



DIN - RAIL POWER SUPPLIES

# SELECTION GUIDE

2010

## DIMENSION

The DIMENSION family of power supplies distinguishes itself from all others due to significant advances in technology and the implementation of a wide variety of technical improvements. This new generation of power supplies offers impressive features which include a compact size as well as being powerful, efficient, reliable, durable, highly functional and easy to use.

### C-Series: Power Supplies and DC/DC-Converters

For users looking for highly reliable power supplies in a compact housing. Focusing only on the essentials achieves significant price advantages.

- 20% Power reserves
- Low inrush current surge
- Large screw connection terminals

### Q-Series: Premium Class Power Supplies

Suitable when you need state-of-the-art technology and flexibility for demanding tasks. With outstanding efficiencies, 50% BonusPower® and many other features, this series is the "Best-in-Class".

- 50% Power reserves
- AC and DC wide-range input
- Low inrush current surge
- DC-OK relay contact (except QS3)
- Excellent power factor
- Active power factor correction PFC (except QS3)
- Quick-connect spring-clamp terminals
- Extensive approval package



## MINILINE

The MiniLine-Series covers the lower power requirements in the range from 15W to 100W. The units in their rugged plastic housing are highly efficient, compact, can be installed in seconds and are extremely reliable. In addition to the 24V power supplies, many other output voltages are also available.

- Single phase or 400/480V input
- Output voltages from 5V to 56V
- Robust plastic housing
- Quick-connect spring-clamp terminals (except ML15)
- Full output power from -10°C to +60°C
- Diode module for redundancy

## SILVERLINE



The classic power supply family for general applications which has been proven over a million times. These legacy products are being augmented by the DIMENSION series.

- Single or three-phase-input
- Redundant power supplies
- AS-Interface® power supplies

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# Best-in-Class DIN-Rail-Power-Supplies

### U-Series: Bridging of Power Outages

These extension modules improve safety and prevent downtime, loss of data and long restart sequences.

- Buffering for minutes with a DC-UPS requiring only one 12V-battery
- Buffering for seconds with a battery-free capacitor module

### Y-Series: Diode- and Redundancy Modules

For building redundant power supply systems or to isolate sensitive circuits.

### X-Series: Semi-regulated 3-Phase Power Supplies

For motors and other power-hungry loads. Small size, maximum efficiency and low price are the benefits with only minor compromises in output voltage regulation precision and buffer time.

- 25% Power reserves
- No inrush current surge
- Efficiencies up to 96%

### Z-Series: Mounting Accessories

For installation in low profile cabinets or for panel installations where no DIN-rail is available.



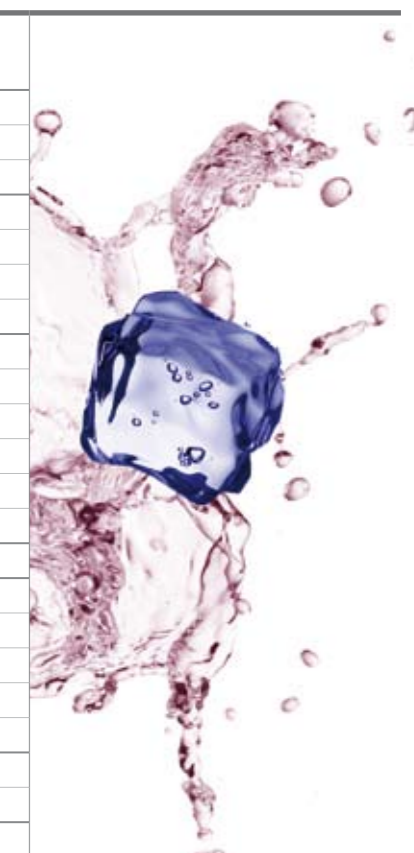
This design reduces the number of critical components and consistently uses only the highest quality materials to achieve longest service life of the products



Quick-connect spring-clamp terminals, no tools required



Order Number	Output	Input	Dimensions WxHxD (mm)	Special Features
ML15.051	5V 3.0A	AC 100-240V	22.5x75x91mm	
ML15.121	12V 1.3A	AC 100-240V	22.5x75x91mm	
ML15.241	24V 0.63A	AC 100-240V	22.5x75x91mm	
ML30.100	24V 1.3A	AC 100-240V	45x75x91mm	
ML30.101	5V 5.0A	AC 100-240V	45x75x91mm	
ML30.102	12V 3.0A	AC 100-240V	45x75x91mm	very low output noise
ML30.106	±12V 2.0A	AC 100-240V	45x75x91mm	dual-output voltage
ML50.100	24V 2.1A	AC 100-240V	45x75x91mm	
ML50.101	24V 2.1A	AC 100-240V	45x75x91mm	optimised for parallel use
ML50.102	12V 4.2A	AC 100-240V	45x75x91mm	
ML50.105	48V 1.05A	AC 100-240V	45x75x91mm	
ML50.109	24V 2.1A	AC 100-240V	45x75x91mm	conformal coated
ML50.111	24V 2.1A	AC 100-240V	45x75x91mm	pluggable screw terminals
ML70.100	24V 3.0A	AC 100-120 / 200-240V	45x75x91mm	
ML95.100	24V 3.95A	AC 100-120 / 200-240V	73x75x103mm	NEC-Class-2-Version
ML100.100	24V 4.2A	AC 100-120 / 200-240V	73x75x103mm	
ML100.102	12V 7.5A	AC 100-120 / 200-240V	73x75x103mm	
ML100.105	48V 2.1A	AC 100-120 / 200-240V	73x75x103mm	
ML100.109	24V 4.2A	AC 100-120 / 200-240V	73x75x103mm	conformal coated
ML90.200	24V 3.75A	2AC 380-480V	73x75x103mm	NEC-Class-2-Version
ML100.200	24V 4.2A	2AC 380-480V	73x75x103mm	
MLY02.100		Dual-input diode module 10-60V, 2x5A	45x75x91mm	for redundant applications



Order Number	ML15.051	ML30.101	ML15.121	ML30.102	ML50.102	ML100.102	ML30.106	ML15.241	ML30.100	ML50.100 ML50.109*)	ML50.101 ML50.111*)	ML70.100	ML95.100	ML100.100 ML100.109*)	ML50.105	ML100.105	ML90.200 380-480V	ML100.200 380-480V	
Output	5V 3A	5V 5A	12V 1.3A	12V 2.5A	12V 4.2A	12V 7.5A	±12V 1.5A	24V 0.63A	24V 1.3A	24V 2.1A	24V 2.1A	24V 3A	24V 3.95A	24V 4.2A	48V 1.05A	48V 2.1A	24V 3.75A	24V 4.2A	
Adjustment Range	5-5.5V	5-5.5V	12-15V	10-12V	12-15V	12-15V	±12-15V	24-28V	24-28V	24-28V	24-28V	24-28V	24-28V	24-28V	48-56V	48-56V	24-28V	24-28V	
Output Current	3.0A	5.0A	1.3-1A	3-2.5A	4.2-3.3A	7.5-6A	2x1.5A	0.63-0.54A	1.3-1.1A	2.1-1.8A	2.1-1.8A	3-2.6A	3.95-3.4A	4.2-3.6A	1.05-0.9A	2.1-1.8A	3.75-3.2A	4.2-3.6A	
Factory Setting	5.1V	5.1V	12.0V	12.0V	15.0V	12.0V	±15V	24.5V	24.5V	24.5V	24.0V	24.5V	24.5V	24.5V	48.0V	48.0V	24.5V	24.5V	
Output Power	15W	25W	15W	30W	50W	90W	36W	15W	30W	50W	50W	72W	95W	100W	50W	100W	90W	100W	
Ripple & Noise Voltage	<50mVpp	<50mVpp	<75mVpp	<10mVpp	<50mVpp	<50mVpp	<50mVpp	<50mVpp	<50mVpp	<50mVpp	<50mVpp	<50mVpp	<50mVpp	<50mVpp	<50mVpp	<50mVpp	<50mVpp	<50mVpp	
AC Input Voltage	AC 100-240V -15%/+10% wide-range	AC 100-240V -15%/+10% wide-range	AC 100-240V -15%/+10% wide-range	AC 100-240V -15%/+10% wide-range	AC 100-240V -15%/+10% wide-range	AC 100-120V/ 200-240V -15%/+10% auto-select	AC 100-240V -15%/+10% wide-range	AC 100-240V -15%/+10% wide-range	AC 100-240V -15%/+10% wide-range	AC 100-240V -15%/+10% wide-range	AC 100-240V -15%/+10% wide-range	AC 100-240V -15%/+10% wide-range	AC 100-120V/ 200-240V -15%/+10% manual select	AC 100-120V/ 200-240V -15%/+10% auto-select	AC 100-120V/ 200-240V -15%/+10% auto-select	AC 100-240V -15%/+10% wide-range	AC 100-120V/ 200-240V -15%/+10% auto-select	2AC 380-480V ±15% wide-range	2AC 380-480V ±15% wide-range
EN 61000-3-2 (PFC-Norm)	not applicable	not applicable	not applicable	not applicable	not applicable	fulfilled	not applicable	not applicable	not applicable	not applicable	not applicable	fulfilled	fulfilled	fulfilled	not applicable	fulfilled	fulfilled	fulfilled	fulfilled
Power Factor, typ.	0.44	0.53	0.44	0.53	0.52	0.55	0.53	0.44	0.53	0.52	0.52	0.54	0.55	0.55	0.52	0.55	0.60	0.60	0.60
Input Inrush Current Limiter	NTC	NTC	NTC	NTC	NTC	NTC	NTC	NTC	NTC	NTC	NTC	NTC	NTC	NTC	NTC	NTC	NTC	NTC	NTC
DC Input Voltage **)	DC 110-290V -25%/+30%	DC 110-290V -25%/+30%	DC 110-290V -25%/+30%	DC 110-290V -25%/+30%	DC 110-290V -25%/+30%	DC 290V -25%/+30%	DC 110-290V -25%/+30%	DC 110-290V -25%/+30%	DC 110-290V -25%/+30%	DC 110-290V -25%/+30%	DC 110-290V -25%/+30%	DC 290V -25%/+30%	DC 290V -25%/+30%	DC 290V -25%/+30%	DC 110-290V -25%/+30%	DC 290V -25%/+30%	DC 600V -25%/+35%	DC 600V -25%/+35%	
Efficiency, typ.	77.2%	80.0%	83.6%	84.0%	90.0%	88.5%	86.0%	88.4%	87.5%	89.0%	89.0%	91.5%	90.0%	90.0%	90.3%	91.8%	89.5%	89.5%	
Power Losses, typ.	4.5W	6.3W	3.1W	5.7W	5.6W	11.7W	5.9W	2.0W	4.3W	6.2W	6.2W	6.7W	9.9W	11.1W	5.4W	8.9W	10.5W	11.7W	
MTBF (40°C, SN 29500)	2686 kh	1963 kh	3811 kh	2507 kh	2365 kh	1310 kh	3010 kh	4369 kh	3603 kh	2613 kh	2613 kh	2038 kh	1551 kh	1551 kh	1970 kh	1671 kh	1594 kh	1594 kh	
Temperature Range	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	
Derating +60°C to +70°C	0.4W/°C	0.8W/°C	0.4W/°C	0.8W/°C	1.3W/°C	2.5W/°C	1.0W/°C	0.4W/°C	0.8W/°C	1.3W/°C	1.3W/°C	1.8W/°C	2.0W/°C	2.5W/°C	1.3W/°C	2.5W/°C	2.0W/°C	2.5W/°C	
Dimensions WxHxD	22.5x75x91mm	45x75x91mm	22.5x75x91mm	45x75x91mm	45x75x91mm	73x75x103mm	45x75x91mm	22.5x75x91mm	45x75x91mm	45x75x91mm	45x75x91mm	45x75x91mm	73x75x103mm	73x75x103mm	45x75x91mm	73x75x103mm	73x75x103mm	73x75x103mm	
Weight	130g	240g	130g	250g	260g	360g	240g	130g	230g	240g	240g	260g	360g	360g	240g	360g	360g	360g	
DC-OK-Signal	-	-	-	-	-	-	-	-	-	yes	yes	-	-	-	-	-	-	-	

\*) ML50.109 and ML100.109 with conformal coated PC-board, ML50.111 with pluggable screw terminals, optimised for parallel use and a depth of 98mm

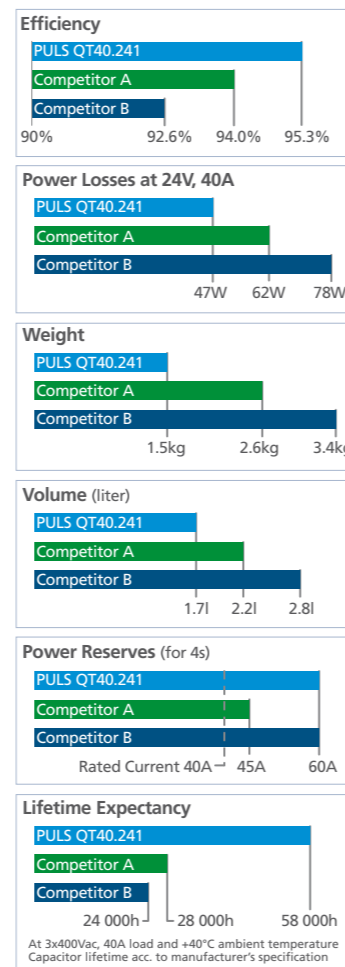
\*\*) With restrictions, see datasheet or main catalogue

**3-PHASE, 24V, 40A**

- Extremely compact and lightweight, just 110mm wide and 1.5kg in weight
- Integrated input fuses, allows a direct connection to mains-branches up to 32A
- Minimal power losses so less heat in the control cabinet
- High efficiency value maintained from low to full load
- Active PFC for low input current consumption and stable performance on asymmetrical supply networks
- Long service life due to low temperatures on the electrolytic capacitors
- Large power reserves, 60A for 4s at full output voltage
- No input inrush current surge
- Active filtering of incoming input transients
- Full output power between -25°C and +60°C
- DC-OK relay contact for remote monitoring
- Shut-down input for remote turn on/off

**QT40 with**  
**Record Breaking Efficiency**  
**of 95.3%**

**No. 1**



Order Number	Output	Input	Dimensions WxHxD (mm)	Special Features
CS3.241	24V 3.3A	AC 100-240V	32x124x102mm	
CS5.241	24V 5.0A	AC 100-120/200-240V	32x124x117mm	
CS5.241-C1	24V 5.0A	AC 100-120/200-240V	32x124x117mm	conformal coated
CS5.241-S1	24V 5.0A	AC 100-120/200-240V	32x124x117mm	spring-clamp terminals
CS5.243	24V 5.0A	AC 100-120V	32x124x117mm	
CS5.244	24V 5.0A	AC 200-240V	32x124x117mm	
QS3.241	24V 3.4A	AC 100-240V	32x124x102mm	
QS5.241	24V 5.0A	AC 100-240V	40x124x117mm	
QS5.DNET	24V 3.8A	AC 100-240V	40x124x117mm	NEC-Class-2, DeviceNet approved



Order Number	CS3.241	QS3.241	QS5.DNET	CS5.241 CS5.241-C1*) CS5.241-S1*)	CS5.243	CS5.244	QS5.241
<b>Output</b>	24V 3.3A	24V 3.4A	24V 3.8A	24V 5A	24V 5A	24V 5A	24V 5A
<b>Adjustment Range</b>	24-28V	24-28V	24V	24-28V	24-28V	24-28V	24-28V
<b>Output Current</b>	3.3-2.7A	3.4-3A	3.8A	5-4.3A	5-4.3A	5-4.3A	5-4.5A
<b>Factory Setting</b>	24.1V	24.1V	24.1V	24.1V	24.1V	24.1V	24.1V
<b>Output Power</b>	80W	82W	91W	120W	120W	120W	120W
<b>Power Reserves</b>	-	+50%	-	+20%	+20%	+20%	+50%
<b>Ripple &amp; Noise Voltage</b>	<50mVpp	<50mVpp	<50mVpp	<50mVpp	<50mVpp	<50mVpp	<50mVpp
<b>AC Input Voltage</b>	AC 100-240V ±10% wide-range	AC 100-240V ±15% wide-range	AC 100-240V -15%/+10% wide-range	AC 100-120/ 200-240V ±10% auto-select	AC 100-120V ±10%	AC 200-240V ±10%	AC 100-240V -15%/+10% wide-range
<b>Input Harmonics Filter</b>	-	active	active	-	-	-	active
<b>EN 61000-3-2 (PFC-Norm)</b>	fulfilled	fulfilled	fulfilled	-	-	fulfilled	fulfilled
<b>Power Factor, typ.</b>	0.56	0.47	0.90	0.47	0.59	0.50	0.91
<b>Input Inrush Current Limiter</b>	NTC	active	active	active	NTC	NTC	active
<b>DC Input Voltage**)</b>	DC 110-300V -20%/+25%	DC 110-300V -20%/+25%	DC 110-300V ±20%	-	-	DC 290V -27%/+30%	DC 110-300V ±20%
<b>Efficiency, typ.</b>	89.8%	90.0%	92.0%	90.2%	90.0%	90.2%	92.7%
<b>Power Losses, typ.</b>	9.1W	9.1W	7.9W	13.2W	13.5W	13.2W	9.4W
<b>MTBF (40°C, SN 29500)</b>	2243 kh	1451 kh	831 kh	869 kh	740 kh	940 kh	831 kh
<b>Temperature Range</b>	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-10°C to +70°C	-10°C to +70°C	-25°C to +70°C
<b>Derating +60°C to +70°C</b>	1.8W/°C	2.0W/°C	2.0W/°C	3.0W/°C	3.0W/°C	3.0W/°C	3.0W/°C
<b>Dimensions WxHxD</b>	32x124x102mm	32x124x102mm	40x124x117mm	32x124x117mm	32x124x117mm	32x124x117mm	40x124x117mm
<b>Connection Terminals</b>	screw terminals	spring terminals	spring terminals	screw terminals <sup>1)</sup>	screw terminals	screw terminals	spring terminals
<b>Weight</b>	430g	440g	620g	500g	500g	500g	620g
<b>DC-OK-Signal</b>	-	-	yes	-	-	-	yes

\*) CS5.241-S1 with quick-connect spring-clamp terminals, CS5.241-C1 with conformal coated PC-board.  
 \*\*) May have restrictions, see datasheet or main catalogue

**Miracle**  
**Miracle Cube**

# DIMENSION 1-Phase Power Supplies 180W - 960W

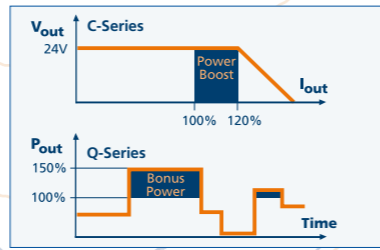
CS10  
QS10  
QS20  
QS40



Highest efficiencies  
protect the environment  
and save money at the  
same time



Large power reserves:  
20% Power Boost or  
50% BonusPower®



Order Number	Output	Input	Dimensions WxHxD (mm)	Special Features
CS10.241	24V 10.0A	AC 100-120 / 200-240V	60x124x117mm	
CS10.241-S1	24V 10.0A	AC 100-120 / 200-240V	60x124x117mm	spring-clamp terminals
CS10.242	24V 10.0A	AC 100-120 / 200-240V	60x124x117mm	PFC-Version
CS10.243	24V 10.0A	AC 100-120V	60x124x117mm	
CS10.244	24V 10.0A	AC 200-240V	60x124x117mm	
CS10.481	48V 5.0A	AC 100-120 / 200-240V	60x124x117mm	
QS10.121	12V 15.0A	AC 100-240V	60x124x117mm	
QS10.241	24V 10.0A	AC 100-240V	60x124x117mm	
QS10.241-C1	24V 10.0A	AC 100-240V	60x124x117mm	conformal coated
QS10.301	30V 8.0A	AC 100-240V	60x124x117mm	
QS10.481	48V 5.0A	AC 100-240V	60x124x117mm	
QS10.DNET	24V 8.0A	AC 100-240V	60x124x117mm	DeviceNet approved
QS20.241	24V 20.0A	AC 100-240V	82x124x127mm	
QS20.241-C1	24V 20.0A	AC 100-240V	82x124x127mm	conformal coated
QS20.244	24V 20.0A	AC 200-240V	70x124x127mm	
QS20.361	36V 13.3A	AC 100-240V	82x124x127mm	
QS20.481	48V 10.0A	AC 100-240V	82x124x127mm	
QS40.244	24V 40.0A	AC 200-240V	125x124x127mm	



Order Number	QS10.121	QS10.DNET	CS10.241 CS10.241-S1*)	CS10.242	CS10.243	CS10.244	QS10.241 QS10.241-C1*)	QS20.241 QS20.241-C1*)	QS20.244	QS40.244	QS10.301	QS20.361	CS10.481	QS10.481	QS20.481
Output	12V 15A	24V 8A	24V 10A	24V 10A	24V 10A	24V 10A	24V 10A	24V 20A	24V 20A	24V 40A	30V 8A	36V 13.3A	48V 5A	48V 5A	48V 10A
Adjustment Range	12-15V	24-24.5V	24-28V	24-28V	24-28V	24-28V	24-28V	24-28V	24-28V	24-28V	28-32V	36-42V	48-52V	48-56V	48-55V
Output Current	15-13.5A	8A	10-8.6A	10-8.6A	10-8.6A	10-8.6A	10-9A	20-17A	20-17A	40-34.4A	8.6-7.5A	13.3-11.4A	5-4.6A	5-4.3A	10-8.7A
Factory Setting	12.0V	24.1V	24.1V	24.1V	24.1V	24.1V	24.1V	24.1V	24.1V	24.1V	30.0V	36.0V	48.0V	48.0V	48.0V
Output Power	180W	196W	240W	240W	240W	240W	240W	480W	480W	960W	240W	480W	240W	240W	480W
Power Reserves	50%	-	20%	20%	20%	20%	50%	50%	50%	50%	50%	50%	20%	50%	50%
Ripple & Noise Voltage	<50mVpp	<50mVpp	<50mVpp	<50mVpp	<50mVpp	<50mVpp	<50mVpp	<100mVpp	<100mVpp	<100mVpp	<50mVpp	<100mVpp	<100mVpp	<100mVpp	<100mVpp
AC Input Voltage	AC 100-240V ±15% wide-range	AC 100-240V ±15% wide-range	AC 100-120V/ 200-240V ±10% auto-select	AC 100-120V/ 200-240V ±10% auto-select	AC 100-120V ±10%	AC 200-240V ±10%	AC 100-240V ±15% wide-range	AC 100-240V ±15% wide-range	AC 200-240V ±15%	AC 200-240V -15%/+10%	AC 100-240V ±15% wide-range	AC 100-240V ±15% wide-range	AC 100-120V/ 200-240V ±10% auto-select	AC 100-240V ±15% wide-range	AC 100-240V ±15% wide-range
Input Harmonics Filter	active	active	-	PFC inductor	-	-	active	active	-	active	active	active	-	active	active
EN 61000-3-2 (PFC-Norm)	fulfilled	fulfilled	-	fulfilled	-	-	fulfilled	fulfilled	-	fulfilled	fulfilled	fulfilled	-	fulfilled	fulfilled
Power Factor. typ.	0.92	0.92	0.51	0.57	0.57	0.52	0.92	0.90	0.50	0.95	0.92	0.90	0.51	0.92	0.90
Input Inrush Current Limiter	active	active	active	active	NTC	NTC	active	active	active	active	active	active	active	active	active
DC Input Voltage**)	DC 110-300V -25%/+30%	DC 110-300V -20%/+25%	-	-	-	DC 290V -27%/+30%	DC 110-300V -20%/+25%	DC 110-300V -20%/+25%	DC 250-300V -15%/+25%	DC 220-300V -20%/+25%	DC 110-300V -20%/+25%	DC 110-300V -20%/+25%	-	DC 110-300V -20%/+25%	DC 110-300V -20%/+25%
Efficiency. typ.	91.8%	92.7%	91.6%	91.2%	91.3%	91.3%	93.0%	93.9%	94.5%	94.6%	93.0%	94.0%	91.6%	92.0%	94.3%
Power Losses. typ.	16.1W	15.1W	22.0W	23.2W	23.4W	23.4W	18.1W	31.4W	28.3W	54.8W	18.1W	30.6W	22.0W	20.9W	29.0W
MTBF (40°C. SN 29500)	631 kh	621 kh	821 kh	810 kh	710 kh	910 kh	581 kh	469 kh	577 kh	366 kh	571 kh	469 kh	835 kh	606 kh	469 kh
Temperature Range	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	0°C to +70°C	0°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C
Derating +60°C to +70°C	5.0W/°C	5.0W/°C	6.0W/°C	6.0W/°C	6.0W/°C	6.0W/°C	6.0W/°C	12.0W/°C	12.0W/°C	24.0W/°C	6.0W/°C	12.0W/°C	6.0W/°C	6.0W/°C	12.0W/°C
Dimensions WxHxD	60x124x117mm	60x124x117mm	60x124x117mm	60x124x117mm	60x124x117mm	60x124x117mm	60x124x117mm	82x124x127mm	70x124x127mm	125x124x127mm	60x124x117mm	82x124x127mm	60x124x117mm	60x124x117mm	82x124x127mm
Connection Terminals	spring terminals	spring terminals	screw terminals	screw terminals	screw terminals	screw terminals	spring terminals	spring terminals	spring terminals	screw terminals	spring terminals	spring terminals	screw terminals	spring terminals	spring terminals
Weight	930g	900g	700g	800g	700g	700g	900g	1200g	880g	1800g	900g	1200g	700g	900g	1200g
DC-OK-Signal	yes	yes	-	-	-	-	yes	yes	yes	yes	yes	yes	-	yes	yes

\*) CS10.241-S1 with quick-connect spring-clamp terminals, QS10.241-C1, QS20.241-C1 with conformal coated PC-board. \*\*) May have restrictions, see datasheet or main catalogue

## Power Supplies for the 3-Phase-System

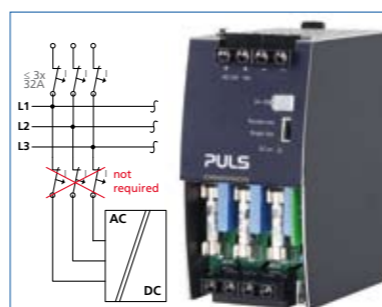
Industrial three-phase systems present a special challenge when designing power supplies. High energy transients and superimposed harmonics on the input lines require special input filters and protection circuits. PULS units are equipped with special active and passive filters.



The small footprint enables large space reductions allowing you to be creative and take advantage of new possibilities

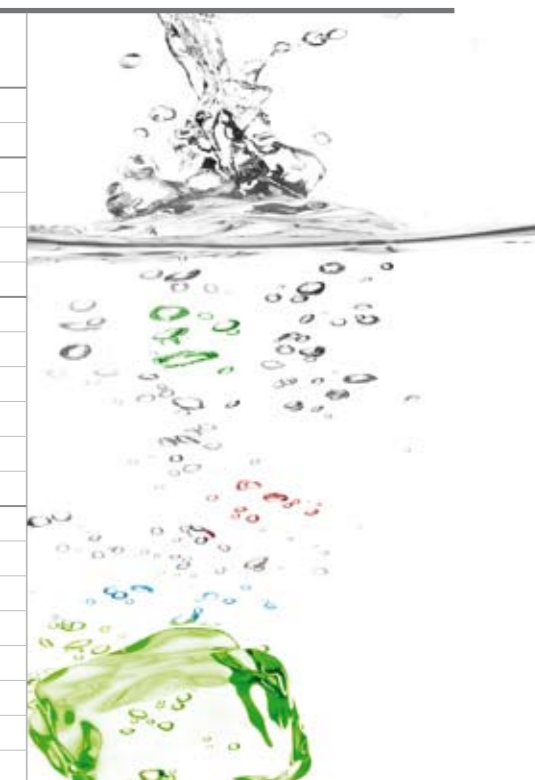


Thermally optimized design to achieve longest service life for the power supply



External protection is easy and often not required thanks to the internal fuses

Order Number	Output	Input	Dimensions WxHxD (mm)	Special Features
ML90.200	24V 3.75A	2AC 380-480V	73x75x103mm	NEC-Class-2
ML100.200	24V 4.2A	2AC 380-480V	73x75x103mm	
CT5.121	12V 8.0A	2AC 380-480V	40x124x117mm	
CT5.241	24V 5.0A	2AC 380-480V	40x124x117mm	
CT10.241	24V 10.0A	3AC 380-480V	62x124x117mm	
CT10.481	48V 5.0A	3AC 380-480V	62x124x117mm	
QT20.241	24V 20.0A	3AC 380-480V	65x124x127mm	
QT20.241-C1	24V 20.0A	3AC 380-480V	65x124x127mm	conformal coated
QT20.361	36V 13.3A	3AC 380-480V	65x124x127mm	
QT20.481	48V 10.0A	3AC 380-480V	65x124x127mm	
QT40.241	24V 40.0A	3AC 380-480V	110x124x127mm	
QT40.481	48V 20.0A	3AC 380-480V	110x124x127mm	
XT40.241	24V 40.0A	3AC 400V	96x124x157mm	semi-regulated
XT40.242	24V 40.0A	3AC 480V	96x124x157mm	semi-regulated
XT40.361	36V 26.6A	3AC 400V	96x124x157mm	semi-regulated
XT40.362	36V 26.6A	3AC 480V	96x124x157mm	semi-regulated
XT40.481	48V 20.0A	3AC 400V	96x124x157mm	semi-regulated
XT40.482	48V 20.0A	3AC 480V	96x124x157mm	semi-regulated
XT40.721	72V 13.3A	3AC 400V	96x124x157mm	semi-regulated
XT40.722	72V 13.3A	3AC 480V	96x124x157mm	semi-regulated



Order Number	CT5.121	ML90.200	ML100.200	CT5.241	CT10.241	QT20.241 QT20.241-C1*)	QT40.241	XT40.241 XT40.242*)	QT20.361	XT40.361 XT40.362*)	CT10.481	QT20.481	QT40.481	XT40.481 XT40.482*)	XT40.721 XT40.722*)
Output	12V 8A	24V 3.75A	24V 4.2A	24V 5A	24V 10A	24V 20A	24V 40A	24V 40A	36V 13.3A	36V 26.6A	48V 5A	48V 10A	48V 20A	48V 20A	72V 13.3A
Adjustment Range	12-15V	24-28V	24-28V	24-28V	24-28V	24-28V	24-28V	24V	36-42V	36V	48-56V	48-55V	48-54V	48V	72V
Output Current	8-6.4A	3.75- 3.2A	4.2-3.6A	5-4.3A	10-8.6A	20-17.5A	40-34.3A	40A	13.3-11.4A	26.6A	5-4.3A	10-8.7A	20-17.8A	20A	13.3A
Factory Setting	12.0V	24.5V	24.5V	24.1V	24.1V	24.1V	24.1V	24.1V	36.0V	36.0V	48.0V	48.0V	48.0V	48.0V	72.0V
Output Power	96W	90W	100W	120W	240W	480W	960W	960W	480W	960W	240W	480W	960W	960W	960W
Power Reserves	-	-	-	20%	20%	50%	50%	25%	50%	25%	20%	50%	50%	25%	25%
Ripple & Noise Voltage	<100mVpp	<50mVpp	<50mVpp	<50mVpp	<50mVpp	<100mVpp	<100mVpp	<1500mVpp	<100mVpp	<2000mVpp	<100mVpp	<100mVpp	<150mVpp	<2500mVpp	<3000mVpp
AC Input Voltage	2AC 380-480V -15%/+20% wide-range	2AC 380-480V ±15% wide-range	2AC 380-480V ±15% wide-range	2AC 380-480V -15%/+20% wide-range	3AC 380-480V -15%/+20% wide-range	3AC 380-480V ±15% wide-range	3AC 380-480V -15%/+20% wide-range	3AC 400V*) ±15%	3AC 380-480V ±15% wide-range	3AC 400V*) ±15%	3AC 380-480V -15%/+20% wide-range	3AC 380-480V ±15% wide-range	3AC 380-480V -15%/+20% wide-range	3AC 400V*) ±15%	3AC 400V*) ±15%
Input Harmonics Filter	PFC inductor	-	-	PFC inductor	PFC inductor	active	active	active	active	active	PFC inductor	active	active	active	active
EN 61000-3-2 (PFC-Norm)	fulfilled	fulfilled	fulfilled	fulfilled	fulfilled	fulfilled	fulfilled	fulfilled	fulfilled	fulfilled	fulfilled	fulfilled	fulfilled	fulfilled	fulfilled
Power Factor, typ.	0.44	0.60	0.60	0.45	0.53	0.94	0.88	0.93	0.94	0.93	0.53	0.94	0.88	0.93	0.93
Input Inrush Current Limiter	active	NTC	NTC	active	active	active	active	active	active	active	active	active	active	active	active
DC Input Voltage**)	DC 600V -25%/+30%	DC 600V -25%/+35%	DC 600V -25%/+35%	DC 600V -25%/+30%	DC 600V -25%/+30%	DC 600V -25%/+30%	DC 600V -25%/+35%	DC 540V*) ±15%	DC 600V -25%/+30%	DC 540V*) ±15%	DC 600V -25%/+30%	DC 600V -25%/+30%	DC 600V -25%/+35%	DC 540V*) ±15%	DC 540V*) ±15%
Efficiency, typ.	85.4%	89.5%	89.5%	90.4%	92.8%	95.0%	95.3%	95.5%	94.8%	95.5%	92.8%	95.4%	95.4%	96.0%	95.5%
Power Losses, typ.	16.4W	10.5W	11.7W	12.7W	18.6W	25.3W	47.3W	45.2W	26.3W	45.2W	18.6W	23.1W	46.3W	40.0W	45.2W
MTBF (40°C, SN 29500)	983 kh	1594 kh	1594 kh	1173 kh	975 kh	501 kh	375 kh	543 kh	492 kh	565 kh	1051 kh	531 kh	395 kh	540 kh	595 kh
Temperature Range	-25°C to +70°C	-10°C to +70°C	-10°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C
Derating +60°C to +70°C	2.5W/°C	2.0W/°C	2.5W/°C	3.0W/°C	6.0W/°C	12.0W/°C	24.0W/°C	24.0W/°C	12.0W/°C	24.0W/°C	6.0W/°C	12.0W/°C	24.0W/°C	24.0W/°C	24.0W/°C
Dimensions WxHxD	40x124x117mm	73x75x103mm	73x75x103mm	40x124x117mm	62x124x117mm	65x124x127mm	110x124x127mm	96x124x157mm	65x124x127mm	96x124x157mm	62x124x117mm	65x124x127mm	110x124x127mm	96x124x157mm	96x124x157mm
Connection Terminals	screw terminals	spring terminals	spring terminals	screw terminals	screw terminals	spring terminals	screw terminals	screw terminals	spring terminals	screw terminals	screw terminals	spring terminals	screw terminals	screw terminals	screw terminals
Weight	500g	360g	360g	500g	750g	870g	1500g	1400g	870g	1400g	750g	870g	1500g	1400g	1400g
DC-OK-Signal	-	-	-	-	-	yes	yes	-	yes	-	-	yes	yes	-	-

\*) QT20.241-C1 with conformal coated PC-board. XT40.242, XT40.362, XT40.482 and XT40.722 for 3AC480V or DC650V input voltages. \*\*) May have restrictions, see datasheet or main catalogue

## DC/DC-Converters

There are multiple applications for these units:

stabilised control voltages in battery powered or mobile applications. Ideal for use in ships, fork-lifts, trucks, for galvanic isolation, to avoid earth (ground) loops or to restore the 24V control voltage at the end of long cable runs to compensate for voltage drops.



Order Number	Input	Output	Dimensions WxHxD (mm)	Special Features
CD5.243	DC 12V	24V 4.0A	32x124x102mm	
CD5.121	DC 24V	12V 8.0A	32x124x102mm	
CD5.241	DC 24V	24V 5.0A	32x124x102mm	
CD5.241-L1	DC 24V	24V 3.8A	32x124x102mm	NEC-Class-2
CD5.241-S1	DC 24V	24V 5.0A	32x124x102mm	DC-OK, Input low signal
SLD2.100	DC 24V	5V 8.0A	49x124x102mm	
CD5.242	DC 48V	24V 5.0A	32x124x102mm	
QTD20.241	DC 600V	24V 20.0A	65x124x127mm	for intermediate DC-bus

## Redundancy- and Diode Modules

For building redundant power supply systems or to isolate sensitive circuits. For this purpose, simple diode or redundancy modules with integrated monitoring circuit of the input voltage are available.



Order Number	Description	Dimensions WxHxD (mm)
YR2.DIODE	10-60V, 2x10A dual-input diode decoupling module	32x124x102mm
YRM2.DIODE	24-60V, 2x10A dual-input redundancy module with input-ok relay contacts	32x124x117mm

Additional modules are available in the MiniLine- and SilverLine-Series.

## Mounting Accessories

Various mounting brackets for installation in low profile cabinets (sideways mounting) or for panel installation where no DIN-rail is available.



Order Number	Description
ZM1.WALL	Wall mounting bracket for various DIMENSION units
ZM2.WALL	Wall mounting bracket for QS20, QS40, QT40, XT40
ZM1.UBC10	Wall mounting bracket for UBC10
ZM11.SIDE	Bracket for sideways mounting CS3, CS5, QS3, YR2, YRM2
ZM12.SIDE	Bracket for sideways mounting CT5, QS5
ZM13.SIDE	Bracket for sideways mounting CS10, CT10, QS10
ZM14.SIDE	Bracket for sideways mounting QT20, QTD20, UF20
ZM15.SIDE	Bracket for sideways mounting QS20 (except QS20.244)

Order Number	CD5.243	SLD2.100	CD5.121	CD5.241-L1	CD5.241	CD5.241-S1	CD5.242	QTD20.241
Input Voltage	DC 12V	DC 24V	DC 24V	DC 24V	DC 24V	DC 24V	DC 48V	DC 600V
Input Voltage Range	8.4-16.2Vdc	18-36Vdc	18-32.4Vdc*)	14.4-32.4Vdc*)	18-32.4Vdc*)	18-32.4Vdc*)	36-60Vdc	480-840Vdc**)
Output Voltage	24-28V	5-5.5V	12-15V	24V	24-28V	24-28V	24-28V	24-28V
Output Current	4-3.4A	8.0A	8-6.4A	3.8A	5-4.3A	5-4.3A	5-4.3A	20-17.5A
Output Power	96W	40W	96W	92W	120W	120W	120W	480W
Power Reserves	20%	-	20%	-	20%	20%	20%	25%
Ripple & Noise Voltage	<50mVpp	<50mVpp	<75mVpp	<50mVpp	<50mVpp	<50mVpp	<50mVpp	<100mVpp
Efficiency, typ.	87.7%	82.0%	88.2%	90.3%	90.2%	90.3%	90.3%	94.5%
Power Losses, typ.	13.5%	8.8W	12.8W	9.9W	13.3W	12.9W	12.9W	25.2W
MTBF (40°C, SN 29500)	1100 kh	1785 kh	1161 kh	1178 kh	1178 kh	1048 kh	951 kh	446 kh
Temperature Range	-25°C to +70°C	0°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C
Derating +60°C to +70°C	2.5W/°C	1.5W/°C	2.5W/°C	0W/°C	3.0W/°C	3.0W/°C	3.0W/°C	12.0W/°C
Dimensions WxHxD	32x124x102mm	49x124x102mm	32x124x102mm	32x124x102mm	32x124x102mm	32x124x102mm	32x124x102mm	65x124x127mm
Connection Terminals	screw terminals	screw terminals	screw terminals	spring terminals	screw terminals	spring terminals	screw terminals	spring terminals
Weight	435g	470g	425g	425g	425g	450g	425g	890g

\*) 14.4-35Vdc with restrictions, see datasheet or main catalogue \*\*) 360-960Vdc with restrictions, see datasheet or main catalogue

## DIMENSION

DC/DC-Converter  
DC-UPS, Buffer Modules  
Diode- and Redundancy Modules  
Mounting Accessories

UB10, UF20  
CD5, YR, ZM

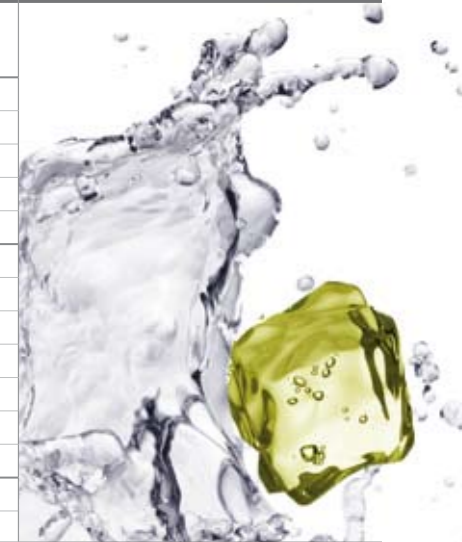


## DC-UPS and Buffer Modules

Battery-buffered DC-UPS's or buffer modules with electrolytic capacitors bridge voltage interruptions on 24V-buses or supply power for a controlled shut-down process of systems after a power outage. Various DC-UPS controllers are available which are optimised for use with different battery sizes. Additionally, a DC-UPS with an integrated 12V output and a DC-UPS with an integrated battery are also available.

- 1-Battery-Concept: The DC-UPS requires only one 12V-battery to buffer 24V loads. No matched batteries needed.
- Buffer modules store the energy in electrolytic capacitors. No service needed for the entire life span.
- Stabilized output voltage in buffer mode.
- No dips of the DC voltage during transition from normal to buffer mode.
- Superior battery management for longest battery service life.

Order Number	Description	Dimensions WxHxD (mm)
UB10.241	24V, 10A DC-UPS for external 12V-batteries between 3.9 and 40Ah	49x124x117mm
UB10.242	24V, 10A DC-UPS for external 12V-batteries between 17 and 130Ah	49x124x117mm
UB10.245	24V, 10A DC-UPS same as UB10.241 but with additional 12V 5A output	49x124x117mm
UBC10.241	24V, 10A DC-UPS with integrated 12V, 5Ah Battery	123x124x119mm
UBC10.241-N1	24V, 10A DC-UPS same as UBC10.241 but battery not included	123x124x119mm
UZK12.071	12V, 7Ah Battery module for UB10	155x124x112mm
UZK12.261	12V, 26Ah Battery module for UB10	214x158x179mm
UZO12.07	same as UZK12.071 but battery not included	155x124x112mm
UZO12.26	same as UZK12.261 but battery not included	214x158x179mm
UZB12.051	12V, 5Ah Battery replacement for UBC10.241	90x106x70mm
UZB12.071	12V, 7Ah Battery replacement for UZK12.071	151x98x65mm
UZB12.261	12V, 7Ah Battery replacement for UZK12.261	175x125x166mm
UF20.241	24V, 20A Capacitor buffer module, typ. 310ms at 20A or 3s at 1A	64x124x102mm
UF20.481	48V, 20A Capacitor buffer module, typ. 150ms at 20A or 1.3s at 1A	64x124x102mm



Order Number	UB10.241	UB10.242	UB10.245	UBC10.241	UF20.241	UF20.481
Nominal Voltage	DC 24V	DC 24V	DC 24V	DC 24V	DC 24V	DC 48V
Storage Element	external battery	external battery	external battery	internal 12V, 5Ah battery	electrolytic capacitors	electrolytic capacitors
Allowed Battery Size	≥3.9Ah, ≤40Ah	≥17Ah, ≤130Ah	≥3.9Ah, ≤40Ah	5Ah	-	-
Output 1 (in Buffer Mode)	22.5V 10A	22.5V 10A	22.5V 10A	22.5V 10A	22.5V 20A*)	45V 20A*)
Output 2 (in Buffer Mode)	-	-	12V 5A	-	-	-
Output Power	240W	240W	240W	240W	480W	960W
Charging Time	5h (at 7Ah)	34h (at 100Ah)	5h (at 7Ah)	3h	18 seconds	21 seconds
Charging Current (12V-Battery)	1.5A	3.0A	1.5A	1.5A	-	-
Hold-up Time, typ.	at 10A and 7Ah: 6min. 45s	at 0.5A and 100Ah: 82h 30min.	at 240W and 7Ah: 6min. 30s	at 10A: 6min. 15s	310ms at 20A	150ms at 20A
Temperature Range	-25°C to +70°C	-25°C to +50°C	-25°C to +70°C	0°C to +40°C	-25°C to +70°C	-25°C to +70°C
Derating	>60°C: 0.25A/°C	-	>50°C: 0.25A/°C	-	-	-
Dimensions WxHxD	49x124x117mm	49x124x117mm	49x124x117mm	123x124x119mm	64x124x102mm	64x124x102mm
Connection Terminals	spring terminals	spring terminals	spring terminals	spring terminals	spring terminals	spring terminals
Weight	530g	545g	650g	2850g	740g	740g

\*) Or selectable to 1V (UF20.241) or 2V (UF20.481) lower as the input voltage

**SILVERLINE**

The classic power supply family for general applications which has been proven over a million times. The wide variety of products include standard, redundant and AS-Interface® power supplies as well as plenty of accessory products. The SilverLine legacy products are being augmented by the DIMENSION series. The SilverLine units are still great products, but the DIMENSION family should be considered for new applications because of all their design features. The SilverLine series will be available for years to come.

**SL-Series**

Power supplies for general applications

- 1- or 3-phase input
- Output power from 60 - 960W
- Connection with screw terminals
- Rugged metal housing

**SLR-Series**

Power supplies for redundant systems

- Integrated decoupling diode
- Designed for use in parallel
- DC-OK Relay contact
- Plug-connectors for an easy replacement

**SLA-Series**

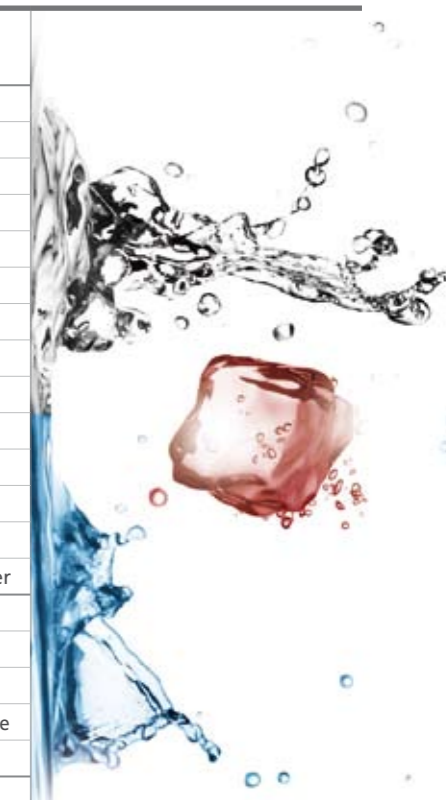


AS-Interface® power supplies

- 1- or 3-phase input
- DC/DC-Converter
- Integrated data decoupling
- Supports IR-addressing-mode
- SLAD4 with ground-fault monitor



Order Number	Output	Input	Dimensions WxHxD (mm)	Special Features
SL2.100	24V 2.5A	AC 100-120 / 200-240V	49x124x102mm	
SL5.100	24V 5.0A	AC 100-120 / 200-240V	64x124x102mm	
SL5.300	24V 5.0A	3AC 400-500V	73x124x117mm	
SL10.100	24V 10.0A	AC 100-120 / 210-240V	120x124x102mm	
SL10.300	24V 10.0A	3AC 400-500V	89x124x117mm	
SL10.309	24V 10.0A	3AC 400-500V	89x124x117mm	conformal coated
SL20.310	24V 20.0A	3AC 400-500V	150x124x121mm	
SL40.300	24V 40.0A	3AC 400-500V	275x124x117mm	
SL40.301	24V 40.0A	3AC 400-500V	275x124x117mm	with signal contacts
SLA3.100	30.6V 2.8A	AC 100-120 / 220-240V	49x124x102mm	AS-Interface® power supply
SLA4.100	30.6V 4.0A	AC 100-120 / 220-240V	73x124x102mm	AS-Interface® power supply
SLA8.100	30.6V 8.0A	AC 100-120 / 220-240V	91x124x102mm	AS-Interface® power supply
SLA8.300	30.6V 8.0A	3AC 400-500V	129x124x117mm	AS-Interface® power supply
SLAD4.100	30.6V 4.0A	DC 24V	40x124x102mm	AS-Interface® DC/DC-converter
SLR2.100	24V 2.5A	AC 100-120 / 200-240V	49x124x102mm	for redundant applications
SLR5.100	24V 5.0A	AC 100-120 / 200-240V	64x124x102mm	for redundant applications
SLR10.100	24V 10.0A	AC 100-120 / 210-240V	120x124x102mm	for redundant applications
SLR01	24V 40A	DC 24V, 1x40A	48x124x117mm	single-input redundancy module
SLR02	24V 30A	DC 24V, 2x30A	48x124x102mm	dual-input redundancy module
SLZ02	Wall mounting bracket		30x42x14mm	for SilverLine units



Order Number	SL2.100	SLR2.100	SL5.100	SLR5.100	SL5.300	SL10.100	SLR10.100	SL10.300 SL10.309*)	SL20.310	SL40.300 SL40.301*)	SLA3.100	SLA4.100	SLA8.100	SLA8.300	SLAD4.100 DC/DC-Converter
Output	24V 2.5A	24V 2.5A	24V 5A	24V 5A	24V 5A	24V 10A	24V 10A	24V 10A	24V 20A	24V 40A	30.6V 2.8A	30.6V 4A	30.6V 8A	30.6V 8A	30.6V 4A
Adjustment Range	24V	24V	24V	24V	24-28V	24-28V	24V	24-28V	24-28V	24-28V	30.6V	30.6V	30.6V	30.6V	30.6V
Output Current	2.5A	2.5A	5.0A	5.0A	5-4.3A	10-8.6A	10.0A	10-8.6A	20-17.1A	40-34.3A	2.8A	4.0A	8.0A	8.0A	4.0A
Factory Setting	24.5V	24.0V	24.5V	24.0V	24.5V	24.5V	24.0V	24.5V	24.5V	24.0V	30.6V	30.6V	30.6V	30.6V	30.6V
Output Power	60W	60W	120W	120W	120W	240W	240W	240W	480W	960W	85W	120W	240W	240W	120W
Power Reserves	-	-	20%	20%	20%	20%	20%	20%	25%	12.5%	-	-	-	-	-
Ripple & Noise Voltage	<25mVpp	<30mVpp	<50mVpp	<30mVpp	<25mVpp	<30mVpp	<30mVpp	<30mVpp	<30mVpp	<50mVpp	<50mVpp	<50mVpp	<50mVpp	<50mVpp	<50mVpp
AC Input Voltage	AC 100-120V/ 200-240V -15% / +10% manual-select	AC 100-120V/ 200-240V -15% / +10% manual-select	AC 100-120V/ 200-240V -15% / +10% manual-select	AC 100-120V/ 200-240V -15% / +10% manual-select	3AC 400-500V ±15% wide-range	AC 100-120V/ 210-240V -15% / +10% manual-select	AC 100-120V/ 210-240V -15% / +10% manual-select	3AC 400-500V ±15% Wide range	3AC 400-500V ±15% wide-range	3AC 400-500V ±15% wide-range	AC 100-120V/ 220-240V -15% / +10% manual-select	AC 100-120V/ 220-240V -15% / +10% manual-select	AC 100-120V/ 220-240V -15% / +10% manual-select	3AC 400-480V ±15% wide-range	-
Input Harmonics Filter	-	-	-	-	PFC inductor	-	-	PFC inductor	PFC inductor	PFC inductor	-	-	-	PFC inductor	-
EN 61000-3-2 (PFC-Norm)	fulfilled	fulfilled	fulfilled	fulfilled	fulfilled	-	-	fulfilled	fulfilled	fulfilled	fulfilled	fulfilled	-	fulfilled	not applicable
Power Factor, typ.	0.51	0.51	0.49	0.49	0.52	0.50	0.50	0.50	0.55	0.55	0.53	0.53	0.48	0.50	not applicable
Input Inrush Current Limiter	NTC	NTC	NTC	NTC	NTC	NTC	NTC	active	active	active	NTC	NTC	active	NTC	active
DC Input Voltage**)	DC 200-300V -20%/+25%	DC 200-300V -20%/+25%	DC 250-300V -15%/+25%	DC 250-300V -15%/+25%	DC 600V -25%/+35%	DC 280-300V -15%/+25%	DC 280-300V -15%/+25%	DC 600V -25%/+35%	DC 600V -25%/+35%	DC 600V -25%/+35%	DC 270-300V -15%/+25%	DC 280-300V -15%/+25%	DC 270-300V -15%/+25%	DC 600V -25%/+35%	DC 24V -25%/+35%
Efficiency, typ.	89.1%	87.2%	89.3%	88.3%	88.8%	90.0%	88.5%	91.9%	92.2%	92.6%	90.5%	90.0%	92.0%	91.5%	90.5%
Power Losses, typ.	7.3W	8.8W	14.4W	15.9W	15.1W	27.2W	31.2W	24.2W	41.3W	77.4W	9.1W	13.5W	21.2W	22.5W	12.7W
MTBF (40°C, SN 29500)	2575 kh	2301 kh	2109 kh	1785 kh	1798 kh	2024 kh	1843 kh	1362 kh	1120 kh	888 kh	1942 kh	1222 kh	869 kh	1220 kh	1247 kh
Temperature Range	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	0°C to +70°C	0°C to +70°C	0°C to +70°C	0°C to +70°C	0°C to +70°C	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-25°C to +70°C
Derating +60°C to +70°C	1.5W/°C	1.5W/°C	3.0W/°C	3.0W/°C	3.0W/°C	6.0W/°C	6.0W/°C	6.0W/°C	12.0W/°C	24.0W/°C	2.0W/°C	3.0W/°C	6.0W/°C	6.0W/°C	3.0W/°C
Dimensions WxHxD	49x124x102mm	49x124x102mm	64x124x102mm	64x124x102mm	73x124x117mm	120x124x102mm	120x124x102mm	89x124x117mm	150x124x121mm	275x124x117mm	49x124x102mm	73x124x102mm	91x124x102mm	129x124x117mm	40x124x102mm
Connection Terminals	screw terminals	plug connector	screw terminals	plug connector	screw terminals	screw terminals	plug connector	screw terminals	screw terminals	screw terminals	screw terminals	screw terminals	screw terminals	screw terminals	screw terminals
Weight	460g	470g	620g	620g	730g	980g	980g	980g	1800g	3300g	500g	650g	890g	1160g	500g
DC-OK-Signal	-	yes	-	yes	-	-	yes	-	-	-	-	-	-	-	-

\*) SL10.309 with conformal coated PC-board, SL40.301 with signal port. \*\*) May have restrictions, see datasheet or catalogue.

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