Installation & Commissioning Instructions – SH – Semi Hermetic Compressor

296x208
White Color

1. Safety

Only appropriately licensed and qualified personnel should work on this Semi Hermetic refrigeration unit.
Appropriate personal safety equipment must be worn at all times.
Take care when relieving the dry nitrogen holding pressure.

2. Good Refrigeration Practice

The current A/NZ Code of Good Practice and all relevant Australian Standards must be followed when installing this unit. The internal components of the system must be kept clean and free from moisture at all times.

3. Transport Damage and Holding Pressure

This unit must be inspected for damage and the holding pressure checked prior to installation. Any damage or lack of holding pressure must be reported to the supplier before installation commences.

4. Electrical Connection Checks

Due to possible vibration during transport all electrical connections must be checked to ensure the safe and correct operation of the unit.

5. Leak Testing and Evacuation

Dry nitrogen must be used when soldering pipe work to ensure the system remains internally clean.
The unit and system must be thoroughly leak tested prior to evacuation.
The entire refrigeration system must be evacuated to 300 microns or less.

6. Deep Vacuum Operation Warning

Never run a compressor in a deep vacuum. Failure to heed this advice can result in arcing of the Fusite pins causing permanent damage to the compressor.
Open the Suction and Discharge valves before starting the compressor. Do not by-pass the HP/LP safety control.

7. Refrigerant Charging

The crank case heater should be powered for at least 2 hours prior to commissioning to avoid excessive bearing wear. No liquid refrigerant should return to the compressor at any time.

8. Essential System Checks

The following must be checked and adjusted as required;
Voltages, amperages, oil level, pressures and temperatures.
The system must be run tested and superheat set correctly.

9. Fan Speed Control Operation

The fan speed control fitted to this unit is set for R404A operation.If operating with R134a the set point of the fan speed control must be adjusted. Fan should not operate below 50% of full speed.
Set point for 40°C SCT for R404A = 50%
Set point for 40°C SCT for R134a = 25%
Set point equals % of total pressure transmitter span (0 – 3450kPa)

APS Model	Compressor Model	Unit Max Operating Current	Compressor Max Operating Current	Fan Max Operating Current	Control Cuircuit Breaker	Circuit Breaker	Overload Setting	Contactor KW Rating
APS 4.6 ML2	SH 4526 Z	5.2	4.5	2 X 0.37	C 16	20		5
APS 6.0 ML2	SH 4536 Z	7.4	6.7	2 X 0.37	C 16	20		5
APS 8.3 ML2	SH 4550 Z	9.5	8.8	2 X 0.37	C 16	20		5
APS 11.7 ML3	SH 4567 Z	13.6	12.5	3 X 0.37	C 16	25		11
APS 14.4 ML3	SH 4591 Z	13.8	12.7	3 X 0.37	C 16	25		11
APS 19.0 ML2	SH 4610 Z	24.2	17.6	2 X 3.3	C 16	32		11
APS 25.8 ML2	SH 4615 Z	29.0	22.4	2 X 3.3	C 16	40		18
APS 33.6 ML2	SH 4620 Z	39.0	32.4	2 X 3.3	C 16	50		18

Actrol reserve the right to change specifications without notice

7366544 (Ind A) 06/11/19

No.	Ind	Modification	Date	Drawn	Checked	Approved
1	A	Change size.	06/11/19	rudy	Ubai	Sham

Model	APS Medium & Large ACPAC	Drawn	rudy
Description	Sticker - Installation	Checked	Ubai
Drawing No.	7366544	Approved	Sham
Date	22/08/2016	Index	A

TECUMSEH EURO-MALAYSIA SDN BHD