

# Primary Switching Power Supply

**CM 50-PS-120-230AC/24DC/2.5/F**  
**CM 125-PS-120-230AC/24DC/5/F**

Data Sheet 1219A



September 2000

## Features

- Fully enclosed, touch safe DIN-rail mounted housing
- Auto resetting electronic short circuit and overload protection on output
- Harmonic filtering maintains the requirements of EN 61000-3-2
- Worldwide acceptability: UL 508, CSA, CE and GL.
- Universal AC and DC input
- Adjustable output voltage 22.5-28.5 V dc
- Parallel connection requires no external hardware
- LED provides local status indication
- DC-o.k. remote signaling
- Conformally coated printed circuit board

## Description

Primary switch mode power supplies utilize microprocessor based, power conversion circuits. The output is precisely regulated and features a very low ripple value.

These regulated primary switch mode power supplies are universal in application. The CM power supply is suitable for use in 100% relative humidity environments. The power supplies are easily incorporated in bus systems, measurement and controls circuits, contactors and PLC digital and analog I/O circuits, DCS and process control applications. The power supply



Figure 1. CM...-PS-120-230AC/24DC/.../F

is ideally suited for applications where lightweight, small space, low heat and high efficiency are required.

Table 1. General Specifications

Technical Data	
Input voltage.....	90-264 V ac and 110-370 V dc auto sensing
Output	
Nominal voltage .....	24 V dc $\pm$ 1%
Adjustable range .....	22.5 V dc to 28.5 V dc.
Ripple .....	200 mV pk-pk (typical 20 mV pk-pk)
MTBF (Mean Time Between Failure) ....	500,000 hours
Nominal current .....	2.5 A/5 A
Hazardous location temperature code ..	T3C
Approvals .....	UL E143711 (1950.508C) C-UL File E143711 (CSA 22.2 #14-1791) VDE Req. #5820 CE EN50881-2 EN50082-2 GL (German Lloyds/ Maritime Approval) Class I, Division 2, Groups A, B, C and D NEC Class II (CM 50 only)

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# CM 50-PS-120-230AC/24DC/2.5/F

# CM 125-PS-120-230AC/24DC/5/F

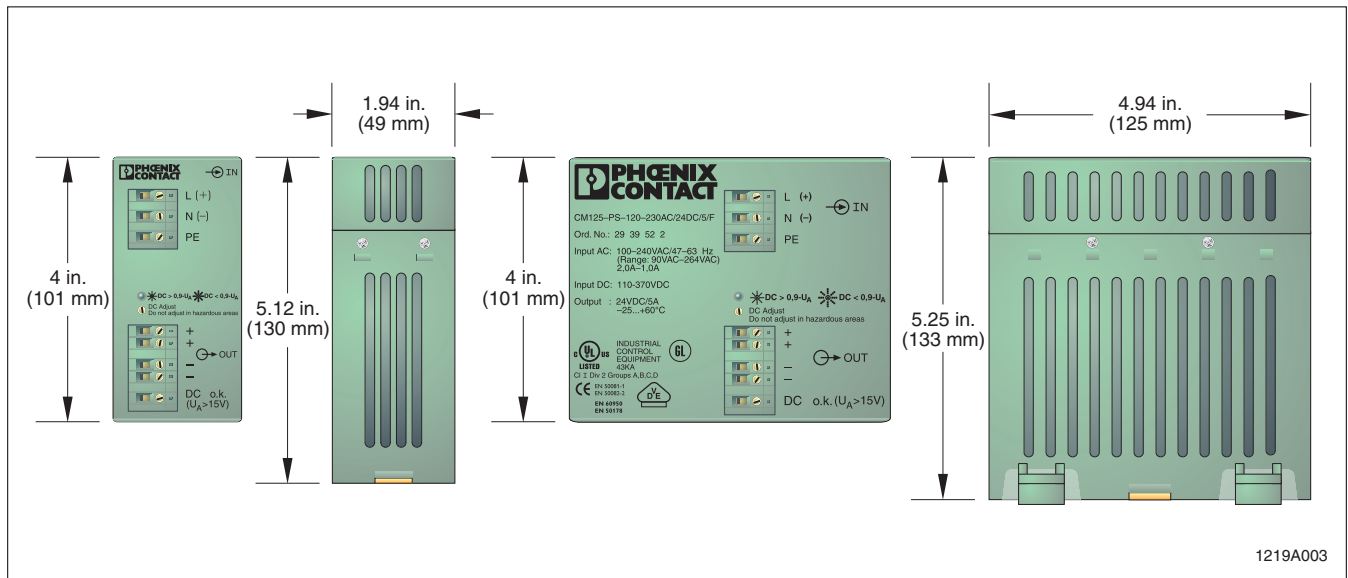


Figure 2. Specifications for the CM 50 and CM 125

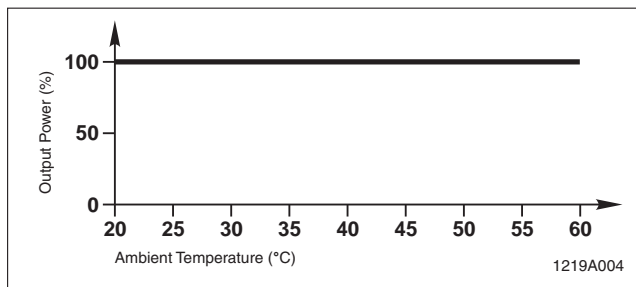


Figure 3. Derating Curve

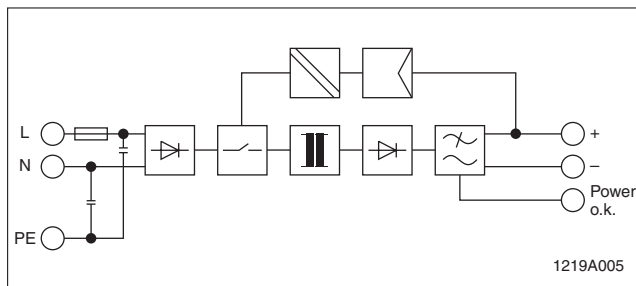


Figure 4. Connection Data

## Ordering Information

CM 50-PS-120-230AC/24DC/2.5/F	<b>29 39 42 5</b>
CM 125-PS-120-230AC/24DC/5/F	<b>29 39 52 2</b>

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