Multifinger Terminal Test Block Block de Pruebas Multipunto



NWRTS / NWRTP





Multifinger Terminal Test Block

Block de Pruebas Multipunto

NWRTS range of Relay Test Blocks are housed in size E2 unit in the Epsilon range of enclosures.

NWRTS range of Relay Test Blocks and **NWRTP** range of Test Plugs facilitates safe and in-situ monitoring and testing of Power Systems Protection schemes.

NWRTS range of Relay Test Blocks comprises 14 pairs of spring loaded contacts. Each is independently terminated at the rear as 28 separated terminals, each with an M4 screw outlet for 'L' shaped pre-insulated crimp terminations for connecting external wiring and 2 nos blades - 4.8mm x 0.8mm cross section to accept snap on connectors.

Each individual circuit consists of a pair of contacts that remain closed to complete the circuit link when the related protective system is in normal service mode. The **NWRTS** cover, when in place provides adequate safeguards from electric shock hazard.

Upon removal of the NWRTS Cover, an orange painted Strip on the face of Test Block provides ample visual indication that the system is out of service. Earth terminal is provided at the rear top on NWRTS.

Internal circuits for the purpose of testing can be accessed after remove the front cover. The cover when removed will interrupt the circuit between terminal 13 and 14 as the metallic probe attached to the inside of NWRTS-01 that closes the circuit between terminal 13 and 14 too is withdrawn. Upon routing the main DC auxiliary supply to the protection system or Relay trough this circuit, removal of the Test Block front cover will thereby prevent inadvertent tripping of the protection system under test.

NWRTS-02 does not have this metallic probe, since the contacts between terminal 13 and 14 are closed.



Terminals 13 and 14 on NWRTS-01 and NWRTS-02 should not be used for CT connections since this will pose a safety hazard. As the related NWRTP-01 test plug contact is shorter than the others, it would result in an open circuit path on the NWRTS-02. Connections to the others related equipments viz. CTs, VTs, DC supplies etc should be made to odd numbered terminals on the test block. This is to ensure that when the Test Plug are the isolated Relay circuits and the sockets in the orange half are connected to the potentially live supplies.



NWRTP-01

This is a multifinger test plug when inserted open the contacts of circuits in the test block. The Test Plug consists of 28 (each), 4 (mm) of diameter, sockets. Each socket corresponds to the numbered case terminal and is identified by identical number.

NWRTP-01 Test Plug when inserted into the Test Block it is securely retained by means 2 (each) knurled knobs. Shorting wire links are also provided with the NWRTP-01 test block.

The following accessories are provided with each NWRTP-01 Test Plug.:

4 (each), 150 (mm) long cable consisting of 4 (mm) plugs at both ends. 4 (each), 50 (mm) long cable consisting of 4 (mm) plugs at both ends. 6 (each), 4 (mm) plugs which accepts flexible insulated cable up to 2.5 mm2 for test lead purposes.

NWRTP-01



Before inserting the Test Plug NWRTP- 01 into the Test Block NWRTS- 01 it is essential that sockets in NWRTP-01 that corresponds to the current transformer secondary windings are shorted using external shorting wire links. This is to avoid dangerously high voltages. It is also essential to ensure that the ammeter is on the correct range and that it is connected to its test leads, before inserting a test plug to measure current.

NWRTP-01 Insertado en NWRTS-01



NWRTP-02

This is a single finger Test Plug that can be inserted into individual test positions. NWRTP-02 consists of two contacts which are insulated from one another. Each contact is connected to a lead wire. For polarity identification, one core is red and the other black. Each NWRTP-02 Test Plug is provided with 1.0 mm2-twln flexible cable of 1.5 metre length.



It is essential that adequate precautions and safety measures are taken before proceeding with the measurements and testing.
When using for voltage measurements, it is possible to access hazardous live voltages via the single finger Test Plug.

• While monitoring secondary CT current, the leads from the single finger Test Block must never be open Circuited. If done, it can generate lethal level voltages.

MODELS ORDERING CODES

- NWRTS 01 : Standard Test Block in vertical version
- NWRTS 02 : Specially designed Test Block for busbar systems, in vertical version.
- NWRTS 03 : Horizontal version of NWRTS 01
- NWRTS 04 : Horizontal version of NWRTS 02
- NWRTP 01 : Multi-finger Test Plug with accessories.
- NWRTP 02 : Single finger Test Plug.

TECHNICAL INFORMATION

High Voltage withstand NWRTS-0X

NWRTP-0X

Current withstand NWRTS-0X NWRTP-0X

Temperature Storage & transit : Operating Humidity

Enclosure Protection EMC compliance :

- 2.5 k V rms for 1 minute between all case terminals connected together and the case earth terminal.
 2 k V rms for 1 minute between incoming and outgoing contacts when inserted.
- : All contact circuits are rated for 20A continuous or 300A for 1s, ac or dc. : All contacts are rated for 20A continuous.
- -250 C to + 700 C : -250 C to + 55 oC
- : Tested for 56 days at 90% RH & + 400 C
- : IP 50. Dust protected.
 - Relay Test Blocks and Relay test plugs have been classified as electromagnetically benign. It has therefore, been excluded from European Community EMC directive (89/336/EEC)

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NWRTS / NWRTP

Panel cut-out



Flush mounting fixing details



* All dimensions in mm

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