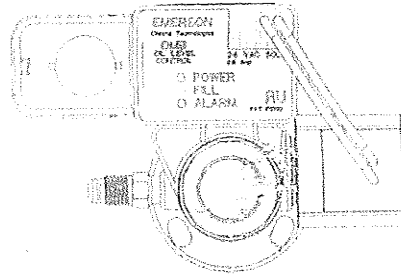


OMB Electronic Oil Level Management System

FEATURES

- Self contained unit with oil level sensor and integral solenoid to manage oil level supply
- Half-effect sensor for precise measurement of oil level
- Alarm and status indication by LEDs
- SPDT output contact for compressor shutdown or alarming
- Easy installation by sightglass replacement
- Adapters suitable for various types of compressors including conventional and scroll compressors
- Signal generated by gravity based float – not prone to errors from foaming like optical sensors
- Sacrificial magnet for reliable operation



SAFETY INSTRUCTIONS

WARNING: Before opening any system, make sure the pressure in the system is brought to and remains at atmospheric pressure. Failure to comply can result in personal injury and/or system damage.

WARNING: The OMB operates by using a strong magnetic sensor. It is important to keep the control free of any steel or iron particles which could accumulate on it during installation. These may hamper or prevent the control from operating.

1. Read installation instructions thoroughly. Failure to follow instructions may result in product failure, system damage, or personal injury.
2. Do not open system under pressure.
3. Ensure supply voltage is within specified OMB limits.
4. Disconnect supply voltage from system/OMB before installation/service. Comply with local electrical regulations when wiring OMB.
5. Do not exceed maximum working pressure.
6. Keep temperature within nominal limits.
7. Work should be performed by qualified service personnel or a licensed contractor.

SPECIFICATIONS

Maximum Working Pressure	640 psig
Solenoid MOPD	350 psig
Supply Voltage	24 VAC, 50/60 Hz
Solenoid Coil ASC2L	24 VAC, 50/60 Hz
Current Consumption	0.6A
Time Delay for Low Level Signal	10 seconds
Time Delay After Setpoint Recovery	5 seconds
Alarm Delay Time (including alarm contact)	120 seconds
Alarm Switch	SPDT
Alarm Contact Rating	10A-125V, 5A-250V
Refrigerant Compatibility (not for use with flammable refrigerants or ammonia)	HFC, HCFC, CFC
Refrigerant Temperature	-40° to 180°F
Storage and Ambient Temperature	-40° to 120°F
Ambient Temperature (Housing)	-40° to 120°F
Oil Supply fitting	1/4" Male SAE

Table 1 – Mounting Adapter Kit Applications*

Adapter Kit	Thread	Adapter Kit Application
ACA	3/4" x 14 NPTF	Copeland Glacier, ZF, ZS, ZB
ACB	1-1/8" x 12 UNF	Copeland A/C Specter
ACD	1-1/4" x 12 UNF	Copeland A/C Summit Series
ACE	1-3/4" x 12 UNF	Copeland LCS Series
AUA	None	Copeland 6D Semi-Hermetic

* **IMPORTANT NOTE:** Typical models – Always check compressor threads size because numerous changes have been incorporated through the years.

INSTALLATION INSTRUCTIONS

1. Read installation instructions thoroughly.
2. Assure that you have the appropriate mounting adapter kit for the compressor. See Table 1. For semi-hermetic compressors, see steps 1 through 5.
3. O-ring replacement kit (KS30368) can be used on both OMB and OMA controls.

Kit AUA for Copeland 6D Semi-Hermetic Compressors

1. Assure that there is no pressure in the compressor crankcase. Note the oil level and drain the crankcase until it is below the level of the sight glass. Remove the compressor sight glass and discard the O-ring.
2. Using the O-ring provided, install adapter to the compressor using the original sight glass bolts. Torque to 120 in.-lbs.
3. Using the O-ring and bolts provided, install the control unit. Use the bolts provided and torque to 120 in.-lbs.
4. Connect the oil supply line to the 1/4 inch male flare fitting. A cleanable strainer is incorporated into the fitting.
5. Make wiring connections in accordance with Figure 1.
Important: The screw clamp style connector plugs used for the power supply and solenoid coil must be unplugged from the circuit board to gain access to the wire clamp screws. Use a small screwdriver to pry them outward.
6. Assure there is proper oil level in the crankcase.

Kit ACA for Scroll Compressors

1. Assure that there is no pressure in the compressor crankcase and unscrew the sight glass from the compressor. Take note of the original oil level since oil may be lost when the sight glass is removed. Tip the compressor to avoid oil loss if possible.
2. Using PTFE tape as a sealant, thread the adapter into the compressor with the three hole flange installed on the adapter. Torque the pipe thread to 30-40 ft.-lbs. Take care not to scratch the O-ring seal surface of the adapter.
3. Using the O-ring and bolts provided, install the control unit to the adapter flange. The top of the control unit must be perfectly horizontal with the oil inlet fitting to the left. Torque the bolts to 120 in.-lbs. (Note: Bolt holes are not symmetrical.)
4. Connect the oil supply line to the 1/4 inch male flare fitting. A cleanable strainer is incorporated into the fitting.
5. Make wiring connections in accordance with Figure 1.
Important: The screw clamp style connector plugs used for the power supply and solenoid coil must be unplugged from the circuit board to gain access to the wire clamp screws. Use a small screwdriver to pry them outward.
6. Assure there is proper oil level in the crankcase before restarting the compressor.