



POWER SUPPLY

- AC 100-240V Wide-range Input
- Efficiency up to 93%
- Width only 60mm
- 150% Peak Load Capability
- Active Power Factor Correction, PFC
- DC Input from 88 to 375Vdc
- Short-term Operation from 60Vac to 300Vac
- Full Power Between -25°C and +60°C
- Negligibly low Inrush Current
- DC-OK Relay Contact
- Quick-connect Spring-clamp Terminals
- 3 Year Warranty

1. GENERAL DESCRIPTION

The most outstanding features of this Dimension Q-Series DIN-rail power supply are the high efficiency and the small size, which are achieved by a synchronous rectification and further novel design details. The Q-Series is part of the Dimension family, existing alongside the lower featured C-Series.

With short-term peak power capability of 150% and built-in large sized output capacitors, these features help start motors, charge capacitors and absorb reverse energy and often allow a unit of a lower wattage class to be used.

High immunity to transients and power surges as well as low electromagnetic emission makes usage in nearly every environment possible.

The integrated output power manager, a wide range input voltage design and virtually no input inrush current make installation and usage simple. Diagnostics are easy due to the dry DC-ok contact, a green DC-ok LED and red overload LED.

Unique quick-connect spring-clamp terminals allow a safe and fast installation and a large international approval package for a variety of applications makes this unit suitable for nearly every situation.

2. SHORT-FORM DATA

| | | |
|-------------------|------------------|------------------|
| Output voltage | DC 24V | |
| Adjustment range | 24-28V | |
| Output current | 10A | continuous, 24V |
| | 15A | for typ. 4s, 24V |
| Output power | 240W | continuous, 24V |
| | 360W | for typ. 4s, 24V |
| Output ripple | < 50mVpp | 20Hz to 20MHz |
| Input voltage | AC 100-240V | ±15% |
| Mains frequency | 50-60Hz | ±6% |
| AC Input current | 2.22 / 1.22A | at 120 / 230Vac |
| Power factor | 0.98 / 0.92 | at 120 / 230Vac |
| AC Inrush current | typ. 4 / 7A peak | at 120 / 230Vac |
| DC Input voltage | DC 110-300V | -20%/+25% |
| DC Input current | 2.37 / 0.87A | at 110 / 300Vdc |
| Efficiency | 92.3 / 93.0% | at 120 / 230Vac |
| Losses | 20.0 / 18.1W | at 120 / 230Vac |
| Temperature range | -25°C to +70°C | operational |
| Derating | 6W/°C | +60 to +70°C |
| Hold-up time | typ. 27 / 28ms | at 120 / 230Vac |
| Dimensions | 60x124x117mm | WxHxD |

3. ORDER NUMBERS

| | | |
|--------------|--|--|
| Power Supply | QS10.241 QS10.241-C1 | Standard unit Conformal coated unit |
| Accessory | ZM1.WALL ZM13.SIDE YR2.DIODE UF20.241 | Wall mount bracket Side mount bracket Decoupling module Buffer unit |

4. MARKINGS

