REFRIGERANT CYLINDER JUG WARMING

Warm a refrigerant cylinder jug and maintain optimal temperatures for servicing during cold seasons

Application

Residential and commercial buildings rely on many forms of cooling systems to keep people, animals, food, chemicals, etc. cool and comfortable. The most common systems are air conditioning or HVAC units, but there are also many refrigerators, freezers, and dehumidifiers used. When these units are serviced, the refrigerant gasses within the system must be removed and placed into a storage tank, then cleaned to remove impurities and pumped back into the unit.

Many HVAC units, walk-in refrigerators, deep freezers, etc. continue to require scheduled and unscheduled service during the cold season. The cold weather can cause unique problems for refrigerants and service technicians. Cold weather causes the pressure inside a cylinder jug to drop. At 0°F (-18°C), the pressure coming out of a jug of R22 Freon® is only 24 PSI. When the system being serviced is running, the suction pressure will be near 60 PSI or greater. Prior to servicing, the surface temperature of the cylinder must be elevated to approximately 100°F (38°C) or greater to maintain adequate pressure inside the cylinder.

Solution

BriskHeat's HotBelt is an ideal heater for pre-heating and keeping refrigerant cylinder jugs warm. The plug-and-play heaters fit snugly around the cylinder to warm the contents so that refrigerant gas can be effectively discharged during servicing. The heaters have an adjustable strap to fit any cylinders with diameters between 9 in (23 cm) and 13 in (33 cm). This fits the most common sizes of 30 lb, 50 lb, and 125 lb cylinders. A built-in controlling thermostat maintains cylinder surface temperature at approximately 120°F (49°C). This ensures that the refrigerant is kept at an optimal operating pressure for servicing.

The HotBelt heater is safe for indoor/outdoor use and grounded for safe operation.

Common Refrigerants:
- R22: Most common on older systems, known as Freon®
- R410A: Most common on newer systems, since 2010
- R407C: Retrofit gas for R22 systems
- R134a: Vehicles and large chiller systems
- R404A: Used in refrigeration and walk-in coolers/freezers

Industries
- HVACR Heating/Cooling and Refrigeration
- Gas Handling Construction

Types of Users
- HVACR Contractors
- HVACR Technicians