



AS-INTERFACE COMPACT MODULE K45,
A/B SLAVE (SPEC. 3.0), IP67 DIGITAL,
4X(1DI/1DO),
MAX. 500MA FOR ALL INPUTS MOUNTING PLATE
3RK19012EA00 OR 3RK19012DA00 TO BE ORDERED
SEPARATELY

General technical data:

Design of the product		digital I/O modules for operation in the field, IP67 - K45
Type		4 x (1 input / 1 output)
Design of the slave type		A/B slave (Spec. 3.0)
I/O configuration		7
ID/ID2 code		A/7
Number / I/O sockets		4
Design of the electrical connection / of the inputs and outputs		M12 screw-type terminals
AS interface / total current input / max	mA	45
operating voltage • according to AS-Interface specification	V	26.5 ... 31.6
Ground terminal		Using PIN5 on the M12 sockets. Outgoing via flat tab sleeve (2.8 x 0.8 mm form A)
Addressing		front addressing socket
AS interface / Connection / Polarity reversal protection		built-in
Delivery note		the modules are delivered without mounting plate
Note 1		All K45 compact modules are delivered with stainless steel screws/sockets
Note 2		This module requires a master according to AS-i specifications 3.0

Sensor supply:		
Type of voltage supply / for the sensor supply		via AUX POWER
Input voltage	V	16.5 ... 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	650
• at ambient temperature 55 °C	mA	500

Inputs:		
Number of digital inputs		4
Type of connection		2- and 3-wire technology
Input circuit		PNP transistor
Type of / input voltages		DC
Inputs / switching level High / min	V	10
Input current / at the digital input		
• for signal <1> / minimum	mA	6
• at signal <0> / maximum	mA	1.5
Inputs / socket assignment		
• PIN 1		sensor supply L+
• PIN 2		output
• PIN 3		sensor supply/outputs L-
• PIN 4		data input
• PIN 5		ground terminal
Design of the pin assignment / of the inputs		Y assignement

Outputs:		
Number of digital outputs		4
Voltage type / of output voltages		DC
Outputs / external power supply 24 V DC		using black AS-Interface flat cable
Output current / at the digital output / for signal <1> / nominal value	A	0.5
Outputs / aggregate current		
• max	A	1.5
• at Tu=40 °C / max	A	2.5
Design of the switching output		PNP transistor
Design of the pin assignment / of the outputs		Y assignement
Outputs / socket assignment		3 = "-", 2 = output, 5 = ground terminal
Characteristic feature of the output / short-circuit protected		Yes
Outputs		
• short-circuit protection		built-in

- induction protection
- watchdog

built-in
built-in

Status display

- display of I/Os
- display of Uaux
- display of AS-Interface/diagnostics

yellow LED
green LED
green/red dual LED

Assignment of data bits

- socket
- socket 2
- socket 3
- socket 4

PIN 4 = IN1 (D0), PIN 2 = OUT1 (D0)
PIN 4 = IN2 (D1), PIN 2 = OUT2 (D1)
PIN 4 = IN3 (D2), PIN 2 = OUT3 (D2)
PIN 4 = IN2 (D1), PIN2 = OUT4 (D3)

Ambient conditions:

Ambient temperature

- during operating
- during storage

°C -25 ... +85
°C -40 ... +85

Protection class IP

IP67

Mechanical design:

Width

mm 45

Height

mm 80

Depth

mm 30

Mounting type

standard rail mounting/wall mounting using mounting plate for K45 compact module

Certificates/approvals:

AS-Interface certificate

requested

Approvals

UL and CSA requested

General Product Approval



CSA



GOST



UL

Shipping Approval



ABS



DNV



LRS



PRS



RMRS

other

[Confirmation](#)

[Declaration of
Conformity](#)

[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

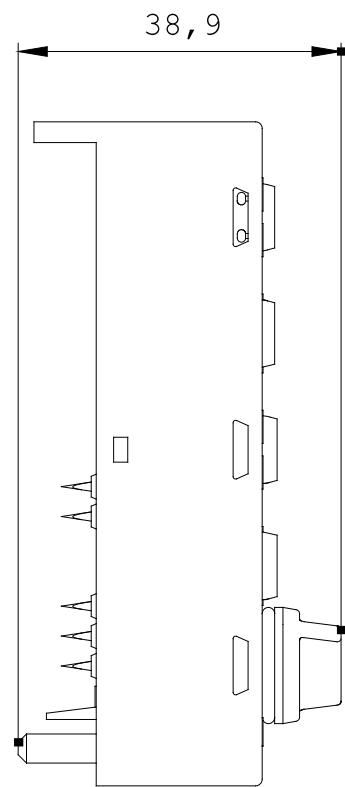
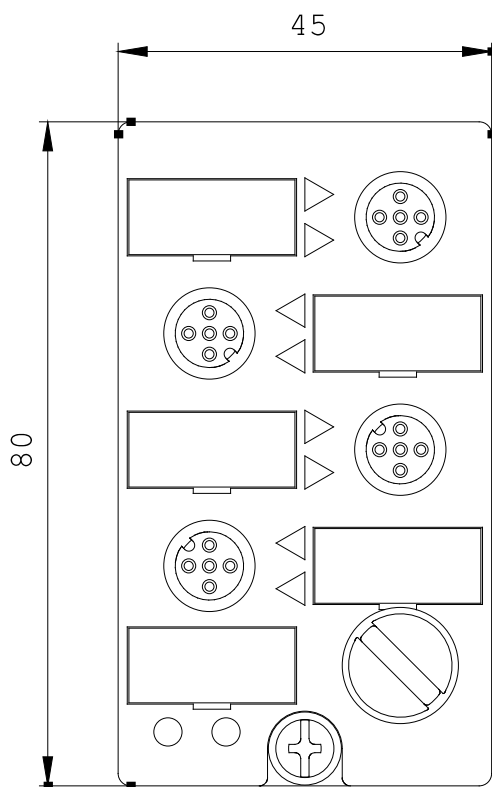
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RK2400-1GQ20-1AA3/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RK2400-1GQ20-1AA3



last change:

Oct 28, 2013