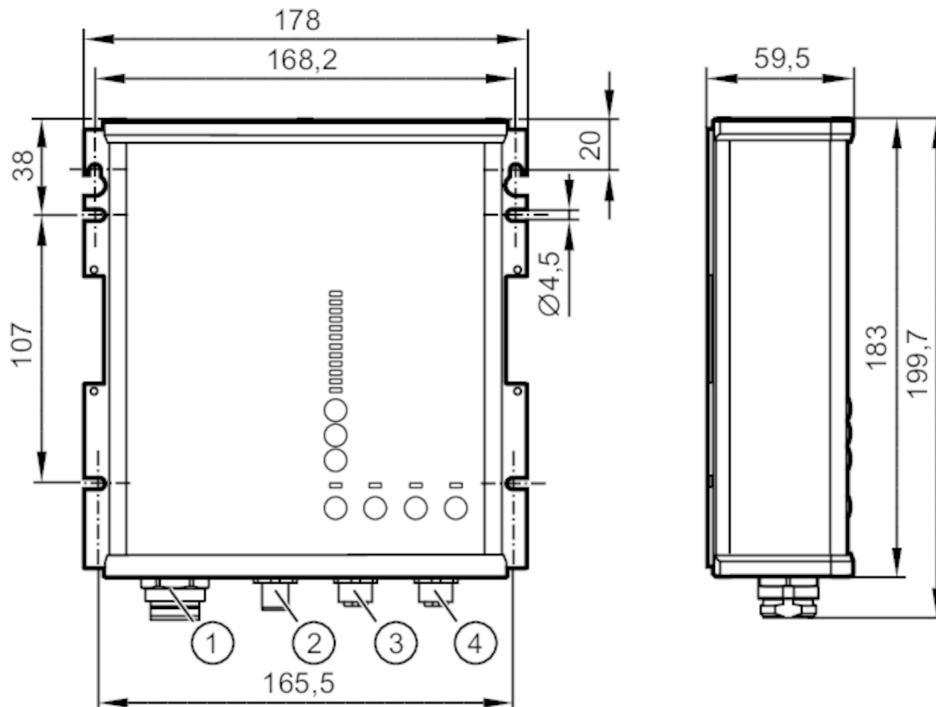


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Switched-mode power supply 24 V DC

PSU-1AC/24VDC-12A/IO-Link/IP67



- 1 voltage supply
- 2 IO-Link
- 3 Output voltage
- 4 Output voltage



Electrical data

Nominal voltage AC	[V]	230
Nominal voltage DC	[V]	300
Nominal frequency AC	[Hz]	50...60
Input voltage range AC	[V]	100...240; (-15 % / +10 %)
Input voltage DC	[V]	110...300; (-20 % / +20 %)
Output voltage DC	[V]	24...28
Protection class		I
Max. power-on delay time	[ms]	2000
Max. output current at min. output voltage	[A]	12.5
Max. output current at max. output voltage	[A]	10.7
Output power (permanent)	[W]	300
Output power (peak)	[W]	600
Power factor (nominal voltage 230 V AC / 50 Hz)		0.97
Number of output circuits		4
Efficiency (nominal voltage 120 V AC / 60 Hz)	[%]	94.3
Efficiency (nominal voltage 230 V AC / 50 Hz)	[%]	95.7

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Mains buffering time (nominal voltage 120 V AC / 60 Hz) [ms]	44
Mains buffering time (nominal voltage 230 V AC / 50 Hz) [ms]	44
Input current (nominal voltage 120 V AC / 60 Hz) [A]	3.2
Input current (nominal voltage 230 V AC / 50 Hz) [A]	1.68

Interfaces

Communication interface	IO-Link	
Transmission type	COM3 (230,4 kBaud)	
IO-Link revision	1.1	
Profiles	Common - I&D	Identification and Diagnosis
SIO mode	yes	
Min. process cycle time [ms]	2	
Supported DeviceIDs	Type of operation	DeviceID
	default	1535

Operating conditions

Ambient temperature [°C]	-25...55
Note on ambient temperature	the derating of the current load indicated in the operating instructions is to be taken into account at the following ambient temperature: 70 °C
Storage temperature [°C]	-40...85
Max. relative air humidity [%]	95; (relative humidity)
Max. height above sea level [m]	5000
Protection	IP 65; IP 67
Degree of soiling	3

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Tests / approvals		
EMC	EN 61000-4-2 CD	8 kV / Failure criterion A
	EN 61000-4-2 AD	15 kV / Failure criterion A
	EN 61000-4-3	80 Mhz...2.7 GHz / 20 V/m Failure criterion A
	EN 61000-4-3	2.7 GHz...6 GHz kV / 10 V/m Failure criterion A
	EN 61000-4-8	50 / 60 Hz / 30 A/m Failure criterion A
	EN 61000-4-4 Burst	4 kV / Failure criterion A
	EN 61000-4-5 Surge	2 kV Lx / Ly / Failure criterion A
	EN 61000-4-5 Surge	4 kV L / PE / Failure criterion A
	EN 61000-4-5 Surge	1 kV + / - / Failure criterion A
	EN 61000-4-5 Surge	1 kV + - / PE / Failure criterion A
	EN 61000-4-5 Surge	1 kV + - / PE / Failure criterion A
	EN 61000-4-5 Surge	1 kV DC-OK / PE / Failure criterion A
	EN 61000-4-6	0.15...80 MHz / 20 V Failure criterion A
	EN 61000-4-11	0 V up to 1 cycle / Failure criterion A
	EN 61000-4-11	40 % of V / 200 ms Failure criterion A
	EN 61000-4-11	70 % of V / 500 ms Failure criterion A
	EN 61000-4-11	0 V / 5000 ms Failure criterion C
	VDE 0160	1550 V / 1.3 ms Failure criterion A
	EN 55032	Class B
	EN 55032	Class B
	EN 55011	Class B
	EN 61000-3-2	
	EN 61000-3-3	
Continuous shock resistance	IEC 60068-2-27	30 g 6 ms / 20 g 11 ms
Vibration resistance	IEC 60068-2-6	2...17.8 Hz ± 1.6mm / 17.8...500 Hz 2 g
MTTF [years]		31
Mechanical data		
Weight [g]		1524.5
Housing		rectangular
Type of mounting		Backplane mounting
Dimensions [mm]		199.7 x 178 x 59.5
Material		housing: Aluminum Alloy; housing cap: PC; screws: steel bronzed
Remarks		
Pack quantity		1 pcs.

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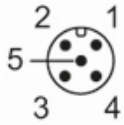


Switched-mode power supply 24 V DC

PSU-1AC/24VDC-12A/IOL/IP67

Electrical connection - IO-Link

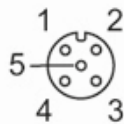
Connector: 1 x M12; coding: A; Locking: brass



1: L+ (US)
2: n.c.
3: L- (US)
4: IO-Link
5: n.c.

Electrical connection - Output voltage

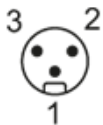
Connector: 2 x M12; coding: A; Locking: brass



1: L+ (UA2)
2: L- (UA1)
3: L- (UA2)
4: L+ (UA1)
5: FE

Electrical connection - voltage supply

Connector: 1 x 7/8"; Locking: brass



1: PE
2: L
3: N

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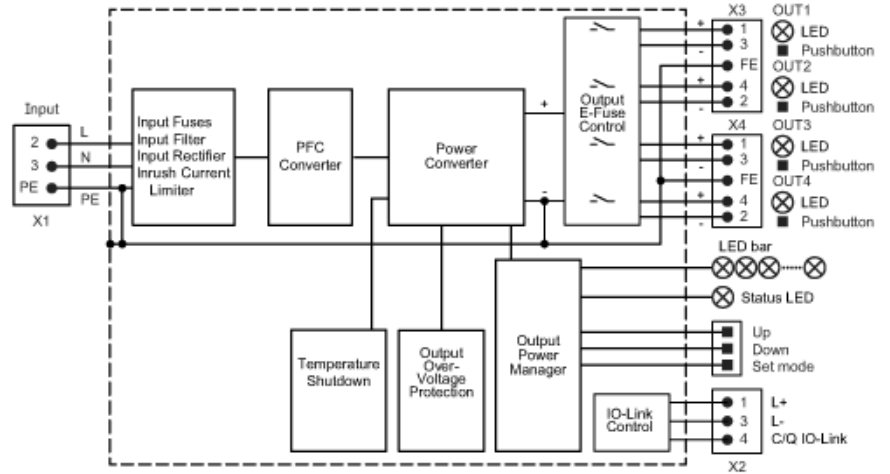


Switched-mode power supply 24 V DC

PSU-1AC/24VDC-12A/IOL/IP67

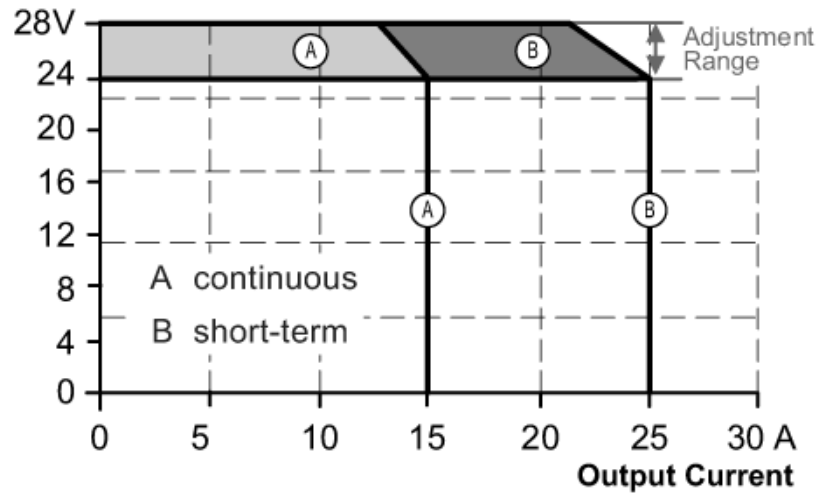
Diagrams and graphs

Block diagram



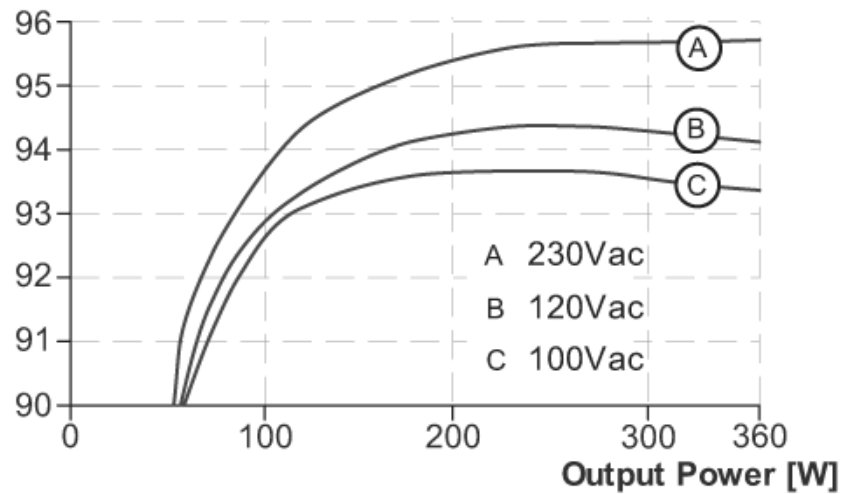
Output curve

Output Voltage



Characteristic curve for degree of efficiency / power loss

Efficiency [%]



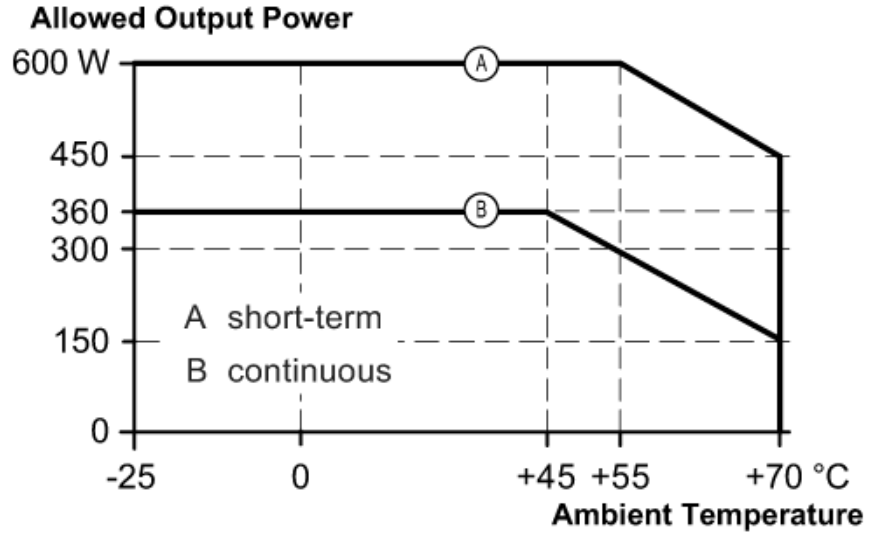
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Characteristic curve for derating



Characteristic curve for mains buffering time

