HILTRON
security

XM2020

Made in Italy
BT2014/35/UE
EMC2014/30/UE

RAEE

MPX bus isolator

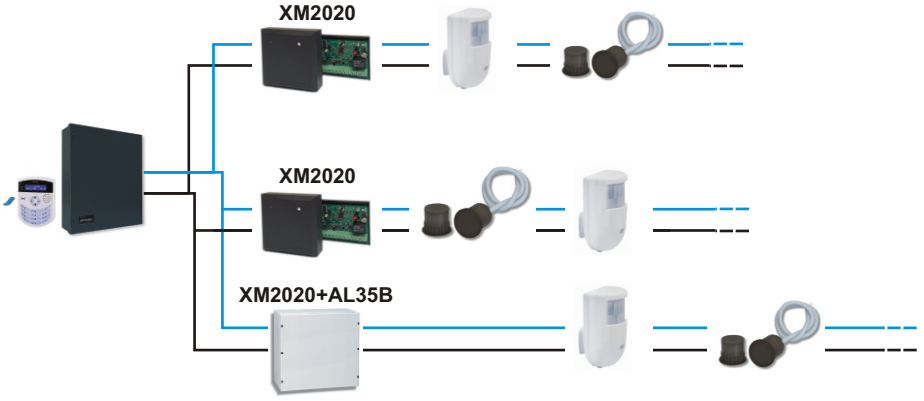
CHARACTERISTICS

- **Compatible with control panelsXMR**
- **Protectionfrom tampering and breakdowns of the bus l**
- **Open collector logic output(40 mA max)**
- **Protection tamperanti-opening**
- **24h anti-sabotage areas1**
- **Visualization: via console (incoming / outgoing bus line voltage)**
- **Entrances1**
- **Dimensions (LxAxP) 71x73x22mm**

INTRODUCTION

The XM2020 isolator can be used on XMR control panels with firmware 2.0 and later, and isolates a branch of the MPX bus line that is not functioning well due to tampering or faults on the line or its devices, thus allowing the devices on the remaining branches to communicate correctly with the control panel.
In fact, when an XM2020 verifies a fault in the MPX line in output (for example a short circuit or an overload), it switches off the power supply of the line itself and interrupts the communication on the incoming MPX line, allowing the control unit to communicate with the remaining devices. placed upstream of the insulator.
Thus, only the devices located downstream of the isolator are excluded from the communication.
The line is restored automatically when the causes of the fault or tampering are removed.

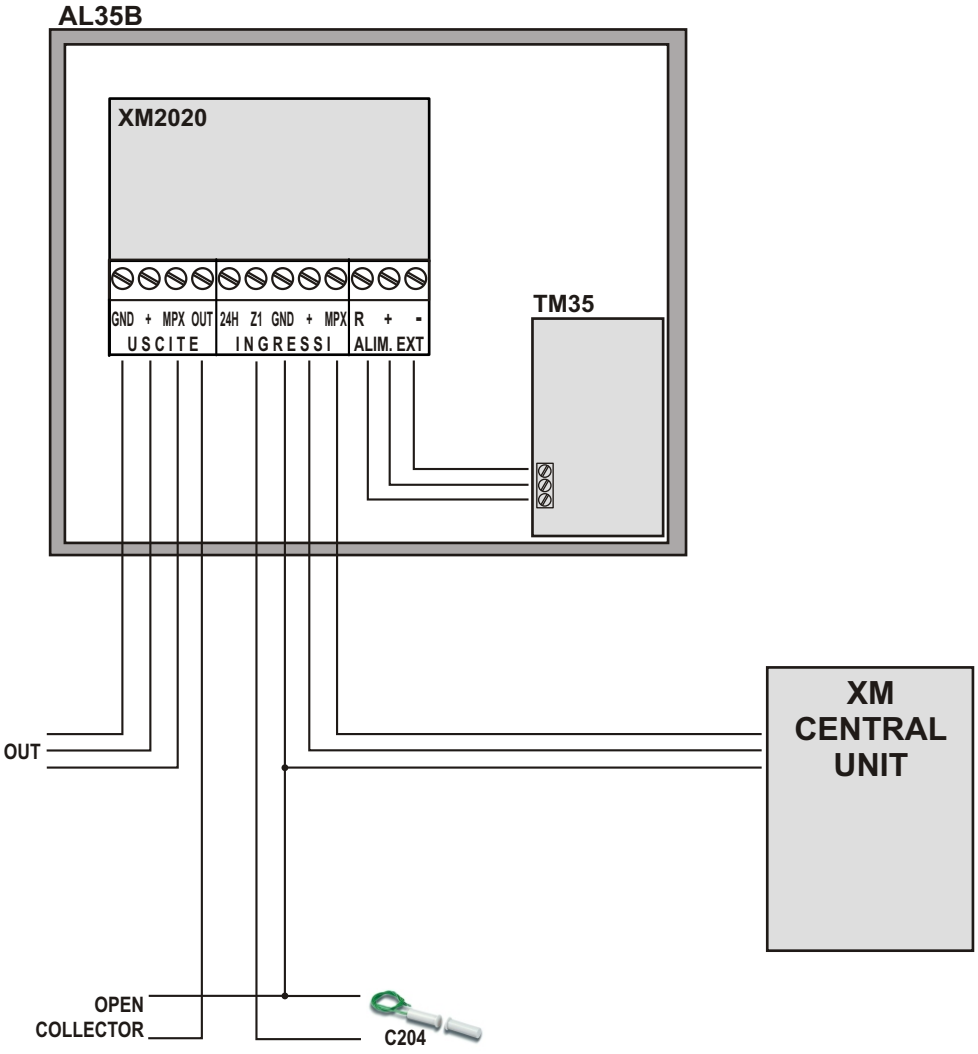
The XM2020 allows you to add and manage an additional power supply on the output line as well as to regenerate the MPX signal "useful for devices located at a great distance from the XM control panel" and communicates to the control panel both the status of the MPX bus line and the status of the " local power supply where present (with battery voltage indication if a TM35EN is used).



After the insulator, the maximum distance of the table on page 3 is replicated

The XM2020 also features a zone input, an open collector output (12V max 40mA), a 24h protection input and a tamper-proof tamper.

CONNECTIONS



LED SIGNALS

GREEN LED	
SLOW FLASHING	MPX bus in and out working.
FAST FLASH	Error on the incoming or outgoing bus line or device not enabled.
LED ON	Outgoing MPX bus blocked (For example insulator subjected to another insulator).

RED LED	
LED ON	Bus power output deactivated - with MPX bus blocked.
SLOW FLASHING	No mains or battery error on external power supply.
FAST FLASH	Error on input voltage, output voltage or current.
LED OFF	No error.

NOTE: The two LEDs flash quickly for a few seconds when the isolator comes powered.

The following table shows the distances that can be traveled with the multiplexer line (expressed in meters) considering the sections of the cables and the absorptions on the line.

Section	MAXIMUM current (mA)						
	50mA	100mA	150mA	200mA	300mA	400mA	500mA
0,22mm	350mt	150mt	120mt	90mt	60mt	40mt	30mt
0,35mm	600mt	300mt	200mt	150mt	100mt	70mt	60mt
0,5mm	800mt	400mt	350mt	200mt	140mt	100mt	80mt
0,75mm	1000mt	600mt	400mt	300mt	200mt	150mt	130mt
1mm	1000mt	800mt	500mt	400mt	250mt	200mt	150mt
1,5mm	1000mt	1000mt	800mt	600mt	400mt	300mt	250mt
2mm	1000mt	1000mt	1000mt	800mt	500mt	400mt	300mt
2,5mm	1000mt	1000mt	1000mt	900mt	600mt	450mt	350mt

Programmation

The following table illustrates which are the main functions of the Type20 (T20)

PARAMETERS	
01	ENABLING
02	DESCRIPTION
03	SERIAL
04	MPX STATUS
05	MPX LINK ALARM
06	TAMPER / INPUT 24h
07	NA\NC POLARITY
08	BALANCED LOGIC
09	BANCED LINE
10	SENS. AND-OR
11	SENSITIVITY
12	NUMBER OF IR PULSES
13	NUMBER OF PULSES
14	LED FUNCTION
15	SYSTEM
16	AREA
17	FUNCTION
18	SYSTEM COMMAND
19	COMMAND MODE
20	COMMAND LEVEL
21	AND-OR SENSITIVITY
22	INSTANT GONG
23	DELAYED GONG
24	INVERSION COMMAND
25	OUTPUT TYPE
26	PULSE START
27	BAD MPX OUTPUT
28	LED
29	LOGICAL OUTPUT
30	COMM. MESS. DIGIT.
31	ECHO OUTPUT
41	MACRO COMMAND
42	12V INPUT BUS XM/EST.

FUNCTION	
00	NONE
01	DISCONNECTION
02	CONNECTION
03	CONN./DISCONN.
04	SILENT CONNECTION
05	SIL. CONN./DISCONN.
06	ANTI-THEFT STOP
07	ALARM STOP
08	IMMEDIATE ZONE
09	DELAYED ZONE
10	24H

OUTPUT ON BAD MPX	
1	INVARIED
2	ON IMMEDIATE
3	ON DELAY 10 sec
4	ON DELAY 1 min
5	OFF IMMEDIATE
6	OFF DELAY 10 sec
7	OFF DELAY 1 min

Interrogation of the isolator from the central unit: **#** 5 6 7 8 8 8 7 0 1

- MPX Master (Useful voltage from the incoming MPX bus)
- MPX Slave (Useful voltage of the MPX output bus)
- VCC MASTER (Power supply voltage used - MPX bus or external power supply)
- VCC Slave (Output voltage for connected devices)
- Power supply type External or BusXM
- Rete OK/ NO NETWORK
- V.Batt (only with TM35EN power supply)

 # INSTALLER CODE