

## General Specifications

Temperature ranges	<ul style="list-style-type: none"> <li>– Operating (ambient temp.)</li> <li>– Derating above 50°C (122°F)</li> <li>– Storage (non operating)</li> </ul>	–25°C to +70°C 2%/K –25°C to +85°C
Humidity (non condensing)		95 % rel. H max.
Pollution degree		2
Temperature coefficient		0.02 %/K
Switching frequency		80 kHz typ. (pulse width modulation)
Efficiency	TIS 50 ... TIS 300: TIS 500: TIS 600:	85 % typ. 90 % typ. 90 % typ.
Isolation		according to IEC/EN 60950, UL 60950, UL 508
Reliability, calculated MTBF (MIL-HDBK-217F, at +25°C, ground benign)	TIS 50/75: TIS 150/300: TIS 500/600:	450'000 h / 420'000 h 420'000 h / 360'000 h 340'000 h / 300'000 h
Safety standards		IEC/EN 60950-1 (SELV, except 72 VDC models) UL/cUL 60950-1, UL 508, UL/cUL 1604
Safety approvals	<ul style="list-style-type: none"> <li>– CB report</li> <li>– UL approvals</li>   <li>– CSA certificate</li> <li>– Certification documents</li> </ul>	for IEC 60950 UL/cUL 60950, File e181381 UL/cUL 508, File e210002 UL/cUL 1604, File e213613 not for TIS 50 & 500 (Class I, Div. 2, Groups A, B, C and D hazardous locations) <a href="http://www.ul.com">www.ul.com</a> -> certifications UL 60950-1, CSA 60950-1 <a href="http://www.tracopower.com/overview/tis">www.tracopower.com/overview/tis</a>
Electromagnetic compatibility (EMC), Emissions	<ul style="list-style-type: none"> <li>– Conducted RI suppression on input</li>   <li>– Radiated RI suppression</li> </ul>	EN 61000-6-3 / EN 61000-6-4 EN 55011 class B, EN 55022 class B, FCC part 15, level B EN 55011 class A, EN 55022 class A, FCC part 15, level A
Electromagnetic compatibility (EMC), Immunity	<ul style="list-style-type: none"> <li>– Electrostatic discharge (ESD)</li> <li>– Radiated RF field immunity</li> <li>– Electrical fast transient / burst immunity</li> <li>– Surge immunity</li> <li>– Immunity to conducted RF disturbances</li> <li>– Power frequency field immunity</li> </ul>	EN 61000-6-2 IEC/EN 61000-4-2 4 kV/8 kV IEC/EN 61000-4-3 10 V/m IEC/EN 61000-4-4 2 kV IEC/EN 61000-4-5 2 kV/4 kV IEC/EN 61000-4-6 10 V IEC/EN 61000-4-8 30 A/m
Safety class		degree of electrical protection 1 (IEC 536)
Case protection		IP 20 (IEC 529)
Environment	<ul style="list-style-type: none"> <li>– Vibration</li> <li>– Shock</li> </ul>	IEC 60068-2-6; 1 gn, 200 sweeps, each axis IEC 60068-2-27; 15 gn, 11 ms, each axis
Enclosure material		aluminium (chassis) / zinc plated steel (cover)
Mounting (snap-on with self locking spring)		for 35 mm DIN-rails as per EN 50022
Connection		detachable screw terminal block (plugs included) (TIS 600: fixed screw terminal block)

Instruction manual can be downloaded under:  
[www.tracopower.com/overview/tis](http://www.tracopower.com/overview/tis)

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

