

Housings for STT 3000 Series STT250 SMART TEMPERATURE TRANSMITTER

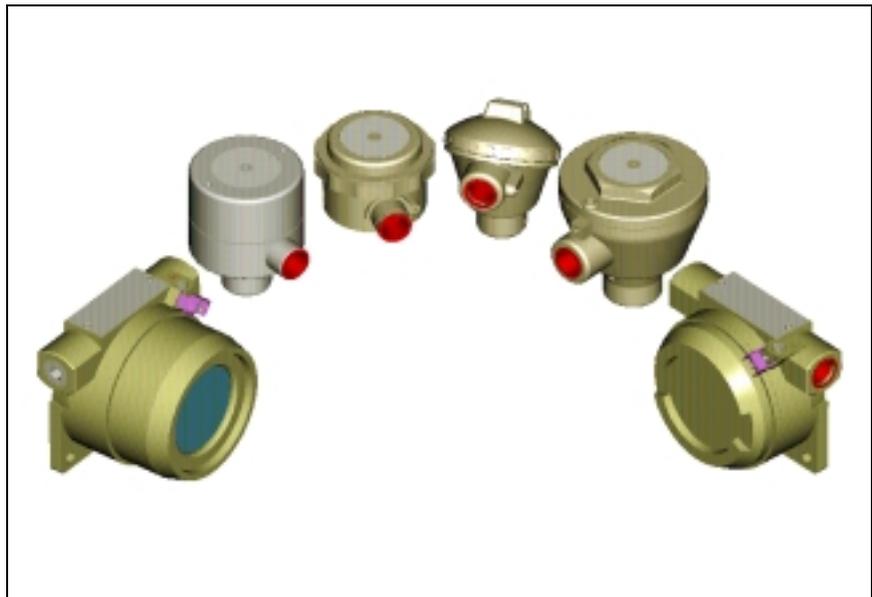
EN01-6032 01/98

Housing Specifications and Dimensional Drawings

OVERVIEW

Honeywell's STT250 range of Temperature Transmitters can be supplied with a wide variety of enclosures for direct sensor head, 2" pipe or wall mounting. Available materials include Aluminium, Plastic, Cast Iron and 316 Stainless Steel.

Select the most suitable housing for lowest installed cost, lightweight, corrosive environments or for safety approvals - whichever is most important to match your requirements.



- All the housings for direct sensor head mounting include the facilities for spring loading of the STT250 transmitter module at a 33mm pitch (DIN 43729).
- When integral meter is required, choose the pipe or wall (field) mount housing.

For Flame-Proof EEx d applications, choose the Cast Iron housing and ensure that the sensor connection is sealed with an approved flametrap by ordering the sensor assembly with the transmitter and housing.
- For FM or CSA Explosion-Proof applications, choose the Aluminium or 316 SS field mount housing.
- The housings can be supplied with the STT250 transmitter installed by specifying from the STT250 Model Selection Guide included in Sales Specification Sheet EN01-6031.
- If the temperature transmitter is pipe or wall mounted, a housing can be supplied with a sensor and a terminal block installed for connection to the remote mounted transmitter.
- Order sensor and thermowells for this direct sensor head mounting by referring to Specification EN01-6033 (non-North America) and 34-44-29-01 (North America).

Housing Specifications (in mm)

Aluminium Direct Head Mount Housing

Suitable for general purpose or Intrinsically Safe applications.
 Dimensions shown in Fig. 1.
 Housing entry length = 41 mm
 Material : LM24 Aluminium die casting.
 Sensor entry : 1/2"NPT
 Cable / conduit entry : 1/2"NPT or M20x1.5.
 Weight : 0.3kg (0.7 lb)
 Paint cover : beige polyester/ epoxy hybrid.
 Enclosure classification : IP65
 Order as STT250 Table II selection A _ _ .

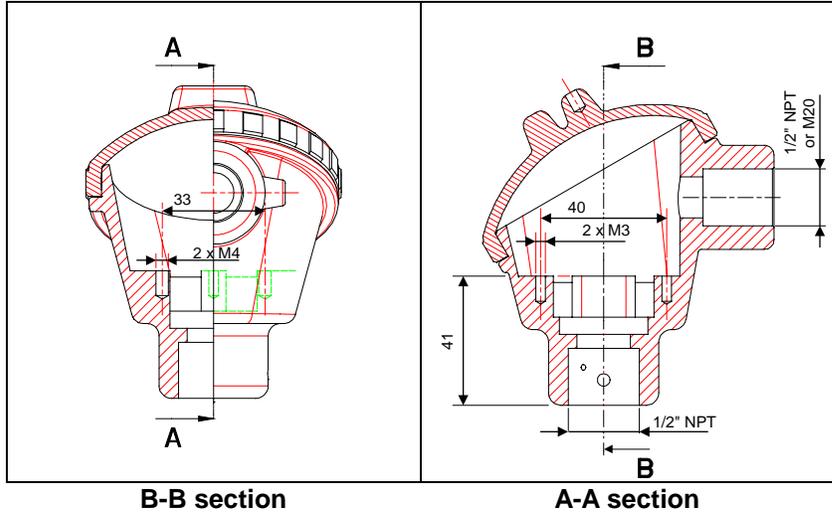


Figure 1

Plastic Direct Head Mount Housing

Suitable for lightweight installation in salt air environments and for general purpose or Intrinsically Safe installations.
 Maximum temperature = 70° C (158° F)
 Dimensions shown in Fig. 2.
 Housing entry length = 26,5 mm
 Material : ABS
 Sensor entry : 1/2"BSP (equivalent to 1/2"NPT)
 Cable/ conduit entry : M20x1.5
 Colour : light beige
 Weight : 0.1kg (0.2 lb)
 Enclosure classification : IP67
 Order as STT250 Table II selection P _ _ .

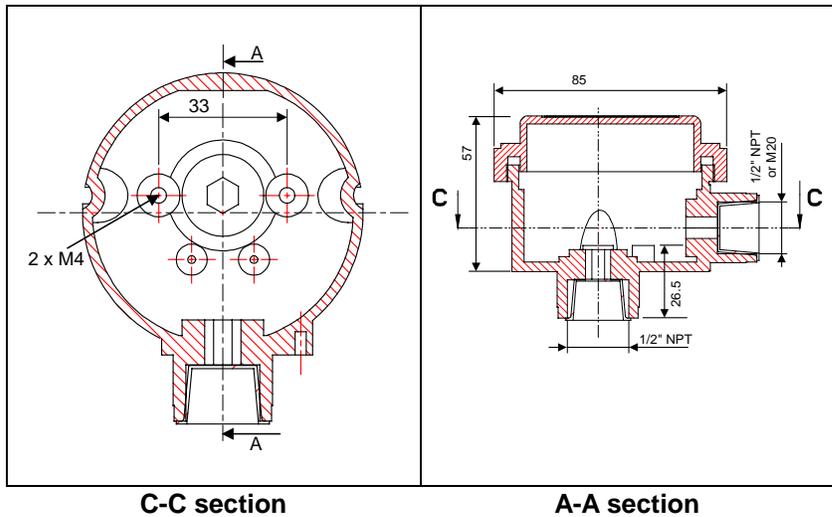


Figure 2

Cast Iron Direct Head Mount Housing

Suitable for Flame-Proof EEx d applications when sensor with flame trap is included in total assembly.

Dimensions shown in Fig. 3.
 Housing entry length = 41 mm
 Material : Cast Iron
 Sensor entry : 1/2"NPT
 Cable/ conduit entry : M20x1.5
 paint cover : light beige
 Weight : 2.5kg (5.5 lb)
 Enclosure classification : IP68
 Conforms to the applicable requirements of NEMA 7 and 9.
 Order as STT250 Table II selection B _ _ .

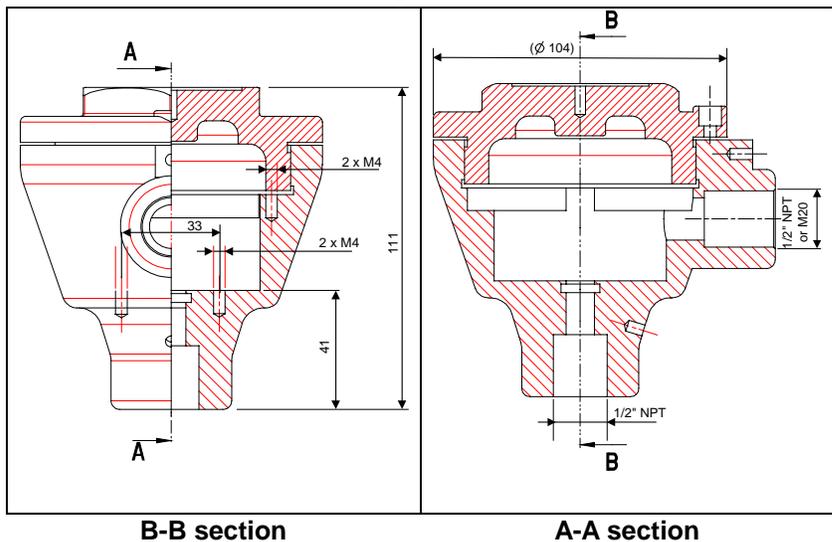


Figure 3

316 Stainless Steel Direct Head Mount Housing

Suitable for corrosive/ salt spray environments and for general purpose or Intrinsically Safe applications.

Dimensions shown in Fig. 4.
 Housing entry length = 40 mm
 Material : 316SS
 Sensor entry : 1/2"NPT
 Cable/ conduit entry : 1/2"NPT or M20x1.5
 Paint cover : none.
 Weight : 1.6kg (3.5 lb)
 Enclosure classification IP65
 Order as STT250 Table II selection S __.
 Flame-Proof version available.

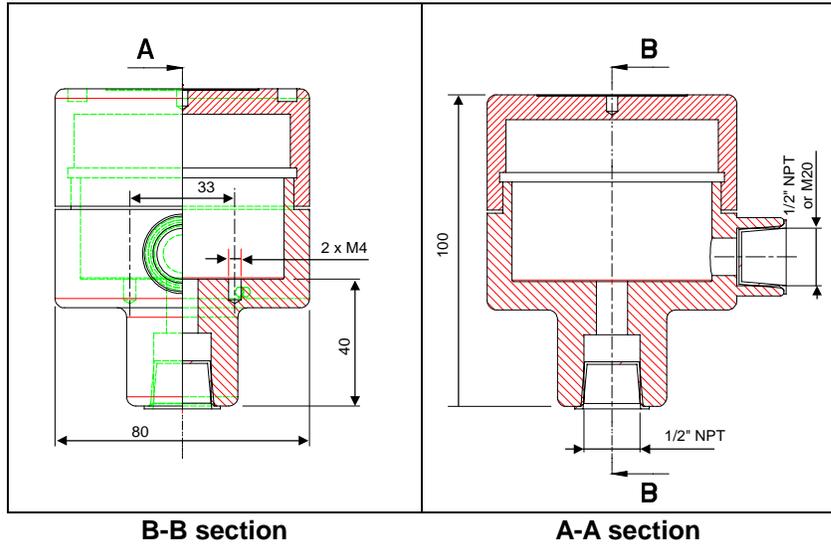


Figure 4

Meters

Honeywell's Series STT250 Temperature Transmitters can be supplied with local or remote indication. An Analogue or Smart meter can be mounted integral to the transmitter inside the field mount housing. Order an integral meter as part of the model number; Table II __ M and __ S, respectively. Order a remote meter as model RMA300. The analogue meter is a 4-20mA moving coil type and displays the temperature in 0 to 100% span. The Smart meter accepts 4-20mA or DE protocol and displays temperature on a LCD in engineering units or 0 to 100% span. The Smart meter displays temperature in 0 to 100% span with the STT25H HART unit. Refer to 34-ST-25-08D for more details. The remote digital meter reads DE protocol and displays temperature on a LCD in 0 to 100% span. Refer to 34-ST-25-07A for details.

STT250 Dimensions

Aluminium Pipe or Wall (Field) Mount Housing

Suitable for pipe or wall mounting remote from the temperature sensor, for direct sensor head mounting (in North America), for local indication and for Explosion-Proof (FM/ CSA and Cenelec), Intrinsically Safe or general purpose applications.

Dimensions shown in Fig. 5 and 6.

Material : Low copper Aluminium alloy

Cable/ Conduit entries : 1/2"NPT.

Paint cover : Beige polyester/ epoxy hybrid or beige epoxy painted.

Weight : 1.1kg (2.4 lb)

Enclosure classification : IP65. Conforms to the applicable requirements of NEMA 7 and 9 for FM/ CSA Explosion-Proof applications.

Order as STT250 Table II selection E __ or X __, respectively.

316 Stainless Steel Pipe or Wall (Field) Mount Housing

Suitable for corrosive/ salt spray environments and for pipe or wall mounting remote from the temperature sensor, for direct sensor head mounting (in North America), for local indication and for Explosion-Proof (FM/ CSA and Cenelec), Intrinsically Safe or general purpose applications.

Dimensions shown in Fig. 5 and 6.

Material : 316SS

Cable/ Conduit entries : 1/2"NPT. 3/4" NPT or M20 available via an adaptor.

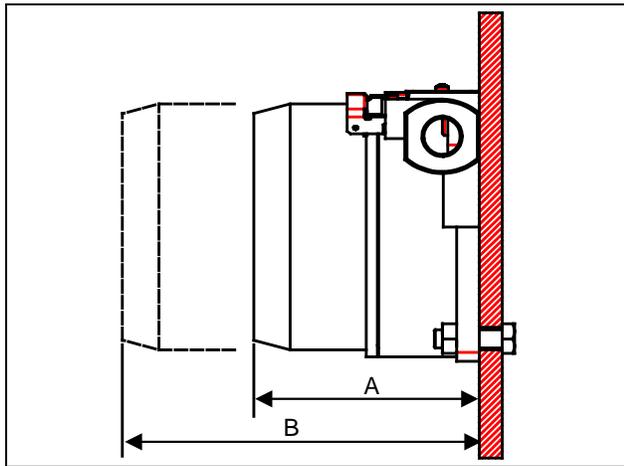
Paint cover : none.

Weight : 3.2 kg (6.9 lb)

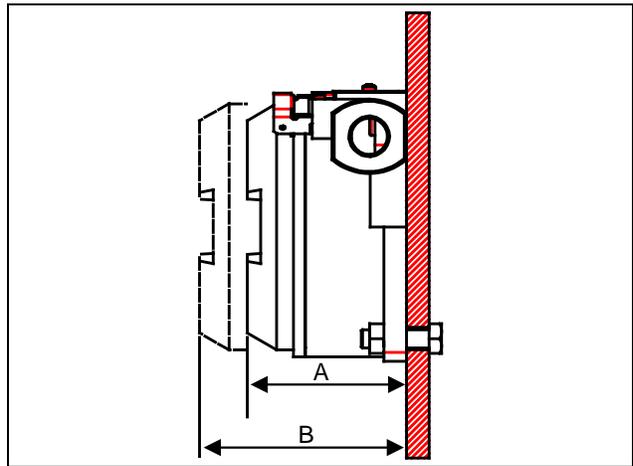
Enclosure classification : IP65

Order as STT250 Table II selection T __.

Dimensions in Figures 5 and 6	Aluminium Field Mount Housing		316 Stainless Steel Field Mount Housing	
	A	B	A	B
Without integral meter	70 mm 2.76 inch	120.8 mm 4.76 inch	95.5 mm 3.76 inch	146.3 mm 5.76 inch
With integral meter	127 mm 5.00 inch	210.8 mm 8.30 inch	127 mm 5.00 inch	210.8 mm 8.30 inch



With meter



Without meter

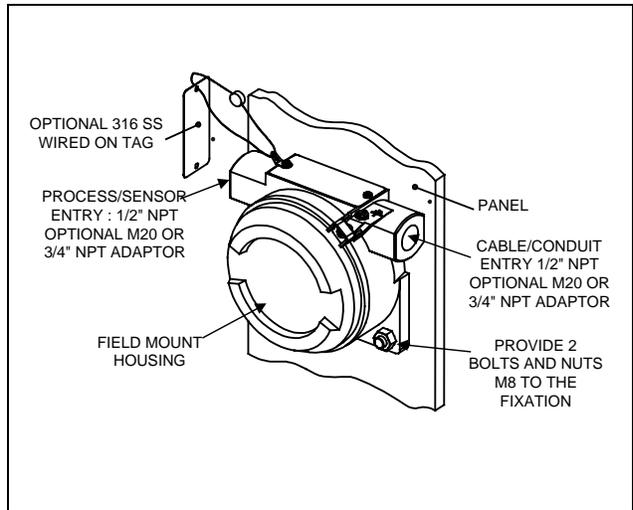
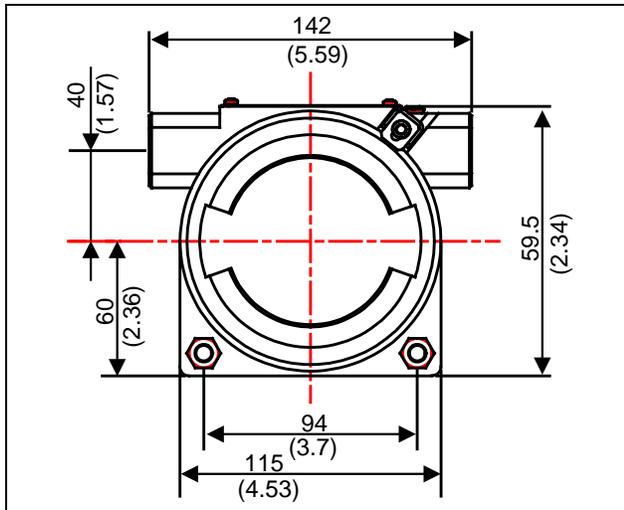
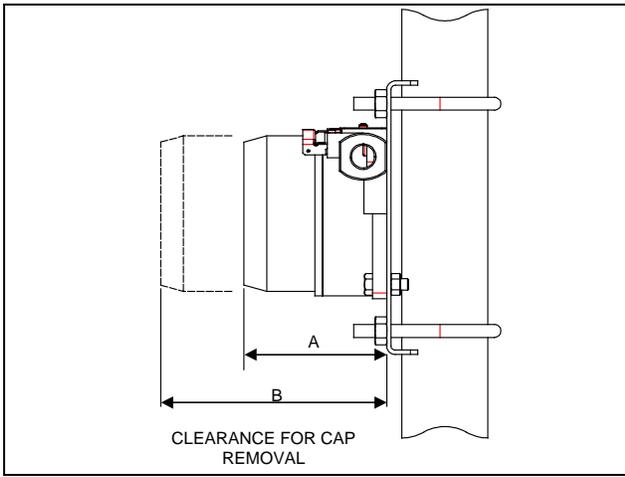
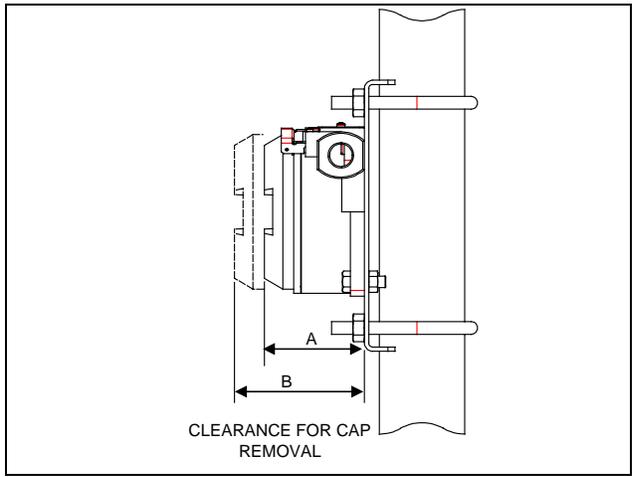


Figure 5 - STT250 Wall Mounting Dimensions



With meter



Without meter

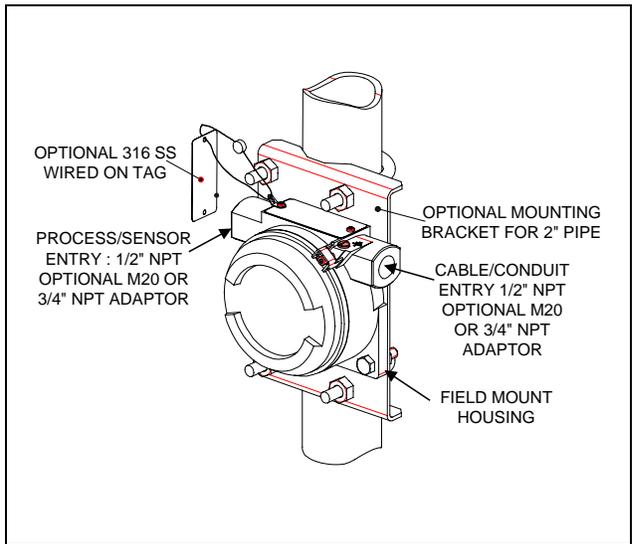
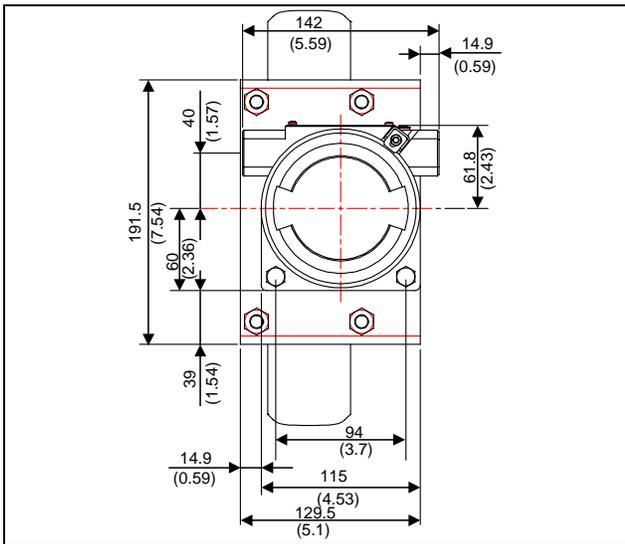
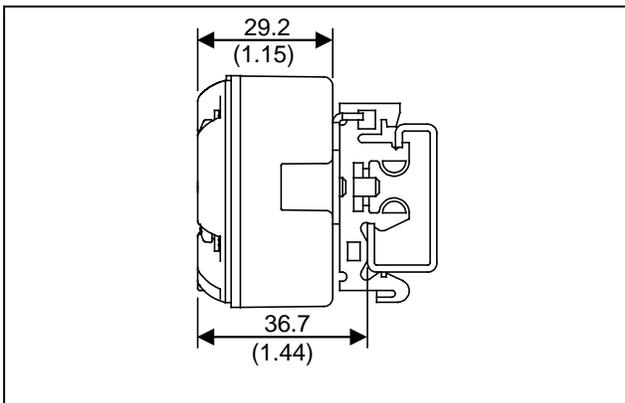
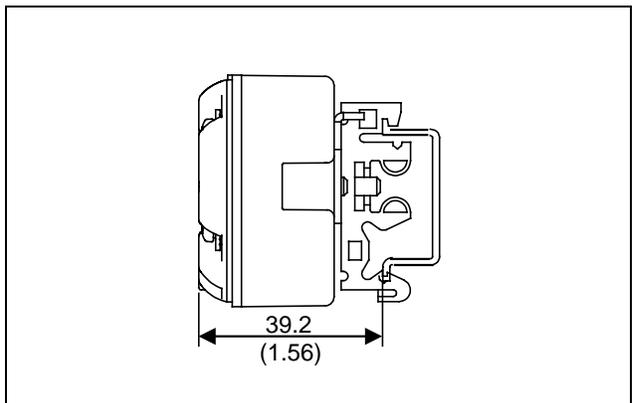


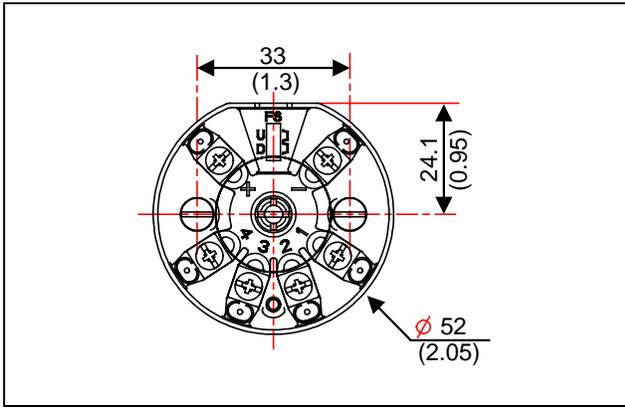
Figure 6 - STT250 Pipe Mounting Dimensions



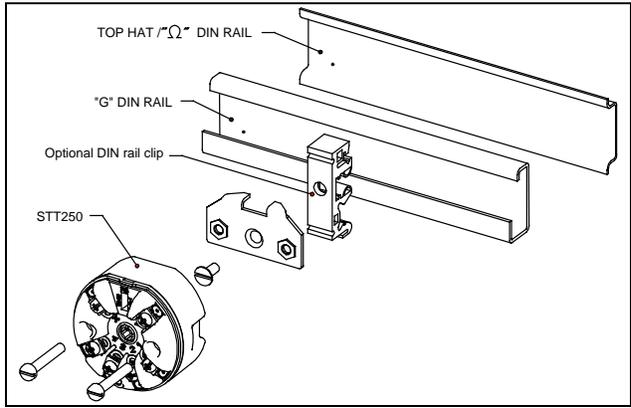
"G" DIN RAIL



TOP HAT / "Ω" DIN RAIL



STT250 MODULE



INSTALLATION WITH DIN RAIL

Figure 7 - STT250DIN Rail Mounting Dimensions

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