

Thermo switch

Temperature detector, Thermostat, Temperature limiter



- high reliability
- long durability
- small temperature tolerances
- high safety
- great variety of types

The thermo switch operates independently from any current supply. The thermal operation system works by means of ceramic pin separated from the contact system galvanically. The housing, the covering cap and the attachments are free of voltage. Thermo switches only react when external thermal heating affects them. The thermal coupling to the source of heat is effected by means of a bimetal

disc lying directly below the metallic covering cap. Due to small size, high reliability, independence of location and the fact that it is totally maintenance-free, a thermo switch is the ideal instrument for perfect thermal protection.

Contact types





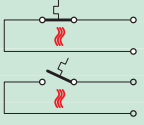
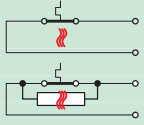
- **KO** - break contact which will automatically return into its original position

- **KS** - make contact which will automatically return into its original position
- **KB** - limiter with mechanical latching
- **SO** - break contact with electric latching
- **CO/CS/CB/CSO** - break contact, make contact, limiter in ceramic housing

Order indication

KO KS KB SO	X	X	X	XXX	XX	X
Type of contact alternatively in ceramics						Hysteresis A = ≤ 15 K B = customer's demand
Connections						Tolerance 05 = ± 5 K 10 = ± 10 K
Faston 6,3 x 0,8 lateral straight	1					
Faston 4,6 x 0,8 lateral straight	2					
Faston 6,3 x 0,8 90° angleshaped form	3					
⋮	⋮					
Attachment						switching temperature
loose flange on both sides		R				040 = 40°C
fixed flange 90°		9				⋮
screw fixture M 4x6		4				⋮
⋮		⋮				180 = 180°C (ceramic model up to 195°C)
Bördelcap						
aluminium, closed				0		
CrNi, closed				2		other models on request

Technical data thermo switch

Name	KO/KS	CO/CS	KB/CB	SO/CSO
				
Circuit diagram	 KO/CO = break contact KS/CS = make contact		 KB/CB = mechanical limiter SO/CSO = electrical limiter	
Contact type	break/make contact with automatic return in its original position		break contact with mechanical latching	break contact with electrical latching
Nominal voltage	up to 250 V / 50 Hz			
electrical durability	100.000 cycles 10 (1,6) A 10.000 cycles 16 (6) A		3.000 cycles 10 (1,6) A 1.000 cycles 16 (6) A	
max. switching current	16 (6) A			10 (1,6) A
switching temperature range	40°C - 180°C (195°C)			
switching temp. tolerance	± 5 K, C, ± 10 K, others on demand			
switching temp. difference	A = ≤ 15 K, C = ≤ 40 K		customer's demand	
Degree of protection	IP00 sequential circuit protected against dust and dirt			
max. ambient temperature (permanent)	200°C			
electrical strength closing cap against mass	2000 V _{eff.} 50 Hz			
electrical strength via open contacts	500 V _{eff.} 50 Hz			
Approvals	VDE, conform to RoHS, further approvals upon request.			

Order example

Controller /Detector — **KO 1 R 0 080 05 A** — Hysteresis: ≤ 15 K

Connection type: flat plug 6,3, lateral straight | range of switching temperature: 80°C

break contact (normally closed) | attachment type: loose flange on both sides | Tolerance: ± 5 K

Dimensioned drawing (example)

