

PXK 系列正压型防爆配电箱

PXK Explosion-proof Pressurized Distribution Cabinets

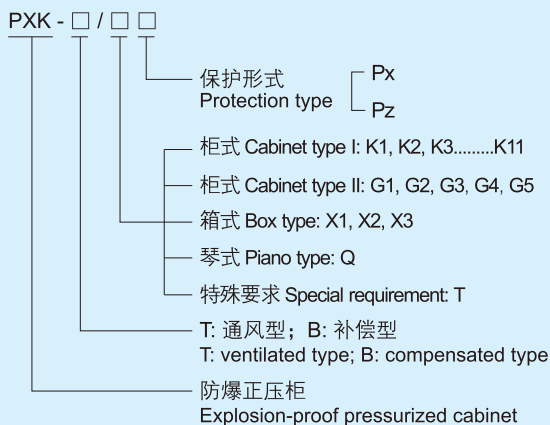


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应用场所 Application

- ◆ 为海洋工程各类作业平台、各类化学品、天然气运输船、危险品码头等危险区域的设备提供正压防爆型控制或配电；
- ◆ 可在潮湿、振动、腐蚀等恶劣环境中可靠工作；
- ◆ 适用于爆炸性危险环境1区、2区、21区、22区等场所。
- ◆ Widely used to provide pressurized control or power distribution for equipment on marine engineering oil and gas drilling platforms, FPSO ships, LNG ships and dock;
- ◆ Can reliably work in severe environment where is easily affected by moisture, vibration, or corrosion;
- ◆ Explosive hazardous atmosphere zone 1, zone 2, zone 21, zone 22.

型号含义 Catalogue Number Logic



防爆原理 Explosion-proof principle

- ◆ 采用介质隔离点燃源达到电器防爆的目的是正压通风防爆柜的防爆原理。即：把用户所有的电器元件装在一个充满正压力洁净介质的壳体内，使外部环境中易燃易爆的混合性气体物质无法接触到电器元件在正常工作时所产生的电火花或危险温度，从而达到电器防爆的目的。
- ◆ Using dielectric isolation ignition source to achieve explosion protection is the Ex principle of pressurized ventilation explosion-proof cabinets. Namely: the user put all the electrical components in a housing filled with clean medium, so that the external explosive gas mixtures can not come into contact with sparks or dangerous temperatures in normal operation of electrical components, so as to achieve the purpose of explosion protection.

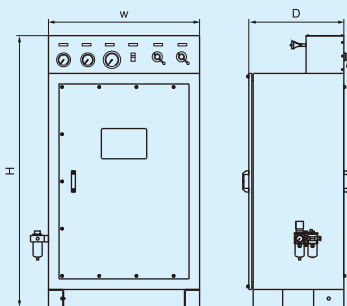
Zones 1&2 ; 21&22

技术参数 Technical parameters

◆ 防爆标志 Ex-Mark	Ⓜ II 3 G Ex pz II CT4 Gc Ⓜ II 3 D Ex pD III CT 130°C Dc IP66
◆ 执行标准 Compliance	IEC60079 EN60079 CCS入级规范 (CCS standard)
◆ 产品证书 Certificate	LCIE 14 ATEX___; IECEX
◆ 正腔压力 Positive pressure value	200Pa~800Pa(0.002bar~0.008bar)
◆ 气源压力 Air source	0.2MPa~0.8MPa (2bar~8bar)
◆ 额定电压 Rated voltage	Max.690V AC
◆ 额定电流 Rated current	Max.630A
◆ 壳体材质 Enclosure material	316L不锈钢或优质碳钢 Stainless steel or high quality carbon steel
◆ 防护等级 Degree of protection	IP66

选配表 Selection table

型号 Model	外形尺寸(mm) W×H×D Outline dimension	主腔尺寸(mm) W×H×D Main cavity size	副腔尺寸(mm) W×H×D Sub-cavity size	主腔操作面板有效尺寸 (mm) W×H Main cavity operation panel effective size	安装尺寸 (mm) Mounting size	重量 (kg) Weight
K1	680 x 1490 x 410	680 x 1000 x 300	680 x 370 x 250	760 x 440	600 x 180	30
K2	1000 x 1370 x 410	1000 x 1000 x 300	1000 x 250 x 250	760 x 760	920 x 180	45
K3	1000 x 1370 x 510	1000 x 1000 x 400	1000 x 250 x 250	760 x 760	920 x 280	55
K4	1000 x 1370 x 710	1000 x 1000 x 600	1000 x 250 x 250	760 x 760	920 x 480	65
K5	1000 x 1650 x 710	1000 x 1280 x 600	1000 x 250 x 250	760 x 1040	920 x 480	80
K6	1000 x 1800 x 710	1000 x 1430 x 600	1000 x 250 x 250	760 x 1190	920 x 480	90
K7	1000 x 1800 x 960	1000 x 1430 x 850	1000 x 250 x 250	760 x 1190	920 x 730	105
K8	1000 x 1800 x 1110	1000 x 1430 x 1000	1000 x 250 x 250	760 x 1190	920 x 880	110
K9	1000 x 1800 x 1225	1000 x 1430 x 1115	1000 x 250 x 250	760 x 1190	920 x 995	116
K10	1000 x 1800 x 1370	1000 x 1430 x 1260	1000 x 250 x 250	760 x 1190	920 x 1140	122
K11	1000 x 1800 x 1560	1000 x 1430 x 1450	1000 x 250 x 250	760 x 1190	920 x 1330	128

 外形示意图 (所有尺寸单位为mm)
 Outline dimension(mm)


Pz型系列正压柜 Pz pressurized cabinet

- ◆ 为专用于2区而设计的一种正压防爆柜，Pz系列和Px系列相比，省略了检查换气时间的安全装置，仅标志换气的的时间，由用户在主腔通电前按要求进行；另外，当内部气压低于100Pa时，自控系统自动报警(声光)，并开启进气，自动调整内部补气，补气成功时，自动恢复正常，不成功并内部气压降到60Pa时，系统不自动断电，继续报警。
- ◆ The cabinet is dedicated to Zone 2, Pz series compared to Px series omit safety device that checks ventilation time, only indicate the ventilation time, before main chamber is energized the user need to check according to requirements ; In addition, when the internal pressure is less than 100Pa, automatic control system alarm (audio and visual), and open air intake, automatically adjust the internal air replenishing, after replenishing is successful, automatically return to normal, if unsuccessful and the internal pressure drops to 60Pa, the system shall not automatically cut power off, continue to the alarm.

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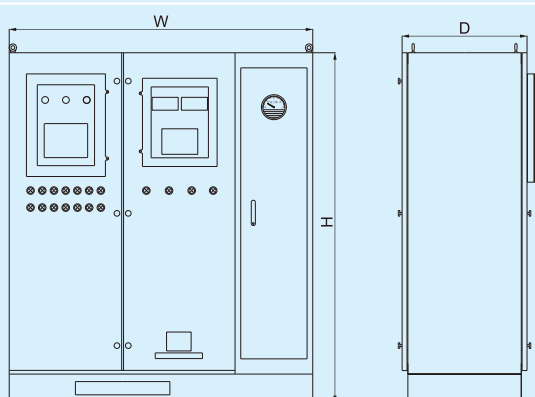
技术参数 Technical parameters

◆ 防爆标志 Ex-Mark	⊕ II 2 G Ex px de [ia] ia IIB T4 Gb
◆ 执行标准 Compliance	IEC60079 EN60079 CCS入级规范 (CCS standard)
◆ 产品证书 Certificate	DNV 13 ATEX__ ; IECEx
◆ 正腔压力 Positive pressure value	200Pa~800Pa(0.002bar~0.008bar)
◆ 气源压力 Air source	0.2MPa~0.8MPa (2bar~8bar)
◆ 额定电压 Rated voltage	Max.690V AC
◆ 额定电流 Rated current	Max.630A
◆ 壳体材质 Enclosure material	316L不锈钢或优质碳钢 Stainless steel or high quality carbon steel

选配表 Selection table

型号 Model	外形尺寸(mm) W × H × D Outline dimension	主腔尺寸(mm) W × H × D Main cavity size	副腔尺寸(mm) W × H × D Sub-cavity size	安装尺寸 (mm) Mounting size	重量 (kg) Weight
G1	800 x 1920 x 600	800 x 1200 x 600	800 x 720 x 600	按用户要求或另订 Upon user request or ordered seperately	100
G2	1000 x 2320 x 600	1000 x 1600 x 600	1000 x 720 x 600		135
G3	1200 x 2150 x 600	800 x 2000 x 600	400 x 2000 x 600		145
G4	1400 x 2150 x 600	1000 x 2000 x 600	400 x 2000 x 600		160
G5	1400 x 2150 x 800	1000 x 2000 x 800	400 x 2000 x 800		180

外形示意图 (所有尺寸单位为mm) Outline dimension(mm)



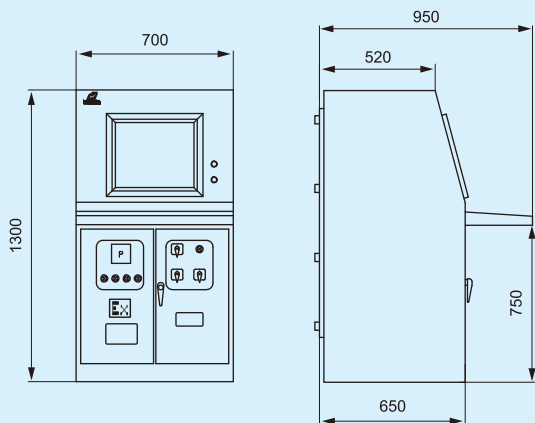
Px型系列正压柜 Px pressurized cabinet

- ◆ 柜式产品正压内腔容积大，内装元件数量多，适合大型设备(大电源)的启动、控制、尤其是变频调速、软起动等，也适合集中控制、工艺控制、仪表分析、信号集中处理系统；
- ◆ 用户根据内装电器元件的数量，选择适合的柜式尺寸(G1、G2、G3、G4、G5)，并可提供“主腔操作面板有效尺寸”设计面板元件布置图，供我公司参考；
- ◆ 可按用户要求进行特殊设计。
- ◆ The cabinet pressurized cavity is of large volume, and large quantity of interior components, suitable for the start, control of large-scale equipment (big power), especially frequency control, soft start, also suitable for centralized control, process control, instrumentation analysis, signal concentrate processing systems;
- ◆ Based on the number of built-in electrical components, select appropriate cabinet size (G1, G2, G3, G4, G5), and design the panel layout in accordance with the "main cavity operation panel effective size" in the table, for our reference;
- ◆ Special design based on user request.

技术参数 Technical parameters

◆ 防爆标志 Ex-Mark	II 2 G Ex de px IIC T4 Gb
◆ 执行标准 Compliance	IEC60079 EN60079 CCS入级规范 (CCS standard)
◆ 产品证书 Certificate	DNV 13 ATEX___ ; IECEx
◆ 正腔压力 Positive pressure value	200Pa~800Pa(0.002bar~0.008bar)
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◆ 壳体材质 Enclosure material	316L不锈钢或优质碳钢 Stainless steel or high quality carbon steel

外形示意图 (所有尺寸单位为mm) Outline dimension(mm) Px型系列正压柜 Px pressurized cabinet



- ◆ 琴式产品正压内腔内装元件主要以现场控制元件、分析仪表、集中控制、信号联络为主，实现现场连续操作、监控。
- ◆ 可根据用户加装电脑；
- ◆ 可按用户要求进行特殊设计。
- ◆ Inner components of piano type product shall be based on the field control devices, analytical instruments, centralized control, signal contact, to achieve continuous operation and monitoring on site.
- ◆ Computers can be added according to user request;
- ◆ Special design based on user request.

PXB 系列正压小屋

PXB Pressurized cabins

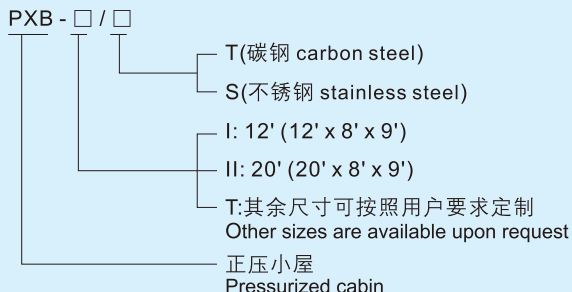


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应用场所 Application

- ◆ 为海洋工程各类作业平台、各类化学品、天然气运输船、危险品码头等危险区域作现场分析、仪表控制之用；
- ◆ 可在潮湿、振动、腐蚀等恶劣环境中可靠工作；
- ◆ 适用于爆炸性危险环境1区、2区、21区、22区等场所。
- ◆ Widely used on marine engineering oil and gas drilling platforms, FPSO ships, LNG ships and dock for field analysis or instrument control;
- ◆ Can reliably work in severe environment where is easily affected by moisture, vibration, or corrosion;
- ◆ Explosive hazardous atmosphere zone 1, zone 2, zone 21, zone 22.

型号含义 Catalogue Number Logic



防爆原理 Explosion-proof principle

- ◆ 本系列产品主要是实现用户现场集中控制、调度指挥、工艺分析、仪表监控的防爆处理，具有其它防爆结构不可比拟的优越性；
- ◆ 该系统由房间主体结构、正压控制系统、正压通风系统、压力监测系统、可燃气体探测系统、有毒气体探测系统、高温报警系统、烟雾报警系统、声光报警联锁系统、照明系统、温湿度调节系统、通用电源系统、用户电气系统等组成。
- ◆ This series of products is to achieve explosion treatment of user-site centralized control, com mand and control, process analysis, instrument monitoring, with superiority that other Ex structure can not reach;
- ◆ The system consists of the main structure of the room, the pressurized control system, pressurized ventilation system, pressurized monitoring system, combustible gas detection system, toxic gas detection system, high temperature alarm system, smoke alarm system, audio and visual alarm interlock system, lighting system, temperature humidity control system, universal power supply system, electrical system and other electrical system of the user.

Zones 1&2 ; 21&22

技术参数 Technical parameters

◆ 防爆标志 Ex-Mark	Ex px II BT4 Gb Ex px III CT130°C Db
◆ 执行标准 Compliance	IEC60079 EN60079 GB3836 CCS入级规范 (CCS standard)
◆ 控制电源 Control power	220V / 380V AC, 50Hz/60Hz
◆ 正压压力 Positive pressure	30~100Pa
◆ 防护等级 Degree of protection	IP65
◆ 报警功能 Alarm function	小屋内危险气体浓度超限(25%LEL)时声光报警 小屋内有毒气体浓度超限(12.5ppm)时声光报警 When concentration of dangerous gases in the cabin exceed (25% LEL) , audible and visual alarm Concentration of toxic gases in the cabin exceed (12.5ppm) audible and visual alarm
◆ 壳体材质 Enclosure material	316L不锈钢或优质碳钢 Stainless steel or high quality carbon steel
◆ 外形尺寸 Outline dimension	根据用户要求订制 upon request

典型示例方案 Typical scheme



PXB 系列正压小屋 PXB Pressurized cabin

产品特性 Features

- ◆ 正压型防爆分析小屋集工业在线仪表的组合、成套、安装应用于一体，并首先在油田、炼油、化工企业及海洋石油平台中得到广泛应用；
 - ◆ 室内安装有防爆空调，可调节温度，具有恒温、恒湿功能；
 - ◆ 配电系统为管线系统，配有防爆控制箱；
 - ◆ 照明系统采用防爆吸顶灯和防爆应急灯，正常照明为管形防爆荧光灯；
 - ◆ 小屋内还具有通风、换气、过滤装置，小屋引风管入口处应处于非危险区；
 - ◆ 有双重密封门，并配有玻璃视窗和逃生门，具有防尘、防水等功能；
 - ◆ 整体全封闭系统，具有防静电、防火花、无环境污染，抗腐蚀、抗干扰等功能；
 - ◆ 采用PLC集成控制技术，使系统稳定可靠运行，整体接地，接地电阻 $<4\Omega$ 。
- ◆ Pressurized cabin combines the assembly, installation of industrial online instrument, and first widely used in oil fields, refineries, chemical companies and offshore oil platforms;
 - ◆ Indoor installed with explosion-proof air conditioner, temperature is adjustable, with constant temperature and humidity function;
 - ◆ Distribution system is a pipeline system, equipped with explosion-proof control box;
 - ◆ Lighting system is designed with explosion-proof ceiling lamp and explosion-proof emergency light, normal lighting is designed with tubular Ex fluorescent lamp;
 - ◆ Inside the cabin is designed with ventilation and filtration devices, ventilation duct entrance should be in non-hazardous areas;
 - ◆ There are double-sealed doors, glass window and escape door, dust-proof, water-proof ;
 - ◆ Overall closed, anti-static, anti-spark, no environmental pollution, anti-corrosion, interference resistant;
 - ◆ Using PLC integrated control technology, the system operation is stable and reliable , overall grounded, ground resistance $<4\Omega$.

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局部示意图 Figure of cabin (partial)



主要组成部分 Main components



BXD81 防爆动力配电箱
BXD81 explosion-proof
power distribution box



可燃气体探测器
Combustible Gas Detector



有毒气体探测器
Toxic gas detector



感烟探测器
Smoke Detector



感温探测器
Thermal detector



压力变送器
Pressure Transmitter



压力表
Pressure gauge



防爆环形荧光灯
Explosion-proof
annular fluorescent lamp



防爆防腐照明开关
Explosion-proof
corrosion-proof illumination switch



防爆分体式空调
Explosion-proof
split air conditioner



防爆声光报警器
Explosion-proof audio and visual
caution spotlight



防爆应急灯
Explosion-proof
caution spotlight