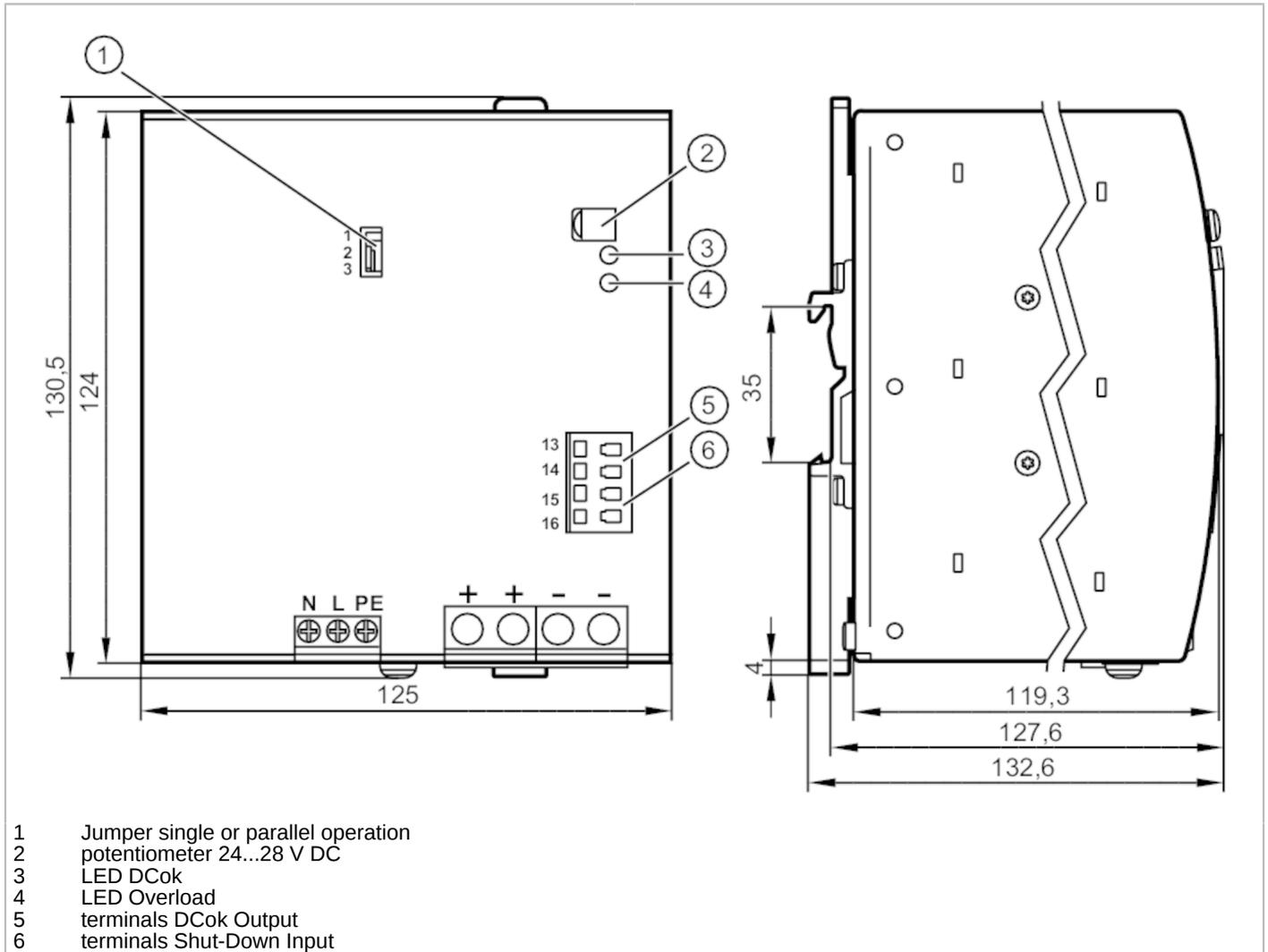


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Switched-mode power supply 24 V DC

PSU-1AC/24VDC-40A



- 1 Jumper single or parallel operation
- 2 potentiometer 24...28 V DC
- 3 LED DCok
- 4 LED Overload
- 5 terminals DCok Output
- 6 terminals Shut-Down Input



Electrical data	
Frequency AC	[Hz] 47...64
Nominal voltage AC	[V] < 230
Input voltage range AC	[V] 100...240; (-15 % / +10 %)
Output voltage DC	[V] 24...28
Protection class	I; (IEC 61140)
Overvoltage protection	yes; (< 32 DC)
Output voltage	[V] adjustable; output voltage to SELV, PELV
Max. output current at min. output voltage	[A] 40
Max. output current at max. output voltage	[A] 34.3
Max. output current peak at min. output voltage	[A] 60
Max. output current peak at max. output voltage	[A] 51.5
Output power (permanent)	[W] 960

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Output power (peak)	[W]	1440
Note on output power (peak)	[W]	if consumption > 4 s the power is automatically reduced to the output power
Power factor (nominal voltage 120 V AC / 60 Hz)		0.99
Power factor (nominal voltage 230 V AC / 50 Hz)		0.99
Power reserve	[%]	50
Number of output circuits		1
Max. residual ripple	[mV]	100
Switch-on peak current (nominal voltage 120 V AC / 60 Hz)	[A]	17
Switch-on peak current (nominal voltage 230 V AC / 50 Hz)	[A]	11
Inrush current limitation		yes
Efficiency (nominal voltage 120 V AC / 60 Hz)	[%]	93.6
Efficiency (nominal voltage 230 V AC / 50 Hz)	[%]	94.6
External input protection		$\geq B-16 A / \geq C-16 A$
Derating	[W/K]	24 (60...70 °C)
Mains buffering time (nominal voltage 120 V AC / 60 Hz)	[ms]	27
Mains buffering time (nominal voltage 230 V AC / 50 Hz)	[ms]	27
Input current (nominal voltage 120 V AC / 60 Hz)	[A]	8.6
Input current (nominal voltage 230 V AC / 50 Hz)	[A]	4.5
Power loss (nominal voltage 120 V AC / 60 Hz)	[W]	65.6
Power loss (nominal voltage 230 V AC / 50 Hz)	[W]	54.8
Back feeding protection	[V]	35

Outputs		
Short-circuit proof		yes
Overload protection		yes
Overload performance		Hiccup Mode; in the event of overload / short circuit, the output alternately supplies continuous power for 2 s and then switches off for 17 s
Type DC-OK signal		Relay output
Reliability of the DC OK signal		60 V DC (0.3 A) / 30 V DC (1 A) / 30 V AC (0.5 A)

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 61000-6-3	
	EN 61000-6-4	
	EN 61000-3-2	class A
Vibration resistance	IEC 60068-2-6	±1,6 mm 2...17,8 Hz / 1 g 17,8...500 Hz
Shock resistance	IEC 60068-2-27	15 g 6 ms / 10 g 11 ms
MTTF [years]		55
Power Factor Correction (PFC)		met

Mechanical data		
Weight [g]		2044.5
Housing		rectangular
Type of mounting		Mounting on DIN rail; (TH35 (EN 60715))
Dimensions [mm]		124 x 125 x 132.6
Material		housing: steel sheet

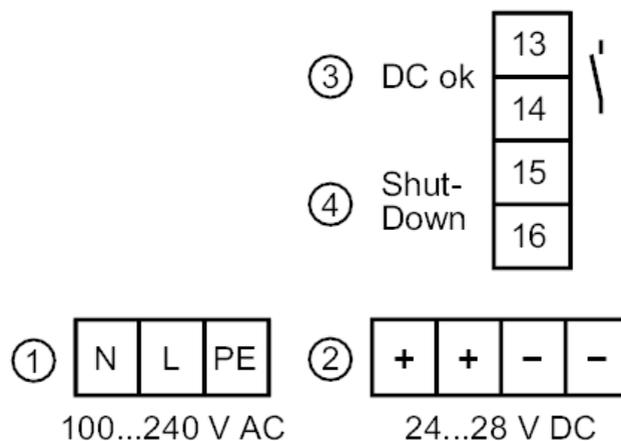
Displays / operating elements		
Display	DCok	1 x LED
	overload	1 x LED

Remarks		
Remarks	series connection of outputs only applies to identical units up to max. 150 V DC overall voltage	
Pack quantity	1 pcs.	

Electrical connection

screw terminals:

Connection



- 1: primary
- 2: secondary
- 3: DCok Relay output
- 4: Shut-Down Input < 2 V / < 0.5 W

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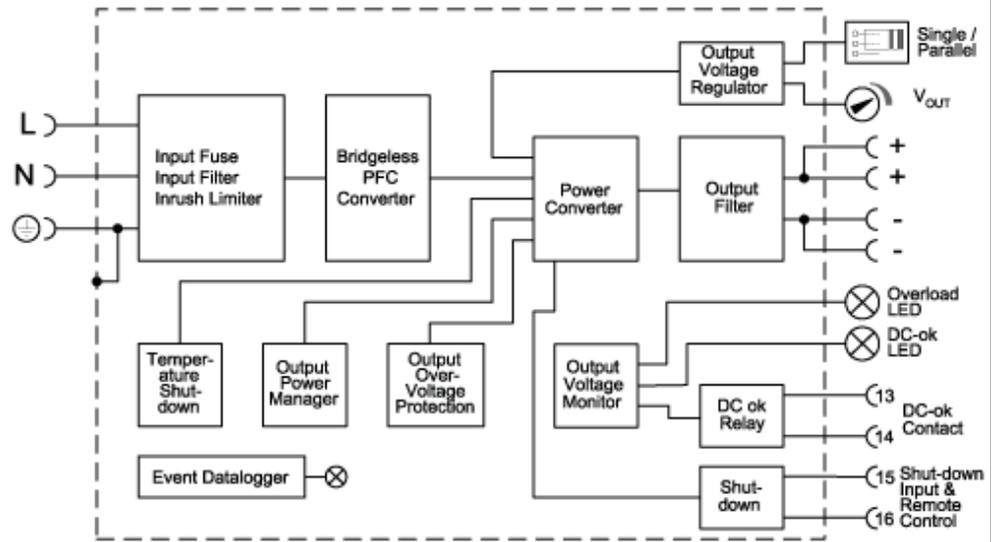


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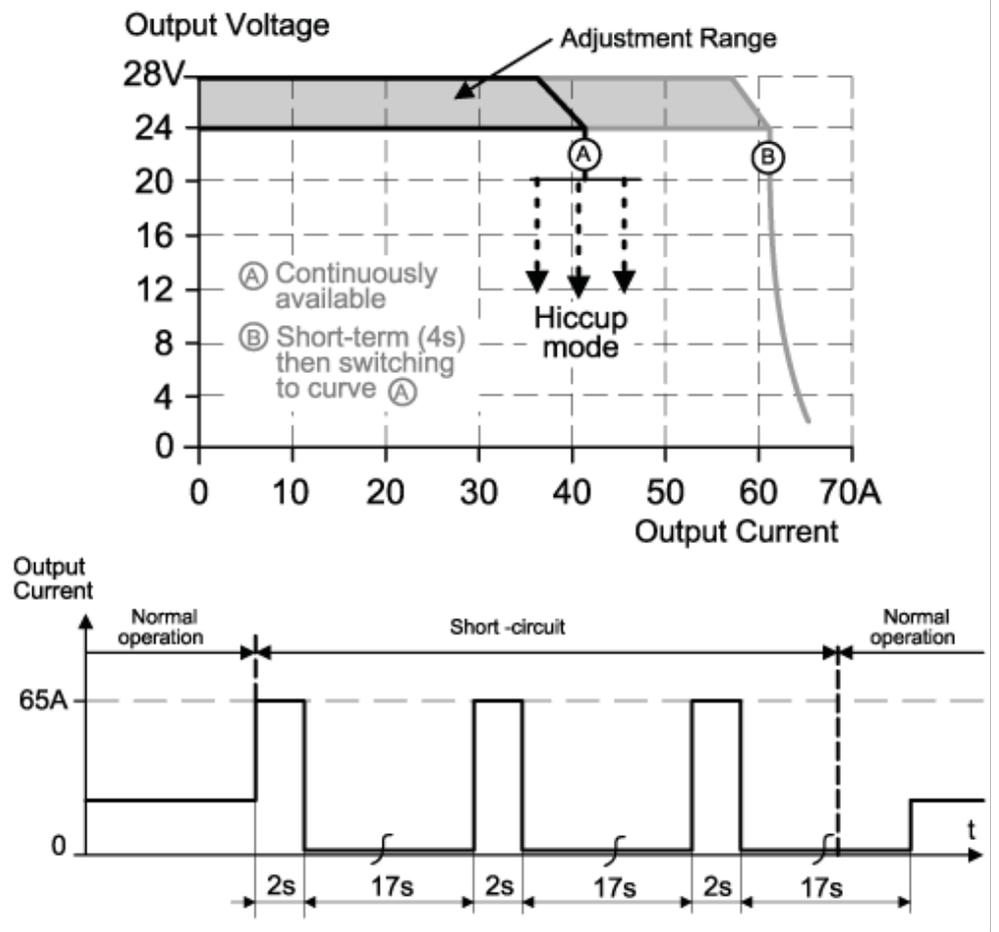
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Diagrams and graphs

Block diagram



Output curve



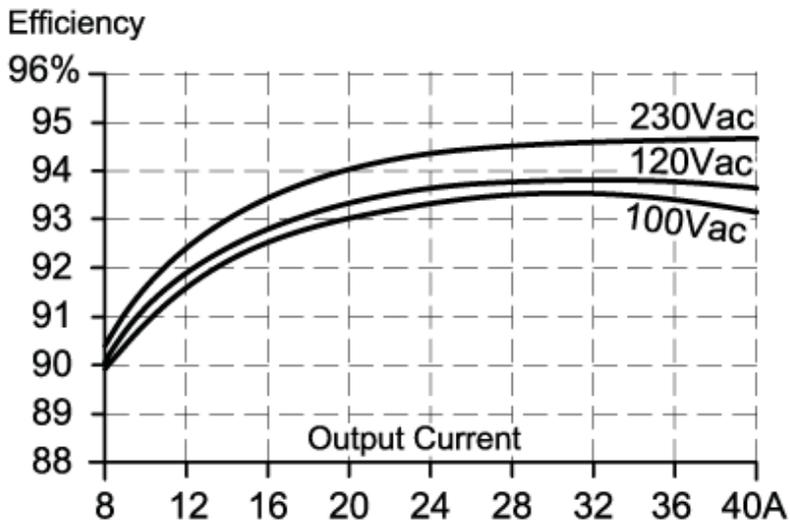
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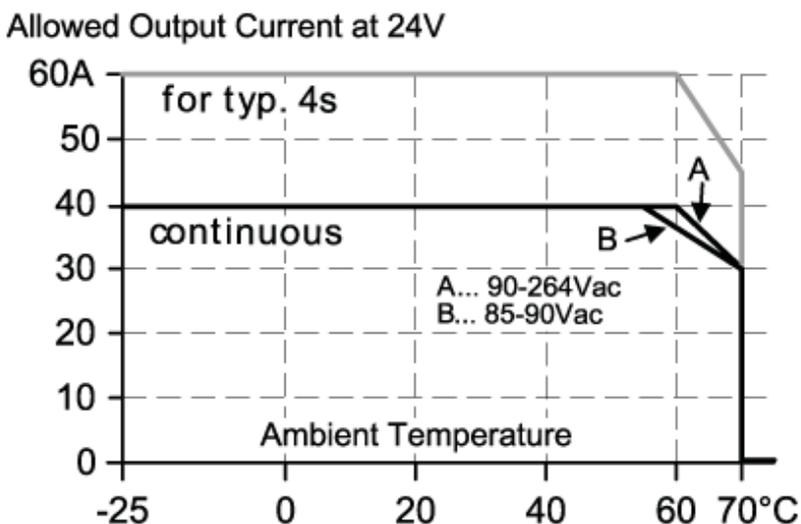
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Characteristic curve for degree of efficiency / power loss



Characteristic curve for derating



Characteristic curve for mains buffering time

