

QUALITROL AKM345 GEN3 OTIWTI™

THE FUTURE OF OIL AND WINDING TEMPERATURE INDICATION
FOR TRANSFORMERS OF ALL CLASSES



The future of oil and winding temperature indication from the industry leader

- Over 75 years of experience providing world class temperature measurement devices
 - New features to support the digitization of transformers
 - New and improved design for an even more reliable and robust product
 - The original bellows technology temperature indicator with integrated winding temperature simulation
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New features to support the digitization of transformers

- All new RS-485 Modbus digital communication option to allow more data to be easily integrated into monitoring systems
 - Dual analog output options for installations where local and remote monitoring is required
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Standard options to meet all specification requirements

- Up to 6 fully independent switches for most control and alarming circuits
 - Optional adjustable switching differential to fine tune cooling operation
 - Standard switch rated for up to 15 Amps VAC and up to 10 Amp DC switches available for higher VDC loads (magnetic blow out, M.B.O.)
 - Various analog output types available – 4-20mA, 0-5VDC, Pt100
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New and improved design for an even more reliable and robust design

- Improved standard features to support longevity of the product
 - IP66 standard ingress protection
 - C5-High standard as per ISO 12944
 - Updated enclosure design to enhance durability
 - Polar option for operation down to -60°C
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Bellows technology with integrated winding temperature simulation

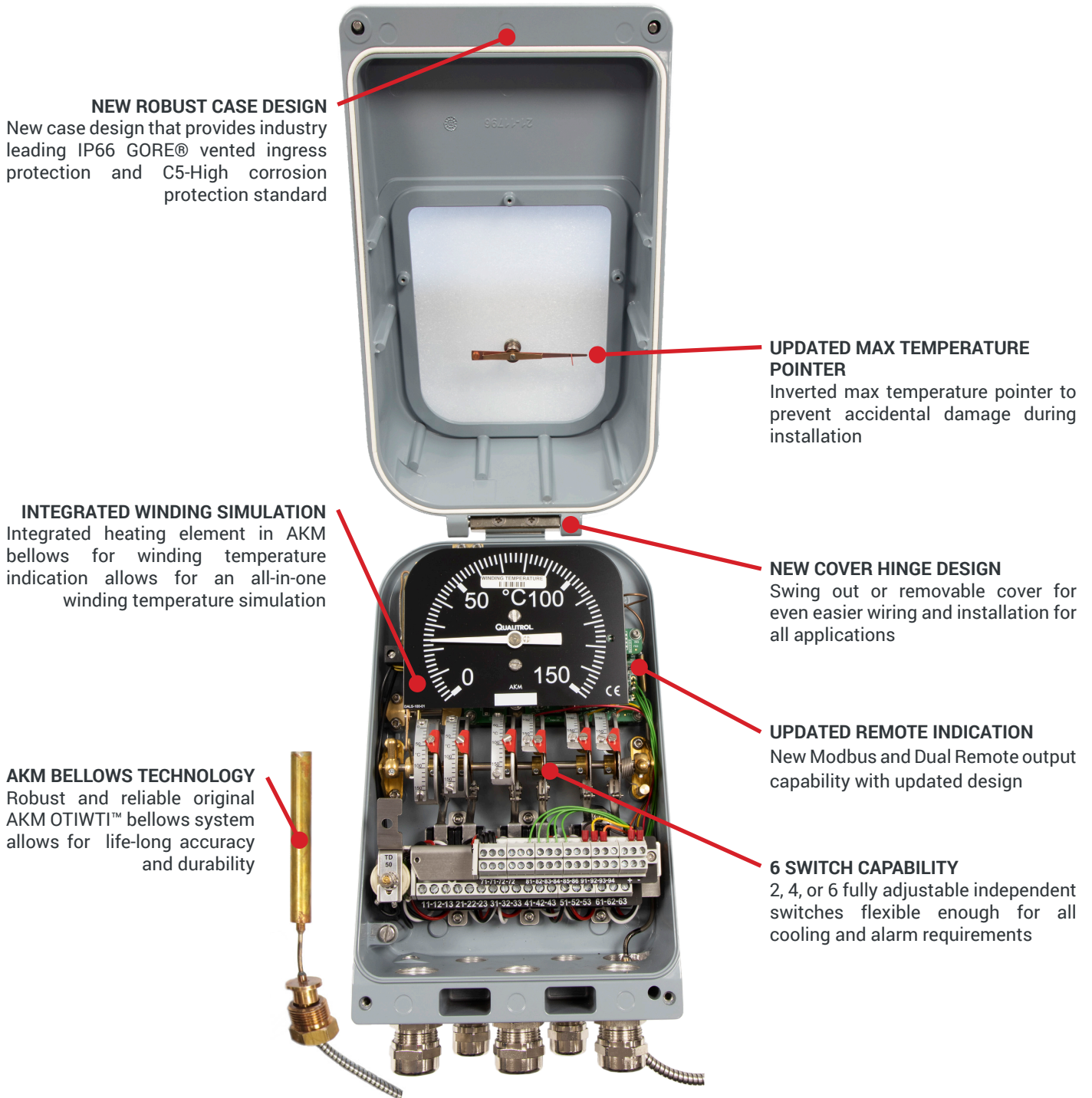
- The same great bellows temperature indication technology from the original OTIWTI™
 - Easy all-in-one winding temperature installation, no need for external equipment
 - Reliable and accurate technology proven over time
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Reduced installation complexity

- New hinged or removable cover for easy access to wiring when mounting on a bracket or in a control cabinet
- Same installation footprint and mounting options as the previous generations AKM345
- Single enclosure design eliminates the need for additional external accessories

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NEW ROBUST CASE DESIGN

New case design that provides industry leading IP66 GORE® vented ingress protection and C5-High corrosion protection standard

UPDATED MAX TEMPERATURE POINTER

Inverted max temperature pointer to prevent accidental damage during installation

NEW COVER HINGE DESIGN

Swing out or removable cover for even easier wiring and installation for all applications

UPDATED REMOTE INDICATION

New Modbus and Dual Remote output capability with updated design

6 SWITCH CAPABILITY

2, 4, or 6 fully adjustable independent switches flexible enough for all cooling and alarm requirements

INTEGRATED WINDING SIMULATION

Integrated heating element in AKM bellows for winding temperature indication allows for an all-in-one winding temperature simulation

AKM BELLOWS TECHNOLOGY

Robust and reliable original AKM OTIWTI™ bellows system allows for life-long accuracy and durability

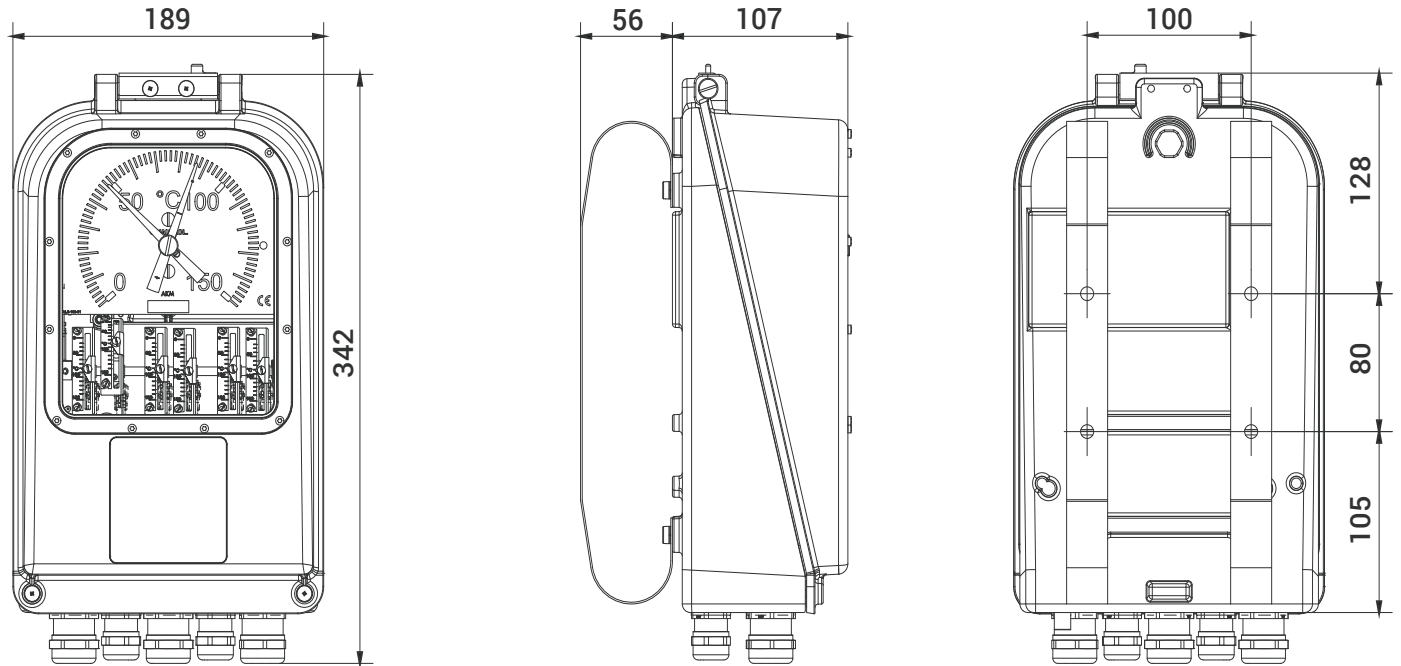
TECHNICAL DATA

Features and Parameters

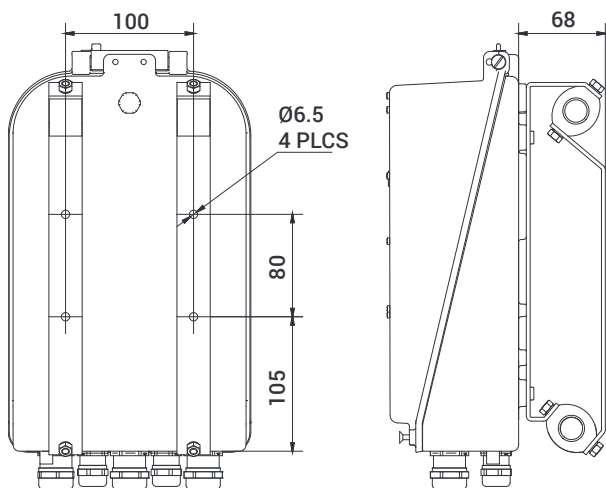
MECHANICAL	
Indication Accuracy	±2% of full dial range
Standard Measurement Range	0°C to 150°C
Winding Temperature Simulation	Internal option for: CT ≤ 2.2A, CT ≤ 2.65A, or CT ≤ 5A
Mounting Style	Stainless Steel anti-vibration mount (standard), Elastomeric seismic mount, or Universal mount
Cover Style	Swing up cover design, easily removed if required
Cable Entry	3 x M25, 2 x M20
ELECTRICAL	
Number of Switches	2, 4, or 6 independently adjustable switches
Switch Types	Standard, High-DC, and Gold options
Switching Differential	12°C ± 2°C - Standard Option for all switches adjustable from 5°C to 25°C
Switching Accuracy	±3% of full dial range
Remote Outputs	Non-powered: Pt100 Powered: 4-20mA, 2 x 4-20mA, or 4-20mA & 0-5VDC
Communications	RS-485 MODBUS
Dielectric Isolation Switches	2000VAC to earth for 60 seconds
Dielectric Isolation Remote Output	500VAC to earth for 60 seconds
MATERIALS	
Housing	Die-cast aluminum, powder coated finish in RAL7000 or RAL7035
Capillary	Copper-nickel element with protective stainless steel cover
Lens	UV stabilized polycarbonate or glass
ENVIRONMENTAL	
Corrosion Protection	C5-High as per ISO 12944
Ingress Protection	IP66
Ambient Operating Temperature	-40°C to 70°C - Standard -60°C to 70°C - Polar
Storage Temperature	-50° to 80°C
Humidity	95% non-condensing relative humidity @ 95°C
General Requirements	Per IEC 60076-22-1
Over-voltage category, Pollution Degree, Class	Category III, Pollution degree 2, Insulation Class 1

DIMENSIONS

Standard Mounting



Seismic Mounting



Universal Mounting

