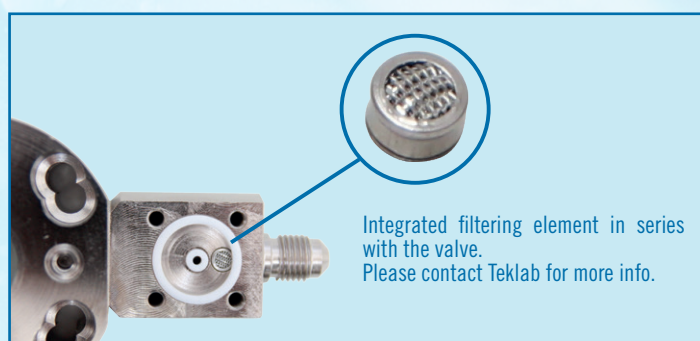


# TK4MB @46 bar

## Oil Level Regulator with integrated Modbus RTU connectivity

SUITABLE FOR CO<sub>2</sub> SYSTEMS

### Some advantages of this solution:

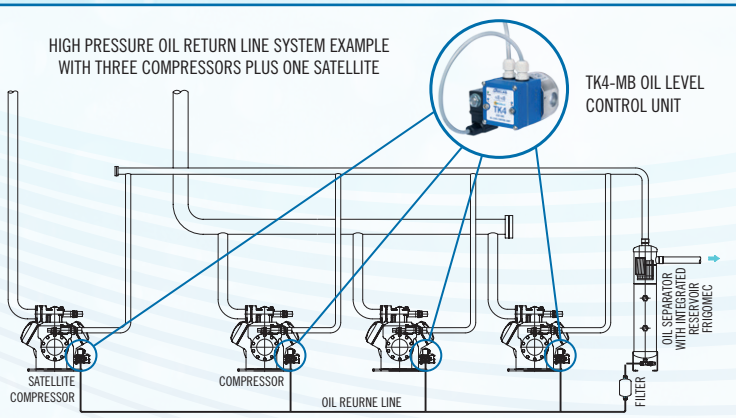
- Modbus RTU Serial connection to system controller
- Extremely compact dimensions
- Left/Right mounting possibility with the same TK4-MB
- Reduction of the number of junctions in the circuit with less possibility of having leakages
- Usage of less components (simplified circuit and easier warehouse management)
- Simplified Installation (cost savings in terms of installation time)
- Revolutionary connectivity capabilities.

### Main Features

- **High reliability** ensured by absence of mechanical moving parts.
- **Sight glass and electronic LEDs** can be checked **on the same side** where is **more comfortable** to do **inspections**.
- Well consolidated steel with fused glass technology with absence of seals ensures **no leakage** and **good chemical compatibility**.
- **Direct sight glass replacement** (3/4/6 holes flange connection).
- 24 VAC / 230 VAC power supply options.
- **Easy maintenance of the coil** of the valve **and of the Electro-Optic sensor** that can be easily replaced **without emptying or depressurizing the plant**.
- 230 VAC /2A alarm relay output suitable for **direct connection in the security chain** of the system.
- **Adapters suitable for various types of compressors.**
- **Unit conform to directives 2014/30/UE and 2014/35/UE.**

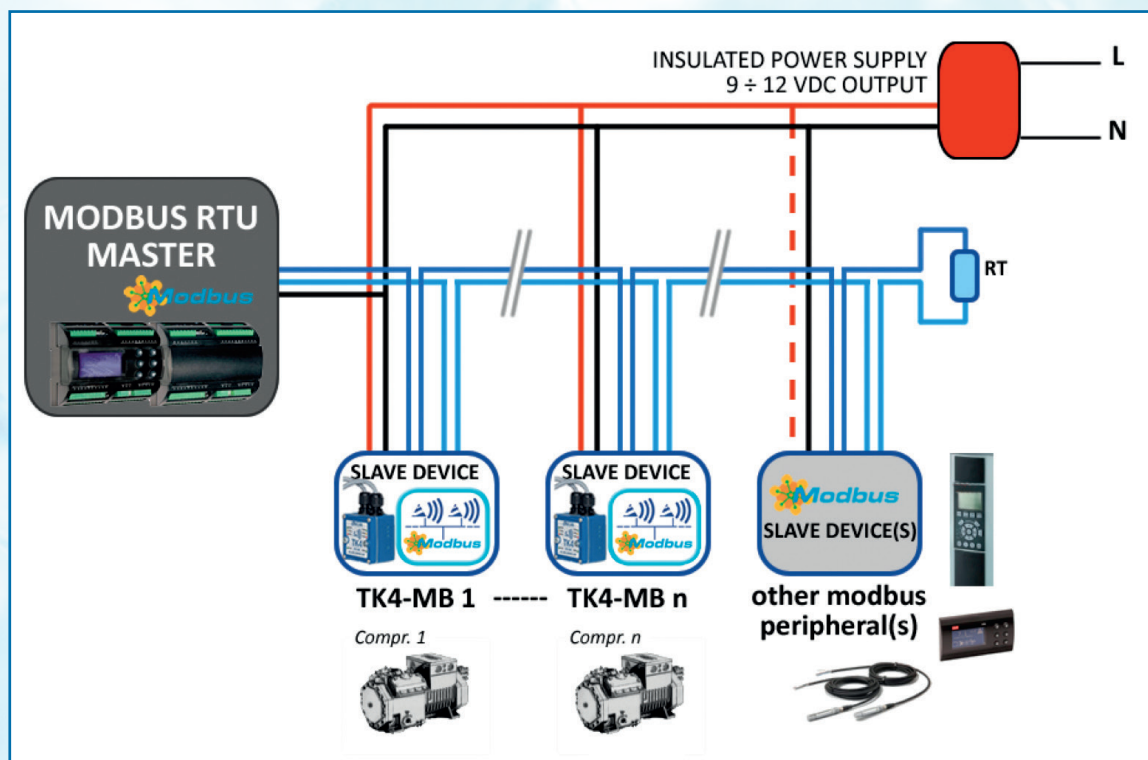
### Application Description

The TK4-MB is designed to control the oil level in the compressor crankcase in order to avoid the compressor to run without oil and so improve its lifetime. TK4-MB monitors the oil level with the embedded electro-optic sensor and comprises a solenoid valve for oil filling and a relay output contact to give an alarm.



<b>SUPPLY VOLTAGE</b>	24 VAC $\pm$ 10% or 230 VAC $\pm$ 10% depending on model
<b>SUPPLY CURRENT</b>	Each TK4MB requires 20VA (depending on the solenoid valve)
<b>ELECTRICAL CONNECTION</b>	EN175301-803 Connector / Spare wires
<b>OUTPUT SIGNAL</b>	Contact free relay output NO and NC
<b>RELAY OUTPUTS</b>	Up to 230VAC @2A
<b>HOUSING MATERIAL</b>	Nickel plated steel + fused glass PA glass fibre reinforced
<b>ENCLOSURE PROTECTION CLASS</b>	IP 65
<b>MEDIA TEMPERATURE</b>	-40°C÷+85°C
<b>AMBIENT TEMPERATURE</b>	-40°C÷+60°C
<b>MAX WORKING PRESSURE</b>	46 bar (higher pressure limits available on different TK4-MB models)
<b>MOPD</b>	26 bar (higher pressure limits available on different TK4-MB models)
<b>OIL RETURN LINE</b>	7/16 – 20 UNF male
<b>CABLE TYPE</b>	PVC cable CEI 20-22. Working temp.: -20 ÷ +70 °C (fixed laying)

## Modbus RTU typical application



## Ordering Codes

ELECTRICAL CONNECTION POWER SUPPLY	CABLE GLANDS 3 m
24 V	TK4MB-A50AB13-01
230 V	TK4MB-A50BB13-01

Program interfaces available. Suggested ordering codes not include oil strainer element. Adapters must be ordered separately.