Optimize Your Critical Systems

Vertiv™ Electronic Expansion Valves (EEV) are designed for modulating the control of refrigerant circuits with high speed and high precision.

Able to adapt to unexpected load variations and large fluctuations in refrigerant pressure, these valves ensure stable operating conditions even at partial load, and consequently optimize the control of refrigerant flow.

The EEV provides superior performance compared to a Thermostatic Expansion Valve (TXV) due to:

- Precise flow control
- Positioning time.

As such, Electronic Expansion Valves are a recommended improvement to ensure the longevity of your cooling units.

Protect Your HVAC/R Systems with an Energy-Efficient Solution

Upgrading Electronic Expansion Valves (EEV) is one of the best ways to improve overall system performance and reliability.

Electronic Expansion Valves also help significantly improve electrical efficiency when implemented with EC fans and smart controllers.

With a wide range of valves designed to control and protect HVAC/R systems, Vertiv is addressing the need to enhance systems that function under strict operating conditions.

Upgrade Benefits

- Optimized control of refrigerant flow
- Energy cost reductions
- Compatibility with third-party units.
Operating at Continuously Stable Conditions

Vertiv™ Electronic Expansion Valves improve direct expansion evaporator units. These valves are controlled by a driver that precisely monitors the opening and closing of the valve, allowing it to operate independently of oscillating temperatures in an efficient manner. Electronic Expansion Valves not only save on energy but also enhance system performance by adapting to changing seasonal conditions. The benefits of these valves lie in their reliable characteristics, such as:

- Boosts refrigerating performance
- Ensures compressor longevity
- Increases coil performance, reducing the need to superheat (SH)
- Adapts to environmental temperature changes
- Protects from anomalies typical of TXV valves
- Increases overall system reliability

Regardless of the external environment, the evaporator will operate at optimal conditions. Electronic Expansion Valves also ensure high precision even at low flow rates and minimize superheating (SH), thus improving refrigeration cycle efficiency. The smooth operation of the Electronic Expansion Valve minimizes superheat (SH) variations with a stand-alone universal controller regardless of temperature conditions.

Improve Your Performance Levels

The replacement of the traditional thermostatic valve (TXV) with an Electronic Expansion Valve is always performed by highly trained and authorized Vertiv engineers. Replacement is performed using a stand-alone valve independent of the control boards and can therefore be applied to third-party cooling units.

From a Traditional Method to an Innovative Approach

Vertiv Electronic Expansion Valves operate at minimum possible condensing pressure to reduce compressor usage. Due to this, energy is saved under all operating conditions, therefore improving refrigerating performance. Electronic Expansion Valve technology extends compressor lifetime, delivers optimal functionality, increases efficiency and reduces anomalies to increase the reliability of customer products.