Automation by innovation.

KeConnect C2

C2-AI 240/A Analog input module

- Analog input module
- Signal form voltage
- Sensor failure detection
- Resolution up to 14 Bit

Brief description

The C2-AI 240/A is an analog input module of the Keba module system. The module is added directly on to a central control unit. A bus link module is used to operate this module with all product lines of the KeControl system.
This module enables the connection of 4 analog inputs.

The analog inputs process differential and/or potentiometric input signals in the range +/-10V and/or 0-10V at a resolution of 14 Bit. A sensor failure is notified to the superior central processor module and can be evaluated in the application. A micro-controller converts the measurement values of the analog inputs with the calibration data and forwards the corrected values to the superior automation device.

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Technical data

General Information

Power supply voltage:	+5 V DC
Addressing at K-Bus:	Via 16-digit address switch, on the side
Connection terminals:	Open terminals, grid dimensions 5.08 mm
Power consumption at K-Bus:	max. 0.3 W

Analog inputs

Number of inputs:	4
Type:	Voltage input
Signal range:	± 10 V or 0 – U_{ref} (10 V)
Maximum measurement signal:	± 10,4 V
Input type:	Differential or single-ended
Galvanic isolation:	No
Referential voltage output:	10 V ± 2,5%, max. 20 mA
Scan repeat cycle:	1 ms
Input impedance at signal range:	10 MΩ
Input filter characteristic – order:	First order
Input filter characteristic – transfer impedance:	250 Hz
Digital resolution:	14 Bit
Transformation method:	Sucessive approximation
Monotonicity without error codes:	Yes
Synchroneity control:	± 13.5 V
Synchroneity suppression:	>80 dB
Value of the lowest-value Bit (LSB):	1.3 mV
Maximum permitted continuous load (without damage)	± 30 V
Typ. temp. coefficient measurement error:	± 5 ppm of scale end value / °C
Max. temp. coefficient measurement error:	± 20 ppm of scale end value / °C
Biggest error at 25°C	± 0,01% of scale end value

Interfaces

System bus-interface:	Parallel Bus-interfaces, plug-in on side

Dimensions:

Footprint:	
Module height:	120 mm
Mounting depth:	100 mm
Front panel width:	22.5 mm
Module width (incl. K-Bus plug):	32.5 mm
Weight (AM 280/A):	135 g
Weight (AI 240/A):	132 g
Weight (AO 240/A):	132 g

Standards:

The module conforms to the following standards:

General information	
UL 508	In preparation
Product standard for programmable controllers:	
IEC 61131-1:2003	General information
IEC 61131-2:2003	Hardware

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