MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

ABB

PM582-ETH

ETHERNET PROCESSOR MODULE

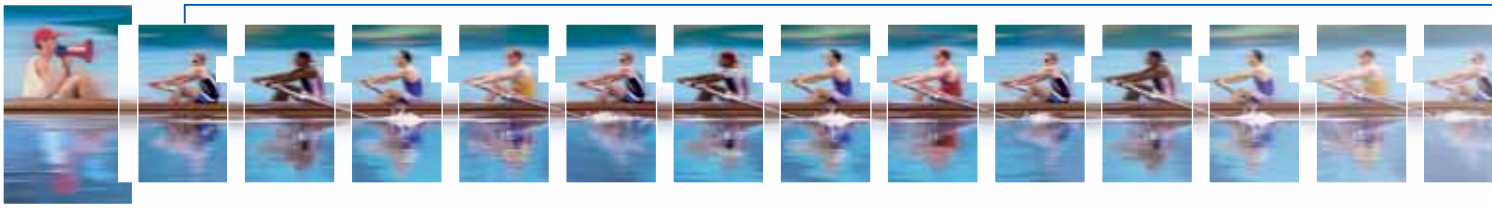
Used with the applicable AC500 configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: ABB AC500 Technical Catalog 2CDC125002B0207



Details/Type:	PM582	PM582-ETH	PM582-ARC	PM590	PM590-ETH	PM590-ARC	PM591	PM591-ETH	PM591-ARC
Supply voltage	24 V DC			24 V DC			24 V DC		
Program memory Flash EPROM and RAM [kB	512			2056			4096		
Integrated data memory [kB]	288, incl. 32 KB RETAIN			3072, incl. 512 KB RETAIN			3072, incl. 512 KB RETAIN		
Plug-in memory card [SD card]	128 MB			128 MB			128 MB		
Cycle time for 1000 instructions in ms binary word floating-point	 0.07 0.07 1.6			 0.002 0.006 0.006			 0.002 0.006 0.006		
Max. number of centralized inputs/outputs Digital inputs Digital outputs Analog inputs Analog outputs	 320 240 160 160			 320 240 160 160			 320 240 160 160		
Max. number of decentralized inputs/outputs	depends on the used standard fieldbus CS31 field bus only: up to 31 stations with up to 120 DIs / 120 DOs per station								
Data buffering	battery			battery			battery		
Real-time clock	x			x			x		
Program execution cyclical time-controlled multi tasking	 x x x			 x x x			 x x x		
User program protection by password	 x			 x			 x		
Internal interfaces									
COM1: RS232/RS485 configurable Connection Programming, Modbus, ASCII, CS31	 x terminal block x			 x terminal block x			 x terminal block x		
COM2: RS232/RS485 configurable Connection Programming, Modbus, ASCII	 x SUB-D x			 x SUB-D x			 x SUB-D x		
Integrated Ethernet coupler Ethernet connection		x RJ45			x RJ45			x RJ45	
Integrated ARCNET coupler ARCNET connection			x Coax			x Coax			x Coax
Display and 8 function keys Function	x RUN/STOP status, diagnosis			x RUN/STOP status, diagnosis			x RUN/STOP status, diagnosis		
Timers	unlimited			unlimited			unlimited		
Counters	unlimited			unlimited			unlimited		
Function Block Diagram (FBS) Instruction List (IL) Ladder Diagram (LD)) Structured Text (ST) Sequential Function Chart (SFC) Continuous Function Chart (CFC)	x x x x x x			x x x x x x			x x x x x x		

Ordering data AC500

The AC500 CPU´s

- 2 serial interfaces integrated, RS232/RS485 configurable
- Display and 8 function keys for diagnosis and status
- Centrally expandable with up to 10 expansion modules locally
- Up to 4 external communication modules simultaneously and in any desired combination
- Optional: SD card for data storage and program backup
- Can also be used as slave on Profibus DP, CANopen and DeviceNet via FieldBusPlug
- Available with communication processors for Ethernet and ARCNET (PM5xx-ARC; PMxx-ETH)



AC500 CPUs, type PM571

Type	Program memory	Cycle time in ms 1000 instructions Bit/Word/Float. point	Integrated coupler	Order code	Weight per piece/kg
PM571	64 KB	0.09/0.3/6	-	1SAP 130 100 R0100	0.135
PM571-ETH	64 KB	0.09/0.3/6	Ethernet	1SAP 130 100 R0170	0.15

AC500 CPUs, type PM581 and PM582

Type	Program memory	Cycle time in ms 1000 instructions Bit/Word/Float. point	Integrated coupler	Order code	Weight per piece/kg
PM581	256 KB	0.07/0.07/1.6	-	1SAP 140 100 R0100	0.135
PM581-ETH	256 KB	0.07/0.07/1.6	Ethernet	1SAP 140 100 R0170	0.15
PM581-ARCNET	256 KB	0.07/0.07/1.6	ARCNET	1SAP 140 100 R0160	0.16
PM582	512 KB	0.07/0.07/1.6	–	1SAP 140 200 R0100	0.135
PM582-ETH	512 KB	0.07/0.07/1.6	Ethernet	1SAP 140 200 R0170	0.15
PM582-ARCNET	512 KB	0.07/0.07/1.6	ARCNET	1SAP 140 200 R0160	0.15

AC500 CPUs, type PM590 and PM591

Type	Program memory	Cycle time in ms 1000 instructions Bit/Word/Float. point	Integrated coupler	Order code	Weight per piece/kg
PM590	2048 KB	0.002/0.006/0.006	-	1SAP 150 000 R0100	0.135
PM590-ETH	2048 KB	0.002/0.006/0.006	Ethernet	1SAP 150 000 R0170	0.15
PM590-ARCNET	2048 KB	0.002/0.006/0.006	ARCNET	1SAP 150 000 R0160	0.16
PM591	4096 KB	0.002/0.006/0.006	-	1SAP 150 100 R0100	0.135
PM591-ETH	4096 KB	0.002/0.006/0.006	Ethernet	1SAP 150 100 R0170	0.15
PM591-ARCNET	4096 KB	0.002/0.006/0.006	ARCNET	1SAT 150 100 R0160	0.16

Ethernet communication module

10/100 Mbit/s, full/half duplex with auto-sensing.
2-port switch integrated.
Transport protocols TCP/IP, UDP/IP, Modbus TCP.
CPU interface: 8 kB dual-port memory.
Contains a separate communication processor, 256 kB RAM memory and 512 kB flash memory.
No external power supply required.

Type	Interfaces	Order code	Weight per piece/kg
CM577-ETH	2 x RJ45	1SAP 170 700 R0001	0.115