

Level Control Unit TK1+



Main Features

- The absence of mechanical moving parts ensures **High reliability**
- **24VAC / 230VAC power supply options**
- **Easy installation (sight-glass replacement)**
- Well consolidated steel with fused glass technology ensures **no leakage** and good chemical compatibility
- Electronic sensor **can be easily replaced** without emptying and/or depressurizing the plant due to the two parts design
- **Direct mounting possibility** / adapters suitable for various types of compressors
- **Customizable delays** on request
- Unit conform to directives 2014/30/UE and 2014/35/UE.

Application Description

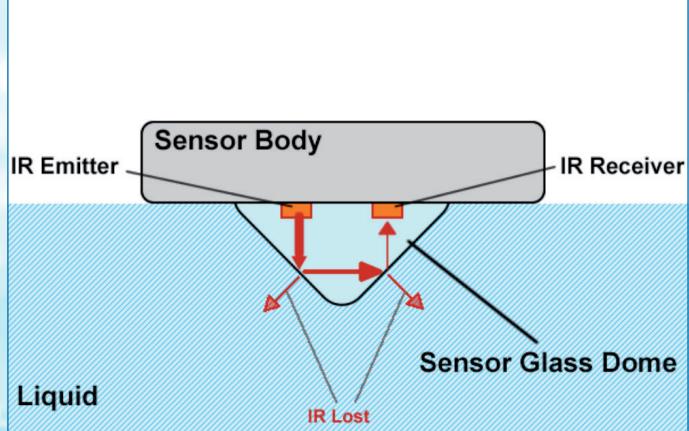
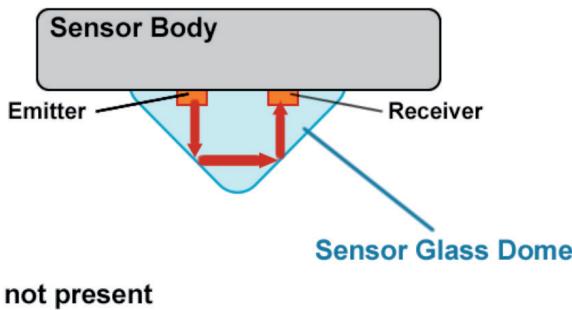
TK1+ series is especially designed for use in level monitoring for HVAC&R market.

TK1+ can be mounted directly on the crankcase of the compressor, on the oil reservoir, oil separator or liquid receiver.

This product is very reliable and suitable for working in heavy environments.

LEDs integrated in the electronic module allow to verify the liquid status.

The two parts design allows the fast replacement of the electronic parts without depressurizing the system.

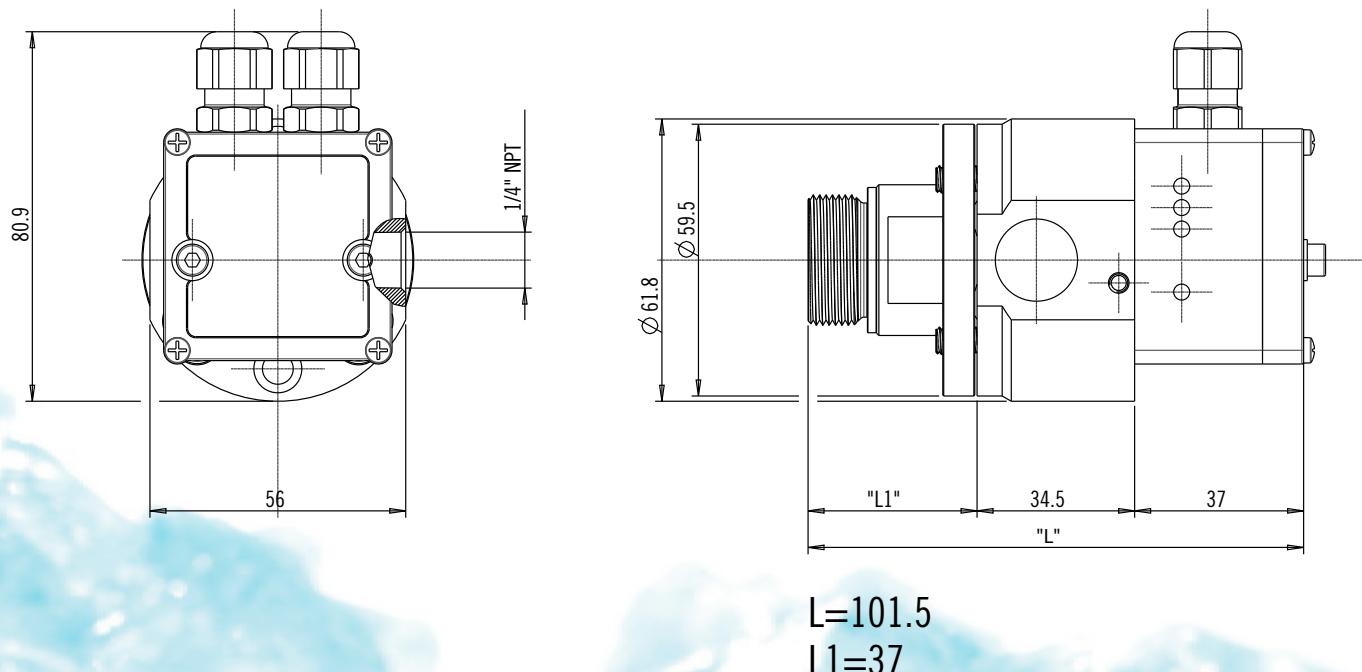


The electronic module of the TK1+ contains an infrared-ray emitter and an optical receiver. In air (liquid not present), all the light emitted is reflected – internally – by the dome and then redirected to the receiver. When the liquid reaches the sensor dome, a big amount of the light emitted is lost in the liquid and the sensor senses its presence.

Technical Data

SUPPLY VOLTAGE	24 VAC \pm 10% or 230VAC \pm 10% depending on model
SUPPLY CURRENT	Each TK1 Electronic module requires 10VA.
ELECTRICAL CONNECTION	Cable wiring or connectors with molded cables depending on model
OUTPUT SIGNAL	Contact free relay output NO and NC
RELAY OUTPUTS	Up to 230VAC @2A
HOUSING MATERIAL	Nickel plated steel + fused glass PA glass fibre reinforced
ENCLOSURE PROTECTION CLASS	IP 65
MEDIA TEMPERATURE	-40°C \div +85°C
AMBIENT TEMPERATURE	-40°C \div +60°C
MAX WORKING PRESSURE	46 bar or 100 bar depending on model
OIL RETURN LINE	1/4" NPT female connection
CABLE TYPE	PVC cable CEI 20-22. Working temp.: -20 \div +70 °C (fixed laying)

Mechanical Dimensions



Note. - Quotes in mm -. L and L1 can vary depending on the adapter (see Adapters Addendum)

Ordering Codes

ELECTRICAL CONNECTION POWER SUPPLY	CABLE GLANDS 1 m	CABLE GLANDS 3 m
24 V	TK1P-KIT-0150-03	TK1P-KIT-0130-03
230 V	TK1P-KIT-01E0-03	TK1P-KIT-01C0-03