th> </tr> </thead> <tbody> <tr> <td>176-264</td> <td>VAC 230V</td> <td>2.5 A</td> </tr> <tr> <td>95-176</td> <td>VAC</td> <td>1.5 A</td> </tr> <tr> <td>85-132</td> <td>VAC 115V</td> <td>2.5 A</td> </tr> <tr> <td>160-375</td> <td>VDC 230V</td> <td>2.5 A</td> </tr> <tr> <td>120-160</td> <td>VDC</td> <td>2 A</td> </tr> <tr> <td>80^{3b}, 120</td> <td>VDC</td> <td>1.5 A</td> </tr> </tbody> </table>		AC/DCin	Selector	I _{out}	176-264	VAC 230V	2.5 A	95-176	VAC	1.5 A	85-132	VAC 115V	2.5 A	160-375	VDC 230V	2.5 A	120-160	VDC	2 A	80 ^{3b} , 120	VDC	1.5 A
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80 ^{3b} , 120	VDC	1.5 A																						
Power factor (PFC): EN 61000-3-2 not valid (low power)		<ul style="list-style-type: none"> Current limitation at 60°C typ. 2.6-3.9 A (see curve in fig. 1) Overload/Short circuit No switch-off, unit characteristic operation continues Derating ($T_{amb} = 60^{\circ}\text{C} - 70^{\circ}\text{C}$) typ. 1.5 W/K 																						
External Fusing not necessary (internal fuse ^d); recommended (for feed lines): protective line circuits with B characteristic (or slower action), fuse value 10A		Characteristic curve: see Fig. 1 Parallel/serial operation: cf. separate application sheet (available upon request)																						
Connector cables^d <ul style="list-style-type: none"> flexible cable 1.5-4 mm² solid cable 1.5-6 mm² stripping at cable end 6 mm (maximum!) 		Connector cables^d <ul style="list-style-type: none"> flexible cable 1.5-4 mm² solid cable 1.5-6 mm² stripping at cable end 6 mm (maximum!) 																						
Size, Weight																								
Width w	50 mm																							
Height h	125 mm																							
Depth d	103 mm + DIN rail																							
Weight	460 g																							
Standards, Certifications																								
The unit fulfills all following standards:																								
EMC:																								
EN50081-1 and -2 (Emissions)																								
EN50082-1 and -2 (Immunity)																								
VDE 0160/W2 (Transient protect.)																								
Safety (certifications):																								
EN 60950, EN 50178,																								
EN 55011, UL 1950, UL 508,																								
CUL CSA-C22.2 No. 950-M90,																								
CE-Marking in compliance with EMC directive and low-voltage directive.																								
Notes:																								
a) unless specified otherwise on the unit																								
b) For start with DC input >95V required																								
c) Single operation, 20 MHz band width, 50Ω measurement																								
d) See supplementary sheet „Installation and Operation“ for further details																								
e) Hiccup mode = Switch-off and periodical restart attempts																								
f) not permissible																								
g) instructions apply to full nominal load; permitted input voltage for small or medium loads: see „Output“																								
Spacing for cooling																								
The maximum temperature at side walls must not exceed 90°C (measurement on metal directly). Recommended respective distances:																								
<ul style="list-style-type: none"> left/right -/10 mm above/below 25/25 mm 																								
Environmental Data																								
Ambient temperature T_{amb}																								
<ul style="list-style-type: none"> Storage/ Shipment -25°C...+85°C Full nominal load -10°C...+60°C Derated +60°C...+70°C 																								
Degree of protection: IP20 (EN60529). Protect from moisture (also dewing)!																								
Safety/Protection																								
Read safety instructions! See attached sheet „Installation and Operation“																								
Safety and protection																								
<ul style="list-style-type: none"> Overvoltage protection (second. side) ✓ (Hiccup mode^{3b}) up to typ. 32 V Resistant to overload ✓ Resistant to sustained short-circuit ✓ Resistant to open-circuit ✓ Overtemperature protect. --- Power-back immunity up to typ. 26 V T3A15H (IEC127), terminal L^d Internal input fuse 1 (IEC 536) Protection class SELV (EN60950, VDE 0100 Part 410), PELV (VDE 0160) Extra low safety potential 																								