

Rudolf DT earth fault relay - Specification

- 1) Rudolf R-EFM DT earth fault relay is a complete micro-processor base digital protection relay with enhance sensitivity, selectivity and speed;
- 2) Rudolf R-EFM DT earth fault relay is designed to monitor power system and provide a relay operation when an earth fault current occurs;
- 3) Rudolf R-EFM DT earth fault relay offer 2 adjustment knobs whereby user can excess from its front panel,
- 4) Rudolf R-EFM DT earth fault relay provide clear indication of the status of the relay from a red LED indicating the state of the relay and a green LED indicating the state of the auxiliary power supply;
- 5) Rudolf R-EFM DT earth fault relay have a manual pushbutton "TEST" to simulate a test trip condition for checking on the operation of the relay;
- 6) Rudolf R-EFM DT earth fault relay have a manual pushbutton "RESET" to manual reset the trip condition after clearing the fault;
- 7) The relay from Rudolf R-EFM DT earth fault relay will remain latch and energise during a trip situation when an earth fault occurs;
- 8) Rudolf R-EFM DT earth fault relay is equipped with a transparent plastic cover with a lockable local sealing facilities to ensure that this relay remain tamperproof to unauthorized personnel;
- 9) Rudolf R-EFM DT earth fault relay have current input adjustment from 0.1-2A in step of 0.1A;
- 10) Rudolf R-EFM DT earth fault relay have time delay adjustment from 0.1-1 second in step of 0.1sec;
- 11) Rudolf R-EFM DT earth fault relay operated with an auxiliary supply voltage of 115 or 230VAC 45-65Hz burden <2VA;
- 12) Rudolf R-EFM earth fault relay is housed in a standard DIN 96x48x98mm enclosure with mounting via 2 corner brackets and thumb tensioning screws. Panel cutout is 92+0.8mm x 45 + 0.6mm and terminal are screw type for 2 x 0.5-3.5mm sq. Material use are black polycarbonate complying with UL94VO.

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13) Rudolf R-EFM DT earth fault relay is manufacture and comply to :

Environmental

- working temperature 0-60 deg C
- functional temperature -25 to +70 deg C
- storage temperature -55 to +85 deg C
- relative humidity 95% without condensation
- class of climate HSE complying with DIN 40040-3, VDE/VDI3540

Insulation

- test voltage : 4kV rms 50Hz 1 min between input / case / auxiliary
- impulse test : EMC 5kV transient complying with IEC801/EN55020
- HF interference test : EHF 2.5kV 1MHz complying with IEC 255-4
- Protection : class II complying with IEC 348/BS4753/Din 57411/VDE0411

Performance

- adjustment accuracy : less than +/- 5%
- repeatability : less than 0.5% of full scale

14) Rudolf R-EFM DT earth fault relay is equipped with 1 (one) single pole changeover contact make of silver /cadmium material with contact resistance 200mW max, 250VAC/150VDC 10A, electrical life 100,000 and mechanical life 5,000,000 operations and operating time 7ms. With the following conditions :

- dielectric strength : between coil and contacts 5kV rms 1min
- dielectric strength : between open contacts 1kV rms 1min
- dielectric strength : between adjacent contacts 1kV rms 1min
- insulation resistance : 1000mW at 500VDC
- operating temperature : -30 to +75 deg C
- approval UL/CSA recognized

Type 4 specification information generated by Helen Too 16-9-2004