



Accurate measurement of transformer winding temperature

- Compact sensor for remote indication and monitoring
- Weatherproof design and robust materials for long trouble-free life

Product Summary

Description Resistance thermometer (RTD) with built-in heating element to simulate the measuring of winding temperatures within a transformer. Provides an analog (Pt100) output for remote indication and monitoring. Choice of one or two RTD's allows for an extra signal for indication or input to SCADA system. Installed in a well (pocket) that allows exchanging units without draining the transformer tank.

Application For winding temperature simulation where the point of measurement (the well or pocket) is not easily viewed from the base of the apparatus or the information is required remotely.



AKM 46890/46812/48003 winding temperature simulation systems

Accurate measurement of transformer winding temperature

- Integrated heating element enables accurate simulation of the average or hot spot temperature of the transformer winding
- By disconnecting the heating element, the thermometer can directly measure the oil temperature
- RTDs enable accurate measurements across an extremely large temperature range

Compact sensor for remote indication and monitoring

- RTD output allows for temperature indication where it is most convenient
- Choose between one or two RTD's within the same transmitter in either Pt100 (100Ω platinum) or Cu10 (10Ω copper) resistance outputs
- Units with 4-20 mA output can transmit signals over long distances

Weatherproof design and robust materials for long trouble-free life

- Ventilated case is weatherproof according to DIN 40050 IP54 (NEMA 3S)
- Die-cast aluminum case with thermosetting powder coat provides excellent protection in harsh environments

Options and accessories

Power supply units 48510 and 48450



- Supplies 24 VDC for AKM winding temperature simulation systems
- Ultra compact 48450 minimizes space and clearance needed for installation
- 48510 accepts a wide range of input power (85-264 VAC or 120-370 VDC)

Remote indicator 47877



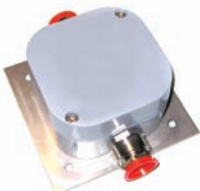
- Analog gauge allows for accurate and easy temperature indication at a glance
- Two different sizes and several available temperature ranges offer a perfect fit for any application

Remote digital indicator 47875



- Display features large, highly visible, bright red LEDs
- Accepts a 4-20 mA signal which represents the temperature range of 0-150°C

Signal converter 47675



- Converts a Pt100 to a 4-20 mA signal for use with remote indicators or connecting to a SCADA system
- 4-20 mA signal can be transmitted great distances without degradation
- Corrosion resistant design is weatherproof according to IP54



TECHNICAL SPECIFICATIONS

Mechanical	Mounting	Side or top mount
	Tank connection	G 3/4", G 1.00", M22, 7/8"-14 UNF-2 (48003 and 44664 series only)
Materials	Probe	Stainless steel
	Probe connection	Brass
	Case	Die-cast aluminum with ANSI #70 light gray coating
Environmental	Std. operating temperatures (46812/46890 series)	-40 to 158°F. (-40 to +70°C)
	Std. operating temperatures (48003 series)	-58 to 185°F. (-50 to +85°C)
	Weatherproof	DIN 40050 IP54 compliant (NEMA 3S equivalent)
Electrical	Electrical connection type	Screw terminals
	Number of RTD's	1 or 2
	Input power (46890 series)	24 VDC
	Output (46890 series)	4-20 mA
	Load (46890 series)	Max. 600 ohms
	Dielectric strength	2000 VAC for one minute

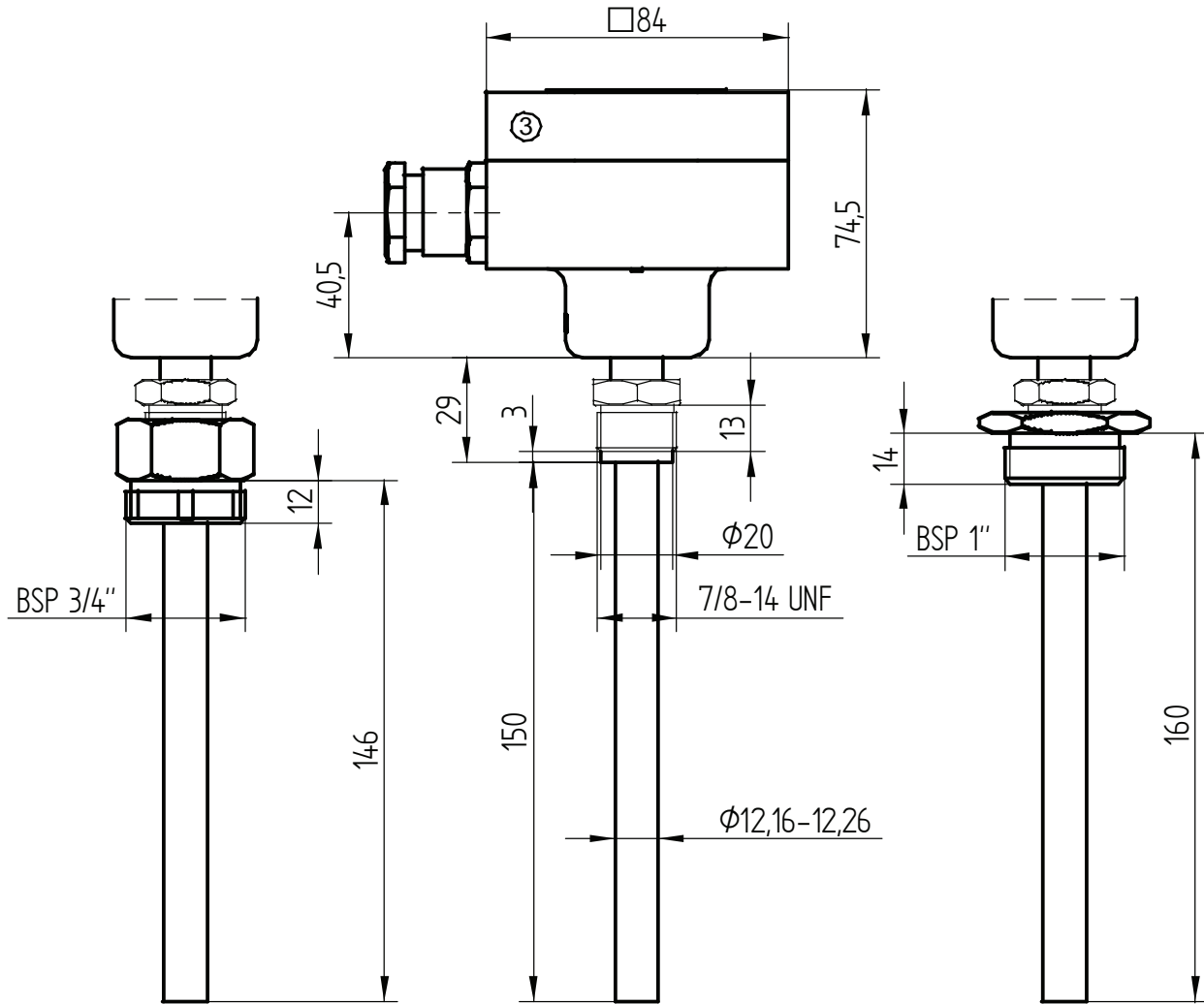


Don't see what you need?

QUALITROL regularly creates models with special customer requirements. Contact your local sales representative or QUALITROL Application Engineer to review your special requirements.



AKM 48003



QUALITROL® Field Services

To further improve reliability, QUALITROL provides comprehensive education and on-site commissioning services, maintenance contracts and technical support to all customers worldwide. Emergency response is available on all products and services.

About QUALITROL®

QUALITROL Company LLC manufactures substation and transformer monitoring and protection devices used by electric utilities and manufacturing companies. It is the global leader in sales and installations of transformer asset protection equipment, fault recorders and fault locators. Established in 1945, QUALITROL Company produces thousands of different types of products on demand, each customized to customers' unique requirements.

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