

Industrial Power Supplies

TPC Series, 30 to 120 Watt

Features

- For industrial, office and residential environments
- Meets European ErP directive (green mode), <0.3 W no load power consumption
- High efficiency across full load range
- Compact plastic casing
- Reliable snap-on mounting on DIN-rails or with wall mounting bracket (not included)
- Universal input 85–264 VAC, 47–63 Hz
- Models with 5, 12, 24 & 48 VDC output
- Output voltage adjustable
- Power good signal
- Low ripple and noise
- Overload and short-circuit protection
- Optional module for parallel and redundant operation
- Worldwide safety approval package
- 3-year product warranty















The TRACOPOWER TPC series is a family of lightweight DIN-rail power supplies with an excellent price/performance ratio. They consume sparse standby power, and operate with high efficiency to comply with the requirements of the European Ecodesign directive. They have universal input of 85-264VAC or 90-375VDC and are designed for class I operation in industrial and residential environments. With the optional active current sharing redundancy module, these power supplies provide a very reliable true redundant DC supply. For further details see page 3.

Models				
Order Code	Input Voltage	Output Power	Output Voltage	Output Current
	Ranges	max.	nominal /adj. range	max.
TPC 030-105		20 W	5.0 VDC /5.0-6.0 VDC	4.0 A
TPC 030-112		26 W	12 VDC /12-15 VDC	2.2 A
TPC 030-124		30 W	24 VDC /24-28.8 VDC	1.25 A
TPC 030-148	85 – 264 VAC	30 W	48 VDC /48-56 VDC	0.6 A
TPC 055-112	Universal Input	42 W	12 VDC / 12-15 VDC	3.5 A
TPC 055-124	47/63 Hz	55 W	24 VDC /24-28.8 VDC	2.3 A
TPC 055-148	90 – 375 VDC	55 W	48 VDC / 48-56 VDC	1.15 A
TPC 080-112		72 W	12 VDC / 12-15 VDC	6.0 A
TPC 080-124		80 W	24 VDC /24-28.8 VDC	3.3 A
TPC 080-148		80 W	48 VDC /48-56 VDC	1.7 A
TPC 120-112		96 W	12 VDC / 12–15 VDC	8.0 A
TPC 120-124		120 W	24 VDC /24-28.8 VDC	5.0 A
TPC 120-148		120 W	48 VDC /48-56 VDC	2.5 A



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Input Specifications				
Input voltage range	AC nominal ratedAC range (designed for)DC nominal ratedDC range (designed for)			110 – 240 VAC, 50-60 Hz 85 – 264 VAC, 47-63 Hz 130 – 300 VDC 90 – 375 VDC
Output derating	- at operation <100 VAC - at operation <130 VDC			-2.5% /V -1.0% /VDC
Standby power consumption			and 055 models: and 120 models:	
Harmonic limits				EN 61000-3-2, Class A
Recommended circuit breake	er, characteristic C			6.0 – 16.0 A
Output Specifications	;			
Output voltage adjustable ra (potentiometer on frontpanel)			5 VDC model: 12 VDC models: 24 VDC models: 48 VDC models:	24 – 28.8 VDC 48 – 56 VDC
Regulation	Input variationLoad variation (0–100 %))	5 VDC models: other models:	
Ripple and noise (20MHz ba	andwidth)			100 mVpk-pk max.
Short circuit protection				<200 % of lout nom.
Overvoltage protection (% of	f max. adjustable voltage)		5 VDC model: 12 VDC models: 24 VDC models: 48 VDC models:	<170 % <160 %
Power back immunity				125 % of nominal Vout
Start-up time				2 sec. max.
Hold-up time (115 VAC / 23	30 VAC)			min. 15 ms / min. 40 ms
Power OK signal	– trigger – PNP open collector max.	current	48 VDC models: other models:	80 - 95 % 5 mA 10 mA
General Specification	ıs			
Temperature ranges	OperatingStorage (non operating)			−25°C to +70°C max. −25°C to +85°C
Temperature derating				2.5 %/K above 50°C
Humidity (non condensing)				95 % rel. H max.
Temperature coefficient				0.02 %/K
Remote On/Off				10 mA current source
Efficiency (average at power	consumption 25-100%)	other	TPC 030-105: 30 Watt models: other models:	79 % 84 % 87 %
Reliability, calculated MTBF of (according to IEC-1709)	nt +25°C		TPC 030 models: TPC 055 models: TPC 080 models: TPC 120 models:	>1.7 Mio h >1.5 Mio h
Isolation voltage (60 s)	- Input / Output			3000 VAC
Altitude during operation				2'000m max. (6'500 ft) approved



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General Specification	ns	
Safety standards	- CB test certificate	IEC 60950-1:2005 2nd Ed, Am 1:2009
	– SIQ type approved	EN 60950-1 :2006 + Am 1 :2010 + Am 11 :2009 + Am 12:2011
	– CSA certificate of compliance	UL 60950-1-2nd Ed
	in eft i f	CSA 60950-1-07-2nd Ed
	UL certificate of complianceSIQ type approved	UL 508, CSA C22.2 No.107.1-01 EN 60204-1:2006 + A1:2009,
	ога туре арргочеа	EN 61558-2-8:2010, EN 61558-2-16:2009,
		EN 50178:1997
	– Certification documents	www.tracopower.com/overview/tpc
Environmental compliance	– Reach declaration document	www.tracopower.com/info/reach-declaration.pdf
	- RoHS	RoHS directive 2011/65/EU
EMC	- emissions	IEC 61000-6-3 (residential environment)
	- immunity	IEC 61000-6-2 (industrial environment)
		SEMI F47
Class of protection		class I (earth connection needed)
Case protection		IP 20 (IEC 60529)
Enclosure material		Makrolon 2405 (UL 94V-0 rated)
Mounting		DIN-rails as per EN 50022-35x15/7.5 (snap-on with self-locking spring) wall mounting bracket optional (not included)
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Supporting documents: www.tracopower.com/overview/tpc

TPC-REM240-24 Redundancy Module				
Order Code	Nominal Input Voltage	Max Power per Input	Output Voltage adjustable	Output Current max.
TPC-REM240-24	24 VDC	120 W	24 - 27 VDC	10 A
TPC-REM240-48	48 VDC	120 **	48 – 55 VDC	5 A

These modules are external units for operation with two TPC power supplies with output voltage of 24 VDC or 48 VDCand of same type and power. The modules allow to connect two outputs of TPC power supplies together in order to achieve a reliable DC supply. In normal operation the module achieves equal current share for both power supplies connected. During the redundancy operation, if one of the power supplies fails, the output power will be provided in full by the remaining operating power supply. The redundancy of the DC system is monitored by a DC-OK signal.



Specifications

Operating temperature	-25°C to $+50^{\circ}\text{C}$ max.
Electromagnetic compatibility	in correspondence to connected units (no internal switching device)
Dimensions	same as model TPC 055 (see page 4)
Connection	screw terminal block
Installation instructions – installation document	www.tracopower.com/overview/tpc

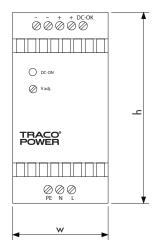
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

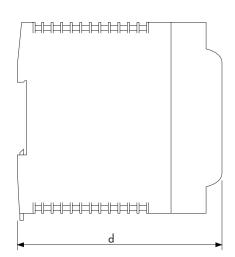


Case Dimensions

Model	Width (W)	Heigth	Depth d	Weight
TPC 030	26.5 (1.04)	90 (3.54)	96.5 (3.80)	160 g
TPC 055	45.0 (1.77)	90 (3.54)	96.5 (3.80)	260 g
TPC-REM 240-24	45.0 (1.77	90 (3.54)	96.5 (3.80)	160 g
TPC 080	63.0 (2.48)	90 (3.54)	96.5 (3.80)	360 g
TPC 120	72.0 (2.83)	90 (3.54)	110.0 (4.33)	440 g

Dimensions in [mm], () = Inch Tolerances: ± 0.5 mm (± 0.02)







Snap-on bracket for wall mounting (black plastic)

Wall Mounting Bracket (accessories not included)				
Order Code	For Models	Dimensions		
TPC-WMK1	TPC 030-xx	26.0 x 35 x 7.5		
TPC-WMK2	TPC 055-xx, TPC-REM 240-24	42.7 × 35 × 7.5		
TPC-WMK3	TPC 080-xx	60.7 x 35 x 7.5		
TPC-WMK4	TPC 120-xx	69.7 x 35 x 7.5		

Mouser Electronics

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TPC-REM240-24 TPC-REM240-48