



SERVICE BULLETIN

Title: 19XL High Discharge Temperatures

Models Affected: 19XL

Number: C9206

Date: 5/25/92

Supersedes: None

Date:

Purpose:

To advise that 19XL's will overheat before they go into surge when operating at low loads and high condensing temperatures.

File: Installation-Startup-Operation

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Explanation:

The 19XL centrifugal, operating with HCFC-22 may experience high discharge temperature cut-outs more frequently than low pressure centrifugals. When the compressor is operating at light loads the discharge temperature rises as compressor lift rises. Eventually the machine will trip on high discharge temperature BEFORE it gets to a point where the compressor will surge. This is the operating nature of R-22.

At loads less than 40% it is important to drop the entering condenser water along the ARI profile, a drop of 2.5 F for each 10% of load reduction. With condenser water temperature dropped to these levels the compressor will not overheat.

A software change is being made to reduce the chance of high temperature safety shut downs at low load, high condenser water conditions. If the discharge temperature rises the guide vanes will be opened to load up the compressor and force a chilled water recycle rather than a safety shut down which requires a manual reset.