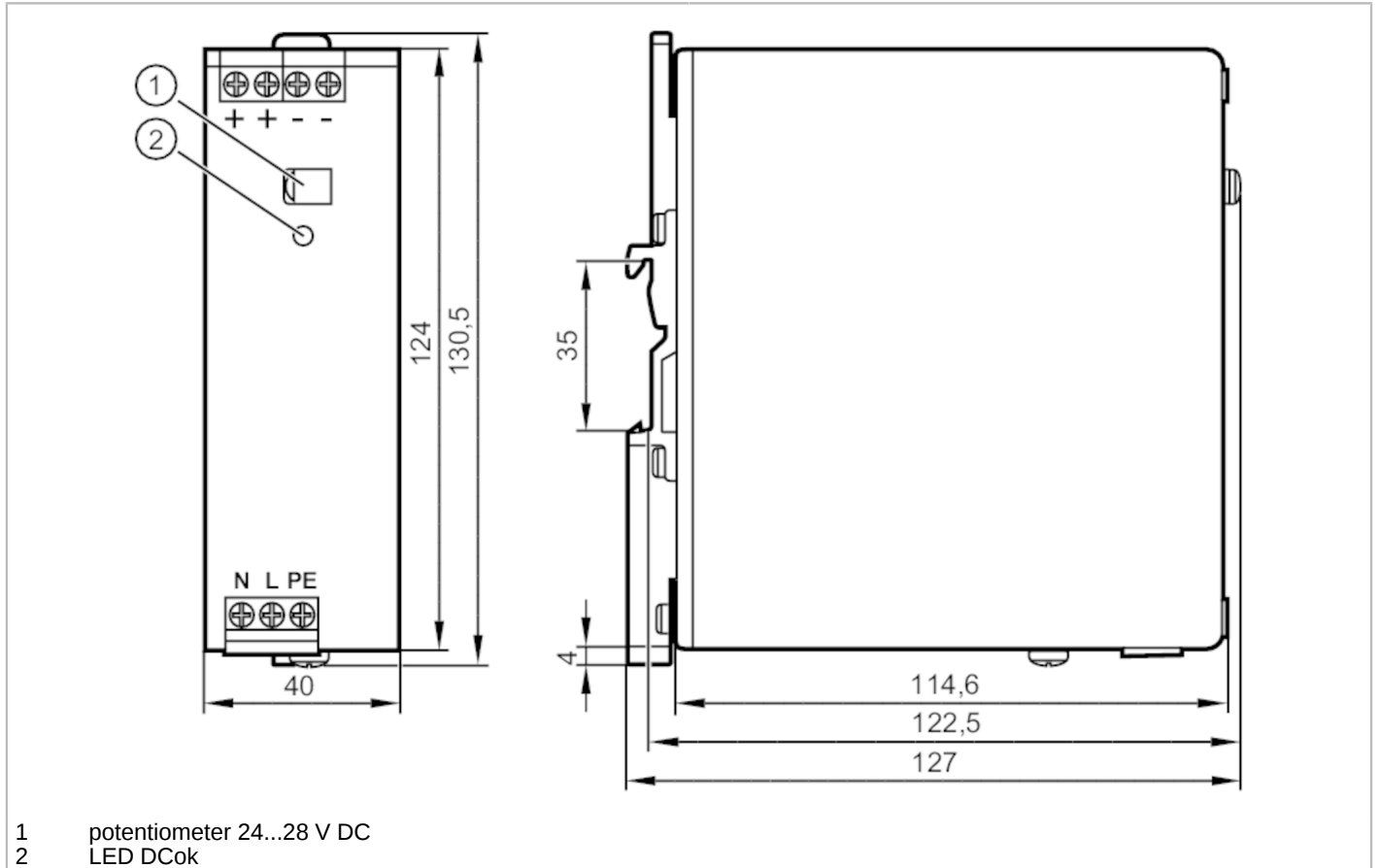


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Switched-mode power supply 24 V DC

PSU-1AC/24VDC-5A



Electrical data	
Frequency AC	[Hz] 47...64
Operating voltage tolerance	[%] 10
Operating voltage tolerance 2	[%] 10
Operating voltage	[V] automatic range selection
Nominal voltage AC	[V] < 230
Input voltage range AC	[V] 100...120 / 200...240; (automatic range selection)
Output voltage DC	[V] 24...28
Protection class	I; (IEC 61140)
Overvoltage protection	yes; (< 39 DC)
Output voltage	[V] adjustable; output voltage to SELV, PELV
Max. output current at min. output voltage	[A] 5
Max. output current at max. output voltage	[A] 4.3
Max. output current peak at min. output voltage	[A] 6
Max. output current peak at max. output voltage	[A] 5.1
Output power (permanent)	[W] 120
Output power (peak)	[W] 144
Note on output power (peak)	[W] ≤ 45 °C permitted continuously; > 45 °C < 1 minute every 10 minutes

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Power factor (nominal voltage 120 V AC / 60 Hz)	0.56
Power factor (nominal voltage 230 V AC / 50 Hz)	0.47
Power reserve [%]	20
Number of output circuits	1
Max. residual ripple [mV]	50
Switch-on peak current (nominal voltage 120 V AC / 60 Hz) [A]	3
Switch-on peak current (nominal voltage 230 V AC / 50 Hz) [A]	3
Inrush current limitation	yes
Efficiency (nominal voltage 120 V AC / 60 Hz) [%]	89.4
Efficiency (nominal voltage 230 V AC / 50 Hz) [%]	90.2
External input protection	$\leq B-10 A / \leq C-6 A$
Derating [W/K]	3 (60...70 °C)
Mains buffering time (nominal voltage 120 V AC / 60 Hz) [ms]	80
Mains buffering time (nominal voltage 230 V AC / 50 Hz) [ms]	78
Input current (nominal voltage 120 V AC / 60 Hz) [A]	2.05
Input current (nominal voltage 230 V AC / 50 Hz) [A]	1.23
Power loss (nominal voltage 120 V AC / 60 Hz) [W]	14.5
Power loss (nominal voltage 230 V AC / 50 Hz) [W]	13.2
Back feeding protection [V]	35

Outputs

Short-circuit proof	yes
Overload protection	yes
Overload performance	constant output current
Parallel connection of outputs possible	no
Series connection of outputs possible	yes

Operating conditions

Ambient temperature [°C]	-25...70
Note on ambient temperature	observe the free space for convection (see operating instructions)
Storage temperature [°C]	-40...85
Max. relative air humidity [%]	95; (IEC 60068-2-30)
Protection	IP 20; (EN 60529)
Degree of soiling	2; (IEC 62103: conductive soiling not permitted)

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Tests / approvals

EMC	EN 61000-6-1	
	EN 61000-6-2	
	EN 61000-6-4	
Vibration resistance	IEC 60068-2-6	±1,6 mm 2...17,8 Hz / 2 g 17,8...500 Hz
Shock resistance	IEC 60068-2-27	30 g 6 ms / 20 g 11 ms

Mechanical data

Weight	[g]	594.5
Type of mounting		rail; (TH35 (EN 60715))
Dimensions	[mm]	124 x 40 x 122.5
Material		steel sheet

Displays / operating elements

Display	DCok	1 x LED
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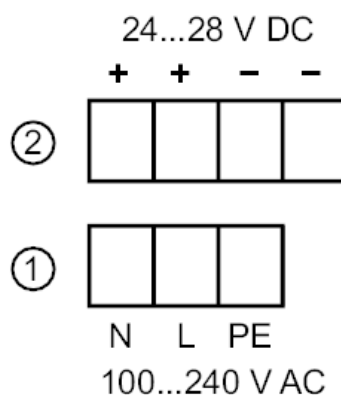
Remarks

Remarks	series connection of outputs only applies to identical units up to max. 150 V DC overall voltage
	100 V AC mains power and permanent P > 120 W may result in thermal shutdown
Pack quantity	1 pcs.

Electrical connection

screw terminals:

Connection



- 1: primary
- 2: secondary

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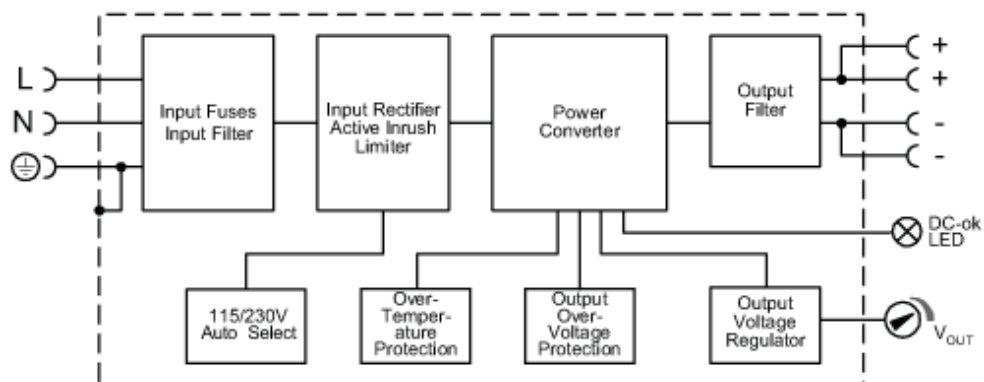


Switched-mode power supply 24 V DC

PSU-1AC/24VDC-5A

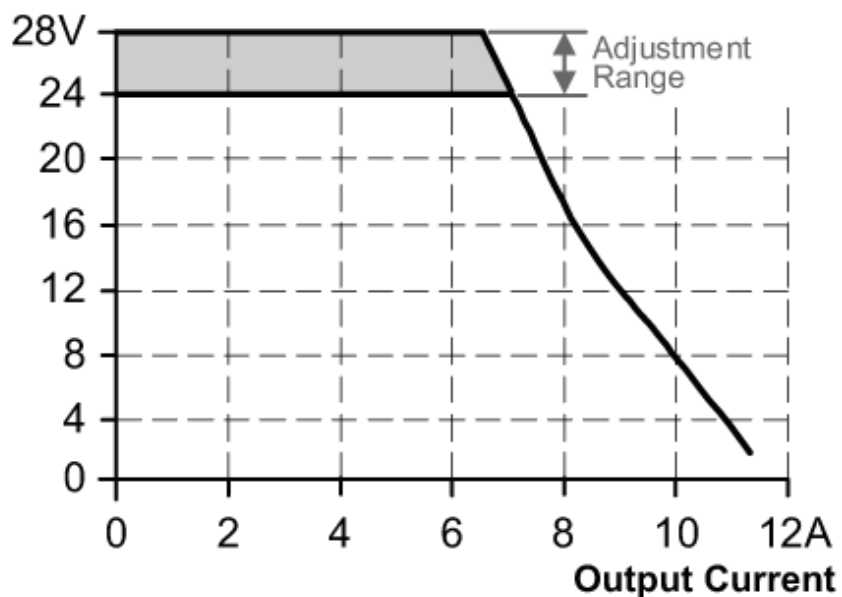
Diagrams and graphs

Block diagram



Output curve

Output Voltage



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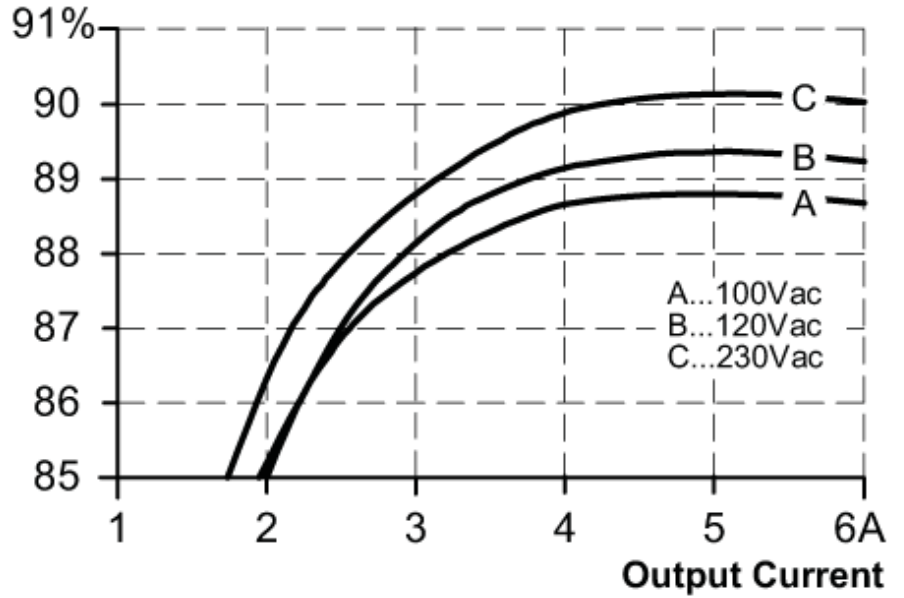


Switched-mode power supply 24 V DC

PSU-1AC/24VDC-5A

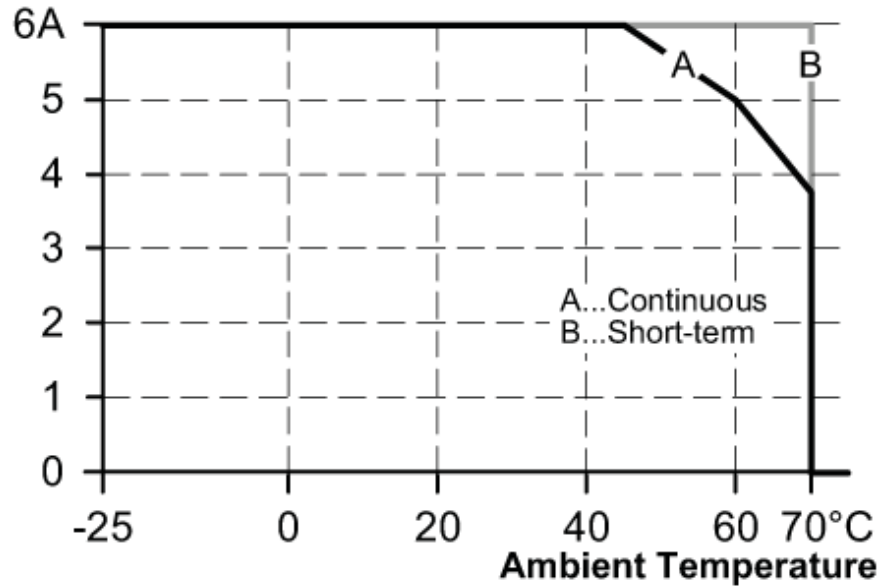
Characteristic curve for degree of efficiency / power loss

Efficiency



Characteristic curve for derating

Allowed Output Current at 24V



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Switched-mode power supply 24 V DC

PSU-1AC/24VDC-5A

Characteristic curve for mains buffering time

Hold-up Time at 24V

