



- Black box system
- Automatic calculation of the purge time
- WEB interface
- 3 x PT100/1000 inputs
- Safety-related control system

SIL 2

The APEX^{mpc} Ex p control unit controls and monitors the pre-purge and operating phase of pressurised enclosure motors protected in accordance with ignition protection type px. The parameters can be set using the integrated WEB interface or the optionally available p operator panel. The APEX^{mpc} features two release relays; one which is energised and one which has floating contacts. Two signal relays with one changeover contact each are additionally available. Three PT100/1000 inputs are available to monitor the temperature of the Ex p-protected equipment. Up to three switch values can be assigned to them. All the components required to set up Ex px monitoring and purge gas valves are integrated in the APEX^{mpc}. The following components are additionally required to set up a complete control system:

- "Motor purge valve MPC" outlet
- There is the option to connect a p operator panel

Explosion protection

ATEX marking	Ⓜ II 2(1)G Ex eb mb ib [ib pxb] [ja Ga] IIC T4 Gb Ⓜ II 2(1)D Ex tb [ib pxb] [ja Da] IIIC T130 °C Db
Certification	BVS 19 ATEX E 015
IECEx marking	Ex eb mb ib [ib pxb] [ja Ga] IIC T4 Gb Ex tb [ib pxb] [ja Da] IIIC T130 °C Db
Certification	IECEx BVS 19.0038X
Other approvals and certificates, see www.bartec.com	
Ambient temperature	In storage -20 °C to +60 °C During operation -25 °C to +50 °C -50 °C to +50 °C (HT) 230 V AC or 110 V AC heating is available on the HT version. Please state which voltage you require when ordering.

Technical data

Directives	Directive 2014/30/EU Directive 2014/34/EU
Structure	Ex e protective housing with integrated Ex mb/ib-protected p control system
Housing material	V4A stainless steel
IP rating	IP 66 according to EN/IEC 60529 IP 64 according to EN/IEC 60079-0
Terminals	Ex e: 0.08 to 2.5 mm ² , fine-wire, tension spring Ex i: 0.2 to 1.5 mm ² , fine-wire, push-in
Pneumatic connections	Purge gas supply in: G 1 ½", internal thread Purge gas supply out: G 1 ½", external thread MPV activation: Pipe connection 10 mm Pressure measurement: 2 x pipe connections 10 mm
Pressure measurement range	0 to 25 mbar (standard) or 0 to 300 mbar (on request)
Pre-purge time	0 to 120 min
Flow rate	Leakage compensation: Proportional up to 11.5 litres/second Purge gas volume: Digital 0 to 450 m ³ /hour
Weight	40 kg
Safety integrity level	SIL 2

Electrical data

Supply voltage	24 V DC to 44 V DC, ±10 % or 100 V AC to 230 V AC, ±10 %
Power consumption	P _v = approx. 19 watts
Normally open contacts	K1 (SIL) release, max. 5 A (AC1) K2 (SIL) release, floating, max. 230 V AC/3 A (AC1) K3 and K4 signal relays, floating, changeover contact, max. 1 A (AC1)
Inputs	3 x PT100/1000 1 x bypass 1 x main switch 1 x 4 – 20 mA [ib] – pressure sensor 1 x 4 – 20 mA [ja] – pressure sensor



- Black box system
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- 3 x PT100/1000 inputs

The SILAS^{mpc} Ex p control unit controls and monitors the pre-purge and operating phase of pressurised enclosure motors protected in accordance with ignition protection type px. The parameters can be set using the integrated WEB interface or the optionally available p operator panel. The SILAS^{mpc} features two release relays; one which is energised and one which has floating contacts. Two signal relays with one changeover contact each are additionally available. Three PT100/1000 inputs are available to monitor the temperature of the Ex p-protected equipment. Up to three switch values can be assigned to them. All the components required to set up Ex px monitoring and the purge gas valve are integrated in the SILAS^{mpc}. The following components are additionally required to set up a complete control system:

- "Motor purge valve MPC" outlet
- There is the option to connect a p operator panel

Explosion protection

ATEX marking	⊕ II 3 G Ex ec mc ic [ic pzc] IIC T4 Gb
Certification	⊕ II 3 D Ex tc [ic pzc] IIIC T130 °C Db BVS 19 ATEX E 016
IECEx marking	Ex ec mc ic [ic pzc] IIC T4 Gb
Certification	Ex tc [ic pzc] IIIC T130 °C Db IECEx BVS 19.0038X
Other approvals and certificates, see www.bartec.com	
Ambient temperature	In storage -20 °C to +60 °C During operation -25 °C to +50 °C -50 °C to +50 °C (HT) 230 V AC or 110 V AC heating is available on the HT version. Please state which voltage you require when ordering.

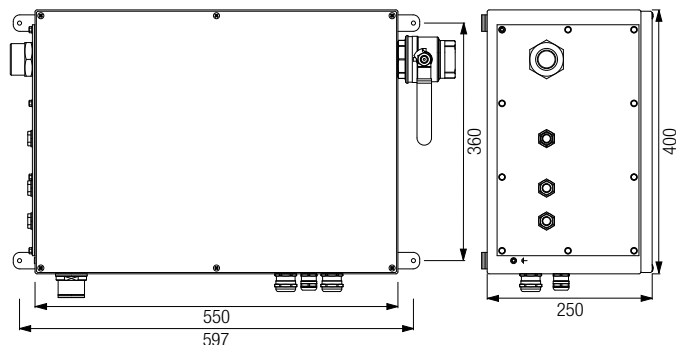
Technical data

Directives	Directive 2014/30/EU Directive 2014/34/EU	
Structure	Ex e protective housing with integrated Ex mb/ib-protected p control system	
Housing material	V4A stainless steel	
IP rating	IP 66 according to EN/IEC 60529 IP 64 according to EN/IEC 60079-0	
Terminals	Ex e: 0.08 to 2.5 mm ² , fine-wire, tension spring Ex i: 0.2 to 1.5 mm ² , fine-wire, push-in	
Pneumatic connections	Purge gas supply in: G 1 ½", internal thread G Purge gas supply out: 1 ½", external thread MPV activation: Pipe connection 10 mm Pressure measurement: 2 x pipe connections 10 mm	
Pressure measurement range	0 to 25 mbar (standard) or 0 to 300 mbar (on request)	
Pre-purge time	0 to 120 min	
Flow rate	Leakage compensation	Mechanical, up to 11.5 l/sec
	Purge gas volume	Digital, 0 to 450 m ³ /hour
Weight	40 kg	

Electrical data

Supply voltage	24 V DC to 44 V DC, ±10 % or 100 V AC to 230 V AC, ±10 %	
Power consumption	Pv = approx. 19 watts	
Normally open contacts	K1 release, max. 5 A (AC1) K2 release, floating, max. 230 V AC/3 A (AC1) K3 and K4 signal relays, floating, changeover contact, max. 1 A (AC1)	
Inputs	3 x PT100/1000 1 x bypass 1 x main switch	

Dimensions



Ordering information

Controller supply voltage	Code no.	Temperature range, UV heating	Code no.
24 V DC to 44 V DC, ±10 %	1	-25 °C to +50 °C	0
100 V AC to 230 V AC, ±10 %	2	-50 °C to +50 °C, 230 V AC	1
		-50 °C to +50 °C, 110 V AC	2

Complete order no. Zones 1, 21 07-37A2-2211/ M5
 Zones 2, 22 A7-37S2-2111/ M5

Please insert code number.

The accessories and order information can be found on the accessory pages.

We reserve the right to make technical changes.