Alco Controls

Take-Apart Thermo[™] Expansion Valves

Designed For Flexibility And Precision. Built To Last.

Alco Controls take-apart Thermo[™]-Expansion Valves are designed for air conditioning, heat pumps, industrial process cooling, refrigeration and numerous special applications. The new takeapart expansion valves are ideal for applications that require flexibility in capacity selection as well as excellent stable superheat control under varying operating conditions such as high and low head pressure and wide load variation.

Valves with XB power elements can be applied in systems with Copeland Digital Scroll™ Compressors.

Rely on Alco Controls for the best selection of Thermo Expansion Valves.

Features and Benefits

- 46 bar maximum working pressure with XB power element
- Take-apart design consists of power element, cage and flange
- Large diaphragm eliminates disturbances to the valve and provides smoother and consistent valve control

Performance

The new power element XB1019 provides excellent performance as follows:

- High endurance/life expectancy for high pressure refrigerants as well as permanent operation of systems (24 hours a day)
- Withstands extreme pressure changes caused by reversing flow in heat pump systems via external equalizer during heating/cooling mode as well as defrost
- Low pressure gradient for lowest dynamic superheat operation
- Fine adjustment: average 0.3 K superheat change per one turn of adjusting stem

Superheat adaptation to partial load conditions achieving stable energy efficient values







- Constant superheat across a wide application range
- XB long life laser welded stainless steel power element resists corrosion
- Flanges: brazing ODF/ODM connection with straight through and angle style configuration



Stable suction pressure and stable superheat at energy efficient values during constant system load



Technical Overview

Maximum working pressure (PS)	46 bar
Burst pressure	255 bar
Medium temperature range (TS)	-45 to +75°C
Factory test pressure (PT)	50.6 bar

Seat leakage	≤ 1% nominal capacity
Flange Connections	Brass ODF or ODM
Capillary Connection	Vertical
Released for R410A	Yes

For more details, see www.emersonclimate.eu

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