



Digital module, 4 inputs and 2 relay outputs, input voltage 24 V DC, relay outputs bistable, max. 2 digital modules, for SIMOCODE pro V basic unit

product brand name	SIMOCODE
product designation	digital modules
product type designation	DM bi
General technical data	
product component	
<ul style="list-style-type: none"> input for thermistor connection 	No
<ul style="list-style-type: none"> digital input 	Yes
<ul style="list-style-type: none"> input for analog temperature sensors 	No
<ul style="list-style-type: none"> input for ground fault detection 	No
<ul style="list-style-type: none"> relay output 	Yes
consumed active power	0.7 W
insulation voltage with degree of pollution 3 at AC rated value	300 V
surge voltage resistance rated value	4 000 V
shock resistance according to IEC 60068-2-27	15g / 11 ms
vibration resistance according to IEC 60068-2-6	1 ... 6 Hz: 15 mm, 6 ... 500 Hz: 2g
switching capacity current of the NO contacts of the relay outputs at AC-15	
<ul style="list-style-type: none"> at 24 V 	6 A
<ul style="list-style-type: none"> at 120 V 	6 A
<ul style="list-style-type: none"> at 230 V 	3 A
switching capacity current of the NO contacts of the relay outputs at DC-13	
<ul style="list-style-type: none"> at 24 V 	2 A
<ul style="list-style-type: none"> at 60 V 	0.55 A
<ul style="list-style-type: none"> at 125 V 	0.25 A
mechanical service life (operating cycles) typical	10 000 000
electrical endurance (operating cycles) typical	100 000
reference code according to IEC 81346-2	K
reference code according to IEC 81346-2:2019	K
continuous current of the NO contacts of the relay outputs	
<ul style="list-style-type: none"> at 50 °C 	6 A
<ul style="list-style-type: none"> at 60 °C 	5 A
Substance Prohibition (Date)	05/01/2012
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8
Net Weight	0.141 kg
Electromagnetic compatibility	
EMC emitted interference according to IEC 60947-1	class A
EMC immunity according to IEC 60947-1	corresponds to degree of severity 3
conducted interference	

<ul style="list-style-type: none"> • due to burst according to IEC 61000-4-4 	1 kV
<ul style="list-style-type: none"> • due to conductor-earth surge according to IEC 61000-4-5 	2 kV
<ul style="list-style-type: none"> • due to conductor-conductor surge according to IEC 61000-4-5 	1 kV
<ul style="list-style-type: none"> • due to high-frequency radiation according to IEC 61000-4-6 	10 V
field-based interference according to IEC 61000-4-3	10 V/m
electrostatic discharge according to IEC 61000-4-2	6 kV contact discharge / 8 kV air discharge
conducted HF interference emissions according to CISPR11	corresponds to degree of severity A
field-bound HF interference emission according to CISPR11	corresponds to degree of severity A
Inputs/ Outputs	
product function	
<ul style="list-style-type: none"> • parameterizable inputs 	Yes
<ul style="list-style-type: none"> • parameterizable outputs 	Yes
number of inputs	4
number of digital inputs	4
<ul style="list-style-type: none"> • with a common reference potential 	4
digital input version	
<ul style="list-style-type: none"> • type 1 acc. to IEC 61131 	No
<ul style="list-style-type: none"> • type 2 acc. to IEC 61131 	Yes
number of analog inputs	0
input voltage at digital input at DC rated value	24 V
number of outputs	2
number of semiconductor outputs	0
number of outputs as contact-affected switching element	2
number of analog outputs	0
switching behavior	bistable
property of contacts of the relay outputs	Floating NO contacts (NC reaction parameterizable via internal signal conditioning), connected to common ground, can be freely assigned to the control functions (e.g. line, star (wye), delta contactor or signaling of the operating state)
wire length for digital signals maximum	300 m
Installation/ mounting/ dimensions	
mounting position	any
fastening method	screw and snap-on mounting
height	92 mm
width	22.5 mm
depth	124 mm
required spacing	
<ul style="list-style-type: none"> • top 	40 mm
<ul style="list-style-type: none"> • bottom 	40 mm
<ul style="list-style-type: none"> • left 	0 mm
<ul style="list-style-type: none"> • right 	0 mm
Connections/ Terminals	
product component removable terminal for auxiliary and control circuit	Yes
type of electrical connection for auxiliary and control circuit	screw-type terminals
type of connectable conductor cross-sections	
<ul style="list-style-type: none"> • solid 	1x (0.5 ... 4.0mm ²), 2x (0.5 ... 2.5 mm ²)
<ul style="list-style-type: none"> • finely stranded with core end processing 	1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1.5 mm ²)
<ul style="list-style-type: none"> • for AWG cables solid 	1x (20 ... 14), 2x (20 ... 16)
<ul style="list-style-type: none"> • for AWG cables stranded 	1x (20 ... 12), 2x (20 ... 14)
tightening torque with screw-type terminals	0.8 ... 1.2 N·m
tightening torque [lbf·in] with screw-type terminals	7 ... 10.3 lbf·in
Ambient conditions	
installation altitude at height above sea level	
<ul style="list-style-type: none"> • 1 maximum 	2 000 m
<ul style="list-style-type: none"> • 2 maximum 	3 000 m; max. +50 °C (no protective separation)
<ul style="list-style-type: none"> • 3 maximum 	4 000 m; max. +40 °C (no protective separation)
ambient temperature	

<ul style="list-style-type: none"> during operation during storage during transport 	-25 ... +60 °C -40 ... +80 °C -40 ... +80 °C
environmental category <ul style="list-style-type: none"> during operation according to IEC 60721 during storage according to IEC 60721 during transport according to IEC 60721 	3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6 3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6 3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6
relative humidity during operation	5 ... 95 %
contact rating of auxiliary contacts according to UL	B300 / R300

Short-circuit protection	
design of short-circuit protection per output	Fuse links: gG 6 A, quick-response 10 A (IEC 60947-5-1), miniature circuit-breaker C char.: 1.6 A (IEC 60947-5-1) or 6 A (I _K < 500 A)

Electrical Safety	
touch protection against electrical shock	finger-safe

Galvanic isolation	
(electrically) protective separation according to IEC 60947-1	All circuits with protective separation (double creepage paths and clearances), the information in the "Protective Separation" test report, No. A0258, must be observed (link see further information)

Control circuit/ Control	
type of voltage of the control supply voltage	DC
control supply voltage at DC rated value	24 V
operating range factor control supply voltage rated value at DC	
<ul style="list-style-type: none"> initial value full-scale value 	0.8 1.2

Approvals Certificates	
General Product Approval	EMV



EMV	Test Certificates	Maritime application	other
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[Type Test Certificates/Test Report](#)



other	Environment	Industrial Communication
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[Confirmation](#)



[Environmental Confirmations](#)



Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

Information- and Downloadcenter (Catalogs, Brochures,...)

<https://www.siemens.com/ic10>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3UF7310-1AB00-0>

Cax online generator

<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UF7310-1AB00-0>

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3UF7310-1AB00-0>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)



