



AS-Interface module F90, digital 16 DI (multiplexing) 16 x inputs for 2-wire sensor Connection via screw terminals Width 90 mm

General technical data		
design of the product		F90 module - I/O modules for operation in the control cabinet, IP20
Type		16 inputs
design of the slave type		standard slave
I/O configuration		7
ID/ID2 code		F/F
type of electrical connection of the inputs and outputs		screw-type terminals
AS interface total current input max	mA	70
operating voltage according to AS-Interface specification	V	26.5 ... 31.6
Group signal current carrying capacity Iout max	mA	25
Group signal Output voltage Uout min	V	20
Group signal Output voltage Uout max	V	30
Watchdog		built-in
Function blocks		required
Note 1		The module has four input groups. Each input group has four inputs and a group signal for the voltage supply of the inputs.
Note 2		The input groups are activated individually by setting of the respective group signal by the control system. The switching states of the assigned inputs are then read in.
Note 3		An external additional supply (AUX POWER) of 20 to 30 V DC is required for the supply of the output circuits. The additional supply must comply with VDE 0106 (PELV), protection class III.
Sensor supply		
type of voltage supply for sensor supply		using AS-Interface
input voltage	V	20 ... 30
property of the sensor supply short-circuit and overload resistant		Yes
ampacity of the sensor supply for all inputs at ambient temperature 40 °C	mA	200
Inputs		
number of digital inputs		16
type of connection technology		PNP transistor
Input circuit		PNP transistor
type of voltage of the input voltages		DC
input current at digital input for signal <1> minimum	mA	3
Inputs - switching level High min - sensor supply using AS-Interface - connection sensors	V	20 short-circuit and overload resistant mechanical contacts
Inputs signal 1		

• Uin	V	20 ... 30
• Iin min	mA	3

Outputs

number of digital outputs		0
property of the output short-circuit proof		No
Status display		
• display of I/Os		yellow LEDs
• display of AS-Interface/diagnostics		green LED
Assignment of data bits		
• D0		group signal G1 (D0) inputs I 1.1 to I 1.4 (D0 to D3)
• D1		group signal G2 (D1) inputs I 2.1 to I 2.4 (D0 to D3)
• D2		group signal G3 (D2) inputs I 3.1 to I 3.4 (D0 to D3)
• D3		group signal G4 (D3) inputs I 4.1 to I 4.4 (D0 to D3)

Ambient conditions

ambient temperature		
• during operation	°C	-25 ... +70
• during storage	°C	-40 ... +85
protection class IP		IP20

Mechanical data

width	mm	90
height	mm	75
depth	mm	37
fastening method		35 mm standard rail mounting

Certificates/ approvals

General Product Approval	EMV
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[Confirmation](#)



[KC](#)

Marine / Shipping	other	Environment
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[Confirmation](#)

[Miscellaneous](#)

[Environmental Confirmations](#)

Further information

Information on the packaging

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

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=3RG9002-0DE00>

Cax online generator

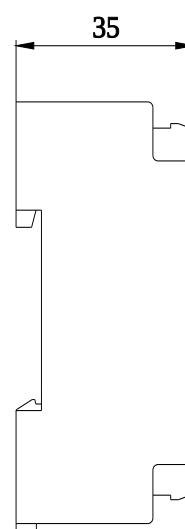
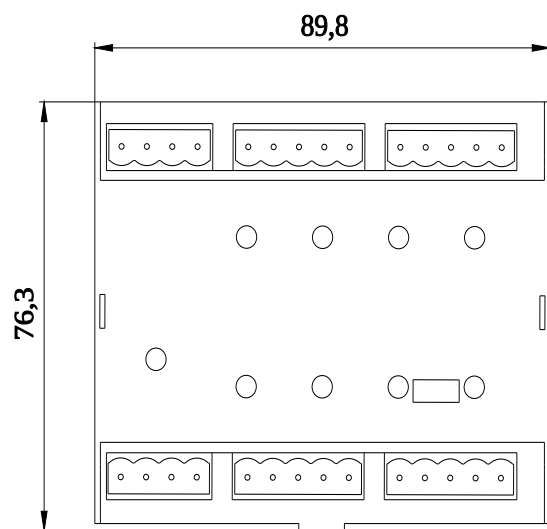
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RG9002-0DE00>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RG9002-0DE00>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RG9002-0DE00&lang=en



last modified:

3/11/2024 