

APEX (SILAS) Pressurized Cabinet



Description

The need for complex automation functions for processes in the chemical, pharmaceutical, oil and gas sectors is constantly increasing.

Flexible, reliable and low-maintenance solutions are required for measurement, control, regulation and visualisation, especially in potentially explosive atmospheres.

Complete control systems and switchgears, drives, pumps, large displays and industrial monitors, including keyboard and printer, must be prepared for use in Ex areas.

The Ex p pressurised enclosure is one of the most flexible Ex solutions for many applications.

This type of ignition protection makes it possible to operate non-ex-capable devices in potentially explosive atmospheres in Zones 1/21, 2/22. The idea behind this is to prevent a potentially explosive atmosphere from entering a sealed protective housing by generating constant overpressure compared to the surrounding atmosphere.

BARTEC offers an Ex solution for controlling and automating devices, machines and systems in Zones 1/21, 2/22 in the form of the pressurised enclosure Ex p systems.

Depending on the application, non-Ex-protected control units and switching devices, as well as complete automation systems, are installed in the housing. Modern, ready-for-operation Ex solutions – including the required ATEX or IECEx certification – are created on the basis of BARTEC's modular, ATEX-certified pressurised enclosure. The overpressure as a result of the purge gas is produced by compensating for the leakage losses. The pressurised enclosure solution is designed for a large range of ambient temperatures in temperature classes T3 to T5.

The main focus is on maintenance and availability of Ex devices and systems. The experts at BARTEC have many years of experience in explosion protection applications and in designing complete systematic solutions for automation.

This expertise is the basis for developing reliable and efficient solutions, from engineering, manufacturing and procurement, through to commissioning and approval.

The Ex p solutions are designed from sheet steel or stainless steel, with air conditioning, with different coatings, seawater-resistant or drip-resistant, depending on the application..

APC – APEX Pressurized Cabinet (Zone 1/21)

Explosion protection

APC	Ex II 2G Ex pxb IIC T5 – T3 Gb
Marking ATEX	Ex II 2D Ex pxb IIIC T95°C – T130 °C Db
	Ex II 2G Ex pyb IIC T5 – T3 Gb
	Ex II 2D Ex pyb IIIC T95°C – T130 °C Db
Certification	BVS 20 ATEX E 060 X
Marking IECEx	Ex pxb IIC T5 – T3 Gb
	Ex pxb IIIC T95°C – T130 °C Db
	Ex pyb IIC T5 – T3 Gb
	Ex pyb IIIC T95°C – T130 °C Db
Certification	IECEX BVS 20 0048X

Other approvals and certificates, see bartec.com

Technical data

Directives	Directive 2014/30/EU Directive 2014/34/EU
Structure	Standard housing or custom solution
Housing material	Stainless steel, sheet steel, die-cast aluminium, polyester
Ambient temperature	-55 °C to +70 °C (application-dependent)
IP rating	Application-dependent, at least IP 54
Housing volume	Up to 17300 litres
Purge gas	Purified compressed air or inert gas
Purge gas inlet pressure	3 to 25 bar
Operating pressure	Version-dependent, between 2 and 4 mbar
Purge pressure	Version-dependent, between 1 and 20 mbar
Pre-purge time	Application-dependent

Electrical data

Supply voltage	Max. 10 kV
Power consumption	Max. 10 kA

We would be happy to provide a pressurised enclosure solution on request.

Please contact our sales representative.

SPC – SILAS Pressurized Cabinet (Zone 2/22)

Explosion protection

SPC	Ex II 3G Ex pzc IIC T5 – T3 Gc
Marking ATEX	Ex II 3D Ex pzc IIIC T95°C – T130 °C Dc
Certification	BVS 20 ATEX E 061 X
Marking IECEx	Ex pzc IIC T5 – T3 Gc
	Ex pzc IIIC T95°C – T130 °C Dc
Certification	IECEX BVS 20 0048X

Other approvals and certificates, see bartec.com