In order to work with Variable-Voltage type alternators (aka Smart Alternators), BCDC chargers require an ignition input. This must receive starter battery voltage when the engine is running, and either GND or be disconnected when the engine is turned off.

In some situations it may be difficult to run an ignition feed all the way to the unit (for example if installed in a trailer) - The following 'short-cut' using a RK1260 Relay Kit may be used.