



Ex pxb motor purge and pressurization control unit

BEBCO EPS®

6100-MP-EX-*

- Certified for ATEX and IECEx Zone 1
- Maximum flow rate of 14,000 l/min
- Intrinsically safe user interface for programming and monitoring the system
- Control Unit monitors system operation and controls enclosure power
- Auxiliary contact outputs for alarm or control
- Multiple temperature inputs for monitoring and control
- Automatic pressure compensation for excess leakage from motor

6100 series Ex pxb motor purge and pressurization system control unit



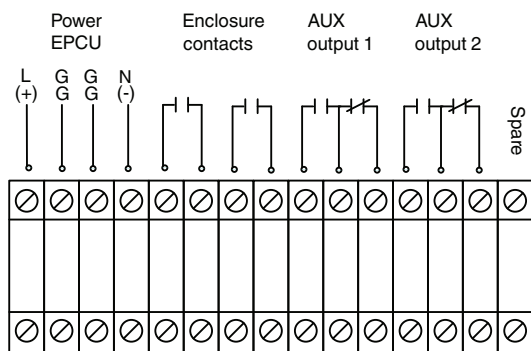
Function

The Bebcos EPS® 6100 series Ex pxb, Zone 1 motor purge and pressurization system consists of the following components in an IP66 housing: a control unit and user interface, intrinsically safe and power terminals, manual pressurization valve, and electro-pneumatic valve for automatic purging and leakage compensation.

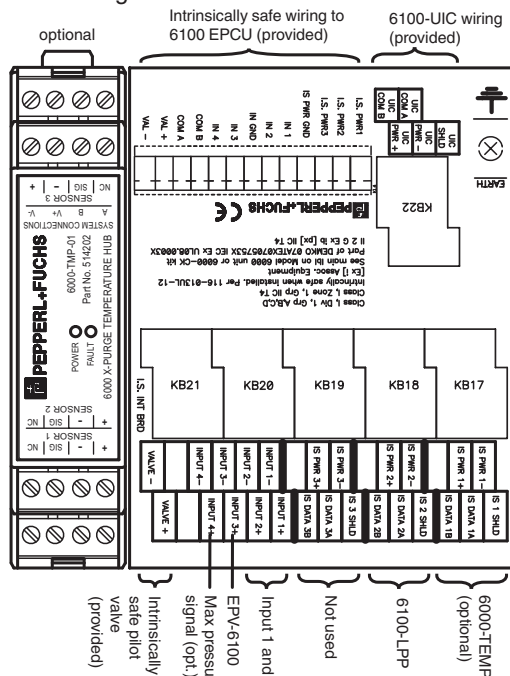
The configurable control unit features temperature and pressure compensation, an extra output for control or alarm, two selectable intrinsically safe inputs for various actions, and up to three temperature sensor inputs that can monitor various points with a motor housing. The intrinsically safe user interface can also be mounted in a separate enclosure near operating personnel for quick access and easy system monitoring. The 6100 purge and pressurization system can also be used to purge and protect large enclosures that require a large flow rate.

Connection

Ex d Wiring



Intrinsically Safe Wiring



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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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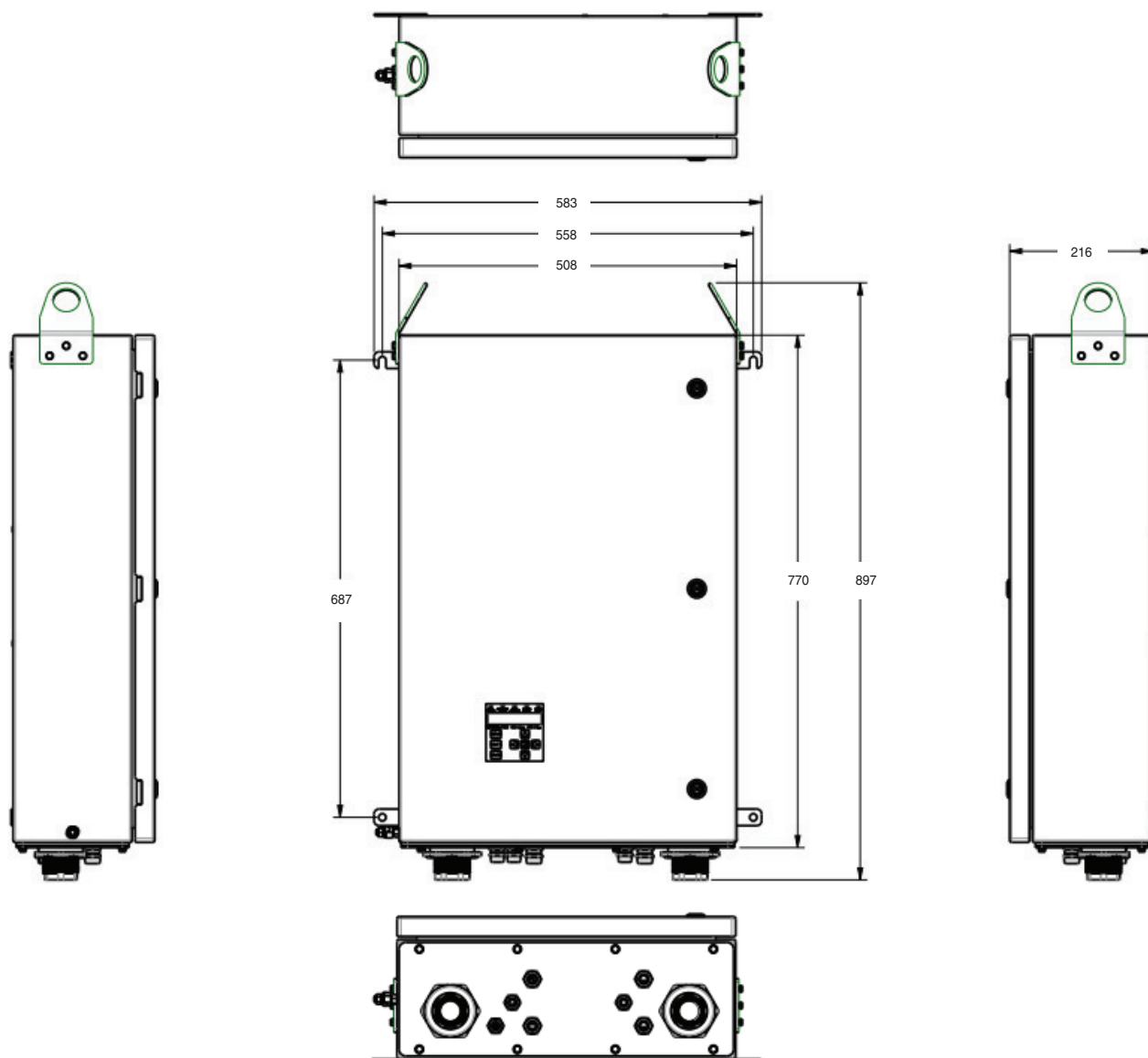
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Dimensions



Technical Data

General specifications		
Operating mode		manual, semi-automatic, or fully automatic - programmable
Series		6100 Series
Number of volume exchanges		4 to 19
Hazardous environment		gas
Supply		
Rated voltage	U_r	100 ... 250 V AC, 48 ... 62 Hz / 0.2 A 20 ... 30 V DC / 0.6 A
Electrical specifications		
Connection		
Power		Ex e terminal blocks
Connection		6000-ISB DIN mounted terminal
Input		

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Technical Data

Input type		IS 1: Dedicated for 6000-TEMP-01 (optional) IS 2: Dedicated for 6100-MP-LPP Input 1: Dry contact or SRM, Discrete Input, Intrinsically Safe Input 2: Dry contact or SRM, Discrete Input, Intrinsically Safe Input 3: Dedicated for EPV-6100-MP, Flow Signal Input 4: Dedicated high pressure switch, Max Pressure Signal (optional)
Output		
Output I		AUX 1: Dedicated blower output
Output type		Dry contacts, SPDT
Inrush current		5 A
Contact loading		2 A at 240 V AC resistive load 2 A at 24 V DC
Output II		AUX 2
Output type		Dry contacts, SPDT
Inrush current		5 A
Contact loading		2 A at 240 V AC resistive load 2 A at 24 V DC
Output III		enclosure 1 and 2
Output type		Dry contacts (2) SPST, NO
Inrush current		72 A
Contact loading		8 A at 240 V AC / 120 V AC resistive load 8 A at 24 V DC
Indicators/settings		
LED indication		Safe pressure: Blue - safe pressure is achieved Enclosure power: Green - power on; Red - power off Rapid exchange: Blue - purging is running System bypass: Yellow - bypass is activated Alarm fault: Red (blinking) - any alarm input detected; Red (solid) - fault
Pneumatic parameters		
Protective gas supply		regulated and filtered air or inert gas
Pressure requirement		regulated side: 1.4 ... 8.3 bar [20 ... 120 psig] unregulated side: 4.1 ... 8.3 bar [60 ... 120 psig]
Safe pressure		0.625 mbar [0.25 in wc / 6.4 mm wc] minimum for 6100-MP-LPP-*
Purge flow and enclosure pressure rate		2000 l/m ... 14000 l/m see EPV-6100 datasheet for flow rate steps
Valve flows		pressurization valve: manual gate valve purging valve: pilot drive angle seat valve pilot valve: intrinsically safe solenoid valve
Directive conformity		
Electromagnetic compatibility		
Directive 2014/30/EU		EN 61326-1:2013
RoHS		
Directive 2011/65/EU (RoHS)		EN 50581:2012
Ambient conditions		
Ambient temperature		0 ... 60 °C (32 ... 140 °F) Standard version -20 ... 60 °C (-4 ... 140 °F) Low temp version, no regulator version
Storage temperature		0 ... 80 °C (32 ... 176 °F) Standard version -20 ... 80 °C (-4 ... 176 °F) Low temp version, no regulator version
Relative humidity		5 ... 95 %, noncondensing
Vibration resistance		EN 60068-2-6
Impact resistance		EN 60068-2-27
Mechanical specifications		
Connection type		Terminals
Core cross section		see manual
Degree of protection		IP66
Cable entry		3 x M16 holes, plugs that are included are not hazardous-location rated 4 x M20 holes, plugs that are included are not hazardous-location rated

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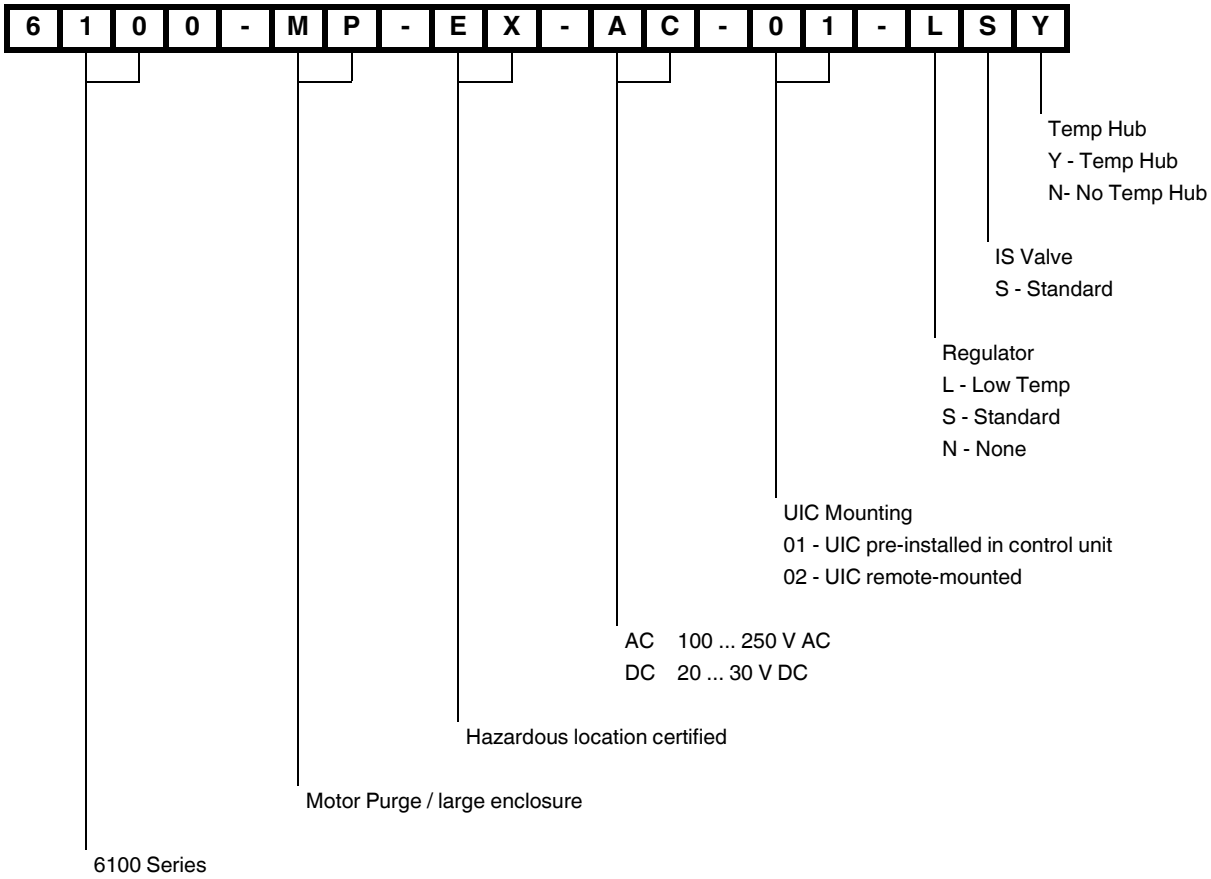
Technical Data

Material	inlet and outlet: 1¼ inch NPTF, 316 stainless steel internal piping: copper bulkhead fittings: 316 stainless steel (no regulator model) gate valve: bronze, Grafoil seals purging valve: 316 stainless steel, PTFE seals solenoid valve: brass housing: 316L stainless steel regulator: zinc (standard temp); aluminum (low temp); N/A (no regulator) filter (pneumatic): aluminum tubing (pneumatic): nylon fittings (pneumatic): nickel-plated brass
Mass	47.2 kg (104 lb)
Dimensions	216 mm x 508 mm x 770 mm (8.5 in x 20 in x 30.3 in)
Data for application in connection with hazardous areas	
Certificate	CML 19 ATEX 1425X
Marking	Ⓜ II 2G Ex db eb ib [ib Gb][pxb Gb] IIC T4 Gb
Directive conformity	
Directive 2014/34/EU	EN IEC 60079-0:2018 EN 60079-1:2014 EN 60079-2:2014 EN 60079-7:2015 EN 60079-11:2012
International approvals	
IECEx approval	IECEx CML 19.0156X Ex db eb ib [ib Gb][pxb Gb] IIC T4 Gb
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 . Supplemental Standards : EN 61010-1:2010

Accessories

	6100-MP-LPP-*	6100 series purge and pressurization system pressure sensor
	EPV-6100-MP-*	6100 series purge and pressurization enclosure protection vent

Type Code



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