

Form

Scroll Compressors

A SAFETY WARNING

Only qualified personnel should install and service the equipment. The installation, starting up, and servicing of heating, ventilating, and air-conditioning equipment can be hazardous and requires specific knowledge and training. Improperly installed, adjusted or altered equipment by an unqualified person could result in death or serious injury. When working on the equipment, observe all precautions in the literature and on the tags, stickers, and labels that are attached to the equipment.

June 2020

CG-ADF010A-EN

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A WARNING

Personal Protective Equipment Required!

Installing/servicing this unit could result in exposure to electrical, mechanical and chemical hazards. Before installing/servicing this unit, technicians MUST put on all Personal Protective Equipment (PPE) recommended for the work being undertaken. ALWAYS refer to appropriate SDS sheets and OSHA guidelines for proper PPE. When working with or around hazardous chemicals, ALWAYS refer to the appropriate SDS sheets and OSHA guidelines for information on allowable personal exposure levels, proper respiratory protection and handling recommendations. If there is a risk of arc or flash, technicians MUST put on all necessary Personal Protective Equipment (PPE) in accordance with NFPA70E for arc/flash protection PRIOR to servicing the unit. Failure to follow recommendations could result in death or serious injury.

Replacement Scroll Compressors

Complete and retain a record in the job file for future reference.

Log Sheet for Installers

| Job Name: | |
|---------------------------|-----------------|
| Job Address: | |
| Equipment Model Number: | |
| Equipment Serial Number: | |
| Compressor Model Number: | |
| Compressor Serial Number: | |
| Startup Date: | |
| X39640522-01 | 2764-0022-01-00 |

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Warnings, Cautions, and Notices

Read this manual thoroughly before operating or servicing this unit. Safety advisories appear throughout this manual as required. Your personal safety and the proper operation of this machine depend upon the strict observance of these precautions.

The three types of advisories are defined as follows:

A WARNING

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

A CAUTION

NOTICE

serious injury.
Indicates a potentially hazardous situation
which, if not avoided, could result in minor or
moderate injury. It could also be used to alert
Indicates a situation that could result in
equipment or property-damage only accidents.

Important Environmental Concerns

Scientific research has shown that certain man-made chemicals can affect the earth's naturally occurring stratospheric ozone layer when released to the atmosphere. In particular, several of the identified chemicals that may affect the ozone layer are refrigerants that contain Chlorine, Fluorine and Carbon (CFCs) and those containing Hydrogen, Chlorine, Fluorine and Carbon (HCFCs). Not all refrigerants containing these compounds have the same potential impact to the environment. Trane advocates the responsible handling of all refrigerants-including industry replacements for CFCs such as HCFCs and HFCs.

Important Responsible Refrigerant Practices

Trane believes that responsible refrigerant practices are important to the environment, our customers, and the air conditioning industry. All technicians who handle refrigerants must be certified according to local rules. For the USA, the Federal Clean Air Act (Section 608) sets forth the requirements for handling, reclaiming, recovering and recycling of certain refrigerants and the equipment that is used in these service procedures. In addition, some states or municipalities may have additional requirements that must also be adhered to for responsible management of refrigerants. Know the applicable laws and follow them.

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Table 1. System Operating Data

| Refrigeration Data | Circuit 1 | Circuit 2 | Circuit 3 | Circuit 4 |
|--|-----------|-----------|-----------|-----------|
| Suction Pressure/ Saturation Temp | | | | |
| Suction Line Temperature | | | | |
| Suction Superheat (2-1) | | | | |
| Discharge Pressure | | | | |
| Discharge Line Temp | | | | |
| Liquid Line Pressure/ Saturation Temp | | | | |
| Liquid Line Temp | | | | |
| Liquid Subcooling (6-7) | | | | |
| | | | | |

Table 2. Electrical Data

| Unit Voltage | L1-L2 | L2-L3 | L1-L3 |
|--------------|-------|-------|-------|
| | | | |

Table 3. Compressor Amperage

| Compressor | #1 | #2 | #3 | #4 | #5 | #6 | #7 | #8 |
|---------------------------------------|----|----|----|----|----|----|----|----|
| T1 AMPS | | | | | | | | |
| T2 AMPS | | | | | | | | |
| T3 AMPS | | | | | | | | |
| Compressor Model 8 Digit Number | | | | | | | | |

| Type Air Cooled Water Cooled Entering Temperature Leaving Temperature Ambient Not Applicable Number of Fans ON Not Applicable Clean (Yes, No) Type DX-Air DX-Water Entering Temperature Leaving Temperature Contactor ReplacedChecked Temperature Controls Cycles Unit Properly? Temperature Entering Temperature Leaving Temperature CFM/GPM Clean (Yes, No) Chiller pressure drop Not Applicable | 4 | | | 5 |
|--|---------------------------|-----------------|----------------|---|
| Compressor | Table 4. Oil Sightglass (| When Available) | | Systems Check |
| Condition MManifold S-S-Single Compressor Mounted Type Air Cooled Entering Temperature Leaving Imperature Authorit Type DX-Air DX-Water Entering Temperature Entering Temperat | | | #6 #7 #8 | |
| M=Manifold Actid Check District Actid Check District Actid Check District | Level | | | Suction line filter drier installed Pressure drop after 1HR PSIG after 4H |
| M-Manifold S-Single Compressor Model is Digit Number Type Air Cooled Water Cooled Entering Imperature Leaving Temperature Entering Te | Condition | | | Liquid Line Filter Changed |
| M—Menfold S—Single Compressor Model 8 Digit Number Type Air Cooled Water Cooled Entering Temperature Leaving Temperature Mumber of Fans ON Not Applicable Clean (Yes, No) Table 6. Evaporator Type DX-Air DX-Water Entering Temperature Leaving Iemperature Leaving Iemp | Condition | | | Oil Changed Acid Check |
| Compressor Mondel & Digit Mumber Type | | | | |
| Type DX-Air DX-Water Eleaving Temperature Leaving Temperature Leav | Model 8 Digit | | | |
| Entering Temperature Leaving Temperature Ambient Not Applicable Number of Fans ON Not Applicable Clean (Yes, No) Sable 6. Evaporator Type DX-Air DX-Water Entering Temperature Leaving Temperature Leaving Temperature Controls Cycles Unit Properly? | Table 5. Condenser | | | Operating Controls Check |
| Entering Temperature Leaving Temperature Numbor of Fans ON Not Applicable Numbor of Fans ON Not Applicable Clean (Yes, No) Type DX-Air DX-Water Entering Temperature Certw/GPM Clean (Yes, No) Chiller pressure drop Not Applicable 6 Observations: | Туре | Air Cooled | Water Cooled | Low Pressure Control |
| Leaving Temperature Ambient Not Applicable Not Applicable Not Applicable Not Applicable Clean (Yes, No) Type DX-Air DX-Water Entering Temperature Leaving Temperature CEM/GPM Clean (Yes, No) Chiller pressure drop Not Applicable Observations: | Entering Temperature | | | |
| Number of Fans ON Not Applicable Clean (Yes, No) Sable 6. Evaporator Type DX-Air DX-Water Entering Temperature Cleaving Temperature Clean (Yes, No) Chiller pressure drop Not Applicable 6 Observations: | Leaving Temperature | | | High Pressure Control |
| Clean (Yes, No) Table 6. Evaporator Type DX-Air DX-Water Entering Temperature Leaving Temperature Clean (Yes, No) Chiller pressure drop Not Applicable 6 Observations: | Ambient | | Not Applicable | Contactor ReplacedChecked |
| iable 6. Evaporator Type DX-Air DX-Water Entering Temperature CPM/GPM Clean (Yes, No) Chiller pressure drop Not Applicable 6 Dbservations: | Number of Fans ON | | Not Applicable | |
| Type DX-Air DX-Water Entering Temperature Leaving Temperature CCFM/GPM CClean (Ves. No) Chiller pressure drop Not Applicable 6 Dbservations: | Clean (Yes, No) | | | Temperature Controls Cycles Unit Properly? |
| Entering Temperature Leaving Temperature CPM/GPM Clean (Yes, No) Chiller pressure drop Not Applicable 6 Observations: | Table 6. Evaporator | | | |
| Entering Temperature Leaving Temperature CPM/GPM Clean (Yes. No) Chiller pressure drop Not Applicable 6 Observations: | Туре | DX-Air | DX-Water | |
| Leaving Temperature CPM/GPM Clean (Yes, No) Chiller pressure drop Not Applicable 6 Observations: | Entering Temperature | | | |
| Clean (Yes, No) Chiller pressure drop Not Applicable Disservations: | Leaving Temperature | | | |
| Chiller pressure drop Not Applicable 6 Observations: | CFM/GPM | | _ | |
| 6 Observations: | Clean (Yes, No) | | | |
| | Chiller pressure drop | Not Applicable | | |
| | | | | |
| | | | | |
| Service Technician Date | 6 Observations: | | | |
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