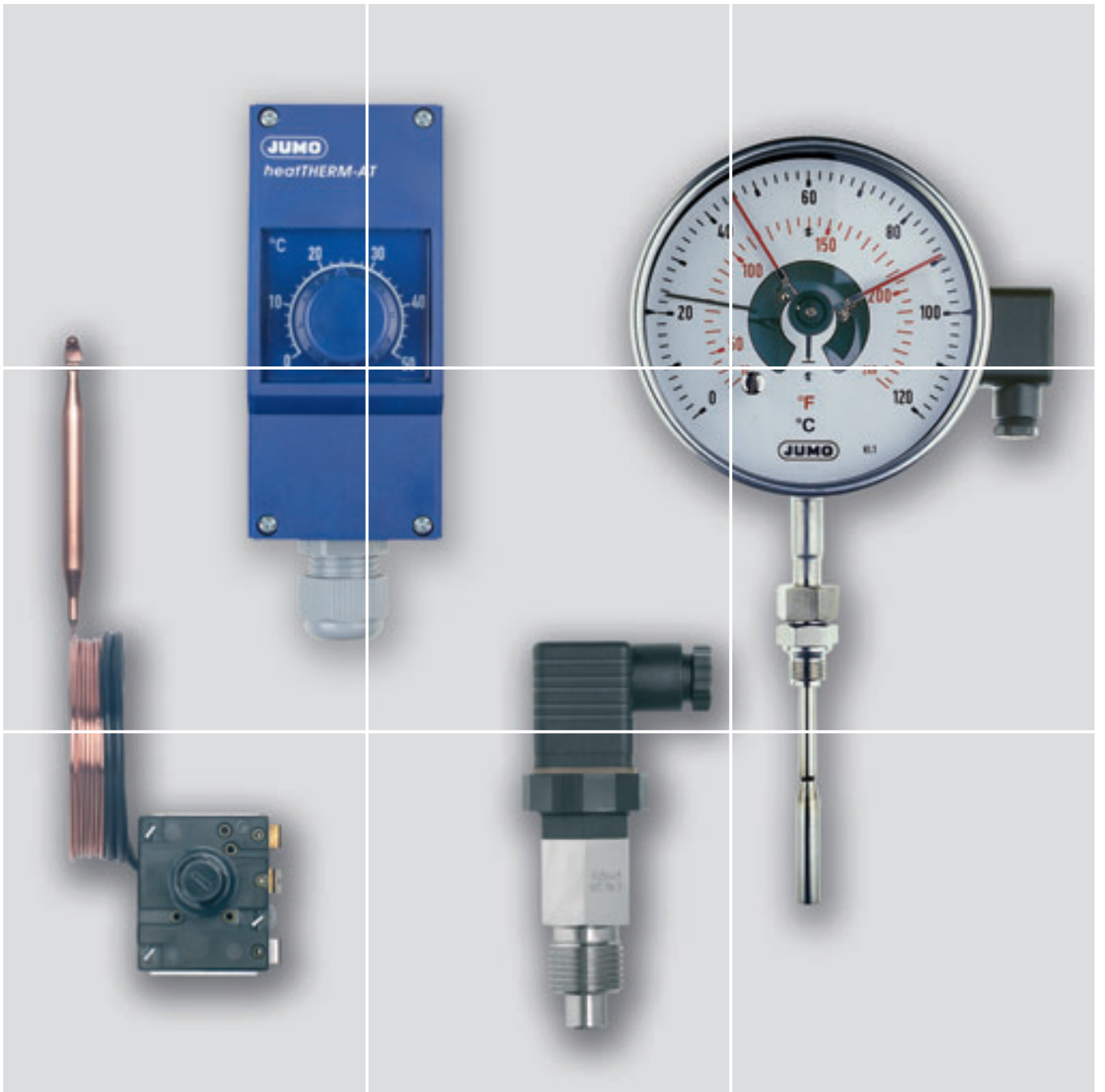
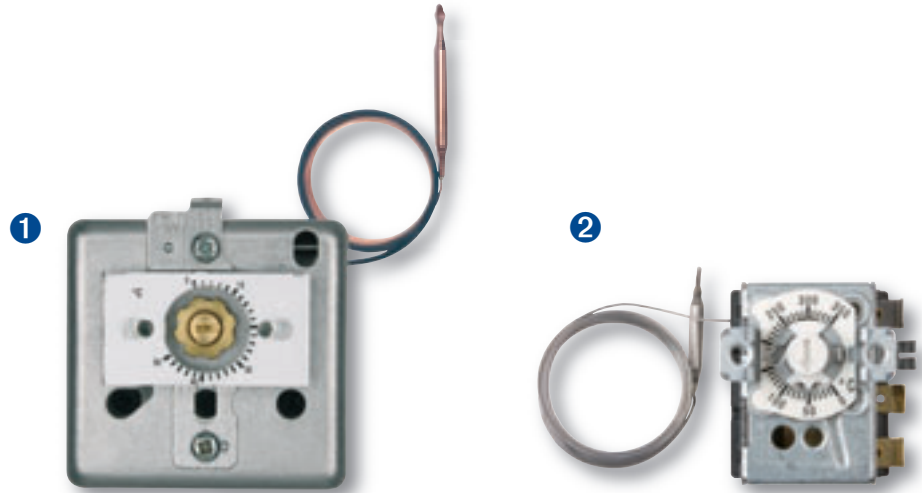








# Electromechanical Indicators and Controllers

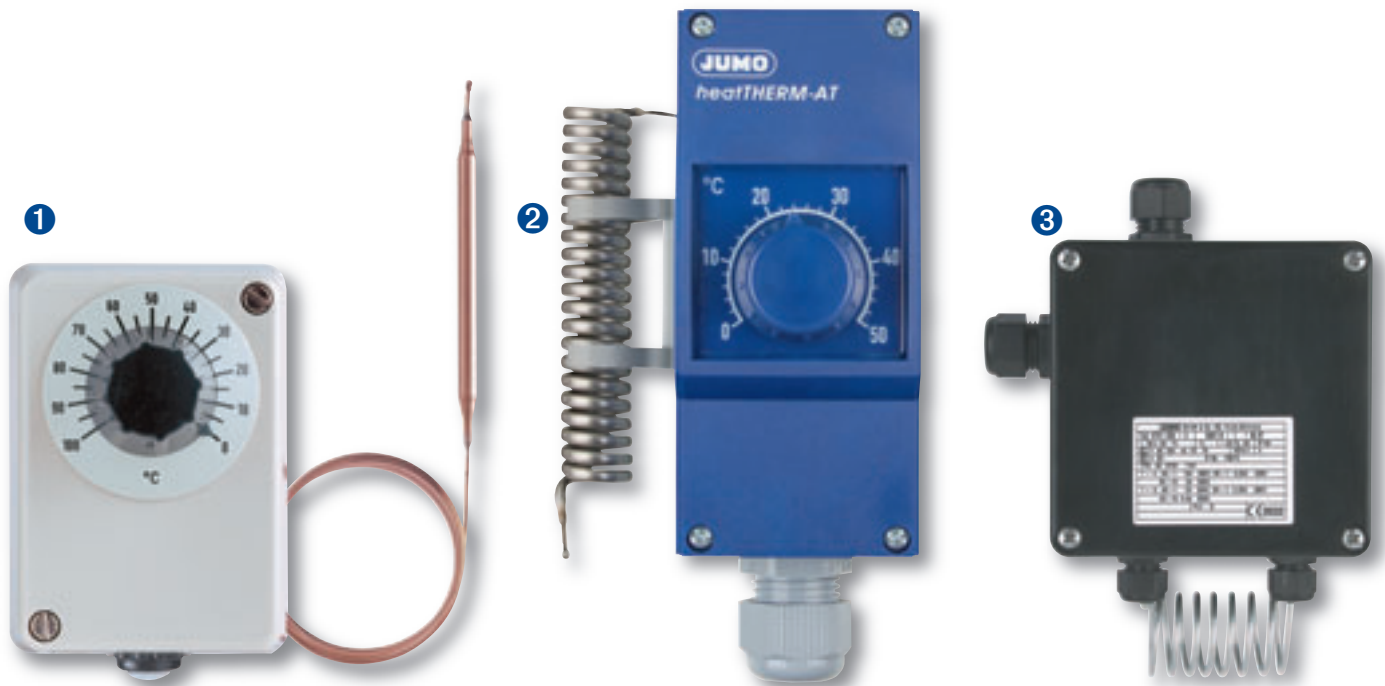


# Panel-mounting Thermostats



<b>Designation</b>	<b>1 Panel-mounting thermostat, EM series</b>	<b>2 JUMO heatTHERM</b>
<b>Approval mark</b>	   DGRL 97/23/EG	   DGRL 97/23/EG
<b>Implemented function to DIN EN 14 597</b>	TR, TW, TB, STW, STB	
<b>Control ranges</b>	-20 to +650 °C	up to 365 °C
<b>Switching differential</b>	optionally 1%-10%	optionally 2,5-7%
<b>Contact rating</b>	16 A, 230V AC	
<b>Switching device</b>	1, 2, 3 or 4 single-pole snap-action switches	single-pole snap-action switch
<b>Measuring system</b>	copper or stainless steel	
<b>Temperature compensation</b>	on request	standard
<b>Further information</b>	data sheet 60.2021	data sheet 60.2031

# Surface-mounting Thermostats



Designation	❶ Surface-mounting thermostat, ATH series	❷ Surface-mounting thermostat, heatTHERM-AT/heatTHERM-DR	❸ Explosion-protected surface-mounting thermostat, ATH-E(X)x series
Approval mark		DIN EN 14 597  DGRL 97/23/EG	
Implemented function to DIN EN 14 597	TR, TW, TB, STW, STB single and twin thermostat	TR, TW, STW, STB single and twin thermostat	TW, TB, STW, STB
Enclosure protection	maximum IP65	maximum IP54	IP65
Control ranges	-20 to +500 °C	-10 to +365 °C	-20 to +500 °C
Switching differential	optionally 1,5%-9 %	2,5 % or 7 %	3 %, 5 % or 6 %
Contact rating	10 A, 230 V AC	16 A, 230 V AC	5A, 230 V AC, 16 A, 230 V AC
Switching device	single-pole snap-action switch		
Measuring system	copper or stainless steel		
Special features	with rigid stem or capillary	„Push-In®“ Connection circuit, Ambient temperature compensation with rigid stem	for potentially explosive gas atmospheres, Zone 1 and potentially explosive atmospheres, Zone 21
Further information	data sheets 60.3021, 60.3026	data sheet 60.3070	data sheets 60.5041, 60.5051

„Push In®“ terminal system: patented connection technology from Weidmüller GmbH & Co. KG, Detmold, Germany

# Electronic Thermostat



# Digital Indicator



# Bimetal Temperature Switch



Designation	① Type TE-1	② JUMO dTHERM-M, with integrated 2-wire transmitter	③ Bimetal Temperature Switch
<b>Housing</b>	plastic housing for rail mounting	dia. 100mm, stainless steel	brass or stainless steel
<b>Enclosure protection</b>	maximum IP65	IP65	maximum IP67
<b>Control ranges</b>	-50 to +1200°C	-	40 to 140°C (steps of 5K)
<b>Indication range</b>	-	-50 to 600°C	-
<b>Switching action</b>	break or make contact	-	break or make contact
<b>Switching differential</b>	adjustable 0,25 - 5%	-	depending on switch temperature
<b>Controller output</b>	relay with floating changeover contact	4 to 20 mA	-
<b>Contact rating</b>	10A, 230V AC, p.f. = 1	-	10A, 230V AC, p.f. = 1
<b>Probe input</b>	Pt100 resistance thermometer or NiCr-Ni thermocouple	Pt100 resistance thermometer	-
<b>Measuring circuit monitoring</b>	break and short-circuit	-	-
<b>Supply</b>	230V AC, 24V AC or DC	DC 12 - 30V	-
<b>Further information</b>	data sheet 60.5501	data sheet 60.8624	data sheet 60.8301

# Indicators



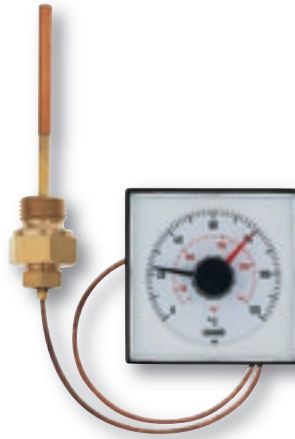
Type	① Bimetal dial thermometer standard version, industrial version, chemical plant version	② Dial thermometer	③ Dial thermometer	④ Dial thermometer
<b>Class</b>	1 and 1.5	1.5	2	1
<b>Enclosure protection</b>	maximum IP 65		IP 53 at front	IP 65
<b>Meas. range</b>	-50 to +500 °C	-40 to +600 °C	-40...+350 °C	-40...+500 °C
<b>Housing</b>	zinc-plated sheet steel, or stainless steel	stainless steel 1.4301, with ring seam	black ABS plastic	stainless steel (1.4301) with bayonet connection
<b>Housing sizes (round)</b>	dia. 50, 63, 80, 100, 160 mm	dia. 60, 80, 100 mm	dia. 52, 60 mm	dia. 100, 160 mm
<b>Housing sizes (square)</b>	-	72 mm x 72 mm, 96 mm x 96 mm	48 mm x 48 mm, 52 mm x 52 mm, 72 mm x 72 mm	-
<b>Style</b>	surface-mounting instrument with rigid immersion tube, tube exit central or downwards	as panel- or surface-mounting instrument, rigid immersion tube	panel-mounting instrument with capillary	panel- or surface-mounting instrument, with capillary or rigid immersion tube
<b>Further information</b>	data sheets 60.8001, 60.8002, 60.8003	data sheet 60.8201	data sheet 60.8202	data sheet 60.8225

# Controllers



1

2



3



Type	1 Contact dial thermometer	2 MICROSTAT-M/M1	3 Contact dial thermometer transformer version
Class	1	2	1.5
Enclosure protection	IP 65	IP53 at front	IP54
Meas. range	-40 to +500 °C	-40 to +600 °C	-20 to +120 °C
Contacts	maximum 3 contacts	1 or 2 microswitches	1 or 2 microswitches with drag pointer
Contact rating	18VA or 50VA at 230V AC/DC	5A or 10A at 230V AC	
Housing (round)	stainless steel (1.4301) with bayonet connection	black ABS plastic or galvanized sheet steel	plastic (PA 6) UV stabilized, fiberglass enforced
Housing (square)	galvanized sheet steel	-	
Housing sizes (round)	dia. 100, 160 mm	dia. 60, 80, 100 mm	dia. 80 mm
Housing sizes (square)	96 mm x 96 mm	72 mm x 72 mm, 96 mm x 96 mm	-
Style	panel- or surface-mounting instrument, with capillary or rigid immersion tube	panel-mounting instrument with capillary	surface-mounting instrument, with capillary or rigid immersion tube
Further information	data sheet 60.8425	data sheets 60.8501	data sheet 60.8540

# Outstanding quality for the global market



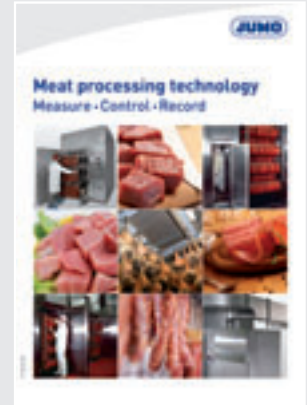
<http://brochures.jumo.info>



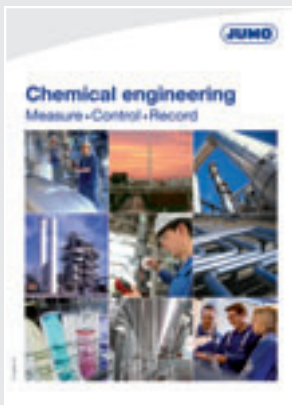
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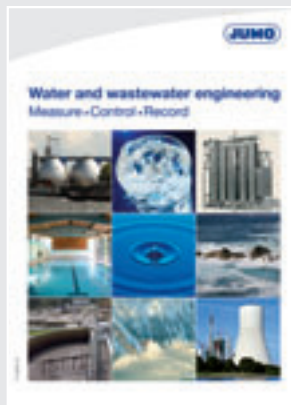
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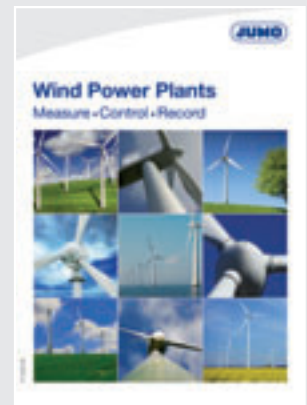
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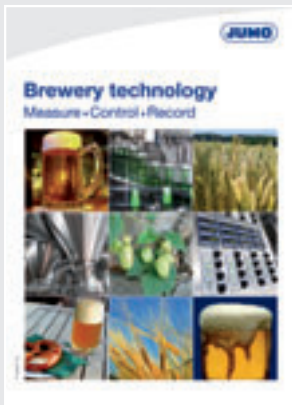
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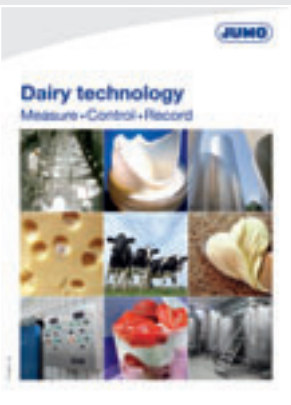
PR 00059 EN



PR 00063 EN



PR 00057 EN



PR 00061 EN



PR 40023 EN

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