

1. Description

The *COM Module* is compatible with E-MAAX CSR, PRO, and PLUS series regulators

The *COM Module* provides two functions;

1. A USB connection point for a PC to display system data.
2. Houses a Field Reduction Switch (FRS) which commands the regulator to reduce the alternator's field coil current to 50% of its nominal value for the current charging conditions. The 50% reduction reduces engine load in conditions where maximum engine power is desired.

The FRS is activated by the depression of the white button on the housing for two seconds; the FRS can be manually de-activated by again pressing the same button for two seconds. An LED provides a visual indication of the switch status state by the sequence of flashes.

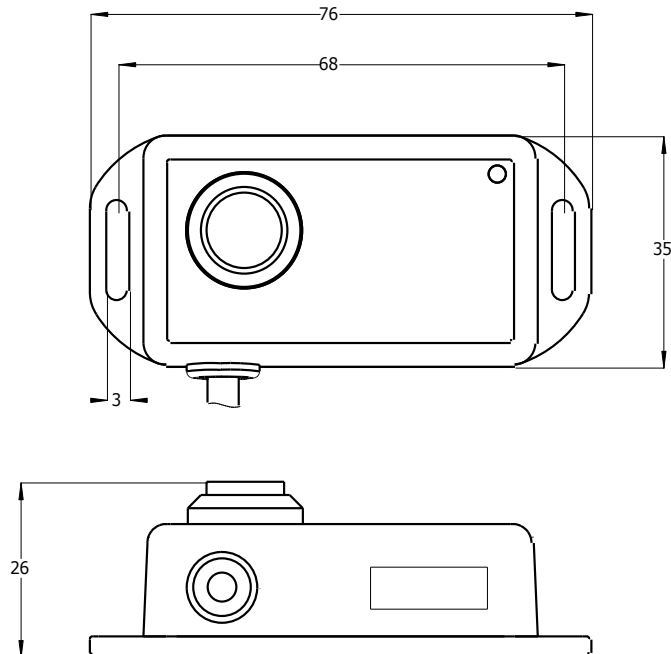
The LED flashes every 2 seconds to indicate the FRS is functional and the alternator output is at 100% of its nominal value, Activation of the FRS the LED flashes 3 times in a second and the alternator output is reduced.

When the engine ignition is switched off, the indicator is not lit and the FRS is re-set to 100%.

2. Specifications

Parameter	Value	Units
Weight	200	grams
Housing material	PVC	-
Operating range	-40 .. +125	Celsius deg
Protection	IP 56	-
Maximum allowable shock	3	G
Maximum allowable relative humidity	90	%

3. Dimensional outline

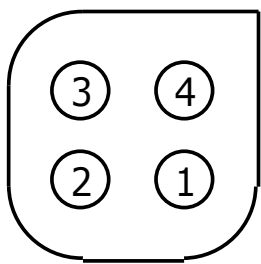


All units are millimeters

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 (Field Reduction Switch inactive) 3.0 (Field Reduction Switch active)	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 (insertion)



Notice

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