

Safety Specifications

Safety Standards	- Medical Equipment	EN 60601-1 IEC 60601-1 ANSI/AAMI ES 60601-1 2 x MOPP (Means Of Patient Protection) www.tracopower.com/overview/tp65
	- Certification Documents	
Protection Class		Class I Prepared: Connection to PE Class II Prepared: Reinforced Insulation
Pollution Degree		PD 2: Office or Laboratory Environments
Over Voltage Category		OVC II

EMC Specifications

EMC Emission	- Conducted Emissions	EN 60601-1-2 edition 4 (Medical Devices) EN 55011 class B (internal filter) EN 55032 class B (internal filter) FCC Part 18, class B
	- Radiated Emissions	EN 55011 class B (internal filter) EN 55032 class B (internal filter) FCC Part 18, class B
	- Harmonic Current Emissions	EN 61000-3-2, class A
	- Voltage Fluctuations & Flicker	EN 61000-3-3
EMC Immunity	- Electrostatic Discharge	EN 60601-1-2 edition 4 (Medical Devices) Air: EN 61000-4-2, ± 15 kV, perf. criteria A Contact: EN 61000-4-2, ± 8 kV, perf. criteria A
	- RF Electromagnetic Field	EN 61000-4-3, 20 V/m, perf. criteria A
	- EFT (Burst)	EN 61000-4-4, ± 2 kV, perf. criteria A
	- Surge	L to L: EN 61000-4-5, ± 1 kV, perf. criteria A
	- Conducted RF Disturbances	EN 61000-4-6, 20 Vrms, perf. criteria A
	- PF Magnetic Field	EN 61000-4-8, 30 A/m, perf. criteria A
	- Voltage Dips & Interruptions	230 VAC / 50 Hz: EN 61000-4-11 30%, perf. criteria A, 25 periods >95%, perf. criteria A, 0.5 periods >95%, perf. criteria A, 1 period >95%, perf. criteria B, 250 periods
		115 VAC / 60 Hz: EN 61000-4-11 30%, 25 periods, perf. criteria A >95%, 0.5 periods, perf. criteria A >95%, 1 period, perf. criteria A >95%, 250 periods, perf. criteria B

General Specifications

Relative Humidity		95% max. (non condensing)
Temperature Ranges	- Operating Temperature	-40°C to +85°C
	- Storage Temperature	-40°C to +85°C
Power Derating	- High Temperature	see application note www.tracopower.com/overview/tp65
	- Low Input Voltage	4 %/V below 90V
Cooling system		Natural convection (no internal fan, 20 LFM)
Altitude during Operation		5000 m max.
Switching Frequency		50 - 140 kHz (PWM) (Output 1) 750 kHz typ. (PWM) (Output 2) 510 kHz typ. (PWM) (Output 3)
Insulation System		Reinfoced Insulation
Working Voltage (rated)		258 VAC

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

Isolation Test Voltage	- Input to Output, 60 s	5'657 VDC
	- Input to Case or PE, 60 s	3'535 VDC
	- Output to Case or PE, 60 s	3'535 VDC
Isolation Resistance	- Input to Output, 500 VDC	100 MOhm min.
Leakage Current (at 264 VAC)	- Touch Current	75 µA max.
Creepage		8 mm min.
Clearance		8 mm min.
Reliability	- Calculated MTBF	1'500'000 h (acc. to MIL-HDBK-217F 1'500'000 h for single output models 1'000'000 h for multi output models)
Environment	- Vibration	IEC 60068-2-6
	- Mechanical Shock	IEC 60068-2-27
Housing Material		Aluminium
Connection Type		Screw Terminal
Weight	- single output	172 g
	- dual output	221 g
	- triple output	221 g
Environmental Compliance	- Reach	www.tracopower.com/info/reach-declaration.pdf
	- RoHS	www.tracopower.com/info/rohs-declaration.pdf

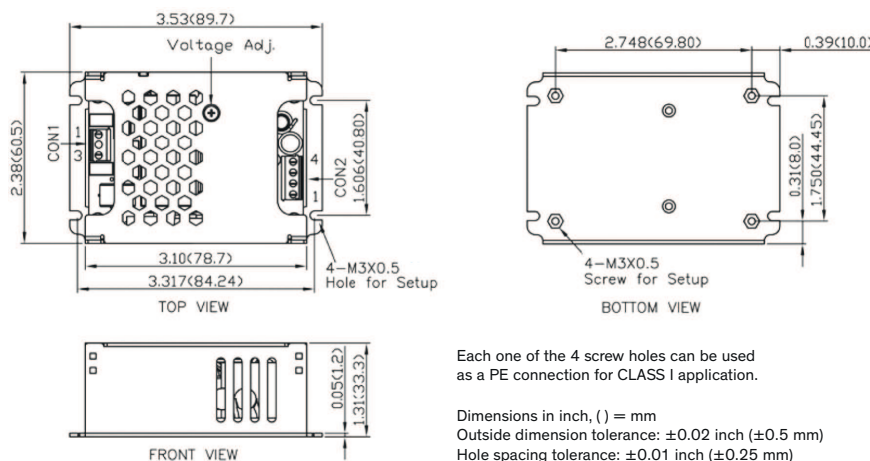
Supporting Documents

Overview Link (for additional Documents)

www.tracopower.com/overview/tp65

Outline Dimensions

Single Output Models



Screw Terminal

Input (CON1)		Output (CON2)	
Pin	Function	Pin*	Function
1	Line	1,2	-Vout
3	Neutral	3,4	+Vout

*Terminal rated for 10 A max.
(at higher current connection has to be split)

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