

## HDT/6/24-F1,1

- Combined two-stage surge protectors intended for a low voltage data and power supply lines routed by a common cable.
- Contains both 1st and 2nd stage of protection.
- The overcurrent protection of the power supply line is ensured by a PPTC resettable fuse.
- To reset the PPTC, the circuit must be switched off and let the fuse cool down, do not have to be changed.
- The protection devices must be installed just in front of the protected device.

| Type   |             | HDT/6/24-F1,1              |
|--|-------------|----------------------------|
| Testing category according to IEC 61643-21:2000 and EN 61643-21:2001     |             | C1, C2, C3                 |
| Connector type   |             | Screw terminals            |
| Rated operating DC voltage (Data line protection)                        | $U_N$       | 0 ÷ 6 V                    |
| Maximum continuous operating voltage DC (Data line protection)           | $U_C$       | 7.2 V                      |
| Rated load current (Data line protection)                                | $I_L$       | 0.1 A                      |
| Rated operating DC voltage (Power supply system protection)              | $U_N$       | 0 ÷ 24 V                   |
| Maximum continuous operating voltage DC (Power supply system protection) | $U_C$       | 28.6 V                     |
| Rated load current (Power supply system protection)                      | $I_L$       | 1.1 A                      |
| Hold-current of the resettable fuse at -40, 23, 70 °C                    | $I_{hold}$  | 1790, 1100, 580 mA         |
| Trip-current of the resettable fuse at -40, 23, 70 °C                    | $I_{trip}$  | 3580, 2200, 1160 mA        |
| C1 Nominal discharge current (8/20)                                      | $I_n$       | 1 kA                       |
| C1 Voltage protection level at $I_n$ (line/G)                            | $U_p$       | < 40 V                     |
| C1 Voltage protection level at $I_n$ (line/line)                         | $U_p$       | < 35 V                     |
| C2 Nominal discharge current (8/20)                                      | $I_n$       | 10 kA                      |
| C2 Voltage protection level at $I_n$ (line/G)                            | $U_p$       | < 60 V                     |
| C2 Voltage protection level at $I_n$ (line/line)                         | $U_p$       | < 40 V                     |
| C3 Voltage protection level at 1 kV/μs (line/G)                          | $U_p$       | < 35 V                     |
| C3 Voltage protection level at 1 kV/μs (line/line)                       | $U_p$       | < 35 V                     |
| Bandwidth  | B           | 0 ÷ 1 MHz                  |
| Lightning protection zone  |             | LPZ 1-2, LPZ 2-3           |
| Housing material   |             | Polyamid PA6, UL94 V-0     |
| Degree of protection   |             | IP20                       |
| Operating temperature  | $\vartheta$ | -40 ÷ 70 °C                |
| Recommended cross-section of connected conductors                        | S           | 0.25 ÷ 1.5 mm <sup>2</sup> |
| Clamp fastening range (solid conductor)                                  |             | 0.25 ÷ 4 mm <sup>2</sup>   |
| Clamp fastening range (stranded conductor)                               |             | 0.25 ÷ 2.5 mm <sup>2</sup> |
| Tightening moment  |             | 0,4 Nm                     |
| Installation   |             | On DIN rail 35 mm          |
| Modular width  |             | 1 TE                       |
| Operating position   |             | Any                        |
| Signalling at the device   |             | None                       |

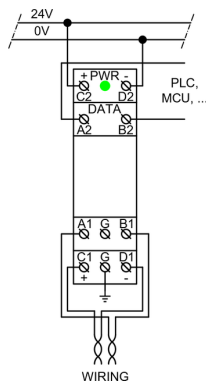
|  |   |                      |
|--|---|----------------------|
| <b>Type</b>  |   | <b>HDT/6/24-F1,1</b> |
| Remote signalling  |   | No                   |
| Modular design   |   | No                   |
| Lifetime   |   | > 100 000 h          |
| <b>Designed according to standards</b>   |   |                      |
| Requirements and test methods for SPDs connected to telecommunications and signalling networks |   | IEC 61643-21:2000    |
| Safety of Flammability of Plastic Materials  |   | UL 94                |
| <b>Application standards</b>   |   |                      |
| Protection against lightning   |   | IEC 62305:2010       |
| <b>Ordering, packaging and additional data</b>   |   |                      |
| Mass   | m | 55 g                 |
| Mass (including the packaging)   | m | 66 g                 |
| Packaging dimensions (H x W x D)   |   | 26 x 98 x 73 mm      |
| Packaging value  | V | 0.19 dm <sup>3</sup> |
| ETIM group   |   | EG000021             |
| ETIM class   |   | EC000943             |
| Customs tariff no.   |   | 85363010             |
| EAN code   |   | 8590681163252        |
| <b>Art. number</b>   |   | <b>56 101</b>        |



The link in the QR code leads to the online presentation of the **HDT/6/24-F1,1**. There, in addition to the always up-to-date data sheet, you will also find all diagrams and drawings, declarations of conformity, or 2D or 3D models and other necessary materials. For more information, visit [www.hakel.com](http://www.hakel.com)



### Application wiring diagram (installation)



### Internal diagram

