SIEMENS

AS-Interface module F90, digital 4 DI/4 DQ, IP20 4 x inputs for 3-wire sensor 4 x output, 1 A, 24 V DC maximal 6 A for all outputs 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		4 inputs / 4 outputs
design of the slave type		standard slave
I/O configuration		7
ID/ID2 code		0/F
type of electrical connection of the inputs and outputs		screw-type terminals
AS interface total current input max	mA	270
operating voltage according to AS-Interface spezification	V	26.5 ... 31.6
Addressing		possible using integrated addressing socket
Watchdog		built-in
Note 1		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 power supply		using AS-Interface
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		4
type of connection technology		2- and 3-conductor PNP transistor
Input circuit		PNP transistor
type of voltage of the input voltages		DC
input current at digital input		
● for signal <1> minimum	mA	5
● with signal <0> maximum	mA	1.5
Inputs		
● switching level High min	V	10
● sensor supply using AS-Interface		short-circuit and overload resistant
● connection sensors		2- and 3-conductor technology

Outputs

number of digital outputs		4
type of voltage of output voltages		DC
Outputs external power supply 24 V DC		using screw-type terminals
output current at digital output for signal <1> rated value	A	1
type of switching output		solid state
Outputs total current of all outputs	A	4
property of the output short-circuit proof		Yes
Outputs		

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● short-ciruit protection			built-in
● induction protection			built-in
Status display			
● display of I/Os			yellow LEDs
● display of AS-Interface/diagnostics			green/red dual LED
Assignment of data bits			
● D0			IN1/OUT1
● D1			IN2/OUT2
● D2			IN3/OUT3
● D3			IN4/OUT4

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	Declaration of Conformity	Marine / Shipping
[Confirmation](#)		

Marine / Shipping	other
	[Confirmation](#) [Miscellaneous](#)

Further information

Siemens is working on the renewal of the current EAC certificates.
Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).
Siemens has decided to exit the Russian market (see here).
https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business
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=3RG9002-0DB00
Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RG9002-0DB00
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3RG9002-0DB00
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RG9002-0DB00&lang=en

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