



AS-INTERFACE MODULE 16I,
IP20 16 INPUTS (MULTIPLEXING) 150MA COMBICON
STRIPS MODULE NECESSARY IN SPS WIDTH 90MM
COMBICON CONNECTOR SET 3RX9810-0AA00 TO BE
ORDERED SEPARATELY

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
Design of the electrical connection / of the inputs and outputs		combicon connection
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 the sensor supply		using AS-Interface
Input voltage	V	20 ... 30
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

Inputs:		
Number of digital inputs		16
Type of connection		PNP transistor
Input circuit		PNP transistor
Type of / input voltages		DC
Input current / at the 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 • U _{in} • I _{in} / min	V mA	20 ... 30 3

Outputs:		
Number of digital outputs		0
Characteristic feature of the output / short-circuit protected		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 operating
- during storage

°C

-25 ... +70

°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/3RG9004-ODE00/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RG9004-ODE00

last change:

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