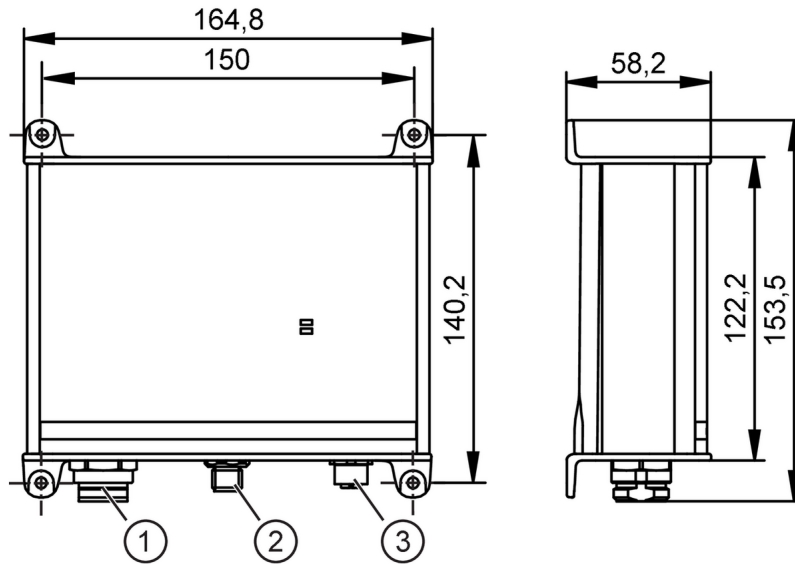


DN4217



Switched-mode power supply 24 V DC

PSU-1AC/24VDC-8A/IOL/IP67



- 1: voltage supply
- 2: IO-Link
- 3: Output voltage



Electrical data

Nominal voltage AC	[V]	230
Nominal frequency AC	[Hz]	50...60
Input voltage range AC	[V]	100...240; (-15 % / +10 %)
Output voltage DC	[V]	24...28
Protection class		I
Max. power-on delay time	[ms]	2000
Max. output current at min. output voltage	[A]	7.9
Max. output current at max. output voltage	[A]	6.7
Output power (permanent)	[W]	190
Output power (peak)	[W]	300
Power factor (nominal voltage 230 V AC / 50 Hz)		0.95
Number of output circuits		2
Efficiency (nominal voltage 120 V AC / 60 Hz)	[%]	93.9
Efficiency (nominal voltage 230 V AC / 50 Hz)	[%]	95.1
Mains buffering time (nominal voltage 120 V AC / 60 Hz)	[ms]	38
Mains buffering time (nominal voltage 230 V AC / 50 Hz)	[ms]	38
Input current (nominal voltage 120 V AC / 60 Hz)	[A]	1.75
Input current (nominal voltage 230 V AC / 50 Hz)	[A]	0.92

DN4217



Switched-mode power supply 24 V DC

PSU-1AC/24VDC-8A/IOL/IP67

Interfaces		
Communication interface	IO-Link	
Transmission type	COM3 (230,4 kBaud)	
IO-Link revision	1.1	
Profiles	Common - I&D	Identification and Diagnosis
SIO mode	yes	
Min. process cycle time [ms]	2	
Supported DeviceIDs	Type of operation	DeviceID
	default	1269

Operating conditions		
Ambient temperature [°C]	-30...70	
Note on ambient temperature	the derating of the current load indicated in the operating instructions is to be taken into account at the following ambient temperature: > 45 °C	
Storage temperature [°C]	-40...85	
Max. relative air humidity [%]	95	
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 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 55011	Class B
	EN 61000-3-2	
	EN 61000-3-3	
	Continuous shock resistance	IEC 60068-2-27
Vibration resistance	IEC 60068-2-6	2...17.8 Hz ± 1.6mm / 17.8...500 Hz 2 g
MTTF [years]	49	

Mechanical data		
Weight [g]	1149.05	
Housing	rectangular	

DN4217



Switched-mode power supply 24 V DC

PSU-1AC/24VDC-8A/IOL/IP67

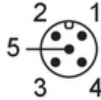
Type of mounting		Backplane mounting
Dimensions [mm]		164.8 x 153.5 x 58.2
Material		housing: PC

Remarks

Pack quantity		1 pcs.
---------------	--	--------

Electrical connection - IO-Link

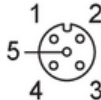
Connector: 1 x M12; coding: A; Locking: brass



1	L+	(US)
2	n.c.	
3	L-	(US)
4	DATA	IO-Link
5	n.c.	

Electrical connection - Output voltage

Connector: 1 x M12; coding: A; Locking: brass



1	L+	(UA)
2	L-	(UA)
3	L-	(UA)
4	L+	(UA)
5	FE	

Electrical connection - voltage supply

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



1	PE
2	L1
3	N

DATA: Communication interface; FE: functional earth; L1: voltage supply (AC); N: voltage supply (AC); PE: protective earth

DN4217

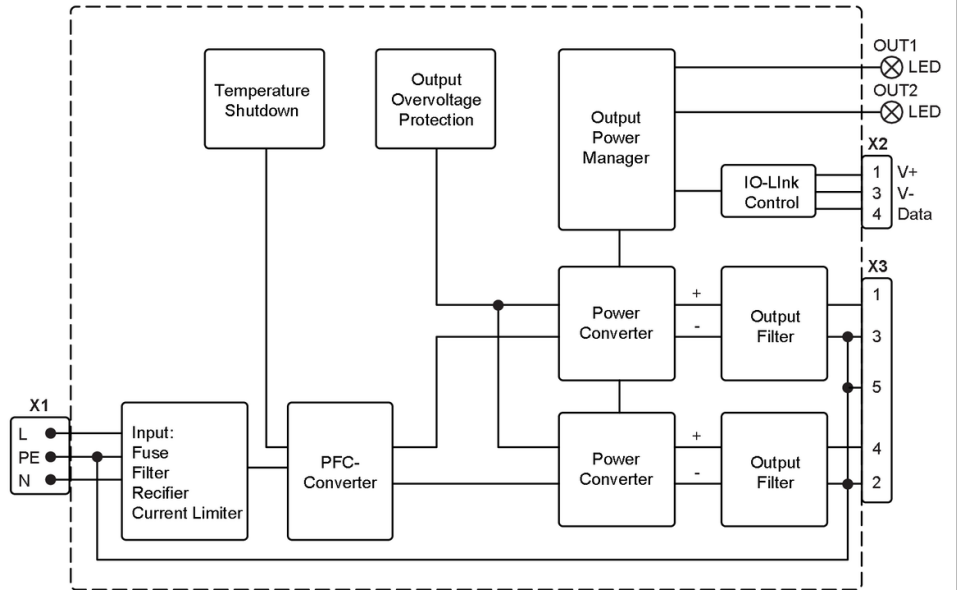


Switched-mode power supply 24 V DC

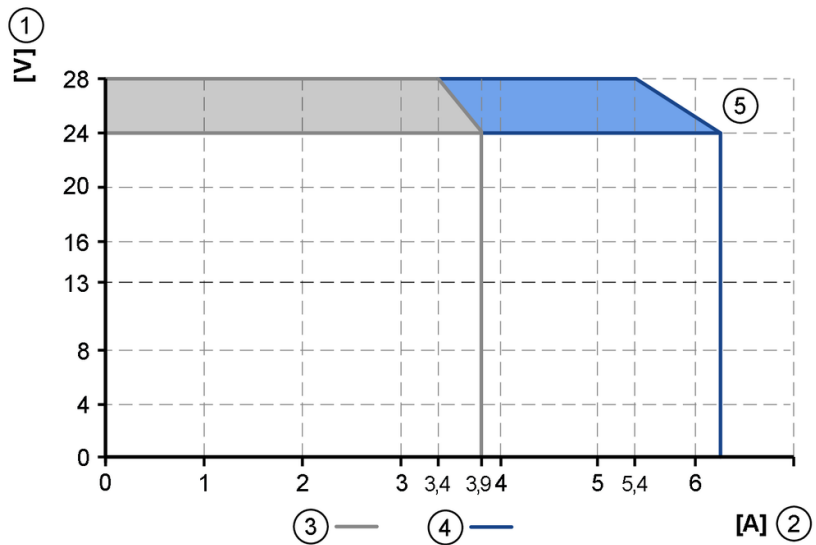
PSU-1AC/24VDC-8A/IOL/IP67

Diagrams and graphs

Block diagram



Output curve



- 1: Output voltage [V]
- 2: output current [A]
- 3: continuously available
- 4: short-term power reserve (4 s)
- 5: Setting range

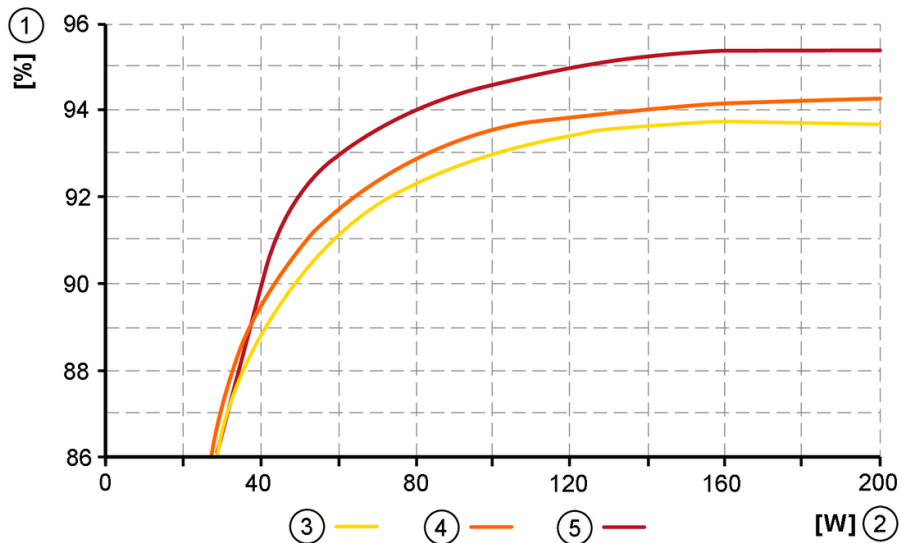
DN4217



Switched-mode power supply 24 V DC

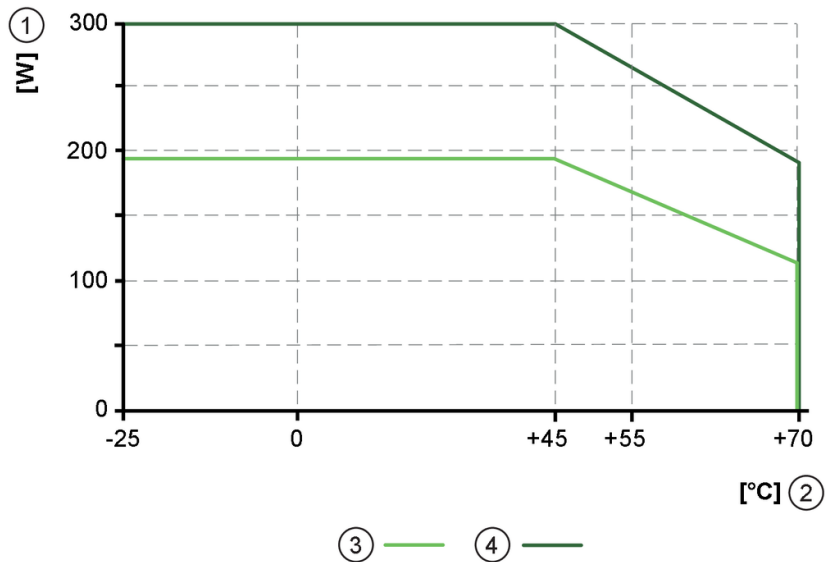
PSU-1AC/24VDC-8A/IOL/IP67

Characteristic curve for degree of efficiency / power loss



- 1: efficiency [%]
- 2: output power [W]
- 3: 100 V AC
- 4: 120 V AC
- 5: 230 V AC

Characteristic curve for derating



- 1: permissible output power
- 2: Ambient temperature
- 3: continuous
- 4: briefly

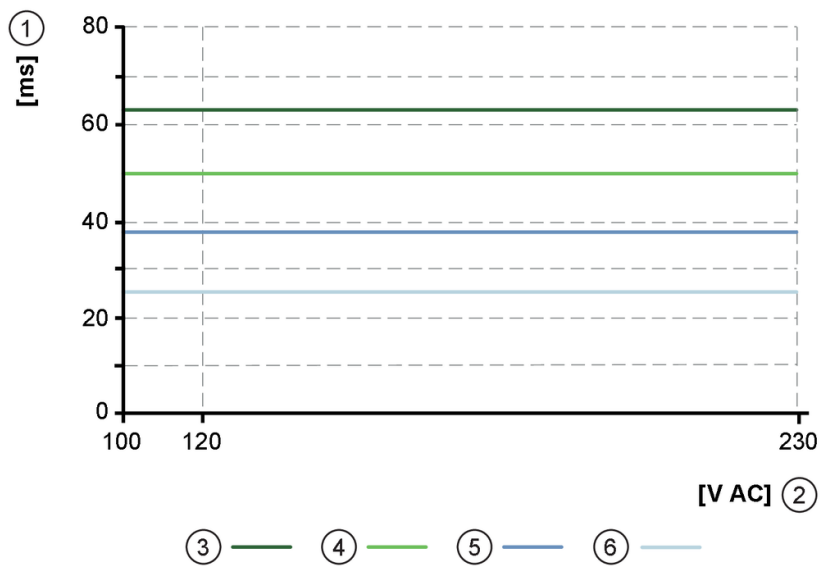
DN4217



Switched-mode power supply 24 V DC

PSU-1AC/24VDC-8A/IOL/IP67

Characteristic curve for mains buffering time



- 1: buffering time [ms]
- 2: Input voltage AC [V]
- 3: 24 V, 2 x 50 W, typical
- 4: 24 V, 2 x 50 W, min.
- 5: 24 V, 2 x 95 W, typical
- 6: 24 V, 2 x 95 W, min.