# Industrial Refrigerant Systems

# Application Note



### PROBLEM:

Industrial refrigeration systems operate by compressing, condensing, and evaporating halocarbon refrigerants such as ammonia and Freon®. Rotary screw compressors are one of the most popular types of compressors used in large scale industrial refrigeration. These compressors operate continuously, therefore they need to be lubricated continuously. Oil is mixed with the refrigerant (gas) while it is compressed and then is separated from the coolant (liquid) that is discharged. The ability to accurately monitor pressures in these systems is crucial. As an example, if the refrigeration system failed at a food processing plant the damage could become extremely costly.

# SOLUTION:

Four MLH Series pressure sensors monitor the compressor's oil input pressure, output pressure, and refrigerant suction pressure. One MLH measures refrigerant discharge pressure. The output from the MLHs are fed into a microprocessor that controls and displays compressor operating information.

### **ENVIRONMENT:**

Industrial refrigeration systems are found in a wide range of environments, such as chemical, food, and pharmaceutical-manufacturing plants. They are also used in air-conditioning systems for malls, airports, and other large buildings. The MLH series sensors are protected from many environmental conditions by a housing designed to meet IP65 standards.

# A WARNING

# PERSONAL INJURY

DO NOT USE these products as safety or emergency stop devices or in any other application where failure of the product could result in personal injury.

Failure to comply with these instructions could result in death or serious injury.

### SUMMARY:

The rugged and highly dependable Honeywell MLH Series pressure sensors are a perfect choice for this type of application. The thru-wall mounting cability, broad range of pressures, along with a variety of pressure ports and connector styles to choose from make this a very versatile product that can be readily adapted to a variety of applications.

#### WARRANTY/REMEDY

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Contact your local sales office for warranty information. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace without charge those items it finds defective. The foregoing is Buyer's sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose.

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application. For application assistance, current specifications, or name of the nearest Authorized Distributor, contact a nearby sales office. Or call: 1-800-537-6945 USA/Canada 1-815-235-6847 International **FAX** 1-815-235-6545 USA **INTERNET** www.honeywell.com/sensing info.sc@honeywell.com

# Honeywell

Sensing and Control www.honeywell.com/sensing Honeywell 11 West Spring Street Freeport, Illinois 61032