

IOM3.1

Input/output module

Data sheet

4921240639-D



Improve
Tomorrow



1. Series 300

1.1 About the hardware modules.....	3
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2. Technical specifications

2.1 Input/output module IOM3.1.....	4
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3. Legal information

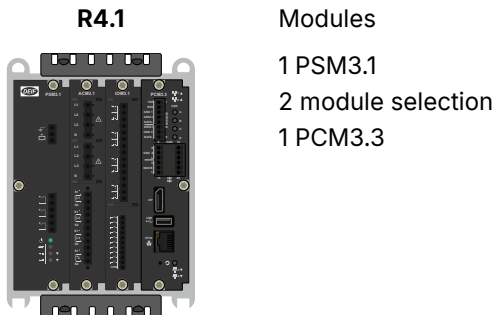
3.1 Disclaimer and copyright.....	6
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1. Series 300

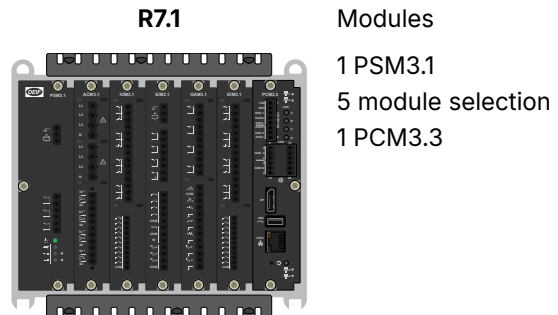
1.1 About the hardware modules

The hardware modules are printed circuit boards that slot in to either a R7.1 or R4.1 rack. Depending on the type of module, they can provide AC or other measurements, inputs, outputs and give communication indication.

Controller racks

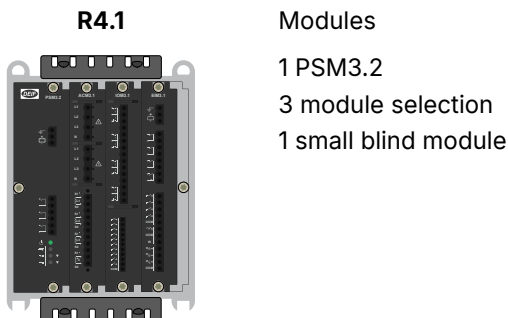


Modules
1 PSM3.1
2 module selection
1 PCM3.3

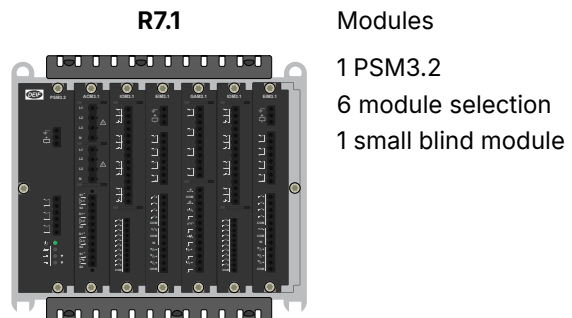


Modules
1 PSM3.1
5 module selection
1 PCM3.3

Extension racks (EtherCAT)



Modules
1 PSM3.2
3 module selection
1 small blind module



Modules
1 PSM3.2
6 module selection
1 small blind module

The hardware modules feature:

- Placement flexibility in the rack.
- Add, replace, or remove 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: Regulation *, operating information.

NOTE * Only available on certain types of controller.

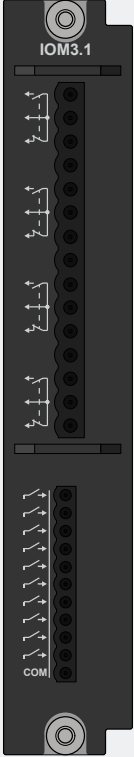


All slots must be covered during operation and blind modules can be used to cover unused slots.

2. Technical specifications



2.1 Input/output module IOM3.1

The input output module has 4 changeover relay outputs, and 10 digital inputs. These I/Os are all configurable.

IOM3.1 terminals

Module	Count	Symbol	Type	Name
	4		Relay output	Configurable
	10		Digital input	Configurable

IOM3.1 technical specifications

Category	Specification
Relay outputs 	Relay type: Electromechanical Electrical rating and UL/cUL Listed: 250 V AC or 30 V DC, and 6 A, resistive; B300, pilot duty (B300 is a power limit specification for inductive loads) Altitude derating from 3,000 to 4,000 m (9,842 to 13,123 ft): Maximum 150 V AC phase-to-phase Voltage withstand: 250 V AC
Digital inputs 	Bipolar inputs <ul style="list-style-type: none"> ON: -36 to -8 V DC, and 8 to 36 V DC OFF: -2 to 2 V DC Minimum pulse length: 50 ms Impedance: 4.7 kΩ Voltage withstand: ±36 V DC
Terminal connections	Relay outputs: Terminals: Standard 45° plug, 2.5 mm ² Wiring: 0.5 to 2.5 mm ² (22 to 12 AWG), multi-stranded Digital inputs: Terminals: Standard 45° plug, 1.5 mm ² Wiring: 0.1 to 1.5 mm ² (28 to 16 AWG), multi-stranded
Torques and terminals	Module faceplate screws: 0.5 N·m (4.4 lb-in) Connection of wiring to relay output terminals: 0.5 N·m (4.4 lb-in) Connection of wiring to digital input terminals: 0.25 N·m (2.2 lb-in)

Category	Specification
	UL/cUL Listed: Wiring must be minimum 90 °C (194 °F) copper conductors only
Galvanic isolation	Between relay groups and other I/Os: 2210 V, 50 Hz for 60 s Between digital input groups and other I/Os: 600 V, 50 Hz for 60 s
Ingress protection	Unmounted: No protection rating Mounted in rack: IP20 according to IEC/EN 60529
Dimensions	L×H×D: 28 × 162 × 150 mm (1.1 × 6.4 × 5.9 in)
Weight	196 g (0.4 lb)

3. Legal information

3.1 Disclaimer and copyright

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