

AIR CONDITIONING & REFRIGERATION

Background

AC and refrigeration systems require precise and reliable pressure control to ensure safe, reliable, and efficient operation. As AC and refrigeration equipment utilizes compression and evaporation of refrigerants to produce a cooling effect, therefore it is critical that the refrigerant pressures in these system are managed carefully to ensure the equipment operates properly and will not become unsafe due to excessive pressures. New AC and refrigeration systems also manage pressure with pressure sensors and variable speed compressors to ensure the highest possible energy efficiency.

Solution

For decades, Sensata has been a leading provider of pressure sensing solutions used in AC and refrigeration systems. The PS80 is a UL listed automatic reset pressure switch that provides electro-mechanical pressure control for both low pressure and high pressure control in refrigerant loops. The PS80 is available in a wide range of pressure settings and configurations which can be used with a wide range of refrigerants. The 2CP5 is a device designed for today's most efficient AC and Refrigeration equipment that use pressure sensing, electronic controls, and variable speed compressors to precisely manage the refrigerant pressure for lower power consumption, quieter operation and more pressure temperature control. Both the PS80 and 2CP5 are ideal for demanding applications where long-term reliability and accuracy is critical.

New AC and refrigeration systems manage pressure with pressure sensors to ensure the highest possible energy efficiency



Commercial Fridge & Freezer



Rooftop AC System

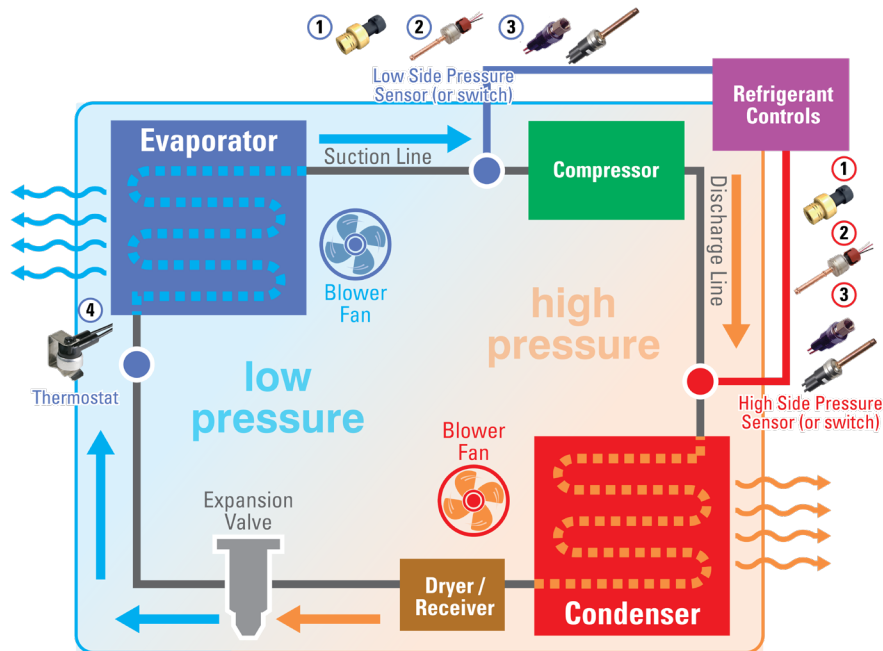


RELATED PRODUCTS

Reference on Diagram	Product	Features	Function	Technology	Operating Range
1	 2CP5	- UL recognized - Low cost	Pressure Sensor	Ceramic capacitive	0-15 to 0-750 psi
2	 2HMP	- Hermetic 1% accuracy	Pressure Sensor	MEMS	0-100 to 0-750 psi
3	 PS80	UL recognized automatic reset	Pressure Switch	Klixon (snap-acting switch)	0-750 psi
4	 3NT	Dry seal (ideal for condensing environments)	Thermostat	Klixon (snap-acting switch)	-20 to 135°C



GENERAL REFRIGERATION CYCLE DIAGRAM



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