# RMT-111Q96

4921240131I

Phase sequence relays

**Data sheet**

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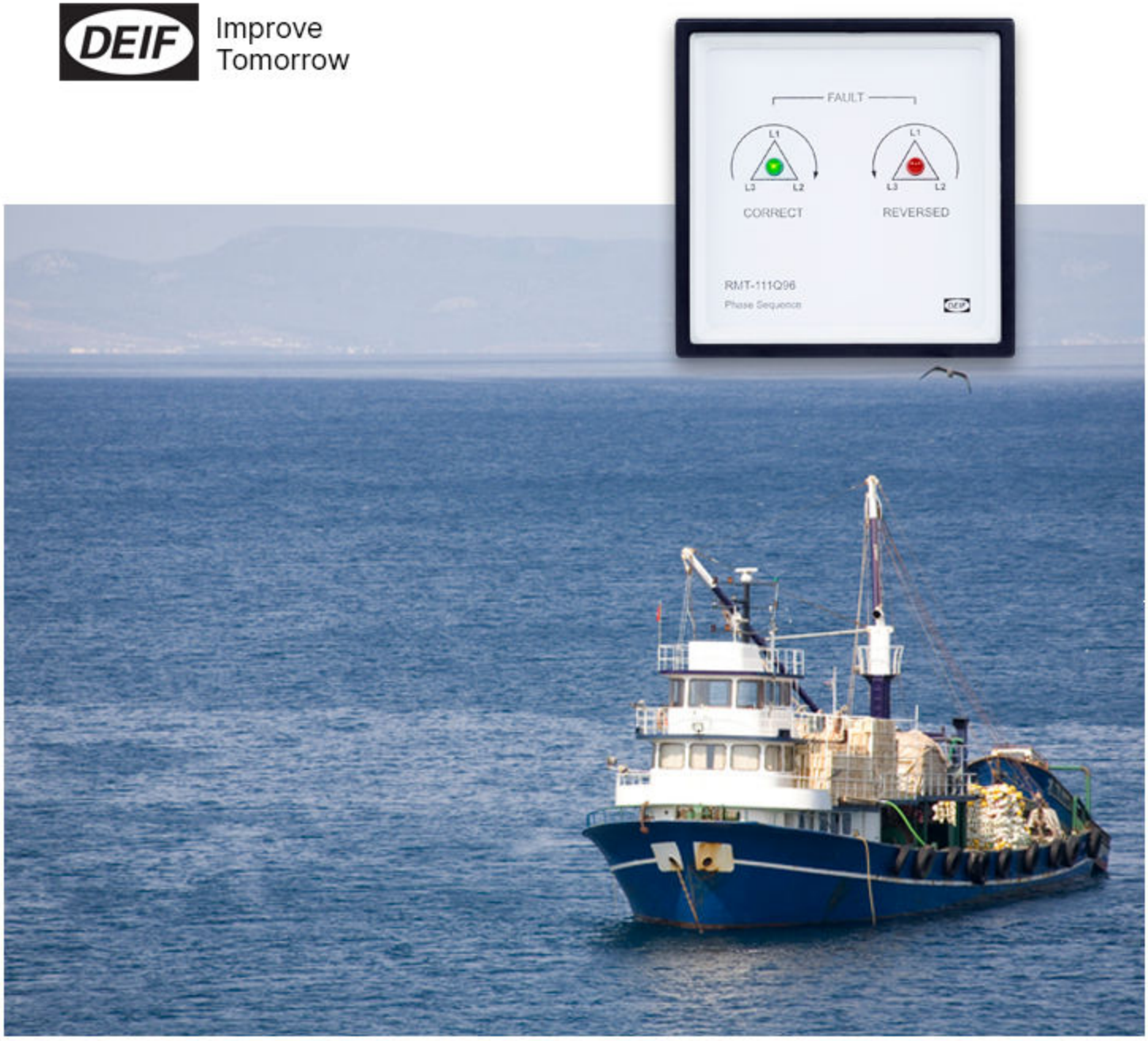


## 1. General information



## 2. Technical information



## 3. Ordering information

# 1. General information

- With change-over switch
- Clear indication of incorrect connection and phase breakage
- Long-life LED indicators
- Continuous operation
- Q96 housing for flush mounting

## 1.1 Application and features

### 1.1.1 Application

The phase sequence relay with relay contacts type RMT-111Q96 is applied for check of the phase sequence of a power plant.

The 400 $V_{a\ c}$ version of the RMT-111Q96 is type-approved by GL, LR and DNV.

A check of the phase sequence is especially required when connecting equipment to a new voltage source, for example when changing from the mains supply of a vessel to the mains at a harbour.

The indicator may furthermore be applied for alarm indication on phase breakage.

The RMT-111Q96 is equipped with two LEDs on the front for indication of the phase condition.

### 1.1.2 Measuring principle

The RMT-111Q96 is connected to all 3 phases of a 3-phase system and registrates the direction of the phase rotation.

If the phase sequence of the supervised power source is correct (L1 - L2 - L3), the LED marked "CORRECT" is lit, and the relay is energised.

If the phase sequence of the supervised power source is incorrect, that is the phase sequence is reversed (L1 - L3 - L2), the LED marked "REVERSED" is lit, and the relay is de-energised.

Should a phase breakage occur, both LEDs will be lit for clear indication of the fault condition, and the relay is de-energised.

### 1.1.3 Relay contacts

The RMT-111Q96 is provided with a change-over switch:

| | |
|---|---|
| Terminals 1-2 closed: | Shore connection OK (relay energised) |
| Terminals 2-3 closed: | Shore connection not OK (relay de-energised) |

# 2. Technical information

## 2.1 Technical specifications and dimensions

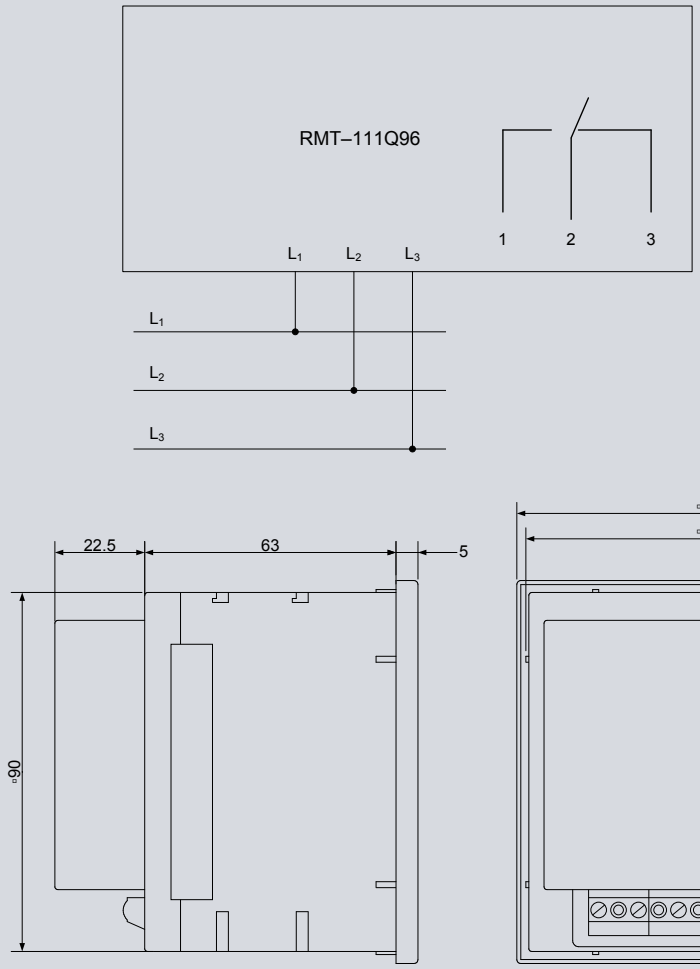
### 2.1.1 Technical specifications

| | |
|---|---|
| **Meas. voltage** | 230 $V_{ac}$ ±20 % or 400 $V_{ac}$ ±20 % |
| Consumption | Max. 3 W |
| **Frequency range** | 47 to 63 Hz |
| **Relay output** | Change-over switch |
| **Contact ratings** | 250 V - 6 A - 1500 VA ($_{ac}$)<br>24 V - 6 A - 150 W ($_{dc}$) |
| Contact voltage | Max. 250 V ($_{ac}$) |

### 2.1.2 General technical specifications

| | |
|---|---|
| **Temperature** | -10 to 55 °C (nominal), -25 to 60 °C (operating), -25 to 65 °C (storage) |
| **Shock test** | 15 g - 6 times, 3 directions<br>50 g/6 ms<br>22 g/20 ms |
| **Climate** | HUE, to DIN 40040 |
| **EMC** | To EN 50081-1/2, EN 50082-1/2, SS4361503 (PL4) and IEC 255-3 |
| **Connections** | Max. 4.0 $mm^2$ (single-stranded)<br>Max. 2.5 $mm^2$ (multi-stranded) |
| **Materials** | All plastic parts are self-extinguishing to UL94 (V0) |
| **Protection** | Case: IP53. Terminals: IP20, to IEC 529 and EN 60529 |

## 2.1.3 Connections/dimensions (in mm)




Weight: Approx. 0.200 kg

# 3. Ordering information

## 3.1 Order specifications and disclaimer

### 3.1.1 Available variants

| Item no. | Variant no. | Variant description |
|---|---|---|
| 2918310010 | 01 | RMT-111Q96 All voltages |

### 3.1.2 Order specifications

**INFO**
There are no additional options to the standard variant.

**Variants**

| Mandatory information | | | |
|---|---|---|---|
| Item no. | Type | Variant no. | Measuring voltage |
| | | | |

Example:

| Mandatory information | | | |
|---|---|---|---|
| Item no. | Type | Variant no. | Measuring voltage |
| 2918310010-01 | RMT-111Q96 | 01 | 400 $V_{ac}$ |

### 3.1.3 Disclaimer

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