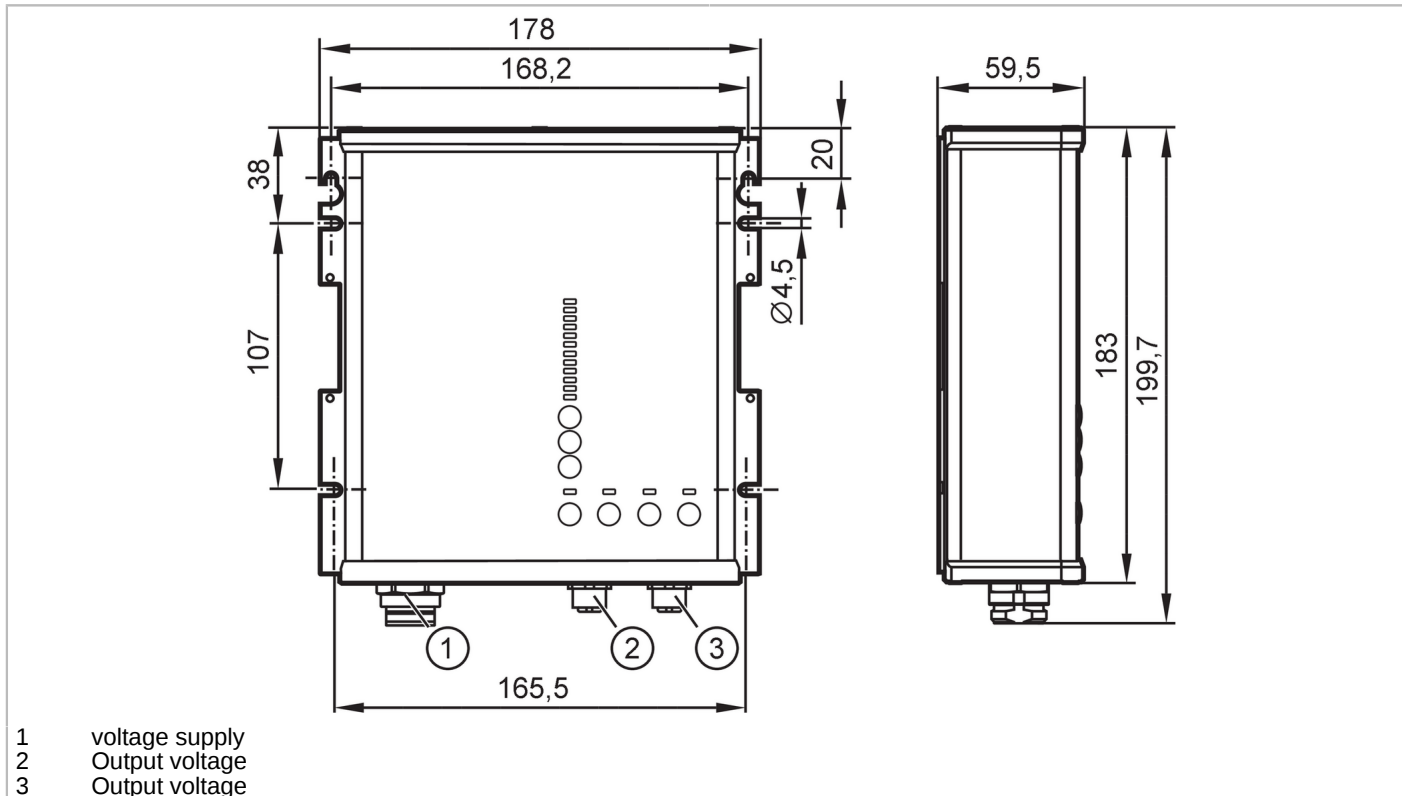


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Switched-mode power supply 24 V DC

PSU-3AC/24VDC-20A/IP67



Electrical data		
Nominal voltage AC	[V]	400 / 480
Nominal frequency AC	[Hz]	50...60
Input voltage range AC	[V]	323...552
Output voltage DC	[V]	24...28
Protection class		I
Max. power-on delay time	[ms]	2000
Output voltage tolerance	[%]	0.2
Max. output current at min. output voltage	[A]	20.8
Max. output current at max. output voltage	[A]	17.8
Output power (permanent)	[W]	500
Output power (peak)	[W]	1000
Power factor (nominal voltage 400 V AC / 50 Hz)		0.94
Power factor (nominal voltage 480 V AC / 50 Hz)		0.95
Number of output circuits		4
Switch-on peak current (nominal voltage 400 V AC / 60 Hz)	[A]	2.1
Switch-on peak current (nominal voltage 480 V AC / 50 Hz)	[A]	2

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Efficiency (nominal voltage 400 V AC / 60 Hz) [%]	94.2
Efficiency (nominal voltage 480 V AC / 50 Hz) [%]	94
Mains buffering time (nominal voltage 400 V AC / 60 Hz) [ms]	24
Mains buffering time (nominal voltage 480 V AC / 50 Hz) [ms]	24
Input current (nominal voltage 400 V AC / 60 Hz) [A]	1.1
Input current (nominal voltage 480 V AC / 50 Hz) [A]	0.9

Outputs

Load capacitance, total [mF]	12.5
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Operating conditions

Ambient temperature [°C]	-25...70
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

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]		27

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Mechanical data		
Weight	[g]	1558.8
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.

Electrical connection - Output voltage

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



- 1: US
- 2: GND UA
- 3: GND US
- 4: UA
- 5: FE

Electrical connection - voltage supply

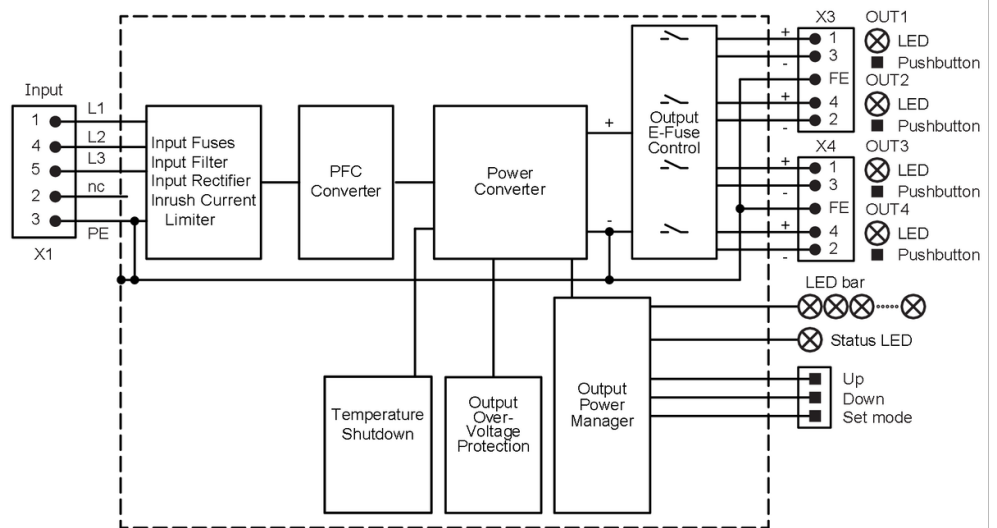
Connector: 1 x 7/8"; Locking: brass



- 1: L1
- 2: N
- 3: PE
- 4: L2
- 5: L3

Diagrams and graphs

Block diagram



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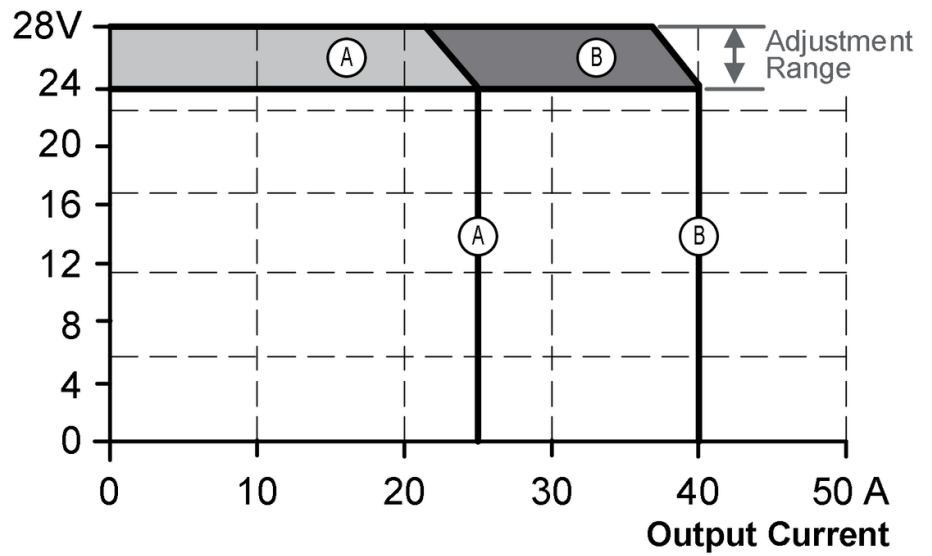


Switched-mode power supply 24 V DC

PSU-3AC/24VDC-20A/-IP67

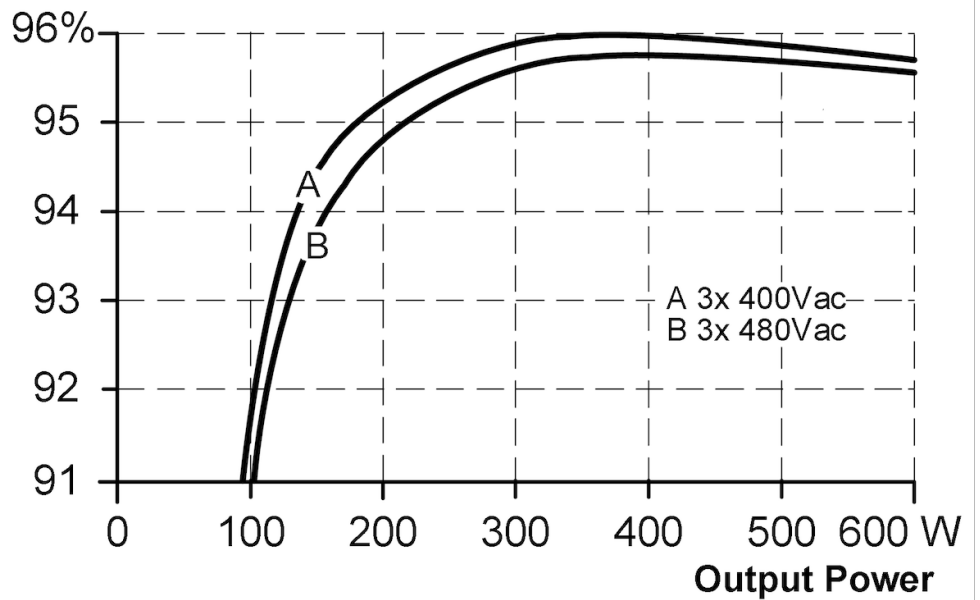
Output curve

Output Voltage



Characteristic curve for degree of efficiency / power loss

Efficiency



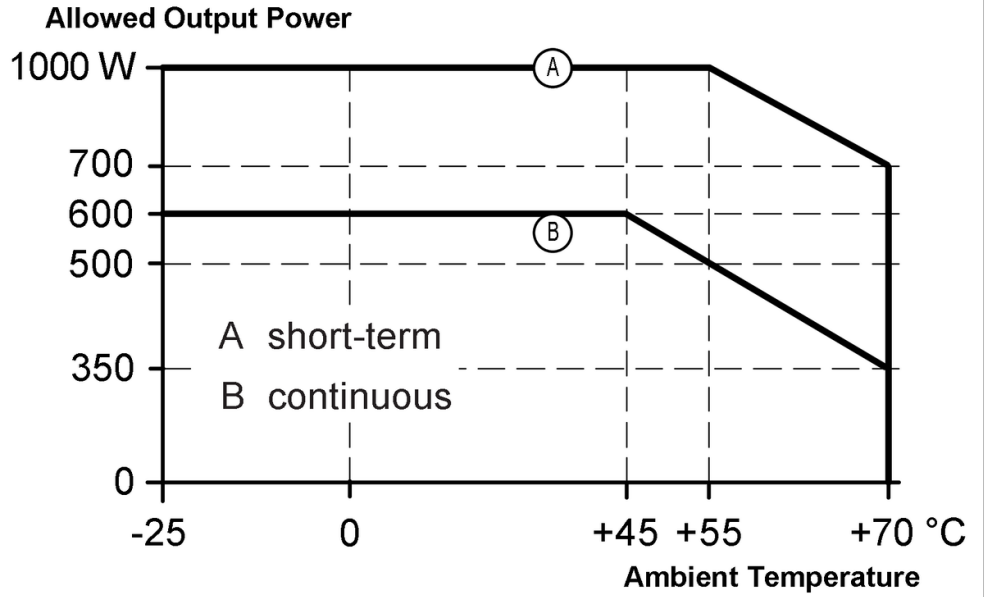
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Switched-mode power supply 24 V DC

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Characteristic curve for derating



Characteristic curve for mains buffering time

