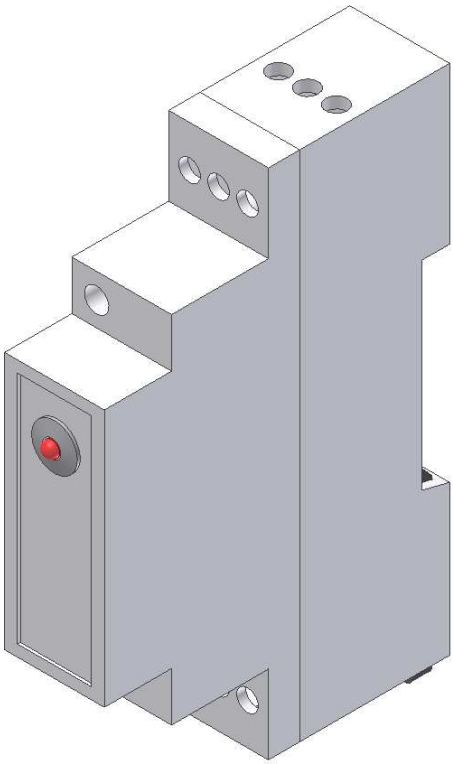
GENIUS BYPASS

GENERAL INFORMATION

This device has been created to implement the function of automatic electric bypass of the GENIUS POWER regulators in a regulation switchboard panel, should it so happen that, in case of over temperature or accidental failures, the regulators put the output to 0V. The GENIUS BYPASS senses the difference between the network tension and the output tension of the GENIUS POWER and, if a determined tension is surpassed, it generates a current impulse that controls an auxiliary current releaser. If you create the switchboard panel according to the instructions of the typical application of the GENIUS BYPASS, you will obtain that the load is instantaneously connected to the network tension, interrupting the regulation but avoiding darkness. The restoration of the regulation condition is to be done manually. For remote signalling of the bypass status it is possible to use the GENIUS GPRS in accordance with the typical application.

CODE	MODEL
100287	GENIUS CONTROL BYPASS



FUNCTIONAL CHARACTERISTICS

- It senses the difference between network tension and output tension of the GENIUS POWER
- It generates a current impulse in order to operate the current releaser when the difference between network tension and output tension of the GENIUS POWER is over 80V
- It is realized in 1 unit modular box to be fixed to omega bar
- It signals the bypass status

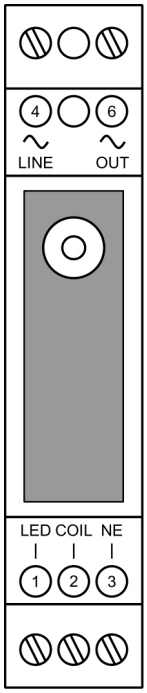
EQUIPMENT

- Red led signalling the bypass status

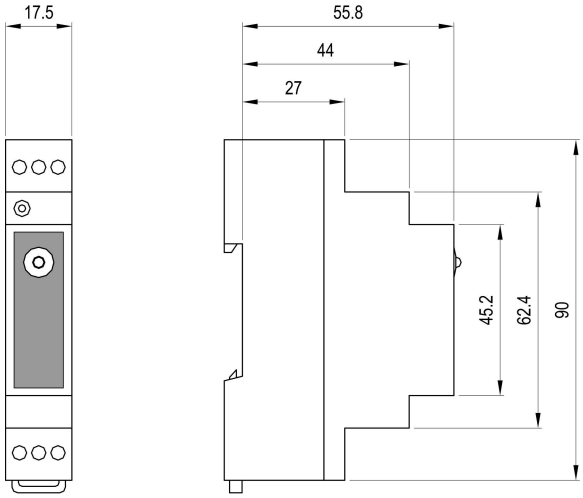
TECHNICAL CHARACTERISTICS

PARAMETER	VALUE
Maximum ΔV (VIN-VOUT)	120V ±20%
Intervention time	10÷15 secondS
Class of isolation	Class I
EMC emission	In accordance with EN61000-6-2
EMC immunity	In accordance with EN61000-6-3
Operating temperature	From –10℃ to +45℃
Stocking temperature	From –25℃ to +75℃
Humidity	Up to 90% without condensate
Altitude	2000 m above sea level
Protection degree	IP20
Weight	20g
Terminal section	Rigid conductor 2.5mm²

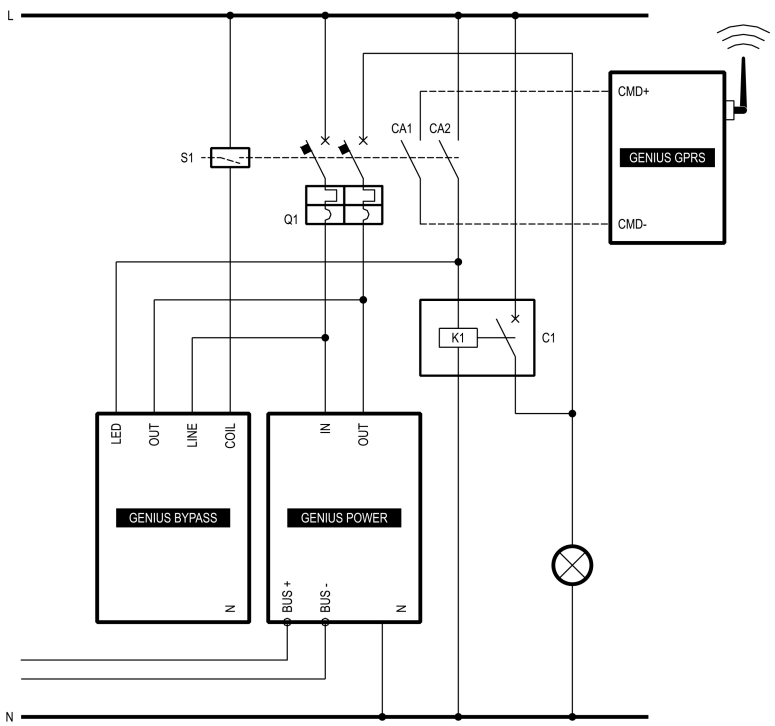
FRONT VIEW



MECHANICAL DIMENSIONS



WIRING DIAGRAM



DRAWING 1
Standard application of GENIUS BYPASS in combination with GENIUS POWER and GENIUS GPRS

S1 = CURRENT LAUNCHING RELEASER
Q1 = AUTOMATIC BIPOLAR MAGNETOTHERMIC SWITCH
CA1 = AUXILIARY CONTACT NA
CA2 = AUXILIARY CONTACT NA
K1 = CONTACTING COIL C1 230V
C1 = POWER CONTACTOR 1P NA

When the GENIUS BYPASS senses a difference between the network tension and the output tension of the GENIUS POWER above 120 V, it generates an impulse on the coil of the current launching releaser S1. The latter opens the automatic bipolar magnetothermic switch Q1, disconnecting the output and input of the GENIUS POWER. Automatically the release of the Q1 leads to the closing of the auxiliary contacts CA1 and CA2. The CA1 excites the coil K1 of the power contactor and this leads to the closing of the contact NA C1 connecting the load directly on the network tension. While with the CA2 you can control either the GENIUS GPRS in order to remote communicate the bypass status or you can simply connect to it a signalling lamp.