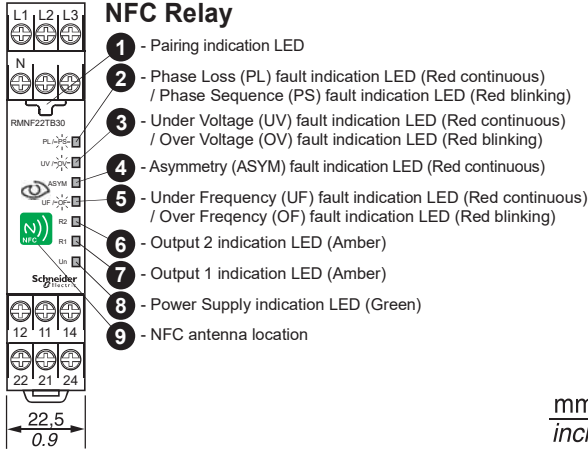


# 1 Description

## NFC 3-Phase Control Relay

### RMNF22TB30



### Application



**Note:**

- To use this product, you must use an Android phone with NFC feature and Android OS version 4.4 and above.
- The App can be downloaded with any of the methods below:
  - Align the mobile phone NFC antenna to the product NFC antenna will bring you to the Google play store for App downloading.
  - Go to Google Play Store and search for "Zelio NFC".
  - You can also use the QR code on the right to download the App.



- ① - Control Relay Model
- ② - 3-phase and 3-phase + neutral toggle
- ③ - Auto Configure option
- ④ - Manual Configure option
- ⑤ - Read Write Settings from phone to control relay, or clone (copy) settings from 1 control relay to another

**⚠ DANGER**

**HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH**

- Disconnect all power before servicing equipment.

Failure to follow this instruction will result in death or serious injury.

**⚠ WARNING**

**EQUIPMENT OPERATION HAZARD**

- Do not use this product in safety critical system.  
 - Do not disassemble, repair or modify this product.  
 - Do not operate beyond the recommended operating environment.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

**⚠ CAUTION**

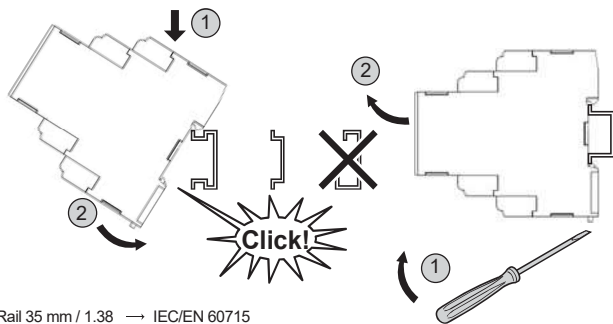
**EQUIPMENT OPERATION HAZARD**

- Install 1 A fuse Class CC / gG OR equivalent 480 V / 277 V, 0.5 A Z-curve circuit breaker on L1, L2 and L3 before use.

Failure to follow this instruction can result in injury or equipment damage.

Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

## 2 Installation

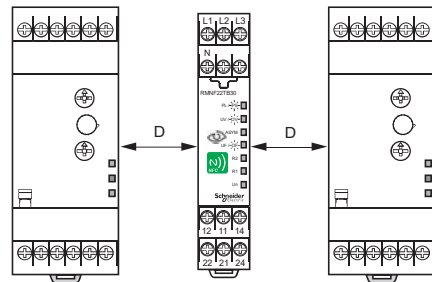


Rail 35 mm / 1.38 → IEC/EN 60715

	Ø 3.5 mm / 0.14 in		Nm	0.6...1
			lb-in	5.3...8.8

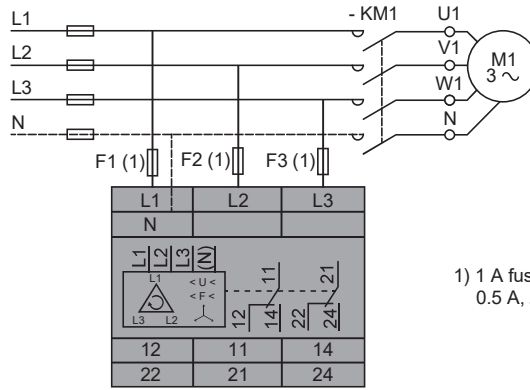
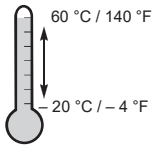
mm in.	6 0.24			
mm <sup>2</sup>	0.5...3.33	0.5...2.5	0.5...2.5	0.5...1.5
AWG	20...12	20...14	20...14	20...16

Adjacent Products



Recommended distance (D) between RMNF22TB30 and adjacent components is 10 mm / 0.39 inch minimum; to ensure heat dissipation through natural airflow.

### 3 Cables



1) 1 A fuse Class CC / gG OR equivalent 480 V / 277 V, 0.5 A, Z-Curve circuit breaker on L1, L2 and L3 before use.

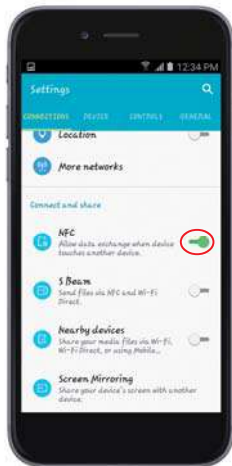
L1, L2, L3, (N) : Supply to be monitored (with or without neutral)  
 12, 11, 14 : 1st C/O contact of output relay  
 22, 21, 24 : 2nd C/O contact of output relay

L1/L2/L3	3 AC~, 208-480 V, 50-60 Hz, 4 VA
L1/L2/L3/N	3 AC~, 120-277 V, 50-60 Hz, 4 VA
	8 A / 250 V~

### 4 Set Up The Phone

Step (1): Turn On NFC feature on mobile device

- Go to phone setting or use phone shortcut to turn On the NFC feature.
- Different phone model might have different GUI design to turn On NFC feature.



Step (2): Locate the position of the NFC antenna of your mobile phone

- The NFC antenna is usually located at the back of your phone. Place the phone around the product front face and adjust until the "pairing LED" is lit-up.

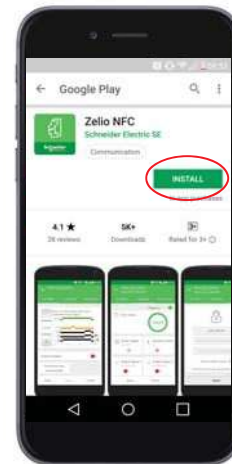


Lit-up indicates that the product is within the communication range with the mobile device.

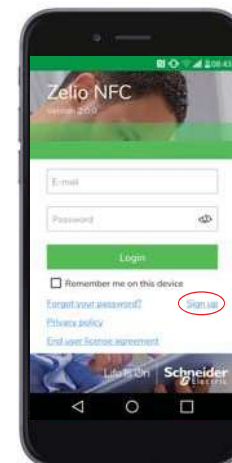
**Note:** Beware that some phone models have NFC antenna built in the battery. If you are changing your original battery to 3rd party battery, your mobile device might lose the NFC capability.

Step (3): Install Zelio NFC App from Google store

- Follow the steps shown in page 1 to download the Zelio NFC App



Step (4): After installing the Zelio NFC App, please register a user account to enjoy the product with enhanced features.



## 5 Application Function

Through Zelio NFC App installed into your mobile device, you could retrieve & configure product setting, diagnose product status, lock/unlock the product setting and share product settings through platforms such as email. All related function diagrams, wiring diagrams and Quick Start Guide can be obtained from the App.

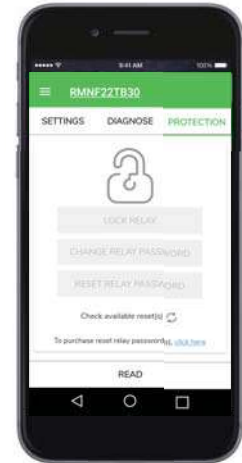
Setting Page



Diagnose Page

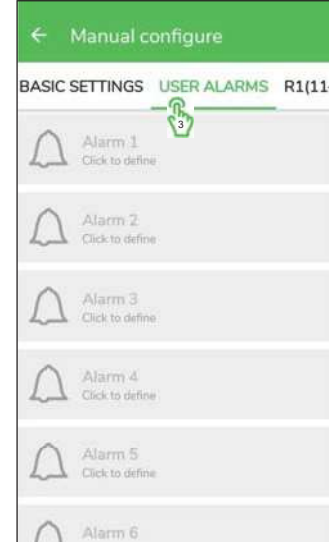
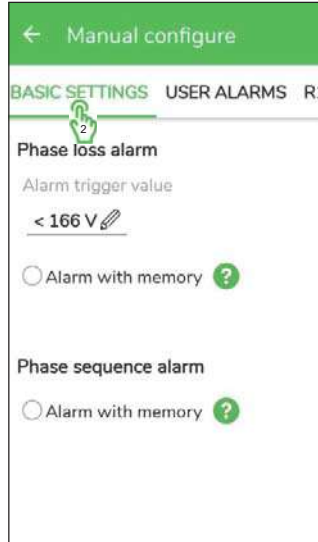


Protection Page

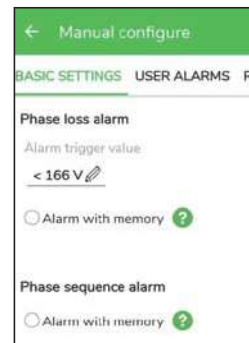
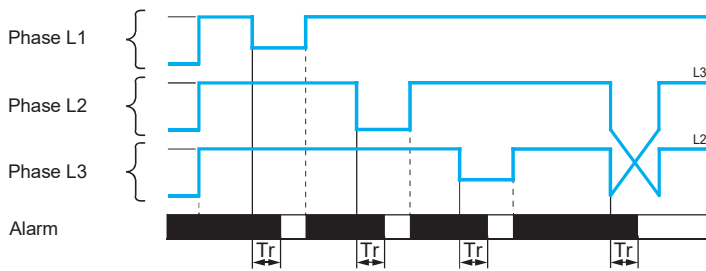


## 6 Alarm Configuration

Follow the steps to get to the manual configuration screen in the App.



### Phase Loss & Phase Sequence

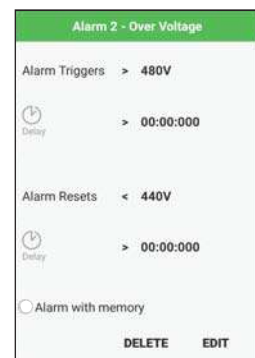
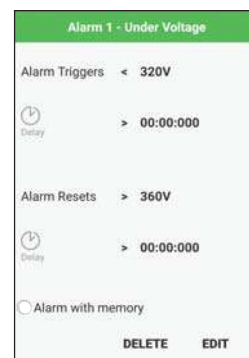
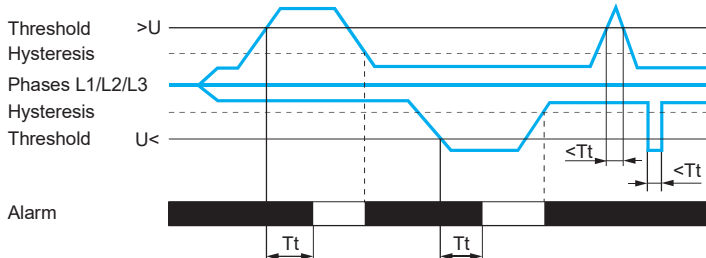


### Function diagram:

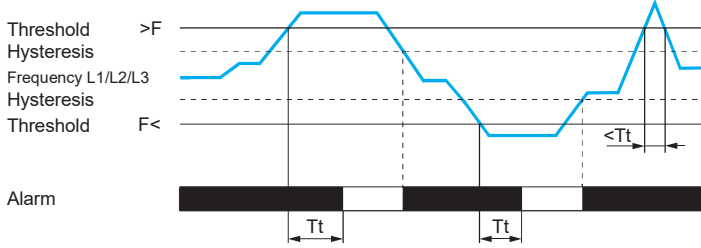
- Alarm triggered
- Alarm not triggered

Note:  $T_t$ : time delay after crossing of threshold (adjustable in Zelio NFC app)  
 $T_r$ : response after crossing of threshold (< 300 ms)

### Overvoltage & Undervoltage



Over Frequency & Under Frequency



**Alarm 3 - Under Frequency**

Alarm Triggers < 46.0Hz

Delay > 00:00:00

Alarm Resets > 48.0Hz

Delay > 00:00:00

Alarm with memory

DELETE EDIT

**Alarm 4 - Over Frequency**

Alarm Triggers > 64.0Hz

Delay > 00:00:00

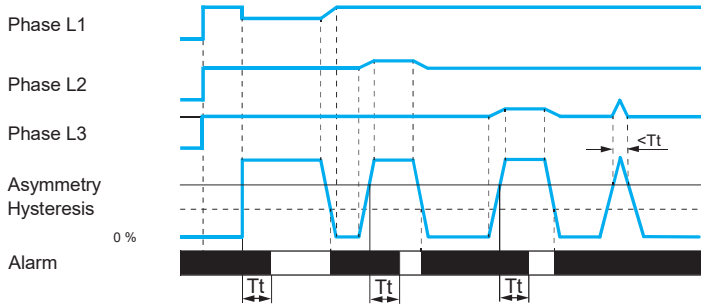
Alarm Resets < 62.0Hz

Delay > 00:00:00

Alarm with memory

DELETE EDIT

Asymmetry



**Alarm 5 - Asymmetry**

Alarm Triggers > 6V

Delay > 00:01:00

Alarm Resets < 5V

Delay > 00:01:00

Alarm with memory

DELETE EDIT

7 Application Configuration Screen - Alarm output combination using AND, OR and NOT logic

The screenshot shows the 'Manual configure' screen for alarm output combination. It includes sections for 'Output', 'Alarm triggers', and logic selection. Numbered callouts 1 through 10 point to specific UI elements: 1 (Tab selection), 2 (OR/AND logic), 3 (Not logic), 4 (SIMULATION button), 5 (Info icon), 6 (Toggle for relay status), 7 (+ icon for Add Alarm), 8 (Toggle for Phase Loss/Sequence), 9 (Trash icon for Delete Alarm), and 10 (COPY TO button).

- ① Tab selection
- ② OR / AND logic for alarm combination
- ③ Not logic for Alarm combination
- ④ Simulator to check Alarm logic combination
- ⑤ Info tab to show relay status based on logic results
- ⑥ Toggle to change relay status if alarm is triggered
- ⑦ Add Alarm
- ⑧ Toggle to turn Phase Loss or Phase Sequence on or off
- ⑨ Delete Alarm
- ⑩ Copy existing alarm combination to the other relay output

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This product must be installed, connected and used in compliance with prevailing standards and/or installation regulations. As standards, specifications and designs develop from time to time, always ask for confirmation of the information given in this publication.