

# Power Supply Unit

Primary switched-mode, DC 24 V / 20 A

1/2

Data sheet



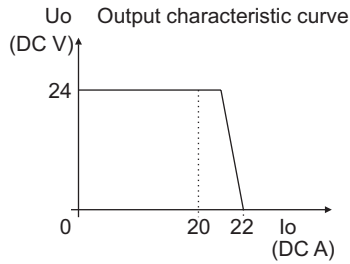
Description	Item-No.	Pack.-unit pcs																																																												
Input 3 x AC 400 V ; Output DC 24 V / 20 A	787-642	1																																																												
<p>Power supply unit with a broad input voltage range for assembly onto DIN 35 rail.</p> <p>Characteristics:</p> <ul style="list-style-type: none"> <li>• Short circuit proof.</li> <li>• Open circuit proof.</li> <li>• Parallel connection possible.</li> <li>• Thermal overload protection.</li> <li>• Use of switching regulator controller technology ensures compact design.</li> <li>• High efficiency.</li> </ul>	<p><b>Technical Data</b></p> <table border="1"> <thead> <tr> <th colspan="2">Input</th> </tr> </thead> <tbody> <tr> <td>Nominal voltage <math>U_{I \text{ nom}}</math></td> <td>3 x AC 400 V</td> </tr> <tr> <td>Voltage range</td> <td>AC 325-550 V DC* 460-770 V</td> </tr> <tr> <td></td> <td>* Use of DC requires external protection</td> </tr> <tr> <td>Frequency</td> <td>50-60 Hz</td> </tr> <tr> <td>Input current <math>I_i</math></td> <td>3 x 1.1 A at AC 400 V</td> </tr> <tr> <td>Inrush current</td> <td>&lt;30 A<sub>p</sub></td> </tr> <tr> <td>Discharge current</td> <td>1.08 mA<sub>typ.</sub></td> </tr> <tr> <td>Output hold-up time</td> <td>&gt;20 ms</td> </tr> <tr> <td>Internal fuse</td> <td>non</td> </tr> <tr> <td>External fuse</td> <td>3 x 2.5 AT required</td> </tr> <tr> <td>Overvoltage protection</td> <td>Varistor at primary circuit</td> </tr> <tr> <th colspan="2">Output</th> </tr> <tr> <td>Nominal voltage <math>U_{O \text{ nom}}</math></td> <td>DC 24 V</td> </tr> <tr> <td>Voltage range</td> <td>DC 22.8-28.8 V adjustable</td> </tr> <tr> <td>Output current <math>I_o</math></td> <td>20 A</td> </tr> <tr> <td>Adjustment accuracy</td> <td>2 %</td> </tr> <tr> <td>Current limitation</td> <td>from approx. 1.1 x <math>I_o</math> (see output characteristic)</td> </tr> <tr> <td>Residual ripple</td> <td>&lt;200 mV<sub>pp</sub></td> </tr> <tr> <td>Efficiency</td> <td>88%<sub>typ.</sub> (at nominal load)</td> </tr> <tr> <td>Power loss <math>P_o</math></td> <td>6,34 W<sub>typ.</sub> at <math>U_{in}</math> 400 V</td> </tr> <tr> <td>Safety extra low voltage</td> <td>SELV</td> </tr> <tr> <th colspan="2">General data</th> </tr> <tr> <td>Test voltage</td> <td>4.2 kV</td> </tr> <tr> <td>Degree of protection</td> <td>IP 20</td> </tr> <tr> <td>Protection class</td> <td>prepared for class I equipment</td> </tr> <tr> <td>LED green</td> <td>at <math>U_o</math></td> </tr> <tr> <td>LED red</td> <td>at overcurrent</td> </tr> <tr> <td>Ambient operating temperature</td> <td>-10 °C...+70 °C</td> </tr> <tr> <td>Derating</td> <td>-3 % / K (&gt;50 °C)</td> </tr> </tbody> </table>		Input		Nominal voltage $U_{I \text{ nom}}$	3 x AC 400 V	Voltage range	AC 325-550 V DC* 460-770 V		* Use of DC requires external protection	Frequency	50-60 Hz	Input current $I_i$	3 x 1.1 A at AC 400 V	Inrush current	<30 A <sub>p</sub>	Discharge current	1.08 mA <sub>typ.</sub>	Output hold-up time	>20 ms	Internal fuse	non	External fuse	3 x 2.5 AT required	Overvoltage protection	Varistor at primary circuit	Output		Nominal voltage $U_{O \text{ nom}}$	DC 24 V	Voltage range	DC 22.8-28.8 V adjustable	Output current $I_o$	20 A	Adjustment accuracy	2 %	Current limitation	from approx. 1.1 x $I_o$ (see output characteristic)	Residual ripple	<200 mV <sub>pp</sub>	Efficiency	88% <sub>typ.</sub> (at nominal load)	Power loss $P_o$	6,34 W <sub>typ.</sub> at $U_{in}$ 400 V	Safety extra low voltage	SELV	General data		Test voltage	4.2 kV	Degree of protection	IP 20	Protection class	prepared for class I equipment	LED green	at $U_o$	LED red	at overcurrent	Ambient operating temperature	-10 °C...+70 °C	Derating	-3 % / K (>50 °C)
Input																																																														
Nominal voltage $U_{I \text{ nom}}$	3 x AC 400 V																																																													
Voltage range	AC 325-550 V DC* 460-770 V																																																													
	* Use of DC requires external protection																																																													
Frequency	50-60 Hz																																																													
Input current $I_i$	3 x 1.1 A at AC 400 V																																																													
Inrush current	<30 A <sub>p</sub>																																																													
Discharge current	1.08 mA <sub>typ.</sub>																																																													
Output hold-up time	>20 ms																																																													
Internal fuse	non																																																													
External fuse	3 x 2.5 AT required																																																													
Overvoltage protection	Varistor at primary circuit																																																													
Output																																																														
Nominal voltage $U_{O \text{ nom}}$	DC 24 V																																																													
Voltage range	DC 22.8-28.8 V adjustable																																																													
Output current $I_o$	20 A																																																													
Adjustment accuracy	2 %																																																													
Current limitation	from approx. 1.1 x $I_o$ (see output characteristic)																																																													
Residual ripple	<200 mV <sub>pp</sub>																																																													
Efficiency	88% <sub>typ.</sub> (at nominal load)																																																													
Power loss $P_o$	6,34 W <sub>typ.</sub> at $U_{in}$ 400 V																																																													
Safety extra low voltage	SELV																																																													
General data																																																														
Test voltage	4.2 kV																																																													
Degree of protection	IP 20																																																													
Protection class	prepared for class I equipment																																																													
LED green	at $U_o$																																																													
LED red	at overcurrent																																																													
Ambient operating temperature	-10 °C...+70 °C																																																													
Derating	-3 % / K (>50 °C)																																																													

## Power Supply Unit

2/2

Primary switched-mode, DC 24 V / 20 A

**Data sheet**



Storage temperature	-25 °C...+85 °C
Relative air humidity	30-85 %, no condensation
Mounting system	To be snapped onto DIN rail (EN 50022)
Wire connection	Terminal blocks with CAGE CLAMP® (WAGO series 231) 0.08-2.5 mm <sup>2</sup> / AWG 28-12** ** AWG12: THHN, THWN
Stripped length	8-9 mm / 0.33 in
Weight	2.000 kg
Dimensions (WxHxD)	(205 x 87***x 140) mm (8.07 x 3.43***x 5.51) in *** from upper edge of DIN35 rail
<b>Standards / prescriptions</b>	EN 60950-1 EN 61204-3 EN 61204-7
<b>Approvals</b>	UL 60950 (CSA C22.2 / No.60950-1-03) UL 508 (CSA C22.2 / No.14-95)