



Introduction

The Elmwood Sensors' thermostat range has been developed for applications in a large number of industries including Appliance, HVAC and Automotive sectors. With an operating range from 0°C to 260°C, and a tolerancing system suited to customers' exact requirements, Elmwood thermostats can provide an accurate solution to your temperature control requirements.

Elmwood's 2450, 2455R, 2455RC and 2455RBV series of automatic reset thermostats are designed to fit a wide range of applications where temperature has to be controlled.

The 2455RM range of manual reset thermostats has been developed for safety critical and fault-condition applications where appliance isolation is required. The appliance can only be re-used when manually reset and may automatically reset at temperatures less than 4°C.

The 2455RD product incorporates a second snap-action disc which guarantees that resetting is totally independent of ambient temperature. An external force only can reset the thermostat.

The S35 series of One Shot Thermostats are specifically designed as high limit devices for applications where automatically resettable thermostats are not desirable.

Elmwood's thermostats are built to meet your exact specifications. Our multi-lingual Sales and Customer Service team will be only too pleased to assist.

Thermostat Application

Proper choice of operating temperatures for a thermostat generally depends on many application parameters. The following can have significant effect on the final operating point of the application:

1. Rate of temperature rise:
2. Location of the thermostat:
3. Electrical load:
4. Mass of the thermal system:
5. Heat transfer medium (air, metal, surface, etc).

To ensure that a safe combination of thermostat and application is achieved, the purchaser must determine product suitability for their individual requirements.

Operating Parameters

Dielectric strength: 2000V AC terminal to cap
 Contact resistance: <50mOHM, <10mOHM also available
 Standard weight: 6 grammes
 Nominal voltage: 250V AC, 50Hz
 Nominal current: up to 16 Ampere

THERMOSTAT SERIES	2450	2455R	2455RC	2455RBV	2455RM	2455RD	2455R/RC-S35
Base material	Phenolic	Phenolic	Ceramic	Phenolic	Phenolic	Phenolic	Phenolic/Ceramic
Ambient temperature	- 30 to 177°C	- 30 to 177°C	- 20 to 290°C	- 20 to 100°C	- 20 to 177°C	- 30 to 177°C	- 20 to 290°C
Operating temperature	0 to 170°C	0 to 170°C	0 to 260°C	0 to 95°C	50 to 150°C	0 to 177°C	0 to 260°C
Characteristic	low profile	standard	high temperatures	splash proof	manual reset	manual reset	one - shot
Approved* electrical ratings - cycles	250V/10A - 30k	250V/10A - 100k 250V/15A - 30k	240V/10A - 100k 240V/12A - 10k	250V/10A - 100k	250V/10A - 1k 250V/12.5A - 6k	250/10A - 6k	

Standard Temperature Characteristics

MULTIPURPOSE THERMOSTATS

Thermostat Series	Operating Temperature °C	Tolerance		Standard Differential
		Open ±K	Close ±K	Mean K
2450 2455R 2455RC 2455RBV	0 - 25 (-10 min reset temp)	3	6	22 - 35
		3	5	16 - 22
		3	4	14 - 16
		3	4	11 - 13
2450 2455R 2455RC	26 - 95 (-10 min reset temp)	3	6	22 - 45
		3	5	17 - 22
		3	5	14 - 16
		3	4	11 - 14
2450 2455R 2455RC	96 - 120	4	7	22 - 45
		4	6	16 - 22
		4	5	14 - 16
		4	4	11 - 14
2450 2455R 2455RC	121 - 150	3	4	8 - 11
		4	8	22 - 45
		4	6	16 - 22
		4	5	14 - 16
2455RC ONLY	151 - 170	8	11	39 - 45
		6	11	34 - 39
		6	8	28 - 33
		6	7	22 - 27
2455RC ONLY	171 - 220	14	14	51 - 56
		11	11	39 - 50
		8	11	28 - 39
		2455RC ONLY	221 - 235	14
14	14			51 - 56
11	11			39 - 50
8	11			28 - 39
2455RC ONLY	236 - 260	14	25	34 - 56
		14	14	31 - 56
		11	11	28 - 50

MANUAL RESET THERMOSTATS

Thermostat Series	Operating Temperature °C	Tolerance Open Only ±K
2455RM	50 - 90	5
		4
	91 - 120	6
		5
121 - 150	4	
	7	
	6	
2455RD	0 - 160	9
		7

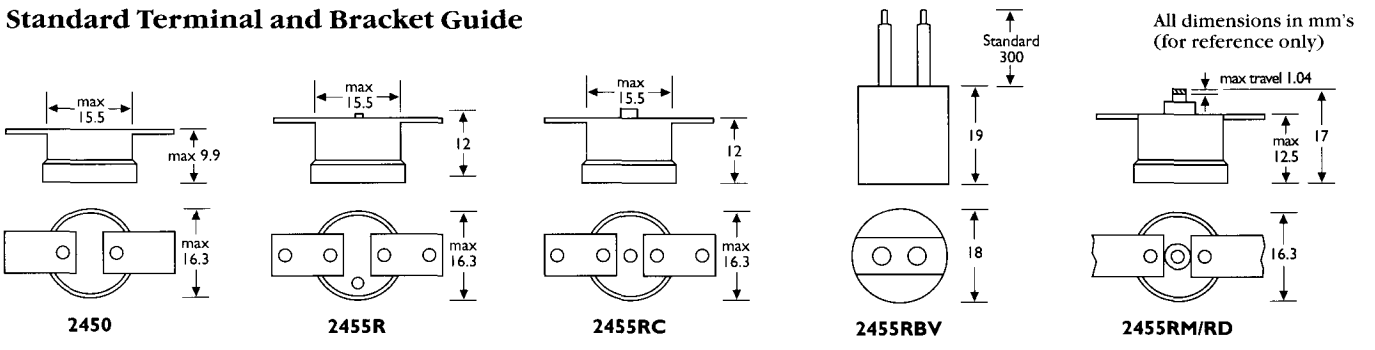
ONE SHOT THERMOSTATS

Thermostat Series	Operating Temperature °C	Tolerance Open Only ±K	Automatic Reset
2450-S35 2455R-S35 2455RC-S35	52 - 93 94 - 121 122 - 149 150 - 177	5	below -35°C
		6	below -35°C
		7	below -35°C
		8	below -35°C
2455RC-S35	178 - 204 205 - 232 233 - 260	10	below -35°C
		11	below -35°C
		14	below -35°C

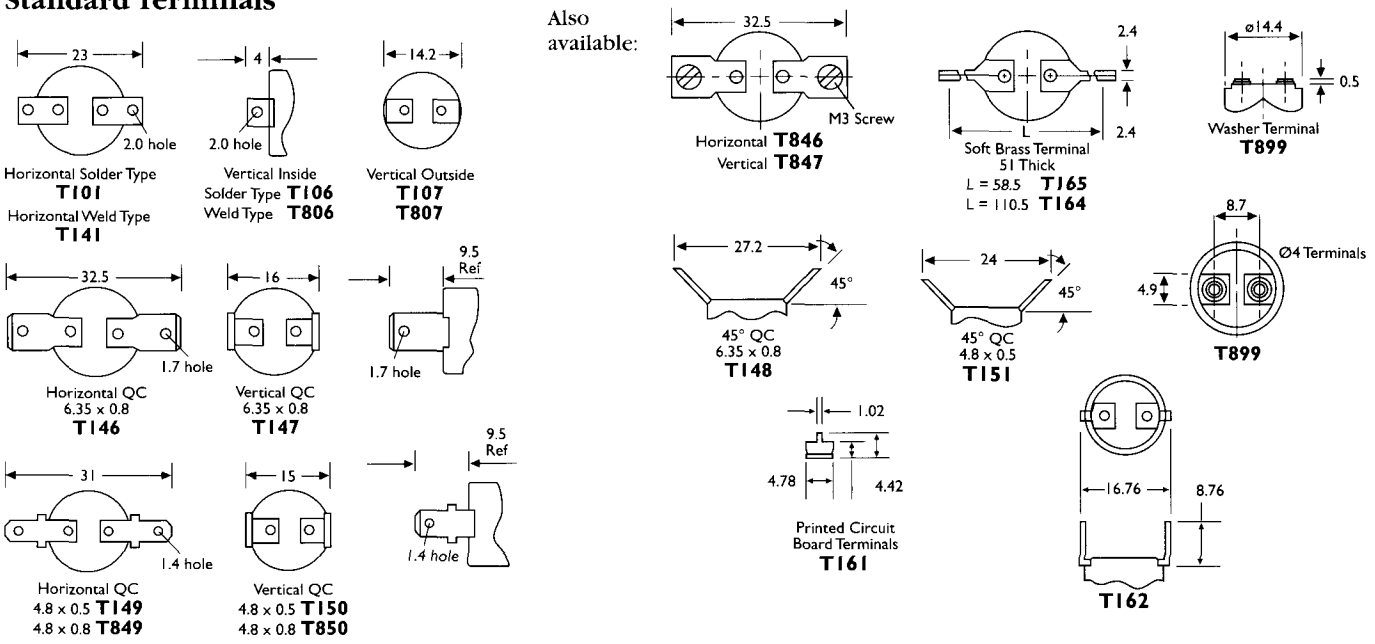
*Approval agency listings are subject to change. Contact factory for current listings of BEAB, VDE, UL, CSA, KEMA, DEMKO, NEMKO, SEMKO, UTE, OVE and SEV, and BS EN 60730-2-9 approval.



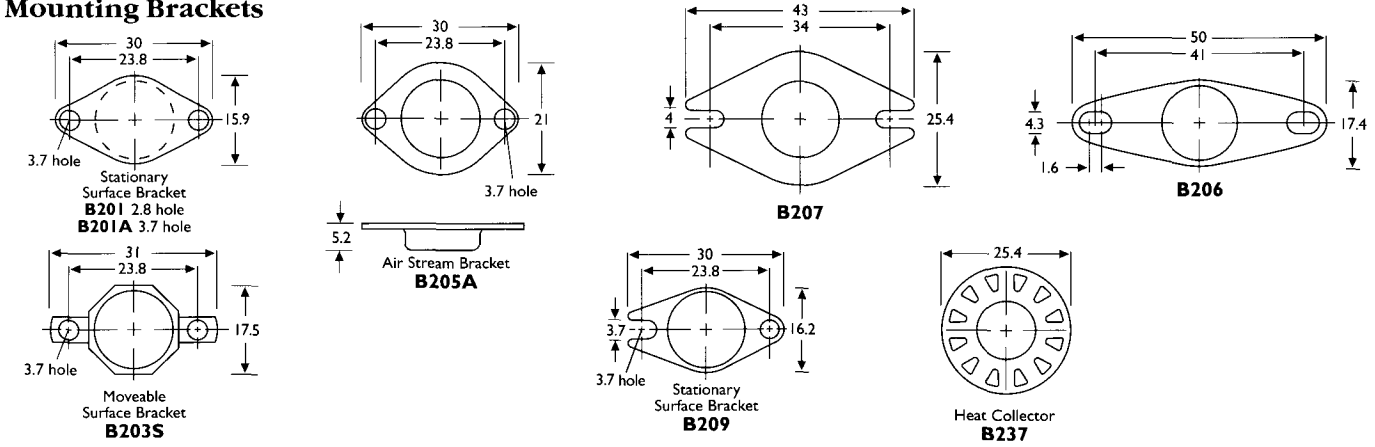
Standard Terminal and Bracket Guide



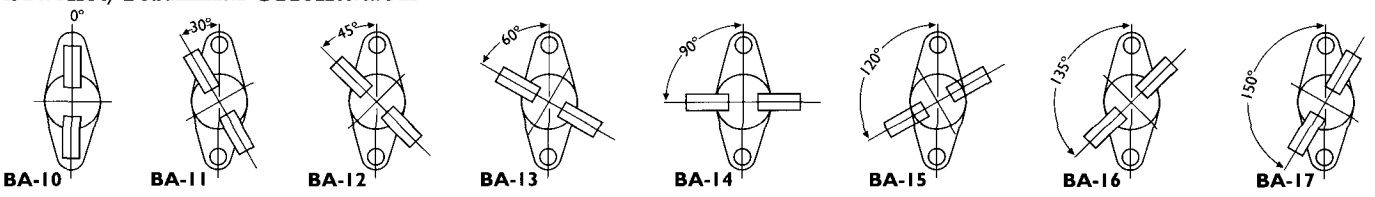
Standard Terminals



Mounting Brackets



Bracket/Terminal Orientation



Screw and Stud Fixings

