

1. Description

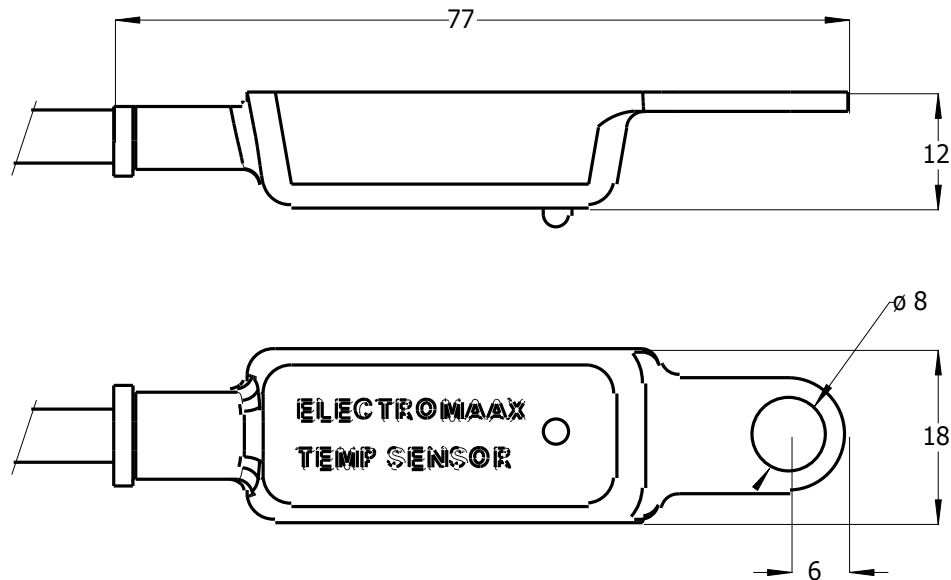
The *Temperature Sensor* measures temperature of alternators or batteries and reports the measured values to the connected regulator. It is compatible with E-MAAX CSR, PRO, and PLUS series regulators. The *Temperature Sensor* is designed to be mounted directly onto alternator or battery on a temperature representative surface via 8mm (5/16") mounting lug. When mounting, care must be taken to provide good mechanical contact between the sensor and the surface for adequate heat transfer. Sensor's electrical circuits are isolated from its housing. Sensor's LED provides a visual indication of the temperature state by the sequence of flashes. Temperature in the normal operating range, the indicator flashes once in 2 seconds. As the temperature reaches the upper safe operating limit for the device (Battery= 40°C, Alternator=90°C), it flashes once a second. When the temperature reaches the maximum (Battery= 50°C , Alternator=100°C), it flashes 3 times in a second.

Sensors anodized black are for the batteries. Sensors anodized silver are for the alternators.

2. Specifications

Parameter	Value	Units
Measured temperature range	-20 .. +110	Celsius deg
Measurement accuracy	1	Celsius deg
Weight	200	grams
Housing material	Aluminum, anodized	-
Mounting lug size	8mm or 5/16"	-
Operating range	-40 .. +125	Celsius deg
Protection	IP 68	-
Maximum allowable shock	3	G
Maximum allowable relative humidity	90	%

3. Dimensional outline

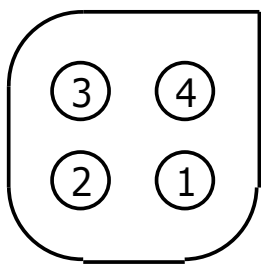


All units are millimeters

3. Electrical specifications

Parameter	Value	Units
DC voltage supply range	6 .. 20	Volts
Current consumption	0.020	Amps
LED color	Green	-
Visual indication flashing frequencies	0.5 (temperature in normal operating range) 1.0 (temperature reaches upper safe limit) 3.0 (temperature reaches upper limit)	Hz
Cable ratings	Gauge: 20 AWG Material: tinned copper strands Strand size: Ø 0.16 mm Insulator Material: PVC Jacket Color: black Diameter: 5.5 mm	-
Communications format	RS-485	-
Wire colors designations	black – battery negative (isolated from the housing) red – DC supply (isolated from the housing) white – communication lead "A" yellow – communication lead "B"	-
Connector pin-out	1 - black – battery negative 2 - red – DC supply 3 - white – communication lead "A" 4 - yellow – communication lead "B"	-

4-pin connector pins, view from the cable side



Notice

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