

PSPM

DC Power Supplies



CONTA-CLIP's new generation of PSPM DC power supplies are a perfect supply solution for controller systems.

PSPM DC power supplies are efficient switch-mode power supplies that are encased in slim plastic housings. They are lightweight and compact, yet still versatile and strong in the field. These multi-purpose power supplies can be used in various solar, measurement/control, industrial automation, and building automation applications.

They cover the needs of low- and mid-level power consumption ranging from 25 W to 50 W. Many uses are possible: variants are available with 1 A and 2 A of output current and an output voltage of 24 V. The output voltage can be easily adjusted using the potentiometer dial located on the front side of the housing.

The primary switch-mode regulators in use ensure that there are reliable connections everywhere to the public power grids. The DIN rail mount and the tension-spring terminals ensure that they can be mounted quickly and safely.

Features

- **Primary switch-mode power supply**
- **Easy to mount on a TS35 DIN rail**
- **Wide-range input**
- **Adjustable output voltage**
- **No-load and short-circuit safe**
- **Thermal overload protection**
- **Ambient temperature: -25 to +70°C**
- **IP 20 protection**



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Our ideas – your advantages

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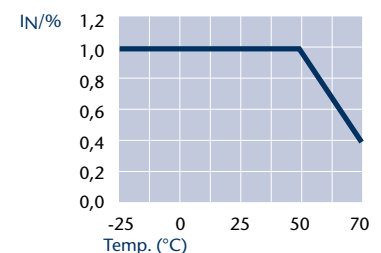
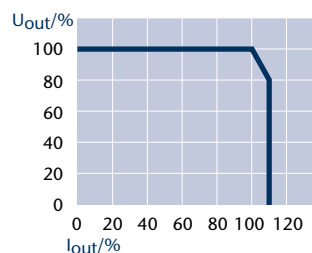
PSPM 230/24-1A



PSPM 230/24-2A



Type Cat. no.	PSPM 230/24-1A 16180.2	Qty. 1	PSPM 230/24-2A 16181.2	Qty. 1
Size (L x W x H) with TS35 x 7.5 mm	22,5 x 90 x 97,5		45 x 90 x 97,5	
Weight	130		210	
Classification	Primary switch-mode power supply		Primary switch-mode power supply	
Mount on DIN rail	TS35 acc. to EN 60715		TS35 acc. to EN 60715	
Connection type	Push-In connection		Push-In connection	
Wire connection cross-section	max. 2,5 mm ²		max. 2,5 mm ²	
Input data				
Nominal input voltage	100 - 240 Vac		100 - 240 Vac	
Input voltage range	85 - 264 Vac (120 - 372 Vdc)*		85 - 264 Vac (120 - 372 Vdc)*	
Input voltage derating	-2,5 %/Vac < 95 Vac		-2,5 %/Vac < 95 Vac	
Frequency range	47 Hz - 63 Hz / 0 Hz		47 Hz - 63 Hz / 0 Hz	
Nominal input current (nominal load)	0,43 A (100 Vac) / 0,2 A (240 Vac)		0,73 A (100 Vac) / 0,37 A (240 Vac)	
Inrush current limitation	< 30 A, NTC		< 30 A, NTC	
Turn-on time after applying the main voltage	2,3 s (100 Vac) / 0,74 s (230 Vac)		0,5 s (100Vac) / 0,27 s (230Vac)	
Mains buffering (full load)	20 / 120 ms (100 / 230 Vac)		20 / 120 ms (100 / 230 Vac)	
Recommended power circuit breaker (characteristic)	6 A, 10 A, 16 A (B,C)		6 A, 10 A, 16 A (B,C)	
Transient surge voltage protection	varistor	√	√	
Terminals input	Push-In, max 2,5 mm ²		Push-In, max 2,5 mm ²	
Output data				
Nominal output voltage	24 Vdc ± 1%		24 Vdc ± 1%	
Output voltage range	23 ... 28,5 Vdc		23 ... 28,5 Vdc	
Nominal output current	1 A		2 A	
Output current limitation	constant current	typ. 1,1 A	typ. 2,2 A	
Parallel operation	√		√	
Serial operation	√		√	
Power losses (Stand-by / nominal load)	< 1W / 4 W (230 Vac)		< 1W / 6 W (230 Vac)	
Maximum power losses	5 W (100 Vac / 24 V / 1 A)		7 W (100 Vac / 24 V / 2 A)	
Efficiency	typ. 86 %		typ. 89 %	
Ripple/noise	typ. 20 mVss		typ. 20 mVss	
Resistance to reverse feed max. (nominal load)	max. 35 Vdc		max. 35 Vdc	
Protection against internal surge voltage (OVP)	max. 39 Vdc		max. 37 Vdc	
Terminals output	Push-In, max 2,5 mm ²		Push-In, max 2,5 mm ²	
Signaling				
Signaling "DC OK"	LED green lit permanently	U _{out} > 21,5 V	LED green lit permanently	U _{out} > 21,5 V
Signal contact "DC OK"	Relay, contact closed	U _{out} > 21,5 V max. 20 mA @ 24Vdc	Relay, contact closed	U _{out} > 21,5 V max. 20 mA @ 24Vdc
Terminals signaling		Push-In, max 2,5 mm ²		Push-In, max 2,5 mm ²
Environment				
Storage temperature	-25° C ... +85° C		-25° C ... +85° C	
Operational temperature	-25° C ... +70° C		-25° C ... +70° C	
Derating	-3 %/K > +50° C		-3 %/K > +50° C	
Convection cooling	√		√	
Humidity	no condensation	max. 0,7 A	max. 1,3 A	
Required minimum spacing (left / right)	---		---	
Required minimum spacing (over / under)	50 mm		50 mm	
General data				
Degree of protection acc. to IEC 60529	IP 20		IP 20	
Protection class acc. to EN 61140	II		II	
Safety standards				
Safety	EN 61558-2-16, EN 60950-1		EN 61558-2-16, EN 60950-1	
EMC	EN 61204-3		EN 61204-3	
Safety extra-low voltage (SELV/PELV)	IEC 60364-4-41 (DIN VDE 0100-410)		IEC 60364-4-41 (DIN VDE 0100-410)	
CE acc. to 2004/108/EC and 2006/95/EC	√		√	
Output characteristic				



* A suitable DC back-up fuse is required for the DC input voltage.