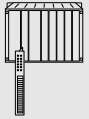


ANALOG INPUT/OUTPUT MODULES, PEA4 - 4 INPUTS 0 - 10 V / 0 - 20 mA

PLC SYSTEMS
MINICONTROL COMPONENTS

A4



PEA4

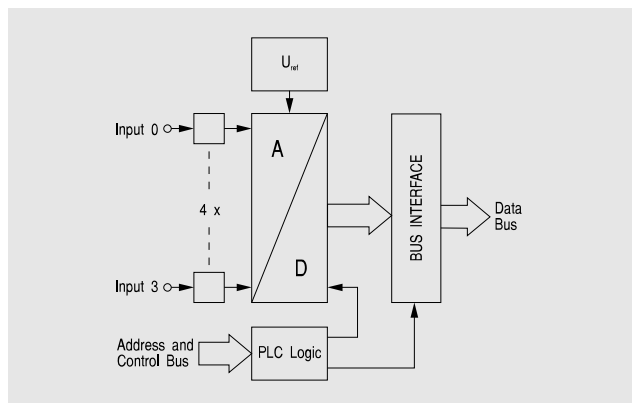
- 4 Analog Inputs
- Input Signal 0 - 10 V or 0 - 20 mA
- 10 Bit Resolution
- Software Operated with Standard Function Blocks

SLOTS	0	1	2	3	4	5
PEA4 Base Unit C (CP32)		●	●			

ORDER DATA

MCPEA4-1	Analog Input Module, 4 Analog Inputs, Input Voltage 0 - 10 V, 10 Bit Resolution, Without Galvanic Isolation
MCPEA4-2	Analog Input Module, 4 Analog Inputs, Input Current 0 - 20 mA, 10 Bit Resolution, Without Galvanic Isolation

DIAGRAM



TECHNICAL DATA

	PEA4-1	PEA4-2
Number of Inputs	4	4
Input Signal		
Nominal	0 to 10 V	0 to 20 mA
Maximal	-0.3 V to +13 V	70 mA
Input Resolution	10 Bit	10 Bit
Conversion Time per Channel	ca. 10 msec	ca. 10 msec
Input Current	< 250 nA	-
Load -		50 Ω
Voltage Drop at 20 mA	-	1 V
Input Precision		
Basic Precision at 20 °C	±0.3 %	±0.3 %
Offset Drift	±0.0025 % / °C	±0.0055 % / °C
Gain Drift	±0.025 % / °C	±0.03 % / °C
Linearity	0.2 %	0.2 %
Documentation	Hardware Manual MINICONTROL	
German	MAHWMINI-0	
English	MAHWMINI-E	
French	MAHWMINI-F	

CONNECTIONS

0 Analog Input 0
1 Analog Input 1
2 Analog Input 2
3 Analog Input 3
▶ Reference Potential for Analog Inputs

Other connections are not used with the PEA4

SOFTWARE OPERATION

The AINA standard function block is used for software control of the analog inputs. This function block is a component of software package SWSPSTD01-0 (see section A7 "PLC Programming").

The parameters of the AINA function block are:

- Number of the first channel to be converted (0 to 3)
- Number of channels to be converted (1 to 4)
- Slot number of the PEA4 module (0 or 1)
- Target address for the converted values

RELATIONSHIP BETWEEN INPUT SIGNAL AND CONVERTER VALUE

The relationship between the input signal (Voltage 0 to 10 V or current 0 to 20 mA) and the converter value (0 to 1023) is linear:

Converter Value	Corresponds with Input Voltage (PEA4-1)	Corresponds with Input Current PEA4-2
0	0 V	0 mA
500	5 V	10 mA
1000	10 V	20 mA