

# RLC16

# Relay card

#### **FEATURES**

- From the Vibro-Meter® product line
- Relay card with screw terminal strip
- 3 16 relays with change-over contacts
- » Relay driver inverter logic (jumper selectable)
- >> Low contact resistance
- >> Low capacitance
- High through power
- Live insertion and removal of cards (hot-swappable)
- Conforms to EC standards for EMC



RLC16

## **DESCRIPTION**

The RLC16 relay card is designed for use in the VM600 series of machinery protection systems and condition and performance monitoring systems, from Meggitt Sensing Systems' Vibro-Meter® product line. It is an optional card, for use when the four relays on the IOC4T input/output card are insufficient for the application and additional relays are required.

The RLC16 is installed in the rear of the VM600 (ABE04x) rack and connects directly to the rack backplane via a single connector.

The RLC16 contains 16 relays with change-over contacts. Each relay is associated with 3 terminals on a screw terminal strip accessible at the rear of the VM600 rack.

The relays are controlled by open-collector drivers under software control. Jumpers on the RLC16 card allow the selection of relay normally energized (NE) or normally de-energized (NDE).



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#### **SPECIFICATIONS**

## Relay characteristics

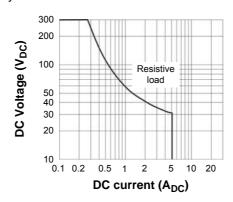
Relay names : RL1 to RL16
Type : PE014005

Contact arrangement : 1x COM, 1x NC and 1x NO contact/relay.

All relay contacts are available on J1, J2 and J3.

 $\begin{array}{lll} \mbox{Nominal rated voltage} & : 250 \ \mbox{V}_{AC} \\ \mbox{Nominal rated current} & : 5 \ \mbox{A}_{AC} \\ \mbox{Maximum breaking capacity} & : 1250 \ \mbox{VA} \\ \mbox{(without contact protection)} & & & & & & & \\ \end{array}$ 

Maximum DC load breaking capacity curve:



Operate / release / bounce time : Typically 8 / 8 / 6 ms Dielectric strength test voltages

Between open contacts
 Between contact and coil
 1000 V<sub>AC</sub>
 4000 V<sub>AC</sub>

Mechanical life :  $15 \times 10^6$  operations Electrical life :  $>10^5$  operations



When used in a VM600 Slimline rack (ABE056) with a DC power supply, the relay contacts on a RLC16 card have a maximum switching voltage of 70  $V_{DC}$  / 33  $V_{AC\ (RMS)}$  (46.7  $V_{AC\ (PEAK)}$ ).

#### Relay card characteristics

Presentation : 16 relay PCB

Relay state : Normally energized or normally de-energized

(jumper selectable)

External connections : Screw terminal connectors (J1, J2 and J3)

Mounting : Installs in the rear of a VM600 rack and connects to the

rack's backplane via a connector

Temperature range : See above relay characteristics Humidity : ≤95% (RH non-condensing)

#### Power supply to RLC16

Supply voltage :  $+5 V_{DC}$ 

Consumption : 40 mA x16 (per relay)



# **SPECIFICATIONS** (continued)

#### **Environmental**

Operating

Temperature
 Humidity
 Temperature
 1 -25 to +65 °C (-13 to +149 °F)
 10 to 90% non-condensing

Storage

Temperature
 -40 to +85°C (-40 to +185°F)
 Humidity
 0 to 95% non-condensing
 Vibrations and shock
 See general rack specifications

**Physical** 

Height : 6 U (262 mm, 10.31 in)

 Width
 : 20.1 mm

 Depth
 : 125 mm

 Weight
 : 0.3 kg

# **ORDERING INFORMATION**

To order please specify

Туре	Designation	Ordering number
RLC16	Relay card	
	'Standard' version	200-570-000-1Hh
	'Separate circuits' version, in accordance with IEC/CEI 60255-5	200-570-000-2Hh

#### Notes

<sup>&</sup>quot;Hh" represents the hardware version.

<sup>&</sup>quot;H" increments are for major modifications that can affect product interchangeability.

<sup>&</sup>quot;h" increments are for minor modifications that have no effect on interchangeability.



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Meggitt Sensing Systems is the operating division of Meggitt specializing in sensing and monitoring systems, which has operated through its antecedents since 1927 under the names of ECET, Endevco, Ferroperm Piezoceramics, Lodge Ignition, Sensorex, Vibro-Meter and Wilcoxon Research. Today, these operations are integrated under one strategic business unit called Meggitt Sensing Systems, headquartered in Switzerland and providing complete systems, using these renowned heads.

brands, from a single supply base.

The Meggitt Sensing Systems facility in Fribourg, Switzerland was formerly known as Vibro-Meter SA, but is now Meggitt SA. This site produces a wide range of vibration and dynamic pressure sensors capable of operation in extreme environments, leading-edge microwave sensors, electronics monitoring systems and innovative software for aerospace and land-based turbo-machinery.



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