

INTERNATIONAL ELECTROTECHNICAL COMMISSION  
COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

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**IEC 62020-1**  
Edition 1.0 2020-04

**ELECTRICAL ACCESSORIES –  
RESIDUAL CURRENT MONITORS (RCMs) –  
Part 1: RCMs for household and similar uses**

**IEC 62020-1**  
Édition 1.0 2020-04

**PETIT APPAREILLAGE ÉLECTRIQUE –  
CONTRÔLEURS D'ISOLEMENT À COURANT  
DIFFÉRENTIEL RÉSIDUEL (RCM) –  
Partie 1: RCM pour usages domestiques et  
analogues**

## **CORRIGENDUM 1**

Corrections to the French version appear after the English text.

Les corrections à la version française sont données après le texte anglais.

### **8.18.2 Immunity requirements**

*Replace, in 8.18.2, the reference to Table 21 with Table 22, as follows:*

Immunity requirements for RCMs are given in Table 22.

### **Table 22 – EMC tests**

*Replace, in row 7 of Table 22, "Covered by test of 9.11." with "Covered by tests of 9.11.", as follows:*

| Phenomenon                                               | Basic standard                   | Port                                                                                                             | Test value                                                                                                                                                                                                                                 | Performance criteria                    | Specification                                                                                                                                                                                                                |
|----------------------------------------------------------|----------------------------------|------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Electrostatic discharges                                 | IEC 61000-4-2                    | Enclosure                                                                                                        | ±6 kV contact discharge<br>±8 kV air discharge                                                                                                                                                                                             | A2<br>A2                                |                                                                                                                                                                                                                              |
| Radiated radio-frequency electromagnetic fields          | IEC 61000-4-3                    | Enclosure                                                                                                        | 80 MHz to 1 GHz,<br>10 V/m for $I_{\Delta n} \geq 30$ mA<br>80 MHz to 1 GHz,<br>3 V/m for $I_{\Delta n} < 30$ mA<br>1 GHz to 6 GHz,<br>3 V/m                                                                                               | A1<br>A1<br>A1                          |                                                                                                                                                                                                                              |
| Electrical fast transients / bursts                      | IEC 61000-4-4                    | Monitored circuit ports ( $U_{em}$ )<br>Auxiliary ports $\geq 100$ V<br>Auxiliary ports $< 100$ V                | 4 kV (5 kHz or 100 kHz)<br>4 kV (5 kHz or 100 kHz)<br>2 kV (5 kHz or 100 kHz)                                                                                                                                                              | A2<br>A2<br>A2                          |                                                                                                                                                                                                                              |
| Surges                                                   | IEC 61000-4-5                    | Monitored circuit ports ( $U_{em}$ )<br><br>Auxiliary ports $\geq 100$ V<br><br>Auxiliary ports $< 100$ V > 10 m | 2 kV line to line (2 $\Omega$ )<br>4 kV line to earth (12 $\Omega$ )<br><br>2 kV line to line (2 $\Omega$ )<br>4 kV line to earth (12 $\Omega$ )<br><br>1 kV line to line (42 $\Omega$ ) <sup>a</sup><br>2 kV line to earth (42 $\Omega$ ) | A2<br>B<br><br>A2<br>A2<br><br>A2<br>A2 | Not intended for symmetrical operated circuits/lines                                                                                                                                                                         |
| Conducted disturbances induced by RF fields              | IEC 61000-4-6                    | all ports                                                                                                        | 150 kHz to 80 MHz<br>10 V for $I_{\Delta n} \geq 30$ mA<br>150 kHz to 80 MHz<br>3 V for $I_{\Delta n} < 30$ mA                                                                                                                             | A1<br>A1                                |                                                                                                                                                                                                                              |
| Power frequency magnetic fields                          |                                  | Enclosure                                                                                                        |                                                                                                                                                                                                                                            |                                         | Covered by tests of 9.11.<br><br>For RCMs with external current transformers, the short-circuit tests shall be performed with the current transformer as close as possible to the RCM, according to manufacturer instruction |
| Voltage dips, short interruptions and voltage variations | IEC 61000-4-11<br>IEC 61000-4-34 |                                                                                                                  | 0 % during 1 cycle<br>40 % during 10/12 cycles<br>70 % during 25/30 cycles<br>0 % during 250/300 cycles                                                                                                                                    | A2<br>B<br>B<br>B                       | For example, "25/30 cycles" means "25 cycles for 50 Hz test" or "30 cycles for 60 Hz test"                                                                                                                                   |
| Ring waves                                               |                                  |                                                                                                                  | 200 A for $I_{\Delta n} > 10$ mA<br>25 A for $I_{\Delta n} \leq 10$ mA                                                                                                                                                                     |                                         | Covered by test 9.17.<br><br>Only in Quiescent mode, without residual current, according to 9.17                                                                                                                             |