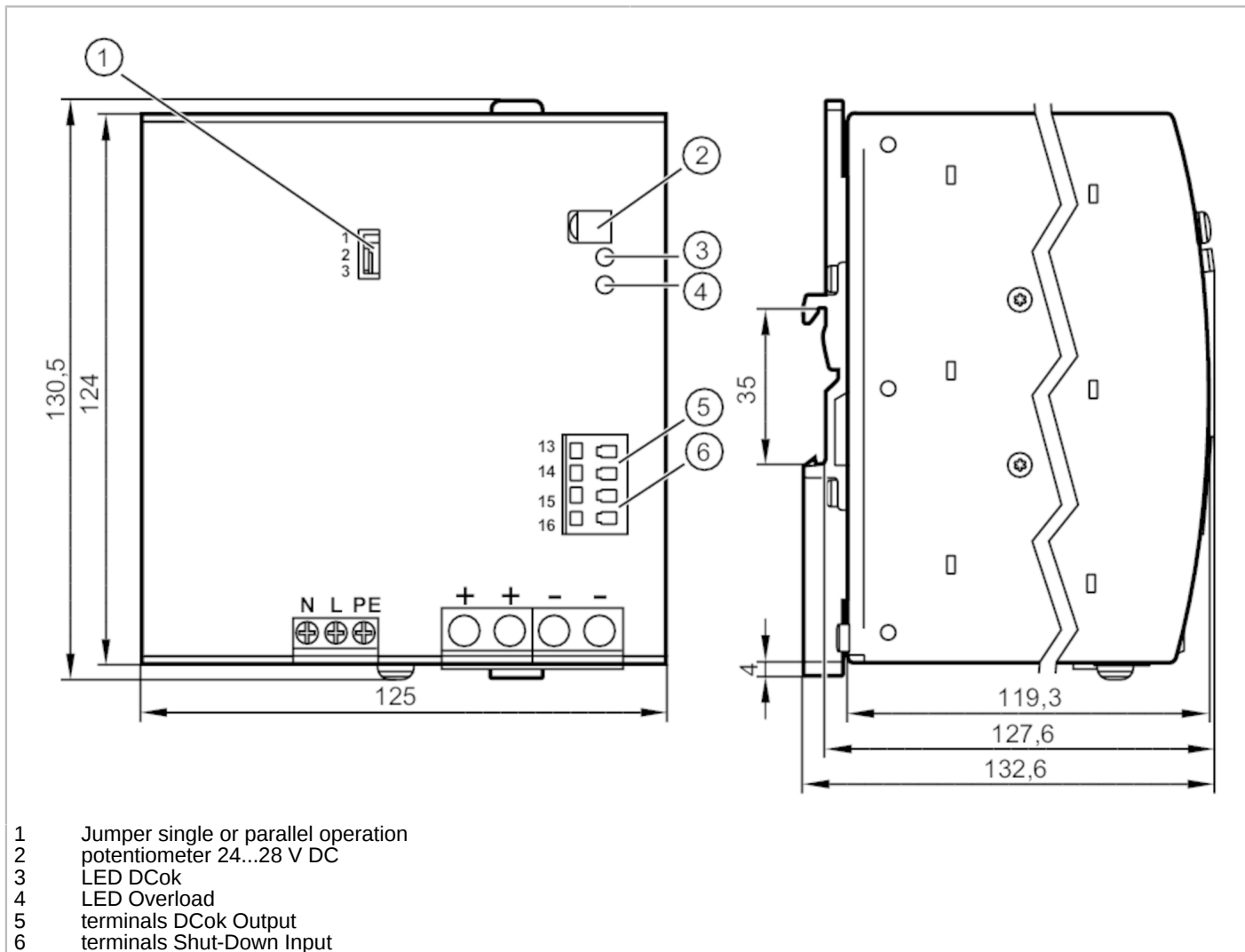


# E84016



## 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
Operating voltage tolerance	[%] 15...10
Nominal voltage AC	[V] < 230
Input voltage range AC	[V] 100...240
Output voltage DC	[V] 24...28
Protection class	I; (IEC 61140)
Oversvoltage 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

# E84016



## Switched-mode power supply 24 V DC

PSU-1AC/24VDC-40A

Output power (permanent) [W]	960
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)

# E84016



## Switched-mode power supply 24 V DC

PSU-1AC/24VDC-40A

Degree of soiling \_\_\_\_\_ 2; (IEC 62103: conductive soiling not permitted)

### 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
Power Factor Correction (PFC)		met

### Mechanical data

Weight [g]	2044.5
Type of mounting	rail; (TH35 (EN 60715))
Dimensions [mm]	124 x 126 x 132.6
Material	steel sheet

### Displays / operating elements

Display	DCok	1 x LED
	overload	1 x LED

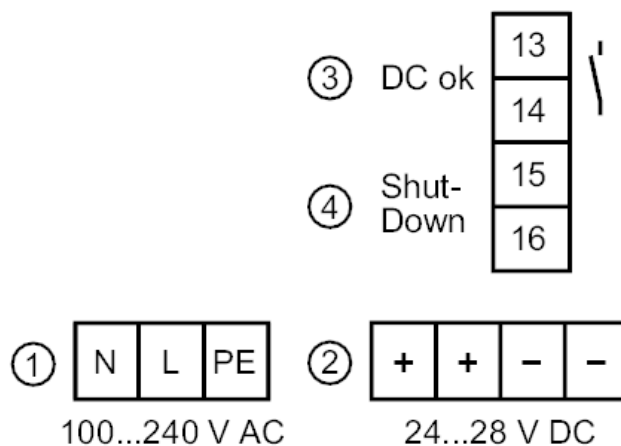
### Remarks

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

# E84016

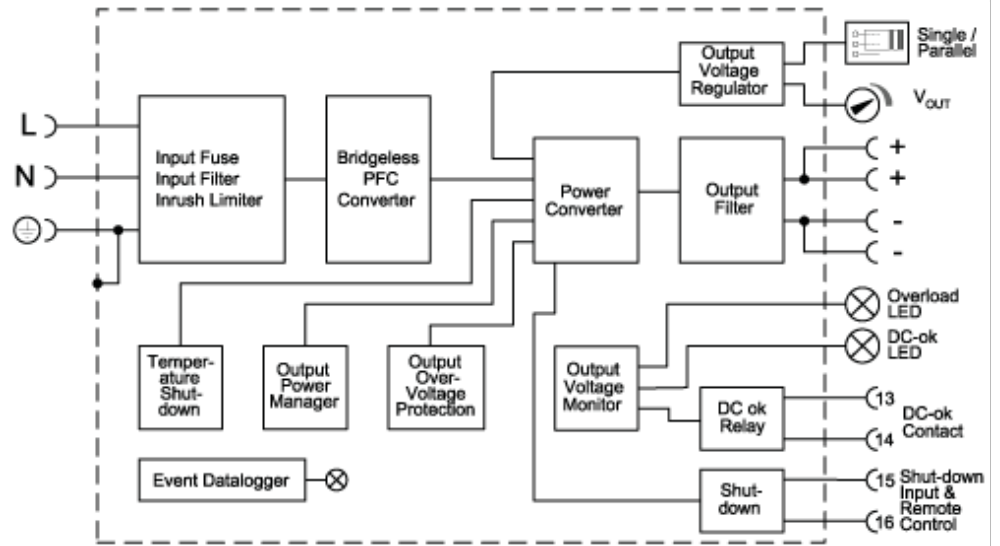


## Switched-mode power supply 24 V DC

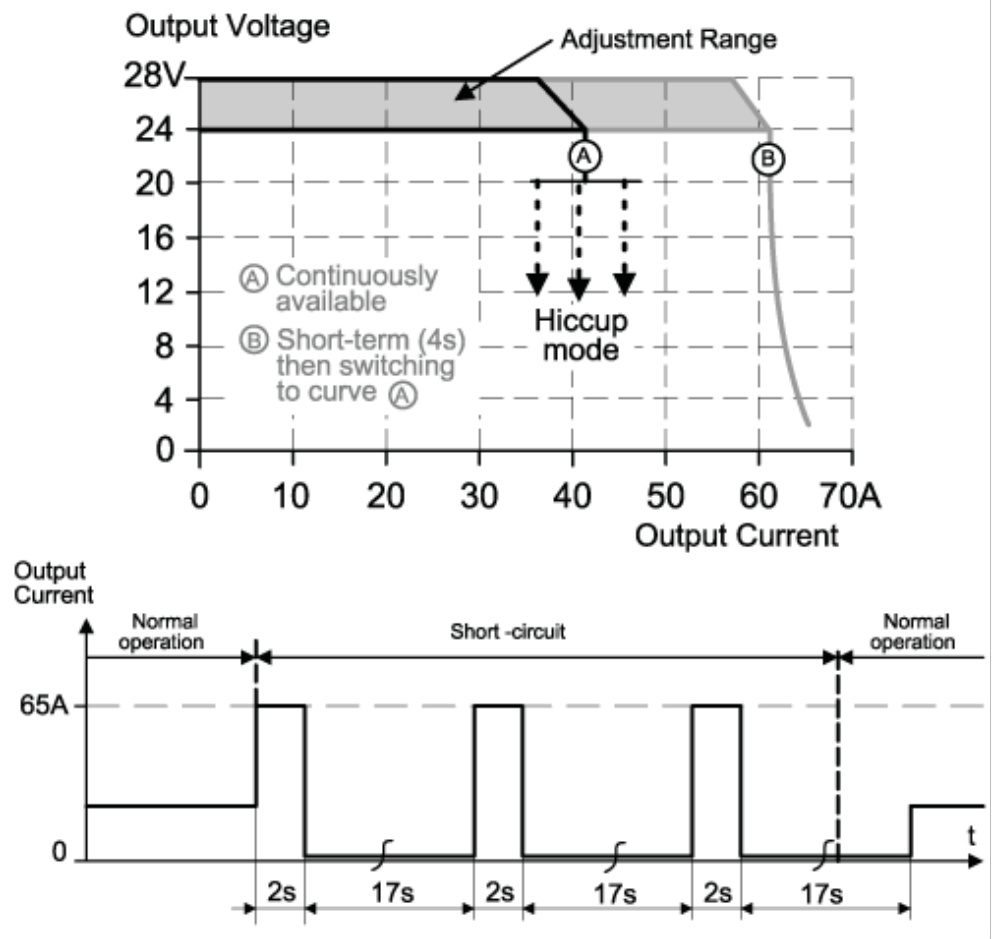
PSU-1AC/24VDC-40A

### Diagrams and graphs

#### Block diagram



#### Output curve



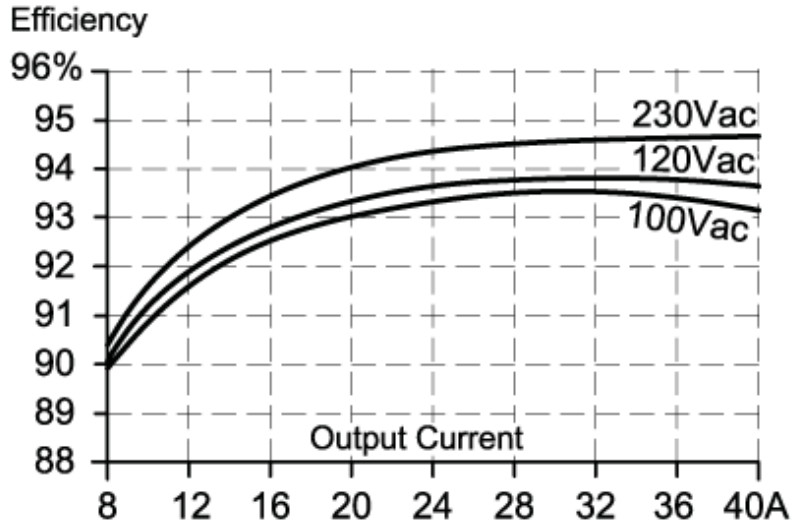
# E84016



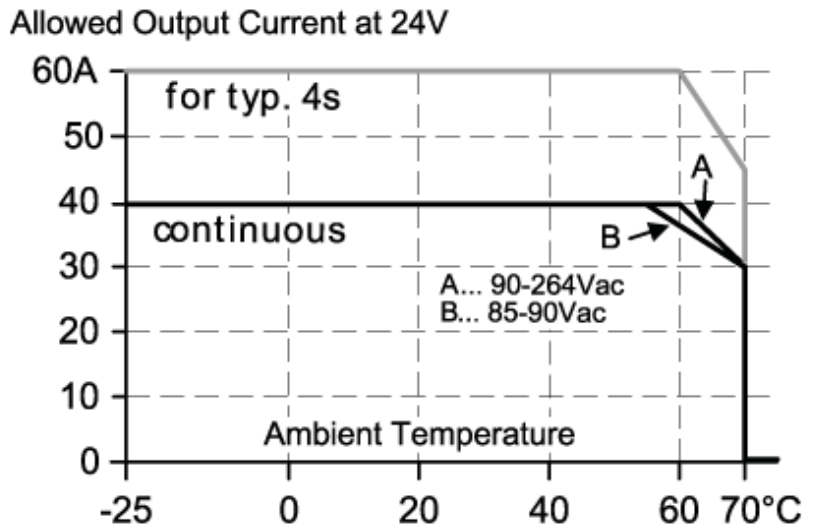
## Switched-mode power supply 24 V DC

PSU-1AC/24VDC-40A

Characteristic curve for degree of efficiency / power loss



Characteristic curve for derating



Characteristic curve for mains buffering time

