Features

- 100% automatic purge and pressurization system including purging, temperature and leakage control, alarming and system power
- Third party approvals for Class I, II, Div. 2 and Zone 2/22
- Universal mounting
- RTD inputs for temperature alarm an control
- Five standard purge programs

Application

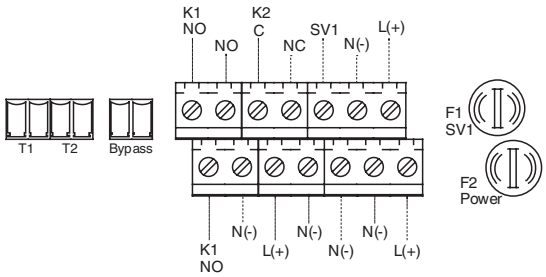
The 5500 series purge/pressurization system consists of the control unit with a user interface in a 316 stainless steel enclosure that works in conjunction with the EPV vents and pneumatic solenoid valves or manual valves form a certified purge and pressurization system for enclosures. The user interface is menu driven and easily guides users through custom programing for their applications. (2) RTD's can be connected to inputs and the user can select temperature ranges for controlling and alarming critical temperatures through a set of contacts and energizing a solenoid valve for displacing air within the enclosure or operate cooling or heating functions. Enclosure pressure and leakage can be monitored. In the event of a loss in pressure a solenoid valve can engage to restore the defined pressure settings and/or alarm for pressure loss.

The 5500 series purge and pressurization system has NEC, CEC, ATEX and IECEx third party certifications for Class I, II/Div. 2 and Zone 2/22.

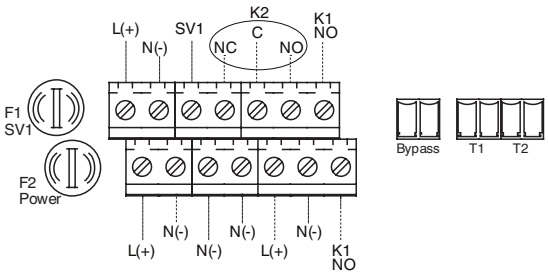
BEBCO EPS®

Connection

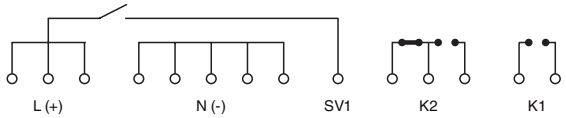
External Mount Terminal Block



Internal Mount Terminal Block



Terminal Block Connections



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General specifications	
Operating mode	fully automatic (FA)
Series	5500
Number of volume exchanges	4 ... 19
Hazardous environment	gas or dust
Supply	
Rated voltage U_n	90 ... 264 V AC, 48 ... 62 Hz ±10 %, single phase 20 ... 30 V DC
Power consumption	100 ... 240 V AC - 2.3 VA (without digital valve) 20 ... 30 V DC - 2.5 W (without digital valve)
Electrical specifications	
Fuse rating	AC: 2 A DC: 3.15 A
Input	
Input I	Temperature, up to 2 RTD's per unit
Connection	Pt100, 2-wire-connection
Input type	temperature input
Input II	1 Bypass
Connection	passive contact (switch)
Input type	mechanical contact
Output	
Output I	
Connection	K1, terminals: K1/N0, K1/N0
Output type	enclosure power, (1) SPST
Inrush current	6 A
Contact loading	6 A @ 250 V AC , 30 V DC resistive load, 6 A @ 30 V DC
Output II	
Connection	K2, terminals: K2(NO, C, NC)
Output type	alarm, (1) DPST
Inrush current	3 A
Contact loading	3 A @ 250 V AC , 30 V DC resistive load, 3 A @ 30 V DC
Output III	
Connection	digital valve, terminals SV
Output type	(1) SPDT, powered contacts from supply 0.08 A @ 250 VAC 0.5 A @ 30 VDC
Inrush current	3 A
Indicators/settings	
LED indicator	Membrane Pad K1: Green - Contact K1 is energized K2: Amber - Contact K2 is energized SV1/encl press.: Blue for safe pressure, Amber for valve on Bypass: Amber when bypass is active PT100 error: Red when fault in PT100 sensor
Pneumatic parameters	
Protective gas supply	instrument grade air or inert gas
Safe pressure	- gas 0.7 mbar (0.3" H_2O) - dust 1.6 mbar (0.65" H_2O)
Conformity	
Degree of protection	EN 60529
Shock resistance	EN 60068-2
Ambient conditions	
Ambient temperature	-20 ... 40 °C (-4 ... 104 °F) at T6 -20 ... 60 °C (-4 ... 140 °F) at T4
Relative humidity	5 ... 90 %, non-condensing
Vibration resistance	5 ... 100 Hz , 1 g, 12 m/s^2, all axes
Impact resistance	30 g, 11 ms, all axes
Mechanical specifications	
Connection type	High pressure port: 1/8" NPTF Low pressure port: 1/8" NPTF
Cable gland	**Wire size** M12 diameter 3 - 6.5mm M20 diameter 10 - 14mm **RTD/Bypass**: (3) M12x1.5 **K1, K2, SV1**: 'P_C' (3) M20x1.5
Degree of protection	Type 4X, IP66

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Material	**Housing**: 316 stainless steel **Cable Gland**: 316 stainless steel or Nickel Plated Brass **Pressure Ports**: 316 stainless steel **Membrane Pad**: Autotex F200XE **O-ring:** EPDM
Mass	approx. 2.7 kg (6 lb)
Dimensions	165 x 124 x 90 mm (6.5 x 4.9 x 3.5 in)
Data for application in connection with Ex-areas	
EC-Type Examination Certificate	
Group, category, type of protection, temperature class	external Ⓔx II 3 G Ex ic nA nC [ic pz IIC Gc] IIC T4 [Gc] (-20°C to 60°C) Ⓔx II 3 G Ex ic nA nC [ic pz IIC Gc] IIC T6 [Gc] (-20°C to 40°C) Ⓔx II 3 D Ex ic tc [ic pD IIIC Dc] IIIB T80°C Dc (-20°C to 60°C) Ⓔx II 3 D Ex ic tc [ic pD IIIC Dc] IIIB T60°C Dc (-20°C to 40°C) internal Ⓔx II 3 G Ex ic nA nC [ic pz IIC] IIC T4 [Gc] (-20°C to 60°C) Ⓔx II 3 G Ex ic nA nC [ic pz IIC] IIC T6 [Gc] (-20°C to 40°C) Ⓔx II 3 D Ex ic tc [ic pD IIIC Dc] IIIC T80°C Dc (-20°C to 60°C) Ⓔx II 3 D Ex ic tc [ic pD IIIC Dc] IIIC T60°C Dc (-20°C to 40°C)
Directive conformity	
Directive 94/9/EC	EN 60079-0:2012+A11:2013 , EN 60079-2:2007 , EN 60079-11:2012 , EN 60079-15:2010 , EN 60079-31:2009 , EN 61241-4:2006
International approvals	
UL approval	
cULus	Class I Division 2 Group A-D T4 (-20°C to 60°C) Class I Division 2 Group A-D T6 (-20°C to 40°C) Class II Division 2 Group F+G T4 (-20°C to 60°C) Class II Division 2 Group F+G T6 (-20°C to 40°C)
IECEx approval	Ex ic nA nC [ic pz IIC Gc] IIC T4 Gc (-20 °C to 60 °C) Ex ic nA nC [ic pz IIC Gc] IIC T6 Gc (-20 °C to 40 °C) Ex ic tc [ic pD IIIC Dc] IIIB T80°C Dc (-20 °C to 60 °C) External version Ex ic tc [ic pD IIIC Dc] IIIB T60°C Dc (-20 °C to 40 °C) External version Ex ic tc [ic pD IIIC Dc] IIIC T80°C Dc (-20 °C to 60 °C) Internal version Ex ic tc [ic pD IIIC Dc] IIIC T60°C Dc (-20 °C to 40 °C) Internal version
General information	
Supplementary information	EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com.

Accessories

5500-MAN-CDUL-*

5500-MAN-CD01-*

5500-MAN-EX01-*

EPV-5500 Vent System

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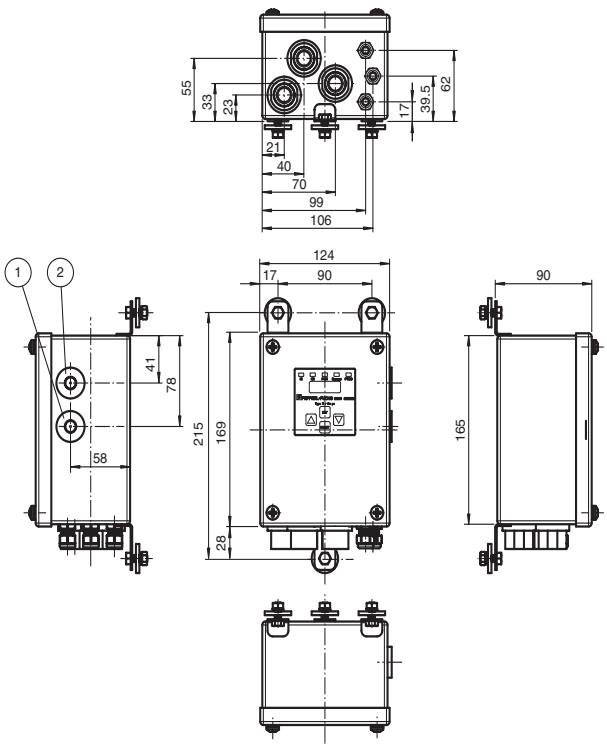
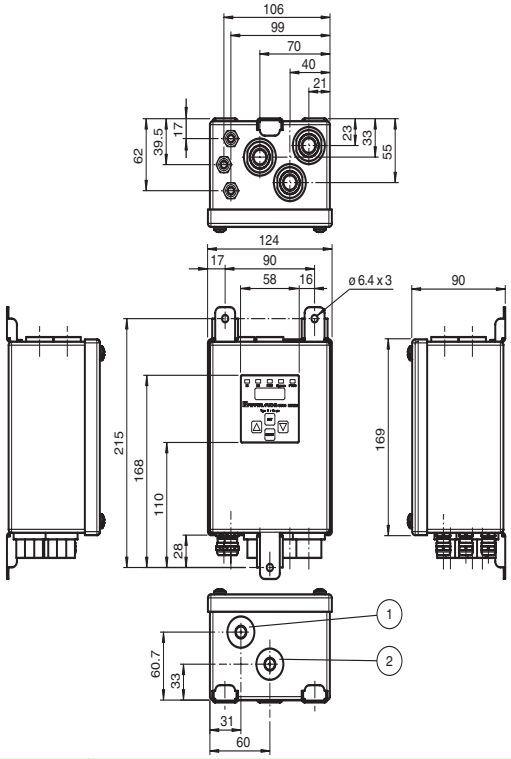
Dimensions - External Mounting



1	Low pressure port (atmostpheric pressure)
2	High pressure port (enclosure pressure)

Dimensions - Internal Mounting



1	Low pressure port (atmostpheric pressure)
2	High pressure port (enclosure pressure)

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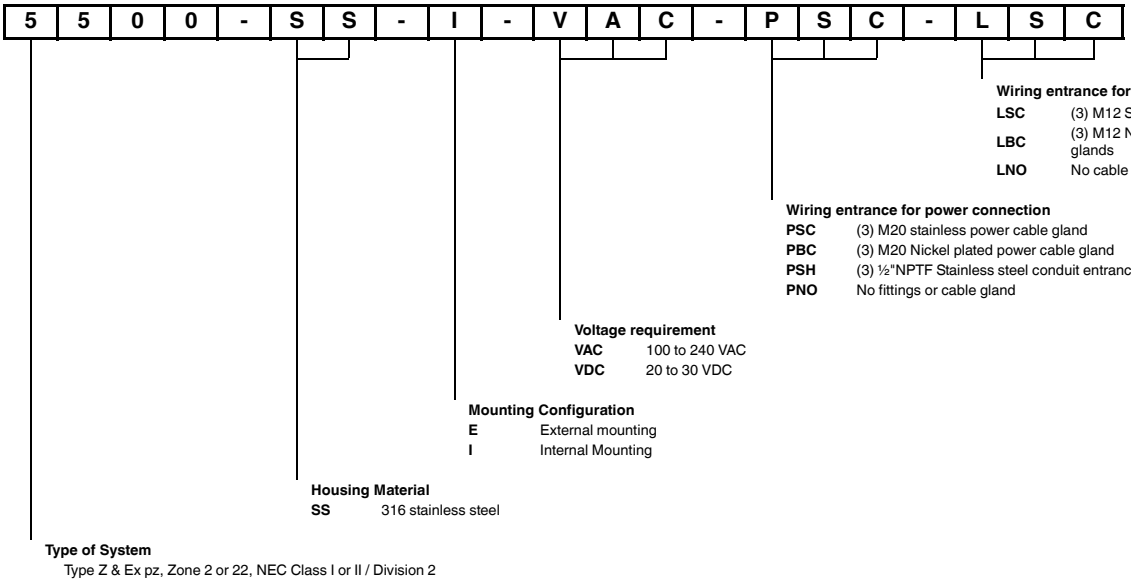
Type code/model number



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