

# Contractor Service Tips

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## Pressure Controls

### Q: What purposes do pressure controls serve?

There are two main categories of pressure controls – high pressure and low pressure. These controls may be individual or combined into one control.

The low pressure control's primary function is to shut the compressor off when the suction pressure becomes too low. This is to protect the compressor from overheating and/or to protect the product from freezing.

The high pressure control is a safety control to protect the compressor from operating at excessive discharge pressures. The high pressure control should be pre-set by the manufacturer and should never be adjusted higher than the factory setting. Most have a stop to prevent it from being set higher in the field although they may be adjusted to a lower setting. The control setting is determined by the refrigerant used in the system and its operating range even though the same compressor may be used.

While high pressure controls may be either manual or automatic resettable, low pressure controls are almost always automatic. Some controls, such as Emerson's line of controls, may be converted from automatic to manual in the field if desired.

There are other applications for pressure controls in refrigeration systems as well. These include condenser fan cycling, oil pressure safeties, and heat reclaim lock-out.

