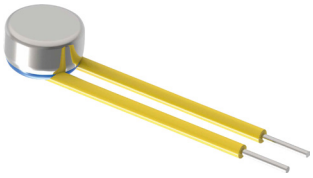
Thermostat Switch

multicomp PRO



RoHS Compliant

Description

These switches have a thermo-bimetallic snap-disc with a fixed switching temperature as the switching element. In the case of an external temperature input, the double contact system of the switch, and thus the circuit of the application is opened or closed. The heat transfer is performed from all sides onto the housing of the switch by means of convection, or direct heat conduction.

These switches are universally applicable through their design, their wide range of performance, and their diverse range of designs: as a protective switch, sensor, controller.

Especially applications in the area of temperature sensors with low voltage and signal currents require gold plated contacts.

Beside the standard counters in single implementation the protectors are also offered in twin and triplet configuration.

Applications

- Motors
- Transformers
- Coils
- Electronics, sensors
- Process automation

Features

- Non-sensitive to current
- High current rating up to 30 A
- Manifold executions
- Special low voltage execution

Technical data

Type ratings	Control	
	MCPA/MCPE	
Version	normally closed	
Rated current at 250 V 50/60 Hz (power factor 0.95 / 0.6)	10A / 6A	13A / 6A
Switching cycles under rated current	10,000	1,000
max. current under failure conditions at 250 V 50/60 Hz (power factor 0.95)	30.0 A	
Switching cycles under max. current	100	
Temperature rating T_A (steps in 5°C)	70°C to 190°C	70°C to 160°C
Tolerances	Standard: ±5°K	
Feature of automatic action	1.B, 2.B, 1.C	
Contact resistance (incl. wire of 100mm)	< 50 mΩ	
Hysteresis	30°K ± 15 °K[1])	
Dielectric strength (standard insulation)	2 kV	
Vibration resistance (10 to 60 Hz)	100 m/s^2	
Resistances to impregnation	Tight against ordinary resins and lacquers	
Degrees of protection provided by enclosures (EN 60529)	IP00	
Suitable for use in protection category	I, II	

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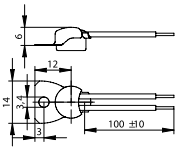
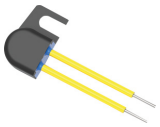
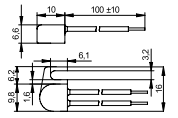
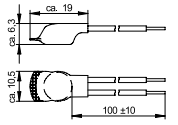
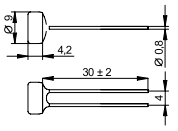
Variants

Control type	n.c.	n.o.	Code	Illustration	Drawing dimensions (mm)*	Technical Specification	Approvals (only for B12)
MCP	E	G	G402			Aluminium housing thread M4x6 potted TA max. 150°C	VDE, UL, cUL
	A	B	U294			Housing of PPS potted TA max. 160°C	VDE, UL, cUL
			U253			Shrink cap potted	VDE, UL, cUL
			A800			Not insulated potted	VDE, UL, cUL

Part Number Table

Description	Part Number
Thermostat Switch, NC, 70°+-5%, L310 Lead,100mm	MCPE07005L310100G402
Thermostat Switch, NC, 80°+-5%, L310 Lead,100mm	MCPE08005L310100G402
Thermostat Switch, NC, 90°+-5%, L310 Lead,100mm	MCPE09005L310100G402
Thermostat Switch, NC, 100°+-5%, L310 Lead,100mm	MCPE10005L310100G402
Thermostat Switch, NC, 110°+-5%, L310 Lead,100mm	MCPE11005L310100G402
Thermostat Switch, NC, 120°+-5%, L310 Lead,100mm	MCPE12005L310100G402
Thermostat Switch, NC, 130°+-5%, L310 Lead,100mm	MCPE13005L310100G402
Thermostat Switch, NC, 140°+-5%, L310 Lead,100mm	MCPE14005L310100G402
Thermostat Switch, NC, 150°+-5%, L310 Lead,100mm	MCPE15005L310100G402

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Description	Part Number
Thermostat Switch, NC, 70°+-5%, U294 Bead, L310 Lead, 100mm	MCPA07005L310100U294
Thermostat Switch, NC, 80°+-5%, U294 Bead, L310 Lead, 100mm	MCPA08005L310100U294
Thermostat Switch, NC, 90°+-5%, U294 Bead, L310 Lead, 100mm	MCPA09005L310100U294
Thermostat Switch, NC, 100°+-5%, U294 Bead, L310 Lead, 100mm	MCPA10005L310100U294
Thermostat Switch, NC, 110°+-5%, U294 Bead, L310 Lead, 100mm	MCPA11005L310100U294
Thermostat Switch, NC, 120°+-5%, U294 Bead, L310 Lead, 100mm	MCPA12005L310100U294
Thermostat Switch, NC, 130°+-5%, U294 Bead, L310 Lead, 100mm	MCPA13005L310100U294
Thermostat Switch, NC, 140°+-5%, U294 Bead, L310 Lead, 100mm	MCPA14005L310100U294
Thermostat Switch, NC, 150°+-5%, U294 Bead, L310 Lead, 100mm	MCPA15005L310100U294
Thermostat Switch, NC, 160°+-5%, U294 Bead, L310 Lead, 100mm	MCPA16005L360100U294
Thermostat Switch, NC, 70°+_5%, U253 Sleeving, L310 Lead, 100mm	MCPA07005L310100U253
Thermostat Switch, NC, 80°+_5%, U253 Sleeving, L310 Lead, 100mm	MCPA08005L310100U253
Thermostat Switch, NC, 90°+_5%, U253 Sleeving, L310 Lead, 100mm	MCPA09005L310100U253
Thermostat Switch, NC, 100°+_5%, U253 Sleeving, L310 Lead, 100mm	MCPA10005L310100U253
Thermostat Switch, NC, 110°+_5%, U253 Sleeving, L310 Lead, 100mm	MCPA11005L310100U253
Thermostat Switch, NC, 120°+_5%, U253 Sleeving, L310 Lead, 100mm	MCPA12005L310100U253
Thermostat Switch, NC, 130°+_5%, U253 Sleeving, L310 Lead, 100mm	MCPA13005L310100U253
Thermostat Switch, NC, 140°+_5%, U253 Sleeving, L310 Lead, 100mm	MCPA14005L310100U253
Thermostat Switch, NC, 150°+_5%, U253 Sleeving, L310 Lead, 100mm	MCPA15005L310100U253
Thermostat Switch, NC, 160°+_5%, U253 Sleeving, L360 Lead, 100mm	MCPA16005L360100U253
Thermostat Switch, NC, 70°+_5%, A800 PCB Pin, 30MM	MCPA07005A800
Thermostat Switch, NC, 80°+-5%, A800 PCB Pin, 30mm	MCPA08005A800
Thermostat Switch, NC, 90°+-5%, A800 PCB Pin, 30mm	MCPA09005A800
Thermostat Switch, NC, 100°+-5%, A800 PCB Pin, 30mm	MCPA10005A800
Thermostat Switch, NC, 110°+-5%, A800 PCB Pin, 30mm	MCPA11005A800
Thermostat Switch, NC, 120°+-5%, A800 PCB Pin, 30mm	MCPA12005A800
Thermostat Switch, NC, 130°+-5%, A800 PCB Pin, 30mm	MCPA13005A800
Thermostat Switch, NC, 140°+-5%, A800 PCB Pin, 30mm	MCPA14005A800
Thermostat Switch, NC, 150°+-5%, A800 PCB Pin, 30mm	MCPA15005A800
Thermostat Switch, NC, 160°+-5%, A800 PCB Pin, 30mm	MCPA16005A800