

AS-Interface module F90, digital 4 DI/4 DQ, IP20 4 x inputs for 3-wire sensor External sensor supply 4 x output, 2 A, 24 V DC maximal 6 A for all outputs Connection via Combicon Width 90 mm Combicon connector set 3RX9810-0AA00 must be ordered .



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		combicon connection
AS interface total current input max	mA	30
operating voltage according to AS-Interface specification	V	26.5 ... 31.6
Addressing		possible using integrated addressing socket
Watchdog		built-in
Note 1		The module has four floating inputs and four floating switching outputs. An external additional supply of 20 to 30 V DC according to VDE 0106 (PELV) protection class III is required for the supply of the input and output circuits.
Note 2		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		via AUX POWER
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, floating
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 Combicon plug connector

output current at digital output for signal <1> rated value	A	2
type of switching output		solid state
Outputs total current of all outputs	A	6
property of the output short-circuit proof		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>fastening method</b>		35 mm standard rail mounting

#### Certificates/ approvals

General Product Approval	EMV	Maritime application
		
		

#### other

	<a href="#">Confirmation</a>	<a href="#">Miscellaneous</a>	<a href="#">Environmental Confirmations</a>
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#### 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=3RG9004-0DC00>

Cax online generator  
<http://support.automation.siemens.com/WWW/CAXorder/default.aspx?lang=en&mlfb=3RG9004-0DC00>

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)  
<https://support.industry.siemens.com/cs/ww/en/ps/3RG9004-0DC00>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)  
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RG9004-0DC00&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RG9004-0DC00&lang=en)

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