

SavAll II[™] REFRIGERANT CHARGE PROTECTION SYSTEM

Low Pressure Centrifugal Chillers

for

Prevent
Catastrophic
Refrigerant Loss
due to Chiller
Over-Pressurization!

Benefits:

- Automatically neutralizes abnormal pressure build-up in chiller
- Avoids catastrophic loss of Refrigerant due to Chiller Over-Pressurization
- MAXIMUM protection...LOW cost!
- Totally PASSIVE operation
- No electricity required
- Direct response to chiller temperature, no controls or sensors to fail
- Fully automatic operation
- No bulky and expensive storage vessel required
- Easy installation, installs between the rupture disc and the chiller
- Maintenance free operation



Patent Pending

A rupture disc protects your vessel from over-pressurization, and...

Adding a relief valve limits refrigerant loss through the rupture disc, however...

ONLY a **SavAll II**[™] will keep both from having to do either!

Finally, affordable protection for everyone!

If you've ever tried to pressurize a centrifugal chiller using hot water while there is water seeping through the condenser...then you understand how the **SavAll II**™ System works.

Specifications

- R-11 Condensing Capacity 100,000
 Btu/Hr @ 105° F sat. temp./65°F city water
- Copper shell, tubes and tube sheets
- Adjustable setting 75° to 110° F
- City water connections 3/4" NPT

- 150 lb. slip flanges 2" or 3"; specify
- Flanges face to face 8.5"
- Overall length 48"
- Floor support mounting 1½" NPT
- Installed weight 56 lbs.

Operation

The SavAll II™ System responds instantaneously to rising refrigerant temperature in the chiller anytime the saturated vapor temperature exceeds a predetermined maximum level (typically 90° F for R-11) by circulating cold city water through the shell & tube heat exchanger. Cool city water flowing freely through the heat exchanger's 31 "fluted" condensing tubes is usually more than sufficient to stabilize rising chiller pressure at a safe level well below the rupture disc setting.

As rapidly as warm refrigerant vapor is generated, it is drawn into the cold heat exchanger where it re-condenses to liquid. The liquid then falls by gravity to the bottom of the heat exchanger and flows back into the chiller. This cycle continues until the cause of the excess heat has been removed, at which time city water flow through the heat exchanger automatically stops.

The best way to illustrate how the SavAll II™ works is by drawing an analogy to pressurizing a chiller for leak testing using hot water. Anyone who has ever tried pressurizing a chiller when there is even a small amount of condenser water leaking past the isolation valves through the condenser knows just how futile this can be. The SavAll II™ System has the same effect on rising chiller pressure, only multiplied several times over!

