

Features

- ◆ Rugged power supplies 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 $+85^{\circ}\text{C}$
- ◆ 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 $+60^{\circ}\text{C}$ 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 as well as ATEX and IECEx certificate of conformity 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	<ul style="list-style-type: none"> - nominal - AC range - DC range 	100 – 240 VAC 85 – 264 VAC 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: 24 VDC model:	12 – 15 VDC 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

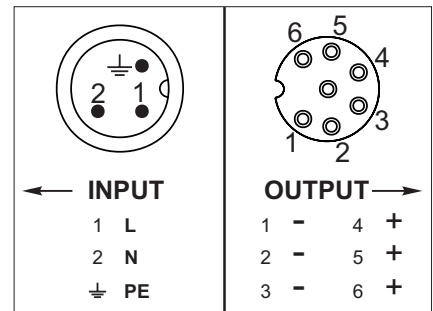
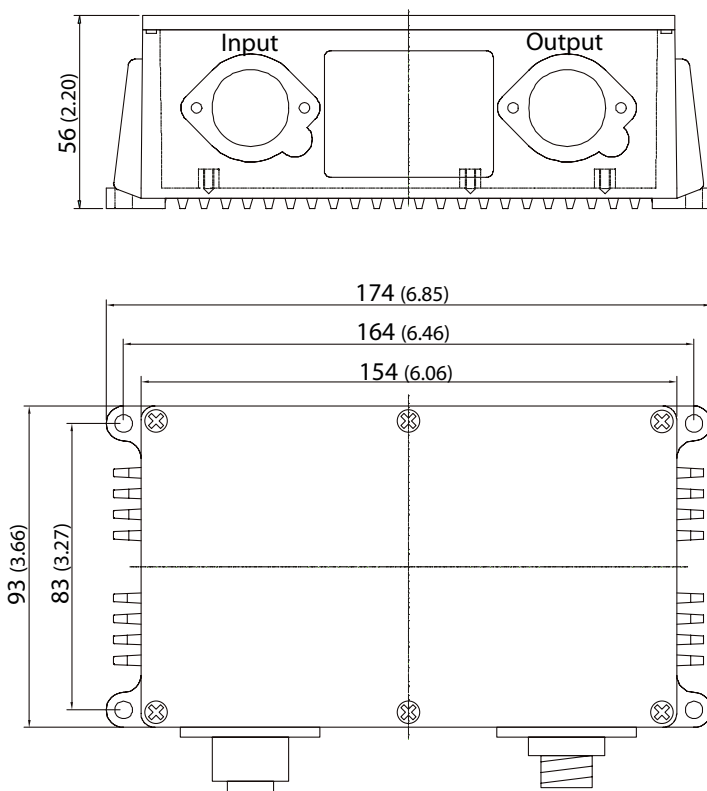
Temperature range	- Operating	-40°C to + 85°C max.
Power derating		above +60°C 2.0 %/K
Humidity		up to 100 % rel. H with condensation
Reliability (calculated MTBF according IEC 61709)		>900'000h @ 40°C
Altitude		3000 m max. (10'000 ft)
Safety standards	<ul style="list-style-type: none"> - Information technology equipment - Control equipment for hazardous location - Electrical equip. for potentially explosive atmospheres - Industrial control equipment - Electrical equipment for machines - Electronic equipment for power installation - Safety transformers 	IEC/EN 60950-1 UL 1604 (Class I, Division 1 & 2, group A, B, C & D, T4) IEC/EN 60079-15 (Class I, Zone 2, EEx nA IIC T4) UL 508 EN 60204-3 EN 50178 EN 61558-2-8
Safety approvals and certifications	<ul style="list-style-type: none"> - CB report (IEC 60950) - ATEX, IECEx scheme (IEC 60079-15) 	www.tracopower.com/products/tex120-cb.pdf www.tracopower.com/products/tex120-atex.pdf
Electromagnetic compatibility (EMC), emissions	<ul style="list-style-type: none"> - Conducted RI suppression on input - Radiated RI suppression 	EN 61000-6-3 EN 55022 class B EN 55022 class B
Electromagnetic compatibility (EMC), immunity	<ul style="list-style-type: none"> - Electrostatic discharge (ESD) - Radiated RF field immunity - Electrical fast transient / burst immunity input - Electrical fast transient / burst immunity output - Surge immunity line – neutral - Surge immunity line – ground - Surge immunity neutral – ground - Surge immunity output - Immunity to conducted RF disturbances - Mains voltage dips and interruptions 	EN 61000-6-2 EN 61000-4-2 8 kV / 15 kV EN 61000-4-3 10 V/m EN 61000-4-4 4 kV / EN 61000-4-4 2 kV EN 61000-4-5 4 kV EN 61000-4-5 2 kV EN 61000-4-5 4 kV EN 61000-4-5 0.5 kV EN 61000-4-6 10 V EN 61000-4-11 30 % /10 mS, 60 % /100 mS

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

General Specifications

Safety class		degree of protection class I
Case protection	<ul style="list-style-type: none"> - Water intrusion test - Dust test - Icing test - Oil exclusion test - Salt spray test - Gasket aging test - Hosedown test 	IP 67 (IEC 60529), NEMA 4X rated, UL 50 www.tracopower.com/products/tex120-water.pdf www.tracopower.com/products/tex120-dust.pdf www.tracopower.com/products/tex120-icing.pdf www.tracopower.com/products/tex120-oil.pdf www.tracopower.com/products/tex120-salt.pdf www.tracopower.com/products/tex120-aging.pdf www.tracopower.com/products/tex120-hose.pdf
Environment	<ul style="list-style-type: none"> - Vibration - Shock 	IEC 60068-2-6 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.