



AS-INTERFACE SLIMLINE MODULE S45, IP20,  
A/B-SLAVE (SPEC 3.0) DIGITAL, 4DI/4DO,  
4 X INPUT FOR SENSOR (MECHAN., 2-WIRE, 3-  
WIRE),PNP,  
SENSOR SUPPLY FROM U\_ASI MAX. TOTAL 200MA;  
4 X OUTPUT 2A,  
OUTPUT SUPPLY DC 24V MAX. 4A FOR ALL OUTPUTS;  
SPRING-LOADED TERMINALS WIDTH 45MM

| General technical data:                                                         |    |                                                                                                                                                                                             |
|---------------------------------------------------------------------------------|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Design of the product                                                           |    | SlimLine S22.5 - I/O modules for operation in the control cabinet                                                                                                                           |
| Design of the slave type                                                        |    | A/B slave (Spec. 3.0)                                                                                                                                                                       |
| Type                                                                            |    | 4 inputs / 4 outputs                                                                                                                                                                        |
| I/O configuration                                                               |    | 7                                                                                                                                                                                           |
| ID/ID2 code                                                                     |    | A/7                                                                                                                                                                                         |
| Protocol / is supported / AS interface protocol                                 |    | Yes                                                                                                                                                                                         |
| AS interface / total current input / max                                        | mA | 270                                                                                                                                                                                         |
| operating voltage                                                               | V  | 26.5 ... 31.6                                                                                                                                                                               |
| • according to AS-Interface spezifikation                                       |    |                                                                                                                                                                                             |
| Addressing                                                                      |    | front addressing socket                                                                                                                                                                     |
| Design of the electrical connection / of the inputs and outputs                 |    | spring-loaded terminals                                                                                                                                                                     |
| Reference code                                                                  |    | A<br><br>K                                                                                                                                                                                  |
| • according to DIN 40719 extended according to IEC 204-2 / according to IEC 750 |    |                                                                                                                                                                                             |
| • according to DIN EN 61346-2                                                   |    |                                                                                                                                                                                             |
| note                                                                            |    | 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. |

|                                                                                                            |         |                                                                           |
|------------------------------------------------------------------------------------------------------------|---------|---------------------------------------------------------------------------|
| <b>Note 1</b>                                                                                              |         | detachment tool for spring-loaded terminal connection:<br>See Accessories |
| <b>Sensor supply:</b>                                                                                      |         |                                                                           |
| <b>Type of voltage supply / for the sensor supply</b>                                                      |         | using AS-Interface                                                        |
| <b>Input voltage</b>                                                                                       | V       | 20 ... 30                                                                 |
| <b>Characteristic feature of the sensor supply / short-circuit and overload resistant</b>                  |         | Yes                                                                       |
| <b>Current carrying capacity / of the sensor supply / for all inputs</b><br>• at ambient temperature 40 °C | mA      | 200                                                                       |
| <b>Inputs:</b>                                                                                             |         |                                                                           |
| <b>Number of digital inputs</b>                                                                            |         | 4                                                                         |
| <b>Type of connection</b>                                                                                  |         | 2- and 3-wire technology                                                  |
| <b>Input circuit</b>                                                                                       |         | PNP transistor                                                            |
| <b>Type of / input voltages</b>                                                                            |         | DC                                                                        |
| <b>Inputs / switching level High / min</b>                                                                 | V       | 10                                                                        |
| <b>Input current / at the digital input</b><br>• for signal <1> / minimum<br>• at signal <0> / maximum     | A<br>mA | 5<br>1.5                                                                  |
| <b>Inputs / sensor supply using AS-Interface</b>                                                           |         | short-circuit and overload resistant                                      |
| <b>Outputs:</b>                                                                                            |         |                                                                           |
| <b>Number of digital outputs</b>                                                                           |         | 4                                                                         |
| <b>Voltage type / of output voltages</b>                                                                   |         | DC                                                                        |
| <b>Output voltage / at 24 V</b><br>• for DC                                                                | V       | 22 ... 24                                                                 |
| <b>Outputs / external power supply 24 V DC</b>                                                             |         | using terminals: Terminal 13 = L+, Terminal 19 = M                        |
| <b>Outputs</b><br>• aggregate current / max                                                                | A       | 4                                                                         |
| <b>Current-carrying capacity</b><br>• of the semiconductor output / at DC-13 / at 24 V                     | A       | 2                                                                         |
| <b>Design of the switching output</b>                                                                      |         | solid state                                                               |
| <b>Characteristic feature of the output / short-circuit protected</b>                                      |         | Yes                                                                       |
| <b>output / Polarity reversal protection</b>                                                               |         | built-in                                                                  |
| <b>Outputs</b><br>• short-circuit protection<br>• induction protection<br>• watchdog                       |         | built-in<br>built-in<br>built-in                                          |
| <b>Status display</b>                                                                                      |         |                                                                           |
| • display of I/Os                                                                                          |         | yellow LED                                                                |

- AS-Interface
- FAULT

green LED  
red LED

#### Assignment of data bits

- D0
- D1
- D2
- D3

IN1/OUT1  
IN2 /OUT2  
IN3/OUT3  
IN4/OUT4

#### Ambient conditions:

##### Ambient temperature

- during operating
- during storage

°C -25 ... +70  
°C -40 ... +85

##### Protection class IP

IP20

#### Mechanical design:

##### Width

mm 45

##### Height

mm 108

##### Depth

mm 86

##### Mounting type

35 mm standard rail mounting or wall mounting using push-in lugs

##### Conductor cross-section

- solid
- finely stranded
  - with end sleeve
- AWG / solid or stranded

2 x (0.25 - 1.5) mm<sup>2</sup>  
2 x (0.25 - 1) mm<sup>2</sup>  
AWG 2 x (24 - 16) mm<sup>2</sup>

#### Certificates/approvals:

##### AS-Interface certificate

yes (or requested for in case of new units)

##### Approvals

UL, CSA, shipbuilding (or requested for in case of new units)

#### 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

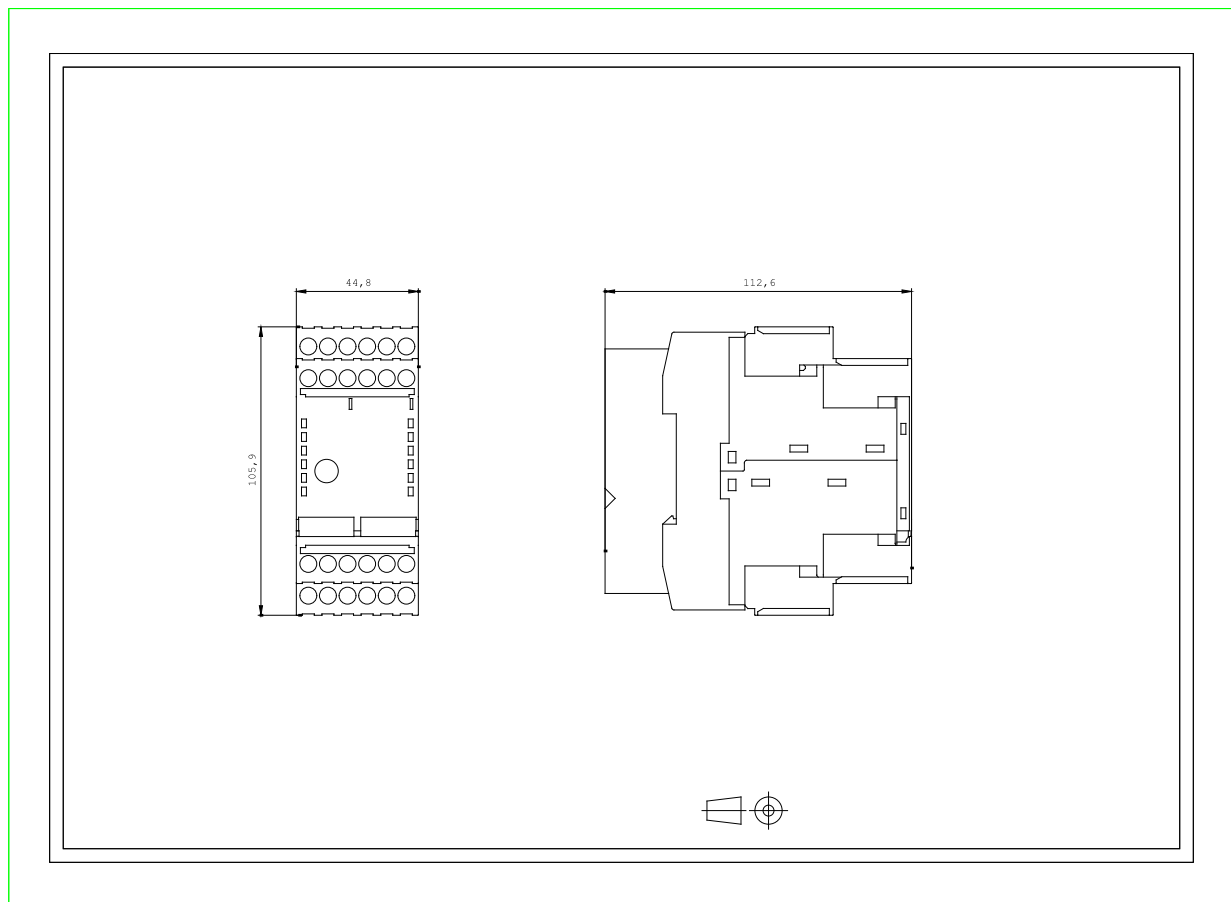
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RK2400-1CG01-0AA2/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RK2400-1CG01-0AA2](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RK2400-1CG01-0AA2)



last change:

Jul 21, 2014