



- High accuracy
- Line or ambient sensing
- External adjustment knob
- UL, CSA and FM approved
- Non hazardous locations

These thermostats are ideal for freeze protection or temperature control of trace heating circuits in more demanding industrial applications. The BARTEC BMC-1A and BMC-1L series thermostats feature 10 foot stainless steel sensors for remote monitoring and local mount sensors for ambient temperature sensing. The BARTEC BMC series feature limit switches with 22 A at AC 120/250/480 V that allow thermostats to be used for higher current, heat tracing applications.

The BMC series models are all UL listed & CSA approved for non hazardous areas.

#### Function

A change in temperature in the sensor causes a change in volume in the fluid filled in the measuring system, which in turn results in a movement of a membrane, which is connected to transmission mechanics and activates a micro switch. If the sensor temperature exceeds the preset level, the contact is actuated. If there is a break in the measuring system (leakage), the circuit remains open permanently.

#### Non hazardous areas

Certification	CSA Certified, file LR34555 UL Listed, file 56247 EMI/RFI: to EN 55011
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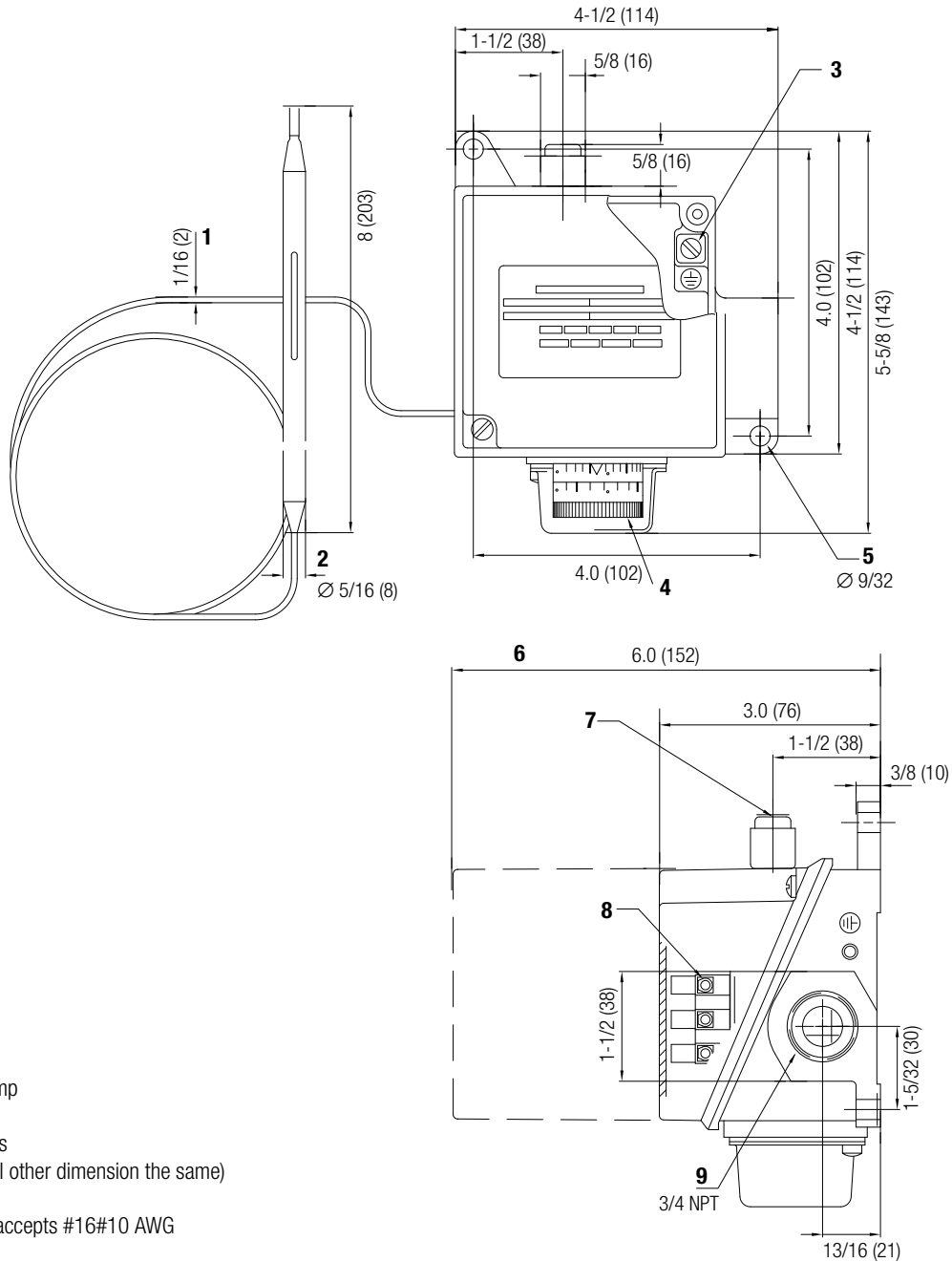
#### Technical data

Ambient device range	+15 °F to +140 °F (-9 °C to +60 °C)
Line sensing device range	+25 °F to +325 °F (-4 °C to +163 °C)
Storage temperature	-40 °F to +140 °F (-40 °C to +60 °C)
Accuracy	±1 % of full scale
Vibration	10 g's 10 to 500 Hz, MIL-STD 202F
Shock	50 g's 10 mS, MIL-STD 901C
Capillary tube (made of stainless steel)	Length: 10 ft (3000 mm) Diameter: 1/16" (2 mm) Bending radius: 5/8" (15 mm) Operating temperature range: +15 °F to 325 °F (-9 °C to +163 °C)
Sensor (made of 316L stainless steel)	Length: 7 3/4" (197 mm) Diameter: 5/16" (8 mm) Operating temperature range: +15 °F to +325 °F (-9 °C to +163 °C)
Weight	1.9 lbs. (0.9 kg)
Protection class	NEMA 4X and IP 65
Terminals	3 pole terminal block, terminal screws 4/2.5 mm <sup>2</sup> AWG 10-14
Cable entries	3/4" NPT female conduit connection
Enclosure	Aluminum die-casting, green polyurethane coated, other exposed parts: stainless steel

#### Electrical data

Rated voltage	AC 125/250/480 V, 50/60 Hz
Switch rating	22 A at AC 120/250/480 V
Contact	1 SPDT, prewired snap action 100,000 switching cycles

**Dimensions** („ resp. mm)



- 1 Capillary
- 2 Bulb
- 3 Ground screw with clamp
- 4 Adjusting knob
- 5 Mounting hole, 2 places
- 6 For relay model only (all other dimension the same)
- 7 Manual reset option
- 8 Wiring terminal block, accepts #16#10 AWG
- 9 Female conduit

Authorized distributor

**Ordering information**

Designation	Temperature Range	Order no.
BMC-1A Ambient sense switch	+15 °F to +140 °F (-9 °C to +60 °C)	710110
BMC-1L Line sensing switch	+25 °F to +325 °F (-4 °C to 163 °C)	710111