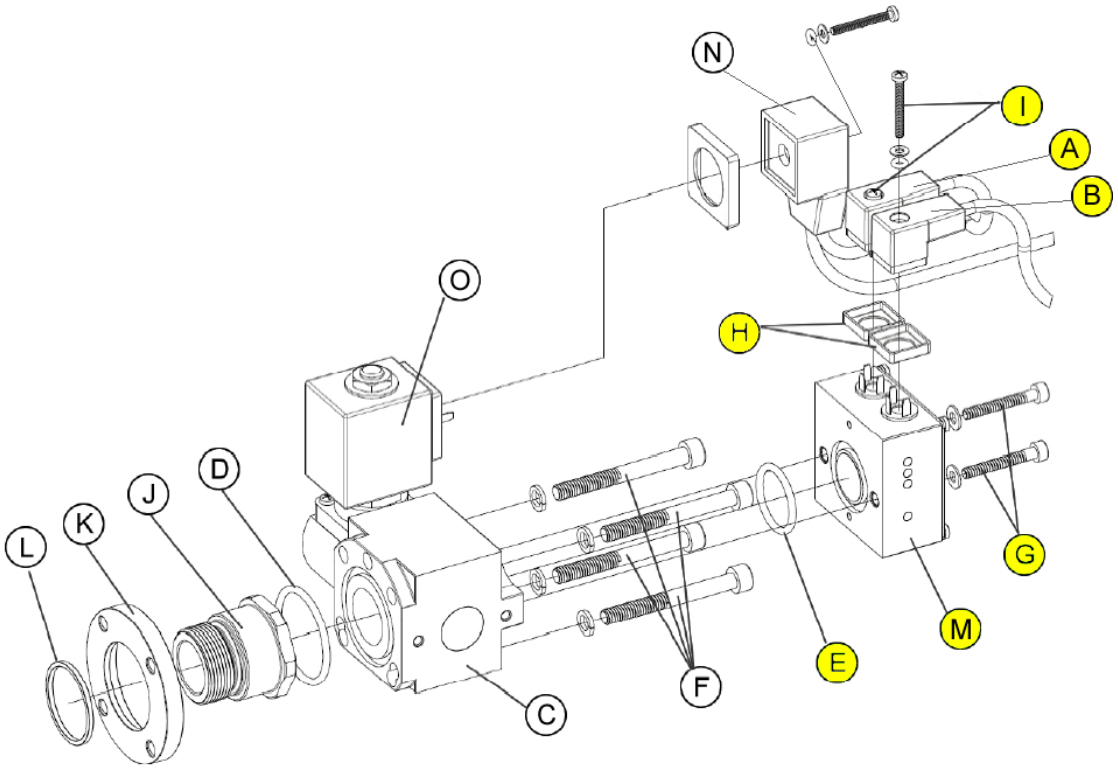
TK3 OIL LEVEL REGULATOR.
ELECTRONIC MODULE REPLACEMENT

Installation notes

- Only qualified personnel must carry out maintenance operations on the system in compliance with current regulations.
- Protect hands and face from any contact with oil, which may contain harmful substances.
- Remove the power supply and isolate the compressor before proceeding with any operation.
- It is possible to replace the electronic module (M) without depressurizing the system.
- The correct oil level in the compressor crankcase must be reached before restarting the system.

Installation instructions



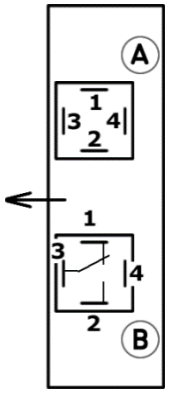
a. Verify that the regulator body (C) and any adapter (if present) are correctly assembled and that there are no leaks.
b. Check the integrity of the wiring and connectors (A), (B), (N). The wiring must be replaced if any damage is observed.
c. Verify that the valve connector (N) is correctly assembled with the coil of the solenoid valve (O).
d. Loosen the screws (I) that secure the connectors to the electronic module (A) and (B) without removing them from the connectors themselves.
e. Remove the two connectors (A) and (B) and the relative gaskets (H) which will be reused for the connections of the new module.
f. Remove the screws (G) which are securing the electronic module (M) to the regulator body (C).
g. Remove the electronic module (M) and the o-ring (E).
h. Before mounting the new electronic module, verify that the glass surfaces of the electronic module and the regulator body are clean and dry.
i. Mount the electronic module on the regulator body using the two screws (G) and the o-ring (E) supplied with the new electronic module.
j. Connect the alarm (B) and power supply (A) connectors using the gaskets (H) while paying attention to the position of the two connectors as indicated in the "Electrical connections" chapter.
k. Secure the connectors by manually tightening the screws (I).
l. It is now possible to power up the regulator again, verifying its correct operation.

Technical Data

Please refer to the technical data of the complete regulator.

Electrical Connections

Electronic Sensor Connections (Industry Std. 9.4mm).
Top View. The arrow indicates the glass side



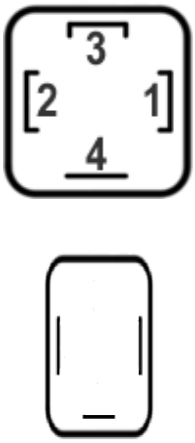
A - Power Supply & Solenoid
(cable with 3 wires and valve derivation)

2. Brown (BN): LINE
3. Blue (BU): NEUTRAL
4. Yellow/Green (YL/GN): EARTH

Connector B – Relay
(cable with 3 wires)

1. Brown(BN): close in alarm
2. Blue (BU): open in alarm
3. Black (BK): common

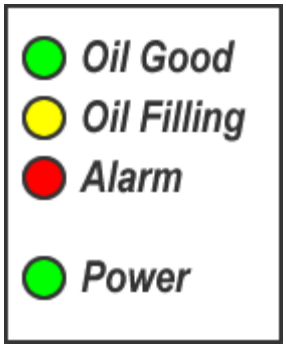
Solenoid Valve Connection



The coil is connected between pins 1 and 2 and in the supplied harness is properly wired to the Electronic Module.

Led di stato

The LEDs on the Electronic box give immediately info on the status of the system.
The alarm state is represented by the red LED and the filling state is represented by the yellow LED.
In details:



Oil Good (green colour): steady on while oil level is good, blinking for a first period of oil missing (even due to turbulence, undulations, etc.) before start filling and is off when filling.

Oil Filling (yellow colour): Off while oil level is good, steady on while injecting oil, blinking while (after filling) TK3^{+} check if the oil level is restored.

Alarm (red colour): Off while oil level is enough, steady on if after a determined number of filling cycles the oil level is not restored.

Power Light (green colour): always on when power is applied.

NOTE. The electronic sensor is equipped with a diagnostic section which monitors the main functional parameters.
In the event that an anomaly is detected, the sensor goes into alarm and the red LED goes into flashing mode. In this case it is recommended to replace the electronic module and check the system working conditions.

Recommendations

Teklab recommends the use of a 10-micron filter in the oil line in order to protect the sensor from contamination. It is recommended to check and keep clean sensitive surfaces during major servicing. Teklab is not to be held responsible for any error on any information present in this document. The products, specifications and data reported here can be changed without the need to give any notice. The information contained in this document are based on data collected by Teklab that are considered valid and which are aligned with the technical knowledge of today. Use of this document and related products is intended only to persons having the necessary skills and knowledge at their own risk and discretion. Since conditions of use are outside the control of Teklab, we cannot assume any liability for any damage caused by the use of our equipment. This document replaces all earlier versions.

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