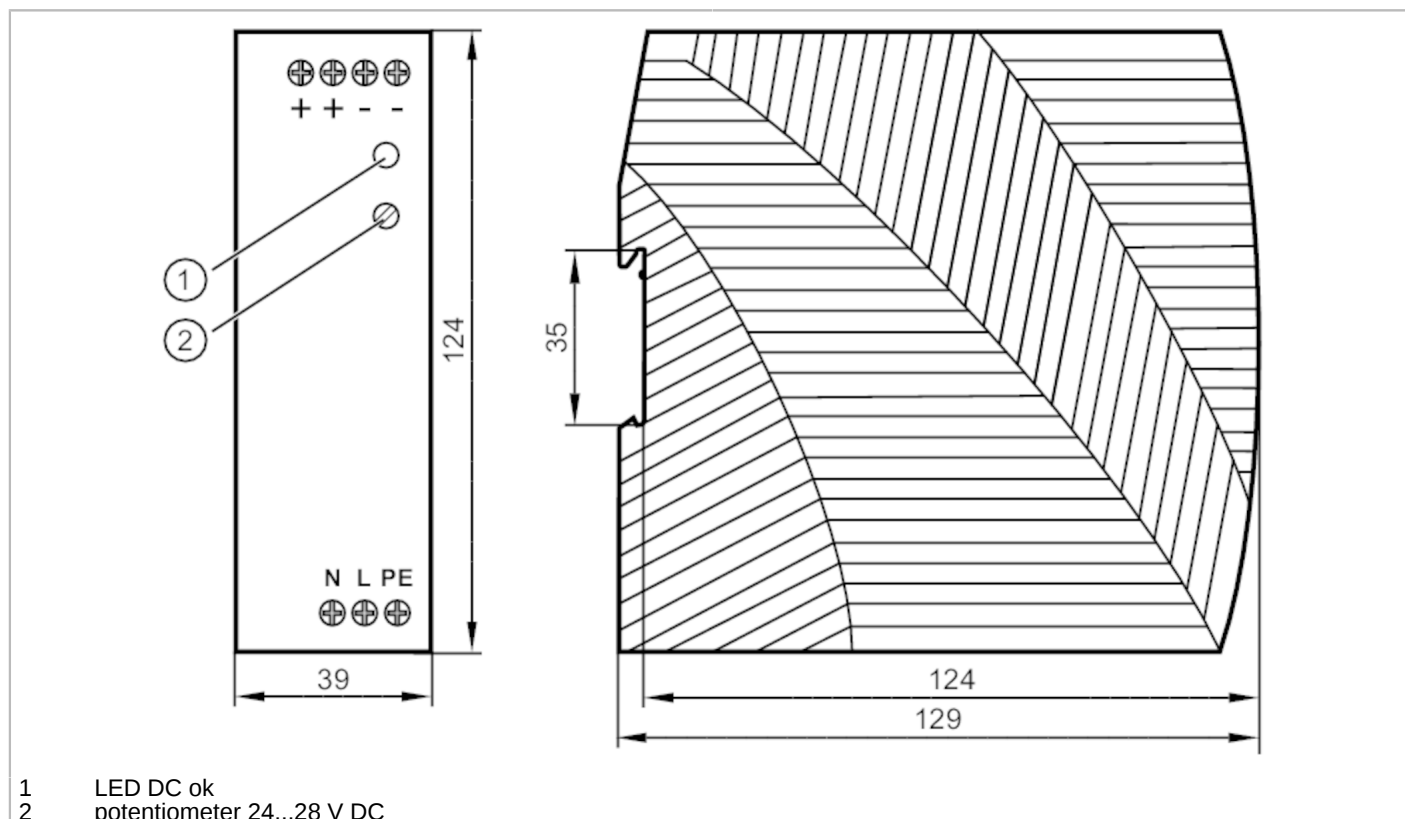


DN1042



Switched-mode power supply 24 V DC

PSU-1AC/200-240VAC/24VDC-5A



Electrical data

Frequency AC	[Hz]	47...63
Operating voltage tolerance	[%]	10
Nominal voltage AC	[V]	230
Input voltage range AC	[V]	200...240
Output voltage DC	[V]	24...28
Protection class		I; (IEC 61140)
Overvoltage protection		yes; (< 34 V 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
Power factor (nominal voltage 230 V AC / 50 Hz)		0.54
Number of output circuits		1
Max. residual ripple	[mV]	100



Switched-mode power supply 24 V DC

PSU-1AC/200-240VAC/24VDC-5A

Switch-on peak current (nominal voltage 230 V AC / 50 Hz)	[A]	28
Efficiency (nominal voltage 230 V AC / 50 Hz)	[%]	90.5
External input protection		$\leq B-10\text{ A} / \leq C-6\text{ A}$
Derating	[W/K]	3 (55...70 °C)
Mains buffering time (nominal voltage 230 V AC / 50 Hz)	[ms]	60
Input current (nominal voltage 230 V AC / 50 Hz)	[A]	1.06
Power loss (nominal voltage 230 V AC / 50 Hz)	[W]	12.6
Back feeding protection	[V]	35

Outputs

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

Operating conditions

Ambient temperature	[°C]	-10...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)
Pollution degree		2; (IEC 62103: conductive soiling not permitted)

Tests / approvals

EMC	EN 61000-6-1	
	EN 61000-6-2	
	EN 61000-6-4	
Vibration resistance	IEC 60068-2-6	$\pm 1,6\text{ mm } 2...17,8\text{ Hz} / 2\text{ g } 17,8...500\text{ Hz}$
Shock resistance	IEC 60068-2-27	30 g 6 ms / 20 g 11 ms

Mechanical data

Weight	[g]	372.5
Type of mounting		mounting on DIN rail; (TH35 (EN 60715))
Dimensions	[mm]	124 x 39 x 129
Materials		PC

Displays / operating elements

Display	DC ok	1 x LED
---------	-------	---------

Remarks

Remarks	Series connection of outputs only applies to identical units up to max. 150 V DC overall voltage
	UL 508 (Industrial Control Equipment)
Pack quantity	1 pcs.

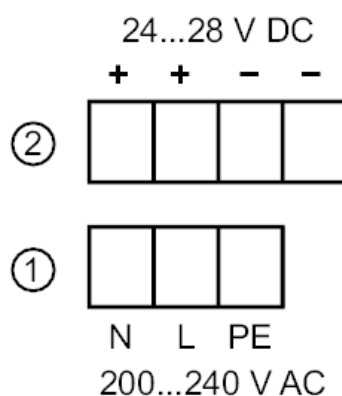
Switched-mode power supply 24 V DC

PSU-1AC/200-240VAC/24VDC-5A

Electrical connection

screw terminals:

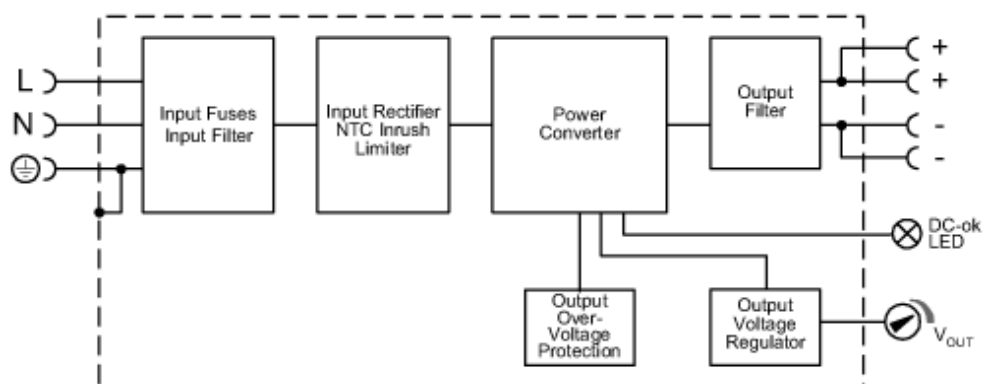
Connection



- 1: primary
2: secondary

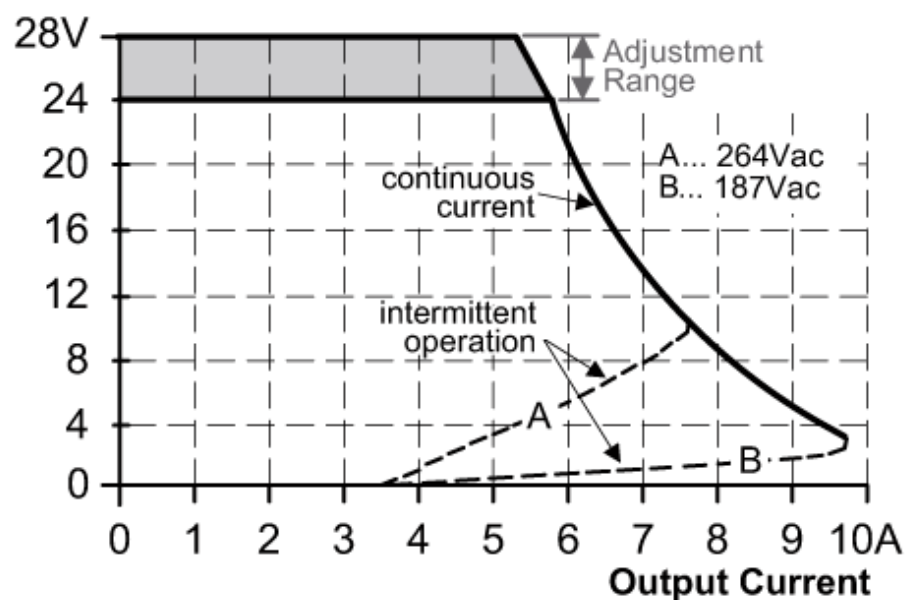
Diagrams and graphs

block diagram



output characteristics

Output Voltage



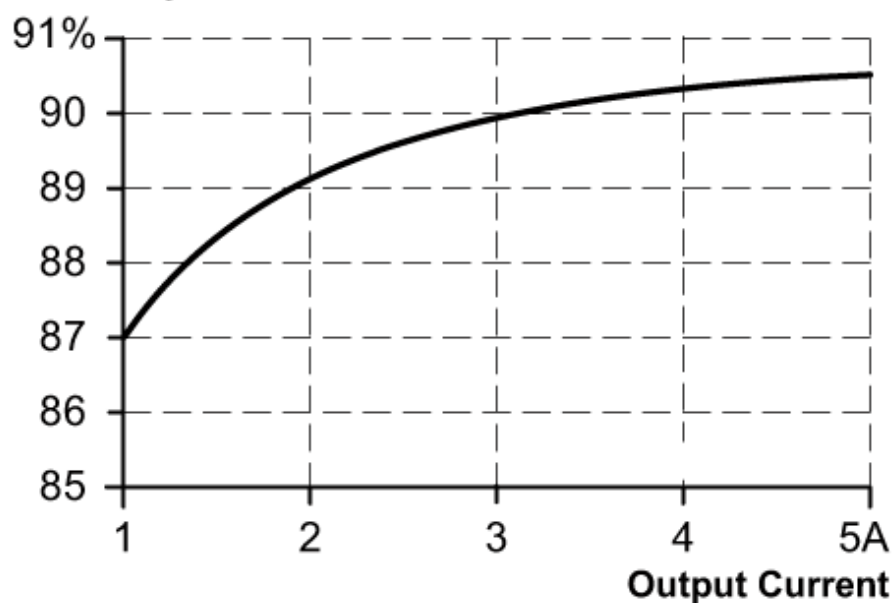


Switched-mode power supply 24 V DC

PSU-1AC/200-240VAC/24VDC-5A

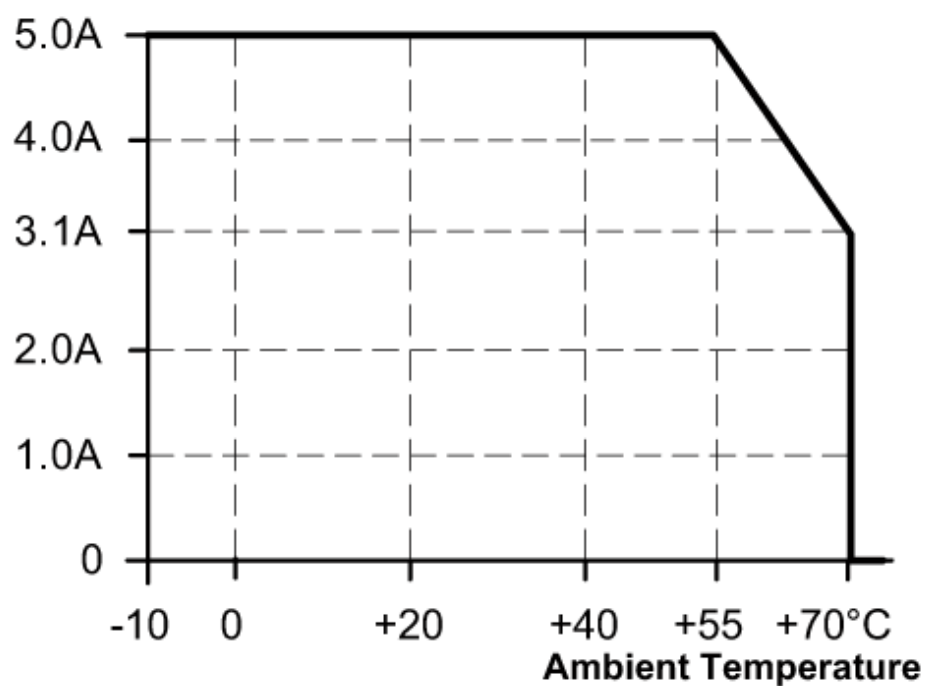
characteristic curve for degree of
efficiency / power loss

Efficiency



characteristic line for derating

Allowed Output Current at 24V





Switched-mode power supply 24 V DC

PSU-1AC/200-240VAC/24VDC-5A

characteristic line for mains buffering
time

Hold-up Time at 24V

