



ACTUATOR SENSOR INTERFACE F90 4I/4O
APPLICATION MODULE,
IP20 4X1 INPUT 200MA PNP, 4X1 OUTPUT ELECTRONICS
DC 24V,
1A SCREW TERMINALS,
EXT. VOLTAGE SUPPLY VIA SCREW TERMINALS

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
Design of the electrical connection / of the inputs and outputs		screw-type terminals
AS interface / total current input / max	mA	270
operating voltage	V	26.5 ... 31.6
according to AS-Interface specification		
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 the sensor supply		using AS-Interface
Characteristic feature of the sensor supply / short-circuit and overload resistant		Yes

Current carrying capacity / of the sensor supply / for all inputs / at ambient temperature 40 °C	mA	200
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Inputs:		
Number of digital inputs		4
Type of connection		2- and 3-conductor PNP transistor
Input circuit		PNP transistor
Type of / input voltages		DC
Input current / at the digital input		
• for signal <1> / minimum	mA	5
• at 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
Voltage type / of output voltages		DC
Outputs / external power supply 24 V DC		using screw-type terminals
Output current / at the digital output / for signal <1> / nominal value	A	1
Design of the switching output		solid state
Outputs / total current / of all outputs	A	4
Characteristic feature of the output / short-circuit protected		Yes
Outputs		
• short-circuit 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 operating	°C	-25 ... +70

• during storage	°C	-40 ... +85
Protection class IP		IP20

Mechanical design:		
Width	mm	90
Height	mm	75
Depth	mm	37
Mounting type		35 mm standard rail mounting

Certificates/approvals:		
AS-Interface certificate		yes
Approvals		UL, CSA, shipbuilding

General Product Approval



Shipping Approval



other

[Confirmation](#)

[Declaration of
Conformity](#)

[other](#)

[Environmental
Confirmations](#)

Further information:

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

<http://www.siemens.com/industrial-controls/catalogs>

Industry Mall (Online ordering system)

<http://www.siemens.com/industrial-controls/mall>

CAX-Online-Generator

<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RG9002-0DB00/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RG9002-0DB00

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