

DATA SHEET

Vibro-Meter®

VM600 RLC16  
relay card



KEY FEATURES AND BENEFITS

- From the Vibro-Meter® product line
- Relay card with screw-terminal connectors
- 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

APPLICATIONS

- Machinery protection

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's 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 a VM600 rack (ABE04x or ABE056) 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 connector 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).

For further information on the use of RLC16 cards in general, refer to the *VM600 machinery protection system (MPS) hardware manual* and the *VM600 MPSx software manuals*.

For specific applications, contact your local Meggitt representative.

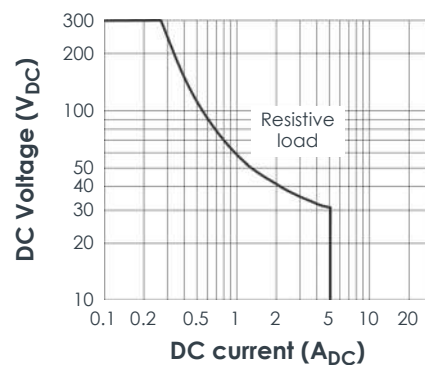


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## SPECIFICATIONS

### 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.
Nominal rated voltage	: 250 V <sub>AC</sub>
Nominal rated current	: 5 A <sub>AC</sub>
Maximum breaking capacity (without contact protection)	: 1 250 VA
Maximum DC load breaking capacity curve:	



Operate / release / bounce time	: Typically 8 / 8 / 6 ms
Dielectric strength test voltages	
• Between open contacts	: 1 000 V <sub>AC</sub>
• Between contact and coil	: 4 000 V <sub>AC</sub>
Mechanical life	: 15 x 10 <sup>6</sup> operations
Electrical life	: > 10 <sup>5</sup> 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<sub>DC</sub> / 33 V<sub>AC</sub> (RMS) (46.7 V<sub>AC</sub> (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

## SPECIFICATIONS *(continued)*

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### Environmental

#### Temperature

- Operating : -25 to 65°C (-13 to 149°F)
- Storage : -40 to 85°C (-40 to 185°F)

#### Humidity

- Operating : 0 to 90% non-condensing
- Storage : 0 to 95% non-condensing

### Approvals

- Conformity : CE marking, European Union (EU) declaration of conformity.  
EAC marking, Eurasian Customs Union (EACU) certificate/  
declaration of conformity.
- Electromagnetic compatibility : EN 61000-6-2.  
EN 61000-6-4.  
EN 61326-3-1.  
TR CU 020/2011.
- Electrical safety : EN 61010-1.  
TR CU 004/2011.
- Vibration : IEC 60255-21-1 (Class 2)
- Insulation coordination for measuring  
relays and protection equipment : Separate circuits according to IEC 60255-5  
for the "separate circuits" version of the RLC16
- Environmental management : RoHS compliant
- Russian federal agency for technical  
regulation and metrology (Rosstandart) : Pattern approval certificate CH.C.28.004.A N° 60224

### Power supply to card (input)

- Power source : VM600 rack power supply
- Supply voltage : +5 V<sub>DC</sub>
- Consumption : 40 mA × 16 (per relay)

### Connectors

- J1 : 16-contact screw-terminal connector.  
Outputs (contacts) for relays RL1 to RL6.
- J2 : 16-contact screw-terminal connector.  
Outputs (contacts) for relays RL6 to RL11.
- J3 : 16-contact screw-terminal connector.  
Outputs (contacts) for relays RL11 to RL16.

### Physical

- Height : 6U (262 mm, 10.3 in)
- Width : 20 mm (0.8 in)
- Depth : 125 mm (4.9 in)
- Weight : 0.30 kg (0.66 lb) approx.

## ORDERING INFORMATION

To order please specify

Type	Designation	Ordering number (PNR)
RLC16	Different versions of the VM600 relay card:	
	– Standard version	200-570-000-1Hh
	– Separate circuits version	200-570-000-2Hh

### Notes

"Hh" represents the hardware version. "H" increments are for major modifications that can affect product interchangeability.  
"h" increments are for minor modifications that have no effect on interchangeability.

## RELATED PRODUCTS

ABE04x	VM600 system racks	: Refer to corresponding data sheet
ABE056	VM600 slimline racks	: Refer to corresponding data sheet
AMC8 and IOC8T	VM600 analog monitoring card pair	: Refer to corresponding data sheet
CPUM and IOCN	VM600 modular CPU card and input/output card. Note: With a front-panel display and support for Modbus RTU/TCP or PROFINET.	: Refer to corresponding data sheet
CPUR and IOCR	VM600 rack controller and communications interface card pair. Note: With rack controller redundancy and support for Modbus RTU/TCP.	: Refer to corresponding data sheet
CPUR2 and IOCR2	VM600 rack controller and communications interface card pair. Note: With mathematical processing of fieldbus data and support for Modbus TCP and PROFIBUS.	: Refer to corresponding data sheet
IRC4	VM600 intelligent relay card	: Refer to corresponding data sheet
MPC4 and IOC4T	VM600 machinery protection card pair	: Refer to corresponding data sheets
MPC4G2 and IOC4G2	VM600 machinery protection card pair	: Refer to corresponding data sheet
RLC16G2	VM600 relay card	: Refer to corresponding data sheet
XMx16 and XIO16T	VM600 condition monitoring card pairs	: Refer to corresponding data sheet

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