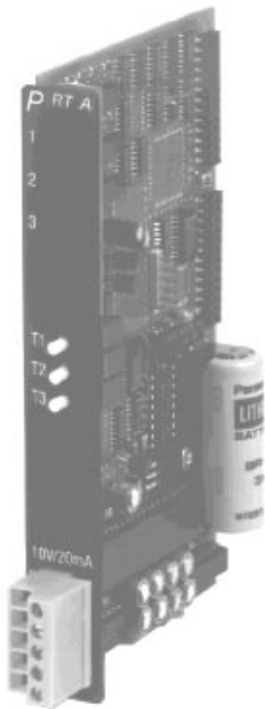
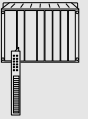


ANALOG INPUT/OUTPUT MODULES, PRTA - 4 INPUTS, REAL-TIME CLOCK

PLC SYSTEMS
MINICONTROL COMPONENTS

A4



PRTA

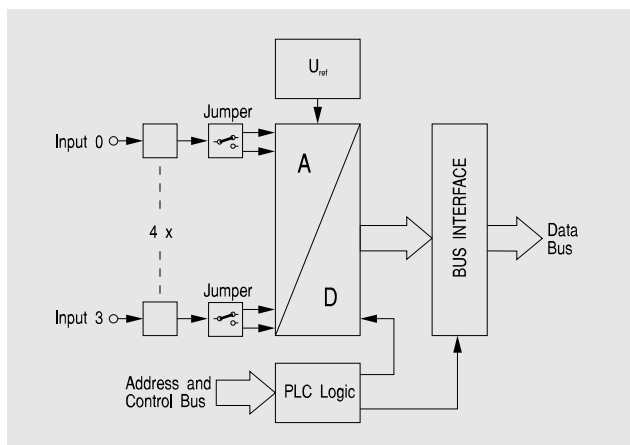
- 4 Analog Inputs
- Voltage (0 to 10 V) or Current (0 to 20 mA) Definable for Every Channel
- 10 Bit Resolution
- Conversion Time - 100 μ sec / Channel
- Real-Time Clock
- 3 Keys for Setting Real-Time Clock
- Three Position LED Display

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

ORDER DATA

MCPRTA-0 Analog Input Module, 4 inputs for voltage or current (selected with jumper), input voltage 0 to 10 V or input current 0 to 20 mA, 10 bit resolution, real-time clock, 3 keys, three position LED display, without galvanic isolation

DIAGRAM



TECHNICAL DATA

PRTA

Number of Inputs	4	
Input Signal	Voltage or Current, Selected with jumper for each channel	
Input Voltage	0 to 10 V	
Nominal	-5 V / +15 V	
Min. / Max.		
Input Current	0 to 20 mA	
Nominal	\pm 50 mA	
Max.		
Resolution	10 Bit	
Conversion Time per Channel	ca. 100 μ sec	
Input Resistance	> 10 M Ω	
Load	50 Ω	
Voltage Drop at 20 mA	1 V	
Input Filter Cutoff Frequency	ca. 180 Hz	
Input Precision	Voltage	Current
Full Scale Error (at 20 $^{\circ}$ C)	\pm 3 Bit	\pm 3 Bit
Offset Error	\pm 1 Bit	\pm 4 Bit
Gain Drift	0.02 % / $^{\circ}$ C	0.03 % / $^{\circ}$ C
Offset Drift	\pm 1 Bit (0 to 60 $^{\circ}$ C)	\pm 2 Bit (0 to 60 $^{\circ}$ C)
Real-Time	Year, Month, Day, Hours, Minutes, Seconds, 1/10 Seconds, 1/100 Seconds, Weekday	
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

SOFTWARE OPERATION

The analog inputs are controlled with standard function block AINB. This function block is a standard component of software package SWSPSTD01-0 (see section A7 "PLC Programming").

The parameters of the AINB 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 PRTA modules (0 or 1)
- Target address for the converted values

RELATIONSHIP BETWEEN INPUT SIGNAL - CONVERTER VALUE

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

Converter Value	Respective Voltage	Respective Current
0	0 V	0 mA
500	5 V	10 mA
1000	10 V	20 mA

¹⁾ The analog input module PRTA can also be operated in slot 1 if slot 2 is not being used.