

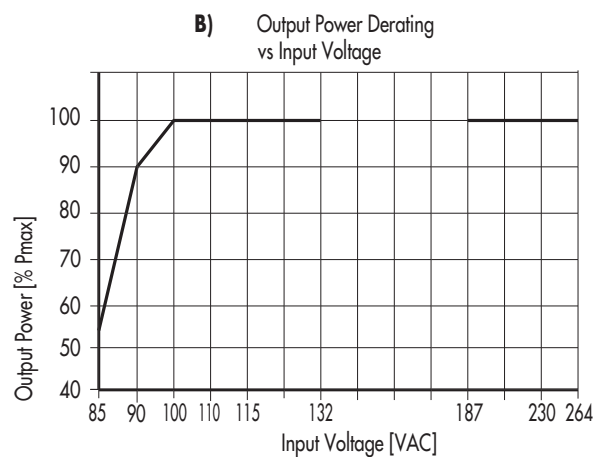
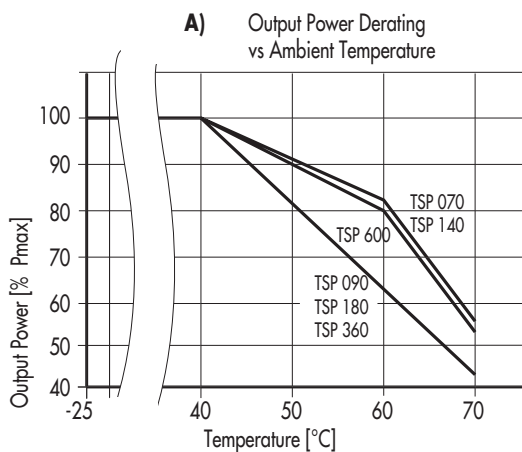
General Specifications

Max. capacitive load		unlimited
Temperature range	– Operating	–25°C to +70°C max. (for derating see graph A on page 4)
	– Storage	–25°C to +85°C
Cooling		convection cooling, no internal fan
Humidity (non condensing)		95 % rel. H max.
Pollution degree		2
Temperature coefficient		0.02 %/K
Reliability, calculated MTBF (at +25°C acc. to IEC 61709)	– TSP 070/090	>1.8 Mio h
	– TSP 140	>1.2 Mio h
	– TSP 180/360/600	>0.9 Mio h
Remote On/Off		by ext. contact. DC on: -S contact open DC off: -S connectetd via 1Kohm to -Vout
Isolation (60 s)	– Input to output	3'000 VAC
	– Input to PE	1'500 VAC
	– Output to PE	500 VAC
Safety standards	– Information technology equipment	IEC/EN 60950-1, UL 60950-1, CSA-C22.2 No. 60950-1-03
	– Industrial control equipment	UL 508, CSA-C22.2 No. 107
	– Electrical equipment for machines	EN 60204
	– Electronic equipment for power installation	EN 50178
	– Safety transformers for SMPS	EN 61558-2-16
	– Limited power source (model TSP 090-124N)	EN 60950 sect. 2.5 and NEC Class 2
	– Control equipment for hazardous location	UL 60079-15 (Class I, Division 2, Groups A,B,C,D AEx n C II C T4 U) IEC/EN 60079-15 (Class I, Zone 2, EEx nC II C T4 U), ⚠ I13G EEx nAC IIC T4 (T3 with limited power)
Safety approvals and certifications	– CB report	for IEC/EN 60950-1
	– UL approvals	UL 60950-1 rec. File: e181381, UL 508 listed File: e210002 (file no. 219759) for UL 60950-1, UL 508, UL 60079-15-02,
	– CSA certification	ANSI/ISA 12.12.01, CSA-22.2 No. 60950-1-03, CSA C22.2 No. 107, CSA 60079-15-02
	– ⚠ I13G ATEX 94/9/EC	certificate no. EPS 12 ATEX 1 424 X (option -EX only)
	– BG certification	EN 60950-1, EN 60204-1, EN 61558-2-16, EN 50178
	– Certification documents	www.tracopower.com/overview/tsp
Class of protection		safety class I (IEC 536)
Degree of protection		IP 20 (IEC/EN 60529)
Electromagnetic compatibility (EMC), Emissions	– Conducted RI suppression on input	EN 61000-6-3, EN 61204-3
	– Radiated RI suppression	EN 55011 class B, EN 55022 class B, EN 55011 class B, EN 55022 class B,
Electromagnetic compatibility (EMC), Immunity	– Electrostatic discharge (ESD)	EN 61000-6-2, EN 61204-3
	– Radiated RF field immunity	IEC / EN 61000-4-2 4 kV / 8 kV criteria B
	TSP 070/140/360 models:	IEC / EN 61000-4-3 10 V / m criteria A
	TSP 090/180/600 models:	IEC / EN 61000-4-3 10 V / m criteria B
	– Electrical fast transient / burst immunity	IEC / EN 61000-4-4 2 kV criteria B
	– Surge immunity	IEC / EN 61000-4-5 1 kV / 2 kV criteria B
	– Immunity to conducted RF disturbances	IEC / EN 61000-4-6 10 V criteria A
	– Power frequency field immunity	IEC / EN 61000-4-8 30 A / m criteria A
	– Mains voltage dips and interruptions	IEC / EN 61000-4-11 criteria B/C
	– Voltage sag immunity	SEMI F47
		www.tracopower.com/products/TSP_SemiF47.pdf

General Specifications

Environment	– Vibration acc. IEC 60068-2-6; – Shock acc. IEC 60068-2-27	3 axis, sine sweep, 10 – 55 Hz, 1 g, 1 oct/min 3 axis, 15 g half sine, 11 ms
Enclosure material		aluminium (chassis) / stainless steel (cover)
Mounting	– DIN-rail mounting – Wall mounting (option)	for DIN-rails as per EN 50022-35x15/7.5 (snap-on with self-locking spring) with wall mounting bracket - see page 9
Connection		detachable screw terminals (plugs included) 2 terminals per output
Remote On/Off connection	– 2 pin molex male terminal KK series	mating connector information (cable not included) www.tracopower.com/products/tsp-rc-cable.pdf
Installation instructions		www.tracopower.com/overview/tsp

Output Power Derating



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