

ACTUATOR SENSOR INTERFACE F90 4I/4O  
 APPLICATION MODULE, IP20 4X1 INPUT 200 MA,  
 PNP 4X1 OUTPUT, ELECTRONICS DC 24V  
 2A, SCREW TERMINALS, EXT. VOLTAGE SUPPLY VIA  
 SCREW TERMINALS



Figure similar

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 specification	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

<b>Type of connection</b>		2- and 3-conductor PNP transistor
<b>Input circuit</b>		PNP transistor
<b>Type of voltage of the input voltages</b>		DC
<b>Input current at digital input</b>		
• for signal <1> minimum	mA	5
• with signal <0> maximum	mA	1.5
<b>Inputs</b>		
• switching level High min	V	10
• sensor supply using AS-Interface		short-circuit and overload resistant
• connection sensors		2- and 3-conductor technology

#### Outputs:

<b>Number of digital outputs</b>		4
<b>Type of voltage of output voltages</b>		DC
<b>Outputs external power supply 24 V DC</b>		using screw-type terminals
<b>Output current at digital output for signal &lt;1&gt; Rated value</b>	A	2
<b>Type of switching output</b>		solid state
<b>Outputs total current of all outputs</b>	A	6
<b>Property of the output Short-circuit proof</b>		Yes
<b>Outputs</b>		
• short-circuit protection		built-in
• induction protection		built-in
<b>Status display</b>		
• display of I/Os		yellow LEDs
• display of AS-Interface/diagnostics		green/red dual LED
<b>Assignment of data bits</b>		
• D0		IN1/OUT1
• D1		IN2/OUT2
• D2		IN3/OUT3
• D3		IN4/OUT4

#### Ambient conditions:

<b>Ambient temperature</b>		
• during operation	°C	-25 ... +70
• during storage	°C	-40 ... +85
<b>Protection class IP</b>		IP20

#### Mechanical data:

<b>Width</b>	mm	90
<b>Height</b>	mm	75
<b>Depth</b>	mm	37
<b>Mounting type</b>		35 mm standard rail mounting

#### Certificates/ approvals:

AS-Interface certificate	yes
Approvals	UL, CSA, shipbuilding
<b>General Product Approval</b>	<b>Shipping Approval</b>



CSA



UL



ABS



BUREAU  
VERITAS



DNV

<b>Shipping Approval</b>	<b>other</b>
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##### Information- and Downloadcenter (Catalogs, Brochures,...)

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

##### Industry Mall (Online ordering system)

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

##### Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RG90020DA00>

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

<http://support.automation.siemens.com/WW/view/en/3RG90020DA00/all>

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

<http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RG90020DA00&lang=en>

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