

References

 Standard(s)
(incl. year)

IEC 60947-1: 2020

 Subclauses(s): cl. 8.2.2.3
Table 3

Subject

Accessible parts definition/identification

 Formulated by:
ACAE CT

 Date:
2022-04-07

Question

Table 3 gives the temperature-rise limits intended to be respected during the temperature-rise verification considering the three “locations” that need to be identified on product.

Table 3 – Temperature-rise limits of accessible parts
(see 8.2.2.3 and 9.3.3.3.4)

	Accessible parts	Temperature-rise limits ^a K
Location 1	Manual operating means: Metallic Non-metallic	15 25
Location 2	Parts intended to be touched but not hand-held: Metallic Non-metallic	30 40
Location 3	Parts which need not be touched during normal operation: Exteriors of enclosures adjacent to cable entries: Metallic Non-metallic Exterior of enclosures for resistors Air issuing from ventilation openings of enclosures for resistors	40 50 200 ^b 200 ^b

^a Different values may be prescribed by product standards for different test conditions and for devices of small dimensions but not exceeding by more than 10 K the values of this table.

^b The equipment shall be protected against contact with combustible materials or accidental contact with personnel. The limit of 200 K may be exceeded if so stated by the manufacturer. The manufacturer shall provide appropriate information, in accordance with 6.3.

The definition of the 3 “accessible parts” zone is not clear and leave different interpretations.

Question:

-giving the “use cases” in the follow pages, which are the identification of the three location/zone?

Analysis

See pages 2 and 3 with colored location


Decision

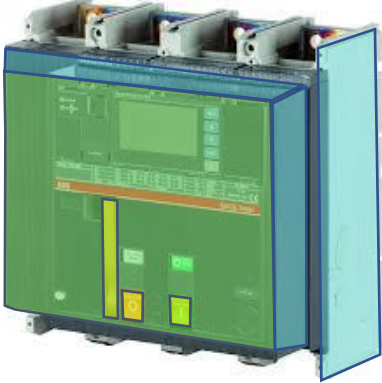
The decision was discussed and approved during 53°LTC (see item 7.3) as document [IT_CT \(LOVAG\) 20_009 LDSxxx_accessible parts.doc](#) and extended to the last edition of IEC 60947-1:2020 without any technical change


Date: 2022-05-29

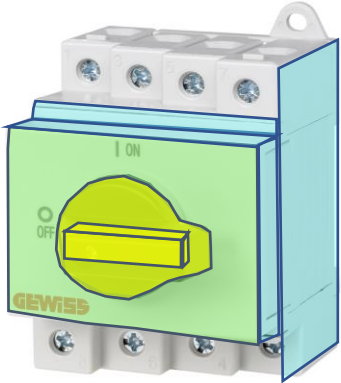
Issued by: ACAE TC

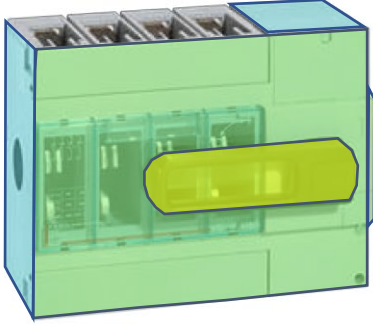
 Approved by: 54th LOVAG TC, 2022


Product (MCCB) - IEC 60947-2	Location / Zone	Color/letter
 <p>a b c</p>	Manual operating means	a-non metallic
	Parts intended to be touched but not hand-held	b-non metallic
	Parts which need not be touched during normal operation	c-non metallic

Product (MCCB) - IEC 60947-2	Location / Zone	Color/letter
 <p>a b c</p>	Manual operating means	a-non metallic
	Parts intended to be touched but not hand-held	b-non metallic
	Parts which need not be touched during normal operation	c-non metallic

Product (ACB) - IEC 60947-2	Location / Zone	Color/letter
 <p>a b c</p>	Manual operating means	a-non metallic
	Parts intended to be touched but not hand-held	b-non metallic
	Parts which need not be touched during normal operation	c-non metallic

Product (Switch) - IEC 60947-3	Location / Zone	Color/letter
 <p>a b c</p>	Manual operating means	a-non metallic
	Parts intended to be touched but not hand-held	b-non metallic
	Parts which need not be touched during normal operation	c-non metallic

Product (Switch) - IEC 60947-3	Location / Zone	Color/letter
 <p>a b c</p>	Manual operating means	a-non metallic
	Parts intended to be touched but not hand-held	b-non metallic
	Parts which need not be touched during normal operation	c-non metallic

Product (MPSD) - IEC 60947-4-1	Location / Zone	Color/letter
 <p>a b c</p>	Manual operating means	a-non metallic
	Parts intended to be touched but not hand-held	b-non metallic
	Parts which need not be touched during normal operation	c-non metallic