

## CTL Provisional DECISION SHEET (PDSH)

Standard(s) (incl. year)	Subclause(s)	Tracking No.	Year
IEC 60335-1:2010 IEC 60335-1:2010/AMD1:2013 IEC 60335-1:2010/AMD2:2016 IEC 60335-2-29:2016	19.11	2191	2021
<b>Category</b>			
HOUS			
<b>Subject</b>	<b>Keywords</b>	<b>Developed by</b>	<b>To be approved</b>
Stand-by mode of a battery charger	- stand-by mode	ETF 1	2023 CTL Plenary Meeting
<b>Question</b>			
<p>A battery charger for specific secondary batteries charges a discharged battery when it is connected to the charger that is connected to the mains.                      As long as the battery charger remains connected to the battery and the mains, there will be the operation mode when the charger is charging, or changes to the non-operation mode when the charger is not charging and vice versa, depending on the state of charge of the connected battery.                      Which tests of clause 19.11.4 are applicable in this case?</p>			
<b>Decision</b>			
All tests of clause 19.11.4 are applicable.			
<b>Explanatory notes</b>			
<p>The changes in the operation of the charger could be considered as changes that occur during cyclical operation. If it relies upon a programmable component to function correctly, the charger will be subjected to the test of clause 19.11.4.8, unless restarting at any point in the operation cycle due to a voltage dip will not result in a hazard. No other tests of clause 19.11.4 would be applicable. But on the other hand, the charger circuit is connected continuously to the supply mains when the battery is connected but is not being charged. This is a characteristic of a stand-by circuit as indicated in clause 19.11.3.                      The battery charger is placed in a stand-by mode by the state of charge monitoring device when the connected battery is fully charged.                      EMP can influence the operation of the charger which may result in permanent charging and thus overcharging of the battery. All tests of clause 19.11.4 would be applied.</p> <p>The decision was confirmed in the second IEC/TC61 meeting held in November 2021.</p>			