Power source

Device protective measures

Question:
How is it possible to protect an AiM device when it is powered on?

Answer:
Considering this task, AiM devices include specific electrical circuits protecting from voltage drops, current peaks and polarity inversions.

- To guarantee the protection during the vehicle cranking, the device features specific circuitry maintaining a constant input voltage, this protects it during the cranking phase in which voltage drops occur, which can reach 6V or less. From the serial numbers specified below, this circuit is included in the devices:

- MXG **4201218**
- MXS **4500888**
- MXL2 **4302189**

Dealing with devices with previous serial numbers (not equipped with the previously mentioned circuit), an EPF module (external power source filter, **P.N.: 08EPF000)** is available, which must be connected in series with the AiM main harness' power leads labelled "GND" and "9-15VDC", and those coming from the vehicle.

- To protect against electric current fluctuations, AiM devices are equipped with internal resettable fuses: 1100mA (until 2017) or 3000mA (from 2018).

- To protect against polarity inversion (AiM 9-15VDC red wire connected to the vehicle GND and vice versa) and from current peaks, a built in circuit sustains voltages up to 21V and currents up to 2,5A. Users can add external fuses to raise the described protection level.