

Details of the Extensions and Major Technical Changes to standard EN 60079-14:2014.

Extensions

Clause	Description
Scope	Introduction of initial inspection
3.2.4	Introduction of definition "hybrid mixture"
4.3	New clause for initial inspection
5.7	New selection criteria for radiating equipment according to EN 60079-0
5.8	New selection criteria for ultrasonic equipment according to EN 60079-0
5.14	New selection criteria for cells and batteries
5.15	New selection criteria for radio frequency identification tags
5.16	New selection criteria for gas detection equipment
6.1	The requirements for material composition of metallic installation material aligned with the requirements for light metal according to EN 60079 -0
6.5	New structure of the requirements for static electricity according to EN 60079 -0 added
6.7	New requirements for electromagnetic radiation in accordance with EN 60079-0
10	New structure of the requirements for cable entry system and blanking elements with subclauses <ul style="list-style-type: none"> - General - Connections of cables to equipment - Selection of cable glands with the new Table 10 - Additional requirements for cable glands other than Ex "d", Ex "t" or Ex "nR" - Additional requirements for Ex "d" - Additional requirements for Ex "t" - Additional requirements for Ex "nR"
11	New structure for the requirements for rotating electrical machines for all types of protections
13	New structure for the requirements for electric heating systems including temperature monitoring, limiting temperature, safety device and additional requirements for electrical heat tracing system
15.4	New clause to limit the dissipation power of terminal boxes as a function of the numbers of wire in relation to the cross-section and the permissible continuous current with an example.
16.4	Improvement of the text for simple apparatus with its definition, limits and the variation in maximum power dissipation based on the ambient temperature and an alternative equation to calculate the max. surface temperature.
17.4	New subclause for pressurized rooms and analyser houses
22	New clause for optical radiation
Annex C	New annex for initial inspection with the equipment specific inspection schedule for all type of protections
Annex D	New annex for electrical installations in extremely low ambient temperature
Annex E	New annex for the restricted migration of gas through cables
Annex F	New annex for installation of electrical trace heating systems
Annex K	New annex for the requirements for type of protection "op" – Optical radiation
Annex M	New annex for hybrid mixtures

Major Technical Changes

Clause	Description
5.10	<p>Specific requirements for cells and batteries used in transportable, portable and personal equipment aligned with EN 60079-11</p> <p>Due to the risk of gassing producing hydrogen from all cell types, adequate provision for venting is required as the gassing can create an explosive condition in small enclosures. This condition would apply to torches, multi meters, pocket gas sensors and similar items. Alternatively, where the equipment meets the requirements for Equipment Group IIC, the requirement of degassing apertures or limitation of hydrogen concentration does not apply.</p>
16.5	<p>New requirements for terminal boxes if containing more than one intrinsically safe circuits to avoid short circuits between independent intrinsically safe circuits.</p> <p>An individual intrinsically safe circuit is also safe under short- circuit conditions. The short-circuit between two independent intrinsically safe circuits is not considered. Therefore the terminal boxes have to meet additional requirements for IP rating as well for the mechanical impact to make sure that the integrity of the enclosure is given also under worst case conditions.</p>