

The H-J Family of Companies

Bimetal Thermometer

in Accordance with DIN 16160



The H-J Family of Companies
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Bimetal Thermometer

Introduction

Heat losses in a transformer's core and windings cause an increase in the overall temperature which is transferred to the insulating oil. This heat increase cannot be avoided and failure to limit these temperature rises to the thermal capability of the insulation can cause oil and paper deterioration and consequently premature failure of the transformer.

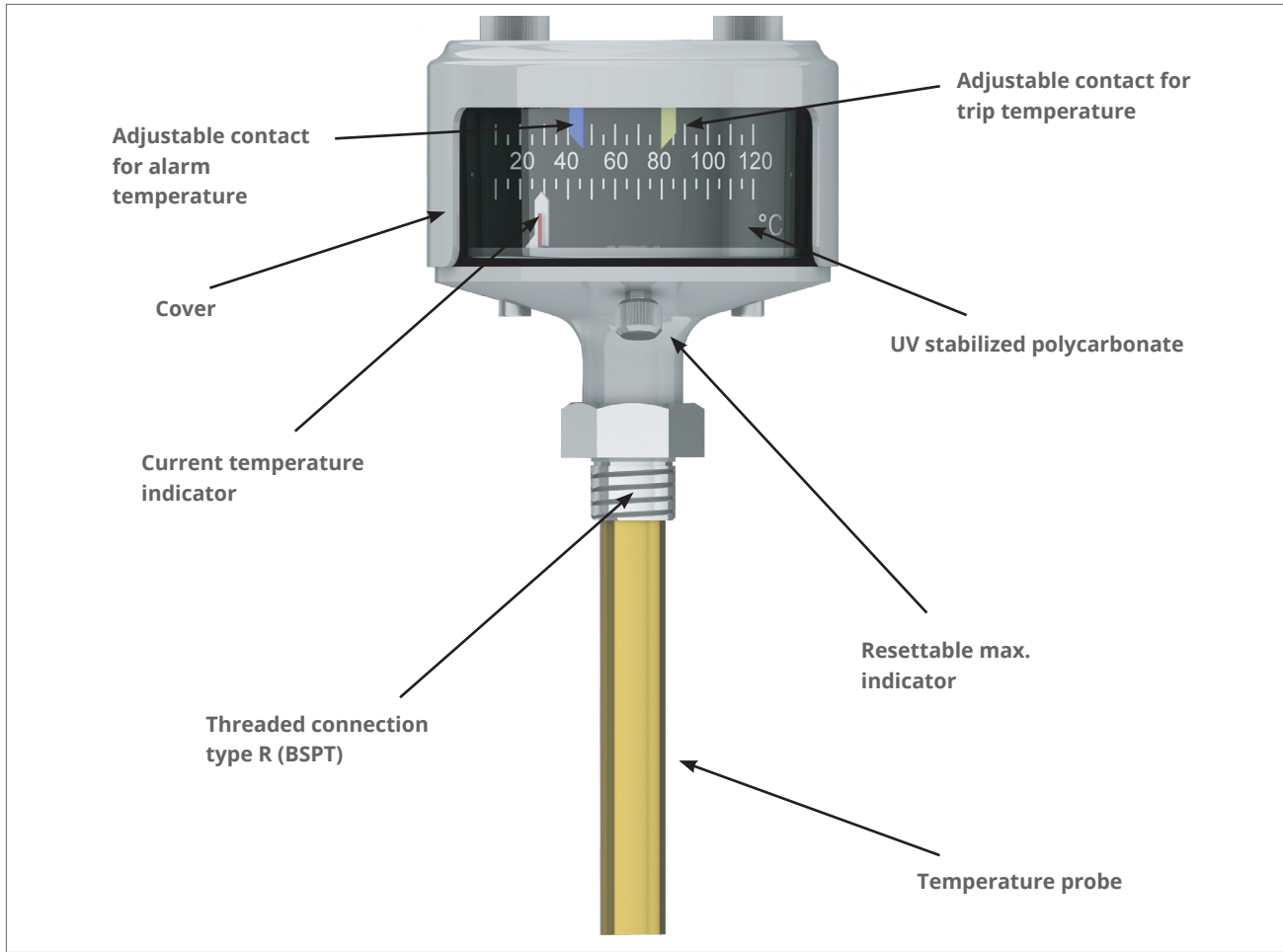
H-J's Bimetal Thermometer for oil immersed distribution transformers has either 1 or 2 adjustable contacts (normally open or changeover) for alarm and/or trip signals. The thermometer can be mounted through a threaded connection available in ½", ¾" or 1". This device includes a resettable indicator for maximum temperature with an oil temperature scale from 0°C to 140°C. The thermometer's normal operating conditions have an ambient temperature range between -40°C and 70°C.

Benefits at a Glance

- » Temperature measurement between 0°C - 140°C
- » Adjustable contacts for alarm and tripping
 - » Resettable maximum indicator
 - » UV-resistant polycarbonate
 - » Degree of protection IP 65
 - » Corrosion resistant materials

Bimetal Thermometer

Technical Specifications



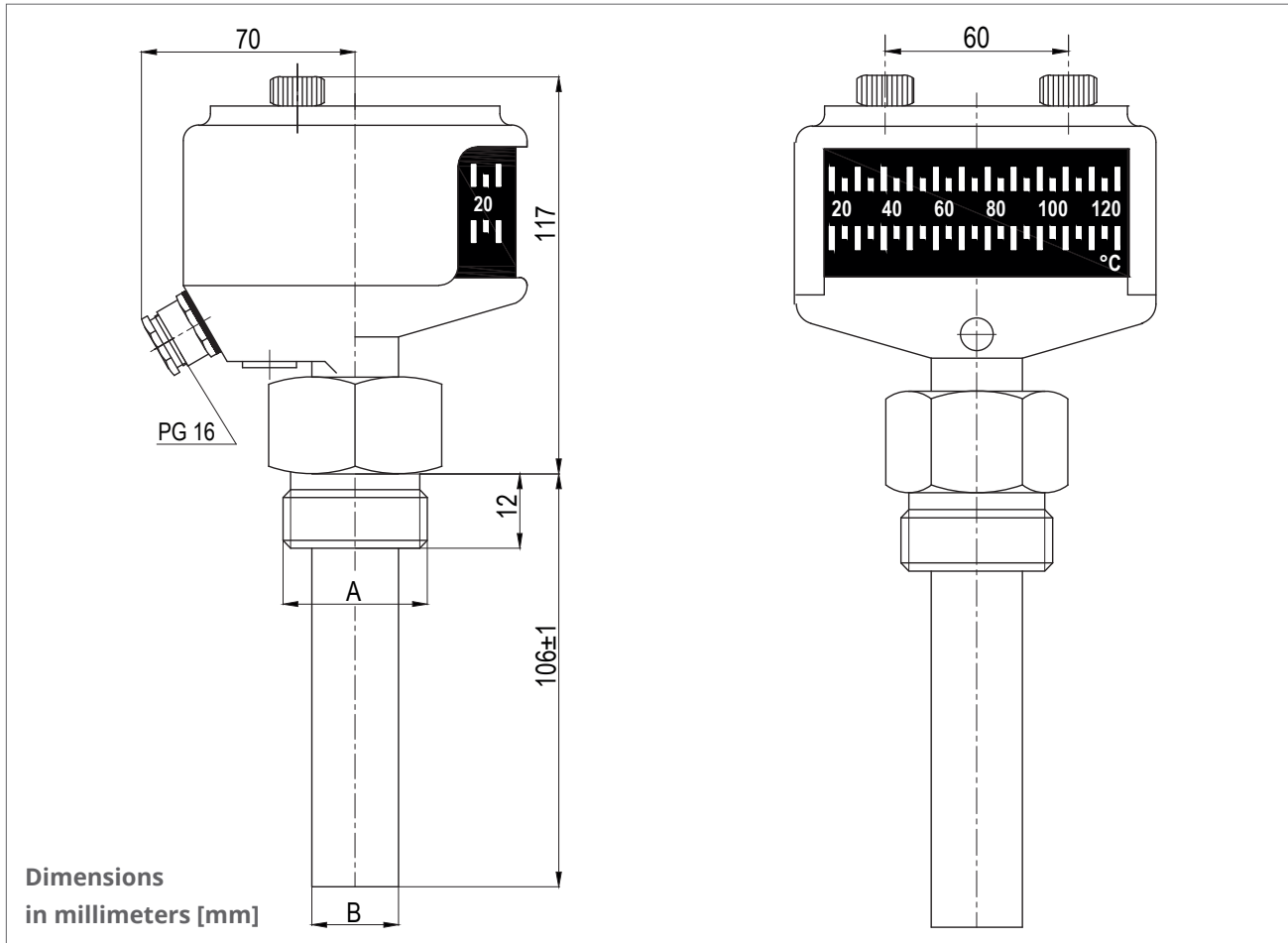
Technical Specifications

Switches	Adjustable (Alarm/Tripping) Number and type of contacts available upon request
Oil Temperature Scale	0°C - 140°C
Body	Diecast aluminium, powder-coated
Coating	RAL 7038, others on request, UV-resistant C4 powder-coating (C5-Marine available upon request)
Cover	UV stabilized polycarbonate
Ambient Operating	-40°C to 70°C
Degree of Protection	IP 65 (EN 60529)
Number of Switches	Up to 2 switches
Dielectric Isolation	1000 V AC / 1 min
Switching Capacity	3 A / 250 V AC
	0.2 A / 250 V DC
Tolerance	±5°C (50°C to 120°C)
Cable Gland	PG 16

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Bimetal Thermometer

Product Data Sheet

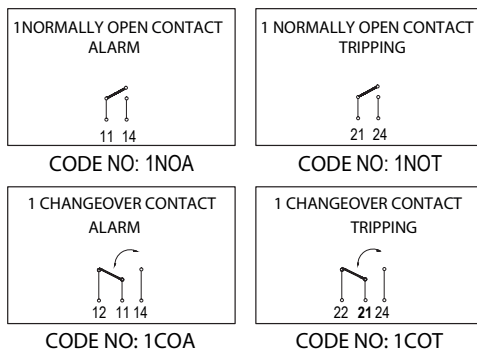


Dimensions
in millimeters [mm]

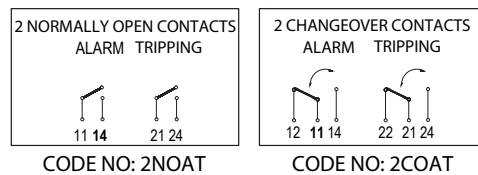
Type	Dimensions		Contacts Options
	Ø A	Ø B	
HJBT-R0.5	R1/2"	15mm	Without Contacts / With 1 Contact / With 2 Contacts
HJBT-R0.7	R3/4"	17mm	Without Contacts / With 1 Contact / With 2 Contacts
HJBT-R1.0	R1"	17mm	Without Contacts / With 1 Contact / With 2 Contacts

Connection Diagram (EN 50005)

1 Contact Alternatives

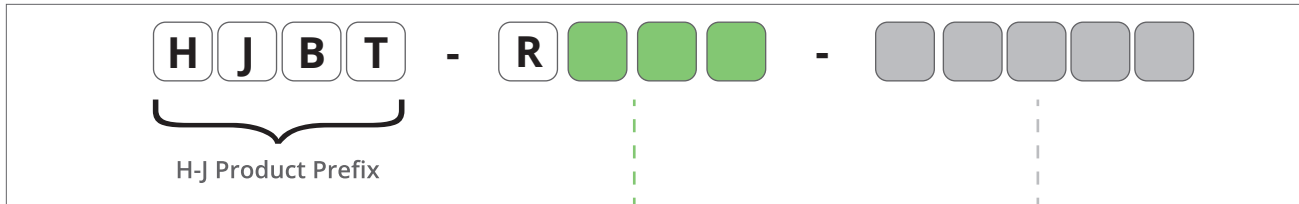


2 Contact Alternatives



Bimetal Thermometer

Part Number Selection



Connection (Thread Size) A [in]	Code
R 1/2	050
R 3/4	075
R 1	100

*See page 5 for complete descriptions

Type	Code
Without Contacts	NC
1 Normally Open Contact (Alarm)	1NOA
1 Normally Open Contact (Trip)	1NOT
1 Changeover Contact SPDT (Alarm)	1COA
1 Changeover Contact SPDT (Trip)	1COT
2 Normally Open Contacts (Alarm & Trip)	2NOAT
2 Changeover Contacts SPDT (Alarm & Trip)	2COAT

* See page 5 for connection diagrams

Standard part number:

* HJBT-R0.7-2NOAT

Example:



Bimetal Thermometer with contacts

Connection (Thread Size): 3/4 inches

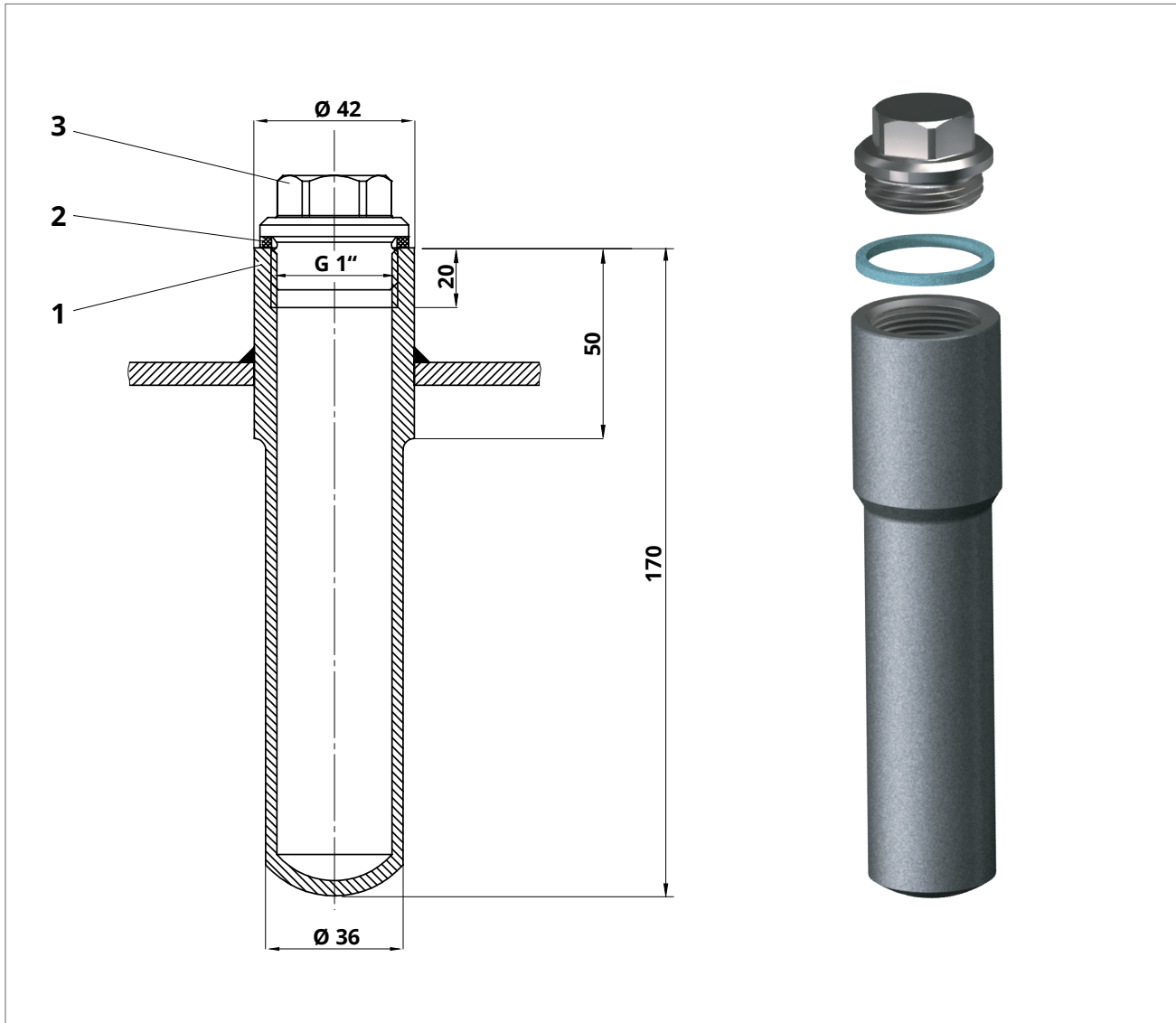
Contacts: 2 Normally Open (NO) Alarm and Trip

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Thermometer Pocket Type HJTHP-G1

in Accordance with EN 50216-4 / DIN 42554

The thermometer pocket is molded in one piece by a seamless deep-drawing process and is guaranteed absolutely leaktight.



*** The pocket thermometer is sold separately.

Dimensions in millimeters [mm]

Item	Q'ty	Descriptions	Remarks	
1	1	Pocket	Standard	Steel grade C10E2C (EN 1.1122)
			Optional	Stainless Steel 316L (EN 1.4404)
2	1	Gasket	Centellen WS 3820 / 39 x 33 x 3	
3	1	Locking Screw	Standard	G1" DIN 910 Corrosion resistant (galv. Zn. Cr-VI free)
			Optional	Stainless Steel 316L (A4-70)



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