

TRIO-PS-2G/1AC/12DC/5/C2LPS - Power supply unit



2903157

<https://www.phoenixcontact.com/in/products/2903157>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Primary-switched TRIO POWER power supply with push-in connection for DIN rail mounting, input: 1-phase, output: 12 V DC/5 A C2LPS

Product description

TRIO POWER power supplies with standard functionality

The TRIO POWER power supply range with push-in connection has been perfected for use in machine building. All functions and the space-saving design of the single and three-phase modules are optimally tailored to the stringent requirements. Under challenging ambient conditions, the power supply units, which feature an extremely robust electrical and mechanical design, ensure the reliable supply of all loads.

Your advantages

- Save time and costs, thanks to the Push-in connection and narrow design
- Increase system availability, thanks to dynamic boost with 150% of the nominal current for five seconds
- Maximum flexibility due to the wide temperature range from -25°C to +70°C and device startup at -40°C
- Electrically robust, thanks to high electric strength
- Mechanically robust, thanks to high vibration and shock resistance

Commercial data

Item number	2903157
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	CMP
Product key	CMPO12
Catalog page	Page 260 (C-4-2019)
GTIN	4055626248486
Weight per piece (including packing)	376.1 g
Weight per piece (excluding packing)	321 g
Customs tariff number	85044095
Country of origin	CN

Technical data

Input data

AC operation

Network type	Star network
Nominal input voltage range	100 V AC ... 240 V AC
Input voltage range	100 V AC ... 240 V AC -15 % ... +10 %
Input voltage range AC	85 V AC ... 264 V AC
Electric strength, max.	≤ 300 V AC 15 s
Typical national grid voltage	120 V AC
	230 V AC
Voltage type of supply voltage	AC/DC
Inrush current	≤ 25 A (typical)
Inrush current integral (I^2t)	< 0.6 A ² s
Inrush current limitation	typ. 25 A (after 1 ms)
AC frequency range	50 Hz ... 60 Hz ±10 %
Mains buffering time	typ. 20 ms (120 V AC)
	typ. 110 ms (230 V AC)
Current consumption	1.1 A (100 V AC)
	1 A (120 V AC)
	0.6 A (230 V AC)
	0.6 A (240 V AC)
Nominal power consumption	137.3 VA
Protective circuit	Transient surge protection; Varistor
Power factor (cos phi)	0.51
Typical response time	< 1 s
Input fuse	6.3 A Slow-blow
Recommended breaker for input protection	6 A ... 16 A (Characteristics B, C, D, K)
Discharge current to PE	< 0.25 mA

DC operation

Nominal input voltage range	110 V DC ... 250 V DC
Input voltage range	99 V DC ... 275 V DC
Switch-on voltage	≥ 85 V DC
Shut-down voltage	< 80 V DC
Voltage type of supply voltage	AC/DC
Current consumption	0.7 A (110 V DC)
	0.3 A (250 V DC)

Output data

Efficiency	> 86 % (for 230 V AC and nominal values)
Output characteristic	U/I with dynamic load reserve
Nominal output voltage	12 V DC ±1 %

TRIO-PS-2G/1AC/12DC/5/C2LPS - Power supply unit



2903157

<https://www.phoenixcontact.com/in/products/2903157>

Setting range of the output voltage (U_{Set})	12 V DC ... 18 V DC (> 12 V DC, constant capacity restricted)
Nominal output current (I_N)	5 A
Derating	> 60 °C ... 70 °C (2.5%/K)
Feedback voltage resistance	< 25 V
Protection against overvoltage at the output (OVP)	≤ 22 V DC
Control deviation	< 1 % (change in load, static 10 % ... 90 %)
	< 3 % (Dynamic load change 10 % ... 90 %, 10 Hz)
	< 0.1 % (change in input voltage ±10 %)
Residual ripple	< 50 mV _{PP} (with nominal values)
Output power	60 W
	90 W
Maximum no-load power dissipation	< 1 W (230 V)
Power loss nominal load max.	< 10 W (230 V)
Rise time	≤ 10 ms (U_{OUT} (10 % ... 90 %))
Connection in parallel	yes, for redundancy and increased capacity
Connection in series	yes

Signal: DC OK

Maximum switching voltage	30 V AC/DC
Continuous load current	100 mA

Connection data

Input

Connection method	Push-in connection
Conductor cross section, rigid min.	0.2 mm ²
Conductor cross section, rigid max.	4 mm ²
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	2.5 mm ²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	12
Stripping length	10 mm

Output

Connection method	Push-in connection
Conductor cross section, rigid min.	0.2 mm ²
Conductor cross section, rigid max.	4 mm ²
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	2.5 mm ²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	12
Stripping length	8 mm

Signal

Connection method	Push-in connection
Conductor cross section, rigid min.	0.2 mm ²