Processor modules MX200 series
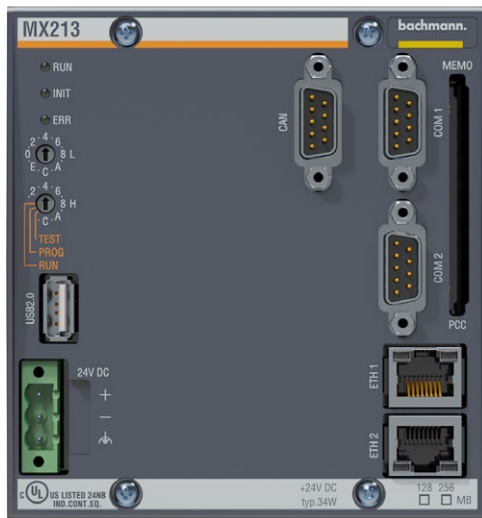
The processor modules of the MX200 series are Module based on PC technology for the M1 controller system. Depending on the type, the modules are equipped with a power supply and an integrated CAN master, and have 100 Mbit Ethernet ports that allow the simple integration of the controller in physically separated networks. The processor module with integrated floating point unit (FPU) is suitable for control applications. The MX200 modules are equipped with non-volatile RAM which provides maximum data security for more than 10 years without battery back-up.

Depending on type, the following features are:
• 2 serial interfaces
• 2 Ethernet-interfaces 10/100 Mbit/s
  with status displays
• 1 CAN interface
• 1 USB interface
• Status indicating LEDs for RUN, INIT and ERROR
• Mass storage (Compact Flash)
• RAM 256 MB DRAM
• Data memory 512 kB nvRAM
• Program memory of 16/32/64 MB FLASH on
  PC card and 16 MB internal FLASH, MX207 64 MB
  internal FLASH
• Integrated power supply

Item	Device	Item no.
MX207		00014445-00
MX213	CF512MB	00018594-00
MX213	CF4GB	00018594-10
MX213❋	CF512MB	00018597-00
MX213❋	CF4GB	00018597-10
MX220	CF512MB	00018593-00
MX220	CF4GB	00018593-10
MX220❋		00019210-00
MX220❋	CF512MB	00017689-00
MX220❋	CF4GB	00017689-10

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Processor modules

MX200 series	MX207	MX213/x	MX220/x
Processor + memory			
CPU	x86	x86	x86
Performance (Pentium equivalent)	66 MHz	133 MHz	200 MHz
CF (mass storage)	-	Without restriction	
nvRAM (data memory)	512 kB		
DRAM (working memory)	256 MB		
PC card (program memory)**	-	PCC201/xx with 16/32/64 MB FLASH	
FLASH (program memory)**	64 MB internal	16 MB internal	
Interfaces			
Serial	1x RS232/422/485	1x RS232 + 1x RS232/422/485	
Ethernet	1x 10/100 base-Tx	2x 10/100 base-Tx	
USB	1x USB 2.0		
CAN	1x 10 k to 1 Mbit/s		
Power supply for I/O			
Supply voltage	24 VDC (18 to 34 V)		
Nominal power	17 W for I/O		
Module	+5 V / 2000 mA; +15 V / 250 mA; -15 V / 200 mA		
Additional features			
Watchdog			
Synchronizing pulse also for Ethernet and fieldbuses SERCOS and CAN			
Real-time clock with battery			
Status indication via 3 LEDs			
CPU-ID selectable with rotary hexadecimal switches			
Operating system VxWorks with Bachmann system extensions on internal FLASH			
Ambient conditions	**Standard**	**ColdClimate (❄)**	
Operating temperature	-30 to +60 °C fanless		
Rel. humidity operation	5 to 95 % without condensation	5 to 95 % with condensation	
Storage temperature	-40 to +85 °C		
Rel. humidity storage	5 to 95 % without condensation	5 to 95 % with condensation	

*   not included in delivery

*** depending on the configuration, a part of the program memory (approx. 4 MB) is reserved for the system software

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MX200 series	
Execution variants	
MX220	CPU module LX700 (433MHz); 256MB DRAM; 512kB nvRAM; 16MB file-flash; 2x Eth100; 1x CAN/CANopen; 1x RS232; 1x RS232/422/485; 1x USB2.0; integrated power supply 17W; PCC slot; CF slot
MX220❄	Like MX220; ColdClimate (❄)
MX213	CPU module LX700 (266MHz); 256MB DRAM; 512kB nvRAM; 16MB file-flash; 2x Eth100; 1x CAN/CANopen; 1x RS232; 1x RS232/422/485; 1x USB2.0; integrated power supply 17W; PCC slot; CF slot
MX213❄	Like MX213; ColdClimate (❄)
MX207	CPU module LX700 (266MHz); without Cache; 256MB DRAM; 512kB nvRAM; 64MB file-flash; 1x Eth100; 1x CAN/CANopen; 1x RS232/422/485; 1x USB2.0; integrated power supply 17W

Accessories MX200 series			
Item		**Item no.**	**Description**
DSub/GB		00005258-01	Housing DSUB 37 mm high, shielded, 45° outlet
KZ51/03 B		00012052-00	Terminal 03-pins grid 5.08; cage clamp terminal with labeling strip
K-CAN/xm			CAN bus cable x meter (x = user-defined) male <> female, without terminating resistor
	K-CAN/0,5m	00008684-03	CAN bus cable 0.5 meter male <> female, without terminating resistor
	K-CAN/1,0m	00008684-08	CAN bus cable 1.0 meter male <> female, without terminating resistor
	K-CAN/2,0m	00008684-04	CAN bus cable 2.0 meter male <> female, without terminating resistor
	K-CAN/5,0m	00008684-06	CAN bus cable 5.0 meter male <> female, without terminating resistor
S-CAN/1B		00009383-00	Connector CAN-terminator, 37 mm high, 120 Ω, female

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