

# › Industrial Power Supply IPS24

- › Industrial 24 V $\overline{\text{DC}}$  Power Supplies range from 60 to 480 W
- › High Efficiency, up to 87% @ 230 V $\sim$
- › DIN Rail Mount
- › UL & CE Certifications

24 V $\overline{\text{DC}}$  60 W24 V $\overline{\text{DC}}$  120 W24 V $\overline{\text{DC}}$  240 W24 V $\overline{\text{DC}}$  480 W

Selection Guide			
Nominal Output Voltage	Maximum Output Power	Maximum Output Current	Part Number
24 V $\overline{\text{DC}}$	60 W	2.5 A	<b>89 452 062</b>
	120 W	5 A	<b>89 452 122</b>
	240 W	10 A	<b>89 452 242</b>
	480 W	20 A	<b>89 452 282</b>

	24 V $\overline{\text{DC}}$ 60 W	24 V $\overline{\text{DC}}$ 120 W	24 V $\overline{\text{DC}}$ 240 W	24 V $\overline{\text{DC}}$ 480 W
<b>General Characteristics</b>				
Part Number	<b>89 452 062</b>	<b>89 452 122</b>	<b>89 452 242</b>	<b>89 452 282</b>
Product Certification	CE, UKCA, UL			
Line Dip (200~240 V $\sim$ )	Voltage Dips & Interruptions. IEC 61000-4-11 Criteria A & B			
Protection against Radio Interference	CE: CISPR11-A; RE: CISPR22-A			
Emission	EN 61000-3-2			
Power Factor & Harmonic Correction (PFHC)	IEC 61000-3-2			
Power Supply Earthing	Available			
Isolation Class / Class of Protection	Class I			
Pollution	Degree 2, Group II b			
Operating Altitude	2000 m			
Vibration	Component: 10 ~ 500 Hz, 2G 10min/1cycle, period for 60 min, each along X, Y, Z axes			
Shock (In package)	Non-Operations Vibration, 10~500 Hz 2G 10 Min/1 Cycle Period for 60 Min each along X, Y, Z axes			
Immunity	EN 61000-4-2 (Level 4 & 3) EN 61000-4-3 (Level 3) EN 61000-4-4 (Level 3) EN 61000-4-5 (Level 3) EN 61000-4-6 (Level 3) EN 61000-4-8 (Level 4) EN 61000-4-11 (Class 3) IEC/EN 62368-1			

You have a project? Contact us on [www.crouzet.com](http://www.crouzet.com)

## Description:

Crouzet range of DIN Rail industrial power supplies, from 60 to 480 W at 24 V $\overline{\text{DC}}$ . With its narrow width (from 43 to 60 mm max), they are designed for a wide range of industrial applications. Characterised by their wide voltage input ranges (90 to 264 V $\sim$ ), they allow the supply of single-phase mains electric power to DC power lines. With a high efficiency of up to 87 % @230 V, these new power supplies will fully satisfy the needs of 24 V $\overline{\text{DC}}$  applications.

For more information about Crouzet's Industrial Power Supply range, please visit [www.crouzet.com](http://www.crouzet.com).

	24 V $\overline{\text{---}}$ 60 W	24 V $\overline{\text{---}}$ 120 W	24 V $\overline{\text{---}}$ 240 W	24 V $\overline{\text{---}}$ 480 W
Operating Temperature	-25 $\rightarrow$ +50 °C (see derating curve)			
Operating Humidity	5 $\rightarrow$ 95 % max. (No condensing)			
Storage Temperature	-40 °C $\rightarrow$ +85 °C			
Storage Humidity	5 $\rightarrow$ 95 % max. (No condensing)			
Cooling	Convection			
Screw Terminals Connection Capacity	AWG 12-26			
Case Colour	Grey RAL 7035			
Protection Degree	IP20			
Weight	285 g	350 g	645 g	1050 g
Dimensions (mm)	43 x 109.8 x 102.7 mm		50 x 136 x 135 mm	60 x 154 x 158.55 mm

Electrical Characteristics				
Input Voltage	90 V $\sim$ $\rightarrow$ 264 V $\sim$	91 V $\sim$ $\rightarrow$ 264 V $\sim$	92 V $\sim$ $\rightarrow$ 264 V $\sim$	93 V $\sim$ $\rightarrow$ 264 V $\sim$
Frequency	50/60 Hz			
Nominal Output Voltage	24 V $\overline{\text{---}}$			
Line Regulation	< 1 % of V <sub>out</sub>			
Load Regulation	$\pm$ 1 %			
Output Voltage Range	24 – 28 V $\overline{\text{---}}$			
Input Current	1.2 A / 0.8 A (Typ. 115/230 V $\sim$ )	2.2 A / 1.5 A (Typ. 115/230 V $\sim$ )	2.4 A / 1.2 A (Typ. 115/230 V $\sim$ )	4.8 A / 2.4 A (Typ. 115/230 V $\sim$ )
Maximum Output Current	2.5 A	5 A	10 A	20 A
Maximum Output Power	60 W	120 W	240 W	480 W
Inrush Current	< 48 A cold start (Typ. 264 V $\sim$ )*		< 60 A cold start (Typ. 264 V $\sim$ )*	
Ripple and Noise	< 1 % of V <sub>out</sub>			
Temperature Coefficient	NA			
No Load Input Power	<1.2 W @115 V $\sim$	<1.2 W @115 V $\sim$	<1.7 W @115 V $\sim$	<2.3 W @115 V $\sim$
Efficiency	>87 % (Typ. 230 V $\sim$ )	>89 % (Typ. 230 V $\sim$ )	>93 % (Typ. 230 V $\sim$ )	>93.5 % (Typ. 230 V $\sim$ )
Power Factor	NA		>0.95 at full load	
Hold-Up Time	$\geq$ 60 ms at 230 V $\sim$ & $\geq$ 15 ms at 115 V $\sim$		>25 ms at 12 V & >16 ms at 14 V	>20 ms at 24 V & >12 ms at 28 V
Over-Voltage Protection	31 V $\overline{\text{---}}$ $\pm$ 1 V $\overline{\text{---}}$		31 V $\overline{\text{---}}$ $\pm$ 0.5 V $\overline{\text{---}}$	
Over-Current Protection	> 110 % "Hiccup" with automatic recovery			
Upstream Protection of Power Supply	See Instruction Manual (Confirm the Concept of Upstream)			
Withstand Voltage	I/P to Earth: 2500 V $\sim$ I/P to O/P: 4000 V $\sim$ O/P to Earth: 1500 V $\sim$	I/P to Earth: 2500 V $\sim$ I/P to O/P: 4000 V $\sim$ O/P to Earth: 1500 V $\sim$	I/P to Earth: 2500 V $\sim$ I/P to O/P: 4000 V $\sim$ O/P to Earth: 1500 V $\sim$ O/P to DCOK: 500 V $\sim$	I/P to Earth: 2500 V $\sim$ I/P to O/P: 4000 V $\sim$ O/P to Earth: 1500 V $\sim$
Isolation Resistance	> 100 M $\Omega$ (500 V $\overline{\text{---}}$ ) @ 25 °C, 70 % RH			
Status Indication	DC OK LED (green)			
Series Operation	Possible, See Instruction Manual			
Transient Response Deviation	< 5 % (50 % to 100 % step load charge)			
Transient Response Recovery Time	Recovery to set value in <ms (50 % to 100 % step load charge)			
DC Ok Signal	N/A		Contact closes @ 23.0V (typ.) Contact opens @ 22.5V (typ.) Contact Rating: 30 V $\overline{\text{---}}$ 1 A; 60 V $\overline{\text{---}}$ 0.5 A; 125 V $\sim$ 0.5 A; resistive load, min current 1 mA	

\* at Maximum Output Power, T<sub>a</sub> = 25 °C

24 V $\overline{\text{---}}$  60 W

24 V $\overline{\text{---}}$  120 W

24 V $\overline{\text{---}}$  240 W

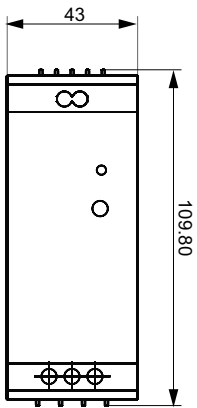
24 V $\overline{\text{---}}$  480 W

Drawings

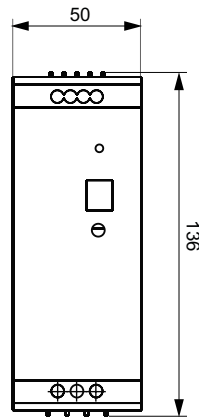
Dimensions (mm)

Front View

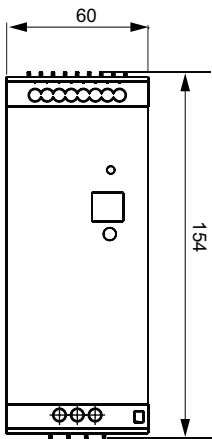
24 V $\overline{\text{---}}$  60 W / 24 V $\overline{\text{---}}$  120 W



24 V $\overline{\text{---}}$  240 W

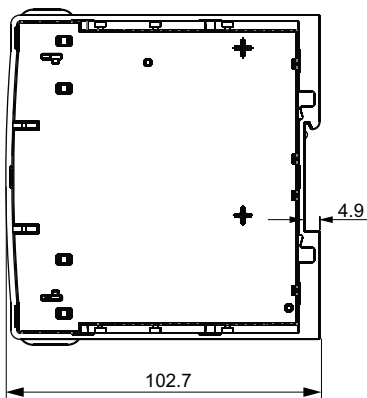


24 V $\overline{\text{---}}$  480 W

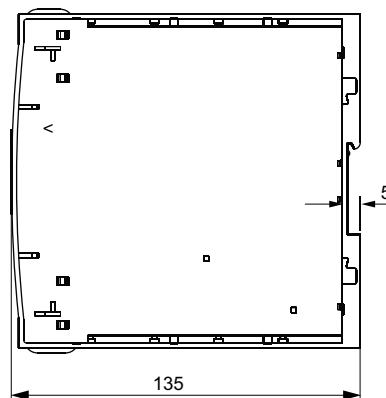


Side View

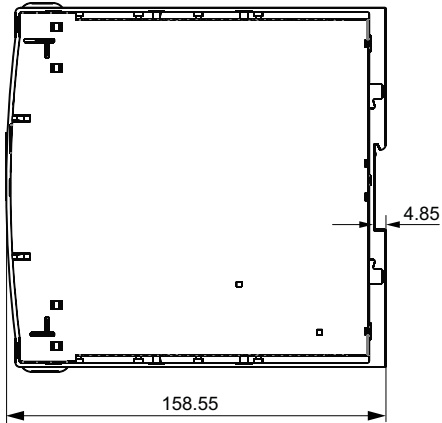
24 V $\overline{\text{---}}$  60 W / 24 V $\overline{\text{---}}$  120 W



24 V $\overline{\text{---}}$  240 W

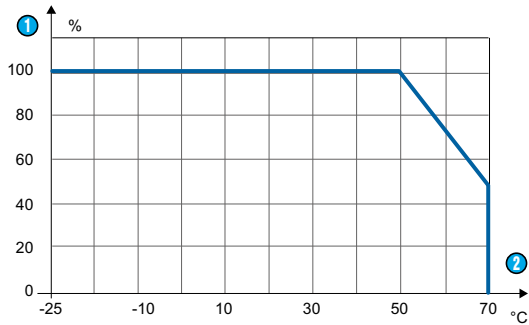


24 V $\overline{\text{---}}$  480 W



Curves

24 V $\overline{\text{---}}$  60 W - 120 W - 240 W - 480 W



- 1 Output Power (%)
- 2 Ambient (°C)

Standards

UL 508 approved (E522848)

Designed to meet IEC 62368-1

Warning:

The product information contained in this catalogue is given purely as information and does not constitute a representation, warranty or any form of contractual commitment. Crouzet and its subsidiaries reserve the right to modify their products without notice. It is imperative that we should be consulted over any particular use or application of our products and it is the responsibility of the buyer to establish, particularly through all the appropriate tests, that the product is suitable for the use or application. Under no circumstances will our warranty apply, nor shall we be held responsible for any application (such as any modification, addition, deletion, use in conjunction with other electrical or electronic components, circuits or assemblies, or any other unsuitable material or substance) which has not been expressly agreed by us prior to the sale of our products.