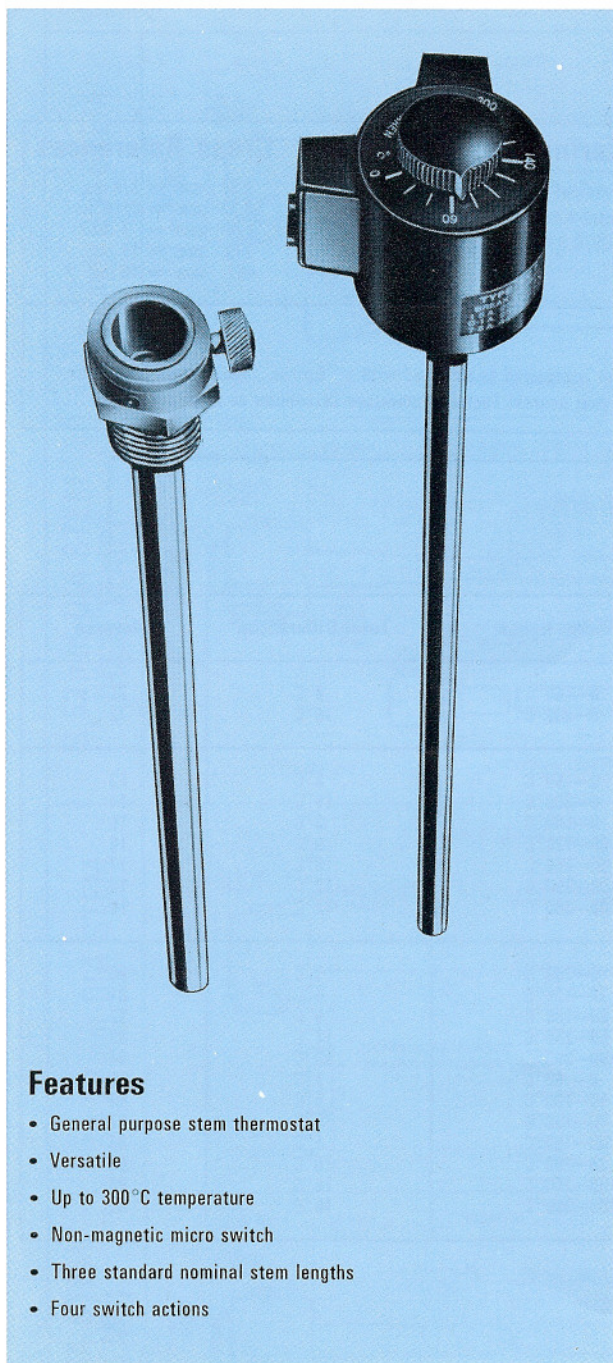




Features

- General purpose stem thermostat
- Versatile
- Up to 300°C temperature
- Non-magnetic micro switch
- Three standard nominal stem lengths
- Four switch actions

Application

To control a medium (air/gas or liquid) at a given temperature.

Description

General

The OPERATIVE LENGTH is that portion of the stem which responds to temperature change.

The INOPERATIVE LENGTH (when required) is that portion of the stem which passes through lagging or a wall thickness so that the operative length is immersed in the medium to be controlled. This inoperative length does not respond to temperature change.

A boss extension must be fitted when the maximum operating temperature is greater than 150°C.

Optional Extras

- Pockets (for liquid controls).
- Mounting flange.
- Loose Hexagon for mounting.
- Watertight cover box.
- "Buxton" Flameproof cover box.

Maclaren Series ACS & ACT Thermostats

For Air or Liquid
Temperature
Control

Electrical Rating

	Voltage	Break on Rise	Make on Rise
ACS	0/250V AC 0/440V AC 250V DC	15A. 7.5A. 0.1A.	5A. 3A. 0.05A.
ACT	0/250V AC 0/440V AC 250V DC	20A. 10A. 0.1A.	5A. 3A. 0.05A.

Switch Action

The following are available:—

Break on rise (S.P.S.T. B.O.R.)

Break on rise with hand reset (S.P.S.T. B.O.R. plus H/R).

Changeover (S.P.D.T. CO) i.e. to break one circuit on change of temperature and to immediately make another.

Changeover with hand reset (S.P.D.T. CO plus H/R).

The hand reset facility is provided when the instrument is used as a safety cut-out. Change of temperature will cause the switch to operate and it will not "re-set" until manually tripped.

Control of Liquids

The stem, 9.5 mm (.375 ins.) diameter, is fitted into a pocket.

Tinned copper pockets with brass hex heads can be supplied for water applications and mild steel pockets can be supplied for use in oil. Stainless steel pockets can also be supplied for special applications, but must be specified when ordering.

Control of Air/Gas

When used in ovens or air ducts no pocket is required, and the stem diameter is increased to 14.29 mm (.562 ins.) to give fast response to temperature change. The thermostat is mounted using a loose flange.

Temperature Settings

On a break circuit on temperature rise (B.O.R.) switch action, the electrical circuit will be open at the dial setting and close when the temperature falls below the dial setting by an equivalent number of degrees to the total differential (see table). The converse applies on the make on rising temperature circuit in the changeover (CO) switch.

ITT Controls **ITT**

Basic Thermostats

Reference

ACS/B — — — : S.P.S.T. BOR switch
 ACS/C — — — : S.P.D.T. CO switch
 ACS/D — — — : S.P.S.T. BOR HR switch
 ACS/E — — — : S.P.D.T. CO HR switch

Stem dia.	Ref.
9.52 mm	3
14.29 mm	9

Alternatively ACT (See RATING page 1)

When ordering please specify: Cross References

(1) "Basic Thermostat" Reference
 (2) "Optional Extra Kits" Reference
 Example: — "ACS/C 372" with option CW"

9.52 mm = 3/8 ins.
 14.29 mm = 9/16 ins.
 178 mm = 7 ins.
 279 mm = 11 ins.
 457 mm = 18 ins.

Note

If the thermostat is required to be fitted with a "Buxton" Flameproof Cover Box, please consult your nearest Factory Authorised Distributor or Regional Office.

Stem O/A	Stem Operative	Temp. Range	Total Differential	Reference
178 mm	178 mm	0–150°C	8°C	71
178 mm + BE	178 mm	0–300°C	16°C	72
279 mm	178 mm	0–150°C	8°C	13
279 mm + BE	178 mm	0–300°C	16°C	14
279 mm	279 mm	0–100°C	6°C	15
279 mm	279 mm	20–120°C	6°C	16
279 mm	279 mm	50–150°C	6°C	17
279 mm + BE	279 mm	50–250°C	12°C	18
279 mm + BE	279 mm	100–300°C	12°C	19
457 mm	279 mm	0–100°C	6°C	80
457 mm	279 mm	20–120°C	6°C	81
457 mm	279 mm	50–150°C	6°C	82
457 mm + BE	279 mm	50–250°C	12°C	83
457 mm + BE	279 mm	100–300°C	12°C	84
457 mm	457 mm	0–60°C	5°C	85
457 mm	457 mm	40–100°C	5°C	86
457 mm	457 mm	70–130°C	5°C	87
457 mm	457 mm	90–150°C	5°C	88
457 mm + BE	457 mm	80–200°C	10°C	89
457 mm + BE	457 mm	130–250°C	10°C	90
457 mm + BE	457 mm	180–300°C	10°C	91

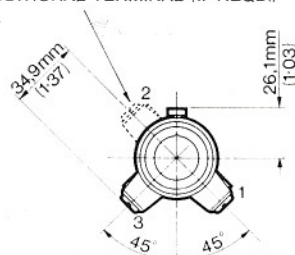
Note: BE = Boss Extension.

Optional Extra Kits

Stem Diameter	Optional Extra	Reference	
		Basic	Plus Watertight Cover Box
9.52 mm	178 mm Copper Pocket 279 mm Copper Pocket 457 mm Copper Pocket	CA CB CC	CW CX CY
	178 mm MS Pocket 279 mm MS Pocket 457 mm MS Pocket	MA MB MC	MW MX MY
	178 mm SS Pocket 279 mm SS Pocket 457 mm SS Pocket	SA SB SC	SW SX SY
9.52 and 14.29 mm	Fixed Flange Loose Flange Loose Hex W/T Cover Box	FA FB LA WA	— FX LX —

	THERMOSTAT ONLY	THERMOSTAT IN WATERTIGHT COVER BOX
9.52mm DIA STEM		
9.52mm DIA STEM (HIGH TEMP)		
14.29mm DIA STEM		
14.29mm DIA STEM (HIGH TEMP)		

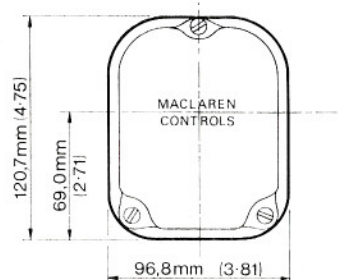
ADDITIONAL TERMINAL (IF REQD.)



DIALS AVAILABLE AS LISTED

CIRCUIT 1&3 BREAK ON RISE OF TEMP.
CIRCUIT 2&3 MAKE ON RISE OF TEMP.

PLAN OF THERMOSTAT



PLAN OF WATERTIGHT COVER BOX

3-HOLES 6.7mm (.26) DIA ON 50.8mm (2.0) P.C.D.



PLAN OF TRIANGULAR FLANGE