

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 screw terminals Width 90 mm



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 | 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 screw-type terminals |

| | | |
|-------------------------------------------------------------|---|--------------------|
| 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 |
| 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 operation | °C | -25 ... +70 |
| • during storage | °C | -40 ... +85 |
| protection class IP | | IP20 |


Mechanical data

| | | |
|-------------------------|----|------------------------------|
| width | mm | 90 |
| height | mm | 75 |
| depth | mm | 37 |
| fastening method | | 35 mm standard rail mounting |

Certificates/ approvals

| | | |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| General Product Approval | EMV | Maritime application |
|  |  |  |
|  |  |  |

other

| | | | |
|-------------------------------------------------------------------------------------|------------------------------|-------------------------------|---------------------------------------------|
|  | Confirmation | Miscellaneous | Environmental Confirmations |
|-------------------------------------------------------------------------------------|------------------------------|-------------------------------|---------------------------------------------|

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=3RG9002-0DC00>

Cax online generator
<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RG9002-0DC00>

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
<https://support.industry.siemens.com/cs/ww/en/ps/3RG9002-0DC00>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RG9002-0DC00&lang=en

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