

MACX-MR-3V-900-PT - Monitoring relay



1336547

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3-phase voltage monitoring relay, with overvoltage, undervoltage, window monitoring as well as phase sequence, phase loss failure, asymmetry (adjustable asymmetry) and neutral monitoring functions. 24 V AC/DC ... 240 V AC/DC wide range power supply, with adjustable threshold values, response delay, and supporting failure record storage and NFC communication. True RMS value test.

Commercial data

Item number	1336547
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	C443
Product key	CK4711
GTIN	4063151636579
Weight per piece (including packing)	301.2 g
Weight per piece (excluding packing)	298 g
Customs tariff number	85364900
Country of origin	CN

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Technical data

Product properties

Product type	Voltage monitoring relay
Operating mode	Closed circuit or wire break

Insulation characteristics: Railway standard

Overvoltage category	III
Pollution degree	3

Electrical properties

Service life electrical	approx. 1×10^5 cycles, resistive load 2000 V A
Maximum power dissipation for nominal condition	15 W
Mains type	3-phase

Railway standard

Rated insulation voltage	1000 V (Between the measuring circuit and other circuits)
	600 V (Between other circuits)

Electrical isolation

Electrical isolation	300 V
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Supply

Supply voltage range	24 V AC ... 240 V AC -15 % ... +10 %
	24 V DC ... 240 V DC -25 % ... +30 %
	24 V ... 240 V AC (Railway application)
	48 V ... 110 V DC (Railway application)
Nominal power consumption	15 VA (1.5 W)

Input data

Input name	Measuring input
Measured value	AC sine (48 Hz ... 63 Hz)
Input resistance of voltage input	1 MΩ
Frequency range	48 Hz ... 400 Hz
Maximum temperature coefficient	0.05 %/K
Setting range for response delay	0 s ... 99.9 s
Min setting range of the voltage threshold value	480 V
Max. setting range of the voltage threshold value	900 V
Function	Undervoltage
	Overvoltage
	Window
	Asymmetry
	Phase sequence
	Phase failure
	Neutral conductor break

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Basic accuracy	1 %
Repeat accuracy	0.5 %
Asymmetry	5 % ... 25% / OFF
Recovery time	200 ms

Output data

Switching

Contact switching type	2 floating changeover contacts
Contact material	AgSnO
Maximum switching voltage	250 V AC
Interrupting rating (ohmic load) max.	2000 VA (8 A/250 V AC)
Output fuse	8 A (fast-blow)

Connection data

Connection method	Push-in connection
Stripping length	10 mm
Conductor cross section rigid	0.2 mm ² ... 2.5 mm ²
Conductor cross section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross section AWG	24 ... 14

Dimensions

Width	45 mm
Height	109 mm
Depth	114 mm

Material specifications

Flammability rating according to UL 94	V0
Housing insulation material	PBT

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP40 (Housing) IP20 (Connection terminal blocks)
Ambient temperature (operation)	-25 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Altitude	2000 m
Permissible humidity (operation)	10 % ... 95 %

Approvals

CE

Identification	CE-compliant
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UL, USA/Canada

Identification	UL/C-UL Listed UL 508
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CCC

Identification	GB/T 14048.5
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EMC data

Low Voltage Directive	Conformance with Low Voltage Directive
Noise immunity	EN 61000-6-2
Electromagnetic compatibility	Conformance with EMC directive
Noise emission	EN 61000-6-4

Standards and regulations

Railway standard

Standard designation	EN 50155, GB/T 25119
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Mounting

Assembly note	on standard DIN rail NS 35 in accordance with EN 60715
Mounting position	any

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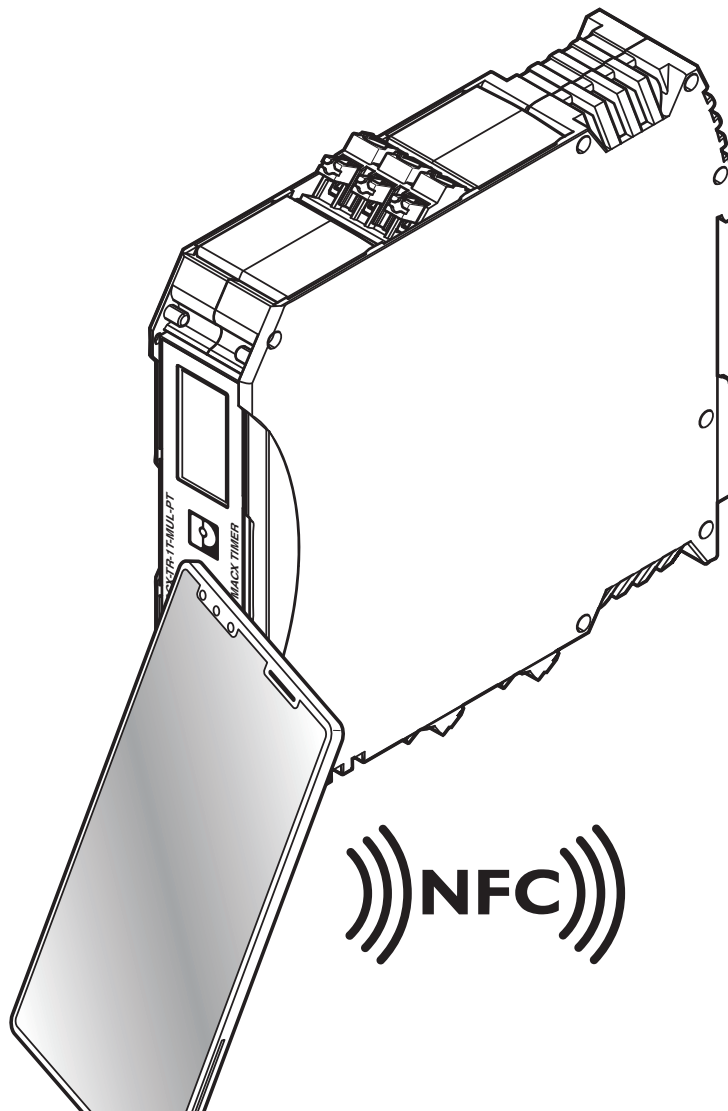
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Drawings

Schematic diagram



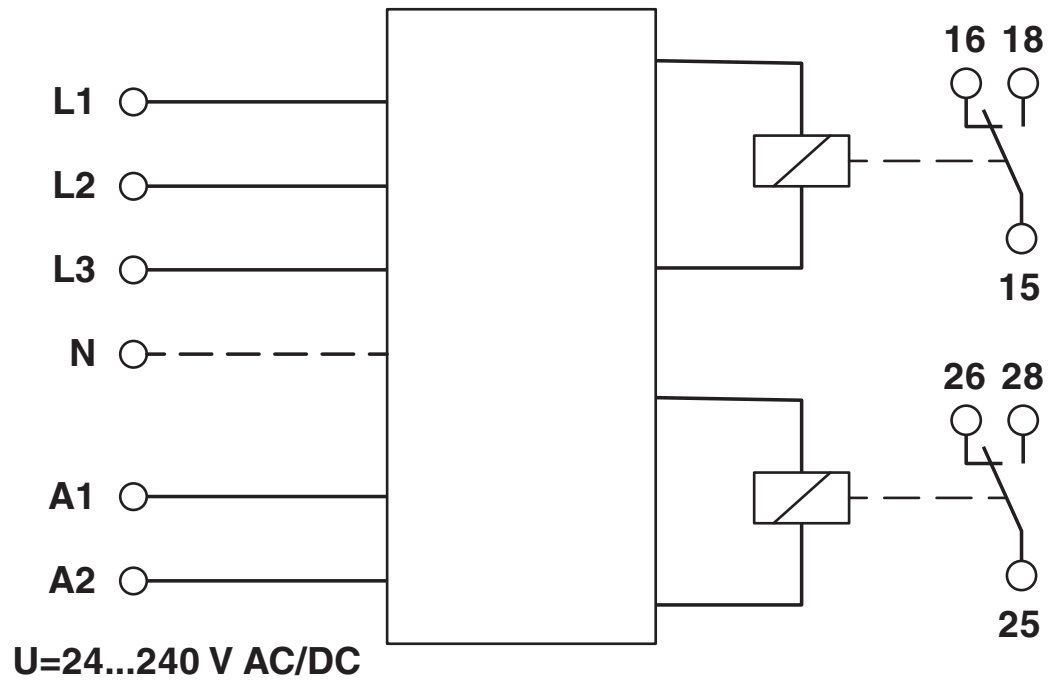
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Block diagram



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Classifications

ECLASS

ECLASS-11.0	27371801
ECLASS-13.0	27371801
ECLASS-12.0	27371801

ETIM

ETIM 9.0	EC001438
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Environmental product compliance

EU RoHS	
Fulfills EU RoHS substance requirements	Yes
Exemption	7(a), 7(c)-I
China RoHS	
Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.
EU REACH SVHC	
REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)

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Accessories

MACX-BLUETOOTH-NFC - Adapter

1142259

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Bluetooth NFC adapter

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