Millenium 3 Smart

➡ Sandwich communication extension

- ■ **Allows the ability to create a Millenium 3 network**
- ■ **Ability to exchange 6 to 1 words with FBD programming**
- ■ **Only compatible with Millenium 3 Smart controllers**
- ■ **Periodic exchanges with max. 6 XN06 extensions**
- ■ **Automatic recognition of number of slaves**

XN07

Part numbers

Type	Description	Supply		Code
XN07	Master exchange unit for XN06	Via the 24 V ⎓ controller	Obsolete	88974250

Accessories

Designation	Code
RJ45 tee-joint with 20 cm cable	88970125
EOL ferrules, RC 120 Ω 1 nF (pack of 2)	88970126
RJ45 wiring kit (2 tees, 2 ferrules, 1 x 4-pair FTP cable, 3 m)	88970127

Specific characteristics*

Earthing	Internal link between electronic mass and equipment mass Refer to the quick reference guide supplied with the product
Operating temperature	-20 → +55 °C (+40 °C in a non-ventilated enclosure) in accordance with to IEC/EN 60068-2-1 and IEC/EN 60068-2-2
Cable length	Maximum network length: 1000 m (max. 9600 bauds, AWG 26)
Pull-up and Pull-down resistance	Polarised line with 470 Ω resistance (included in product)

Communication parameters

Type of link	2 or 4-wire; RTU or ASCII
Transmission rate (Bauds)	1200, 2400, 4800, 9600, 19200, 28800, 38400, 57600
Parity	None; even; odd
Addressing	XN07: 7 → 247 XN06: 1 → 6

Characteristics of exchanges

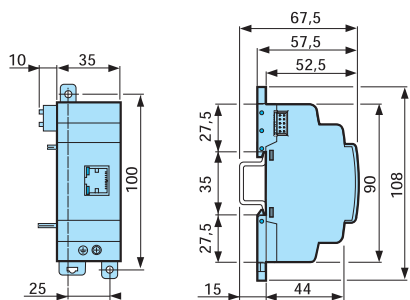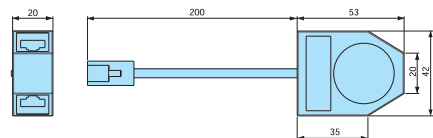| Function blocks programming	
Read-words	1 to 6, depending on the number of XN06 (1 XN06: 6 words, 2 XN06: 3 words, 3 XN06: 2 words, 4, 5 or 6 XN06: 1 word)
Write-words	1 to 6, depending on the number of XN06 (1 XN06: 6 words, 2 XN06: 3 words, 3 XN06: 2 words, 4, 5 or 6 XN06: 1 word)
"Status" words	1 (state of XN06, connected - non-connected)
Clock synchronise bit	Date and time update bit XN07 → XN06
Initialisation bit	Initialization bit (update of number of slaves connected)
Watch dog bit	1 per XN06 (0/1 if connected)
Cycle time	RTU at 1200 bauds: with 6 XN06: < 3.7 s at 1200 bauds: with 1 XN06: < 1 s at 57600 bauds: with 6 XN06: < 0.2 s ASCII at 1200 bauds: with 6 XN06: < 5.7 s at 1200 bauds: with 1 XN06: < 1.5 s at 57600 bauds: with 6 XN06: < 0.2 s

*Also see Millenium 3 Smart and Essential General characteristics

CROUZET

Dimensions (mm)

XN07

67,5
57,5
52,5
10 35
27,5
35
27,5
100
90
108
25 15 44

88970125

20
200
53
20
42
35

88970126

11,7
15
39
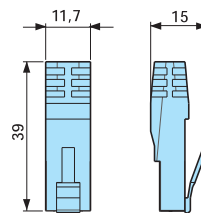
Connections

Example with three slaves and accessories (two-wire)

XN07
88974250

88970125

❶

88970126

88970126

88970125

❷
XN06
88972250

❸
XN06
88972250

❹
XN06
88972250
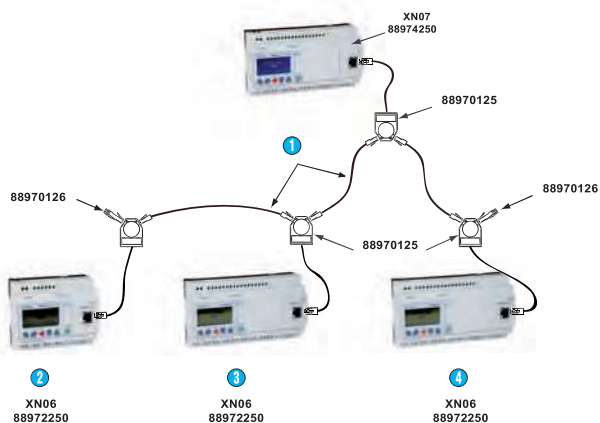
❶ RJ45/RJ45 "Cat 5E" - 100 Ω FTP, 4 pairs
(available in RJ45 wiring kit - part no.: 88970127)

❷ XN06 Modbus slave 1

❸ XN06 Modbus slave 2

❹ XN06 Modbus slave 3

Concerning connection precautions, please refer to the installation sheet IS 0876
(M3 Application note - Modbus extension XN06 and XN07: Implementation of simplified networks)

## Applications

M3 XN07   M3 XN06   [X   XN0]
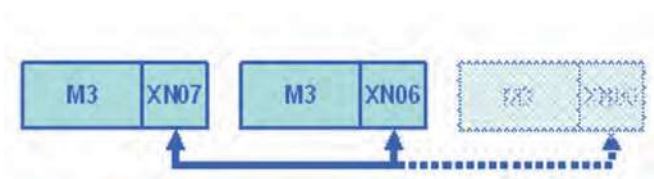
Increase the number of inputs/outputs
- More inputs/outputs while retaining the user-friendly program interface of the Millenium 3
- Easier wiring over long distances (up to 1000 m)
- Flexible, modular solution

Repartition of an application to several Millenium 3
- Each Millenium 3 manages a part of the application, the Master synchronizes the lot

M3 XN07   M3 XN06
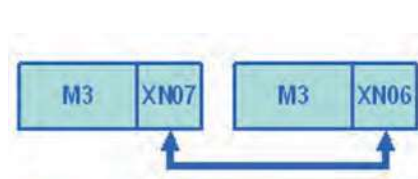
Double the processing capacity with data exchange
- Local and/or remote data processing