

AS-i compact module K45 digital A/B slave 4 x (1 DI/1 DQ), IP67 4 x 1 input / 1 output 4 x M12 socket Total current for all inputs and outputs max. 500 mA Supply I/O from 24 V DC Mounting plate 3RK1901-2EA00 or 3RK1901-2DA00 is 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
type of electrical connection of the inputs and outputs	M12 screw-type terminals
AS interface total current input max	45 mA
operating voltage according to AS-Interface specification	26.5 ... 31.6 V
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 2	This module requires a master according to AS-i specifications 3.0
Sensor supply	
type of voltage supply for power supply	via AUX POWER
input voltage	16.5 ... 30 V
property of the sensor supply short-circuit and overload resistant	Yes
ampacity of the sensor supply for all inputs	
• at ambient temperature 40 °C	650 mA
• at ambient temperature 55 °C	500 mA
Inputs	
number of digital inputs	4
type of connection technology	2- and 3-wire technology
Input circuit	PNP transistor
type of voltage of the input voltages	DC
Inputs switching level High min	10 V
input current at digital input	
• for signal <1> minimum	6 mA
• with signal <0> maximum	1.5 mA
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 assignment
Outputs	

number of digital outputs	4
type of voltage of output voltages	DC
Outputs external power supply 24 V DC	using black AS-Interface flat cable
ampacity of the semiconductor output at DC-13 at 24 V	0.5 A
Outputs aggregate current	
• max	1.5 A
• at Tu=40 °C max	2.5 A
type of switching output	PNP transistor
design of the pin assignment of the outputs	Y assignment
Outputs socket assignment	3 = "-", 2 = output, 5 = ground terminal
property of the output short-circuit proof	Yes
Outputs	
• short-circuit protection	built-in
• induction protection	built-in
• watchdog	built-in

Display

Status display	
• display of I/Os	yellow LED
• display of Uaux	green LED
• display of AS-Interface/diagnostics	green/red dual LED

Assignment of the data bits

Assignment of data bits	
• socket	PIN 4 = IN1 (D0), PIN 2 = OUT1 (D0)
• socket 2	PIN 4 = IN2 (D1), PIN 2 = OUT2 (D1)
• socket 3	PIN 4 = IN3 (D2), PIN 2 = OUT3 (D2)
• socket 4	PIN 4 = IN4 (D3), PIN 2 = OUT4 (D3)

Ambient conditions

ambient temperature	
• during operation	-25 ... +85 °C
• during storage	-40 ... +85 °C
protection class IP	IP67

Mechanical data

width	45 mm
height	80 mm
depth	30 mm
fastening method	standard rail mounting/wall mounting using mounting plate for K45 compact module
shock resistance	15g / 11 ms

Certificates/ approvals

General Product Approval	EMC	Declaration of Conformity
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[Confirmation](#)



Marine / Shipping

	other		
LRS	PRS	DNV-GL	ASI

[Confirmation](#)

[Miscellaneous](#)

Further information

Siemens has decided to exit the Russian market (see here).
<https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business>

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

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=3RK2400-1GQ20-1AA3>

Cax online generator

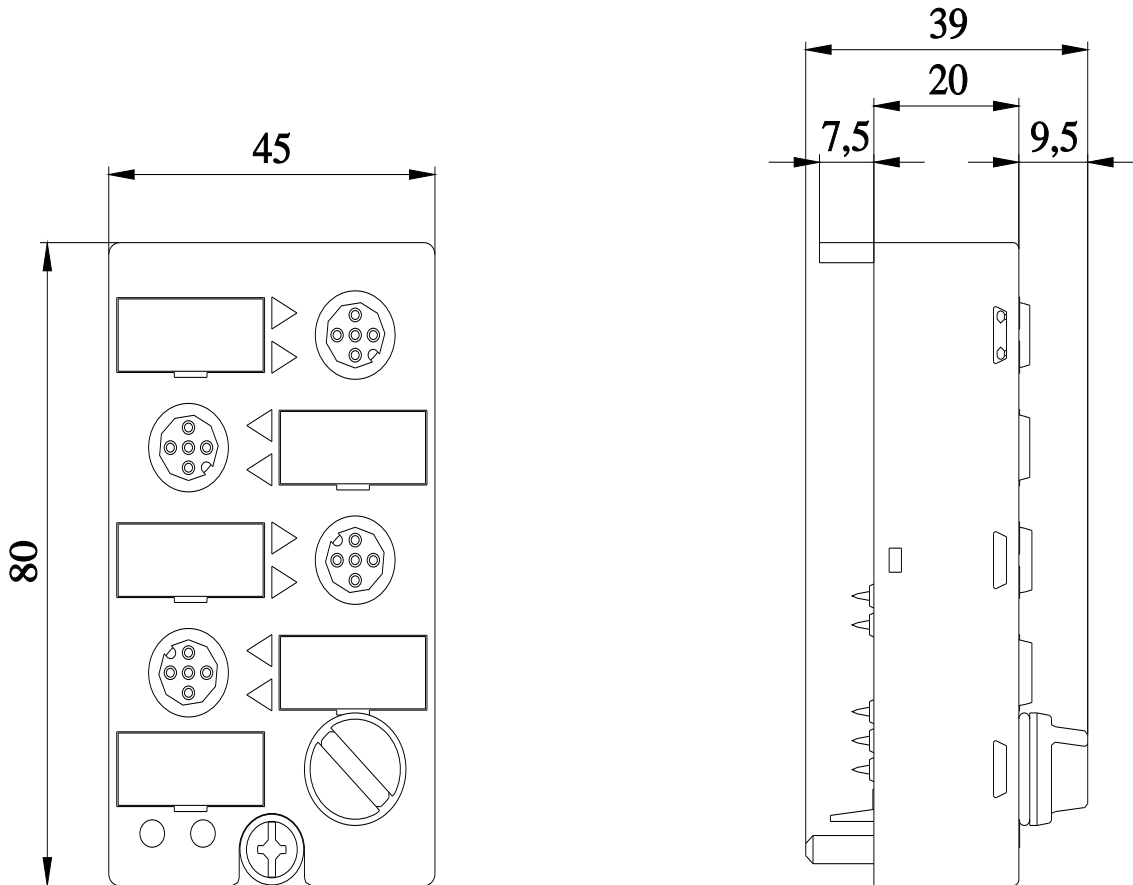
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RK2400-1GQ20-1AA3>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RK2400-1GQ20-1AA3>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RK2400-1GQ20-1AA3&lang=en



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