

DIM©NSION Q-Series

QS20.241, QS20.241-C1

24V, 20A, SINGLE PHASE INPUT



POWER SUPPLY

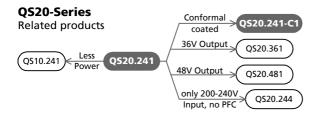
- AC 100-240V Wide-range Input
- Efficiency up to 93.9%
- Width only 82mm
- 150% Peak Load Capability
- Active Power Factor Correction, PFC
- DC Input from 88 to 375Vdc
- Short-term Operation from 60Vac to 300Vac
- Full Power Between -25°C and +60°C
- Negligibly Low Inrush Current
- DC-OK Relay Contact
- Quick-connect Spring-clamp Terminals
- 3 Year Warranty

1. GENERAL DESCRIPTION

The most outstanding features of this Dimension Q-Series power supply are the high efficiency and the small size, which are achieved by a synchronous rectification and further novel design details.

With short-term power capability of 150% and built-in large sized output capacitors, these features help start motors, charge capacitors and absorb reverse energy. A wide range input voltage design and a negligible low input inrush current make installation and usage simple. Diagnostics are easy due to the DC-ok relay, a green DC-ok and a red overload LED.

Unique quick-connect spring-clamp terminals allow a safe and fast installation. Many global approvals make this unit suitable for nearly every situation.



2. SHORT-FORM DATA

Output voltage	DC 24V	
Adjustment range	24-28V	
Output current	20A	continuous, 24V
	30A	for typ. 4s, 24V
Output power	480W	continuous, 24V
	720W	for typ. 4s, 24V
Output ripple	< 100mVpp	20Hz to 20MHz
Input voltage	AC 100-240V	±15%
Mains frequency	50-60Hz	±6%
AC Input current	4.56 / 2.48A	at 120 / 230Vac
Power factor	0.95 / 0.90	at 120 / 230Vac
AC Inrush current	typ. 9 / 7A peak	at 120 / 230Vac
DC Input voltage	DC 110-300V	-20%/+25%
DC Input current	4.7 / 1.7A	at 110 / 300Vdc
Efficiency	92.4 / 93.9%	at 120 / 230Vac
Losses	39.6 / 31.4W	at 120 / 230Vac
Temperature range	-25°C to +70°C	operational
Derating	12W/°C	+60 to +70°C
Hold-up time	typ. 32 / 51ms	at 120 / 230Vac
Dimensions	82x124x127mm	WxHxD

3. ORDER NUMBERS

Power	QS20.241	24-28V unit
Supply	QS20.241-C1	conformal coated unit
Accessory	ZM1.WALL	Wall mount bracket
	ZM15.SIDE	Side mount bracket
	YR2.DIODE	Decoupling module

4. MARKINGS















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All parameters are specified at 24V, 20A, 230Vac, 25°C ambient and after a 5 minutes run-in time unless otherwise noted.