Data sheet

PRO INSTA 90W 24V 3.8A

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com



RoHS COMPLIANT

The single-phase INSTA-POWER switching power supplies are characterised by a wide power spectrum, compact design and good value for money. They are suitable for temperature ranges from -25°C to +70°C, have international approvals and a wide voltage input range. This makes them suitable for a wide range of applications. This also includes signal and telecommunications systems as well as automation systems with a low power requirement up to 96 Watt.

General ordering data

Version	Power supply, switch-mode power supply unit, 24 V
Order No.	2580250000
Type	PRO INSTA 90W 24V 3.8A
GTIN (EAN)	4050118590982
Qty.	1 items

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Technical data

Approvals

Approvals	
ROHS	Conform
UL File Number Search	UL Website
Certificate no. (cULus)	E258476

Dimensions and weights

Depth	60 mm	Depth (inches)	2.3622 inch
Height	90 mm	Height (inches)	3.5433 inch
Width	90 mm	Width (inches)	3.5433 inch
Net weight	352 g		

Temperatures

Storage temperature	-40 °C...85 °C	Operating temperature	-25 °C...70 °C
Start-up	≥ -40 °C		

Environmental Product Compliance

RoHS Compliance Status	Compliant with exemption
RoHS Exemption (if applicable/known)	6c, 7a, 7cl
REACH SVHC	Lead 7439-92-1, Lead monoxide 1317-36-8
SCIP	d62541f7-8058-4336-b693-7303c8b40800

Input

Connection system	PUSH IN with actuator	AC input voltage range	85...264 V AC (derating at 100 V AC)
Recommended back-up fuse	2 A / DI, safety fuse 6 A, Char. B, circuit breaker 2...4 A, Char. C circuit breaker	Frequency range AC	45...65 Hz
Rated input voltage	110...240 V AC / 120...340 V DC	Wire connection method	PUSH IN with actuator
Input fuse (internal)	Yes	AC current consumption	1.2 A @ 230 V AC / 2.4 A @ 100 V AC
DC current consumption	0.4 A @ 370 V DC / 1.3 A @ 120 V DC	DC input voltage range	95...370 V DC
Inrush current	max. 40 A	Input electric strength, max.	AC/DC
Nominal power consumption	103.4 VA		

Output

Output power	90 W	Connection system	PUSH IN
Rated output voltage	24 V DC ± 1 %	Residual ripple, breaking spikes	<50 mVss @ UNenn, Full Load
Output voltage, max.	25 V	Output voltage, min.	22 V
Output current, max.	3.8 A	Wire connection method	PUSH IN with actuator
Output voltage, note	(adjustable via potentiometer on front)	Nominal output current for Unom	3.8 A @ 55 °C
Capacitive load	unrestricted	Continuous output current @ UNominal	3.8 A @ 55 °C, 2.38 A @ 70 °C
Ramp-up time	≤ 100 ms		

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General data

Degree of efficiency	87 %	Protection degree	IP20
Mounting position, installation notice	Horizontal on DIN rail TS 35, top and bottom 50 mm clearance for free air flow, 10 mm clearance to neighbouring active subassemblies with full load, 5 mm with passive neighbouring subassemblies, direct row mounting with 90% rated load	Housing version	Plastic, protective insulation
Protection against reverse voltages from the load	30...35 V DC	Power loss, idling	0.45 W
Short-circuit protection	Yes, internal	Power loss, nominal load	11.7 W

EMC / shock / vibration

Limiting of mains voltage harmonic currents	EN 61000-4-2 (ESD)/ EN 61000-4-3 and EN 61000-4-8 (fields)/EN 61000-4-4 (burst)/EN 61000-4-5 (surge)/EN 61000-4-6 (conducted)/ EN 61000-4-11 (dips), EN 61000-4-11 (Dips)	Shock resistance IEC 60068-2-27	15 g In all directions
Noise emission in accordance with EN55032	Class B	Interference immunity test acc. to	EN 61000-4-2 (ESD)/ EN 61000-4-3 and EN 61000-4-8 (fields)/EN 61000-4-4 (burst)/EN 61000-4-5 (surge)/EN 61000-4-6 (conducted)/ EN 61000-4-11 (dips), EN 61000-4-11 (Dips)
Vibration resistance IEC 60068-2-6	2.3 g		

Insulation coordination

Pollution severity	2	Protection class	II
Insulation voltage, input/output	4 kV	Insulation voltage input / earth	3.5 kV
Insulation voltage output / earth	0.5 kV		

Electrical safety (applied standards)

Electrical machine equipment	Acc. to EN60204	Safety extra-low voltage	SELV acc. to IEC 61010-1, PELV acc. to IEC 61010-2-201
Safety transformers for switch-mode power supplies	According to EN 61558-2-16		

Connection data (input)

Connection system	PUSH IN with actuator	Number of terminals	2 (L,N)
Conductor cross-section, AWG/kcmil , max.	12 AWG	Conductor cross-section, AWG/kcmil , min.	24 AWG
Wire connection cross section, flexible (input), max.	2.5 mm²	Conductor cross-section, flexible , min.	0.25 mm²
Conductor cross-section, rigid , max.	2.5 mm²	Conductor cross-section, rigid , min.	0.25 mm²

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Connection data (output)

Connection system	PUSH IN	Number of terminals	4 (++ / –)
Conductor cross-section, AWG/kcmil , max.	12 AWG	Conductor cross-section, AWG/kcmil , min.	24 AWG
Conductor cross-section, flexible , max.	2.5 mm²	Conductor cross-section, flexible , min.	0.25 mm²
Conductor cross-section, rigid , max.	2.5 mm²	Conductor cross-section, rigid , min.	0.25 mm²

Signalling

LED green	Operating voltage OK

Guarantee

Time interval	1 year

Classifications

ETIM 6.0	EC002540	ETIM 7.0	EC002540
ETIM 8.0	EC002540	ETIM 9.0	EC002540
ETIM 10.0	EC002540	ECLASS 9.0	27-04-07-01
ECLASS 9.1	27-04-07-01	ECLASS 10.0	27-04-07-01
ECLASS 11.0	27-04-07-01	ECLASS 12.0	27-04-07-01
ECLASS 13.0	27-04-07-01	ECLASS 14.0	27-04-07-01
ECLASS 15.0	27-04-07-01		

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Drawings

