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# 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 |

| | |
|---|---|
| **Material protection** | Aluminium |
| **Supply frequency** | 50-60 ±6 % |
| **Ripple max** | 50 mV pp |
| **Series** | Dimension C |
| **Power consumption 120 V ac** | 1.23 A |
| **Power consumption 230 V ac** | 0.68 A |
| **Power drop from +60 °C to + 70 °C** | 1.8 W/°C |
| **Temperature min without derating** | -25 °C |
| **Temperature max without derating** | 60 °C |

| | |
|---|---|
| **Type Power Supply** | AC-DC |
| **Active Transient** | Yes |







