



INCERT DECISION SHEET (DSH) 008

Standard(s)/Document(s)	Subclause(s):	No.	Year
- T 031:2017 + A1 :2018 + A2 :2022	Clause 7.13.1	DSH008	2024
- T 033:2020 + A1 :2021 + A2 :2022	Clause 7.12.1		
Subject:	Key words:	Developed by:	Approved at 20240607
Additional requirements for type C power supplies	Power supply	INCERT TC WG2	INCERT Trademark Committee

Objective: To describe the test to be performed for motion detector

Methodology:

This test described 2 situations: in armed situation and in stand-by (not-armed) situation.

Armed situation: The detector needs to be solicited 1 time (2 sec) during 12h. The response current needs to be measured, included supervision.

It is allowed to measure the current during 1 hour with 1 event of 2 second ($I_{armed 1}$) and to measure the current without event during 1 hour ($I_{armed 2}$).

The Sub total current in armed situation will be : $I_{armed} = I_{armed 1} + 11 \times I_{armed 2}$

Standby situation : The detector needs to be solicited continuously during 12h. The response current needs to be measured, included supervision.

It is allowed to measure the current during 1 hour in order to determine the reproducibility of the response current (solicitation response, rest time and supervision included) = $I_{Standby1}$.

The sub total current in standby situation will be : $I_{Standby} = 12 \times I_{Standby1}$

Total current 24h : The total current for 24 hours is the sum of these 2 currents : $I_{total24h} = I_{armed} + I_{Standby}$

This total current for 1 year is then extrapolated, based on 365 days : $365 \times I_{total24h}$

Criteria (PASS/FAIL)

The battery needs to be able the deliver the needed energy during 1 year.

Notes:

The real rest time of the product response needs be considered. This value couldn't exceed the value specified in the table (cfr T 031 of T 033).

This approach will be similar for the other detectors (magnetic contact, active IR), taking into account the situation in armed and standby situation.