Single-phase, primary switched mode power supply
PEL 230

General Data

- Input voltage range 85 - 264 Vac
- Output rated voltage 5 - 24 Vdc
- Output rated current 1.3 - 6.5 A
- Ambient temperature -25 °C to +55 °C
- Efficiency up to 88 %
- Protection index IP 20

Advantages

- Stabilised and adjustable output voltage
- DC OK signalling via LEDs
- Parallel connection option
- Service-friendly spring-loaded connector system
- Panel installation on mounting rails

Applications

Primary switched mode power supply is concentrated on the core task of voltage and current supply. Flat step profile optimised for installation in control panels in the building automation.

Standards

Primary switched mode power supply
to UL 60950, UL 508

Safety:
EN 61558-2-16, EN 60950-1

EMC:
EN 61204-3

Approvals

UL/CSA 60950 recognised (E213214), UL508 listed (E219022),
Germanischer Lloyd

Single-phase, primary switched mode power supply
PEL 230

Electrical data

Typ	PEL 230/5-5,5	PEL 230/12-2	PEL 230/12-4	PEL 230/12-6,5
Input				
Input rated voltage	100 - 240 Vac	100 - 240 Vac	100 - 240 Vac	100 - 240 Vac
Input voltage range	85 - 264 Vac (120 - 373 Vdc)	85 - 264 Vac (120 - 373 Vdc)	85 - 264 Vac (120 - 373 Vdc)	85 - 264 Vac (120 - 373 Vdc)
Input rated current (rated load)	0.9 / 0.5 A (110 / 230 Vac)	0.7 / 0.4 A (110 / 230 Vac)	0.9 / 0.5 A (110 / 230 Vac)	1.5 / 0.5 A (110 / 230 Vac)
Rated frequency range	44 - 66 Hz / 0 Hz	44 - 66 Hz / 0 Hz	44 - 66 Hz / 0 Hz	44 - 66 Hz / 0 Hz
Starting current limiter	<30 A, NTC	<30 A, NTC	<30 A, NTC	<30 A, NTC
Input fuse internal	2 A (slow-blow)	2 A (slow-blow)	2 A (slow-blow)	4 A
Recommended back-up fuse (circuit breaker)	6 A, 10 A, 16 A, characteristics B, C	6 A, 10 A, 16 A, characteristics B, C	6 A, 10 A, 16 A, characteristics B, C	6 A, 10 A, 16 A, characteristics B, C
Mains buffering (rated load)	10 / 80 ms	10 / 80 ms	10 / 80 ms	15 / 100 ms
Transient surge voltage protection	Varistor	Varistor	Varistor	Varistor
Output				
Output rated voltage	5 Vdc	12 Vdc	12 Vdc	12 Vdc
Output voltage range	4.5 - 8.5 Vdc	10.5 - 15.5 Vdc	10.5 - 15.5 Vdc	10.5 - 15.5 Vdc
Output rated current	5.50 A	2.00 A	4.00 A	6.50 A
Resistance to reverse feed max.	10 Vdc	25 Vdc	25 Vdc	25 Vdc
Overload behaviour	Constant current	Constant current	Constant current	Constant current
Ripple factor	typ. 100 mVss	typ. 100 mVss	typ. 100 mVss	typ. 100 mVss
Parallel connection	Yes	Yes	Yes	Yes
Serial operation	Yes	Yes	Yes	Yes
Efficiency	typ. 85 %	typ. 80 %	typ. 85 %	typ. 87 %
Signaling				
Power Good (DC OK)	LED green	LED green	LED green	LED green
Approvals				
Approvals	-	cURus, cULus, GL	cURus, cULus, GL	cURus, cULus, GL
Environment				
Ambient temperature	-25 °C to +55 °C	-25 °C to +55 °C	-25 °C to +55 °C	-25 °C to +55 °C
Storage temperature	-25 °C to +85 °C	-25 °C to +85 °C	-25 °C to +85 °C	-25 °C to +85 °C
Derating	-3 %/K > +45 °C	-3 %/K > +45 °C	-3 %/K > +45 °C	-3 %/K > +45 °C
Current capacity by any mounting position	max. 3.5 A	max. 1.4 A	max. 2.4 A	max. 3.9 A
Safety and protection				
Protection index	IP 20	IP 20	IP 20	IP 20
Safety class	II, (in closed cabinet)	II, (in closed cabinet)	II, (in closed cabinet)	II, (in closed cabinet)
Order numbers				
Order Number	**PEL 230/5-5,5**	**PEL 230/12-2**	**PEL 230/12-4**	**PEL 230/12-6,5**

Single-phase, primary switched mode power supply
PEL 230

Electrical data

Typ	PEL 230/18-1,1	PEL 230/18-2,5	PEL 230/24-1,3	PEL 230/24-2,5
Input				
Input rated voltage	100 - 240 Vac	100 - 240 Vac	100 - 240 Vac	100 - 240 Vac
Input voltage range	85 - 264 Vac (120 - 373 Vdc)	85 - 264 Vac (120 - 373 Vdc)	85 - 264 Vac (120 - 373 Vdc)	85 - 264 Vac (120 - 373 Vdc)
Input rated current (rated load)	0.45 / 0.23 A (110 / 230 Vac)	0.72 / 0.42 A (110 / 230 Vac)	0.7 / 0.4 A (110 / 230 Vac)	1.4 / 0.6 A (110 / 230 Vac)
Rated frequency range	44 - 66 Hz / 0 Hz	44 - 66 Hz / 0 Hz	44 - 66 Hz / 0 Hz	44 - 66 Hz / 0 Hz
Starting current limiter	<30 A, NTC	<30 A, NTC	<30 A, NTC	<30 A, NTC
Input fuse internal	2 A (slow-blow)	4 A (slow-blow)	2 A (slow-blow)	2 A (slow-blow)
Recommended back-up fuse (circuit breaker)	6 A, 10 A, 16 A, characteristics B, C	6 A, 10 A, 16 A, characteristics B, C	6 A, 10 A, 16 A, characteristics B, C	6 A, 10 A, 16 A, characteristics B, C
Mains buffering (rated load)	10 / 80 ms	25 / 120 ms	10 / 80 ms	10 / 80 ms
Transient surge voltage protection	Varistor	Varistor	Varistor	Varistor
Output				
Output rated voltage	18 Vdc	18 Vdc	24 Vdc	24 Vdc
Output voltage range	15.5 - 19.0 Vdc	15 - 28 Vdc	22.8 - 26.4 Vdc	22.8 - 26.4 Vdc
Output rated current	1.10 A	2.50 A	1.30 A	2.50 A
Resistance to reverse feed max.	25 Vdc	35 Vdc	30 Vdc	30 Vdc
Overload behaviour	Constant current	Constant current	Constant current	Constant current
Ripple factor	typ. 100 mVss	typ. 50 mVss	typ. 100 mVss	typ. 100 mVss
Parallel connection	Yes	Yes	Yes	Yes
Serial operation	Yes	Yes	Yes	Yes
Efficiency	typ. 80 %	typ. 83 %	typ. 82 %	typ. 88 %
Signaling				
Power Good (DC OK)	LED green	LED green	LED green	LED green
Approvals				
Approvals	cURus, cULus, GL	cURus, cULus	cURus, cULus, GL	cURus, cULus, GL
Environment				
Ambient temperature	-25 °C to +55 °C	-25 °C to +55 °C	-25 °C to +55 °C	-25 °C to +55 °C
Storage temperature	-25 °C to +85 °C	-25 °C to +85 °C	-25 °C to +85 °C	-25 °C to +85 °C
Derating	-3 %/K > +45 °C	-3 %/K > +45 °C	-3 %/K > +45 °C	-3 %/K > +45 °C
Current capacity by any mounting position	max. 0.8 A	max. 1.6 A	max. 0.9 A	max. 1.6 A
Safety and protection				
Protection index	IP 20	IP 20	IP 20	IP 20
Safety class	II, (in closed cabinet)	II, (in closed cabinet)	II, (in closed cabinet)	II, (in closed cabinet)
Order numbers				
Order Number	**PEL 230/18-1,1**	**PEL 230/18-2,5**	**PEL 230/24-1,3**	**PEL 230/24-2,5**

Single-phase, primary switched mode power supply
PEL 230

Electrical data

Typ	PEL 230/24-4
Input	
Input rated voltage	100 - 240 Vac
Input voltage range	85 - 264 Vac (120 - 373 Vdc)
Input rated current (rated load)	1.6 / 0.9 A (110 / 230 Vac)
Rated frequency range	44 - 66 Hz / 0 Hz
Starting current limiter	<30 A, NTC
Input fuse internal	4 A
Recommended back-up fuse (circuit breaker)	6 A, 10 A, 16 A, characteristics B, C
Mains buffering (rated load)	15 / 100 ms
Transient surge voltage protection	Varistor
Output	
Output rated voltage	24 Vdc
Output voltage range	22,8 - 26,4 Vdc
Output rated current	4.00 A
Resistance to reverse feed max.	30 Vdc
Overload behaviour	Constant current
Ripple factor	typ. 100 mVss
Parallel connection	Yes
Serial operation	Yes
Efficiency	typ. 88 %
Signaling	
Power Good (DC OK)	LED green
Approvals	
Approvals	cURus, cULus, GL
Environment	
Ambient temperature	-25 °C to +55 °C
Storage temperature	-25 °C to +85 °C
Derating	-3 %/K > +45 °C
Current capacity by any mounting position	max. 2.4 A
Safety and protection	
Protection index	IP 20
Safety class	II, (in closed cabinet)
Order numbers	
Order Number	**PEL 230/24-4**

Single-phase, primary switched mode power supply
PEL 230

Mechanical data

Typ	Terminals input, (spring clamp terminal)	Terminals output, (spring clamp terminal)	Mounting position	Fixing method	Weight	Dimension picture (in mm)	A	B	C	D
PEL 230/5-5,5	max. 2.5 mm²	max. 2.5 mm²	vertical	DIN rail system TS35	0.24 kg	1	72	89	59	54
PEL 230/12-2	max. 2.5 mm²	max. 2.5 mm²	vertical	DIN rail system TS35	0.17 kg	1	54	89	59	54
PEL 230/12-4	max. 2.5 mm²	max. 2.5 mm²	vertical	DIN rail system TS35	0.24 kg	1	72	89	59	54
PEL 230/12-6,5	max. 2.5 mm²	max. 2.5 mm²	vertical	DIN rail system TS35	0.30 kg	1	90	89	59	54
PEL 230/18-1,1	max. 2.5 mm²	max. 2.5 mm²	vertical	DIN rail system TS35	0.17 kg	1	54	89	59	54
PEL 230/18-2,5	max. 2.5 mm²	max. 2.5 mm²	vertical	DIN rail system TS35	0.24 kg	1	72	89	59	54
PEL 230/24-1,3	max. 2.5 mm²	max. 2.5 mm²	vertical	DIN rail system TS35	0.17 kg	1	54	89	59	54
PEL 230/24-2,5	max. 2.5 mm²	max. 2.5 mm²	vertical	DIN rail system TS35	0.24 kg	1	72	89	59	54
PEL 230/24-4	max. 2.5 mm²	max. 2.5 mm²	vertical	DIN rail system TS35	0.30 kg	1	90	89	59	54

Dimension pictures

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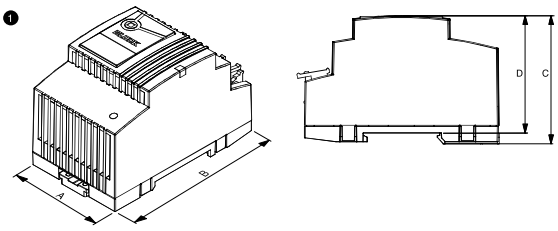
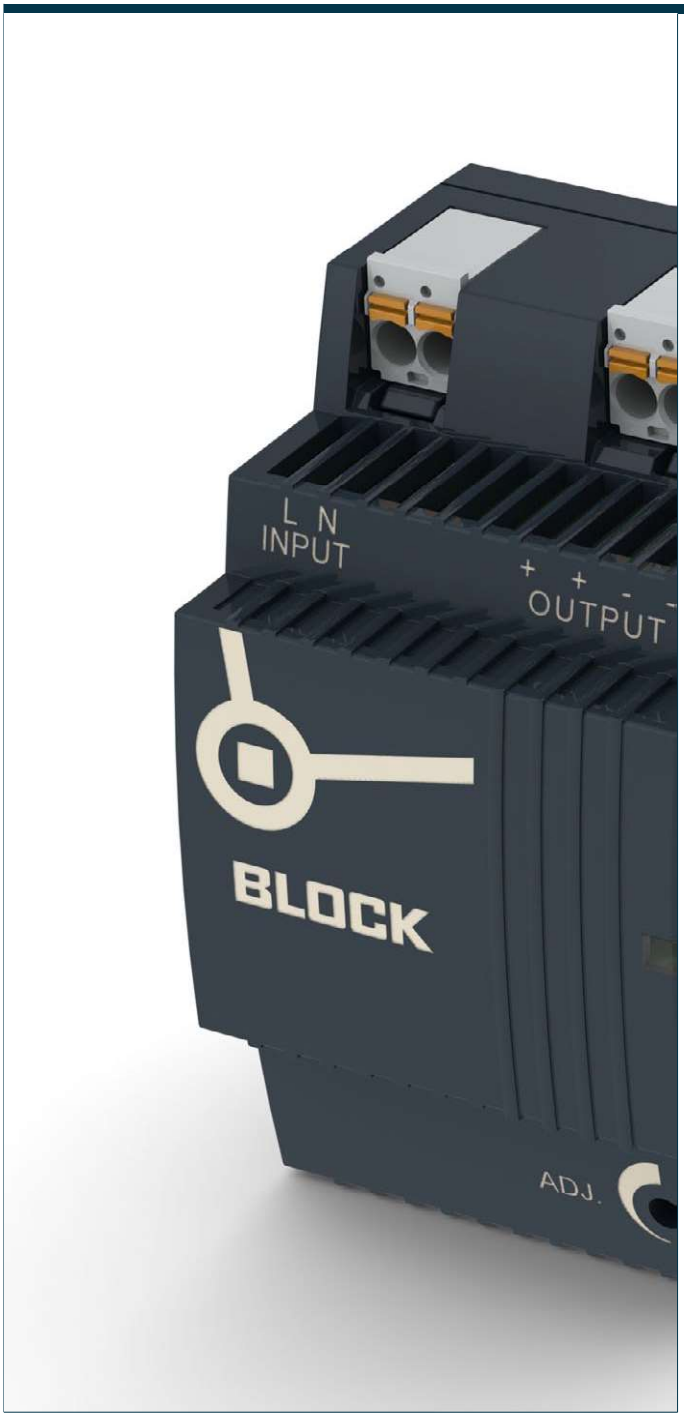


Single-phase, primary switched mode power supply
PEL Neo



General Data

- Input voltage range 85 - 264 Vac
- Output rated voltage 24 Vdc ± 2 %
- Output rated current 1.3 - 4 A
- Ambient temperature -25 °C to +55 °C
- Efficiency up to 88 %
- Protection index IP 20

Advantages

- Stabilised and adjustable output voltage
- DC OK signalling via LEDs
- Parallel connection option
- Push-in terminals
- Panel installation on mounting rails

Applications

Primary switched mode power supply is concentrated on the core task of voltage and current supply. Flat step profile optimised for installation in control panels in the building automation.

Standards

Primary switched mode power supply
to UL 60950, UL 508

Safety:
EN 61558-2-16, EN 60950-1

EMC:
EN 61204-3

Approvals

UL/CSA 60950 recognised (E213214), UL508 listed (E219022),
Germanischer Lloyd

Single-phase, primary switched mode power supply
PEL Neo

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Electrical data

Typ	PEL-0124-013-0	PEL-0124-025-0	PEL-0124-040-0
Input			
Input rated voltage	100 - 240 Vac	100 - 240 Vac	100 - 240 Vac
Input voltage range	85 - 264 Vac (120 - 373 Vdc)	85 - 264 Vac (120 - 373 Vdc)	85 - 264 Vac (120 - 373 Vdc)
Input rated current (rated load)	0.7 / 0.4 A (110 / 230 Vac)	1.4 / 0.6 A (110 / 230 Vac)	1.6 / 0.9 A (110 / 230 Vac)
Rated frequency range	44 - 66 Hz / 0 Hz	44 - 66 Hz / 0 Hz	44 - 66 Hz / 0 Hz
Starting current limiter	<30 A, NTC	<30 A, NTC	<30 A, NTC
Input fuse internal	2 A (slow-blow)	2 A (slow-blow)	4 A
Recommended back-up fuse (circuit breaker)	6 A, 10 A, 16 A, characteristics B, C	6 A, 10 A, 16 A, characteristics B, C	6 A, 10 A, 16 A, characteristics B, C
Mains buffering (rated load)	10 / 80 ms	10 / 80 ms	15 / 100 ms
Transient surge voltage protection	Varistor	Varistor	Varistor
Output			
Output rated voltage	24 Vdc	24 Vdc	24 Vdc
Output voltage range	22.8 - 26.4 Vdc	22.8 - 26.4 Vdc	22.8 - 26.4 Vdc
Output rated current	1.30 A	2.50 A	4.00 A
Resistance to reverse feed max.	30 Vdc	30 Vdc	30 Vdc
Overload behaviour	Constant current	Constant current	Constant current
Ripple factor	typ. 100 mVss	typ. 100 mVss	typ. 100 mVss
Parallel connection	Yes	Yes	Yes
Serial operation	Yes	Yes	Yes
Efficiency	typ. 82 %	typ. 88 %	typ. 88 %
Signaling			
Power Good (DC OK)	LED green	LED green	LED green
Approvals			
Approvals	cURus, cULus, GL	cURus, cULus, GL	cURus, cULus, GL
Environment			
Ambient temperature	-25 °C to +55 °C	-25 °C to +55 °C	-25 °C to +55 °C
Storage temperature	-25 °C to +85 °C	-25 °C to +85 °C	-25 °C to +85 °C
Derating	-3 %/K > +45 °C	-3 %/K > +45 °C	-3 %/K > +45 °C
Current capacity by any mounting position	max. 0.9 A	max. 1.6 A	max. 2.4 A
Safety and protection			
Protection index	IP 20	IP 20	IP 20
Safety class	II, (in closed cabinet)	II, (in closed cabinet)	II, (in closed cabinet)
Order numbers			
Order Number	**PEL-0124-013-0**	**PEL-0124-025-0**	**PEL-0124-040-0**

Single-phase, primary switched mode power supply
PEL Neo

Mechanical data

Typ	Terminals input (direct plug-in technology Push-in, pluggable)	Terminals output (direct plug-in technology Push-in, pluggable)	Fixing method	Mounting position	Weight	Dimension picture (in mm)	A	B	C	D
PEL-0124-013-0	max. 2,5 mm²	max. 2,5 mm²	DIN rail system TS35	vertical	0.17 kg	1	54	89	59	54
PEL-0124-025-0	max. 2,5 mm²	max. 2,5 mm²	DIN rail system TS35	vertical	0.24 kg	1	72	89	59	54
PEL-0124-040-0	max. 2,5 mm²	max. 2,5 mm²	DIN rail system TS35	vertical	0.30 kg	1	90	89	59	54

Dimension pictures

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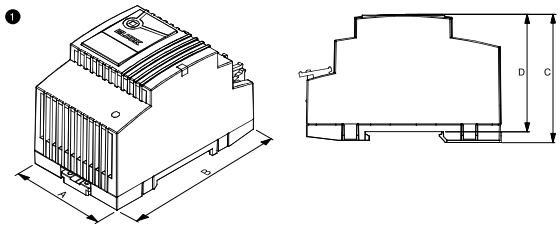

Single-phase, primary switched mode power supply
PM 1AC

General Data

- Input voltage range 85 - 264 Vac
- Nominal output voltage: DC 12 - 48 V
- Nominal output current: 1 - 20 A
- Ambient temperature -25 °C to +70 °C
- Conform to domestic appliances EN 60335-1
- Protection index IP 20
- Plastic housing

Advantages

- Stabilised and adjustable output voltage
- Low stand-by consumption <1 W
- Constant current limiting without overload shutdown
- DC OK signalling
- Parallel operation option
- Push-in terminals
- Panel installation on mounting rails
- In compliance with EN 60335-1

Applications

Efficient, primary switched mode power supply in slim plastic housing. A powerful and flexible option that's still light and compact. Our real all-rounders, these power supply units are suitable for a highly diverse range of applications in solar, measurement and control technology as well as industrial and building automation. The devices cover the lower and average power requirements from 25 W to 100 W. Versions with 12 V, 24 V, and 48 V are available, enabling a whole range of applications. A version with 3.8 A rated current is available for establishing NEC Class 2 circuits. All power supplies also comply with the EN 60335-1 standard for domestic appliances. The output voltage can be easily set using the rotary potentiometer on the front of the housing. The DIN rail fastening method and push-in connection terminals enable fast and secure mounting.

For applications in the medical field, power supplies are available with approval according to UL 60601-1.

Standards

Primary switched mode power supply
to UL 60950, UL 508

Safety:
EN 61558-2-16, EN 60950-1, EN 60335-1

EMC:
EN 61204-3

Approvals

UL/CSA 60950 recognised, UL508 listed, Germanischer Lloyd; Medical Netzteil: UL 60601-1 (3rd ed. 2MOPP)

Single-phase, primary switched mode power supply
PM 1AC

Electrical data

Typ	PM-0112-020-0	PM-0112-040-0	PM-0112-070-0	PM-0124-010-0
Special features				
Characteristics	-	-	-	-
Input				
Input rated voltage	100 - 240 Vac	100 - 240 Vac	100 - 240 Vac	100 - 240 Vac
Input voltage range	85 - 264 Vac (120 - 373 Vdc)	85 - 264 Vac (120 - 373 Vdc)	85 - 264 Vac (120 - 373 Vdc)	85 - 264 Vac (120 - 373 Vdc)
Input voltage derating	-2.5 %/Vac < 95 Vac	-2.5 %/Vac < 95 Vac	-2.5 %/Vac < 95 Vac	-2.5 %/Vac < 95 Vac
Rated frequency range	44 Hz - 66 Hz / 0 Hz	44 Hz - 66 Hz / 0 Hz	44 Hz - 66 Hz / 0 Hz	44 Hz - 66 Hz / 0 Hz
Input rated current (rated load)	0.44 A (100 Vac) / 0.22 A (240 Vac)	0.83 A (100 Vac) / 0.41 A (240 Vac)	1.87 A (100 Vac) / 0.94 A (240 Vac)	0.43 A (100 Vac) / 0.2 A (240 Vac)
Starting current limiter	< 30 A, NTC	< 30 A, NTC	< 30 A, NTC	< 30 A, NTC
Switch-on time	1.5 s (100 Vac) / 0.4 s (230 Vac)	1.5 s (100 Vac) / 0.7 s (230 Vac)	0.5 s (100 Vac) / 0.3 s (230 Vac)	2.3 s (100 Vac) / 0.74 s (230 Vac)
Power factor	0.48	0.48	0.55	0.48
Input fuse internal	2 A	4 A	4 A	2 A
Recommended back-up fuse (circuit breaker)	6 A, 10 A, 16 A, characteristic B, C	6 A, 10 A, 16 A, characteristic B, C	6 A, 10 A, 16 A, characteristic B, C	6 A, 10 A, 16 A, characteristic B, C
Mains buffering (rated load)	15 ms (100 Vac) / 120 ms (230 Vac)	15 ms (100 Vac) / 120 ms (230 Vac)	15 ms (100 Vac) / 80 ms (230 Vac)	20 ms (100 Vac) / 120 ms (230 Vac)
Transient surge voltage protection	Varistor	Varistor	Varistor	Varistor
Output				
Output rated voltage	12 Vdc	12 Vdc	12 Vdc	24 Vdc
Output voltage range	11.5 – 14.5 Vdc	11.5 – 14.5 Vdc	11,5 – 14,5 Vdc	23 – 28,5 Vdc
Output rated current	2 A	4 A	7 A	1 A
Output limited current	2.2 ... 2.4 A (constant current)	4.4 ... 4.8 A (constant current)	7.7 ... 8 A (constant current)	1.25 ... 1.4 A (constant current)
Class 2 output (UL Limited Power Source, LPS)	✔	✔	-	✔
Parallel connection	Yes	Yes	Yes	Yes
Serial operation	Yes	Yes	Yes	Yes
Power dissipation, no load/rated load	0.7 W / 5,3 W (230 Vac)	<1 W / 8 W (230 Vac)	<1 W / 16.2 W (230 Vac)	< 1 W / 4 W (230 Vac)
Max. power losses	5.7 W (100 Vac / 12 V / 2 A)	9.1 W (100 Vac / 12 V / 4 A)	19.8 W (100 Vac / 12 V / 7 A)	5 W (100 Vac / 24 V / 1 A)
Ripple factor	typ. 20 mVss	typ. 20 mVss	typ. 20 mVss	typ. 20 mVss
Resistance to reverse feed max.	25 Vdc	25 Vdc	25 Vdc	35 Vdc
Over-voltage-protection	max. 35 Vdc	max. 35 Vdc	max. 32 Vdc	max. 39 Vdc
Efficiency	82 %	86 %	86 %	86 %
Signaling				
Status indicator	LED green Uout > typ. 10 Vdc LED lit permanently	LED green Uout > typ. 10 Vdc LED lit permanently	LED green Uout > typ. 10 Vdc LED lit permanently	LED green Uout > typ. 21.5 Vdc LED lit permanently
Signal output	Active high signal Uout > typ. 10 Vdc max. 40 mA@12 Vdc short circuit proof	Active high signal Uout > typ. 10 Vdc max. 40 mA@12 Vdc short circuit proof	Active high signal Uout > typ. 10 Vdc max. 40 mA@12 Vdc short circuit proof	Active high signal Uout > typ. 21.5 Vdc max. 20 mA@24 Vdc short circuit proof
Approvals				
Approvals	cURus, cULus, GL	cURus, cULus, GL	cURus, cULus, GL	cURus, cULus, GL
Environment				
Storage temperature	-25 °C to +85 °C	-25 °C to +85 °C	-25 °C to +85 °C	-25 °C to +85 °C
Ambient temperature	-25° C to +70° C	-25° C to +70° C	-25° C to +70° C	-25° C to +70° C
Derating	-3 %/K > +50 °C	-3 %/K > +50 °C	-3 %/K > +50 °C	-3 %/K > +50 °C
Mounting position	horizontal for standard rail DIN TS35	horizontal for standard rail DIN TS35	horizontal for standard rail DIN TS35	horizontal for standard rail DIN TS35
Type of cooling	Natural convection	Natural convection	Natural convection	Natural convection
Required minimum spacing (left/right)	0 mm	0 mm	0 mm	0 mm
Required minimum spacing (over/under)	50 mm	50 mm	50 mm	50 mm
Safety and protection				
Protection index	IP 20	IP 20	IP 20	IP 20
Safety class	II, without PE connection	II, without PE connection	II, without PE connection	II, without PE connection
Order numbers				
Order Number	**PM-0112-020-0**	**PM-0112-040-0**	**PM-0112-070-0**	**PM-0124-010-0**

Single-phase, primary switched mode power supply
PM 1AC

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Electrical data

Typ	PM-0124-020-0	PM-0124-020-4	PM-0124-038-0	PM-0124-040-0
Special features				
Characteristics	-	Suitable for the medical field	For establishing NEC Class 2 circuits	-
Input				
Input rated voltage	100 - 240 Vac	100 - 240 Vac	100 - 240 Vac	100 - 240 Vac
Input voltage range	85 - 264 Vac (120 - 373 Vdc)	85 - 264 Vac (120 - 373 Vdc)	85 - 264 Vac (120 - 373 Vdc)	85 - 264 Vac (120 - 373 Vdc)
Input voltage derating	-2.5 %/Vac < 95 Vac	-2.5 %/Vac < 95 Vac	-2.5 %/Vac < 95 Vac	-2.5 %/Vac < 95 Vac
Rated frequency range	44 Hz - 66 Hz / 0 Hz	44 Hz - 66 Hz / 0 Hz	44 Hz - 66 Hz / 0 Hz	44 Hz - 66 Hz / 0 Hz
Input rated current (rated load)	0.73 A (100 Vac) / 0.37 A (240 Vac)	0,82 A (100 Vac) / 0,48 A (230 Vac)	1.5 A (100 Vac, 91 W) / 0.6 A (240 Vac, 91 W)	1.52 A (100 Vac) / 0.66 A (240 Vac)
Starting current limiter	< 30 A, NTC	< 30 A, NTC	< 30 A, NTC	< 30 A, NTC
Switch-on time	0.5 s (100 Vac) / 0.27 s (230 Vac)	0,5 s (100 Vac) / 0,27 s (230 Vac)	<0.5 s (100 Vac) / <0.2 s (230 Vac)	0.24 s (100 Vac) / 0.14 s (230 Vac)
Power factor	0,47	0,47	0.5	0.5
Input fuse internal	4 A	4 AT	4 A	4 A
Recommended back-up fuse (circuit breaker)	6 A, 10 A, 16 A, characteristic B, C	6 A, 10 A, 16 A, characteristic B, C	6 A, 10 A, 16 A, characteristic B, C	6 A, 10 A, 16 A, characteristic B, C
Mains buffering (rated load)	20 ms (100 Vac) / 120 ms (230 Vac)	20 ms (100 Vac) / 120 ms (230 Vac)	>15 ms (100 Vac) / >80 ms (230 Vac)	15 ms (100 Vac) / 80 ms (230 Vac)
Transient surge voltage protection	Varistor	Varistor	Varistor	Varistor
Output				
Output rated voltage	24 Vdc	24 Vdc	24 Vdc	24 Vdc
Output voltage range	23 – 28.5 Vdc	23 - 28,5 Vdc	23 – 28.5 Vdc (> 24 Vdc constant capacity)	23 – 28.5 Vdc
Output rated current	2 A	2 A	3.8 A / NEC Class 2	4 A
Output limited current	2.2 ... 2.4 A (constant current)	2.2 ... 2.4 A (constant current)	3.8 ... 3.2 A (constant current, Class 2)	4.4 ... 4.7 A (constant current)
Class 2 output (UL Limited Power Source, LPS)	✔	-	✔	-
Parallel connection	Yes	Yes	Yes	Yes
Serial operation	Yes	Yes	Yes	Yes
Power dissipation, no load/rated load	< 1 W / 4 W (230 Vac)	< 1 W / 4 W (230 Vac)	2.8 W / 14 W (230 Vac)	< 1 W / 12 W (230 Vac)
Max. power losses	7 W (100 Vac / 24 V / 2 A)	7,0 W (100 Vac/ 24 V/ 2A)	<20 W (100 Vac / 91 W)	15 W (100 Vac / 24 V / 4 A)
Ripple factor	typ. 20 mVss	typ. 20mVss	typ. 20 mVss	typ. 20 mVss
Resistance to reverse feed max.	35 Vdc	35 Vdc	35 Vdc	35 Vdc
Over-voltage-protection	max. 37 Vdc	max. 37 Vdc	max. 40 Vdc	max. 40 Vdc
Efficiency	89 %	typ. 89 %	87 %	89 %
Signaling				
Status indicator	LED green Uout > typ. 21.5 Vdc LED lit permanently	LED green Uout > typ. 21.5 Vdc LED lit permanently	LED green Uout > typ. 21.5 Vdc LED lit permanently	LED green Uout > typ. 21.5 Vdc LED lit permanently
Signal output	Active high signal Uout > typ. 21.5 Vdc max. 20 mA@24 Vdc short circuit proof	Active high signal Uout > typ. 21.5 Vdc max. 20 mA@24 Vdc short circuit proof	Active high signal Uout > typ. 21.5 Vdc max. 20 mA@24 Vdc short circuit proof	Active high signal Uout > typ. 21.5 Vdc max. 20 mA@24 Vdc short circuit proof
Approvals				
Approvals	cURus, cULus, GL	cURus, cULus (UL 60601), GL	cURus, cULus, GL	cURus, cULus, GL
Environment				
Storage temperature	-25 °C to +85 °C	-25 °C to +85 °C	-25 °C to +85 °C	-25 °C to +85 °C
Ambient temperature	-25° C to +70° C	-25° C to +70° C	-25° C to +70° C	-25° C to +70° C
Derating	-3 %/K > +50 °C	-3 %/K > +50 °C	-3 %/K > +50 °C	-3 %/K > +50 °C
Mounting position	horizontal for standard rail DIN TS35	horizontal for standard rail DIN TS35	horizontal for standard rail DIN TS35	horizontal for standard rail DIN TS35
Type of cooling	Natural convection	Natural convection	Natural convection	Natural convection
Required minimum spacing (left/right)	0 mm	0 mm	0 mm	0 mm
Required minimum spacing (over/under)	50 mm	50 mm	50 mm	50 mm
Safety and protection				
Protection index	IP 20	IP 20	IP 20	IP 20
Safety class	II, without PE connection	II, without PE connection	II, without PE connection	II, without PE connection
Order numbers				
Order Number	**PM-0124-020-0**	**PM-0124-020-4**	**PM-0124-038-0**	**PM-0124-040-0**

Single-phase, primary switched mode power supply
PM 1AC

Electrical data

Typ	PM-0148-020-0
Special features	
Characteristics	-
Input	
Input rated voltage	100 - 240 Vac
Input voltage range	85 - 264 Vac (120 - 373 Vdc)
Input voltage derating	-2.5 %/Vac < 95 Vac
Rated frequency range	44 Hz - 66 Hz / 0 Hz
Input rated current (rated load)	1.79 A (100 Vac) / 0.9 A (240 Vac)
Starting current limiter	< 30 A, NTC
Switch-on time	0.5 s (100 Vac) / 0.3 s (230 Vac)
Power factor	0.5
Input fuse internal	4 A
Recommended back-up fuse (circuit breaker)	6 A, 10 A, 16 A, characteristic B, C
Mains buffering (rated load)	15 ms (100 Vac) / 80 ms (230 Vac)
Transient surge voltage protection	Varistor
Output	
Output rated voltage	48 Vdc
Output voltage range	40 – 56 Vdc
Output rated current	2 A
Output limited current	2.2 ... 2.4 A (constant current)
Class 2 output (UL Limited Power Source, LPS)	-
Parallel connection	Yes
Serial operation	Yes
Power dissipation, no load/rated load	< 1 W / 16.2 W (230 Vac)
Max. power losses	19.8 W (100 Vac / 48 V / 2 A)
Ripple factor	typ. 20 mVss
Resistance to reverse feed max.	63 Vdc
Over-voltage-protection	max. 60 Vdc
Efficiency	86 %
Signaling	
Status indicator	LED green Uout > typ. 39 Vdc LED lit permanently
Signal output	Active high signal Uout > typ. 39 Vdc max. 10 mA@48 Vdc short circuit proof
Approvals	
Approvals	cURus, cULus, GL
Environment	
Storage temperature	-25 °C to +85 °C
Ambient temperature	-25° C to +70° C
Derating	-3 %/K > +50 °C
Mounting position	horizontal for standard rail DIN TS35
Type of cooling	Natural convection
Required minimum spacing (left/right)	0 mm
Required minimum spacing (over/under)	50 mm
Safety and protection	
Protection index	IP 20
Safety class	II, without PE connection
Order numbers	
Order Number	**PM-0148-020-0**

Single-phase, primary switched mode power supply
PM 1AC

Mechanical data

Typ	Terminals input (direct plug-in technology Push-in)	Terminals output (direct plug-in technology Push-in)	Terminals signalling (direct plug-in technology Push-in)	Dimension (W x H x D)	Weight	Dimension picture (in mm)	A	B	C	D	E	F	G
PM-0112-020-0	max 2,5 mm²	max 2,5 mm²	max 2,5 mm²	22.5 x 90 x 90.5 mm	0.13 kg	1	90	45	3	22.5	3.5	90.5	98
PM-0112-040-0	max 2,5 mm²	max 2,5 mm²	max 2,5 mm²	45 x 90 x 90.5 mm	0.21 kg	1	90	45	3	45	3.5	90.5	98
PM-0112-070-0	max 2,5 mm²	max 2,5 mm²	max 2,5 mm²	52 x 90 x 103.5 mm	0.40 kg	1	90	45	3	52	3.5	103.5	111
PM-0124-010-0	max 2,5 mm²	max 2,5 mm²	max 2,5 mm²	22.5 x 90 x 90.5 mm	0.13 kg	1	90	45	3	22.5	3.5	90.5	98
PM-0124-020-0	max 2,5 mm²	max 2,5 mm²	max 2,5 mm²	45 x 90 x 90.5 mm	0.21 kg	1	90	45	3	45	3.5	90.5	98
PM-0124-020-4	max 2,5 mm²	max 2,5 mm²	max 2,5 mm²	45 x 90 x 90,5 mm	0.24 kg	1	90	45	3	45	3.5	90.5	98
PM-0124-038-0	max 2,5 mm²	max 2,5 mm²	max 2,5 mm²	52 x 90 x 103.5 mm	0.39 kg	1	90	45	3	52	3.5	103.5	111
PM-0124-040-0	max 2,5 mm²	max 2,5 mm²	max 2,5 mm²	52 x 90 x 103.5 mm	0.39 kg	1	90	45	3	52	3.5	103.5	111
PM-0148-020-0	max 2,5 mm²	max 2,5 mm²	max 2,5 mm²	52 x 90 x 103.5 mm	0.39 kg	1	90	45	3	52	3.5	103.5	111

Dimension pictures

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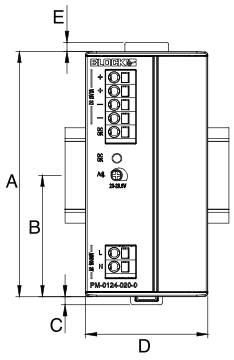

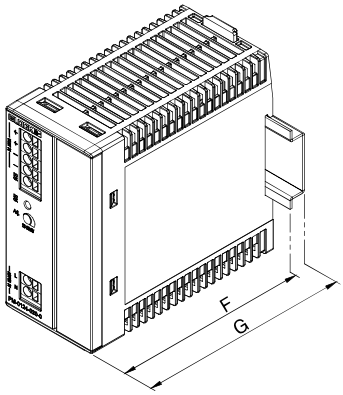

Single-phase, primary switched mode power supply
PC 1AC

General Data

- Nominal input voltage: AC 100 - 240 V
- Nominal output voltage: DC 12 - 48 V
- Nominal output current: 5 - 20 A
- Ambient temperature -25 °C to +70 °C
- Efficiency up to 93 %
- Protection index IP 20

Advantages

- Stabilised and adjustable output voltage
- Fast tripping of conventional circuit breakers
- DC OK signalling
- Parallel operation
- Push-in terminals
- Robust DIN rail mounting
- Resistant to transient overvoltages up to 4 kV

Applications

Power Compact combines the basic functionality of an economic switched mode power supply with key additional features to ensure high system availability. A powerful and flexible option that's still light and compact. Our real all-rounders, these power supply units are suitable for a highly diverse range of applications in solar, measurement and control technology and they really come into their own in industrial and building automation. The devices cover the average power requirement from 120 W to 480 W. Versions with 12 V, 24 V, and 48 V are available, which allow a range of applications. A version with 5 A rated current is available for a single or two-phase supply from 180 V to 550 V. The output voltage can be set easily using the rotary potentiometer on the front of the housing. The robust DIN rail fastening method and push-in connection terminals enable fast and secure mounting.

For applications in the medical field, power supplies are available with approval according to UL 60601-1.

Standards

Primary switched mode power supply
to UL 60950, UL 508

Safety:
EN 61558-2-16, EN 60950-1

EMC:
EN 61204-3

Approvals

UL/CSA 60950 recognised, UL508 listed, Germanischer Lloyd; Medical Netzteil: UL 60601-1 (3rd ed. 2MOPP)

Single-phase, primary switched mode power supply
PC 1AC

ePLAN data portal | BLOCK Website

Electrical data

Typ	PC-0112-150-0	PC-0124-050-0	PC-0124-050-4	PC-0124-100-0
Special features				
Characteristics	-	-	Suitable for the medical field	-
Input				
Input rated voltage	100 - 240 Vac	100 - 240 Vac	100 - 240 Vac	100 - 240 Vac
Input voltage range	85 - 264 Vac (120 - 372 Vdc)	85 - 264 Vac (120 - 372 Vdc)	85 - 264 Vac (120 - 372 Vdc)	85 - 264 Vac (120 - 372 Vdc)
Input voltage derating	-2.5 %/Vac < 100 Vac	-2.5 %/Vac < 97 Vac	-2,5 %/Vac < 97 Vac	-2.5 %/Vac < 100 Vac
Rated frequency range	44 Hz - 66 Hz / 0 Hz	44 Hz - 66 Hz / 0 Hz	44 Hz - 66 Hz / 0 Hz	44 Hz - 66 Hz / 0 Hz
Input rated current (rated load)	2.07 A (100 Vac) / 0,95 A (230 Vac)	2.25 A (100 Vac) / 1.2 A (230 Vac)	2,3 A (100 Vac) / 1,24 A (230 Vac)	2.74 A (100 Vac) / 1.25 A (230 Vac)
Starting current limiter	< 30 A, NTC (active)	< 30 A, NTC	< 30 A, NTC (active)	< 30 A, NTC (active)
Switch-on time	0.71 s (100 Vac) / 0.43 s (230 Vac)	0.25 s (100 Vac) / 0.2 s (230 Vac)	0,25 s (100 Vac) / 0,2 s (230 Vac)	1.3 s (100 Vac) / 0.25 s (230 Vac)
Mains buffering (rated load)	28 ms (100 Vac) / 28 ms (230 Vac)	10 ms (100 Vac) / 80 ms (230 Vac)	10 ms (100 Vac) / 80 ms (230 Vac)	15 ms (100 Vac) / 17 ms (230 Vac)
Power factor	0.91 (active PFC)	0.5	0,47	0.92 (active PFC)
Input fuse internal	6.3 A	4 A	4AT	6.3 A
Recommended back-up fuse (circuit breaker)	10 A, 16 A, characteristic B, C	6 A, 10 A, 16 A, characteristic B, C	6A, 10 A, 16 A, characteristic B, C	10 A, 16 A, characteristic B, C
Transient surge voltage protection	Varistor	Varistor	Varistor	Varistor
Output				
Output rated voltage	12 Vdc	24 Vdc	24 Vdc	24 Vdc
Output voltage range	11.5 – 15 Vdc	23 – 28.5 Vdc	11,8 – 27,5 Vdc	23 – 28.5 Vdc
Output rated current	15 A	5 A	5 A	10 A
Output limited current	typ. 16.5 A (constant current)	typ. 5.5 A (constant current)	typ. 16.5 A (constant current)	typ. 11 A (constant current)
Tripping of LS circuit breakers	max. B4	max. B4	Yes	max. B6, C2
Parallel connection	Yes	Yes	Yes	Yes
Serial operation	Yes	Yes	Yes	Yes
Power dissipation, no load/rated load	4.4 W / 21.8 W (230 Vac)	1.2 / 14.6 W (230 Vac)	1,2 W / 14,6 W (230 Vac)	6.6 / 24.4 W (230 Vac)
Max. power losses	24.7 W (100 Vac / 12 V / 15 A)	19.4 W (100 Vac / 24 V / 5 A)	19,4 W (100 Vac / 24 V / 5 A)	31.3 W (100 Vac / 24 V / 10 A)
Ripple factor	typ. 35 mVss	typ. 30 mVss	typ. 30 mVss	typ. 50 mVss
Efficiency	typ. 90 %	typ. 89 %	typ. 89 %	typ. 91 %
Resistance to reverse feed max.	35 Vdc	35 Vdc	0 Vdc	35 Vdc
Over-voltage-protection	max. 20 Vdc	max. 41 Vdc	max. 41 Vdc	max. 40 Vdc
Signaling				
Typ. switching threshold for LED and signal output (DC OK)	-	-	LED: Uout > 11,2 V, signal output: Uout > 16 V (typ.)	-
Status indicator	LED green	LED green	LED green	LED green
Signal output	Relay contact	Relay contact	Relay contact, max. 30 V / 1 A	Relay contact
Approvals				
Approvals	cURus, cULus, GL	cURus, cULus, GL	cURus, cULus (UL 60601), GL	cURus, cULus, GL
Environment				
Type of cooling	natural convection	natural convection	natural convection	natural convection
Ambient temperature	-25 °C to +70 °C	-25 °C to +70 °C	-25 °C to +70 °C	-25 °C to +70 °C
Storage temperature	-25 °C to +85 °C	-25 °C to +85 °C	-25 °C to +85 °C	-25 °C to +85 °C
Derating	-5 %/K > +60 °C @ 196 - 264 Vac -2.5 %/K > +50° C @ 85 - 195 Vac	-5 %/K > +60 °C @ 196 - 264 Vac -2.5 %/K > +50° C @ 85 - 195 Vac	-5 %/K > +60 °C @ 196 - 264 Vac -2.5 %/K > +50° C @ 85 - 195 Vac	-5 %/K > +60 °C @ 196 - 264 Vac -2.5 %/K > +50° C @ 85 - 195 Vac
Required minimum spacing (left/right)	0 mm	0 mm	0 mm	0 mm
Required minimum spacing (over/under)	50 mm	50 mm	50 mm	50 mm
Safety and protection				
Protection index	IP 20	IP 20	IP 20	IP 20
Safety class	I, with PE connection	I, with PE connection	I	I, with PE connection
Order numbers				
Order Number	**PC-0112-150-0**	**PC-0124-050-0**	**PC-0124-050-4**	**PC-0124-100-0**

Single-phase, primary switched mode power supply
PC 1AC

Electrical data

Typ	PC-0124-100-4	PC-0124-200-0	PC-0124-200-4	PC-0148-050-0
Special features				
Characteristics	Suitable for the medical field	-	Suitable for the medical field	-
Input				
Input rated voltage	100 - 240 Vac	100 - 240 Vac	100 - 240 Vac	100 - 240 Vac
Input voltage range	85 - 264 Vac (120 - 372 Vdc)	85 - 264 Vac (120 - 372 Vdc)	85 - 264 Vac (120 - 372 Vdc)	85 - 264 Vac (120 - 372 Vdc)
Input voltage derating	-2,5 %/Vac < 100 Vac	-2.5 %/Vac < 100 Vac	-2,5 %/Vac < 100 Vac	-2.5 %/Vac < 100 Vac
Rated frequency range	44 Hz - 66 Hz / 0 Hz	44 Hz - 66 Hz / 0 Hz	44 Hz - 66 Hz / 0 Hz	44 Hz - 66 Hz / 0 Hz
Input rated current (rated load)	2,74 A (100 Vac) / 1,25 A (230 Vac)	5.56 A (100 Vac) / 2.23 A (230 Vac)	5,56 A (100 Vac) / 2,23 A (230 Vac)	2.68 A (100 Vac) / 1.19 A (230 Vac)
Starting current limiter	< 30 A, NTC	< 30 A, NTC (active)	< 30 A, NTC (active)	< 30 A, NTC (active)
Switch-on time	1,3 s (100 Vac) / 0,25 s (230 Vac)	0.45 s (100 Vac) / 0.2 s (230 Vac)	0,45 s (100 Vac) / 0,2 s (230 Vac)	0.68 s (100 Vac) / 0.31 s (230 Vac)
Mains buffering (rated load)	15 ms (100 Vac) / 17 ms (230 Vac)	20 ms (100 Vac) / 20 ms (230 Vac)	8 ms (100 Vac) / 20 ms (230 Vac)	21 ms (100 Vac) / 21 ms (230 Vac)
Power factor	0,92	0.98 (active PFC)	0,98	0.92 (active PFC)
Input fuse internal	6,3 AT	10 A	10 AT	6.3 A
Recommended back-up fuse (circuit breaker)	10 A, 16 A, characteristic B, C	10 A, 16 A, characteristic B, C	10 A, 16 A, characteristic B, C	10 A, 16 A, characteristic B, C
Transient surge voltage protection	Varistor	Varistor	Varistor	Varistor
Output				
Output rated voltage	24 Vdc	24 Vdc	24 Vdc	48 Vdc
Output voltage range	23 – 28,5 Vdc	23 – 28,5 Vdc	23 – 28,5 Vdc	40 – 56 Vdc
Output rated current	10 A	20 A	20 A	5 A
Output limited current	typ. 11 - 13 A (constant current)	typ. 22 A (constant current)	typ. 22 A (constant current)	typ. 5.5 A (constant current)
Tripping of LS circuit breakers	Yes	max. B6, C6, K4	Yes	max. B6, C4, K2
Parallel connection	Yes	Yes	Yes	Yes
Serial operation	Yes	Yes	Yes	Yes
Power dissipation, no load/rated load	6,6 W / 24,4 W (230 Vac)	7.2 / 42.4 W (230 Vac)	7,2 W / 42,4 W (230 Vac)	7 W / 40,8 W (230 Vac)
Max. power losses	31,3 W (100 Vac / 24 V / 10 A)	68.3 W (100 Vac / 24 V / 20 A)	68,3 W (100 Vac / 24 V / 10 A)	26,5 W (100 Vac / 48 V / 5 A)
Ripple factor	typ. 50 mVss	typ. 70 mVss	typ. 70 mVss	typ. 35 mVss
Efficiency	typ. 91 %	typ. 92 %	typ. 92 %	typ. 92 %
Resistance to reverse feed max.	0 Vdc	35 Vdc	0 Vdc	63 Vdc
Over-voltage-protection	max. 40 Vdc	max. 40 Vdc	max. 40 Vdc	max. 60 Vdc
Signaling				
Typ. switching threshold for LED and signal output (DC OK)	Uout > 21,5 V	-	Uout > 21,5 V	-
Status indicator	LED green	LED green	LED green	LED green
Signal output	Relay contact, max. 30 V / 1 A	Relay contact	Relay contact, max. 30 V / 1 A	Relay contact
Approvals				
Approvals	cURus, cULus (UL 60601), GL	cURus, cULus, GL	cURus, cULus (UL 60601), GL	cURus, cULus, GL
Environment				
Type of cooling	natural convection	natural convection	natural convection	natural convection
Ambient temperature	-25 °C to +70 °C	-25 °C to +70 °C	-25 °C to +70 °C	-25 °C to +70 °C
Storage temperature	-25 °C to +85 °C	-25 °C to +85 °C	-25 °C to +85 °C	-25 °C to +85 °C
Derating	-5 %/K > +60 °C @ 196 - 264 Vac -2.5 %/K > +50° C @ 85 - 195 Vac	-5 %/K > +60 °C @ 196 - 264 Vac -2.5 %/K > +50° C @ 85 - 195 Vac	-5 %/K > +60 °C @ 196 - 264 Vac -2.5 %/K > +50° C @ 85 - 195 Vac	-5 %/K > +60 °C @ 196 - 264 Vac -2.5 %/K > +50° C @ 85 - 195 Vac
Required minimum spacing (left/right)	0 mm	0 mm	0 mm	0 mm
Required minimum spacing (over/under)	50 mm	50 mm	50 mm	50 mm
Safety and protection				
Protection index	IP 20	IP 20	IP 20	IP 20
Safety class	I	I, with PE connection	I	I, with PE connection
Order numbers				
Order Number	**PC-0124-100-4**	**PC-0124-200-0**	**PC-0124-200-4**	**PC-0148-050-0**

Single-phase, primary switched mode power supply
PC 1AC

Electrical data

Typ	PC-0148-100-0
Special features	
Characteristics	-
Input	
Input rated voltage	100 - 240 Vac
Input voltage range	85 - 264 Vac (120 - 372 Vdc)
Input voltage derating	-2.5 %/Vac < 100 Vac
Rated frequency range	44 Hz - 66 Hz / 0 Hz
Input rated current (rated load)	5.15 A (100 Vac) / 2.22 A (230 Vac)
Starting current limiter	< 30 A, NTC (active)
Switch-on time	0.45 s (100 Vac) / 0.2 s (230 Vac)
Mains buffering (rated load)	20 ms (100 Vac) / 20 ms (230 Vac)
Power factor	0.92 (active PFC)
Input fuse internal	10 A
Recommended back-up fuse (circuit breaker)	10 A, 16 A, characteristic B, C
Transient surge voltage protection	Varistor
Output	
Output rated voltage	48 Vdc
Output voltage range	40 – 56 Vdc
Output rated current	10 A
Output limited current	typ. 11 A (constant current)
Tripping of LS circuit breakers	max. B6, C4, K2
Parallel connection	Yes
Serial operation	Yes
Power dissipation, no load/rated load	11.7 / 36.3 W (230 Vac)
Max. power losses	64.9 W (100 Vac / 48 V / 10 A)
Ripple factor	typ. 80 mVss
Efficiency	typ. 93 %
Resistance to reverse feed max.	63 Vdc
Over-voltage-protection	max. 60 Vdc
Signaling	
Typ. switching threshold for LED and signal output (DC OK)	-
Status indicator	LED green
Signal output	Relay contact
Approvals	
Approvals	cURus, cULus, GL
Environment	
Type of cooling	natural convection
Ambient temperature	-25 °C to +70 °C
Storage temperature	-25 °C to +85 °C
Derating	-5 %/K > +60 °C @ 196 - 264 Vac -2.5 %/K > +50° C @ 85 - 195 Vac
Required minimum spacing (left/right)	0 mm
Required minimum spacing (over/under)	50 mm
Safety and protection	
Protection index	IP 20
Safety class	I, with PE connection
Order numbers	
Order Number	**PC-0148-100-0**

Single-phase, primary switched mode power supply
PC 1AC

Mechanical data

Typ	Mounting position	Terminals signalling (direct plug-in technology Push-in)	Terminals output (direct plug-in technology Push-in)	Terminals input (direct plug-in technology Push-in)	Weight	Dimension (W x H x D)	Dimension picture (in mm)	A	B	C	D	E	F
PC-0112-150-0	horizontal for standard rail DIN TS35	max 2,5 mm²	max 2,5 mm²	max 2,5 mm²	0.93 kg	55 x 127 x 161 mm	1	127	63.5	3	55	153.5	161
PC-0124-050-0	horizontal for standard rail DIN TS35	max 2,5 mm²	max 2,5 mm²	max 2,5 mm²	0.59 kg	42 x 127 x 126 mm	1	127	63.5	3	42	118.5	126
PC-0124-050-4	horizontal for standard rail DIN TS35	-	max 2,5 mm²	-	0.65 kg	42 x 127 x 140.5 mm	1	127	63.5	3	42	133	140.5
PC-0124-100-0	horizontal for standard rail DIN TS35	max 2,5 mm²	max 2,5 mm²	max 2,5 mm²	0.93 kg	55 x 127 x 161 mm	1	127	53.5	3	55	153.5	161
PC-0124-100-4	horizontal for standard rail DIN TS35	-	max 2,5 mm²	-	0.65 kg	55 x 127 x 170 mm	1	127	63.5	3	55	162.5	170
PC-0124-200-0	horizontal for standard rail DIN TS35	max 2,5 mm²	max 2,5 mm²	max 2,5 mm²	1.60 kg	95 x 127 x 159 mm	1	127	63.5	3	95	151.5	159
PC-0124-200-4	horizontal for standard rail DIN TS35	-	max 2,5 mm²	-	1.70 kg	95 x 127 x 168 mm	1	127	63.5	3	95	160.5	168
PC-0148-050-0	horizontal for standard rail DIN TS35	max 2,5 mm²	max 2,5 mm²	max 2,5 mm²	0.93 kg	55 x 127 x 161 mm	1	127	63.5	3	55	153.5	161
PC-0148-100-0	horizontal for standard rail DIN TS35	max 2,5 mm²	max 2,5 mm²	max 2,5 mm²	1.60 kg	95 x 127 x 159 mm	1	127	63.5	3	95	151.5	159

Dimension pictures

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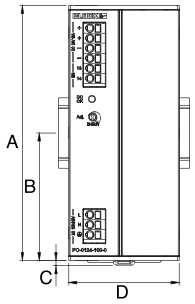
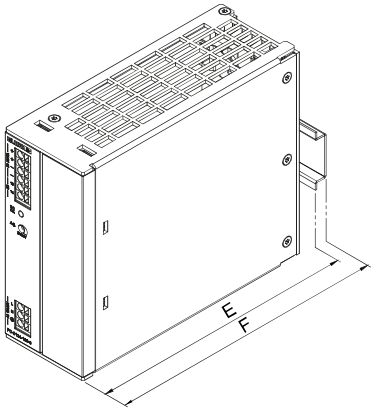




Single-phase, primary switched mode power supply, Economy
PVSE 230

General Data

- Input rated voltage 100 - 240 Vac
- Output rated voltage 12 - 48 Vdc
- Output rated current 3 - 20 A
- Ambient temperature -25 °C to +70 °C
- Efficiency up to 92 %

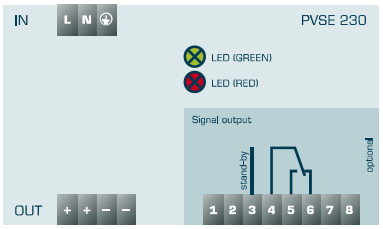
Advantages

- Stabilised and adjustable output voltage
- Up to 200 % Real Power Boost for 4 seconds
- Top Boost to trip conventional circuit breakers
- DC OK signalling
- Stand-by-input
- Parallel connection option
- Service-friendly spring-loaded connector system
- Optional with active inrush current limiter

Applications

Primary switched mode power supply with massive power reserves focussing on the key task of power supply.

Sample application



Standards

Primary switched mode power supply
to UL 60950, UL 508

Safety:
EN 61558-2-16, EN 60950-1

EMC:
EN 61204-3

Approvals

UL/CSA 60950 recognised (E213214), UL508 listed (E219022)

Single-phase, primary switched mode power supply, Economy
PVSE 230

Electrical data

Typ	PVSE 230/12-6	PVSE 230/12-10	PVSE 230/12-15	PVSE 230/24-3
Input				
Input rated voltage	100 - 240 Vac	100 - 240 Vac	100 - 240 Vac	100 - 240 Vac
Input rated current (rated load)	0.86 / 0.51 Aac (110 / 230 Vac)	1.7 / 0.97 Aac (110 / 230 Vac)	1.9 / 0.9 Aac (110 / 230 Vac)	0.86 / 0.51 Aac (110 / 230 Vac)
Input voltage range	85 - 264 Vac (120 - 373 Vdc)	85 - 264 Vac (120 - 373 Vdc)	85 - 264 Vac (120 - 373 Vdc)	85 - 264 Vac (120 - 373 Vdc)
Rated frequency range	44 Hz - 66 Hz / 0 Hz	44 Hz - 66 Hz / 0 Hz	44 Hz - 66 Hz / 0 Hz	44 Hz - 66 Hz / 0 Hz
Starting current limiter	<30 A, NTC	<30 A, NTC	<8 A, active	<30 A, NTC
Input fuse internal	2 A (slow-blow)	4 A (slow-blow)	6.3 A (slow-blow)	2 A (slow-blow)
Recommended back-up fuse (circuit breaker)	6 A, 10 A, 16 A, characteristics B, C	6 A, 10 A, 16 A, characteristics B, C	10 A, 16 A, characteristics B, C	6 A, 10 A, 16 A, characteristics B, C
Harmonic correction	-	-	active	-
Mains buffering (rated load)	10 / 70 ms (110 / 230 Vac)	12 / 35 ms (110 / 230 Vac)	30 / 30 ms (110 / 230 Vac)	10 / 70 ms (110 / 230 Vac)
Transient surge voltage protection	Varistor	Varistor	Varistor	Varistor
Output				
Output rated voltage	12 Vdc	12 Vdc	12 Vdc	24 Vdc
Output voltage range	11 - 18 Vdc	11 - 18 Vdc	11 - 18 Vdc	22 - 29.5 Vdc
Resistance to reverse feed max.	25 Vdc	25 Vdc	25 Vdc	35 Vdc
Output rated current	6.00 A	10.00 A	15.00 A	3.00 A
Parallel connection	Yes	Yes	Yes	Yes
Power Boost	12 A / 4 s (9 A / 8 s)	20 A / 4 s (15 A / 8 s)	30 A / 4 s (22.5 A / 8 s)	6.5 A / 4 s (5.8 A / 8 s)
Overload behaviour	Constant current	Constant current	Constant current	Constant current
max. Power loss idling/nominal load	3.0 / 8.8 W	5.0 / 14.6 W	4.6 / 23.4 W	3.0 / 8.8 W
Serial operation	Yes	Yes	Yes	Yes
Efficiency	typ. 83 %	typ. 87.8 %	typ. 87 %	typ. 87.7 %
Ripple factor	typ. 70 mVss	typ. 70 mVss	typ. 70 mVss	typ. 70 mVss
Top Boost	21 A / 25 ms	60 A / 25 ms	55 A / 25 ms	14 A / 25 ms
Signaling				
Stand-by-input	Yes	Yes	Yes	Yes
Power Good (DC OK)	LED green, LED red	LED green, LED red	LED green, LED red	LED green, LED red
Potential free signal contact	Yes	Yes	Yes	Yes
Approvals				
Approvals	cURus, cULus	cURus, cULus	cURus, cULus	cURus, cULus
Environment				
Storage temperature	-25 °C to +85 °C	-25 °C to +85 °C	-25 °C to +85 °C	-25 °C to +85 °C
Derating	-3 %/K > +50 °C, -5 %/Vac < 95 Vac	-3 %/K > +50 °C, -5 %/Vac < 95 Vac	-3 %/K > +50 °C, -1.5 %/Vac < 110 Vac	-3 %/K > +50 °C, -5 %/Vac < 95 Vac
Ambient temperature	-10 °C to +70 °C	-10 °C to +70 °C	-10 °C to +70 °C	-10 °C to +70 °C
Safety and protection				
Safety class	I, with PE connection	I, with PE connection	I, with PE connection	I, with PE connection
Protection index	IP 20	IP 20	IP 20	IP 20
Accessory				
Connector for signalling	PV-CON (optional)	PV-CON (optional)	PV-CON (optional)	PV-CON (optional)
Side DIN rail mounting	PV-TS35M (optional)	PV-TS35M (optional)	PV-TS35M (optional)	PV-TS35M (optional)
Direct screw fastening plate for lateral mounting	PV-WB2 (optional)	PV-WB2 (optional)	PV-WB2 (optional)	PV-WB2 (optional)
Order numbers				
Order Number	**PVSE 230/12-6**	**PVSE 230/12-10**	**PVSE 230/12-15**	**PVSE 230/24-3**

Single-phase, primary switched mode power supply, Economy
PVSE 230

Electrical data

Typ	PVSE 230/24-3B	PVSE 230/24-5	PVSE 230/24-5B	PVSE 230/24-10
Input				
Input rated voltage	100 - 240 Vac	100 - 240 Vac	100 - 240 Vac	110 - 240 Vac
Input rated current (rated load)	0.86 / 0.51 A (110 / 230 Vac)	1.7 / 0.97 Aac (110 / 230 Vac)	1.7 /0.97 Aac (110 / 230 Vac)	2.5 / 1.2 Aac (110 / 230 Vac)
Input voltage range	85 - 264 Vac (120 - 373 Vdc)	85 - 264 Vac (120 - 373 Vdc)	85 - 264 Vac (120 - 373 Vdc)	85 - 264 Vac (120 - 373 Vdc)
Rated frequency range	44 Hz - 66 Hz / 0 Hz	44 Hz - 66 Hz / 0 Hz	44 Hz - 66 Hz / 0 Hz	44 Hz - 66 Hz / 0 Hz
Starting current limiter	<5 A, active	<30 A, NTC	<8 A, active	<8 A, active
Input fuse internal	2 A (slow-blow)	4 A (slow-blow)	4 A (slow-blow)	6,3 A (slow-blow)
Recommended back-up fuse (circuit breaker)	6 A, 10 A, 16 A, characteristics B, C	6 A, 10 A, 16 A, characteristics B, C	6 A, 10 A, 16 A, characteristics B, C	10 A, 16 A, characteristics B, C
Harmonic correction	-	-	-	active
Mains buffering (rated load)	10 / 70 ms (110 / 230 Vac)	12 / 35 ms (110 / 230 Vac)	12 / 35 ms (110 / 230 Vac)	24 / 24 ms (110 / 230 Vac)
Transient surge voltage protection	Varistor	Varistor	Varistor	Varistor
Output				
Output rated voltage	24 Vdc	24 Vdc	24 Vdc	24 Vdc
Output voltage range	22 - 29.5 Vdc	22 - 29.5 Vdc	22 - 29.5 Vdc	22 - 29.5 Vdc
Resistance to reverse feed max.	35 Vdc	35 Vdc	35 Vdc	35 Vdc
Output rated current	3.00 A	5.00 A	5.00 A	10.00 A
Parallel connection	Yes	Yes	Yes	Yes
Power Boost	6.5 A / 4 s (5.8 A / 8 s)	10 A / 4 s (7.5 A / 8 s)	10 A / 4 s (7.5 A / 8 s)	20 A / 4 s (15 A / 8 s)
Overload behaviour	Constant current	Constant current	Constant current	Constant current
max. Power loss idling/nominal load	3.0 / 8.8 W	5.0 / 14.6 W	5.0 / 14.6 W	3.5 / 19.7 W
Serial operation	Yes	Yes	Yes	Yes
Efficiency	typ. 87.7 %	typ. 87.8 %	typ. 87.8 %	typ. 91.8 %
Ripple factor	typ. 70 mVss	typ. 70 mVss	typ. 70 mVss	typ. 70 mVss
Top Boost	14 A / 25 ms	21 A / 25 ms	21 A / 25 ms	60 A / 25 ms
Signaling				
Stand-by-input	Yes	Yes	Yes	Yes
Power Good (DC OK)	LED green, LED red	LED green, LED red	LED green, LED red	LED green, LED red
Potential free signal contact	Yes	Yes	Yes	Yes
Approvals				
Approvals	cURus, cULus	cURus, cULus	cURus, cULus	cURus, cULus
Environment				
Storage temperature	-25 °C to +85 °C	-25 °C to +85 °C	-25 °C to +85 °C	-25 °C to +85 °C
Derating	-3 %/K > +50 °C, -5 %/Vac < 95 Vac	-3 %/K > +50 °C, -5 %/Vac < 95 Vac	-3 %/K > +50 °C, -5 %/Vac < 95 Vac	-3 %/K > +50 °C, -1.5 %/Vac < 110 Vac
Ambient temperature	-10 °C to +70 °C	-10 °C to +70 °C	-10 °C to +70 °C	-10 °C to +70 °C
Safety and protection				
Safety class	I, with PE connection	I, with PE connection	I, with PE connection	I, with PE connection
Protection index	IP 20	IP 20	IP 20	IP 20
Accessory				
Connector for signalling	PV-CON (optional)	PV-CON (optional)	PV-CON (optional)	PV-CON (optional)
Side DIN rail mounting	PV-TS35M (optional)	PV-TS35M (optional)	PV-TS35M (optional)	PV-TS35M (optional)
Direct screw fastening plate for lateral mounting	PV-WB2 (optional)	PV-WB2 (optional)	PV-WB2 (optional)	PV-WB2 (optional)
Order numbers				
Order Number	**PVSE 230/24-3B**	**PVSE 230/24-5**	**PVSE 230/24-5B**	**PVSE 230/24-10**

Single-phase, primary switched mode power supply, Economy
PVSE 230

Electrical data

Typ	PVSE 230/24-20	PVSE 230/30-15	PVSE 230/48-5	PVSE 230/48-10
Input				
Input rated voltage	110 - 240 Vac	110 - 240 Vac	110 - 240 Vac	110 - 240 Vac
Input rated current (rated load)	5.7 / 2.3 Aac (110 / 230 Vac)	5.7 / 2.3 Aac (110 / 230 Vac)	2.5 / 1.2 Aac (110 / 230 Vac)	5.7 / 2.3 Aac (110 / 230 Vac)
Input voltage range	85 - 264 Vac (120 - 373 Vdc)	85 - 264 Vac (120 - 373 Vdc)	85 - 264 Vac (120 - 373 Vdc)	85 - 264 Vac (120 - 373 Vdc)
Rated frequency range	44 Hz - 66 Hz / 0 Hz	44 Hz - 66 Hz / 0 Hz	44 Hz - 66 Hz / 0 Hz	44 Hz - 66 Hz / 0 Hz
Starting current limiter	<8 A, active	<8 A, active	<8 A, active	<8 A, active
Input fuse internal	10 A (slow-blow)	10 A (slow-blow)	6.3 A (slow-blow)	10 A (slow-blow)
Recommended back-up fuse (circuit breaker)	10 A, 16 A, characteristics B, C	10 A, 16 A, characteristics B, C	10 A, 16 A, characteristics B, C	10 A, 16 A, characteristics B, C
Harmonic correction	active	active	active	active
Mains buffering (rated load)	20 / 25 ms (110 / 230 Vac)	20 / 25 ms (110 / 230 Vac)	24 / 24 ms (110 / 230 Vac)	20 / 25 ms (110 / 230 Vac)
Transient surge voltage protection	Varistor	Varistor	Varistor	Varistor
Output				
Output rated voltage	24 Vdc	30 Vdc	48 Vdc	48 Vdc
Output voltage range	22 - 29.5 Vdc	27 - 43 Vdc	33 - 52 Vdc	33 - 52 Vdc
Resistance to reverse feed max.	35 Vdc	63 Vdc	63 Vdc	63 Vdc
Output rated current	20.00 A	15.00 A	5.00 A	10.00 A
Parallel connection	Yes	Yes	Yes	Yes
Power Boost	30 A / 4 s (25 A / 8 s)	15 A / 4 s (12.5 A / 8 s)	10 A / 4 s (7.5 A / 8 s)	15 A / 4 s (12.5 A / 8 s)
Overload behaviour	Constant current	Constant current	Constant current	Constant current
max. Power loss idling/nominal load	4.8 / 50.2 W	4.8 / 50.2 W	7.4 / 21.6 W	4.8 / 50.2 W
Serial operation	Yes	Yes	Yes	Yes
Efficiency	typ. 91 %	typ. 91 %	typ. 91 %	typ. 91 %
Ripple factor	typ. 70 mVss	typ. 70 mVss	typ. 70 mVss	typ. 70 mVss
Top Boost	80 A / 25 ms	70 A / 25 ms	30 A / 25 ms	40 A / 25 ms
Signaling				
Stand-by-input	Yes	Yes	Yes	Yes
Power Good (DC OK)	LED green, LED red	LED green, LED red	LED green, LED red	LED green, LED red
Potential free signal contact	Yes	Yes	Yes	Yes
Approvals				
Approvals	cURus, cULus	cURus, cULus	cURus, cULus	cURus, cULus
Environment				
Storage temperature	-25 °C to +85 °C	-25 °C to +85 °C	-25 °C to +85 °C	-25 °C to +85 °C
Derating	-3 %/K > +50 °C, -1.5 %/Vac < 110 Vac	-3 %/K > +50 °C, -1.5 %/Vac < 110 Vac	-3 %/K > +50 °C, -1.5 %/Vac < 110 Vac	-3 %/K > +50 °C, -1.5 %/Vac < 110 Vac
Ambient temperature	-10 °C to +70 °C	-10 °C to +70 °C	-10 °C to +70 °C	-10 °C to +70 °C
Safety and protection				
Safety class	I, with PE connection	I, with PE connection	I, with PE connection	I, with PE connection
Protection index	IP 20	IP 20	IP 20	IP 20
Accessory				
Connector for signalling	PV-CON (optional)	PV-CON (optional)	PV-CON (optional)	PV-CON (optional)
Side DIN rail mounting	PV-TS35M (optional)	PV-TS35M (optional)	PV-TS35M (optional)	PV-TS35M (optional)
Direct screw fastening plate for lateral mounting	PV-WB2 (optional)	PV-WB2 (optional)	PV-WB2 (optional)	PV-WB2 (optional)
Order numbers				
Order Number	**PVSE 230/24-20**	**PVSE 230/30-15**	**PVSE 230/48-5**	**PVSE 230/48-10**

Single-phase, primary switched mode power supply, Economy
PVSE 230

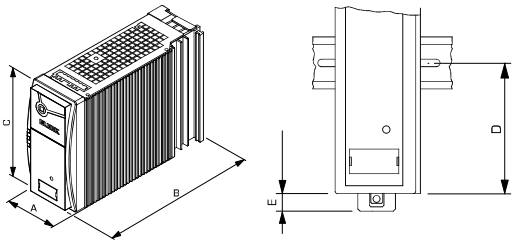
ePLAN data portal | BLOCK Website

Mechanical data

Typ	Terminals input, (spring clamp terminal, pluggable)	Terminals output, (spring clamp terminal, pluggable)	Terminals signalling, (spring clamp terminal, pluggable)	Mounting position	Fixing method	Weight	Dimension picture (in mm)	A	B	C	D	E
PVSE 230/12-6	max. 2.5 mm²	max. 2.5 mm²	max. 0.5 mm²	vertical	DIN Rail system TS35	0.8 kg	1	40	163.5	127	76	12.5
PVSE 230/12-10	max. 2.5 mm²	max. 2.5 mm²	max. 0.5 mm²	vertical	DIN Rail system TS35	1.1 kg	1	57	163.5	127	76	12.5
PVSE 230/12-15	max. 2.5 mm²	max. 2.5 mm²	max. 0.5 mm²	vertical	DIN Rail system TS35	1.3 kg	1	57	179.5	127	76	12.5
PVSE 230/24-3	max. 2.5 mm²	max. 2.5 mm²	max. 0.5 mm²	vertical	DIN Rail system TS35	0.8 kg	1	40	163.5	127	76	12.5
PVSE 230/24-3B	max. 2.5 mm²	max. 2.5 mm²	max. 0.5 mm²	vertical	DIN Rail system TS35	0.8 kg	1	40	163.5	127	76	12.5
PVSE 230/24-5	max. 2.5 mm²	max. 2.5 mm²	max. 0.5 mm²	vertical	DIN Rail system TS35	1.1 kg	1	57	163.5	127	76	12.5
PVSE 230/24-5B	max. 2.5 mm²	max. 2.5 mm²	max. 0.5 mm²	vertical	DIN Rail system TS35	1.1 kg	1	57	163.5	127	76	12.5
PVSE 230/24-10	max. 2.5 mm²	max. 2.5 mm²	max. 0.5 mm²	vertical	DIN Rail system TS35	1.3 kg	1	57	179.5	127	76	12.5
PVSE 230/24-20	max. 2.5 mm²	max. 10 mm²	max. 0.5 mm²	vertical	DIN Rail system TS35	2.3 kg	1	97	187.5	127	76	12.5
PVSE 230/30-15	max. 2.5 mm²	max. 10 mm²	max. 0.5 mm²	vertical	DIN Rail system TS35	2.3 kg	1	97	187.5	127	76	12.5
PVSE 230/48-5	max. 2.5 mm²	max. 2.5 mm²	max. 0.5 mm²	vertical	DIN Rail system TS35	1.3 kg	1	57	179.5	127	76	12.5
PVSE 230/48-10	max. 2.5 mm²	max. 10 mm²	max. 0.5 mm²	vertical	DIN Rail system TS35	2.3 kg	1	97	187.5	127	76	12.5

Dimension pictures

1



Single-phase, primary switched mode power supply
PVSA 230

General Data

Input rated voltage 100 – 240 Vac
Output rated voltage 30,5 Vdc
Output rated current 3 A
Ambient temperature -10 °C to +70 °C
Efficiency 82 %
Protection index IP 20

Advantages

Stabilised and adjustable output voltage
Up to 200 % Real Power Boost for 4 seconds
Top Boost to trip conventional circuit breakers
DC OK signalling via LEDs
Parallel connection option
Service-friendly spring-loaded connector system
Optional with active inrush current limiter
Panel installation on mounting rails
Compatible to AS-i

Applications

Primary switched mode power supply with integrated output filter for AS-i bus system.

Standards

Primary switched mode power supply
to UL 60950, UL 508

Safety:
EN 60950, EN 60950 (SELV), EN 60204 (PELV)

EMC:
EN 55022 (Interference emissions), EN 61000-4-3 (Interference immunity)

Approvals

Single-phase, primary switched mode power supply
PVSA 230

ePLAN data portal | BLOCK Website

Electrical data

Typ	PVSA 230/30-3
Special features	
Characteristics	Compatible to AS-i
Input	
Input rated voltage	100 – 240 Vac
Input voltage range	85 - 264 Vac (120 - 350 Vdc)
Input voltage derating	5%/Vac < 95 Vac
Switch-on time	700 ms
Transient surge voltage protection	Varistor
Input rated current (rated load)	1,13/0,7 Aac (100 Vac/ 240 Vac)
Power factor	0,68
Starting current limiter	<30 A
Input fuse internal	4 AT
Frequency Range	50 Hz – 60 Hz
Recommended back-up fuse (circuit breaker)	6 A, 10 A, 16 A, characteristic B, C
Mains buffering (rated load)	typ. 80 ms @230 Vac
Output	
Output rated voltage	30,5 Vdc
Output voltage range	29,0 - 32,0 Vdc
Resistance to reverse feed max.	50 Vdc
Output rated current	3.00 A
Power Boost	6 A / 4 s (4,5 A / 8 s)
Top Boost	18 Adc for 25 ms
Overload behaviour	Constant current
Parallel connection	Yes
max. Power loss idling/nominal load	7,3 W / 20 W
Efficiency	82.0 %
Correction time	typ. 1 ms
Output limited current	typ. 1,1 x Inenn
Leakage current (50 Hz)	1 mA
Signaling	
Status indicator	LED green: Uout > 0,85 x Unenn; LED red: off
Environment	
Ambient temperature	–10 °C . . +70 °C
Storage temperature	–25 °C . . +85 °C
Derating	-3 %/K > +50 °C
Required minimum spacing (left/right)	0 mm
Type of cooling	Natural convection
Required minimum spacing (over/under)	70 mm
Safety and protection	
Protection index	IP 20
Safety class (prepared)	I
Accessory	
Connector for signalling	PV-CON (optional)
Order numbers	
Order Number	**PVSA 230/30-3**

Single-phase, primary switched mode power supply
PVSA 230

Mechanical data

Typ	Terminals Input	Terminals Output	Fixing method	Weight	Dimension picture (in mm)	A	B	C	D	E	F	G	H
PVSA 230/30-3	WAGO series 231, max. 2,5 mm²	WAGO series 231, max. 2,5 mm²	DIN rail mounting	1.16 kg	❶	163	170.5	127	63.5	4	57	81.5	163

Dimension pictures

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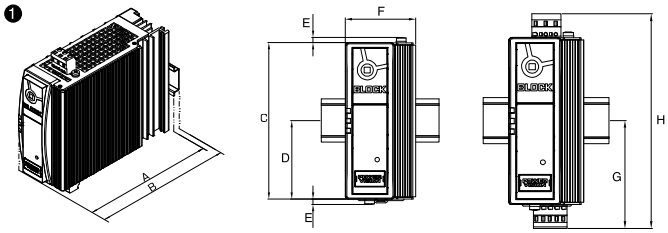

Single-phase, primary switched mode power supply, PCB assembly
PP 1AC

BLOCK Website

General Data

- Input rated voltage 100 - 240 Vac
- Output voltage range 5 - 24 Vdc
- Output rated current 0.17 - 0.8 A
- Ambient temperature -25 °C to +50 °C
- Efficiency typ. 73 %
- Protection index IP 00

Advantages

- Stabilised output voltage
- Low idling losses <0,1W
- Wide-range input voltages
- Short-and open-circuit proof
- Thermal overload switch-off
- Low ripple factor

Applications

Switching power supply with excellent efficiency and low no-load losses for direct soldering to the PCB. Provides an extremely space-saving design of various applications.

Standards

Primary switched mode power supply
to UL 60950, UL 508

Safety:
EN 61558-2-16, EN 60950-1

EMC:
EN 61204-3

Approvals

EAC

Single-phase, primary switched mode power supply, PCB assembly
PP 1AC

BLOCK Website

Electrical data

Typ	PP-0105-008-0	PP-0109-005-0	PP-0112-004-0	PP-0118-003-0	PP-0124-002-0
Input					
Input rated voltage	100 - 240 Vac	100 - 240 Vac	100 - 240 Vac	100 - 240 Vac	100 - 240 Vac
Input voltage range	85 - 264 Vac (120 - 373 Vdc)	85 - 264 Vac (120 - 373 Vdc)	85 - 264 Vac (120 - 373 Vdc)	85 - 264 Vac (120 - 373 Vdc)	85 - 264 Vac (120 - 373 Vdc)
Input voltage derating	-3 %/Vac < 100 Vac	-3 %/Vac < 100 Vac	-3 %/Vac < 100 Vac	-3 %/Vac < 100 Vac	-3 %/Vac < 100 Vac
Switch-on time	16 ms	16 ms	16 ms	16 ms	16 ms
Recommended primary preliminary fuse	2 A (delay)	2 A (delay)	2 A (delay)	2 A (delay)	2 A (delay)
Rated frequency range	44 Hz - 66 Hz / 0 Hz	44 Hz - 66 Hz / 0 Hz	44 Hz - 66 Hz / 0 Hz	44 Hz - 66 Hz / 0 Hz	44 Hz - 66 Hz / 0 Hz
Input rated current (rated load)	96 mA / 54 mA (100 / 230 Vac)	92 mA / 52 mA (100 / 230 Vac)	92 mA / 52 mA (100 / 230 Vac)	90 mA / 51 mA (100 / 230 Vac)	88 mA / 51 mA (100 / 230 Vac)
Power factor	0.45	0.45	0.45	0.45	0.45
Starting current limiter	< 7.5 A	< 7.5 A	< 7.5 A	< 7.5 A	< 7.5 A
Mains buffering (rated load)	14 / 82 ms (100 / 230 Vac)	14 / 83 ms (100 / 230 Vac)	16 / 93 ms (100 / 230 Vac)	17 / 87 ms (100 / 230 Vac)	15 / 93 ms (100 / 230 Vac)
Output					
Output rated voltage	5.0 Vdc	9.0 Vdc	12.0 Vdc	18.0 Vdc	24.0 Vdc
Power dissipation, no load/rated load	83 mW / 1.65 W	56 mW / 1.32 W	47 mW / 1.32 W	62 mW / 1.3 W	57 mW / 1.2 W
Over-voltage-protection	typ. 7.5 Vdc	typ. 15 Vdc	typ. 15 Vdc	typ. 28 Vdc	typ. 28 Vdc
Output rated current	0.90 A	0.45 A	0.34 A	0.23 A	0.17 A
Efficiency	typ. 71 %	typ. 75%	typ. 75%	typ. 76%	typ. 77%
Ripple factor	200 mVss (Ripple + Noise)	150 mVss (Ripple + Noise)	130 mVss (Ripple + Noise)	120 mVss (Ripple + Noise)	90 mVss (Ripple + Noise)
Output limited current	typ. 1.2 - 1.8 x Inenn	typ. 1.2 - 1.8 x Inenn	typ. 1.2 - 1.8 x Inenn	typ. 1.2 - 1.8 x Inenn	typ. 1.2 - 1.8 x Inenn
Environment					
Ambient temperature	-25 °C to +50 °C	-25 °C to +50 °C	-25 °C to +50 °C	-25 °C to +50 °C	-25 °C to +50 °C
Storage temperature	-25 °C to +85 °C	-25 °C to +85 °C	-25 °C to +85 °C	-25 °C to +85 °C	-25 °C to +85 °C
Derating	-3 %/K > +40 °C	-3 %/K > +40 °C	-3 %/K > +40 °C	-3 %/K > +40 °C	-3 %/K > +40 °C
Type of cooling	natural convection	natural convection	natural convection	natural convection	natural convection
Safety and protection					
Protection index	IP 00	IP 00	IP 00	IP 00	IP 00
Safety class	II, without PE connection	II, without PE connection	II, without PE connection	II, without PE connection	II, without PE connection
Resistance to reverse feed max.	6.3 Vdc	16 Vdc	16 Vdc	35 Vdc	35 Vdc
Order numbers					
Order Number	**PP-0105-008-0**	**PP-0109-005-0**	**PP-0112-004-0**	**PP-0118-003-0**	**PP-0124-002-0**

Single-phase, primary switched mode power supply, PCB assembly
PP 1AC

BLOCK Website

Mechanical data

Typ	Terminals Input	Terminals Output	Mounting position	Dimension (W x H x D)	Weight	Dimension picture (in mm)	A	B	C	D	E	F	G	H	I	J	K
PP-0105-008-0	Pins for PCB	Pins for PCB	selectable	41 x 21 x 33 mm	0.04 kg	❶	24.8	33.3	41.1	21	5.08	19.4	4.1	5	25	7.62	4
PP-0109-005-0	Pins for PCB	Pins for PCB	selectable	41 x 21 x 33 mm	0.04 kg	❶	24.8	33.3	41.1	21	5.08	19.4	4.1	5	25	7.62	4
PP-0112-004-0	Pins for PCB	Pins for PCB	selectable	41 x 21 x 33 mm	0.04 kg	❶	24.8	33.3	41.1	21	5.08	19.4	4.1	5	25	7.62	4
PP-0118-003-0	Pins for PCB	Pins for PCB	selectable	41 x 21 x 33 mm	0.04 kg	❶	24.8	33.3	41.1	21	5.08	19.4	4.1	5	25	7.62	4
PP-0124-002-0	Pins for PCB	Pins for PCB	selectable	41 x 21 x 33 mm	0.04 kg	❶	24.8	33.3	41.1	21	5.08	19.4	4.1	5	25	7.62	4

Dimension pictures

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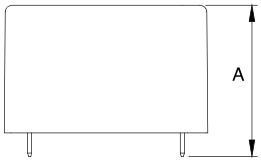

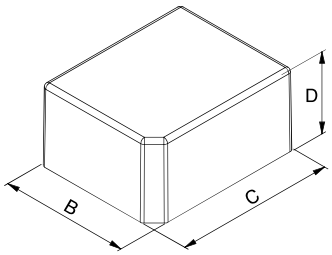

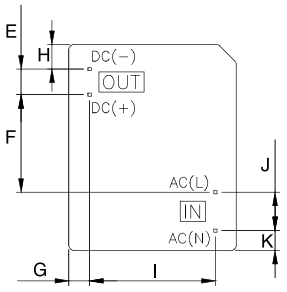

Ansicht unten
Bottom view

Two-phase, primary switched mode power supply
PM 2AC

BLOCK Website

General Data

- Input voltage range 200 - 500 Vac
- Nominal output voltage: DC 24 V
- Nominal output current: 3.8 A
- Ambient temperature: -25 °C ... +70 °C
- Protection index IP 20
- Plastic housing

Advantages

- Stabilised and adjustable output voltage
- Low stand-by consumption <1 W
- Constant current limiting without overload shutdown
- DC OK signalling
- Parallel operation option
- Push-in terminals
- Panel installation on mounting rails

Applications

Efficient, primary switched mode power supply in slim plastic housing. A powerful and flexible option that's still light and compact. This power supply is suitable for a highly diverse range of applications in solar, measurement and control technology as well as industrial and building automation. It delivers an output current of 3.8 A and is suitable for establishing NEC Class 2 circuits. The output voltage can be easily set using the rotary potentiometer on the front of the housing. The DIN rail fastening method and push-in connection terminals enable fast and secure mounting.

Standards

Primary switched mode power supply for NEC Class 2 applications to UL 60950, UL 508, UL 1310

Safety:
EN 61558-2-16, EN 60950-1, EN 60335-1

EMC:
EN 61204-3

Approvals

c UL us EAC

UL/CSA 60950 recognised (pending), UL 508 listed (pending), UL 1310

Two-phase, primary switched mode power supply
PM 2AC

BLOCK Website

Electrical data

Typ	PM-0224-038-0
Special features	
Characteristics	For establishing NEC Class 2 circuits
Input	
Input rated voltage	200 - 500 Vac
Input voltage range	180 - 575 Vac (254 - 800 Vdc)
Input voltage derating	-0.1 %/Vac < 320 Vac
Rated frequency range	44 Hz - 66 Hz / 0 Hz
Input rated current (rated load)	0.82 A / 0.52 A (200 Vac / 500 Vac)
Starting current limiter	< 30 A, NTC
Switch-on time	<1.2 s (230 Vac) / <0.8 s (400 Vac)
Power factor	0.66
Input fuse internal	3.15 A
Recommended back-up fuse (circuit breaker)	6 A, 10 A, 16 A, characteristic B, C
Mains buffering (rated load)	>15 ms (230 Vac) / >60 ms (400 Vac)
Transient surge voltage protection	Varistor
Output	
Output rated voltage	24 Vdc
Output voltage range	23 – 28.5 Vdc (> 24 Vdc constant capacity)
Output rated current	3.8 A / NEC Class 2
Output limited current	3.8 ... 3.2 A (constant current, Class 2)
Class 2 output (UL Limited Power Source, LPS)	✔
Parallel connection	Yes
Serial operation	Yes
Power dissipation, no load/rated load	2.8 W / 14 W (230 Vac)
Max. power losses	<15 W (180 Vac / 72 W)
Ripple factor	typ. 30 mVss
Resistance to reverse feed max.	35 Vdc
Over-voltage-protection	max. 40 Vdc
Efficiency	89 %
Signaling	
Status indicator	LED green Uout > typ. 21.5 Vdc LED lit permanently
Signal output	Active high signal Uout > typ. 21.5 Vdc max. 20 mA@24 Vdc short circuit proof
Approvals	
Approvals	cURus, cULus (in preparation)
Environment	
Storage temperature	-25 °C to +85 °C
Ambient temperature	-25 °C to +70 °C
Derating	-2.5 %/K > +55 °C
Mounting position	horizontal for standard rail DIN TS35
Type of cooling	Natural convection
Required minimum spacing (left/right)	0 mm
Required minimum spacing (over/under)	50 mm
Safety and protection	
Protection index	IP 20
Safety class	II, without PE connection
Order numbers	
Order Number	**PM-0224-038-0**

Two-phase, primary switched mode power supply
PM 2AC

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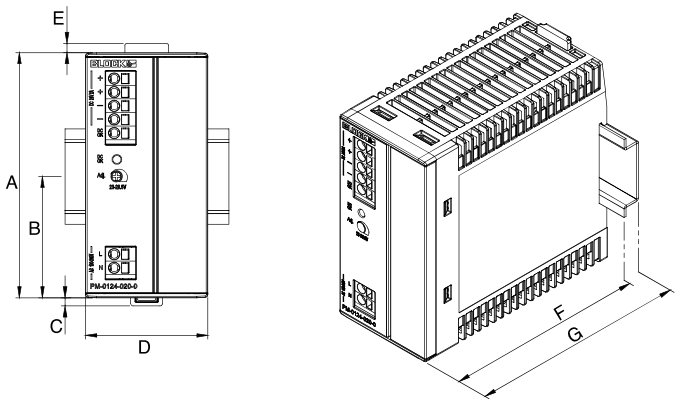
Mechanical data

Typ	Terminals input (direct plug-in technology Push-in)	Terminals output (direct plug-in technology Push-in)	Terminals signalling (direct plug-in technology Push-in)	Weight	Dimension picture (in mm)	A	B	C	D	E	F	G
PM-0224-038-0	max 2,5 mm²	max 2,5 mm²	max 2,5 mm²	0.39 kg	❶	90	45	3	52	3.5	103.5	111

Dimension pictures

❶



Single- and two-phase, primary switched mode power supply
PC 2AC

General Data

- Nominal input voltage: 200 – 500 Vac
- Nominal output voltage: 24 Vdc
- Nominal output current: 5 A – 10 A
- Ambient temperature -25 °C to +70 °C
- Protection index IP 20

Advantages

- Stabilised and adjustable output voltage
- Fast tripping of conventional circuit breakers
- DC OK signalling
- Parallel operation
- Push-in terminals
- Robust DIN rail mounting
- Resistant to transient overvoltages up to 4 kV
- Optional with 50 % Power Boost (PC-0224-xxx-2)

Applications

The economic power supplies in the Power Compact series set new stan-dards in their class. Above-average robustness against transients and energetic surge pulses at their input and equipped with essential additional aspects for a worldwide high plant availability. A powerful and flexible option that's still light and compact. Due to a single or two-phase supply from 180 V to 550 V, these power supplies are suitable for a highly diverse range of applications in solar, measurement and control technology and they really come into their own in industrial and building automation. The output voltage can be set easily using the rotary potentiometer on the front of the housing. The robust DIN rail fastening method and push-in connection terminals enable fast and secure mounting.

Standards

Primary switched mode power supply
to UL 60950, UL 508

Safety:
EN 61558-2-16, EN 60950-1

EMC:
EN 61204-3

Approvals

UL 60950, UL 508, GL (prepared)

Single- and two-phase, primary switched mode power supply
PC 2AC

Electrical data

Typ	PC-0224-050-0	PC-0224-050-2	PC-0224-100-0	PC-0224-100-2
Input				
Input rated voltage	200 - 500 Vac	200 - 500 Vac	200 - 500 Vac	200 - 500 Vac
Input voltage range	180 - 550 Vac (254 - 780 Vdc)	180 - 550 Vac (254 - 780 Vdc)	180 - 550 Vac (254 - 780 Vdc)	180 - 550 Vac (254 - 780 Vdc)
Input voltage derating	-0.5 %/Vac < 200 Vac (-0.4 %/Vdc < 280 Vdc)	-0.5 %/Vac < 200 Vac (-0.4 %/Vdc < 280 Vdc)	0,5 %/Vac < 200 Vac	0,5 %/Vac < 200 Vac
Rated frequency range	44 - 66 Hz	44 - 66 Hz	44 - 66 Hz	44 - 66 Hz
Input rated current (rated load)	1.25 A (200 Vac) / 0.67 A (500 Vac)	1.25 A (200 Vac) / 0.67 A (500 Vac)	1,97 A (230 Vac)	1,97 A (230 Vac)
Starting current limiter	< 30 A, NTC	< 30 A, NTC	< 30 A, NTC	< 30 A, NTC
Switch-on time	0.98 s (200 Vac) / 0.47 s (500 Vac)	0.98 s (200 Vac) / 0.47 s (500 Vac)	0,5 s (1 x 230 Vac / 3 x 400 Vac)	0,5 s (1 x 230 Vac / 3 x 400 Vac)
Mains buffering (rated load)	15 ms (200 Vac) / 126 ms (500 Vac)	15 ms (200 Vac) / 126 ms (500 Vac)	20 ms (230 Vac) / 78 ms (400 Vac)	20 ms (230 Vac) / 78 ms (400 Vac)
Power factor	0.52	0.52	0.52	0.52
Input fuse internal	3.15 A	3.15 A	6,3 AT	6,3 AT
Recommended back-up fuse (circuit breaker)	6 A, 10 A, 16 A, characteristic B, C	6 A, 10 A, 16 A, characteristic B, C	6 A, 10 A, 16 A, characteristic B, C	6 A, 10 A, 16 A, characteristic B, C
Transient surge voltage protection	Varistor	Varistor	Varistor	Varistor
Output				
Output rated voltage	24 Vdc	24 Vdc	24 Vdc	24 Vdc
Output voltage range	23 – 28.5 Vdc	23 – 28.5 Vdc	23 – 28.5 Vdc	23 – 28.5 Vdc
Output rated current	5 A	5 A	10 A	10 A
Power Boost	-	7.5 A / 5 s	-	15 A / 5 s @24 Vdc >260 Vac
Output limited current	typ. 5.5 A	8.5 A	11 A	typ. 11 A
Tripping of LS circuit breakers	max. B4	max. B4	max. B6/ C2	max. B6/ C2
Parallel connection	Yes	Yes	Yes	Yes
Serial operation	Yes	Yes	Yes	Yes
Power dissipation, no load/rated load	0.94 W / 16.36 W (230 Vac) 1.35 W / 14.55 W (400 Vac)	0.94 W / 16.36 W (230 Vac) 1.35 W / 14.55 W (400 Vac)	1,33 W / 27,77 W (230 Vac) 2 W / 20,27 W (400 Vac)	1,33 W / 27,77 W (230 Vac) 2 W / 20,27 W (400 Vac)
Max. power losses	18.2 W (200 Vac / 24 V / 5 A)	18.2 W (200 Vac / 24 V / 5 A)	27,77 W (230 Vac / 24 V / 10 A)	27,77 W (230 Vac / 24 V / 10 A)
Ripple factor	typ. 30 mVss	typ. 30 mVss	typ. 22 mVss	typ. 22 mVss
Efficiency	typ. 89 %	typ. 89 %	typ. 90% (230V) / 92,5% (400V)	typ. 90% (230V) / 92,5% (400V)
Resistance to reverse feed max.	35 Vdc	35 Vdc	35 Vdc	35 Vdc
Over-voltage-protection	max. 40 Vdc	max. 40 Vdc	typ. 40 Vdc	typ. 40 Vdc
Signaling				
Status indicator	LED green	LED green	LED green	LED green
Signal output	Relay contact	Relay contact	Relay contact	Relay contact
Approvals				
Approvals	cURus, cULus, GL (prepared)	cURus, cULus, GL (prepared)	cURus, cULus (prepared), GL (prepared)	cURus, cULus (prepared), GL (prepared)
Environment				
Type of cooling	natural convection	natural convection	natural convection	natural convection
Ambient temperature	-25 °C to +70 °C	-25 °C to +70 °C	-25 °C to +70 °C	-25 °C to +70 °C
Storage temperature	-25 °C ... +85 °C	-25 °C ... +85 °C	-25 °C ... +85 °C	-25 °C ... +85 °C
Derating	-2.5 %/K > +55 °C	-2.5 %/K > +55 °C	-2.5 %/K > +55 °C	-2.5 %/K > +55 °C
Required minimum spacing (left/right)	0 mm	0 mm	0 mm	0 mm
Required minimum spacing (over/under)	50 mm	50 mm	50 mm	50 mm
Safety and protection				
Protection index	IP 20	IP 20	IP 20	IP 20
Safety class	I, with PE connection	I, with PE connection	I, with PE connection	I, with PE connection
Order numbers				
Order Number	**PC-0224-050-0**	**PC-0224-050-2**	**PC-0224-100-0**	**PC-0224-100-2**

Single- and two-phase, primary switched mode power supply
PC 2AC

Mechanical data

Typ	Mounting position	Terminals signalling (direct plug-in technology Push-in)	Terminals output (direct plug-in technology Push-in)	Terminals input (direct plug-in technology Push-in)	Weight	Dimension (W x H x D)	Dimension picture (in mm)	A	B	C	D	E	F
PC-0224-050-0	horizontal for standard rail DIN TS35	max 2,5 mm²	max 2,5 mm²	max 2,5 mm²	0.6 kg	42 x 127 x 126 mm	1	127	63.5	3	42	118.5	126
PC-0224-050-2	horizontal for standard rail DIN TS35	max 2,5 mm²	max 2,5 mm²	max 2,5 mm²	0.6 kg	42 x 127 x 126 mm	1	127	63.5	3	42	118.5	126
PC-0224-100-0	horizontal for standard rail DIN TS35	max 2,5 mm²	max 2,5 mm²	max 2,5 mm²	0.8 kg	55 x 127 x 125 mm	1	127	63.5	3	55	118.5	125
PC-0224-100-2	horizontal for standard rail DIN TS35	max 2,5 mm²	max 2,5 mm²	max 2,5 mm²	0.8 kg	55 x 127 x 125 mm	1	127	63.5	3	55	118.5	125

Dimension pictures

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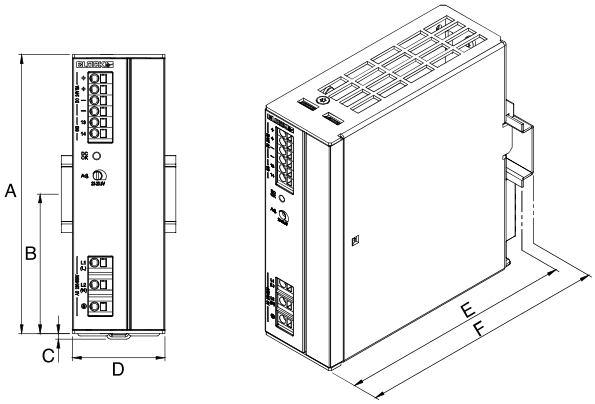

Three-phase, primary switched mode power supply
PC 3AC

General Data

- Nominal input voltage: 3 x 400 - 500 Vac
- Nominal output voltage: 24 Vdc, 48 Vdc, 60 Vdc
- Nominal output current: 10 - 40 A
- Ambient temperature -25 °C to +70 °C
- Protection index IP 20

Advantages

- Stabilised and adjustable output voltage
- Fast tripping of conventional circuit breakers
- DC OK signalling
- Parallel operation
- Push-in terminals
- Robust DIN rail mounting
- Resistant to transient overvoltages up to 4 kV
- Optional with 50 % Power Boost (PC-03xx-xxx-2)

Applications

The economic power supplies in the Power Compact series set new stan-dards in their class. Above-average robustness against transients and energetic surge pulses at their input and equipped with essential additional aspects for a worldwide high plant availability. The output voltage can be set easily using the rotary potentiometer on the front of the housing. The robust DIN rail fastening method and push-in connection terminals enable fast and secure mounting. All versions are available as option with 50% power reserves for high inrush current applications.

Standards

Primary switched mode power supply
to UL 60950, UL 508

Safety:
EN 61558-2-16, EN 60950-1

EMC:
EN 61204-3

Approvals

UL 60950, UL 508, GL (prepared)

Three-phase, primary switched mode power supply
PC 3AC

ePLAN data portal | BLOCK Website

Electrical data

Typ	PC-0324-100-0	PC-0324-100-2	PC-0324-200-0	PC-0324-200-2
Input				
Input rated voltage	400 - 500 Vac	400 - 500 Vac	400 - 500 Vac	400 - 500 Vac
Input voltage range	320 - 575 Vac	320 - 575 Vac	320 - 575 Vac	320 - 575 Vac
Input voltage derating	-	-	-	-
Rated frequency range	44 Hz - 66 Hz / 0 Hz	44 Hz - 66 Hz / 0 Hz	44 Hz - 66 Hz / 0 Hz	44 Hz - 66 Hz / 0 Hz
Input rated current (rated load)	3 x 0.73 A (400 Vac) / 0.66 A (500 Vac)	3 x 0.73 A (400 Vac) / 0.66 A (500 Vac)	3 x 1.21 A (400 Vac) / 1.03 A (500 Vac)	3 x 1.21 A (400 Vac) / 1.03 A (500 Vac)
Starting current limiter	< 30 A, NTC	< 30 A, NTC	< 30 A, NTC	< 30 A, NTC
Input fuse internal	-	-	-	-
Recommended back-up fuse (circuit breaker)	6 A, 10 A, 16 A, characteristic B, C	6 A, 10 A, 16 A, characteristic B, C	6 A, 10 A, 16 A, characteristic B, C	6 A, 10 A, 16 A, characteristic B, C
Transient surge voltage protection	Varistor	Varistor	Varistor	Varistor
Output				
Output rated voltage	24 Vdc	24 Vdc	24 Vdc	24 Vdc
Output voltage range	23 – 28.5 Vdc	23 – 28.5 Vdc	23 – 28.5 Vdc	23 – 28.5 Vdc
Output rated current	10 A	10 A	20 A	20 A
Output limited current	typ. 11 A (constant current)	typ. 11 A (constant current)	typ. 22 A (constant current)	typ. 22 A (constant current)
Power Boost	-	15 A / 5 s	-	30 A / 5 s
Tripping of LS circuit breakers	max. B6/C2 @ 2.5mm² /20m	max. B6/C2 @ 2.5mm² /20m	max. B6/C4/K4 @ 6mm² /20m	max. B6/C6/K4 @ 6mm² /20m
Parallel connection	Yes	Yes	Yes	Yes
Serial operation	Yes	Yes	Yes	Yes
Power dissipation, no load/rated load	2.7 W / 27.6 W (400 Vac)	2.7 W / 27.6 W (400 Vac)	4.03 W / 42.53 W (400 Vac)	4.03 W / 42.53 W (400 Vac)
Ripple factor	typ. 30 mVss	typ. 30 mVss	typ. 30 mVss	typ. 30 mVss
Efficiency	typ. 90 %	typ. 90 %	typ. 92 %	typ. 92 %
Resistance to reverse feed max.	35 Vdc	35 Vdc	35 Vdc	35 Vdc
Over-voltage-protection	max. 40 Vdc	max. 40 Vdc	max. 40 Vdc	max. 40 Vdc
Signaling				
Status indicator	LED green	LED green	LED green	LED green
Signal output	Relay contact	Relay contact	Relay contact	Relay contact
Approvals				
Approvals	cURus, cULus, GL (in preparation)	cURus, cULus, GL (in preparation)	cURus, cULus, GL (in preparation)	cURus, cULus, GL (in preparation)
Environment				
Type of cooling	natural convection	natural convection	natural convection	natural convection
Ambient temperature	-25 °C to +70 °C	-25 °C to +70 °C	-25 °C to +70 °C	-25 °C to +70 °C
Storage temperature	-25 °C to +85 °C	-25 °C to +85 °C	-25 °C to +85 °C	-25 °C to +85 °C
Derating	-2.5 %/K > +55 °C	-2.5 %/K > +55 °C	-2.5 %/K > +55 °C	-2.5 %/K > +55 °C
Required minimum spacing (left/right)	0 mm	0 mm	0 mm	0 mm
Required minimum spacing (over/under)	50 mm	50 mm	50 mm	50 mm
Safety and protection				
Protection index	IP 20	IP 20	IP 20	IP 20
Safety class	I, with PE connection	I, with PE connection	I, with PE connection	I, with PE connection
Order numbers				
Order Number	**PC-0324-100-0**	**PC-0324-100-2**	**PC-0324-200-0**	**PC-0324-200-2**

Three-phase, primary switched mode power supply
PC 3AC

ePLAN data portal | BLOCK Website

Electrical data

Typ	PC-0324-400-0	PC-0324-400-2	PC-0348-200-0	PC-0348-200-2
Input				
Input rated voltage	400 - 500 Vac	400 - 500 Vac	400 - 500 Vac	400 - 500 Vac
Input voltage range	320 - 575 Vac	320 - 575 Vac	320 - 575 Vac (450 - 800 Vdc)	320 - 575 Vac (450 - 800 Vdc)
Input voltage derating	-	-	-	-
Rated frequency range	44 Hz - 66 Hz / 0 Hz	44 Hz - 66 Hz / 0 Hz	44 Hz - 66 Hz / 0 Hz	44 Hz - 66 Hz / 0 Hz
Input rated current (rated load)	3 x 2.15 A (400 Vac) / 1.82 A (500 Vac)	3 x 2.15 A (400 Vac) / 1.82 A (500 Vac)	3 x 2,01 A (400 Vac)/ 1,63 A (520 Vac)	3 x 2,01 A (400 Vac)/ 1,63 A (520 Vac)
Starting current limiter	< 30 A, NTC	< 30 A, NTC	< 30 A, NTC	< 30 A, NTC
Input fuse internal	-	-	6,3 AT	6,3 AT
Recommended back-up fuse (circuit breaker)	6 A, 10 A, 16 A, characteristic B, C	6 A, 10 A, 16 A, characteristic B, C	6 A, 10 A, 16 A, characteristic B, C	6 A, 10 A, 16 A, characteristic B, C
Transient surge voltage protection	Varistor	Varistor	Varistor	Varistor
Output				
Output rated voltage	24 Vdc	24 Vdc	48 Vdc	48 Vdc
Output voltage range	23 – 28.5 Vdc	23 – 28,5 Vdc	40 – 56 Vdc	40 – 56 Vdc
Output rated current	40 A	40 A	20 A	20 A
Output limited current	typ. 44 A (constant current)	typ. 44 A (constant current)	typ. 22 A (constant current)	typ. 22 A (constant current)
Power Boost	-	60 A / 5 s	-	30 A / 5 s
Tripping of LS circuit breakers	max. B10/C6/K4 @ 6/10mm²/40m	max. B10/C6/K4 @ 6/10mm²/40m	max. B10/C6/K6	max. B10/C6/K6
Parallel connection	Yes	Yes	Yes	Yes
Serial operation	Yes	Yes	Yes	Yes
Power dissipation, no load/rated load	2.78 W / 83.91 W (400 Vac)	2.78 W / 83.91 W (400 Vac)	5 W / 71,14 W (400 Vac)	5 W / 71,14 W (400 Vac)
Ripple factor	typ. 30 mVss	typ. 30 mVss	typ. 25 mVss	typ. 25 mVss
Efficiency	typ. 92.5 %	typ. 92.5 %	typ. 93%	typ. 93%
Resistance to reverse feed max.	35 Vdc	35 Vdc	63 Vdc	63 Vdc
Over-voltage-protection	max. 40 Vdc	max. 40 Vdc	typ. 60 Vdc	typ. 60 Vdc
Signaling				
Status indicator	LED green	LED green	LED green	LED green
Signal output	Relay contact	Relay contact	Relay contact	Relay contact
Approvals				
Approvals	cURus, cULus, GL (in preparation)	cURus, cULus, GL (in preparation)	cURus, cULus, GL (in preparation)	cURus, cULus, GL (in preparation)
Environment				
Type of cooling	natural convection	natural convection	natural convection	natural convection
Ambient temperature	-25 °C to +70 °C	-25 °C to +70 °C	-25 °C to +70 °C	-25 °C to +70 °C
Storage temperature	-25 °C to +85 °C	-25 °C to +85 °C	-25 °C to +85 °C	-25 °C to +85 °C
Derating	-2.5 %/K > +55 °C	-2.5 %/K > +55 °C	-2.5 %/K > +55 °C	-2.5 %/K > +55 °C
Required minimum spacing (left/right)	0 mm	0 mm	0 mm	0 mm
Required minimum spacing (over/under)	50 mm	50 mm	50 mm	50 mm
Safety and protection				
Protection index	IP 20	IP 20	IP 20	IP 20
Safety class	I, with PE connection	I, with PE connection	I, with PE connection	I, with PE connection
Order numbers				
Order Number	**PC-0324-400-0**	**PC-0324-400-2**	**PC-0348-200-0**	**PC-0348-200-2**

Three-phase, primary switched mode power supply
PC 3AC

Electrical data

Typ	PC-0360-160-0
Input	
Input rated voltage	400 - 500 Vac
Input voltage range	390 - 575 Vac (550 - 800 Vdc)
Input voltage derating	-
Rated frequency range	44 Hz - 66 Hz / 0 Hz
Input rated current (rated load)	3 x 2,02 A (400 Vac)/ 1,6 A (520 Vac)
Starting current limiter	< 30 A, NTC
Input fuse internal	6,3 AT
Recommended back-up fuse (circuit breaker)	6 A, 10 A, 16 A, characteristic B, C
Transient surge voltage protection	Varistor
Output	
Output rated voltage	60 Vdc
Output voltage range	40 – 61 Vdc
Output rated current	16 A
Output limited current	typ. 11 A (constant current)
Power Boost	-
Tripping of LS circuit breakers	max. B10/C6/K6
Parallel connection	Yes
Serial operation	Yes
Power dissipation, no load/rated load	7,5 W / 68,93 W (400 Vac)
Ripple factor	typ. 25 mVss
Efficiency	typ. 93%
Resistance to reverse feed max.	63 Vdc
Over-voltage-protection	typ. 63 Vdc
Signaling	
Status indicator	LED green
Signal output	Relay contact
Approvals	
Approvals	cURus, cULus, GL (in preparation)
Environment	
Type of cooling	natural convection
Ambient temperature	-25 °C to +70 °C
Storage temperature	-25 °C to +85 °C
Derating	-2.5 %/K > +55 °C
Required minimum spacing (left/right)	0 mm
Required minimum spacing (over/under)	50 mm
Safety and protection	
Protection index	IP 20
Safety class	I, with PE connection
Order numbers	
Order Number	**PC-0360-160-0**

Three-phase, primary switched mode power supply
PC 3AC

Mechanical data

Typ	Mounting position	Terminals signalling (direct plug-in technology Push-in)	Terminals output (direct plug-in technology Push-in)	Terminals input (direct plug-in technology Push-in)	Weight	Dimension (W x H x D)	Dimension picture (in mm)	A	B	C	D	E	F
PC-0324-100-0	horizontal for standard rail DIN TS35	max 2,5 mm²	max 2,5 mm²	max 2,5 mm²	1.02 kg	55 x 127 x 152 mm	1	127	63.5	3	55	152.5	160
PC-0324-100-2	horizontal for standard rail DIN TS35	max 2,5 mm²	max 2,5 mm²	max 2,5 mm²	1.02 kg	55 x 127 x 152 mm	1	127	63.5	3	55	152.5	160
PC-0324-200-0	horizontal for standard rail DIN TS35	max 2,5 mm²	max 6 mm²	max 2,5 mm²	1.51 kg	80 x 127 x 152 mm	1	127	63.5	3	80	152.5	160
PC-0324-200-2	horizontal for standard rail DIN TS35	max 2,5 mm²	max 6 mm²	max 2,5 mm²	1.51 kg	80 x 127 x 152 mm	1	127	63.5	3	80	152.5	160
PC-0324-400-0	horizontal for standard rail DIN TS35	max 2,5 mm²	max 16 mm²	max 2,5 mm²	2.71 kg	126 x 127 x 170 mm	1	127	63.5	3	126	170.5	178
PC-0324-400-2	horizontal for standard rail DIN TS35	max 2,5 mm²	max 16 mm²	max 2,5 mm²	2.71 kg	126 x 127 x 170 mm	1	127	63.5	3	126	170.5	178
PC-0348-200-0	horizontal for standard rail DIN TS35	max 2,5 mm²	max 16 mm²	max 2,5 mm²	2.76 kg	126 x 127 x 170 mm	1	127	63.5	3	126	170.5	178
PC-0348-200-2	horizontal for standard rail DIN TS35	max 2,5 mm²	max 16 mm²	max 2,5 mm²	2.77 kg	126 x 127 x 170 mm	1	127	63.5	3	126	170.5	178
PC-0360-160-0	horizontal for standard rail DIN TS35	max 2,5 mm²	max 16 mm²	max 2,5 mm²	2.76 kg	126 x 127 x 170 mm	1	127	63.5	3	126	170.5	178

Dimension pictures

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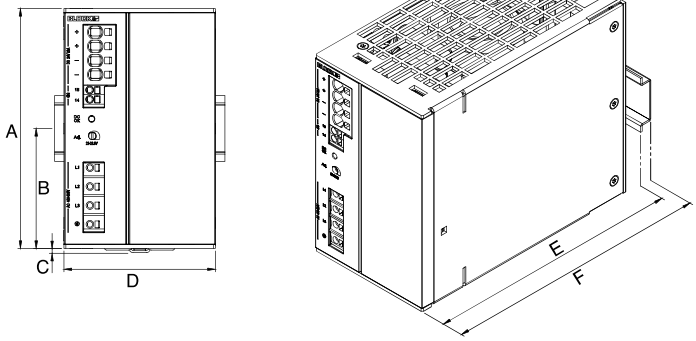


Three-phase, primary switched mode power supply, Economy
PVSE 400

General Data

- Input rated voltage 3 x 400 – 500 Vac
- Output rated voltage 24 - 48 Vdc
- Output rated current 10 – 40 A
- Ambient temperature -25 °C to +70 °C
- Efficiency up to 95 %
- Protection index IP 20

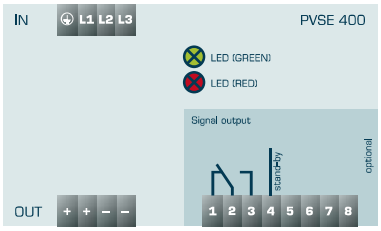
Advantages

- Stabilised and adjustable output voltage
- Up to 200 % Real Power Boost for 4 seconds
- Top Boost to trip conventional circuit breakers
- DC OK signalling
- Parallel connection option
- Service-friendly spring-loaded connector system
- Can be supplied with active inrush current limiting option
- Can be supplied with isolated DC OK signalling function
- Panel installation on mounting rails

Applications

Primary switched mode power supply with massive power reserves focussing on the key task of power supply.

Sample application



Standards

Primary switched mode power supply
to UL 60950, UL 508

Safety:
EN 61558-2-16, EN 60950-1

EMC:
EN 61204-3

Approvals

UL/CSA 60950 recognised (E213214), UL508 listed (E219022)

Three-phase, primary switched mode power supply, Economy
PVSE 400

Electrical data

Typ	PVSE 400/24-10	PVSE 400/24-20	PVSE 400/24-40	PVSE 400/30-25
Input				
Input rated voltage	3 x 400 - 500 Vac	3 x 400 - 500 Vac	3 x 400 - 500 Vac	3 x 400 - 500 Vac
Input voltage range	340 - 550 Vac (480 - 780 Vdc)	340 - 550 Vac (480 - 780 Vdc)	340 - 550 Vac (480 - 780 Vdc)	340 - 550 Vac (480 - 780 Vdc)
Input rated current (rated load)	0.6 A (3 x 340 Vac)	1.1 A (3 x 340 Vac)	2 A (3 x 340 Vac)	1.6 A (3 x 340 Vac)
Rated frequency range	44 Hz - 66 Hz / 0 Hz	44 Hz - 66 Hz / 0 Hz	44 Hz - 66 Hz / 0 Hz	44 Hz - 66 Hz / 0 Hz
Starting current limiter	<30 A, NTC	<30 A, NTC	<30 A, NTC	<30 A, NTC
Input fuse internal	3 x 1.6 A (slow-blow)	3 x 2.5 A (slow-blow)	3 x 6.3 A (slow-blow)	3 x 6.3 A (slow-blow)
Recommended back-up fuse (circuit breaker)	6 A, 10 A, 16 A, characteristics B, C	6 A, 10 A, 16 A, characteristics B, C	10 A, 16 A, characteristics B, C	10 A, 16 A, characteristics B, C
Harmonic correction	passive	passive	passive	passive
Mains buffering (rated load)	22.6 / 51.5 ms (400 / 500 Vac)	13.2 / 36.8 ms (400 / 500 Vac)	15.6 / 42.9 ms (400 / 500 Vac)	15.6 / 42.9 ms (400 / 500 Vac)
Transient surge voltage protection	Varistor	Varistor	Varistor	Varistor
Output				
Output rated voltage	24 Vdc	24 Vdc	24 Vdc	30 Vdc
Output voltage range	22.8 - 28.8 Vdc	22.8 - 28.8 Vdc	22.8 - 28.8 Vdc	27 - 43 Vdc
Resistance to reverse feed max.	35 Vdc	35 Vdc	35 Vdc	63 Vdc
Output rated current	10.00 A	20.00 A	40.00 A	25.00 A
Parallel connection	Yes	Yes	Yes	Yes
Power Boost	20 A / 4 s (15 A / 8 s)	40 A / 4 s (30 A / 8 s)	60 A / 4 s (50 A / 8 s)	45 A / 4 s (35 A / 8 s)
Overload behaviour	Constant current	Constant current	Constant current	Constant current
max. Power loss idling/nominal load	7.8 / 19.9 W	8.3 / 38.4 W	7.0 / 66.2 W	5.2 / 47.3 W
Serial operation	Yes	Yes	Yes	Yes
Efficiency	typ. 91.7 %	typ. 92.9 %	typ. 93.1 %	typ. 94.1 %
Ripple factor	typ. 70 mVss	typ. 70 mVss	typ. 70 mVss	typ. 70 mVss
Top Boost	70 A / 50 ms	80 A / 50 ms	100 A / 50 ms	85 A / 50 ms
Signaling				
Power Good (DC OK)	LED green, LED red	LED green, LED red	LED green, LED red	LED green, LED red
Potential free signal contact	Yes	Yes	Yes	Yes
Stand-by-input	Yes	Yes	Yes	Yes
Approvals				
Approvals	cURus, cULus	cURus, cULus	cURus, cULus	cURus, cULus
Environment				
Ambient temperature	-25 °C to +70 °C	-25° C to +70° C	-25 °C to +55 °C	-25° C to +70° C
Storage temperature	-25 °C to +85 °C	-25 °C to +85 °C	-25 °C to +85 °C	-25 °C to +85 °C
Derating	-3 %/K > +50 °C	-3 %/K > +50 °C	-5 %/K > +45 °C	-3 %/K > +50 °C
Safety and protection				
Protection index	IP 20	IP 20	IP 20	IP 20
Safety class	I, with PE connection	I, with PE connection	I, with PE connection	I, with PE connection
Accessory				
Connector for signalling	PV-CON (optional)	PV-CON (optional)	PV-CON (optional)	PV-CON (optional)
Side DIN rail mounting	PV-TS35M (optional)	PV-TS35M (optional)	PV-TS35M (optional)	PV-TS35M (optional)
Direct screw fastening plate for lateral mounting	PV-WB2 (optional)	PV-WB2 (optional)	PV-WB2 (optional)	PV-WB2 (optional)
Order numbers				
Order Number	**PVSE 400/24-10**	**PVSE 400/24-20**	**PVSE 400/24-40**	**PVSE 400/30-25**

Three-phase, primary switched mode power supply, Economy
PVSE 400

Electrical data

Typ	PVSE 400/48-10	PVSE 400/48-20
Input		
Input rated voltage	3 x 400 - 500 Vac	3 x 400 - 500 Vac
Input voltage range	340 - 550 Vac (480 - 780 Vdc)	340 - 550 Vac (480 - 780 Vdc)
Input rated current (rated load)	1.1 A (3 x 340 Vac)	2 A (3 x 340 Vac)
Rated frequency range	44 Hz - 66 Hz / 0 Hz	44 Hz - 66 Hz / 0 Hz
Starting current limiter	<30 A, NTC	<30 A, NTC
Input fuse internal	3 x 6.3 A (slow-blow)	3 x 6.3 A (slow-blow)
Recommended back-up fuse (circuit breaker)	10 A, 16 A, characteristics B, C	10 A, 16 A, characteristics B, C
Harmonic correction	passive	passive
Mains buffering (rated load)	12 / 35 ms (400 / 500 Vac)	15.6 / 42.9 ms (400 / 500 Vac)
Transient surge voltage protection	Varistor	Varistor
Output		
Output rated voltage	48 Vdc	48 Vdc
Output voltage range	37 - 51 Vdc	37 - 51 Vdc
Resistance to reverse feed max.	63 Vdc	63 Vdc
Output rated current	10.00 A	20.00 A
Parallel connection	Yes	Yes
Power Boost	15 A / 4 s (12.5 A / 8 s)	30 A / 4 s (25 A / 8 s)
Overload behaviour	Constant current	Constant current
max. Power loss idling/nominal load	8.2 / 38 W	5.2 / 59.2 W
Serial operation	Yes	Yes
Efficiency	typ. 93 %	typ. 94.4 %
Ripple factor	typ. 70 mVss	typ. 70 mVss
Top Boost	55 A / 50 ms	80 A / 50 ms
Signaling		
Power Good (DC OK)	LED green, LED red	LED green, LED red
Potential free signal contact	Yes	Yes
Stand-by-input	Yes	Yes
Approvals		
Approvals	cURus, cULus	cURus, cULus
Environment		
Ambient temperature	-25° C to +70° C	-25° C to +70° C
Storage temperature	-25 °C to +85 °C	-25 °C to +85 °C
Derating	-3 %/K > +50 °C	-3 %/K > +50 °C
Safety and protection		
Protection index	IP 20	IP 20
Safety class	I, with PE connection	I, with PE connection
Accessory		
Connector for signalling	PV-CON (optional)	PV-CON (optional)
Side DIN rail mounting	PV-TS35M (optional)	PV-TS35M (optional)
Direct screw fastening plate for lateral mounting	PV-WB2 (optional)	PV-WB2 (optional)
Order numbers		
Order Number	**PVSE 400/48-10**	**PVSE 400/48-20**

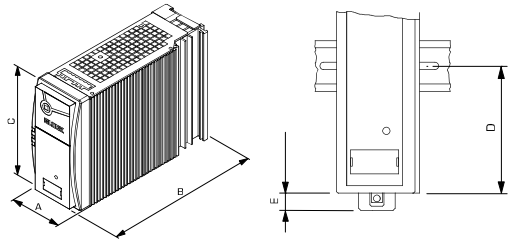
Three-phase, primary switched mode power supply, Economy
PVSE 400

Mechanical data

Typ	Terminals input, (spring clamp terminal, pluggable)	Terminals output, (spring clamp terminal, pluggable)	Terminals signalling, (spring clamp terminal, pluggable)	Mounting position	Fixing method	Weight	Dimension picture (in mm)	A	B	C	D	E
PVSE 400/24-10	max. 2.5 mm²	max. 2.5 mm²	max. 0.5 mm²	vertical	DIN Rail system TS35	1.30 kg	1	57	179.5	127	76	12.5
PVSE 400/24-20	max. 2.5 mm²	max. 10 mm²	max. 0.5 mm²	vertical	DIN Rail system TS35	1.76 kg	2	77	179.5	127	76	12.5
PVSE 400/24-40	max. 2.5 mm²	max. 10 mm²	max. 0.5 mm²	vertical	DIN Rail system TS35	3.03 kg	3	128	205.5	127	76	12.5
PVSE 400/30-25	max. 2.5 mm²	max. 10 mm²	max. 0.5 mm²	vertical	DIN Rail system TS35	3.03 kg	3	128	205.5	127	76	12.5
PVSE 400/48-10	max. 2.5 mm²	max. 10 mm²	max. 0.5 mm²	vertical	DIN Rail system TS35	1.76 kg	2	77	179.5	127	76	12.5
PVSE 400/48-20	max. 2.5 mm²	max. 10 mm²	max. 0.5 mm²	vertical	DIN Rail system TS35	3.03 kg	3	128	205.5	127	76	12.5

Dimension pictures

1



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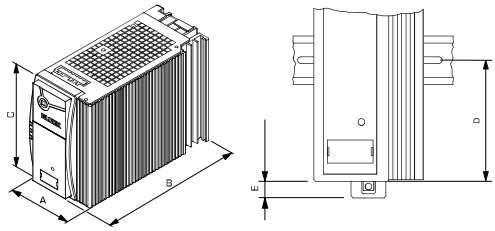

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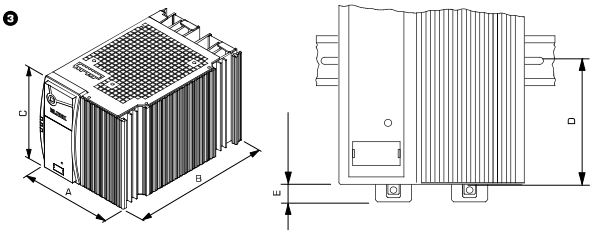


Three-phase, primary switched mode power supply, Basic
PVSB 400

General Data

Input rated voltage 3 x 400 – 500 Vac
Output rated voltage 24 Vdc
Output rated current 10 – 40 A
Ambient temperature -25 °C to +70 °C
Efficiency up to 94 %
Protection index IP 20

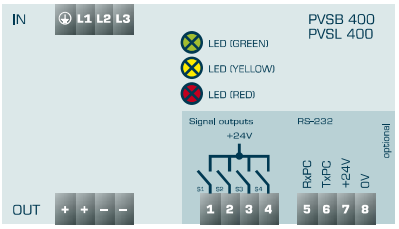
Advantages

LCD
Output current and output voltage monitoring
RS-232 interface
Stabilised and adjustable output voltage
Up to 200 % Real Power Boost for 4 seconds
Top Boost to trip conventional circuit breakers
3 LEDs and active signal outputs to indicate operating status
Parallel connection option
Service-friendly spring-loaded connector system
Can be supplied with active inrush current limiting option
Panel installation on mounting rails

Applications

Primary switched mode power supply with high power reserves for all automation requirements with a variety of parameter setting and display functions, including output current and output voltage monitoring.

Sample application



Standards

Primary switched mode power supply
to UL 60950, UL 508

Safety:
EN 61558-2-16, EN 60950-1

EMC:
EN 61204-3

Approvals

UL/CSA 60950 recognised (E213214), UL508 listed (E219022)

Three-phase, primary switched mode power supply, Basic
PVSB 400

Electrical data

Typ	PVSB 400/24-10	PVSB 400/24-20	PVSB 400/24-40
Input			
Input rated voltage	3 x 400 - 500 Vac	3 x 400 - 500 Vac	3 x 400 - 500 Vac
Input voltage range	340 - 550 Vac (480 - 780 Vdc)	340 - 550 Vac (480 - 780 Vdc)	340 - 550 Vac (480 - 780 Vdc)
Input rated current (rated load)	0.6 A (3 x 340 Vac)	1.1 A (3 x 340 Vac)	2 A (3 x 340 Vac)
Rated frequency range	44 Hz - 66 Hz / 0 Hz	44 Hz - 66 Hz / 0 Hz	44 Hz - 66 Hz / 0 Hz
Starting current limiter	<30 A, NTC	<30 A, NTC	<30 A, NTC
Input fuse internal	3 x 1.6 A (slow-blow)	3 x 2.5 A (slow-blow)	3 x 6.3 A (slow-blow)
Recommended back-up fuse (circuit breaker)	6 A, 10 A, 16 A, characteristics B, C	6 A, 10 A, 16 A, characteristics B, C	10 A, 16 A, characteristics B, C
Harmonic correction	passive	passive	passive
Transient surge voltage protection	Varistor	Varistor	Varistor
Mains buffering (rated load)	22.6 / 51.5 ms (400 / 500 Vac)	13.2 / 36.8 ms (400 / 500 Vac)	15.6 / 42.9 ms (400 / 500 Vac)
Output			
Output rated voltage	24 Vdc	24 Vdc	24 Vdc
Output voltage range	22.8 - 28.8 Vdc	22.8 - 28.8 Vdc	22.8 - 28.8 Vdc
Resistance to reverse feed max.	35 Vdc	35 Vdc	35 Vdc
Output rated current	10.00 A	20.00 A	40.00 A
Parallel connection	Yes	Yes	Yes
Power Boost	20 A / 4 s (15 A / 8 s)	40 A / 4 s (30 A / 8 s)	60 A / 4 s (50 A / 8 s)
Overload behaviour	Constant current or fuse	Constant current or fuse	Constant current or fuse
Efficiency	typ. 91.7 %	typ. 92.9 %	typ. 93.1 %
Ripple factor	typ. 70 mVss	typ. 70 mVss	typ. 70 mVss
Top Boost	70 A / 50 ms	80 A / 50 ms	100 A / 50 ms
Signaling			
Power Good (DC OK)	LED green, LED red, LED yellow	LED green, LED red, LED yellow	LED green, LED red, LED yellow
Potential free signal contact	No	No	No
Active signal outputs	4 x 24 Vdc, 2 configurable	4 x 24 Vdc, 2 configurable	4 x 24 Vdc, 2 configurable
Stand-by-input	No	No	No
Display, interface	Yes, RS 232	Yes, RS 232	Yes, RS 232
Approvals			
Approvals	cURus, cULus	cURus, cULus	cURus, cULus
Environment			
Ambient temperature	-25° C to +70° C	-25° C to +70° C	-25° C to +55° C
Storage temperature	-25 °C to +85 °C	-25 °C to +85 °C	-25 °C to +85 °C
Derating	-3 %/K > +50 °C	-3 %/K > +50 °C	-5 %/K > +50 °C
Safety and protection			
Protection index	IP 20	IP 20	IP 20
Safety class	I, with PE connection	I, with PE connection	I, with PE connection
Accessory			
Connector for signalling	PV-CON (optional)	PV-CON (optional)	PV-CON (optional)
Adapter cable for interface	PV-KOK2 (optional)	PV-KOK2 (optional)	PV-KOK2 (optional)
Side DIN rail mounting	PV-TS35M (optional)	PV-TS35M (optional)	PV-TS35M (optional)
Direct screw fastening plate for lateral mounting	PV-WB2 (optional)	PV-WB2 (optional)	PV-WB2 (optional)
Order numbers			
Order Number	**PVSB 400/24-10**	**PVSB 400/24-20**	**PVSB 400/24-40**

Three-phase, primary switched mode power supply, Basic
PVSB 400

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Mechanical data

Typ	Terminals input, (spring clamp terminal, pluggable)	Terminals output, (spring clamp terminal, pluggable)	Terminals signalling, (spring clamp terminal, pluggable)	Mounting position	Fixing method	Weight	Dimension picture (in mm)	A	B	C	D	E
PVSB 400/24-10	max. 2.5 mm²	max. 2.5 mm²	max. 0.5 mm²	vertical	DIN Rail system TS35	1.30 kg	❶	57	179.5	127	76	12.5
PVSB 400/24-20	max. 2.5 mm²	max. 10 mm²	max. 0.5 mm²	vertical	DIN Rail system TS35	1.76 kg	❷	77	179.5	127	76	12.5
PVSB 400/24-40	max. 2.5 mm²	max. 10 mm²	max. 0.5 mm²	vertical	DIN Rail system TS35	3.03 kg	❸	128	205.5	127	76	12.5

Dimension pictures

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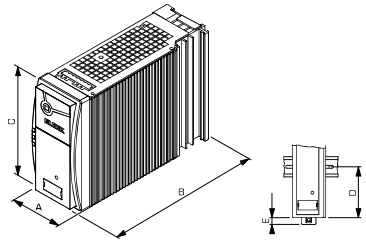

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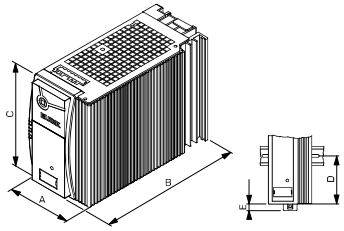

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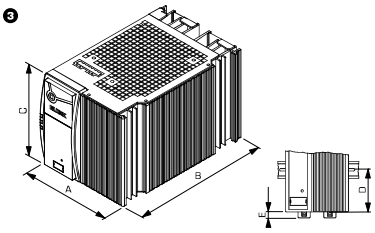


Three-phase, primary switched mode power supply, Line **PVSL 400**

General Data

- Input rated voltage 3 x 400 – 500 Vac
- Output rated voltage 24 Vdc
- Output rated current 10 – 40 A
- Ambient temperature -25 °C to +70 °C
- Efficiency up to 94 %
- Protection index IP 20

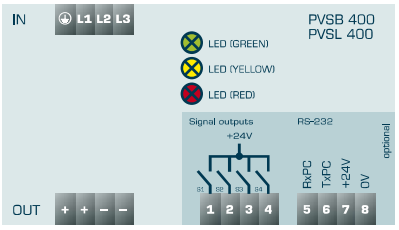
Advantages

- Power input monitoring
- LCD
- Output current and output voltage monitoring
- RS-232 interface
- Stabilised and adjustable output voltage
- Up to 200 % Real Power Boost for 4 seconds
- Top Boost to trip conventional circuit breakers
- 3 LEDs and active signal outputs to indicate operating status
- Parallel connection option
- Service-friendly spring-loaded connector system
- Can be supplied with active inrush current limiting
- Panel installation on mounting rails

Applications

Primary switched mode power supply with high power reserves for all automation requirements with a variety of parameter setting and display functions, including output current and output voltage monitoring. Intelligent additional functions for the input power to replace a variety of external devices such as diagnostic voltmeter, phase meter, hour meter.

Sample application



Standards

Primary switched mode power supply
to UL 60950, UL 508

Safety:
EN 61558-2-16, EN 60950-1

EMC:
EN 61204-3

Approvals

UL/CSA 60950 recognised (E213214), UL508 listed (E219022)

Three-phase, primary switched mode power supply, Line **PVSL 400**

ePLAN data portal | BLOCK Website

Electrical data

Typ	PVSL 400/24-10	PVSL 400/24-20	PVSL 400/24-40
Input			
Input rated voltage	3 x 400 - 500 Vac	3 x 400 - 500 Vac	3 x 400 - 500 Vac
Input voltage range	340 - 550 Vac (480 - 780 Vdc)	340 - 550 Vac (480 - 780 Vdc)	340 - 550 Vac (480 - 780 Vdc)
Input rated current (rated load)	0.6 A (3 x 340 Vac)	1.1 A (3 x 340 Vac)	2 A (3 x 340 Vac)
Rated frequency range	44 Hz - 66 Hz / 0 Hz	44 Hz - 66 Hz / 0 Hz	44 Hz - 66 Hz / 0 Hz
Starting current limiter	<30 A, NTC	<30 A, NTC	<30 A, NTC
Input fuse internal	3 x 1.6 A (slow-blow)	3 x 2.5 A (slow-blow)	3 x 6.3 A (slow-blow)
Recommended back-up fuse (circuit breaker)	6 A, 10 A, 16 A, characteristics B, C	6 A, 10 A, 16 A, characteristics B, C	10 A, 16 A, characteristics B, C
Harmonic correction	passive	passive	passive
Mains buffering (rated load)	22.6 / 51.5 ms (400 / 500 Vac)	13.2 / 36.8 ms (400 / 500 Vac)	15.6 / 42.9 ms (400 / 500 Vac)
Transient surge voltage protection	Varistor	Varistor	Varistor
Output			
Output rated voltage	24 Vdc	24 Vdc	24 Vdc
Output voltage range	22.8 - 28.8 Vdc	22.8 - 28.8 Vdc	22.8 - 28.8 Vdc
Resistance to reverse feed max.	35 Vdc	35 Vdc	35 Vdc
Output rated current	10.00 A	20.00 A	40.00 A
Parallel connection	Yes	Yes	Yes
Power Boost	20 A / 4 s (15 A / 8 s)	40 A / 4 s (30 A / 8 s)	60 A / 4 s (50 A / 8 s)
Overload behaviour	Constant current or fuse	Constant current or fuse	Constant current or fuse
Efficiency	typ. 91.7 %	typ. 92.9%	typ. 93.1 %
Ripple factor	typ. 70 mVss	typ. 70 mVss	typ. 70 mVss
Top Boost	70 A / 50 ms	80 A / 50 ms	100 A / 50 ms
Signaling			
Power Good (DC OK)	LED green, LED red, LED yellow	LED green, LED red, LED yellow	LED green, LED red, LED yellow
Active signal outputs	4 x 24 Vdc, 2 configurable	4 x 24 Vdc, 2 configurable	4 x 24 Vdc, 2 configurable
Stand-by-input	No	No	No
Display, interface	Yes, RS 232	Yes, RS 232	Yes, RS 232
Approvals			
Approvals	cURus, cULus	cURus, cULus	cURus, cULus
Environment			
Ambient temperature	-25 °C to +70 °C	-25° C to +70° C	-25° C to +55° C
Storage temperature	-25 °C to +85 °C	-25 °C to +85 °C	-25 °C to +85 °C
Derating	-3 %/K > +50 °C	-3%/K > +50 °C	-5 %/K > +50 °C
Safety and protection			
Protection index	IP 20	IP 20	IP 20
Safety class	I, with PE connection	I, with PE connection	I, with PE connection
Accessory			
Connector for signalling	PV-CON (optional)	PV-CON (optional)	PV-CON (optional)
Adapter cable for interface	PV-KOK2 (optional)	PV-KOK2 (optional)	PV-KOK2 (optional)
Side DIN rail mounting	PV-TS35M (optional)	PV-TS35M (optional)	PV-TS35M (optional)
Direct screw fastening plate for lateral mounting	PV-WB2 (optional)	PV-WB2 (optional)	PV-WB2 (optional)
Order numbers			
Order Number	**PVSL 400/24-10**	**PVSL 400/24-20**	**PVSL 400/24-40**

Three-phase, primary switched mode power supply, Line
PVSL 400

Mechanical data

Typ	Terminals input, (spring clamp terminal, pluggable)	Terminals output, (spring clamp terminal, pluggable)	Terminals signalling, (spring clamp terminal, pluggable)	Mounting position	Fixing method	Weight	Dimension picture (in mm)	A	B	C	D	E
PVSL 400/24-10	max. 2.5 mm²	max. 2.5 mm²	max. 0.5 mm²	vertical	DIN Rail system TS35	1.30 kg	❶	57	179.5	127	76	12.5
PVSL 400/24-20	max. 2.5 mm²	max. 10 mm²	max. 0.5 mm²	vertical	DIN Rail system TS35	1.76 kg	❷	77	179.5	127	76	12.5
PVSL 400/24-40	max. 2.5 mm²	max. 10 mm²	max. 0.5 mm²	vertical	DIN Rail system TS35	3.03 kg	❸	128	205.5	127	76	12.5

Dimension pictures

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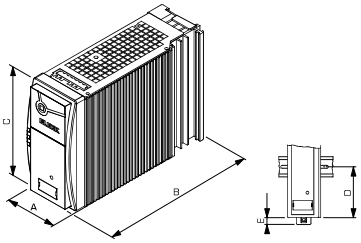

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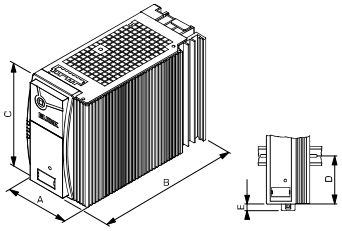

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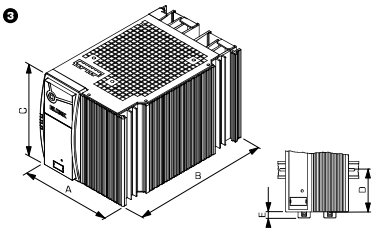

Constant current LED driver for High Power LED
PLED

BLOCK Website

General Data

- Input rated voltage 220 – 240 Vac
- Output rated voltage max. 94 V
- Output rated current 350 – 1400 mA
- Ambient temperature -25 °C to +60 °C
- Efficiency up to 90 %
- Protection index IP 20

Advantages

- Dimmable versions available (10 – 100 %)
- Extremely robust against transient overvoltages
- Protection of LEDs against voltage peaks and overtemperature (external NC required)
- Very wide output voltage range for a wide range of applications
- Long service life

Applications

Outdoor LED lightning with increased overvoltage resistance requirements

Standards

Safety:
EN 61347-2-13

EMC:
EN 6100-3-2, EN 55015 (emitted interference), EN 61547 (interference immunity)

Approvals

VDE (EN 61347)

Constant current LED driver for High Power LED
PLED

BLOCK Website

Electrical data

Typ	PLED-0194-007-0	PLED-0194-007-1	PLED-0194-011-0	PLED-0194-011-1
Input				
Input rated voltage	220 - 240 Vac	220 - 240 Vac	220 - 240 Vac	220 - 240 Vac
Input voltage range	196 Vac - 264 Vac 220 Vdc - 375 Vdc	196 Vac - 264 Vac 220 Vdc - 375 Vdc	196 Vac - 264 Vac 220 Vdc - 375 Vdc	196 Vac - 264 Vac 220 Vdc - 375 Vdc
Over voltage protection	6 kV (1,2 / 50 µs)	6 kV (1,2 / 50 µs)	6 kV (1,2 / 50 µs)	6 kV (1,2 / 50 µs)
Power factor	> 0,95	> 0,95	> 0,95	> 0,95
Input fuse internal	6,3 AT	6,3 AT	6,3 AT	6,3 AT
Frequency Range	47...63 Hz / 0 Hz	47...63 Hz / 0 Hz	47...63 Hz / 0 Hz	47...63 Hz / 0 Hz
Output				
Output voltage normal operation	max. 94 V	max. 94 V	max. 94 V	max. 94 V
Output voltage range	12 - 94 V (47 V at 700 mA)	12 - 94 V (47 V at 700 mA)	12 - 94 V (63 V bei 1050 mA)	12 - 94 V (63 V at 1050 mA)
Over-voltage-protection	<120 V	<120 V	<120 V	<120 V
Output rated current (switchable)	350 mA / 700 mA	350 mA / 700 mA	700 mA / 1050 mA	700 mA / 1050 mA
Overload behaviour	Hiccup	Hiccup	Hiccup	Hiccup
Parallel connection	Yes	Yes	Yes	Yes
max. Power loss idling/nominal load	4,7 W (350 mA)/ 4,8 W (700 mA)	4,7 W (350 mA)/ 4,8 W (700 mA)	6,6 W (700 mA)/ 7,2 W (1050 mA)	6,6 W (700 mA)/ 7,2 W (1050 mA)
Dimming range	-	10 ... 100 %	-	10 ... 100 %
Dimming voltage	-	1 ... 10 V	-	1 ... 10 V
Efficiency	typ. 88 %	typ. 88 %	typ. 90 %	typ. 90 %
Environment				
Ambient temperature	-25 °C - 60 °C	-25 °C - 60 °C	-25 °C - 60 °C	-25 °C - 60 °C
Storage temperature	-40 °C - 80 °C	-40 °C - 80 °C	-40 °C - 80 °C	-40 °C - 80 °C
Required minimum spacing (left/right)	0 mm	0 mm	0 mm	0 mm
Type of cooling	natural convection	natural convection	natural convection	natural convection
Safety and protection				
Protection index	IP 20	IP 20	IP 20	IP 20
Safety class (prepared)	II	II	II	II
Order numbers				
Order Number	**PLED-0194-007-0**	**PLED-0194-007-1**	**PLED-0194-011-0**	**PLED-0194-011-1**

Constant current LED driver for High Power LED
PLED

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Mechanical data

Typ	Terminals input (direct plug-in technology Push-in)	Terminals output (direct plug-in technology Push-in)	Dimming input spring-loaded, plug-in	Fixing method	Dimension (W x H x D)	Weight	Dimension picture (in mm)	A	B	C	D	E	F
PLED-0194-007-0	max. 2,5 mm²	max. 2,5 mm²	-	Screw-on housing	40 x 32 x 148,5 mm	0.14 kg	❶	22	131	4.2	32	40	148.5
PLED-0194-007-1	max. 2,5 mm²	max. 2,5 mm²	max. 0,5 mm²	Screw-on housing	40 x 32 x 148,5 mm	0.14 kg	❶	22	131	4.2	32	40	148.5
PLED-0194-011-0	max. 2,5 mm²	max. 2,5 mm²	-	Screw-on housing	65 x 32 x 148,5 mm	0.25 kg	❶	47	131	4.2	32	65	148.5
PLED-0194-011-1	max. 2,5 mm²	max. 2,5 mm²	max. 0,5 mm²	Screw-on housing	65 x 32 x 148,5 mm	0.25 kg	❶	47	131	4.2	32	65	148.5

Dimension pictures

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