

TRIO3-PS/1AC/24DC/20/8C/IOL - Power supply unit



1252697

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Primary-switched power supply unit, TRIO POWER, Push-in connection, 8-channel fuse module, IO-Link, DIN rail mounting, input: 1-phase, output: 24 V DC / 20 A

Commercial Data

Item number	1252697
Packing unit	1 pc
Minimum order quantity	1 pc
Product Key	CMPD16
GTIN	4063151360078
Weight per Piece (including packing)	1,389.3 g
Weight per Piece (excluding packing)	1,160 g
Country of origin	CN

Technical Data

Input data

AC operation

Supply system configuration	Star network (TN, TT, IT (PE))
Nominal input voltage range	100 V AC ... 240 V AC
Input voltage range	100 V AC ... 240 V AC -15 % ... +10 % 115 V AC ... 240 V AC ±10 % (UL)
Derating	< 100 V AC (1 %/V) 2.5 %/K, > 60 °C
Typical national grid voltage	120 V AC 230 V AC
Voltage type of supply voltage	AC
Inrush current	< 21 A (25 °C)
Inrush current integral (I^2t)	< 1.091 A ² s
Frequency range (f_N)	50 Hz ... 60 Hz ±10 %
Mains buffering time	typ. 23 ms (120 V AC) typ. 24 ms (230 V AC)
Current consumption	5.3 A (100 V AC) 4.4 A (120 V AC) 2.3 A (230 V AC) 2.15 A (240 V AC)
Protective circuit	Transient protection; Varistor
Power factor (cos phi)	0.96 (230 V AC)
Device mains fuse	10 A internal (device protection)
Recommended breaker for input protection	6 A ... 16 A (Characteristic B, C, D, K or comparable)
Discharge current to PE	< 3.5 mA

DC operation

Input voltage range	100 V DC ... 240 V DC ±10 % 160 V DC ... 240 V DC ±10 % (UL)
Derating	< 140 V DC (1 %/V)
Voltage type of supply voltage	DC
Current consumption	5.2 A (100 V DC) 2.1 A (240 V DC)

Output data

Efficiency	typ. 93.49 % (120 V AC) typ. 94.42 % (230 V AC)
Nominal output voltage	24 V DC
Setting range of the output voltage (U_{Set})	24 V DC ... 28 V DC (> 24 V DC, constant capacity restricted)
Nominal output current (I_N)	20 A
Dynamic Boost ($I_{Dyn.Boost}$)	max. 30 A (5 s)

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No. of channels	8
Nominal current per channel	1 A
	2 A
	3.8 A
	4 A
	6 A
	8 A
	10 A
Waiting time after switch off of a channel	5 s
Switch-on delay of the channels	100 ms
Short-circuit-proof	yes
Derating	60 °C ... 70 °C
Crest factor	typ. 1.77 (120 V AC)
	typ. 1.6 (230 V AC)
Output power (P_N)	480 W
Output power ($P_{Dyn. Boost}$)	max. 720 W (5 s)
Connection in parallel	no
Connection in series	No
Feedback voltage resistance	≤ 35 V DC
Protection against overvoltage at the output (OVP)	≤ 35 V DC
Residual ripple	typ. 50 mV _{pp} (with nominal values)
Control deviation	< 1 % (change in load, static 10 % ... 90 %)
	< 3 % (change in load, dynamic 10 % ... 90 %)
	< 0.1 % (change in input voltage ± 10 %)
Rise time	≤ 1 s ($U_{Out} = 10$ % ... 90 %)
Minimum no-load power dissipation	< 1.3 W (120 V AC)
Maximum no-load power dissipation	< 1.37 W (230 V AC)
Minimum nominal load power dissipation	< 33.37 W (120 V AC)
Power loss nominal load max.	< 26.72 W (230 V AC)
Integrated fuse protection	yes

Signal relay 13/14

Position	3.x
Position marking	3.1 (13), 3.2 (14)
Switch contact (floating)	OptoMOS
Switching voltage	max. 30 V DC (SELV)
Current carrying capacity	max. 100 mA
State condition	$U_{Out} > 21$ V DC and $I_{Out} < 0.9 \times I_N$ (Contact closed)
	$U_{Out} < 21$ V DC or $I_{Out} > 0.9 \times I_N$ (averaging over 60 s) (Contact open)

Connection data

Input

Position	1.x
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