



PRODUCT SPECIFICATIONS

# B7-15140

## ADJUSTABLE AMBIENT CONTROL THERMOSTAT

### APPLICATION

The B7-15140 is designed to provide ambient sensing control of electric heat tracing circuits for freeze protection of piping and vessels. This adjustable thermostat can be used to control a single heating circuit or as pilot control of a contactor switching multiple heat tracing circuits.

B7-15140 is an aluminum lacquer finished die-cast aluminum enclosure provides watertight and dust tight protection (per IP66) and is Exd IIC T6 rated. The tamper-resistant, threaded and gasketed aluminum dial cover is externally adjustable.

The B7-15140 is approved for use in both ordinary (nonclassified) and hazardous (classified) locations.

### RATINGS

Voltage rating.....	125/250/480 Vac
Switch rating .....	22 amps
Switch type .....	SPDT <sup>1</sup>
Electrical connection <sup>2</sup> .....	terminal blocks
Adjustable control range.....	-9°C to 60°C
Maximum control differential .....	3.3°C
Set point repeatability .....	±1.1°C
Maximum bulb exposure temperature.....	71°C
Bulb dimensions .....	14 x 76 mm
Bulb material.....	stainless steel

### Notes

1. See back for typical wiring diagram.
2. The B7-15140 utilizes a 3/4" NPT conduit hub with an internal grounding terminal. The external bonding terminal is not to be used as the primary equipment grounding terminal. The internal grounding terminal shall be used as the primary equipment grounding means and the external grounding terminal is only for a supplemental (secondary) bonding connection where local authorities permit or require such a connection.
3. Date code format on nameplate is "YYWW" for year and week.
4. Zone hazardous locations flameproof gap and joint details. Activation plunger to guide through hole gap joints: 28.1 mm minimum length by 0.08 mm maximum annular gap. Adjustment shaft to shaft through hole gap joints: 27.0 mm minimum length by 0.08 maximum annular gap.
5. Plug is approved explosion-proof with the product as a full assembly, and does not carry individual markings.



B7-15140<sup>4</sup>

### CERTIFICATIONS/APPROVALS



II 2 G Ex d IIC T6 Gb DEMKO 12ATEX1204259X  
II 2 D Ex tb IIIC T85°C Db IP66  
-40°C ≤ T<sub>AMB</sub> ≤ +75°C



International Electrotechnical Commission  
IEC Certification Scheme for Explosive Atmospheres  
UL 09.0004X  
Ex d IIC T6  
Ex tD A21 IP66 T85°C<sup>5</sup>  
-40°C ≤ T<sub>Amb</sub> ≤ +75°C



Underwriters Laboratories Inc.  
Ordinary Locations  
Hazardous (Classified) Locations  
Class I, Divisions 1 & 2, Groups B, C and D  
Class II, Divisions 1 & 2, Groups E, F and G  
Class III, Divisions 1 and 2  
Class I, Zone 1, Group IIB + H<sub>2</sub> T

### THERMON The Heat Tracing Specialists®



European Headquarters: Boezenweg 25 • PO Box 205 • 2640 AE Pijnacker • The Netherlands • Phone: +31 (0) 15-36 15 37  
Corporate Headquarters: 100 Thermon Dr • PO Box 609 San Marcos, TX 78667-0609 • Phone: 512-396-5801 • 1-800-820-4328  
For the Thermon office nearest you visit us at . . . [www.thermon.com](http://www.thermon.com)

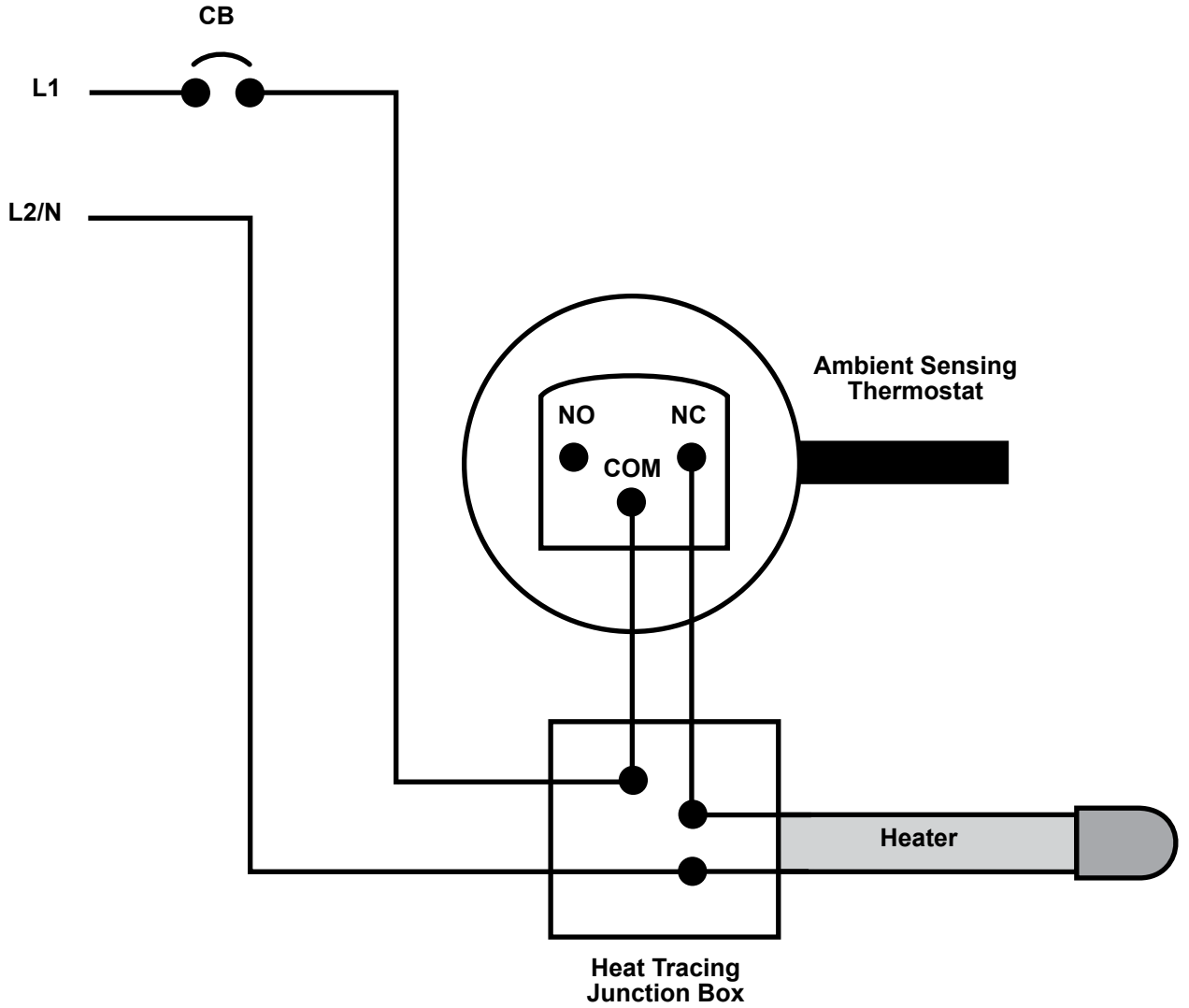


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## TYPICAL WIRING DIAGRAM



**Notes . . .**  
Two pole circuit breakers required in hazardous areas only.