

# PRODUCT DATASHEET

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**Datasheet begins on next page.**

### 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 case
- ◆ Reliable snap-on mounting on DIN-rails or with wall mounting bracket (included)
- ◆ Adaptor for wall mounting 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 Ranges	Output Power max.	Output Voltage nominal / adj. range	Output Current max.
TPC 030-105	85 – 264 VAC Universal Input 47/63 Hz	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		30 W	48 VDC / 48–56 VDC	0.6 A
TPC 055-112	90 – 375 VDC	42 W	12 VDC / 12–15 VDC	3.5 A
TPC 055-124		55 W	24 VDC / 24–28.8 VDC	2.3 A
TPC 055-148		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

### Input Specifications

Input voltage range	- AC nominal rated	110 – 240 VAC, 50-60 Hz
	- AC range (designed for)	85 – 264 VAC, 47-63 Hz
	- DC nominal rated	130 – 300 VDC
	- DC range (designed for)	90 – 375 VDC
Output derating	- at operation <100 VAC	-2.5% /V
	- at operation <130 VDC	-1.0% /VDC
Standby power consumption	TPC 030 and 055 models:	< 0.3 W
	TPC 080 and 120 models:	< 0.5 W
Harmonic limits		EN 61000-3-2, Class A
Recommended circuit breaker, characteristic C		6.0 – 16.0 A

### Output Specifications

Output voltage adjustable range (potentiometer on frontpanel)	5 VDC model:	5.0 – 6.0 VDC
	12 VDC models:	12 – 15 VDC
	24 VDC models:	24 – 28.8 VDC
	48 VDC models:	48 – 56 VDC
Regulation	- Input variation	0.5 % max.
	- Load variation (0-100 %)	5 VDC models: 0.75 % max. other models: 0.5 % max.
Ripple and noise (20MHz bandwidth)		100 mVpk-pk max.
Short circuit protection		<200 % of lout nom.
Overvoltage protection (% of max. adjustable voltage)	5 VDC model:	<180 %
	12 VDC models:	<170 %
	24 VDC models:	<160 %
	48 VDC models:	<107 %
Power back immunity		125 % of nominal Vout
Start-up time		2 sec. max.
Hold-up time (115 VAC / 230 VAC)		min. 15 ms / min. 40 ms
Power OK signal	- trigger	80 – 95 %
	- PNP open collector max. current	48 VDC models: 5 mA other models: 10 mA

### General Specifications

Temperature ranges	- Operating	-25°C to +70°C max.
	- Storage (non operating)	-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 2 pin molex male terminal KK series (mating connector/cable not included)		10 mA via internal 100 Ohm resistor mating connector cable order code tba.
Efficiency (average at power consumption 25-100%)	TPC 030-105:	79 %
	other 30 Watt models:	84 %
	other models:	87 %
Reliability, calculated MTBF at +25°C (according to IEC-1709)	TPC 030 models:	>2.2 Mio h
	TPC 055 models:	>1.7 Mio h
	TPC 080 models:	>1.5 Mio h
	TPC 120 models:	>1.3 Mio h
Altitude during operation		2'000m max. (6'500 ft) approved

**General Specifications**

Safety standards		IEC 60950-1, EN 60950-1 (output SELV), UL 60950-1, UL 508, EN 50178, EN 60204, EN 61558-2-8.
Safety approvals	<ul style="list-style-type: none"> <li>- CB scheme (IEC 60950-1)</li> <li>- UL listing</li> <li>- UL recognition (entry pending)</li> <li>- CSA certification</li> <li>- BG certificate (by SIQ) (IEC/EN 60950-1)</li> </ul>	<a href="http://www.tracopower.com/products/tpc-cb.pdf">www.tracopower.com/products/tpc-cb.pdf</a> UL 508C listed, CSA C22.2 No. 14 File e210002 <a href="http://www.ul.com">www.ul.com</a> -> certifications UL 60950, File e181381 <a href="http://www.ul.com">www.ul.com</a> -> certifications UL 60950-1, CSA 60950-1-03 <a href="http://www.tracopower.com/products/tpc-csa.pdf">www.tracopower.com/products/tpc-csa.pdf</a> <a href="http://www.tracopower.com/products/tpc-bg.pdf">www.tracopower.com/products/tpc-bg.pdf</a>
Environmental compliance	<ul style="list-style-type: none"> <li>- Reach</li> <li>- RoHS</li> </ul>	<a href="http://www.tracopower.com/products/tpc-reach.pdf">www.tracopower.com/products/tpc-reach.pdf</a> RoHS directive 2011/65/EU
Electromagnetic compatibility (EMC), emissions		EN 61000-6-3 (residential environment)
Electromagnetic compatibility (EMC), immunity	<ul style="list-style-type: none"> <li>- Voltage sag immunity</li> </ul>	EN 61000-6-2 (industrial environment) <a href="http://www.tracopower.com/products/tpc-semiF47.pdf">www.tracopower.com/products/tpc-semiF47.pdf</a>
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
Installation instructions		<a href="http://www.tracopower.com/products/tpc-inst.pdf">www.tracopower.com/products/tpc-inst.pdf</a>

**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		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 VDC and 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.



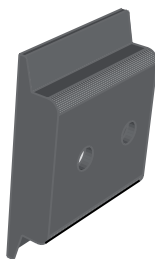
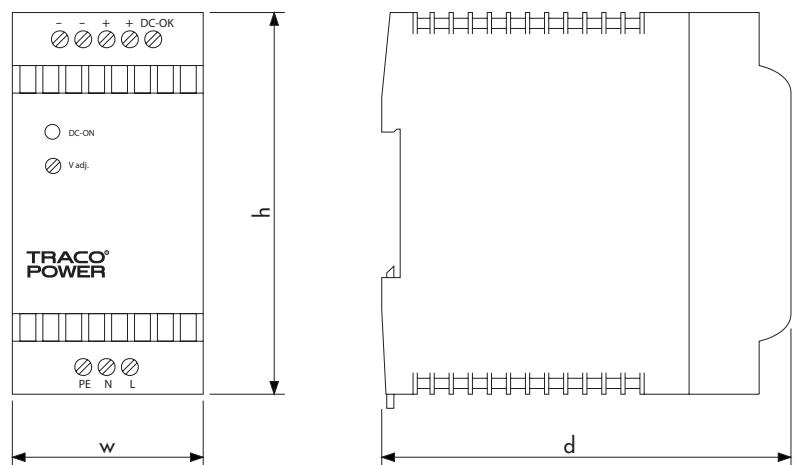
**Specifications**

Operating temperature	-25°C to +50°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	<a href="http://www.tracopower.com/products/tpc-rem-inst.pdf">www.tracopower.com/products/tpc-rem-inst.pdf</a>

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

**Case Dimensions**

Model	Width (W)	Height	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



Snap-on bracket for wall mounting (black plastic)

Wall Mounting Bracket (optional)		
Order Code	For Models	Dimensions
TPC-WMK1	TPC 030-xx	26.0 x 35 x 7.5
TPC-WMK2	TPC 050-xx, TPC-REM 240-24	42.7 x 35 x 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

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