

Cable temperature sensor with mounting flange

For temperature measurement in air ducts. With 100/200 mm stainless steel probe and PVC cable.

Technical data sheet





Type Overview

Туре	Output signal	Probe length	Probe diameter
01CT-1ALF	Pt100	100 mm	6 mm
01CT-1APF	Pt100	200 mm	6 mm
01CT-1BLF	Pt1000	100 mm	6 mm
01CT-1BPF	Pt1000	200 mm	6 mm
01CT-1CLF	Ni1000	100 mm	6 mm
01CT-1CPF	Ni1000	200 mm	6 mm
01CT-1DLF	Ni1000TK5000	100 mm	6 mm
01CT-1DPF	Ni1000TK5000	200 mm	6 mm
01CT-1LLF	NTC10k (10k2)	100 mm	6 mm
01CT-1LPF	NTC10k (10k2)	200 mm	6 mm
01CT-1QLF	NTC20k	100 mm	6 mm
01CT-1QPF	NTC20k	200 mm	6 mm

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Electrical data	Electrical connection	Cable 2 m, 2-wire
Functional data	Output signal passive temperature	Pt100
		Pt1000
		Ni1000
		Ni1000TK5000
		NTC10k (10k2)
		NTC20k
	Application	Air
Measuring data	Measuring values	Temperature
	Measuring range temperature	-35100°C [-30210°F]
	Accuracy temperature passive	Passive sensors depending on used type
	, , ,	Pt : Class B, ±0.3°C @ 0°C [±0.5°F @ 32°F]
		Ni: ±0.4°C @ 0°C [±0.7°F @ 32°F]
		NTC: ±0.2°C @ 25°C [±0.35°F @ 77°F]
	Measuring current	Pt100: <1 mA @ 0°C [32°F]
		Pt1000: <0.3 mA @ 0°C [32°F]
		Ni1000: <0.3 mA @ 0°C [32°F]
		Ni1000TK5000: <0.3 mA @ 0°C [32°F]
		NTC10k (10k2): <2 mA @ 25°C [77°F]
		NTC20k: <0.5 mA @ 25°C [77°F]
	Time constant τ (63%) in air duct	Typical 155 s @ 0 m/s
		Typical 35 s @ 3 m/s



Time constant τ (63%) in water pipe	With thermowell A-22P-A and thermal contact fluid Typical 7 s with thermowell brass	
	Typical 9 s with thermowell stainless steel	
Ambient humidity	Max. 95% r.H., non-condensing	
Ambient temperature	-35100°C [-30210°F]	
Fluid temperature	-35100°C [-30210°F]	
Protection class IEC/EN	III Safety Extra-Low Voltage (SELV)	
Protection class UL	UL Class 2 Supply	
EU Conformity	CE Marking	
Certification IEC/EN	IEC/EN 60730-1	
Degree of protection IEC/EN	IP67	
Degree of protection NEMA/UL	NEMA 4X	
Quality Standard	ISO 9001	

Safety notes



Safety data

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This device has been designed for use in stationary heating, ventilation and air-conditioning systems and must not be used outside the specified field of application. Unauthorised modifications are prohibited. The product must not be used in relation with any equipment that in case of a failure may threaten humans, animals or assets.

Ensure all power is disconnected before installing. Do not connect to live/operating equipment.

Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.

The device contains electrical and electronic components and must not be disposed of as household refuse. All locally valid regulations and requirements must be observed.

Remarks

General remarks concerning sensors

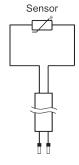
Due to self-heating with 2 wire passive sensors, the supply wire current affects the measurement accuracy. So the supply current should not be higher than the measuring current values specified in this data sheet.

When using lengthy connecting cables (depending on the cross section used), the cable resistance must be taken into account. The lower the impedance of the sensor used, the greater the effect of the line resistance on the measurement, because it generates an offset.

Scope of delivery

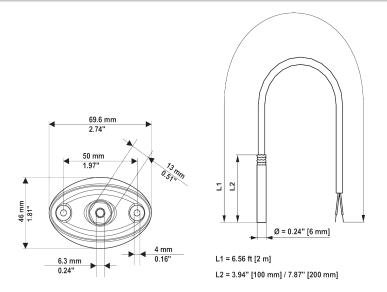
Scope of delivery	Description	Туре
	Mounting flange for sensor probe 6 mm, up to max. 120°C [248°F], Plastic	A-22D-A03

Wiring diagram





Dimensions



Туре	Probe length	Weight
01CT-1ALF	100 mm	0.070 kg
01CT-1APF	200 mm	0.075 kg
01CT-1BLF	100 mm	0.070 kg
01CT-1BPF	200 mm	0.075 kg
01CT-1CLF	100 mm	0.070 kg
01CT-1CPF	200 mm	0.075 kg
01CT-1DLF	100 mm	0.070 kg
01CT-1DPF	200 mm	0.075 kg
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