






Limator supplies high-precision, temperature-based components for protection, control, switching, and sensing in demanding applications.

With decades of engineering expertise, Limator delivers reliable, application-specific solutions for industry, consumer, medical, and scientific markets.

Typical applications include:

- ▶ **Protection of primary windings in transformers**
- ▶ **Winding protection in small electric motors**
- ▶ **Switch-on of cooling fans**
- ▶ **General temperature protection of small electric equipment**

Thermal protectors



Name	P Series	O Series	TB02 Series	TB05 Series	TB11 Series
					
Function	Normally closed	Normally open	Normally open / normally closed	Normally open / normally closed	Normally open / normally closed
Switch range	40–150 °C	50–130 °C	50–155 °C	50–155 °C	50–160 °C
Tolerance	± 5 °C	± 5 °C	± 5 °C	± 5 °C	± 5 °C
Max current at 250 VAC	2.5 A	1 A	2 A	5 A	11 A
Housing	Plastic	Plastic	Plastic	Plastic	Plastic
Feature	Customisable	Customisable	-	-	Optional N/C with delay reset function
Approval	VDE/UL	VDE/UL	VDE/UL	VDE/UL	VDE/UL
Application examples	Sterilizers, pumps, coffee machines	Cooling fans	Pumps, coffee machines		

Thermal switches with current sensitivity and/or self-holding function






Those switches provide overtemperature protection with electrical self-holding whilst the Y-switch adds additionally overcurrent protection.

The holding resistor keeps contacts open until mains power is disconnected, preventing automatic restart.




Fast trip response ensures reliable fault protection, with flexible integration and application-specific sensitivity allowing superior response time.

Name	Q Series	Y Series
		
Function	Normally closed with self-holding	Normally closed incl. current limiter with self-holding
Switch range	40–150 °C	40–150 °C
Tolerance	± 5 °C	± 5 °C
Max current at 250 VAC	6.5 A	9.6 A
Housing	Plastic	Plastic
Feature	Customisable, no auto reset	Customisable, no auto-reset, extreme quick response time for current driven overheating
Approval	VDE/UL	VDE/UL
Application Examples	Heaters, light systems	Blenders, coffee machines




Motor protectors

Name	ST Series	BM1 Series	TB02 Series	TB05 Series	TB11 Series
					
Function	Normally open/ normally closed	Normally open/ normally closed	Normally open/ normally closed	Normally open/ normally closed	Normally open/ normally closed
Switch range	60–200 °C	45–180 °C	50–155 °C	50–155 °C	50–160 °C
Tolerance	± 5/8/10 °C	± 5 °C	± 5 °C	± 5 °C	± 5 °C
Max current at 250 VAC	10 A	8 A	2 A	5 A	11 A
Housing	Metal	Metal	Metal	Metal	Metal
Feature	Different housing shapes	Partially sensitive to current	-	-	Optional N/C with delay reset function
Approval	TÜV/UL	VDE/UL	VDE/UL	VDE/UL	VDE/UL




Thermal regulators

Name	TK24 Series	TK32 Series	KSD Series
			
Function	Normally open/normally closed	Normally open/normally closed	Normally open/normally closed
Switch range	-45–200 °C	30–250 °C	60–220 °C
Tolerance	± 1/3/6 °C	± 3/6 °C	± 5 °C
Max current at 250 VAC	16 A	16 A	16 A
Housing	Ceramic/Plastic/Steel	Ceramic/Plastic	Ceramic/Plastic
Feature	Wide range of options	Manual reset	Manual reset optional
Cycles	Up to 100k	Up to 10k	Min 60k



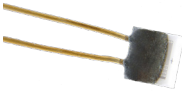
High temperature switches

Name	TB97 Series	TB98 Series	TK24HT Series
			
Function	Normally closed	Normally open	Normally open/normally closed
Switch range	200–450 °C	200–450 °C	200–425 °C
Tolerance	± 5 %	± 5 %	± 6 %
Max current at 250 VAC	10 A	10 A	10 A
Housing	Ceramic	Ceramic	Ceramic
Feature	Customisable	Customisable	Sealed option
Approval	VDE/UL	VDE/UL	VDE/UL
Application examples	Ovens, Heater, Welding and soldering machines	Cooling fans	Ovens, Heater, BBQ




Temperature fuses

Name	SF Series	DF Series	A Series
			
Function	One shot	One shot	One shot
Fuse temperature	73–240 °C	66–240 °C	84–160 °C
Max. operating temperature	Fuse Temperature: 15 to 40 °C	Fuse Temperature: 24 °C	Fuse Temperature: 15 to 25 °C
Max current at 250 VAC	16 A	16 A	5 A
Housing	Axial, metal	Axial, metal	Radial and axial, plastic
Feature	Fast response time, robust		
Approval	VDE/UL	VDE/UL	VDE/UL
Application examples	Appliances, Commercial equipment	Appliances, Commercial equipment	Appliances, Commercial equipment





Temperature sensor elements

Name	ENTC-EB Series	ENTC-G1B Series	ERTD2 Series
			
Sensor	NTC	NTC	RTD
Temperature range	-40–150 °C	-40–250 °C	-200–300 °C
Tolerance	± 0.2 °C over 0–70 °C	± 1 % at 25 °C	Class A (F0.15) and B (F0.3)
Resistance	1–100 kΩ at 25 °C	2–100 kΩ at 25 °C	PT100 & PT1000
Housing	Epoxy coated	Glass coated	Thin film platin
Construction	2.4 mm OD	2.2 mm oD	2 x 2 x 1.3 mm





Temperature sensor sub-assemblies

Name	ENTC-EI Series	ENTC-MTP Series	LTS1 Series
			
Sensor	NTC	NTC	RTD
Temperature range	-40–125 °C	-40–125 °C	-50–150 °C
Tolerance	± 0.2 °C over 0–70 °C	± 0.2 °C over 0–70 °C	Class A (F0.15) and B (F0.3)
Resistance	10 kΩ at 25 °C	10 kΩ at 25 °C	PT100 & PT1000
Housing	Epoxy coated	Polyamide with Epoxy	PU resin coated
Construction	2.4 mm OD with AWG28 Kynar wire	1.1 mm OD with AWG30 Kynar wire	2.4 OD with AWG28 PTFW wire






Temperature probes
Surface probes

Name	Ring terminal	Block housing	Rubber probe	Pipe probe
				
Sensor	NTC, RTD	NTC, RTD	NTC 10 kΩ	NTC
Temperature range	-40–230 °C	-40–150 °C	Up to 130 °C	Up to 105 °C
Construction	Several ring terminal sizes	Molded standard thermal switch housing	Rubber probe for 2170 EV battery cell	Over molded rubber probe with rubber strip
Connection	Wires & cables	Wires	Wires	Cable

Screw probes

Name	Standard screw	Screw with tip	Screw with tip for transport	Bird cage
				
Sensor	NTC, RTD	NTC, RTD	RTD	NTC, RTD
Temperature range	-40–230 °C	-40–250 °C	-40–150 °C	Up to 230 °C
Construction	Screws with different stud sizes	Different thread sizes with 4 mm tip	Heavy duty construction for mobile machinery	Screw with miniature tip and air flow holes
Connection	Wires & Shielded cable	Cable or connector	Cable & Connectors	Cable

Tubular probes

Name	Kapton tube	Over molded probe	Brass probe	Miniature stainless steel probe	Stainless steel probe
					
Sensor	NTC	NTC	NTC, RTD	RTD	NTC, RTD
Temperature range	-40–125 °C	Up to 125 °C	-40–230 °C	-40–150 °C	Up to 230 °C
Construction	2.5 mm Kapton tube with potting	Over molded 5.3 mm OD probe	Brass tube with 5 mm OD	316 SS Tubular probe 3 mm OD	T316 SS Tubular probe 6 mm OD
Connection	Wires	Cable	Wires	Wires	Cable