

Klinge

PTI form for all NMF-372 models

Date:	Serial number:	Location:
Date of last pre trip inspection if known:	Container number:	

Note: Manual available on www.thermoking.com/klinge; unit revision number found on data plate.

Trained Operator and Date: _____

PRE-OPERATION TEST - conduct on each system	Initial = OK
1. With NO POWER to the unit(s), check unit visually for physical damage:	
a. Refrigeration unit(s) frame for corrosion, structural or defective damage	
b. Piping - no corrosion or physical damage to impede operation	
c. Compressor/Fans - no broken components and no appearance in defect of structural integrity	
d. Coils - no visible damage or bent/broken fins	
e. Probes - securely mounted in proper locations and in good condition	
2. Open control box cover and check that all electric components are secured:	
a. Wires/ferrules are secure and in good condition - no cracks, splits, or bare conductors	
b. Contactors/breakers/overloads operate properly - no sticking, easy release	
3. Check the gasket on control box covers. Be sure the latches hold the covers tightly closed.	
4. Check cleanliness of the condenser coils and steam or air clean if necessary.	
5. Check all refrigerant joints and connections thoroughly for traces of oil or stains indicating small refrigerant leak.	
6. Supply power to Unit(s) and close CB1 for each Unit, for the following:	
a. Turn System 1 ON and scroll to pressure readings for R23 HIGH and R134 HIGH	
b. record values:	
R23 Stand-by: _____ R-134A Stand-by: _____	
c. Turn System 1 OFF.	
d. Turn System 2 ON and scroll to pressure readings for R23 HIGH and R134 HIGH	
e. record values:	
R23 Stand-by: _____ R-134A Stand-by: _____	
f. Turn System 2 OFF.	

OPERATIONAL TEST - Connect main power. (See NOTE below)	Initial = OK
Conduct the following test with only ONE Unit on at a time. (NOTE: Alarm may occur due to one system being OFF)	
1. Turn System 1 ON, and unit "boots" on display. Alarm horn and light sound.	
a. Scroll UP to COMMANDS and select RUN AUTO TEST	
i. AUTO TEST completes without errors.	
ii. Turn System 1 OFF	

2. Turn System 2 ON, and unit "boots" on display. Alarm horn and light sound.							
a. Scroll UP to COMMANDS and select RUN AUTO TEST							
i. AUTO TEST completes without errors.							
ii. Turn System 2 OFF							
3. Turn ON System 1 and then System 2, adjust Set Points to -40° to -65°C (based on customer requirements). and allow to start operation. (NOTE: System 1 will be PRIM: and System 2 will be SEC: this can be checked by scrolling UP once on the displays).							
a. Check the rotation of all fans. See arrows marking correct direction.							
4. After 30 minutes of operation, record the following information for System 1:							
Compressor 1	5 - 8 Amps	L1		L2		L3	
Compressor 2	5 - 8 Amps	L1		L2		L3	
Compressor 3	6 - 10 Amps	L1		L2		L3	
Condenser Fan	0.5 - 2 Amps	L1		L2		L3	
Evaporator Fan	.4 - 1.5 Amps	L1		L2		L3	
5. Put unit in Manual Defrost. (Enter "Manual Defrost" through the COMMAND menu)							
a. Compressor(s) 1 & 2 stop, Evaporator fans stop, condensing fan stops.							
b. Compressor 3 will begin to operate.							
c. Defrost terminates when Defrost temperature reads 18.0°C							
d. Check R23 high pressure reading on display during defrost - 250-300 PSI (17-21 Bar)							
6. After defrost terminates System 2 will now run as PRIMARY system.							
a. Check the rotation of all fans. See arrows marking correct direction.							
7. Allow the unit to achieve set point and cycle 1 time. Record pressures below.							
a. Record pressures on Display during Freezing Mode of first cycle.							
i. R23 HIGH: LOW:							
ii. R134 HIGH: LOW:							
8. Allow unit to cycle a second time and record the following information: Should Be within following ranges:							
Compressor 1	5- 8 Amps	L1		L2		L3	
Compressor 2	5- 8 Amps	L1		L2		L3	
Compressor 3	6-10 Amps	L1		L2		L3	

Condenser Fan	0.5-2 Amps	L1		L2		L3	
Evaporator Fan	.4-1.5 Amps	L1		L2		L3	
Vent Heater	0.5-1.5 Amps	L1		L2		L3	
9. Verify Vent Heater wire from control box is connected to Vent Heater (2-wire connector).							
10. Check amperage of Container Vent Heater at load side of CB5, record information in above table.							
11. Switch Breaker CB5 off, Alarm Light 2 illuminates and Alarm Horn sounds.							
12. NOTE: No alarm code will be displayed on the Controller for Vent Heater Alarm.							
13. Reset Breaker CB5, Alarm Light and Alarm Horn should terminate.							
14. Put unit in Manual Defrost. (Enter "Manual Defrost" through the COMMAND menu)							
a. Compressor(s) 1 & 2 stop, Evaporator fans stop, condensing fan stops.							
b. Compressor 3 will begin to operate.							
c. Defrost terminates when Defrost temperature reads 18.0°C							
d. Check R23 high pressure reading on display during defrost - 250-300 PSI (17-21 Bar)							
15. After defrost terminates System 1 will now run as PRIMARY system.							
16. Allow unit to achieve set point and cycle 2 times. Record pressures below.							
a. Record pressures on Display during freezing mode of Second cycle.							
i.	R23	HIGH:		LOW:			
i.	R134	HIGH:		LOW:			
17. After all tests are completed please download Log Files for both Systems.							
18. Turn OFF systems, PTI complete.							
NOTES:							

By signing this form, we are acknowledging that any discrepancies in the recorded data have been noted and accepted.

Test Operator Signature	Date	Engineer / Designee Signature	Date