

VigiPacT RHB, type B Residual-Current Protection Relays

Functions

The VigiPacT RHB:

- Measures the residual current detected by the toroid.
 - Displays the residual current.
 - Trips the installation protection circuit breaker through an MN or MX release if the residual current exceeds the threshold $I\Delta N$ for a time greater than the delay Δt .
- The relay implements two insulation monitoring thresholds, one corresponding to a pre-alarm and another to an alarm.

Alarm Detection

The alarm threshold I_{alarm} corresponds to a residual current that is dangerous for the installation.

An alarm is active when the measured residual current is greater than the set alarm threshold (I_{alarm}) on toroid for a period of time greater than the set alarm delay (t_{alarm} in milliseconds or seconds).

- When an alarm is active, AL1 and AL2 LEDs are switched on.
- When an alarm is detected, the residual current value in the LCD display blinks.

Pre-Alarm Detection

The pre-alarm threshold $I_{\text{pre-alarm}}$ corresponds to an earth leakage level that must be eliminated before being dangerous for the installation.

A pre-alarm is active when the measured residual current is greater than the set pre-alarm threshold for a period of time greater than the set pre-alarm trip delay ($t_{\text{pre-alarm}}$ in milliseconds or seconds).

- When a pre-alarm is active, AL1 LED is switched on.
- When a pre-alarm is detected, the residual current value in the LC display blinks.

Time Delays

Ton1 and Ton2 delay the alarm output through LEDs and relays.

- Ton1 time delay is related to pre-alarm
- Ton2 time delay is related to alarm.

RHB Installation

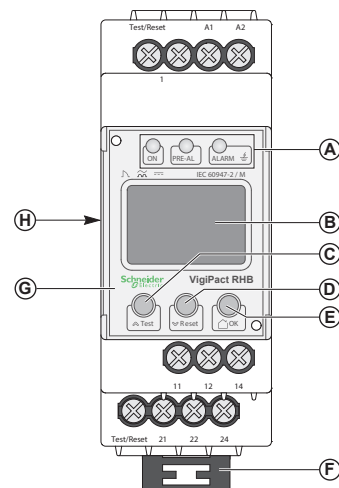
- On a DIN rail (flush mounted or in cubicle)
- Screwed on a plate (with optional kit LV..., sold separately)
- Install the connectors delivered with the RHB.

Compatibility with Toroids

- VigiPacT RHB relays may only be used with closed toroid (B type).



VigiPacT RHB



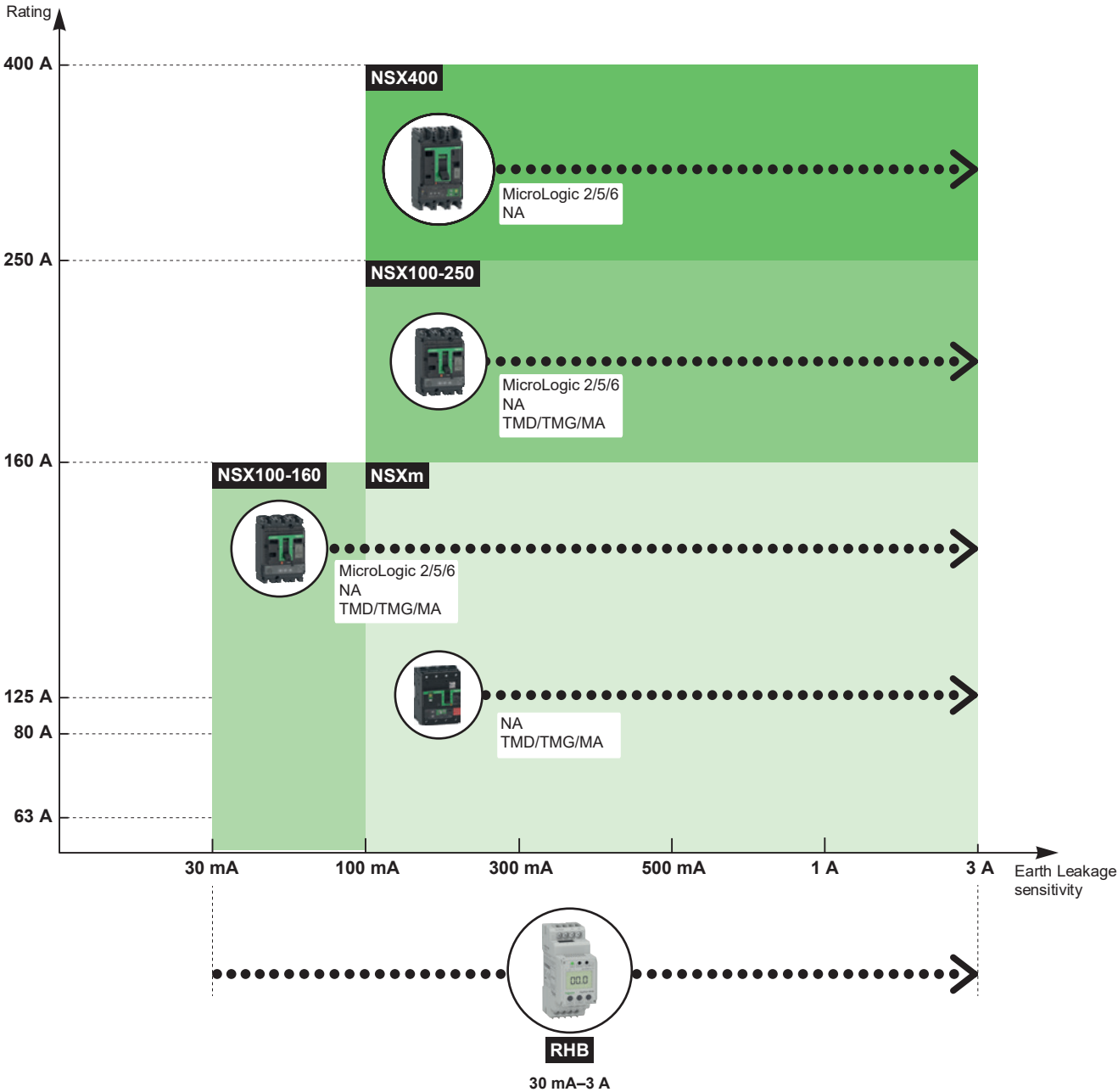
- A Status LEDs: On, Pre-alarm, Alarm
- B Multifunctional LCD display
- C Test/UP button
- D Reset/DOWN button
- E MENU/OK button
- F DIN clip
- G Lead-seal cover
- H QR code to access device information
- I Socket for toroid connection with the wiring kit



B type active closed toroid



Tested ComPacT NSX/NSXm & VigiPacT RHB combinations



Please see further information in our VigiPacT catalogue.