

SELECTING AND CONFIGURING AN EPC (EVSE PROTOCOL CONTROLLER):

The Viridian EPC is available in two main options:

Tethered Units

These units are designed for applications where the charging cable is permanently fixed to the EVSE. The selected EPC should be chosen so that it will never be able to advertise a higher current than the lowest rating of the components within the EVSE (Care must be taken to select the correct contactor, RCBO and cable for the application).

Free (Socket) Units

These units are designed for applications where the EVSE features a socket allowing for a range of adapter cables to be used. By default we supply EPCs that are suitable for sockets with solenoid locking mechanisms though we can configure them for use with motor locking options.

Solenoid vs Motor locking mechanisms

In the event of a power outage a solenoid lock socket will unlock and allow for removal of the cable from the Charging Station. The motor locks require the motor to be driven to unlock the unit and so in the event of a power outage the motor sockets will remain in their previous state until power to the EVSE is reconnected. The motor lock EPC's have feedback functionality built in that will allow the EPC to detect the current state of the lock.

Maximum Current

The EPCs leave the factory programmed ready for use/installation at the amps selected at purchase. This is the maximum current advertised by the EPC.

The maximum current that the EPC will advertise to the EV can be configured from 6A to the maximum rating of the EPC (as selected when purchasing) in 1A steps by connecting a simple resistor¹ between the IC and 0V terminals of the EPC. This functionality can be integrated into smart systems allowing for control of EV charging current, as well as limiting the maximum current available from the EPC. The IC pin can also accept a 0-5V input enabling the Viridian EPC to be integrated into a wide variety of systems.

Please refer to the EVSE Protocol Controller Manual for further configuration & installation information, available online at www.viridianeve.co.uk/resources.

¹ Table 'INPUT CURRENT RESISTANCE INFORMATION' in section 3.3, page 8 of the manual (viridianeve.co.uk/resources) details what resistance is required to achieve a maximum advertised current.