

AS/NZS 5033:2014 stipulates that all Power Conversion Equipment (PCE) including charge controllers must be compliant with IEC 62109 after July 11 2015. That seems pretty clear, but the devil is definitely in the detail. Not all charge controllers are PCE.

IEC 62109 is for Power Conversion Equipment (from IEC 62109 1.1 Scope)

PCE is defined as follows in IEC 62109 3.66:

3.66 power conversion equipment (PCE)

an electrical device converting one kind of electrical power from a voltage or current source into another kind of electrical power with respect to voltage, current and frequency

Note Examples include AC-DC converters, DC-AC inverters, DC-DC charge controllers, frequency converters, etc.

The PL and Dingo ranges of charge controllers are not PCE according to this definition. They do not do any kind of conversion. They simply turn the charging current to the battery on and off as required to maintain the battery voltage and state of charge. They are not DC-DC charge controllers in the sense referred to in the note to 3.66, they are dc charge controllers with no conversion stage. In essence, they are a simple switch that is controlled by an intelligent control system.

Therefore IEC62109 is not relevant to Dingo or PL series controllers and nothing to our knowledge hinders their continued use in AS/NZS 5033 compliant systems. In fact, we couldn't have them tested to IEC62109 if we wanted to. They are not covered in the scope of the standard and testing them to that standard would be silly and the result would mean nothing. It would be like testing a bicycle to a crashworthiness standard intended for cars.