

Features

- ◆ Rugged power supply for harsh outdoor environments
- ◆ Die-cast aluminium housing
- ◆ Dust, water (incl. salt water), ice and oil resistant enclosure
- ◆ IP67 and NEMA 4X rated
- ◆ Connection via waterproof I/O plug-connectors
- ◆ Shock & vibration proof construction
- ◆ Operating temp. range -40°C to +85°C
- ◆ Universal input 85 to 264 VAC
- ◆ Output voltage adjustable
- ◆ DC-OK indicator
- ◆ Low ripple and noise
- ◆ Worldwide safety approvals
- ◆ Class I, zone 2 approval incl. ATEX certification
- ◆ 3-year product warranty



These power supplies have been designed particularly for applications in extreme environments. The rugged die-cast aluminium housing is water, ice, oil and dust resistant in compliance with IP67 and NEMA 4X standards. The metal case works as an efficient heatsink allowing full power operation at up to +60°C ambient temperature (no fan required). With a shock and vibration proof construction the power supplies can be mounted directly on a machine.

An International safety approval package includes CB scheme, EN/UL 60950-1 as well as UL508 listing. The power supply is also certified for class I, zone 2 for applications in hazardous locations i.e in chemical or food processing industries. The TEX series offers a cost efficient solution for de-centralized power systems in industrial automation applications with critical environment conditions.

Models

Order Code	Output Power (max.)	Output Voltage* (nom.)	Output Current (max.)
TEX 120-112	96 W	12 VDC	8.0 A
TEX 120-124	120 W	24 VDC	5.0 A

* adjustable

Input Specifications

Input voltage	– nominal	100 – 240 VAC
	– AC range	85 – 264 VAC
	– DC range	85 – 375 VDC (power derating tba)
Input frequency		47 – 63 Hz
Harmonic limits		EN 61000-3-2, Class A
Input current at full load (typ.)		1.0 A @ 230 VAC, 2.0 @ 115 VAC
Recommended circuit breaker (characteristic C or slow blow fuse)		5.0 A

Output Specifications

Output voltage adjustable range	12 VDC model:	12 – 15 VDC
	24 VDC model:	24 – 28 VDC
Output regulation (10 to 90% load variation)		2.5 %
Ripple and noise (20MHz bandwidth)		<50 mV pk-pk
Electronic short circuit protection		current limitation at 110 % typ. (automatic recovery)
Output overvoltage protection		<40 V
Hold-up time		>20 ms

General Specifications

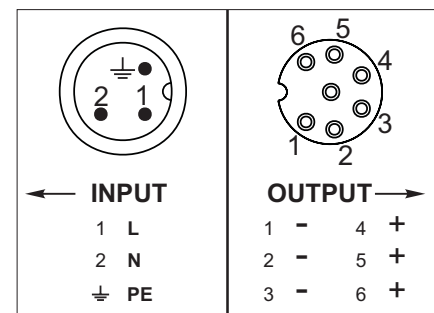
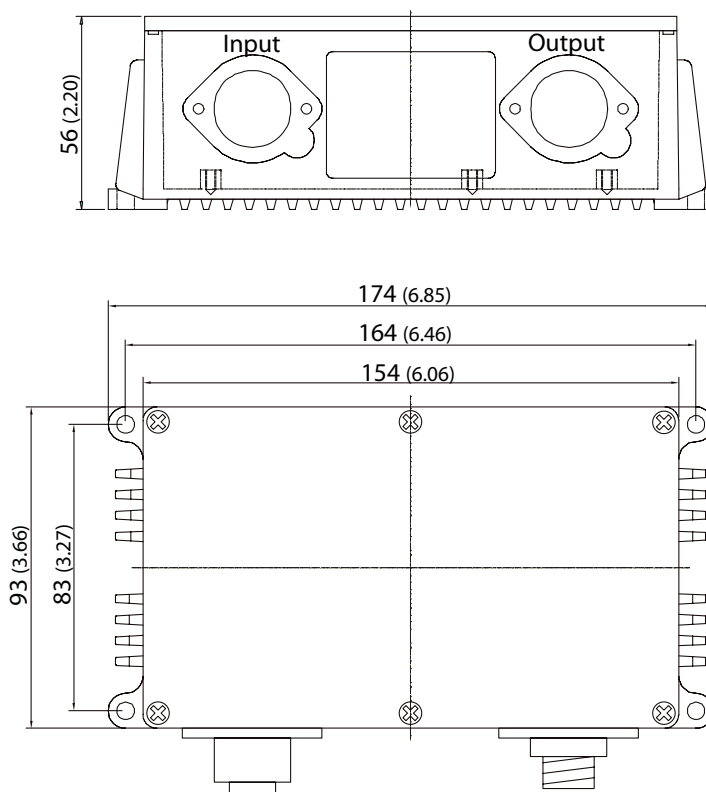
Temperature range	– Operating	– 40 °C to + 85 °C max.
Power derating		above + 60 °C 2.0 %/K
Humidity		up to 100% rel. H with condensation
Reliability (calculated MTBF according IEC 61709)		>900'000h @ 40 °C
Altitude		3000 m max. (10'000 ft)
Safety standards	– Information technology equipment	IEC/EN 60950-1
	– Control equipment for hazardous location	UL 1604 (Class I, Division 1 & 2, group A, B, C & D, T4)
	– Electrical equip. for potentially explosive atmospheres	IEC/EN 60079-15 (Class I, Zone 2, EEx nA IIC T4)
	– Industrial control equipment	UL 508
	– Electrical equipment for machines	EN 60204-3
	– Electronic equipment for power installation	EN 50178
Safety approvals and certifications (in process)	– Safety transformers	EN 61558-2-8
	– CB report	IEC/EN 60950-1
	– UL approvals	UL 508 listing, UL 1604
	– IEC	ATEX, IECEx scheme

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

General Specifications

Electromagnetic compatibility (EMC), emissions		EN 61000-6-3
– Conducted RI suppression on input		EN 55022 class B
– Radiated RI suppression		EN 55022 class B
Electromagnetic compatibility (EMC), immunity		EN 61000-6-2
– Electrostatic discharge (ESD)		EN 61000-4-2 8 kV / 15 kV
– Radiated RF field immunity		EN 61000-4-3 10 V/m
– Electrical fast transient / burst immunity input		EN 61000-4-4 4 kV /
– Electrical fast transient / burst immunity output		EN 61000-4-4 2 kV
– Surge immunity line – neutral		EN 61000-4-5 4 kV
– Surge immunity line – ground		EN 61000-4-5 2 kV
– Surge immunity neutral – ground		EN 61000-4-5 4 kV
– Surge immunity output		EN 61000-4-5 0.5 kV
– Immunity to conducted RF disturbances		EN 61000-4-6 10 V
– Mains voltage dips and interruptions		EN 61000-4-11 30 % /10 mS, 60 % /100 mS
Safety class		degree of protection class I
Case protection		IP 67 (IEC 60529), NEMA 4X rated, UL 50
Environment	– Vibration	IEC 60068-2-6
	– Shock	IEC 60068-2-27
Enclosure material		die-cast aluminium
Weight		1000 g (35.3 oz)
Installation instructions		www.tracopower.com/products/tex120_inst.pdf

Case Dimensions



Mating Connectors*

AC Input	Amphenol 4-pin female circular plug C016 20D003 110 12
DC Output	Amphenol 6-pin male circular plug C016 30H006 110 12

***not included in shipment!**

(Units are supplied with sealing connector caps)

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

Specifications can be changed any time without notice.