



Pressure controls for hazardous environments

P77X / P78X / P100



Get the most reliable and repeatable pressure controls to enhance operational safety in hazardous applications.

The power behind **your mission**





Compatible with most refrigerants

PENN pressure controls are designed for a wide range of high and low pressure applications. The P77, P78 and P100 series controls are available in several pressure ranges and are compatible with standard refrigerants.

They can also be used for controlling pressure in other non-corrosive fluid applications. P77, P78 and P100 models are available in various switch configurations and electrical ratings to provide application flexibility.



In compliance with the European Union's requirements for hazardous locations, various PENN pressure control models are ATEX certified, ensuring safe and reliable operation.



ATEX Certified

- **Proven reliability:** controls are safe for use in applications with flammable and natural refrigerants such as R290 (Propane) and R600a (Iso-Butane).
- **Robust construction:** Single and dual pressure controls, using rugged, cast aluminum housings.

P77X
Adjustable Pressure Control
Single Pressure, IP54 Enclosure



P78X
Adjustable Pressure Control
Single Pressure, IP54 Enclosure



P100
Fixed Setting Pressure Switch
Direct Mount, IP67 Enclosure



Product overview

- Suitable for control or limit functions, depending on model number
- All models include alarm contacts
- Standard models include phosphor bronze bellows and brass pressure connections
- Devices conforming to PED 2014/68/EU Cat. IV (high-pressure models) have a fail-safe function with double bellows
- IP54 classification: P77 series pressure controls are suitable for most commercial refrigeration applications.
- Suitable for control or limit functions, depending on model number
- All models include alarm contacts
- Standard models include phosphor bronze bellows and brass pressure connections
- Devices conforming to PED 2014/68/EU Cat. IV have a double bellows on the high-pressure versions
- IP54 classification: P77 series pressure controls are suitable for most commercial refrigeration applications
- P100 series are encapsulated and non-adjustable. Direct mount pressure controls are typically used for low and high pressure cut-outs
- Available in a wide variety of factory-calibrated, non-adjustable pressure setpoints
- The P100's compact, light-weight construction and protection class allows for direct mounting
- Applicable for all non-corrosive refrigerants: R134a, R32, R404A, R410A, R290 (Propane), R600a (Iso-Butane), R1234yf, R744 (CO2) and many others

Features

- Generous wiring space
- Splash-proof enclosure (IP54)
- SPDT contacts are provided as standard on single pressure controls
- Trip-free manual reset
- Wetted materials approved for use with standard and (mild) flammable A2L / A3 refrigerants
- ATEX certified
- Generous wiring space
- Splash-proof enclosure (IP54)
- Models are available with gold-plated contacts
- Patented separate alarm contacts for both low pressure and high pressure cut-out
- Trip-free manual reset
- Wetted materials approved for use with standard and (mild) flammable A2L / A3 refrigerants
- ATEX certified
- Compact size and light weight
- Encapsulated, dust-tight switch IP67
- Wide variety of electrical and pressure connections
- Manual reset models with a trip-free design
- Models with gold-plated contacts available upon request
- High pressure safety models comply to PED 2014/68/EU cat. IV
- ATEX certified models available

Applications

- Designed for use in various applications involving high or low pressure and mediums such as refrigerant, air and water
- The P77X series offers a full-range design, allowing the compatibility and use of R22, R134A, R404A, R290 refrigerants, and other non-corrosive refrigerants that are within the control operating range
- High pressure safety models comply to PED 2014/68/EU cat. IV
- Designed for use in various applications involving high or low pressure and mediums such as refrigeration systems, air, water, etc.
- The P78X series offers a full-range design, allowing the compatibility and use of R22, R134A, R404A, R290 refrigerants, and other non-corrosive refrigerants that are within the control operating range
- High pressure safety models comply to PED 2014/68/EU cat. IV
- Designed for use in various commercial refrigeration applications, including computer room air conditioning, ice machines and food service equipment
- The P100 series can be used for all non-corrosive refrigerants like R134a, R32, R404, R410A, R290 (Propane), R600a (Iso-Butane), R1234yf, R744 (CO2) and many others
- High pressure safety models comply to PED 2014/68/EU cat. IV

About Johnson Controls

At Johnson Controls (NYSE:JCI), we transform the environments where people live, work, learn and play. As the global leader in smart, healthy and sustainable buildings, our mission is to reimagine the performance of buildings to serve people, places and the planet.

With a history of more than 135 years of innovation, Johnson Controls delivers the blueprint of the future for industries such as healthcare, schools, data centres, airports, stadiums, manufacturing and beyond through its comprehensive digital offering OpenBlue. With a global team of 100,000 experts in more than 150 countries, Johnson Controls offers the world's largest portfolio of building technology, software and service solutions with some of the most trusted names in the industry.

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