Product data sheet



AS INTERFACE COMP. MODULE K60, DIGITAL, 4I/4O, IP67, 4 X 1 INPUT, MAX. 200 MA, PNP, 4 X 1 OUTPUT, 2 A, 24 V DC 8 X M12 STANDARD SOCKET Y-II ALLOCATION ATEX EX II 3D T75 C IP65X OBSERVE SPECIAL CONDITIONS FOR SAFE OPERATION: SUITABLE PROT. MEASURES AGAINST MECHANICAL DAMAGE REQUIRED. DETAILS SEE OPERATING INSTRUCTIONS MOUNTING PLATE 3RK19010CA00

General technical data:		
Design of the product		digital I/O modules for operation in the field, IP67 - K60
Туре		4 inputs / 4 outputs
Design of the slave type		standard slave
I/O configuration		7
ID/ID2 code		F/F
Number / I/O sockets		8
Design of the electrical connection / of the inputs and outputs		M12 screw-type terminals
AS interface / total current input / max	mA	270
operating voltage		
according to AS-Interface spezification	V	26.5 31.6
Ground terminal		PIN5 of each M12 socket is connected to the grounding wrist strap in the mounting plate using a pin
Addressing		front addressing socket
Application		Use in Zone 22 hazardous areas according to Classification II 3D (dusty atmosphere, non-conductive dust), resistance to shock: 1 joule Conformance with Directive 94/9/EC (ATEX) is verified through compliance with the standards EN 50281-1-1 und EN 60947-5-2
Delivery note		the modules are delivered without mounting plate

Note 1		All K60 compact modules are delivered with stainless steel screws/sockets
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 the sensor supply		using AS-Interface
Input voltage	V	20 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	200
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		
• sensor supply using AS-Interface		short-circuit and overload resistant
• socket assignment		
• PIN 1		sensor supply L+
• PIN 2		data input II
• PIN 3		sensor supply L-
• PIN 4		data input I
• PIN 5		ground terminal
Design of the pin assignment / of the inputs		Y-II 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	Α	2
Outputs / aggregate current / max	А	4
Design of the switching output		PNP transistor
Design of the pin assignment / of the outputs		Y-II assignement

Outputs / socket assignment		3 = "-", 4 = output, 5 = ground terminal
Characteristic feature of the output / short-circuit protected		Yes
Outputs		
short-ciruit protection		built-in
• induction protection		built-in
• watchdog		built-in
Assignment of the data bits:		
Assignment of data bits		
• socket		PIN 4 = IN1 (D0), PIN 2 = IN2 (D1)
• socket 2		PIN 4 = IN2 (D1)
• socket 3		PIN 4 = IN3 (D2) , PIN 2 = IN4 (D3)
• socket 4		PIN 4 = IN4 (D3)
• socket 5		PIN4 = OUT1 (D0), PIN2 = OUT2 (D1)
• socket 6		PIN4 = OUT2 (D1)
• socket 7		PIN4 = OUT3 (D2), PIN2 = OUT4 (D3)
• socket 8		PIN4 = OUT4 (D3)
Ambient conditions:		
Ambient temperature		
during operating	°C	-25 +85
during storage	°C	-40 + 85
Protection class IP		IP65
Status display:		
Status display / display of I/Os		
Status display / display of Uaux		yellow LED
		yellow LED green LED
Status display / display of AS-Interface/diagnostics		
Status display / display of AS-Interface/diagnostics Mechanical design:		green LED
	mm	green LED
Mechanical design:	mm	green LED green/red LED
Mechanical design: Width		green LED green/red LED 60
Mechanical design: Width Height	mm	green LED green/red LED 60 152
Mechanical design: Width Height Depth	mm	green LED green/red LED 60 152 29 standard rail mounting/wall mounting using mounting
Mechanical design: Width Height Depth Mounting type	mm	green LED green/red LED 60 152 29 standard rail mounting/wall mounting using mounting
Mechanical design: Width Height Depth Mounting type Certificates/approvals:	mm	green LED green/red LED 60 152 29 standard rail mounting/wall mounting using mounting plate for K60 compact module

Limiting conditions for safe operation

Suitable measures must be taken to protect the module from mechanical damage. All M12 connectors must be secured by a lock-clip against unauthorized opening such that the connector cannot be disconnected by hand but only by destroying the lockclip. A suitable lock-clip is available from Binder GmbH + Co., Elektrische Bauelemente KG, Postfach 1152, 74148 Neckarsulm, Germany, Tel. +49 (0)7132/325-0, Fax +49 (0)7132/325-150, info@binder -connector.de, Article No. 16-0977-000. All the M12 sockets which are not assigned must be closed with 3RK1 901-1KA01 caps (tamper-proof version) such that they cannot be released by hand. Addressing the module using the 3RK1 904-2AB01 addressing unit is only permitted outside the EX-Zone 22. When the addressing operation is finished, the addressing socket must be closed with a 3RK1 901-1KA01 sealing cap (tamper-proof version) such that it cannot be released by hand. If an additional supply (AUX POWER) is required, it must comply with VDE 0106 (PELV), protection class III.

Safety and commissioning instructions

The devices are approved for an ambient temperature of -25 to +85 °C. The devices must be configured, connected and commissioned by qualified, responsible personnel only. An incorrect response may cause serious injury to persons and damage to property. It is assumed that personnel are familiar with the assignment of classes to the permitted hazardous zones. The plug connectors and AS-Interface cables must not be connected or disconnected when live. The units require no maintenance. No modifications or repairs are allowed to be carried out on the units. All the above points must be observed in the event of replacement. See also Regulations for Installation EN 60079-14 / EN 50281-1-2.

General Product Approval









Test Certificates

Special Test Certificate

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)

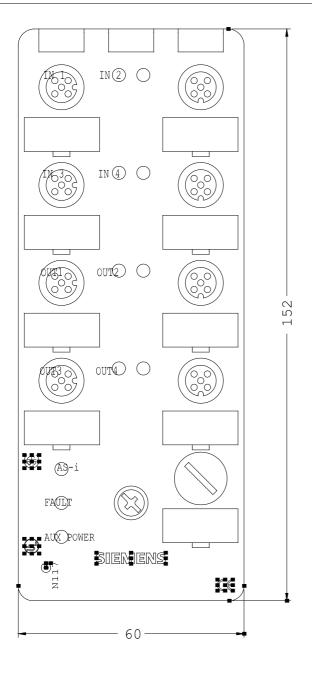
http://www.siemens.com/industrial-controls/mall

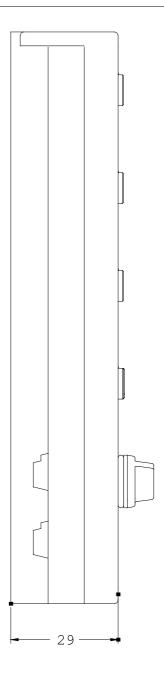
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

http://support.automation.siemens.com/WW/view/en/3RK1400-1DQ05-0AA3/all

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RK1400-1DQ05-0AA3





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