

Before operating the power supply, read this manual thoroughly and retain it for future reference! This device may only be installed and put into operation by qualified personnel. If damage or malfunction should occur during operation, immediately turn power off and send unit to the factory for inspection. The unit does not contain serviceable parts. The tripping of an internal fuse is caused by an internal defect.

This power supply is designed for installation in an enclosure and is intended for general use such as in industrial control, office, communication, and instrumentation equipment. Do not use this device in equipment, where malfunction may cause severe personal injury or threaten human life.

### **Risk of electrical shock, fire, personal injury or death:**

- (1) Do not use the power supply without proper grounding (Protective Earth).
- (2) Turn power off before working on the device. Protect against inadvertent re-powering.
- (3) Make sure that the wiring is correct by following all local and national codes.
- (4) Do not modify or repair the unit. The unit does not contain serviceable parts.
- (5) Do not open the unit as high voltages are present inside.
- (6) Use caution to prevent any foreign objects from entering the housing.
- (7) Do not use in wet locations or in areas where moisture or condensation can be expected.
- (8) Do not touch during power-on, and immediately after power-off. Hot surfaces may cause burns.

### **Installation Notes**

- Install the device on a DIN-rail according to EN 60715 with the input terminals on the bottom of the unit.
- Do not obstruct air flow as the unit is convection cooled.
  - Ventilation grid must be kept free of any obstructions (min. 40mm on top, 20mm on the bottom, 5mm left and right side).
- Do not place heat sources adjacent to the power supply.
- Do not use the device in pollution degree 3 environments.
- Do not use the device in parallel connection.
- The unit is tested and approved for branch circuits up to 30A (UL), 32A (IEC) without additional protection device.
  - If an external fuse is utilized, do not use breakers smaller than 10A (B- or C-Characteristic) to avoid nuisance tripping.
- Maximum surrounding air temperature: 70°C / 158°F.
- For use in CSA C22.2 No 107 areas: Provide an output disconnecting means and use only in controlled environments.

### **CE Declaration**

The CE mark is in conformance with EMC directive 2004/108/EC, the low-voltage directive (LVD) 2006/95/EC and the RoHS directive 2011/65/EU.

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**Technical Data <sup>1)</sup>**

		<b>PIC120.241C PIC120.242C</b>		<b>PIC240.241C</b>
<b>Output Voltage</b>	nom.	DC 24-28V		DC 24-28V
<b>Output Current</b>	nom.	5A at 24V, 4.3A at 28V		10A at 24V, 8.6A at 28V
<b>Output Power</b>	nom.	120W		240W
<b>Output Ripple &amp; Noise Voltage <sup>2)</sup></b>	max.	100mVpp		100mVpp
<b>Input Voltage</b>	nom.	AC 200-240V $\pm 10\%$		AC 200-240V $\pm 10\%$
<b>Input Frequency</b>	nom.	50-60Hz $\pm 6\%$		50-60Hz $\pm 6\%$
<b>Input Current</b>	typ.	1.1A		2.2A
<b>Power Factor</b>	typ.	0.54		0.52
<b>Input Inrush Current <sup>3)</sup></b>	typ.	28A peak		48A peak
<b>Efficiency / Power Losses</b>	typ.	90.5% / 12.6W		91.4% / 22.6W
<b>Operational Temperature Range <sup>4)</sup></b>	nom.	-10°C - +70°C		-10°C - +70°C
<b>Output Derating</b>	nom.	3W/°C from 55°C to +70°C		6W/°C from 55°C to +70°C
<b>Storage Temperature Range</b>	nom.	-40°C - +85°C		-40°C - +85°C
<b>Terminals <sup>5)</sup></b>	Stranded / solid wire	nom.		0.5-4mm <sup>2</sup> / 0.5-6mm <sup>2</sup>
	AWG	nom.		20-10AWG
	Wire stripping length	nom.		7mm, 0.28inch
	Tightening torque	nom.		1Nm, 9lb.in
<b>DC-OK Contact</b>		PIC120.241C: Yes <sup>6)</sup> PIC120.242C: No		PIC240.241C: Yes <sup>6)</sup>
<b>EMC Immunity</b>	Generic Standard	IEC 61000-6-1/ -6-2		IEC 61000-6-1/ -6-2
<b>EMC Emission</b>	Generic Standard	IEC 61000-6-3 /-6-4		IEC 61000-6-4
	Radiated Emission	EN 55011/22 Class B		EN 55011/22 Class B
	Conducted Emission	EN 55011/22 Class B		EN 55011/22 Class B
	Harmonic Input Current	IEC 61000-3-2 Class A		-
<b>Dimensions</b>	(WxHxD, without DIN-rail)	nom.		39x124x124mm
<b>Weight</b>		max.		350g, 0.77lb
				49x124x124mm
				550g, 1.2lb

1) All parameters are specified at 230Vac, nominal output current, 25°C ambient and after a 5 minutes run-in time unless otherwise noted.

2) 50-Ohm measurement, bandwidth 20MHz

3) At 230Vac, 40°C ambient and cold start. The input inrush current is limited by a NTC and is temperature dependent.

4) The operational temperature range equals the surrounding air temperature measured 2cm below the unit.

5) Use appropriate copper cables, that are designed for a minimum operating temperature of 60°C for ambient temperatures up to 45°C, 75°C for ambient temperatures up to 60°C and 90°C for ambient temperatures up to 70°C.

Follow national installation codes and regulations! Ensure that all strands of a stranded wire enter the terminal.

6) Contact ratings: 60Vdc 0.3A; 30Vdc 1A; 30Vac, 0.5A; resistive load, min. current 1mA.