

M1 - MODICON M340 : Technical & sales presentation Offer



A

Modicon M340 offer



A – Modicon M340 offer

Hardware

General information

The hardware offer



- Rack based architecture
 - High robustness
 - For all the module Plug / Unplug allowed CPU in RUN



- Reduced Size
 - Mounting in low depth cabinet (<150 mm)
 - All CPU and I/Os in single width

General information

The hardware offer

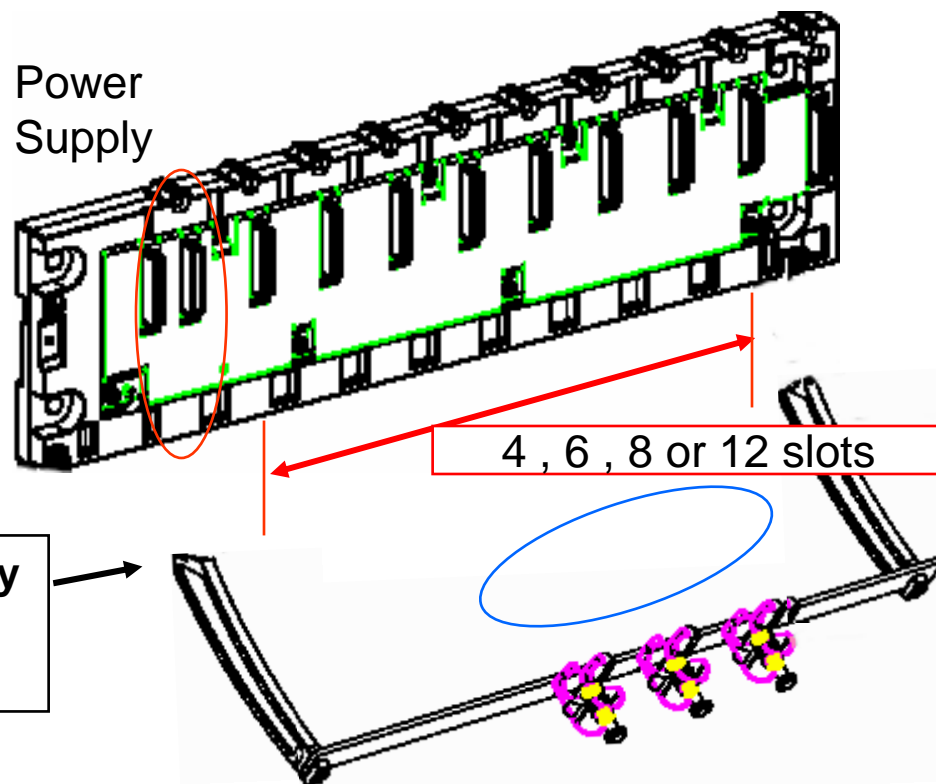
■ System specifications



- Mechanical constraints
 - Chocks : 50g
 - Vibrations : 5g
- Temperature
 - Ambient : 0 to 60 °C (Over 2000 m limit 55°C)
- Altitude
 - All safety constraints for 4000 meters

Racks from 4 modules to 12

The hardware offer



STB XSP 3010

small clamping

STB XSP 3020

Big clamping rings

Characteristics and performance

Rack	BMX XBP 0400	BMX XBP 0600	BMX XBP 0800	BMX XBP 1200
Short description	4 slots backplane	6 slots backplane	8 slots backplane	12 slots backplane
Shield bar	BMX XSP 0400	BMX XSP 0600	BMX XSP 0800	BMX XSP 1200
Short description	4 slots protection	6 slots protection	8 slots protection	12 slots protection

Power supply AC/DC standard or High power

The hardware offer

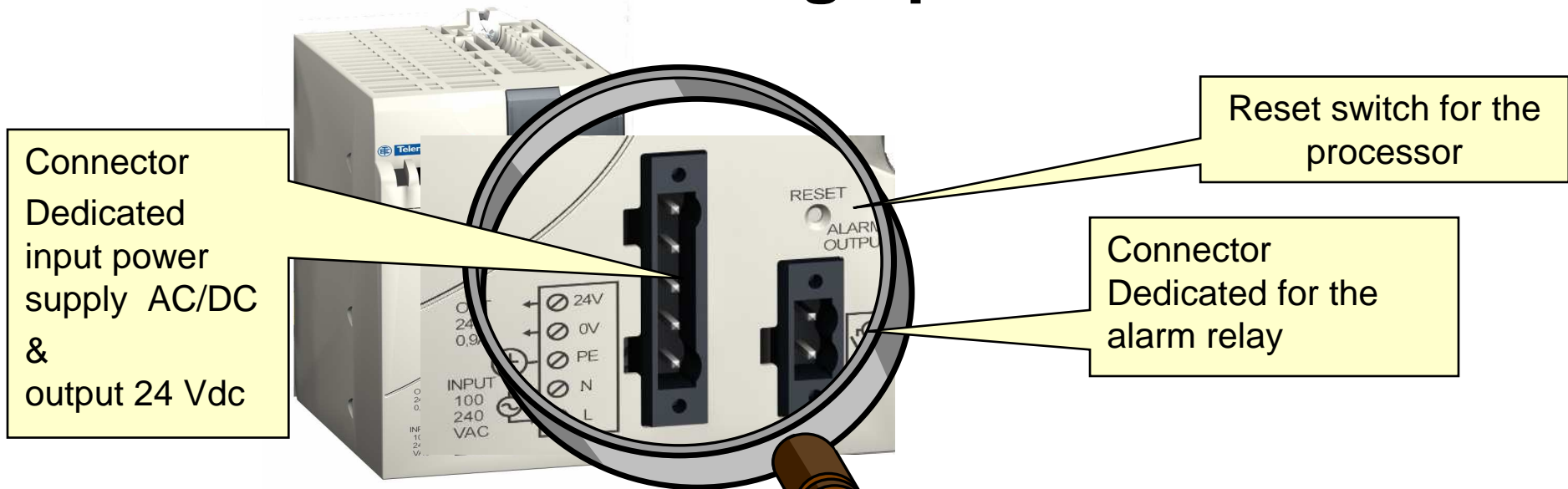


Characteristics and performance

Types	BMX CPS 2000	BMX CPS 3500	BMX CPS 2010	BMX CPS 3020
Short description	20 Watts 115 to 230 Vca Power supply	36 Watts 115 to 230 Vca Power supply	16 Watts 24 Vdc Power supply	31 Watts 24 & 48 Vdc Power supply
Protection	Overload : yes Short circuit: yes Overvoltage : yes	Overload : yes Short circuit: yes Overvoltage : yes	Overload : yes Short circuit: yes Overvoltage : yes	Overload : yes Short circuit: yes Overvoltage : yes
Max output 24Vdc sensor	0.45 Amps	0.9 Amps	-	-

Power supply AC/DC standard or High power

The hardware offer




Characteristics and performance		
Types	BMX XTS CPS10	BMX XTS CPS20
Short description	Connectors set for power supply, two screw connector	Connectors set for power supply, two spring clamp connector



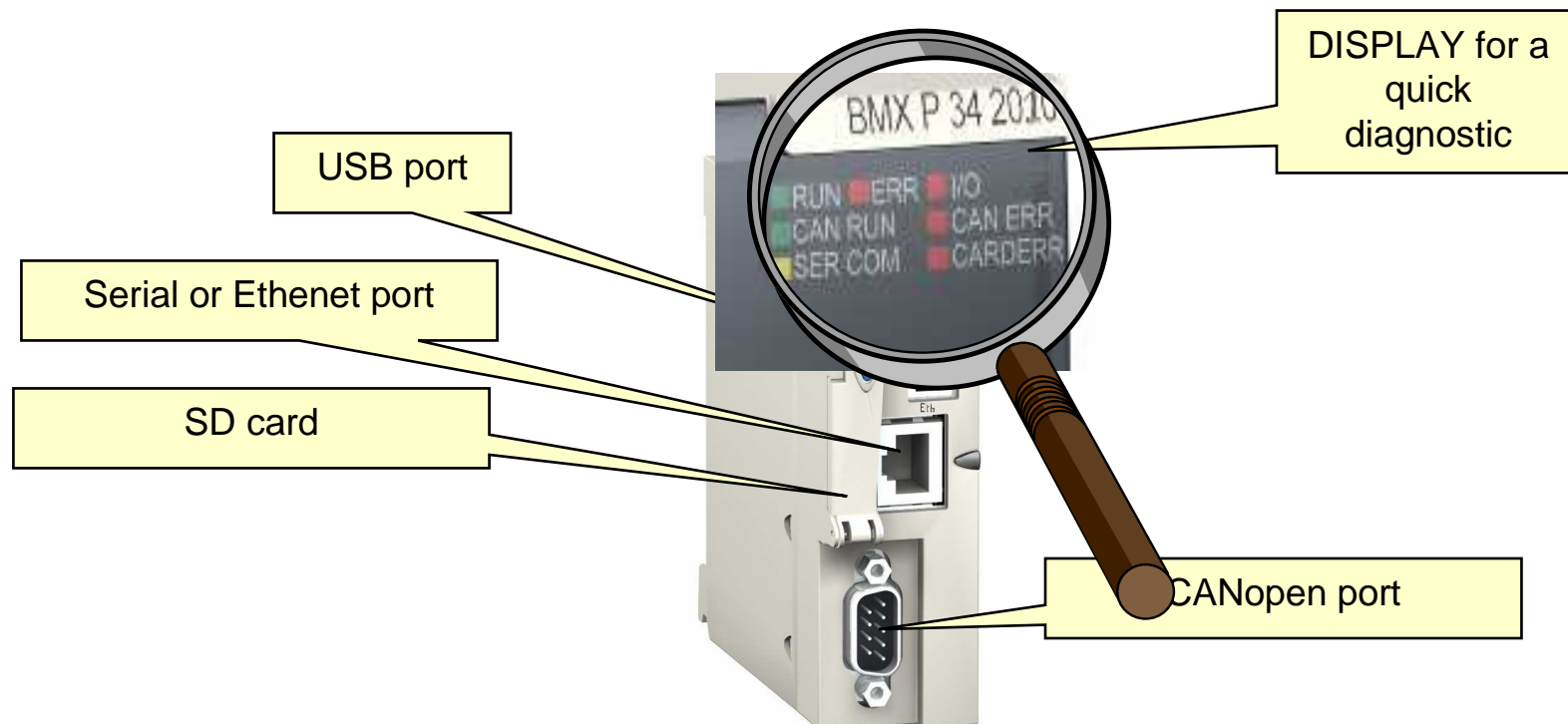
Central processing Unit

The hardware offer

	STANDARD	PERFORMANCE		
Characteristics and performance				
Types	BMX P34 1000	BMX P34 2010	BMX P34 2020	BMX P34 2030
Short description	USB terminal port Memory card slot One comm port : - Serial	USB terminal port Memory card slot Two comm port : - Serial - CANopen	USB terminal port Memory card slot Two comm port : - Serial - Ethernet	USB terminal port Memory card slot Two comm port : -CANopen -Ethernet
number of in-rack TOR in /out	512	1024		
number of in-rack Analog in /out	128	256		
Counting chs & Serial port	20	36		
Memory appli	2 Mb	4 Mb		
User data	128 Kb	256 Kb		

Central processing Unit

The hardware offer



Characteristics and performance

Types	BMX XCA USB 018	BMX XCA USB 045
Short description	Connecting cable Programmable Logic Controller USB cable with grounding possibility for permanent connection of programming Length 1.8 meter	Connecting cable Programmable Logic Controller USB cable with grounding possibility for permanent connection of programming Length 4.5 meter

Memory card for Programmable Logic Controller

The hardware offer

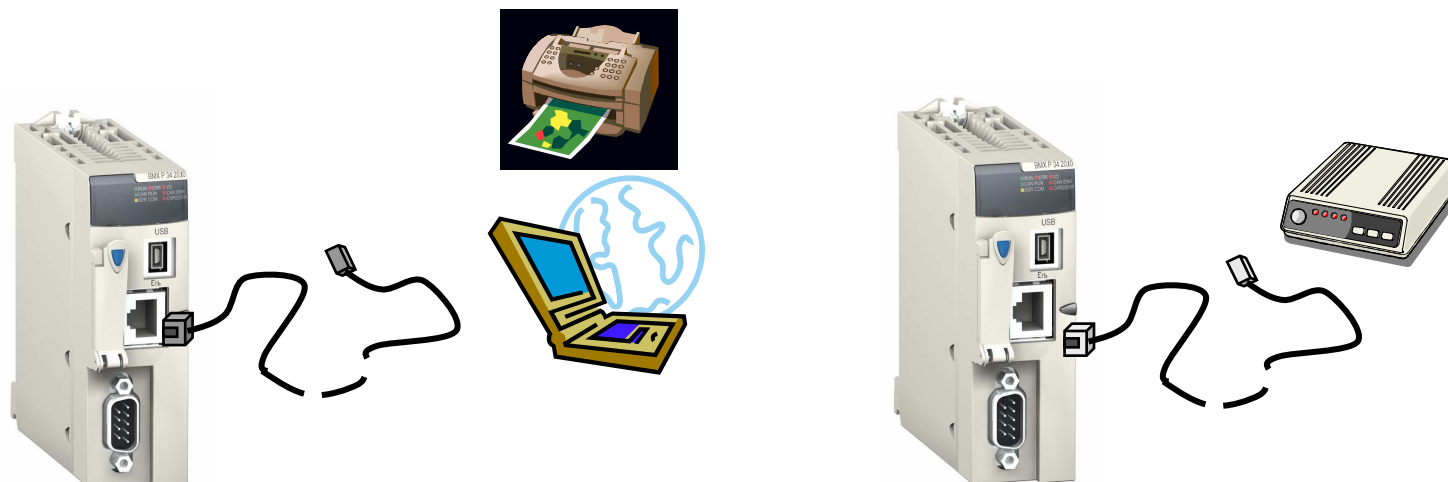


Characteristics and performance

Types	BMX RMS 008MP	BMX RMS 008MPF
Short description	<p>Mem card 8 Mb</p> <p>Memory Card for Programmable Logic Controller When inserted in processor this memory card</p> <ul style="list-style-type: none"> – insures application backup – activates the WEB server on the Ethernet embedded port (Transparent Ready class B) <p>Provide with the CPU</p>	<p>Mem card 8Mb + Files 16Mb</p> <p>Memory Card for Programmable Logic Controller When inserted in processor this memory card</p> <ul style="list-style-type: none"> – insures application backup – activates the WEB server on the Ethernet embedded port (Transparent Ready class B) – provides 16 Mega bytes for user files storage

Specific wiring for the CPU on the MODBUS port

The hardware offer

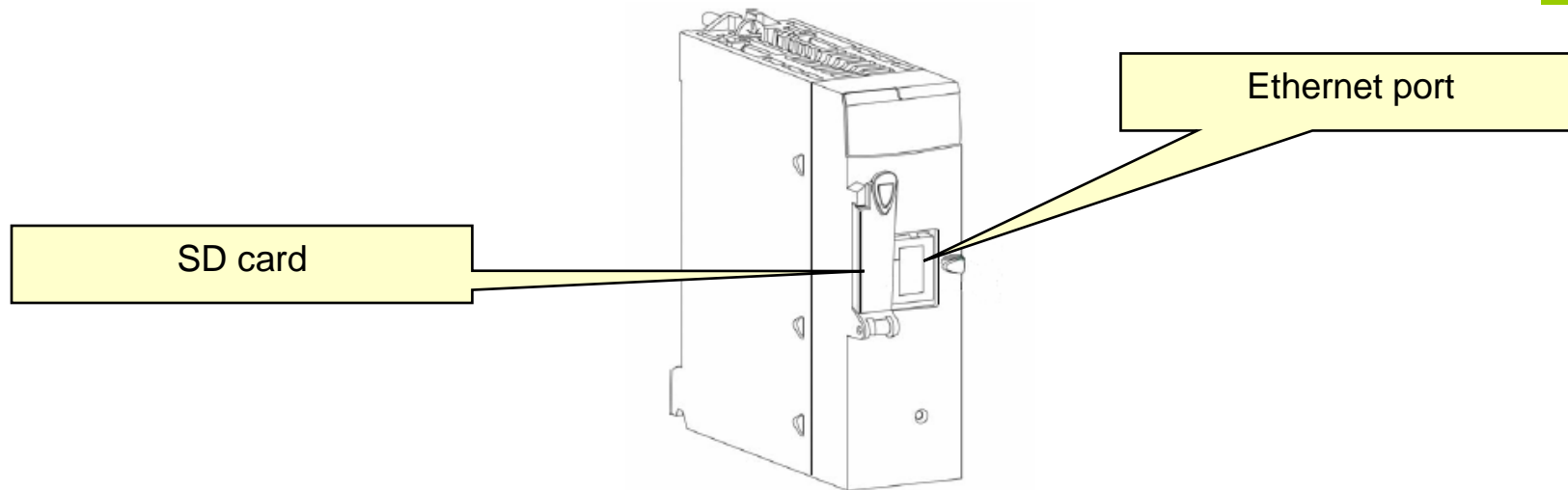


Characteristics and performance

Types	TCS MCN 3M4F3C2	TCS MCN 3M4M3S2
Short description	<p>Network Accessory for Programmable Logic Controller</p> <p>RJ45 to DB9 female crossed cable.</p> <p>Length 3m. This cable is used to connect a RS232 DTE (typically a PC or a printer) to the CPU embedded serial port.</p>	<p>Network Accessory for Programmable Logic Controller</p> <p>RJ45 to DB9 male straight cable.</p> <p>Length 3m. This cable is used to connect a RS232 DCE (typically a modem) to the CPU embedded serial port</p>

Ethernet module BMX NOE 0100

The hardware offer



Characteristics and performance

Types

BMX NOE 0100

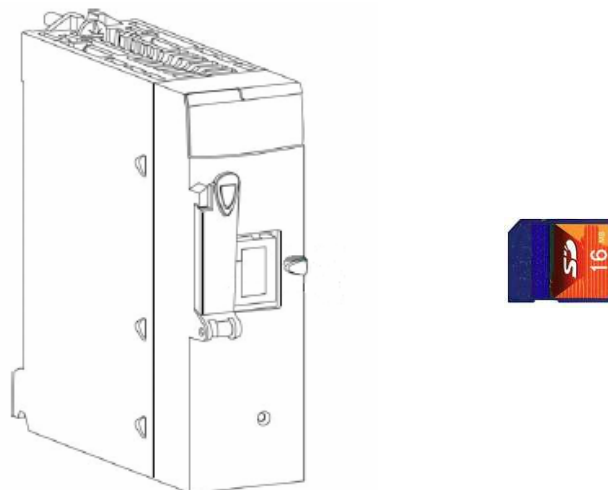
Short
description

Network Module for Programmable Logic Controller

- 1 RJ45 10/100 Ethernet port
- Memory card slot
- Services according Transparent Ready Class B30 or C30 depending of the memory

Memory card dedicated for the BMX NOE 0100

The hardware offer

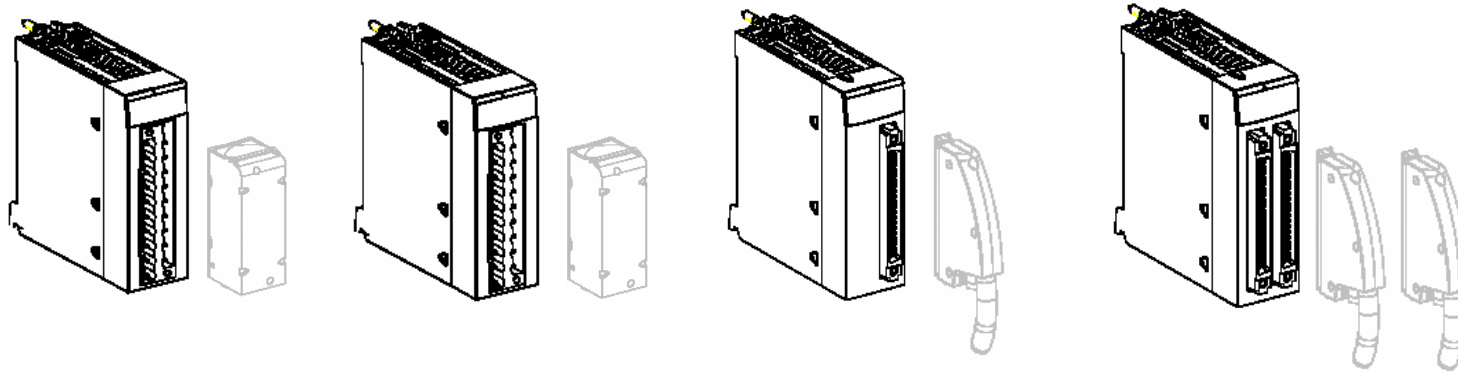


Characteristics and performance

Types	BMX RWS B008M	BMX RWS C016M
Short description	<p>Mem card NOE Web B 8 Mb</p> <p>Memory Card for Programmable Logic Controller When inserted in the Ethernet option module BMXNOE0100, the provided services are conform to Transparent Ready class B30</p>	<p>Mem card NOE Web C 16 Mb</p> <p>Memory Card for Programmable Logic Controller When inserted in the Ethernet option module BMXNOE0100, the provided services are conform to Transparent Ready class C30. 16 Mega bytes are available for user web pages</p>

Digital Input Output

The hardware offer



BMX

Dxx

xx xx

Range
product

D Discrete

D Dc
A Ac
RA Relay

I input
O output
M mixte

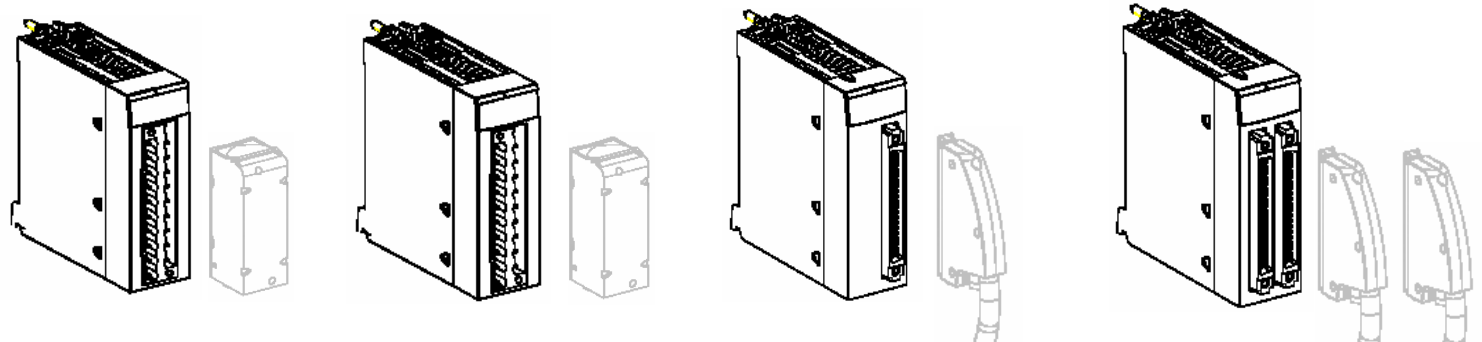
16 Channels
32 Channels
64 Channels

2 24Vdc
3 48Vdc
4 120Vac
5 100 ..240 Vac

0 Positive logic
1 Negative logic

Digital input

The hardware offer



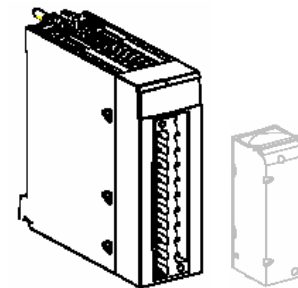
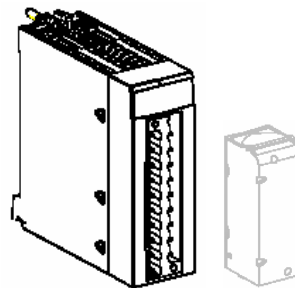
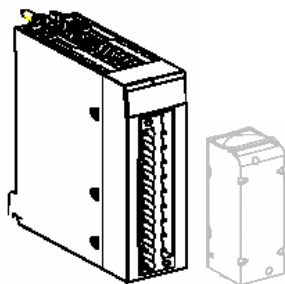
Characteristics and performance

Types	BMX DDI 1602	BMX DAI 1604	BMX DDI 3202K	BMX DDI 6402K
Short description	<p>Digital Inputs module for Programmable Logic Controller</p> <p>16 Channels, 24 Vdc, Sink (positive logic),</p> <p>20 points terminal bloc</p>	<p>Digital Inputs module for Programmable Logic Controller</p> <p>16 Channels, 120 Vac,</p> <p>20 points terminal bloc</p>	<p>Digital Inputs module for Programmable Logic Controller</p> <p>32 Channels, 24 Vdc, Sink (positive logic)</p> <p>1 connectors 40 points</p>	<p>Digital Inputs module for Programmable Logic Controller</p> <p>64 Channels, 24 Vdc, Sink (positive logic)</p> <p>2 connectors 40 points</p>

Digital input

Module
available
in the
launch
L12A.

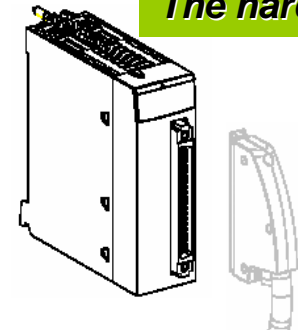
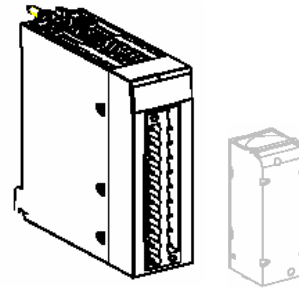
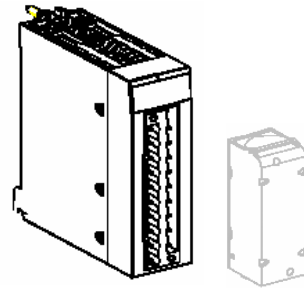
The hardware offer



Characteristics and performance

Types	BMX DDI 1603	BMX DAI 1602	BMX DAI 1603	
Short description	<p>Digital Inputs module for Programmable Logic Controller</p> <p>16 Channels, 48 Vdc, Sink (positive logic),</p> <p>20 points terminal bloc</p>	<p>Digital Inputs module for Programmable Logic Controller</p> <p>16 Channels, 24 Vac/Vdc (negative logic)</p> <p>20 points terminal bloc</p>	<p>Digital Inputs module for Programmable Logic Controller</p> <p>16 Channels, 48 Vac,</p> <p>20 points terminal bloc</p>	

Digital input and output

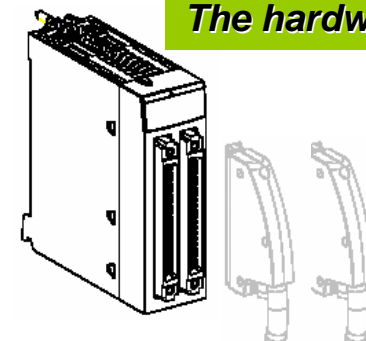
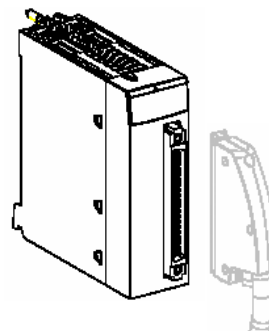
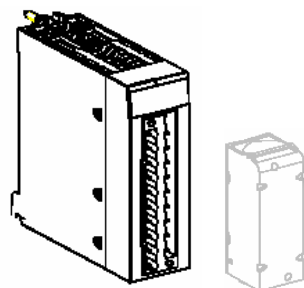


The hardware offer

Characteristics and performance

Types	BMX DDM 16022	BMX DDM 16025	BMX DDM 3202K
Short description	<p>Digital Inputs and Outputs Combination module for Programmable Logic Controller</p> <p>8 IN Channels, 24 Vdc, Sink (logique positive),</p> <p>8 OUT Channels, Transistors, 24 Vdc 0.5 Amp, Source logic, Diagnosis and protection channel by channel</p> <p>20 points terminal bloc</p>	<p>Digital Inputs and Outputs Combination module for Programmable Logic Controller</p> <p>8 IN Channels, 24 Vdc, Sink (logique positive),</p> <p>8 OUT Channels, Relays, 24 Vdc 24...240 Vac 3 Amp (lth), No protection</p> <p>20 points terminal bloc</p>	<p>Digital Inputs and Outputs Combination module for Programmable Logic Controller</p> <p>16 IN Channels, 24 Vdc, Sink (logique positive),</p> <p>16 OUT Channels, Transistors, 24 Vdc 0.1 Amp, Source logic, Diagnosis and protection channel by channel</p> <p>1 connector 40 points</p>

Digital output



The hardware offer

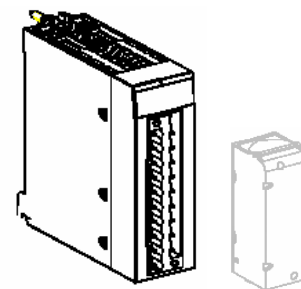
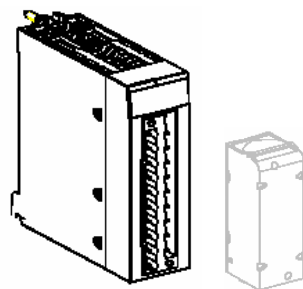
Characteristics and performance

Types	BMX DDO 1602	BMX DDO 3202K	BMX DDO 6402K
Short description	<p>Digital Outputs module for Programmable Logic Controller</p> <p>16 Channels, Transistors, 24 Vdc 0.5 Amp, Source logic,</p> <p>Diagnosis and protection channel by channel</p> <p>20 points terminal bloc</p>	<p>Digital Outputs module for Programmable Logic Controller</p> <p>32 Channels, Transistors, 24 Vdc 0.1 Amp, Source logic,</p> <p>Diagnosis and protection channel by channel</p> <p>1 connector 40 points</p>	<p>Digital Outputs module for Programmable Logic Controller</p> <p>64 Channels, Transistors, 24 Vdc 0.1 Amp, Source logic,</p> <p>Diagnosis and protection channel by channel</p> <p>2 connectors 40 points</p>

Digital output

Module
available
in the
launch
L12A.

The hardware offer

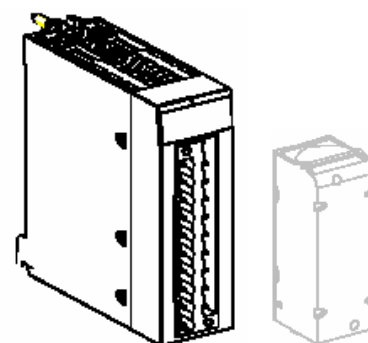
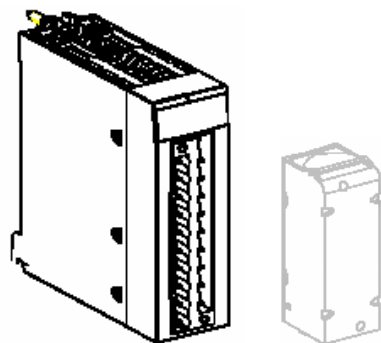


Characteristics and performance

Types	BMX DDO 1612	BMX DAO 1605		
Short description	<p>Digital Outputs module for Programmable Logic Controller</p> <p>16 Channels, Transistors, 24 Vdc 0.5 Amp, sink logic,</p> <p>Diagnosis and protection channel by channel</p> <p>20 points terminal bloc</p>	<p>Digital Outputs module for Programmable Logic Controller</p> <p>16 Channels, Triacs, 100 ... 240 Vac , 0.6 Amp,</p> <p>Diagnosis channel by channel</p> <p>20 points terminal bloc</p>		

Digital output

The hardware offer

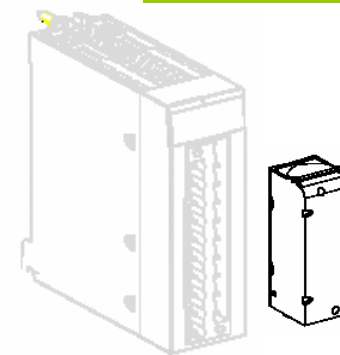
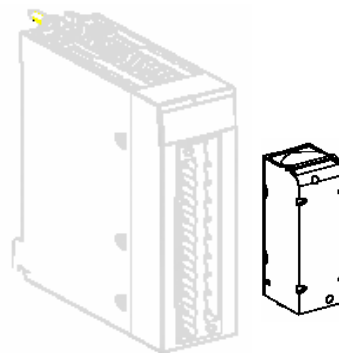
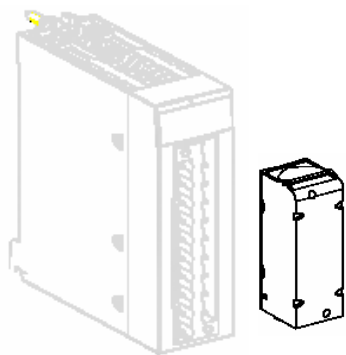


Characteristics and performance

Types	BMX DRA 0805	BMX DRA 1605
Short Description	<p>Digital Outputs module for Programmable Logic Controller</p> <p>8 Channels, Isolated relays, 2 contacts / channel</p> <p>24 Vdc 24...240 Vac 3 Amp (lth),</p> <p>No protection 20 points terminal bloc</p>	<p>Digital Outputs module for Programmable Logic Controller</p> <p>16 Channels, Relays, 1 common point for 8 channels</p> <p>24 Vdc 24...240 Vac 3 Amp (lth),</p> <p>No protection 20 points terminal bloc</p>

Terminal block

The hardware offer



Characteristics and performance

Types	BMX FTB 2000	BMX FTB 2010	BMX FTB 2020
Short Description	<p>Cabling Accessory for Programmable Logic Controller</p> <p>Screw terminal strip (20 points), Standard</p>	<p>Cabling Accessory for Programmable Logic Controller</p> <p>Square washer terminal strip (20 points), Circular adapter</p>	<p>Cabling Accessory for Programmable Logic Controller</p> <p>Spring terminal strip (20 points)</p>



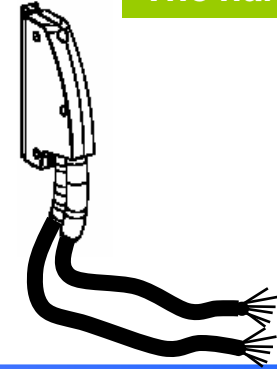
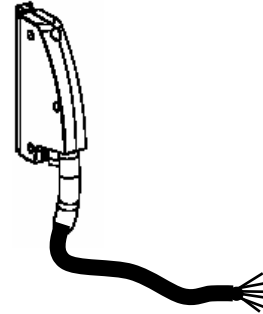
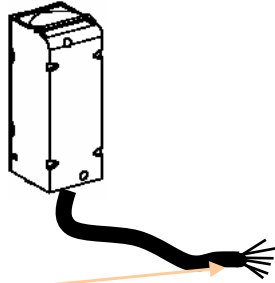
■ The TERMINAL block is provided with accessories of codification.

-The goal is to dedicate the Terminal block with the associated module in order to avoid a bad wiring.

Terminal block & Cable without connector

The hardware offer

Colour code given
in the catalog



Characteristics and performance

Types	BMX FTW x01	BMX FCW x01	BMX FCW x03
Short Description	<p>Cable for Digital Inputs or Outputs module of Programmable Logic Controller</p> <p>1 FTB terminal block preformed on one 20 wires cable with colour coded flying leads</p> <p>Length : x meters</p>	<p>Cable for Digital Inputs or Outputs module of Programmable Logic Controller</p> <p>1 FCN connector preformed on one 20 wires cable with colour coded flying leads</p> <p>Length : x meters</p>	<p>Cable for Digital Inputs or Outputs module of Programmable Logic Controller</p> <p>1 FCN connector preformed on one 20 wires cable with colour coded flying leads</p> <p>Length : x meters</p>

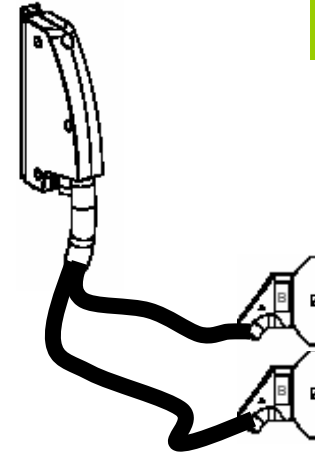
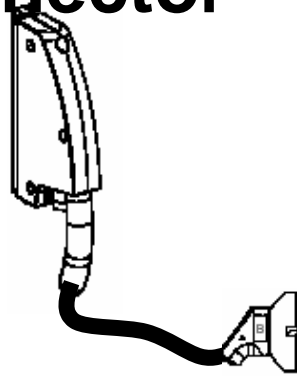
X



3 (3 meters) : **5** (5 meters) : **10** (10 meters)

Terminal block & Cable with HE10 connector

Compatible with
the standard TELEFAST
offer



The hardware offer

Characteristics and performance

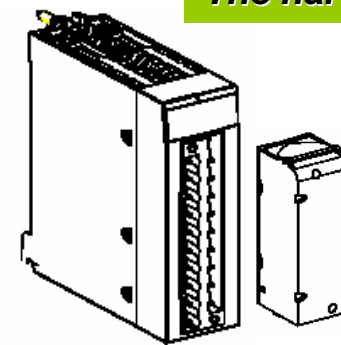
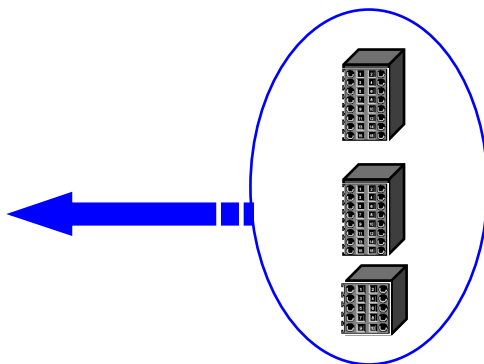
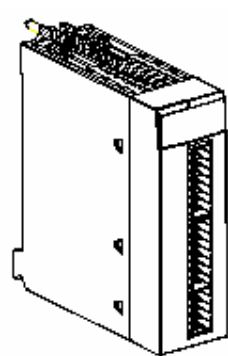
Types	BMX FCC xx1	BMX FCC xx3
Short Description	<p>Cable for Digital Inputs or Outputs module of Programmable Logic Controller</p> <p>1 FCN to 1 HE10 connectors for direct wiring with Telefast 2 system</p> <p>Length : x.x meter</p>	<p>Cable for Digital Inputs or Outputs module of Programmable Logic Controller</p> <p>1 FCN to 2 HE10 connectors for direct wiring with Telefast 2 system</p> <p>Length : x.x meter</p>

X.X



05 (0.5 meters) : **10** (1 meters) : **30** (3 meters) : **50** (5 meters) : **100** (10 meters)

Count module & connectors

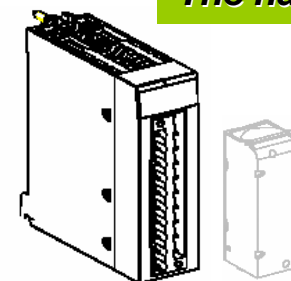
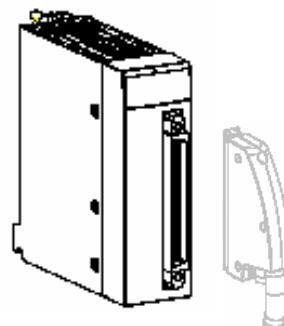
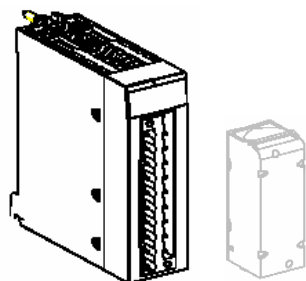


The hardware offer

Characteristics and performance

Types	BMX EHC 200	BMX XTS HSC 20	BMX EHC 0800
Short Description	<p>Counter Module for Programmable Logic Controller</p> <ul style="list-style-type: none"> -2 Channels 60 KHz -6 inputs 24Vdc per channel -2 transistors outputs per channel <p>4 counting modes, 4 measuring modes and PWM</p>	<p>Connectors set for Counter Module of Programmable Logic Controller</p> <p>Two 16-terminal spring clamp connector</p> <p>One 10-terminal spring clamp connector</p>	<p>Counter Module for Programmable Logic Controller</p> <ul style="list-style-type: none"> -8 Channels 10 KHz -2 inputs 24Vdc per channel <p>5 counting modes, 1 measuring modes</p>

Analog module



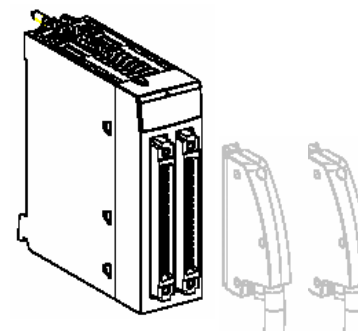
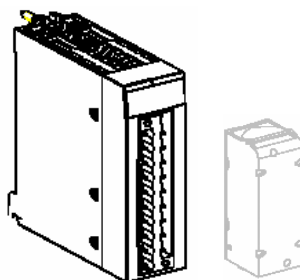
The hardware offer

Characteristics and performance

Types	BMX AMI 0410	BMX ART 0414	BMX AMO 0210
Short Description	<p>Analog Input module for Programmable Logic Controller</p> <ul style="list-style-type: none"> -4 High Level Fast Inputs -multi-range (U & I) channels +/-10 V, 0..10 V, +/- 5 V , 0.5 V / 0.20 mA, +/- 20 mA, 1..5 V / 4..20 mA, - high speed, high resolution (16bits) - isolated between channels 	<p>Analog Input module for Programmable Logic Controller</p> <ul style="list-style-type: none"> -4 Temperature inputs -multi-range channels : Thermocouples and RTD -thermosonde CEI Pt100/Pt1000, US/JIS Pt100/Pt1000, Cu10, Ni100/Ni1000 en 2, 3 ou 4 fils, - resistor - thermocouple B, E, J, K, L, N, R, S, T, U, - tension +/- 40 mV à +/- 1,28 V. - high resolution (16bits) - isolated between channels 	<p>Analog Outputs module for Programmable Logic Controller</p> <ul style="list-style-type: none"> -2 multi-range (U & I) channels tension +/- 10 V, courant 0..20 mA et 4..20 mA. -- high speed, high resolution (16 bits) - isolated between channels

Analog module

Module
available
in the
launch
L12A.



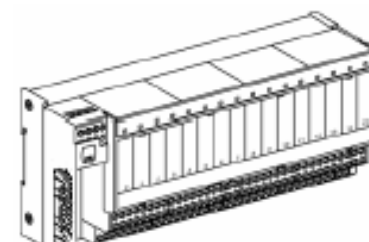
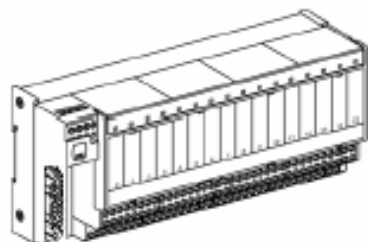
The hardware offer

Characteristics and performance

Types	BMX AMM 0600	BMX ART 0814
Short Description	<p>Analog Input / Output module for Programmable Logic Controller</p> <ul style="list-style-type: none"> - 4 High Level Fast Inputs - multi-range (U & I) channels +/-10 V, 0..10 V, +/- 5 V ,0.5 V / 0.20 mA, +/- 20 mA, 1..5 V / 4..20 mA, - high speed, low resolution (10/12 bits) - <u>Not isolated between channels</u> - 2 multi-range (U & I) channels - tension +/- 10 V, courant 0..20 mA et 4..20 mA. - high speed, low resolution (12 bits) - Not isolated between channels 	<p>This module provide the same function than the BMX ART 0414 but with 8 inputs</p> <p>Analog Input module for Programmable Logic Controller</p> <ul style="list-style-type: none"> - Temperature inputs - multi-range channels : Thermocouples and RTD - thermosonde CEI Pt100/Pt1000, US/JIS Pt100/Pt1000, Cu10, Ni100/Ni1000 en 2, 3 ou 4 fils, - resistor - thermocouple B, E, J, K, L, N, R, S, T, U, - tension +/- 40 mV à +/- 1,28 V. - high resolution - isolated between channels

Telefast Analog module

The hardware offer

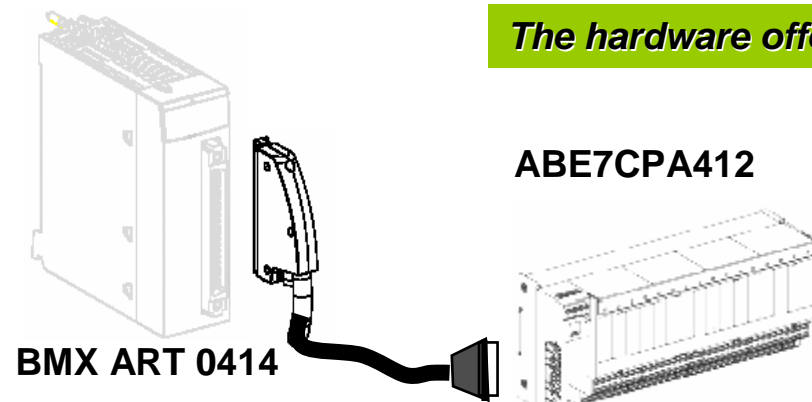
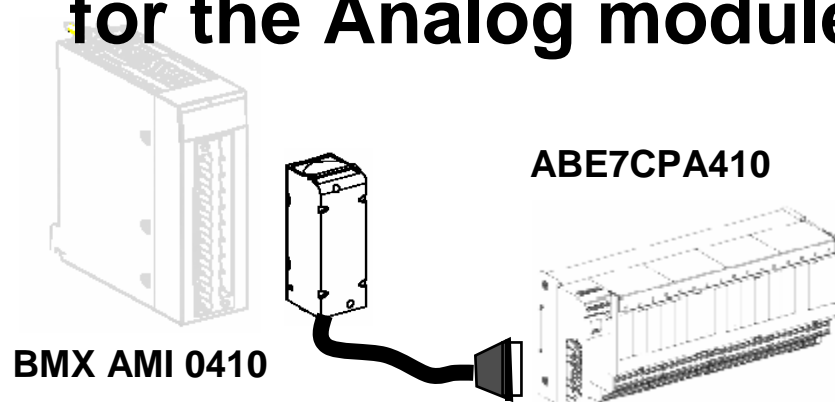


Characteristics and performance

Types	ABE 7CPA 410	ABE 7CPA 412
Short Description	<p>Cabling Accessory for Programmable Logic Controller</p> <p>Connection and isolated sensor power supply distribution for the high level input module BMX AMI0410</p> <p>Provide 4 isolated and protected power supplies for current loops 4-20mA</p> <p>Allow a direct wiring of 4 current or voltage Inputs</p>	<p>Cabling Accessory for Programmable Logic Controller</p> <p>Provide connection and the Cold Junction compensation for thermocouples sensors of temperature input module BMX ART0414.</p> <p>Make easier a direct wiring of the 4 temperature Inputs</p>

Terminal block & Cable with Sud25 connector for the Analog module

The hardware offer



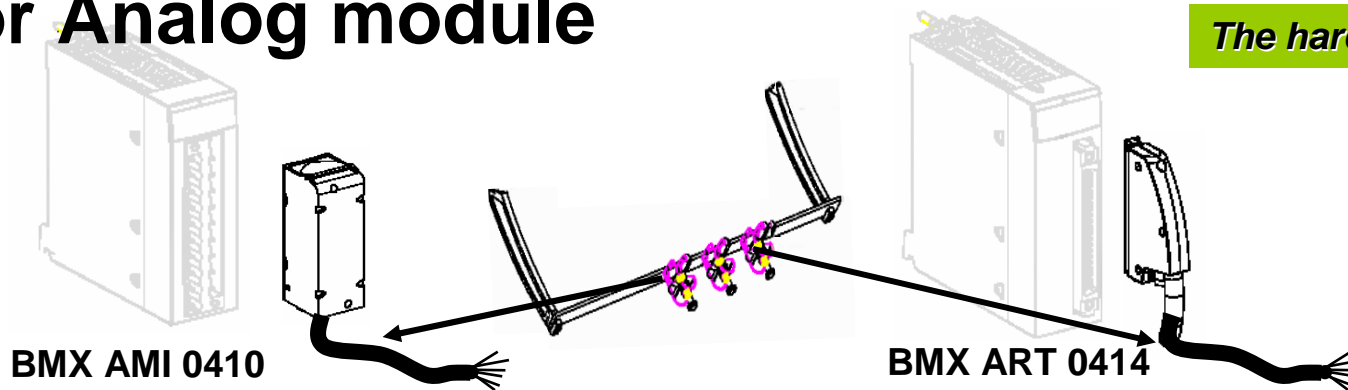
Characteristics and performance

Types	BMX FCA xx0	BMX FCA xx2
Short Description	<p>Cable for High Level Analog Inputs module of Programmable Logic Controller</p> <p>1 FTB and 1 Sub-D 25 connectors for direct wiring of BMX AMI 0410 with Telefast ABE7CPA410</p> <p>Length : x.x meter</p>	<p>Cable for Temperature Inputs module of Programmable Logic Controller</p> <p>1 FCN and 1 Sub-D 25 connectors for direct wiring of BMX ART 0414 with Telefast ABE7CPA412</p> <p>Length : x.x meter</p>

XX → **15** (1.5 meters) : **30** (3 meters) : **50** (5 meters)

Terminal block & Cable without connector for Analog module

The hardware offer



Characteristics and performance

Types	BMX FTW x01S	BMX FCW x01S
Short Description	<p>Cable for Analog Inputs or Outputs module of Programmable Logic Controller</p> <p>1 FTB terminal block on a shielded cable with colour coded flying leads</p> <p>Length : x meters</p>	<p>Cable for Analog Inputs or Outputs module of Programmable Logic Controller</p> <p>1 FCN connector on a shielded cable with colour coded flying leads</p> <p>Length : x meters</p>

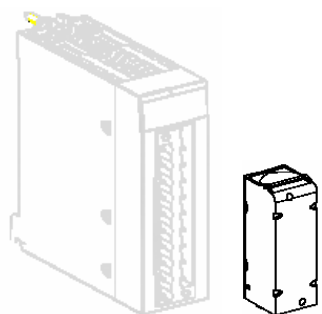
X



3 (3 meters) : **5** (5 meters)

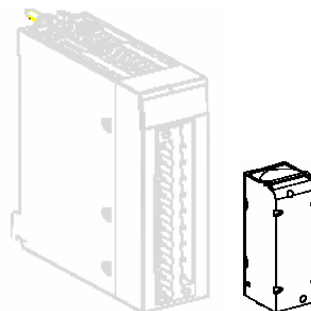
Terminal block for Analog module

The hardware offer



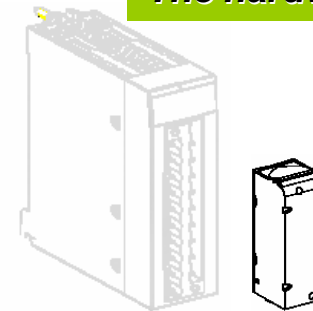
BMX AMI 0410

BMX AMO 0210



BMX AMI 0410

BMX AMO 0210



BMX AMI 0410

BMX AMO 0210

Characteristics and performance

Types	BMX FTB 2000	BMX FTB 2010	BMX FTB 2020
Short Description	<p>Cabling Accessory for Programmable Logic Controller</p> <p>Screw terminal strip (20 points), Standard</p>	<p>Cabling Accessory for Programmable Logic Controller</p> <p>Square washer terminal strip (20 points), Circular adapter</p>	<p>Cabling Accessory for Programmable Logic Controller</p> <p>Spring terminal strip (20 points)</p>



■ The TERMINAL block is provided with accessories of codification.

-The goal is to dedicate the Terminal block with the associated module in order to avoid a bad wiring.



B – Modicon M340 offer

Software

Unity Pro V3.0: Selection Guide



Unity Pro S

MODICON M340

M

L

XL

Premium

57-00

57-10

57-20

57-30

57-40

57-50

ATRIUM

57-20

57-30

Quantum

31110

43412

53414

65150

65160

67160



Unity Pro V3.0



Single & Multi-seats

Up to

3 10 100 users



	Single	Group	Team	Facility
Unity Pro X Large	✓	✓	✓	✓
Unity Pro Large	✓	✓	✓	✓
Unity Pro Medium	✓	✓	✓	
Unity Pro Small	✓	✓	✓	



Unity Pro Small follows the same policy as the other versions

Upgrades

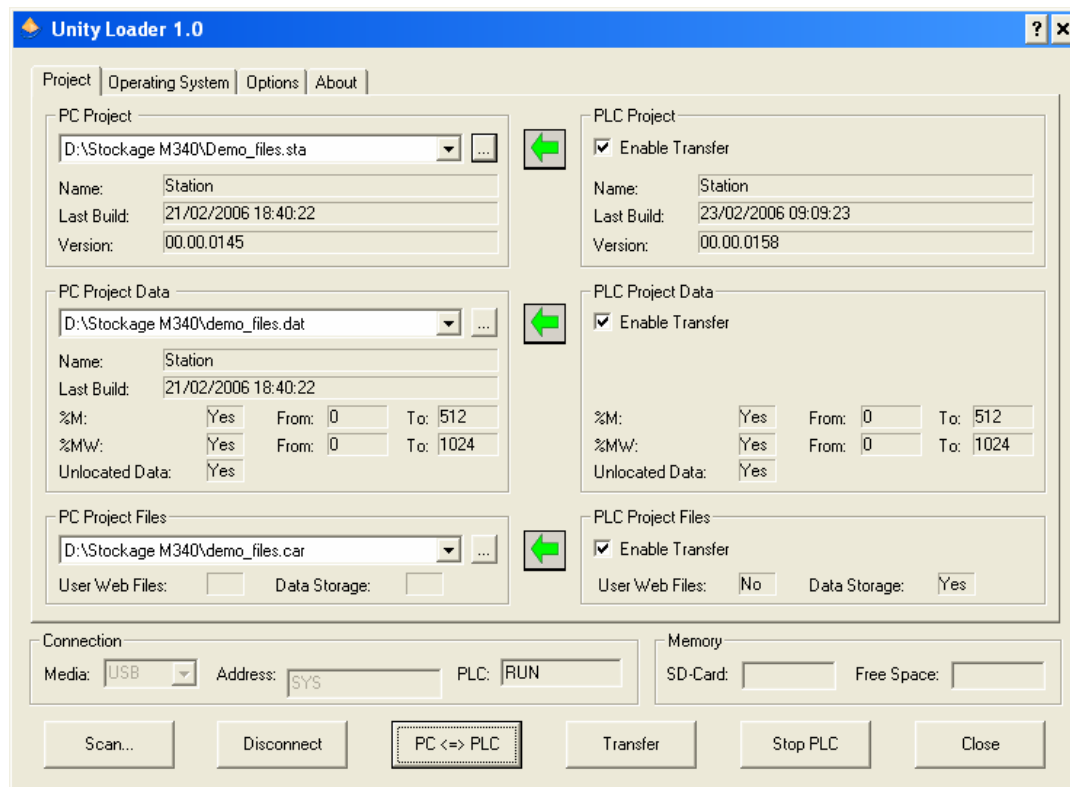
Ease the transition path from PL7 Micro, Concept Small and ProWorx Lite

... For customers with active subscription only

Subscription service (1st year included)

May include in the same contract PL7, Concept or Proworx

Unity Loader for operation and maintenance



- Standalone software to backup/restore the project
 - Program
 - Real time data
 - Data storage from the cartridge
- Firmware update

