

ROM6·1

Relay output module

Data sheet

4921240718A



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1. About the 600 series

1.1 About the hardware modules

The 600 series is a PLC-based programmable automation controller (PAC) suitable for land, marine, and wind power control applications. It is class approved, designed to marine specifications and can withstand very harsh operating conditions.

The controller is a highly flexible, modular PLC and I/O system that is designed for usage across a wide range of industrial applications. It is reliable, robust and flexible.

EtherCAT is used as native communication protocol both as the backplane communication and as interconnection between multiple 600 series racks via electrical or fibre optical connections. Other DEIF EtherCAT I/O modules or third party EtherCAT I/O modules can also be connected.

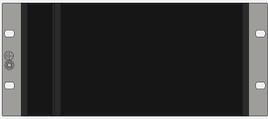
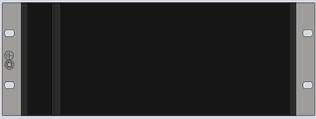
The hardware modules feature:

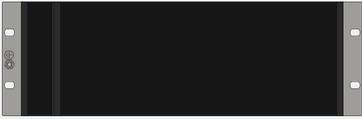
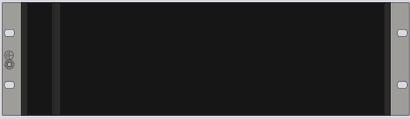
- Placement flexibility in the rack.
- Remove, replace, or add on-site.
- Automatically recognised.
- Configurable input and output functions (digital and analogue):
 - Digital input functions: Commands from operators or 3rd party equipment, changing configuration, operating information.
 - Digital output functions: Alarm status, commands to 3rd party equipment, operating information.
 - Analogue input functions: External set points, operating information, supervised binary inputs.
 - Analogue output functions: Operating information.

NOTE All slots must be covered during operation and blind modules can be used to cover unused slots.

Rack sizes

The controller rack is available in six different sizes:

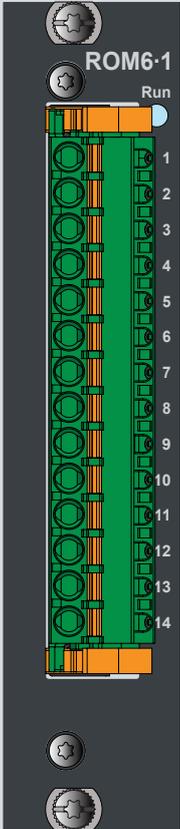
| Rack | Slots | Ground plate dimensions HxDxW (mm) | Weight (g) | Rack |
|----------|-------|---------------------------------------|------------|--|
| Rack6-4 | 4 | 122.0 x 113.9 x 182.4 | 715 |  |
| Rack6-6 | 6 | 122.0 x 113.9 x 233.2 | 870 |  |
| Rack6-8 | 8 | 122.0 x 113.9 x 284.4 | 1020 |  |
| Rack6-10 | 10 | 122.0 x 113.9 x 334.8 | 1175 |  |

| Rack | Slots | Ground plate dimensions HxDxW (mm) | Weight (g) | Rack |
|----------|-------|---------------------------------------|------------|--|
| Rack6-12 | 12 | 122.0 x 113.9 x 385.6 | 1335 |  |
| Rack6-14 | 14 | 122.0 x 113.9 x 436.4 | 1500 |  |

2. Technical specifications

2.1 ROM6-1 module specifications

ROM6-1 has 8 x normally open relays.

| Relay output module | | | |
|--|--|--|---|
|  <p>ROM6-1 Run</p> <p>1 2 3 4 5 6 7 8 9 10 11 12 13 14</p> | Power supply | From backplane using PDM6-1 module or PDM6-2 module | |
| | Backplane interfaces | 1 x EtherCAT OUT (Port 1) - LVDS 1 x EtherCAT OUT (Port 2) - LVDS | |
| | 8 relay outputs (normally open NO) | Type | Electromechanical |
| | | Electrical rating | Resistive load (continuously): 250 VAC @ 2 A 120 VAC @ 2 A 48 VAC @ 2 A 24 VAC @ 2 A |
| | | | 220 VDC @ 0.2 A 110 VDC @ 0.3 A 48 VDC @ 1 A 24 VDC @ 2 A 12 VDC @ 2 A |
| | | | Inductive load: (AC:B300, DC:R300) Altitude derating 2,000-4,000 m Max. 150 VAC |
| | | | ⚠ CAUTION: Relays with working voltages >150 V AC must be operated within the same relay group and not next to relays with 30 V DC working voltage. |
| | | Load type | Resistive, Inductive B300/R300 (power limit specification for inductive loads), Pilot duty |
| | | Operating cycles | Mechanical: >1 x 10 ⁷ cycles Electrical: >50,000 cycles (depending of load) |
| | | Response time (contact on/ brake off) | Operate time (typical): 10 ms Release time (typical): 7 ms |
| Isolation | Between relays: 2200 V 50 Hz for 1 minute Between relays and chassis: 3250 V 50 Hz for 1 minute | | |
| Size | 25.40 mm | | |
| Weight | 165 g (incl. connectors) | | |
| Power consumption | Typical 2.6 W (all relays ON) | | |
| Connector, grip (included by default) | 14 pole connector, push-in terminals, with snap lock 1810913 - FKC 2.5/14-ST-5.08-LR | | |
| Connector, screw | 14 pole connector, push-in terminals, with snap lock 1873320 - FKC 2.5/14-ST-5.08-LR | | |

3. Legal information

3.1 Disclaimer and copyright

Third party equipment

DEIF takes no responsibility for the installation or operation of any third party equipment, for example, a **genset**. Contact the **manufacturer** or third party equipment company if you have any doubt about how to install or operate the third party equipment.

Open source software

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The product continuously monitors the operating temperature and stores this information in a log file on the device. DEIF uses this information for service purpose and to validate if issues with the product are covered by the warranty.

The software packages supplied are believed to be of the highest quality. Due to the nature of the software development process, it is possible that there are hidden defects in the software which may affect its use, or the operation of any software or device developed with this software package.

DEIF does not undertake responsibility for determining whether this package is suitable for the application, nor for ensuring the correct operation of the application software and hardware.

The warranty does not cover product wear parts, such as:

- Internal flash disc
- If applicable, SD card (purchased separately)
- Replaceable coil-cell battery, used for the real-time clock (available as a spare part)

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