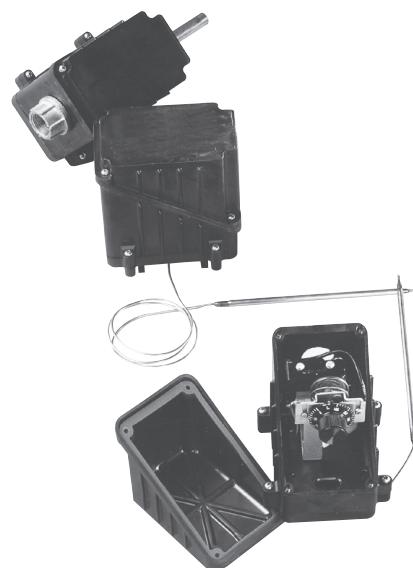


DL Series

Integrated Temperature Controls

- Line or Ambient Sensing Thermostats
- ElectroMechanical Control
- Rugged, Corrosion Resistant Construction
- NEMA 4X Design with Corrosion and Weather Resistant Construction
- Ambient Sensing
 - 120 - 480 Vac
 - 0 - 225°F Temp. Rating
 - 9/16" OD x 4" SS Probe
 - Ordinary Area Approvals
- Bulb & Capillary
 - 120 - 480 Vac
 - 0 - 400°F Setpoint Range
 - 1/4" OD x 7-1/4" SS Bulb and 3 Ft. Capillary
 - Ordinary Area Approvals



Description

The DL Series Single Point On/Off Temperature Controls from Chromalox represent the state of the art in heat tracing and are available in five models to handle a broad range of applications. Models include two ambient sensing thermostats, two line sensing thermostats and a line sensing solid state controller. These high-quality models combine temperature control and power connection in a convenient, easy to use and economical package.

Applications

- Hydrocarbon and Chemical Product Piping
- Process Temperature Maintenance
- Fluid Flow and Viscosity Maintenance
- Freeze Protection

Features

- Integrated Controls and Power Connections reduce installation hardware
- Molded of Durable Plastic Material
- High Service Temperature
- Corrosion Resistant
- Thermal Stability
- Non-Flammability
- High Strength and Rigidity
- Stainless Steel Sensor Sheath
- Stainless Steel Hardware to ensure the integrity of the system
- Cable Terminations inside enclosure reduce installation time and cost
- Liquid Tight Design prevents moisture from reaching the electrical connections. All models are rated NEMA 4X.

Approvals

UL Listed for ordinary areas

CSA Certified for ordinary areas

FM Approved for ordinary areas

DL Series

Integrated Temperature Controls

RTAS Ambient Sensing

RTAS is an ambient-sensing thermostat which is generally used for freeze protection in ordinary (non-hazardous) areas. The thermostat is mounted through the end of the oblique sided enclosure lid. In fact, because there is so much room in this model, multiple heating cables can be terminated. The stainless steel sheathed, inverted bellows probe provides good sensitivity, resulting in more accurate control.

Specifications

Temp. Setpoint Range — 0 to 225°F (-18 to 107°C)

Microswitch® Rating — 22 Amps SPDT

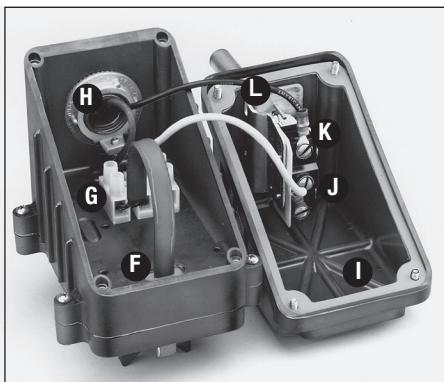
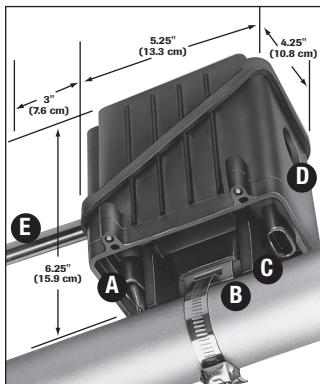
Scale Division — 10°F (5.6°C)

Max. Sensor Exposure Temp. — 250°F (121°C)

Sensor Dimensions — 9/16" Dia. x 3" Long

Operating Ambient Temp. Range — -40°F to 160°F (-40 to 71°C)

Factory Preset and Calibrated — 40°F



Construction

- A** Strategically placed cable entries allow maximum flexibility for insulation (Heating cable cut away for clarity).
- B** Stainless steel tiedown support provides positive attachment to pipes.¹
- C** Heavy duty support legs give stable pipe mounting and provide conduit clearance for applications with up to three inches of insulation.
- D** Opening for 3/4" (20 mm) conduit hub.¹
- E** Stainless steel sheath temperature sensor.
- F** Cable grommets provide water-tight seal between base, box and cable. Use GRSR with all self-regulating cables. Use GRCW with constant wattage cables. One of each grommet included in kit. See table below for spare grommets.
- G** Three position terminal block for easy wiring.
- H** Power wiring entry. Conduit hub not included.
- I** Gasket provides water-tight seal between box and lid. It is affixed to the lid and holds the mounting hardware during assembly.
- J** Thermostat switch.
- K** Setpoint adjustment knob.
- L** Setpoint indicator.

Note 1 — Refer to Commercial Self Regulating and Constant Wattage Accessories.

Spare Grommets

PCN

GRS	RTD/Capillary type	513287
GRO	Blank	513295
GRSR	Self Regulating type	513308
GRCW	Constant Wattage type	513316

Ordering Information

Model	PCN	Switch Rating (Amps/Volts)	Max. Continuous Exposure Temp.		Max. Intermittent Exposure Temp.		Wt. (Lbs.)
			°F	°C	°F	°C	
RTAS	513199	22A @ 120 - 480	400	200	500	260	2

DL Series

Integrated Temperature Controls

RTBC Bulb & Capillary

RTBC is a line-sensing thermostat which is generally used for process temperature maintenance applications in ordinary (non-hazardous) areas. The thermostat is mounted within the enclosure and the capillary is brought out through one of the openings in the bottom of the box. This design provides extra protection for the capillary, especially when the control is mounted on a pipe, for heat tracing applications. The three foot long stainless steel capillary provides good flexibility in mounting locations.

Specifications

Temp. Setpoint Range — 0 to 400°F (-18 to 200°C)

Microswitch® Rating — 22 Amps SPDT

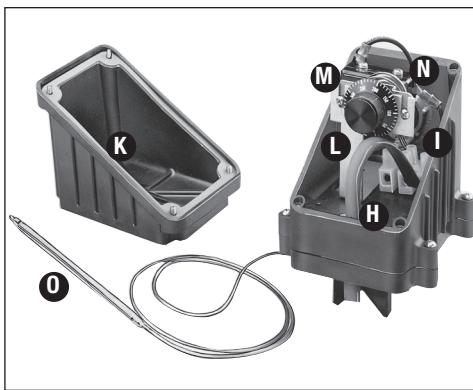
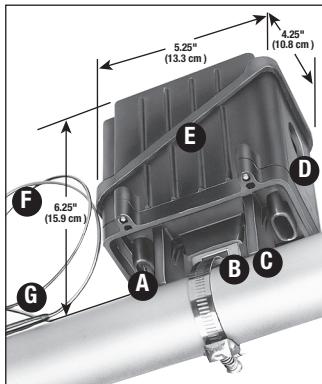
Minor Scale Division — 10°F (5.6°C)

Max. Sensor Exposure Temp. — 450°F (230°C)

Sensor Dimensions — 1/4" (6.4mm) OD x 7-1/4" (18.4cm) L Bulb, 3' (1m) Capillary

Operating Ambient Temp. Range — -40°F to 160°F (-40 to 71°C)

Factory Preset and Calibrated — 200°F (93°C)



Construction

- A** Strategically placed cable entries allow maximum flexibility for insulation (Heating cable cut away for clarity).
- B** Stainless steel tiedown support provides positive attachment to pipes.¹
- C** Heavy duty support legs give stable pipe mounting and provide conduit clearance for applications with up to three inches of insulation.
- D** Opening for 3/4" (20 mm) conduit hub.¹
- E** Oblique sided box and cover allow easy access for wiring.
- F** Stainless steel capillary (3 ft/1m long).
- G** Stainless steel sensing bulb.
- H** Cable grommets provide water-tight seal between base, box, cable and capillary. Use GRSR with all self-regulating cables. Use GRCW with constant wattage cables. One of each grommet included in kit. See table below for spare grommets.
- I** Three position terminal block for easy wiring.
- J** Power wiring entry. Conduit hub not included.¹
- K** Gasket provides water-tight seal between box and lid. It is affixed to the lid and captures the mounting hardware.
- L** Thermostat mounting bracket.
- M** Setpoint adjustment knob.
- N** Thermostat switch.
- O** Stainless steel sensing bulb.

Note 1 — Refer to Commercial Self Regulating and Constant Wattage Accessories.

Spare Grommets		PCN
GRS	RTD/Capillary type	513287
GRO	Blank	513295
GRSR	Self Regulating type	513308
GRCW	Constant Wattage type	513316

Ordering Information — RTBC

Model	PCN	Switch Rating (Amps/Volts)	Max. Continuous Exposure Temp.		Max. Intermittent Exposure Temp.		Wt. (Lbs.)
			°F	°C	°F	°C	
RTBC	513201	22A @ 120 - 480	400	200	500	260	2