



ACTUATOR SENSOR INTERFACE 4I/4O APPLICATION  
MODULE 4X1 INPUT 200MA PNP,  
4X1 OUTPUT ELECTRONICS DC 24V,  
1A COMBICON STRIPS 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                                                            |    | 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 |    | combicon connection                                                                                                                                                                         |
| AS interface / total current input / max                        | mA | 270                                                                                                                                                                                         |
| operating voltage                                               | V  | 26.5 ... 31.6                                                                                                                                                                               |
| • according to AS-Interface spezifikation                       |    |                                                                                                                                                                                             |
| 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 |
|--------------------------------------------------------------------------------------------------|----|-----|

|                                      |    |                                      |
|--------------------------------------|----|--------------------------------------|
| <b>Inputs:</b>                       |    |                                      |
| 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        |

|                                                                         |   |                               |
|-------------------------------------------------------------------------|---|-------------------------------|
| <b>Outputs:</b>                                                         |   |                               |
| Number of digital outputs                                               |   | 4                             |
| Voltage type / of output voltages                                       |   | DC                            |
| Outputs / external power supply 24 V DC                                 |   | using Combicon plug connector |
| 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                      |

|                                       |  |                    |
|---------------------------------------|--|--------------------|
| <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 |

|                            |    |             |
|----------------------------|----|-------------|
| <b>Ambient conditions:</b> |    |             |
| <b>Ambient temperature</b> |    |             |
| • 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/3RG9004-0DB00/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RG9004-0DB00](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RG9004-0DB00)

last change:

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