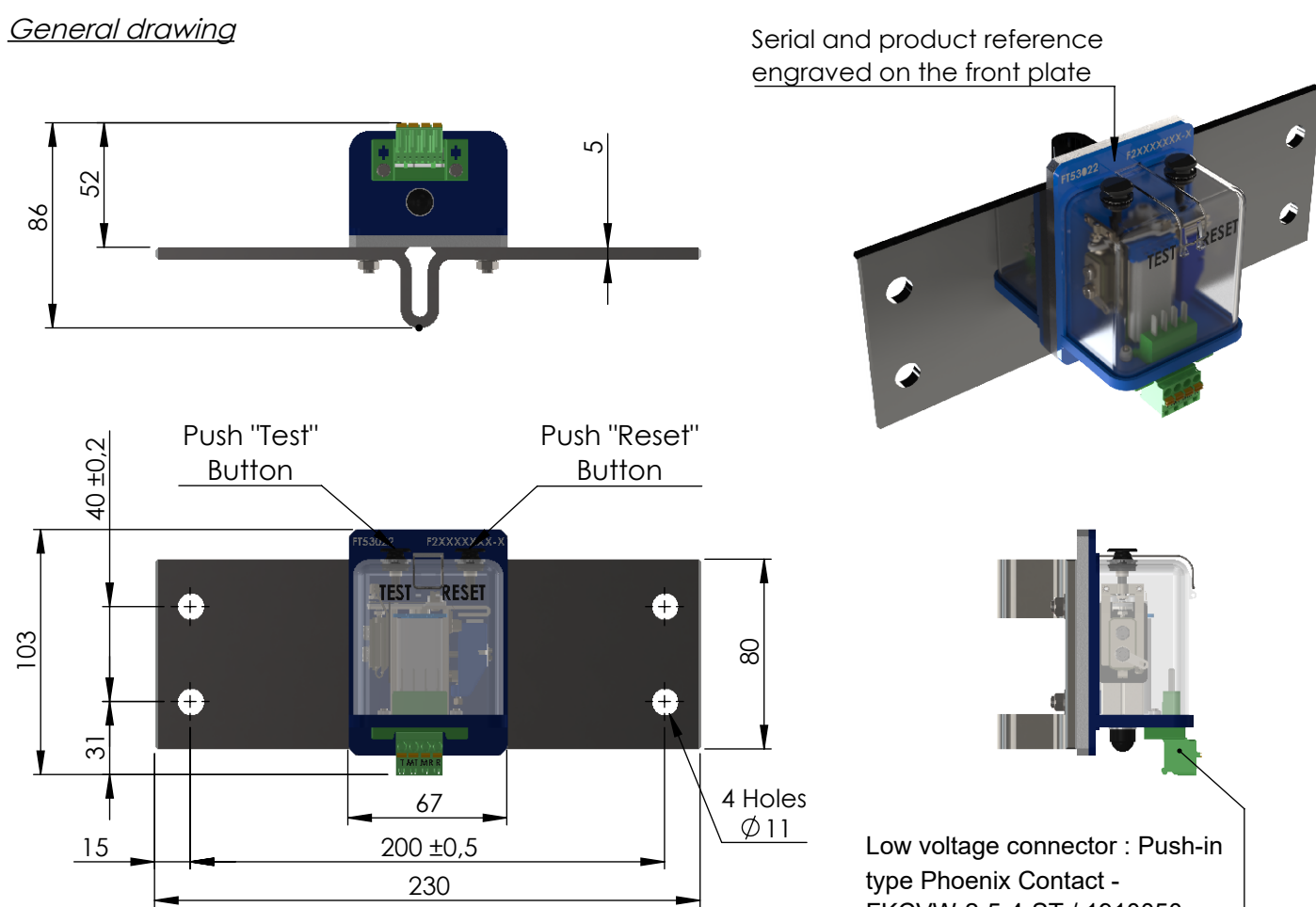
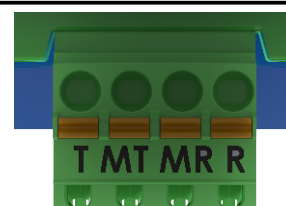


| Généralités                                                                                                                                                                                                                                                                             |  | Generalities |  | Reference standard                                                                                                               |  | Electrical Characteristics                                                                                                   |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------|--|----------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------------------|--|
| PM relay type under BB housing mounted on 80x5 busbar. Mainly connected between earth and frame in order to detect earth fault in DC railway substations                                                                                                                                |  |              |  | Normes références                                                                                                                |  | Circuit primaire/ Primary circuit                                                                                            |  |
| <div>General drawing</div> <div></div> <div>Serial and product reference engraved on the front plate</div> <div>Low voltage connector : Push-in type Phoenix Contact - FKCVW-2-5-4-ST / 1910050</div> |  |              |  | Title                                                                                                                            |  | Standard No.                                                                                                                 |  |
|                                                                                                                                                                                                                                                                                         |  |              |  | Electrical equipment :                                                                                                           |  | NF EN 60077/ IEC 60077                                                                                                       |  |
|                                                                                                                                                                                                                                                                                         |  |              |  | Traction network supply :                                                                                                        |  | NF EN 50163                                                                                                                  |  |
|                                                                                                                                                                                                                                                                                         |  |              |  | Shock and vibration :                                                                                                            |  | NF EN 61373                                                                                                                  |  |
|                                                                                                                                                                                                                                                                                         |  |              |  | Salt mist :                                                                                                                      |  | 96h/ NF EN 60068-2-11                                                                                                        |  |
|                                                                                                                                                                                                                                                                                         |  |              |  | Fire and smoke :                                                                                                                 |  | EN 45545                                                                                                                     |  |
|                                                                                                                                                                                                                                                                                         |  |              |  | Main Characteristics                                                                                                             |  |                                                                                                                              |  |
|                                                                                                                                                                                                                                                                                         |  |              |  | Caractéristiques principales                                                                                                     |  |                                                                                                                              |  |
|                                                                                                                                                                                                                                                                                         |  |              |  | Main                                                                                                                             |  |                                                                                                                              |  |
|                                                                                                                                                                                                                                                                                         |  |              |  | Type of Relay :                                                                                                                  |  | Current relay                                                                                                                |  |
|                                                                                                                                                                                                                                                                                         |  |              |  | Type of current :                                                                                                                |  | AC/DC                                                                                                                        |  |
|                                                                                                                                                                                                                                                                                         |  |              |  | Type of Housing :                                                                                                                |  | BB                                                                                                                           |  |
|                                                                                                                                                                                                                                                                                         |  |              |  | Auxiliary voltage :                                                                                                              |  | No                                                                                                                           |  |
|                                                                                                                                                                                                                                                                                         |  |              |  | Weight :                                                                                                                         |  | 1.3 Kg                                                                                                                       |  |
|                                                                                                                                                                                                                                                                                         |  |              |  | Contacts                                                                                                                         |  |                                                                                                                              |  |
|                                                                                                                                                                                                                                                                                         |  |              |  | Number of Contacts :                                                                                                             |  | 1 N/O - 1 N/C                                                                                                                |  |
|                                                                                                                                                                                                                                                                                         |  |              |  | Contacts metallurgy :                                                                                                            |  | Ag/ Pd                                                                                                                       |  |
|                                                                                                                                                                                                                                                                                         |  |              |  | Contacts rating :                                                                                                                |  | 90 VDC - 0.3 A - L/R=30 ms                                                                                                   |  |
|                                                                                                                                                                                                                                                                                         |  |              |  | Electrical lifetime :                                                                                                            |  | > 10 <sup>6</sup> Operations                                                                                                 |  |
|                                                                                                                                                                                                                                                                                         |  |              |  | Contact resistance :                                                                                                             |  | < 20 mOhms                                                                                                                   |  |
|                                                                                                                                                                                                                                                                                         |  |              |  | Environment                                                                                                                      |  |                                                                                                                              |  |
|                                                                                                                                                                                                                                                                                         |  |              |  | Operating temperature :                                                                                                          |  | -25°C...+70°C                                                                                                                |  |
|                                                                                                                                                                                                                                                                                         |  |              |  | Storing temperature :                                                                                                            |  | -40°C...+85°C                                                                                                                |  |
|                                                                                                                                                                                                                                                                                         |  |              |  | Mounting position :                                                                                                              |  | Any attitude                                                                                                                 |  |
|                                                                                                                                                                                                                                                                                         |  |              |  | Connections & marking                                                                                                            |  |                                                                                                                              |  |
|                                                                                                                                                                                                                                                                                         |  |              |  | Connections & gravage                                                                                                            |  |                                                                                                                              |  |
|                                                                                                                                                                                                                                                                                         |  |              |  |                                             |  | T : N/O<br>MT : Ground N/O<br>MR : Ground N/C<br>R : N/C                                                                     |  |
|                                                                                                                                                                                                                                                                                         |  |              |  | Relay reference and serial number engraved on the top plate.<br>Pickup setting value engraved on the fixed part of the terminal. |  |                                                                                                                              |  |
|                                                                                                                                                                                                                                                                                         |  |              |  | Caractéristiques Supplémentaires                                                                                                 |  |                                                                                                                              |  |
|                                                                                                                                                                                                                                                                                         |  |              |  | Fonction(s) client : N.A.                                                                                                        |  | N°(s) spécification : N.A.                                                                                                   |  |
|                                                                                                                                                                                                                                                                                         |  |              |  |                                                                                                                                  |  | Symbole/ Article : N.A.                                                                                                      |  |
|                                                                                                                                                                                                                                                                                         |  |              |  | NOM                                                                                                                              |  | DATE                                                                                                                         |  |
|                                                                                                                                                                                                                                                                                         |  |              |  | AUTEUR. FT                                                                                                                       |  | 17/04/2020                                                                                                                   |  |
|                                                                                                                                                                                                                                                                                         |  |              |  | Frederic Forli                                                                                                                   |  | Entreprise/ Company :<br>TECHNO-ELEC SAS<br>Adresse/ Address :<br>ZI de la castine, rue des sapins<br>54730 - GORCY - FRANCE |  |
|                                                                                                                                                                                                                                                                                         |  |              |  |                                                                                                                                  |  | DÉSIGNATION DU PRODUIT/ PRODUCT DESIGNATION:                                                                                 |  |
|                                                                                                                                                                                                                                                                                         |  |              |  |                                                                                                                                  |  | Earth fault detection current relay                                                                                          |  |
|                                                                                                                                                                                                                                                                                         |  |              |  | Marque déposée/ Brand name :                                                                                                     |  | RÉFÉRENCE FICHE TECHNIQUE/ DATASHEET REFERENCE:                                                                              |  |
|                                                                                                                                                                                                                                                                                         |  |              |  | TECHNO-ELEC - SERVO CONTACT                                                                                                      |  | FT53022                                                                                                                      |  |
|                                                                                                                                                                                                                                                                                         |  |              |  |                                                                                                                                  |  | Echelle:1:2                                                                                                                  |  |
|                                                                                                                                                                                                                                                                                         |  |              |  |                                                                                                                                  |  | FEUILLE 1 SUR 1                                                                                                              |  |
|                                                                                                                                                                                                                                                                                         |  |              |  | This drawing is the property of TECHNO-ELEC; It can't be reproduced or communicated without our written agreement.               |  |                                                                                                                              |  |

| REVISIONS |                                                       |                 |            |
|-----------|-------------------------------------------------------|-----------------|------------|
| REVISION  | DESCRIPTION                                           | APPROVED BY     | DATE       |
| C         | Setting range added with default value                | Frederic Forli  | 17/05/2023 |
| B         | Product upgrade with push-in type isolated connectors | Thibaud Colodie | 18/09/2020 |
| A         | Issue of technical specification                      | Thibaud Colodie | 30/04/2020 |