Compact temperature switch

06/2016

Applications

- Temperature monitoring and control of processes
- Safety-critical applications in general process instrumentation, especially in the chemical and petrochemical industries, oil and gas industries, power generation incl. nuclear power plants, water/wastewater industries, mining
- For measuring points with limited space, e.g. control panels

Special features

- No power supply needed for switching of electrical loads
- Setting ranges from -30 ... +10 °C to 160 ... 250 °C
- Ex ia version available
- 1 set point, SPDT or DPDT, high switching power up to AC 250 V, 15 A
- Direct mounting or remote mounting with capillary ≤ 10 m



Order numbers		
Case	aluminium, epoxy resin coated	
Sensor	direct mounting	remote mounting with capillary, length 2 m
Process connection	1/2 NF	T male
Electrical connection	1/2 -14	INPT-F
Electric contacts	A - 1xSPDT, s	silver contact
Setting range		
-15 +40°C	14160352	14160356
10 70 °C	14160357	14160358
40 100°C	14160360	14160361
70 120°C	14160362	14160364
90 160°C	14160365	14160366
130 190 °C	14160367	14160368

Legend: available from stock in Germany available after production ---- not available



Quick order sheet model TCS

06/2016

Field no. Code Version Switch enclosure a duminium, epoxy resin coaled ① 2 aluminium, epoxy resin coaled ③ 4 stainless steel 316L Sensor B direct mounting ② C remote mounting with capillary, length 2 m ③ C remote mounting with capillary, length 5 m R remote mounting with capillary, length 10 m Contacts A 1xSPDT, silver contact Ø 1xSPDT, silver contact B Ø 1xSPDT, silver contact, hermetically sealed with argon gas G 1xSPDT, silver contact, hermetically sealed with argon gas G 1xSPDT, silver contact, hermetically sealed with argon gas G 1xSPDT, silver contact, hermetically sealed with argon gas G 1xSPDT, silver contact, hermetically sealed with argon gas G 1xSPDT, silver contact, hermetically sealed with argon gas C 1xSPDT, silver contact, hermetically sealed with argon gas G 1xSPDT, silver contact, hermetically sealed with argon gas G 1xSPDT, silver contact, hermetically sealed with argon gas C 1xSPDT, silver contact, hermetically sealed with argon gas G 1xSPDT, silver contact, hermetically sealed with argon gas CAG 1010 °C, working	Quick order code (for further details see data sheet TV 31.64)			
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Sensor interes steel 316L Sensor 	1	2	aluminium, epoxy resin coated	
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G 1xDPDT, silver contact H 1xDPDT, silver contact, hermetically sealed with air Setting range Image: CAA -30+10°C, working range-40+60°C, proof temperature +90°C CAB -15+40°C, working range-40+60°C, proof temperature +90°C CAC 1070°C, working range-40+60°C, proof temperature +90°C CAC 1070°C, working range-40+70°C, proof temperature +90°C CAC 1070°C, working range-40+70°C, proof temperature +90°C CAB -15+40°C, working range-40+70°C, proof temperature +90°C CAC 1070°C, working range-40+70°C, proof temperature +90°C CAB -1070°C, working range-40+70°C, proof temperature +90°C CAC 1070°C, working range-40+70°C, proof temperature +90°C CAB 90180°C, working range-40+170°C, proof temperature +180°C CAE 70120°C, working range-40+170°C, proof temperature +180°C CAF 90180°C, working range-40+190°C, proof temperature +210°C CAH 160250°C, working range-40+280°C, proof temperature +210°C CAB 1/2 NPT male F 3/4 NPT male 3/4 NPT male 3/4 NPT Special desize Image: Special desize Special desize Special desize Special desize Special desize <td>В</td> <td>1xSPDT, silver contact, hermetically sealed with argon gas</td>		В	1xSPDT, silver contact, hermetically sealed with argon gas	
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CAE 70 120 °C, working range -40 +170 °C, proof temperature +180 °C CAF 90 160 °C, working range -40 +170 °C, proof temperature +180 °C CAG 130 190 °C, working range -40 +170 °C, proof temperature +210 °C CAH 160 250 °C, working range -40 +190 °C, proof temperature +210 °C CAH 160 250 °C, working range -40 +280 °C, proof temperature +300 °C Process convection F 3/4 NPT male G G G 1/2 A male F 3/4 NPT male G G J/2 A male F 3/4 A male Special design F Vithout A mode M helical bulb N NACE Z without A mode M NACE Z without A suitable for ambient temperature up to -60°C ⑦ O1 Offshore		CAD	40 100 °C, working range -40 +120 °C, proof temperature +140 °C	
CAG 130 190 °C, working range -40 +190 °C, proof temperature +210 °C CAH 160 250 °C, working range -40 +280 °C, proof temperature +300 °C Process concent I 1/2 NPT male F 3/4 NPT male I/2 NPT male G G // 2 A male G G // 2 A male Special designer Feature Feature Feature M helical bulb NACE Ambient condition AACE Secondition Secondition D1 suitable for ambient temperature up to -60°C Offshore	(4)	CAE	70 120 °C, working range -40 +170 °C, proof temperature +180 °C	
CAH 160 250 °C, working range -40 +280 °C, proof temperature +300 °C Process con		CAF	90 160 °C, working range -40 +170 °C, proof temperature +180 °C	
Process convertion E 1/2 NPT male Image: Second design of the		CAG	130 190 °C, working range -40 +190 °C, proof temperature +210 °C	
E1/2 NPT maleF3/4 NPT maleGG 1/2 A maleHG 3/4 A maleSpecial desizIBAlical bulbNACENACEIvithoutDautable for ambient temperature up to -60°CO1Offshore		CAH	160 250 °C, working range -40 +280 °C, proof temperature +300 °C	
F3/4 NPT maleGG 1/2 A maleHG 3/4 A maleSpecial designationFeaturesIndical bulbImage: NACENACEImage: National colspan="3">A vithoutD1suitable for ambient temperature up to -60°CImage: One StateOne StateImage: One State <td colspan="4">Process connection</td>	Process connection			
Image: Special design features	\$	E	1/2 NPT male	
G G 1/2 A male H G 3/4 A male Special design features Image: Imag		F	3/4 NPT male	
Special design features B helical bulb N NACE Z without Ambient condition / application condition D1 suitable for ambient temperature up to -60°C O1 Offshore		G	G 1/2 A male	
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N NACE Z without Ambient condition / application condition condition D1 suitable for ambient temperature up to -60°C ①1 Offshore	Special design features			
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D1 suitable for ambient temperature up to -60°C ⑦ 01 Offshore		Ν	NACE	
D1 suitable for ambient temperature up to -60°C ⑦ 01 Offshore		Z	without	
⑦ 01 Offshore	Ambient condition / application condition			
	\bigcirc	D1	suitable for ambient temperature up to -60°C	
		01	Offshore	
		ZZ	without	



Please specify approvals and certificates via free text. C1 Intrinsic safety Ex ia IECEx-ATEX C4 SIL 2 for functional safety

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