

## POWER SUPPLY 1-PHASE, 24 V DC DIMENSION C SERIES, 3 AND 5A

CS3.241

PSU 100-240V ac I/P 24V dc 3.3A 80W O/P

- Output currents of 3 and 5 A
- Width 32mm
- Efficiency 90%
- 5A-model has a 20% power reserve



### PRODUCT DESCRIPTION

The DIMENSION C-Line units are cost optimized power supplies without compromising quality, reliability and performance. The C-Line is part of the DIMENSION power supply family, existing alongside the high featured Q-Line.

The CS3.241 includes all the essential basic functions but also includes important features of small size, high efficiency, wide temperature range and is NEC Class 2 compliant.

The CS5.241 includes all the essential basic functions and the devices have a power reserve of 20%. This extra current may even be used continuously at temperatures up to +45°C.

The most important features are the small size, high efficiency and the wide temperature range.

The Auto-select input makes worldwide installation and usage very simple. Defects or system failures caused by wrongly set switches cannot occur.

High immunity to transients and power surges as well as low electromagnetic emission and a large international approval package for a variety of applications makes this unit suitable for nearly every situation.

- AC 100-240V Wide-range Input
- Width only 32mm
- NEC Class 2 Compliant
- Full Power Between -25°C and +60°C
- Optional with Conformal Coated PC-boards (CS5.241-C1)
- Optional with Spring-clamp Terminals (CS5.241-S1)
- Efficiency up to 90.2%
- Easy Fuse Breaking due to High Overload Peak Current
- 20% Output Power Reserves
- Full Power Between -25°C and +60°C
- Minimal Inrush Current Surge
- 3 Year Warranty

### TECHNICAL DATA

#### INPUT DATA

Input voltage ac	100-240 V
Input voltage ac min	90 V AC
Input voltage ac max	264 V AC

Input voltage dc	110-300 V
Input voltage dc min	88 V DC
Input voltage dc max	375 V DC
Inrush current at 120 V ac typical	23 A
Inrush current at 230 V ac typical	45 A
Input voltage range	Wide-range
Power factor at 120 V ac, full load. Typical	0.61
Power factor at 230 V ac, full load. Typical	0.56
Number of phases	1

## OUTPUT DATA

Output voltage	24 V DC
Output voltage min	24 V DC
Output voltage max	28 V DC
Output current	3.3 A
Power	80 W

## EFFICIENCY / LIFETIME / MTBF

Efficiency at 120 V ac, full load, typical	88 %
Efficiency at 230 V ac, typical	87.7 %
Efficiency at 230 V ac, full load, typical	89.8 %
Lifetime at 120 V ac, full load and +40 ° C	64000 h
Lifetime at 230 V ac, full load and +40 ° C	77000 h
MTBF (IEC 61709) 230 V ac, max load, 40 ° C	2243000 h

## DIMENSIONS

Width	32 mm
Height	124 mm
Depth	102 mm
Weight	0.43 kg

## OTHER

Approvals	ABS, CB, CE, CSA US, cRUus, cULus, GL, NEC Class 2
Hold time at 120 V ac, typical full load	29 ms
Hold time at 230 V ac, typical full load	120 ms
IP class	IP20
Clamp type	Screw

<b>Material protection</b>	Aluminium
<b>Supply frequency</b>	50-60 $\pm 6$ %
<b>Ripple max</b>	50 mV pp
<b>Series</b>	Dimension C
<b>Power consumption 120 V ac</b>	1.23 A
<b>Power consumption 230 V ac</b>	0.68 A
<b>Power drop from +60 °C to +70 °C</b>	1.8 W/°C
<b>Temperature min without derating</b>	-25 °C
<b>Temperature max without derating</b>	60 °C
<b>Type Power Supply</b>	AC-DC
<b>Active Transient</b>	Yes

