

PULS

Dimension



Current Automation

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CS series (80-240W)

Cost Effective Single phase power supplies Description

The C-Series power supplies are affordable basic units comprising an alternative to the feature-rich Q-Series. Corners were cut when it comes to a few features, but not in terms of quality, reliability, ease of operation, small overall size and generous power reserves. In this sense, the same standards apply to the C-Series as to all other PULS products. In the 120W class, the C-Series units are even smaller than those of the Q Series and yet are every bit as durable, with a specified life expectancy of the electrolytic capacitor of 50,000 hours. The guaranteed power boost of +20% of the rated power is intended to ensure optimal adaptation to fluctuating loads. If the ambient temperature remains below 45°C or with forced ventilation, this performance is even specified for continuous loads. Nor were any compromises made when it comes to limiting the inrush current. This unpleasant side effect of switching power supplies was completely eliminated by means of a new circuit.

Features

- 1-Phase input
- 20% Power reserve
- -25°C to + 60°C without derating



Model	Watt	Output Voltage (V) and Rated Current (A)		Power Reserves	Efficiency	AC Input	Power Losses	Dimension	Power Factor
		24-28V	48-52V						
CS3.241	80	3.3-2.7A	-	-	89.8% / 230V typ	100~240V	9.1W	32 x 124 x 102	0.61/0.56
CS5.241	120	5-4.3A	-	+20%	90.2% / 230V typ	115/230V	13.2W	32 x 124 x 117	0.56/0.47
CS5.243	120	5-4.3A	-	+20%	90.0% / 120V typ	100~120V	13.5W	32 x 124 x 117	0.59/-
CS5.244	120	5-4.3A	-	+20%	90.2% / 230V typ	200~240V	13.2W	32 x 124 x 117	-/0.5
CS10.241	240	10-8.6A	-	+20%	91.6% / 230V typ	115/230V	22W	60 x 124 x 117	0.59/0.51
CS10.243	240	10-8.6A	-	+20%	91.3% / 120V typ	100~120V	23.4W	60 x 124 x 117	0.57/-
CS10.244	240	10-8.6A	-	+20%	91.3% / 230V typ	200~240V	23.4W	60 x 124 x 117	-/0.52
CS10.481	240	-	5-4.6A	+20%	91.6% / 230V typ	115/230V	22.0W	60 x 124 x 117	0.59/0.51

Y Series Diode and Redundancy Modules

Model	Voltage Range	Number of Inputs	Number of Outputs	Output Current	Alarm Signal	Alarm Threshold	Dimensions
YR2.DIODE	10~60V	2	1	25A	-	-	32x124x102
YRM2.DIODE	24~60V	2	1	25A	Relay contact	21.5V	32x123x117



UB Series DC-UPS Description

This uninterruptible power supply (UPS) controller UB10.241 is an addition to standard 24V power supplies to bridge power failures or voltage fluctuations. Expensive downtimes, long restart cycles and loss of data can be avoided. The DC-UPS includes a professional battery management system which charges and monitors the battery to achieve the longest battery service life as well as many diagnostic functions that ensure a reliable operation of the entire system. A unique feature of the UB10.241 is that only one 12V battery is required to buffer the 24V output. This makes matching batteries unnecessary and allows a precise battery charging and testing. The UB10.241 requires one external 12V battery for which two preassembled battery modules are available. A lightweight 7Ah battery which can be mounted on the DIN-Rail and a 26Ah module that can be panel mounted for longer buffer times. In addition to the UB10.241, the UBC10.241 UPS includes the same controller with an integrated 5Ah battery.



Features

- Requires only one 12V battery for a 24V output
- Stable output voltage in buffer mode
- Superior battery management for longest battery life
- 15A Output current in normal mode 50% power reserves in buffer mode
- Full output power between -25 and +60°C
- Quick-connect spring-clamp terminals

Model	Output Voltage (V)	Battery	Input (Vdc)	Output Current		Input Current Charging Mode	Dimension
				Normal Mode	Buffer Mode		
UB10.241	24~28V	External	22.5~30	15A	10A (15A for 5seconds)	1.1A	49x124x117
UB10.245	24~28V	External	22.5~30	15A	10A (15A for 5seconds)	1.1A	49x124x117
	5A			5A			
UBC10	24~28V	Internal	22.5~30	15A	10A (15A for 5seconds)	1.1A	123x124x119

QS Series 1-Phase-Power Supplies (80-480W)

Premium class power supplies

Description

Suitable when you need state-of-the-art technology and flexibility for demanding tasks. With outstanding efficiency, 50% Bonus Power and many additional features this series is the "Best in Class".

The wide variety of features and an active PFC (QS5 and higher) gives you everything you could want. These high-tech-devices combine 50% power reserves, immunity against fluctuations between 60Vac and 300Vac (1-Ph units) with an outstanding efficiency. The uniquely designed spring clamp terminals are easy to use while offering a reliable and long-lasting connection.

Features

- Wide-range AC input (85~276Vac)
- Wide-range DC input (88~375Vdc)
- 50% Power reserve.
- -25°C to + 60°C without derating.
- Lowest inrush current surge.
- DC-OK relay contact (except for QS3)
- Active harmonic correction (PFC)
- Quick-connect spring-clamp terminals

Model	Watt	Output Voltage (V) and Rated Current (A)				Power Reserves	Efficiency	AC Input	Dimension	Power Factor
		24-28V	30V	36~42V	48~52V					
QS3.241	80W	3.4~3A	-	-	-	+50%	90%	100~240V	32x124x102	0.53/0.47
QS5.241	120W	5-4.5A	-	-	-	+50%	92.7%	100~240V	40x124x117	0.99/0.91
QS10.121	180W	15~13.5A	-	-	-	+50%	91.8%	100~240V	60x124x117	0.98/0.92
QS10.241	240W	10-9A	-	-	-	+50%	93.0%	100~240V	60x124x117	0.98/0.92
QS10.301	240W	-	8.6-7.5A	-	-	+50%	93%	100~240V	60x124x117	0.98/0.92
QS10.481	240W	-	-	-	5-4.3A	+50%	92%	100~240V	60x124x117	0.98/0.92
QS20.241	480W	20-17A	-	-	-	+50%	93.9%	100~240V	82x124x117	0.95/0.9
QS20.244	480W	20-17A	-	-	-	+50%	94.5%	200~240V	70x124x127	-/0.5
QS20.361	480W	-	-	13.3-11.4A	-	+50%	94%	100~240V	82x124x127	0.95/0.9
QS20.481	480W	-	-	-	10-8.7A	+25%	94.3%	100~240V	82x124x127	0.95/0.9

QT Series 3-Phase-Power Supplies (480W)

Model	Watt	Output Voltage (V) and Rated Current (A)			Power Reserves	Efficiency	AC Input	Dimension	Power Factor
		24-28V	36~42V	48~52V					
QT20.241	480W	20~17.5A	-	-	+50%	95%	3x 380-480V	65x124x127	0.94
QT20.361	480W	-	13.3~11.4A	-	+50%	94.8%	3x 380-480V	65x124x127	0.94
QT20.481	480W	-	-	10~8.7A	+50%	95.4%	3x 380-480V	65x124x127	0.94

QTD Series DC-DC Converter (480W)

Model	Watt	Output Voltage (V) and Rated Current (A)	Power Reserves	Efficiency	DC Input	Dimension	Power Factor
QTD20	480W	24~28V/20~17.5A	+25%	95%	360~900Vdc	65x124x127	0.94



Devicenet power supplies

The QS5.DNET and QS10.DNET power supply is a derivative of the Dimension QS5 and QS10 family, which is specially designed to meet the DeviceNet® requirement. The QS5.DNET exists beside the QS10.DNET, which is the right choice to supply networks with the thick cable. The specialties of DeviceNet® power supplies are:

- The nominal and overload currents are sized for the ratings of the DeviceNet® cables.
- Large load capacitors can be charged in a very short period of time.
- After turn on, the output voltage increases according to the DeviceNet® timing specification.
- The upper level of the output level is limited to protect the network.

The most outstanding features are a high efficiency, compact size, wide-range input voltage, a very low inrush surge and a DC-ok contact. High immunity to transients and power surges and a low electromagnetic emission makes usage in nearly every environment possible. Unique quick-connect spring-clamp terminals allow a safe and fast installation. A large international approval package makes this unit suitable for nearly every situation.

Features

- Wide-range AC input (85~276Vac)
- NEC Class 1 or 2 Compliant
- DeviceNet approved
- High Efficiency
- Active Power factor correction
- Negligibly low inrush current
- Full power between -25°C to + 60°C

Model	Watt	Output Voltage (V) and Rated Current (A)	Efficiency	AC Input	Dimension	Power Factor
		24V				
QS5.DNET	91.2W	3.8A	92%	100~240V	40x124x117	0.98/0.90
QS10.DNET	192W	8A	92.7%	100~240V	60x124x117	0.98/0.92

XT Series AC-DC Converter (960W)

Semi-regulated 3-Phase power supplies

Description

3-Phase semi-regulated power supplies

The attractive alternative for supplying DC motors and other non-critical loads. Small compromises in the output voltage regulation and ripple voltage allow a cost efficient design with low power losses. The power supplies in the Dimension X-Series include a new and innovative concept for generating an isolated DC voltage from a three-phase mains system. A semi-regulated resonant converter enables a very compact design, maximum efficiency and extremely competitive pricing with only a small compromise in the output voltage regulation, output ripple and hold-up time. Weighing just 1.4 kg, the device provides 960 watts of continuous output power and an additional 25% power reserve for dynamic loads. The light-weight design along with compact dimensions facilitate straightforward mounting on DIN-rail. Primary use are applications involving supplies to motors, valves and other load circuits with a high power consumption, where an accurate output voltage regulation which is standard on traditional switched-mode power supplies is not required. Furthermore, these switched-mode power supplies can often replace mains transformers with rectifiers.

Features

- Alternative or Replacement for AC Transformer
- Three Phase Input – DC Output
- Width only 96mm
- 95.5% Efficiency
- 125% Peak Power Capability
- 125% Peak Power Capability
- Active Input Transient Blocker



Model	Watt	Output Voltage (V) and Rated Current (A)				Ripple and Noise	Efficiency	AC Input	Power Losses	Dimension
		24V	36V	48V	72V					
XT40.241	960	40 / 50A..15s	-	-	-	1.5Vpp	95.5%	3x 400Vac	45.2W	96 x 124 x 157mm
XT40.242	960	40 / 50A..15s	-	-	-			3x 480Vac		96 x 124 x 157mm
XT40.361	960	-	26.6 / 33.3A..15s	-	-	2.0Vpp	95.5%	3x 400Vac	45.2W	96 x 124 x 157mm
XT40.362	960	-	26.6 / 33.3A..15s	-	-			3x 480Vac		96 x 124 x 157mm
XT40.481	960	-	-	20 / 25A..15s	-	2.5Vpp	96%	3x 400Vac	40.0W	96 x 124 x 157mm
XT40.482	960	-	-	20 / 25A..15s	-			3x 480Vac		96 x 124 x 157mm
XT40.721	960	-	-	-	13.3 / 16.7A..15s	3.0Vpp	95.5%	3x 400Vac	45.2W	96 x 124 x 157mm
XT40.722	960	-	-	-	13.3 / 16.7A..15s			3x 480Vac		96 x 124 x 157mm

UF Series Buffer units

Description

Bridging of power outages

Back-up for minutes with a DC-UPS utilising only one 12V battery or for seconds with our battery-free buffer module with no battery wear out. This prevents down time, loss of data and long restart sequences.

Features

- Buffer unit to bridge 24V brown-outs and black-outs
- No service required, utilizes electrolytic capacitors
- Can be connected parallel to the load
- Various signals for remote monitoring included
- Full output power between -25 and +70°C
- Quick-connect spring-clamp terminals

Model	Watt	Output Voltage (V) and Rated Current (A)		Input (Vdc)	Buffer Current			Dimension
		24V	48V		minimum	Typical	Typical	
UF20.241	480	20A	-	23~28.8	200ms at 20A	310ms at 20A	43s at 0.1A	64 x 124 x 102mm
UF20.481	480	-	20A	46~56	100ms at 20A	150ms at 20A	21s at 0.1A	64 x 124 x 102mm



CD Series

Dimension C-Series DC/DC converters

Description

For users who are looking for power supplies in a compact housing, that are easy to use and offer high reliability. Focussing only on the essential aspects achieves significant price advantages.

Features

- DC/DC Converter, isolated output
- 24V input, 12V output
- Efficiency up to 88.2%
- Negligibly low input inrush current
- 20% Power reserves can be used continuously up to 45°C.

Model	DC Input Voltage (V)	DC Output Voltage (V)	Output current	Power reserves	Efficiency	Power Losses	Dimension
CD5.121	18~32.4V	12~15V	8-6.4A	+20%	88.2%	12.4W	32x124x102
CD5.241	18~32.4V	23~28V	5-4.3A	+20%	90.3%	12.9W	32x124x102
CD5.242	36~60V	36~60V	5-4.3A	+20%	90.3%	12.9W	32x124x117