



### Descrizione

La Fire Door Junction Box consente un facile collegamento tra le porte e la Fire Door I/O Control Box modello MD9842.

Ciò riduce la possibilità di errore e può essere utilizzata per porte singole, a doppia anta, e scorrevoli.

Si compone di un contenitore plastico dotato di passacavi e un circuito stampato. Quest'ultimo monta l'elettronica per la conversione dei segnali di proximity, i relay per la funzione di *interlock* e le morsettiere per il campo.

Due led montati sui lati indicano la corretta chiusura della porta.

La Junction Box è disponibile nei seguenti modelli:

MD2209..... per zone "asciutte" - contiene un magnete Kendrion modello GTR070.004601

MD2210..... per zone "asciutte" - senza magnete

MD2211..... per zone "umide" - contiene un magnete Kendrion modello GTR070.004601

MD2212..... per zone "umide" - senza magnete

La Junction Box, in tutte le versioni, è collegata alle porte ed alla I/O Box MD9842 attraverso le morsettiere del solito circuito stampato. I collegamenti verso le porte avvengono come indicato nelle pagine successive.

Per ulteriori esempi di collegamento si veda il datasheet della I/O Box MD9842, dis. Nr. D32307.

### Description

The Fire Door Junction Box allows easy connections between fire doors and Microdata Fire Door I/O Control Box MD9842.

It reduces wiring errors and it can be used for single leaf, double leaves and sliding doors.

It is basically composed of a plastic box with cable glands and a PCB board. The board contains the circuitry for the conversion of the signals of the proximity switch, the relay for the *interlock* function and the terminal blocks for all the connections.

Two leds mounted on each side of the box indicate the closing of the door.

The Junction Box is available in different versions:

MD2209 .....for dry area – suitable for housing a magnet Kendrion model GTR070.004601

MD2210 .....for dry area – no magnet

MD2211 .....IP65 for wet area – suitable for housing a magnet Kendrion model GTR070.004601

MD2212 .....IP65 for wet area – no magnet

The Junction Box, whatever its type, is connected to the door and to the I/O Box MD9842 through the same PCB with terminals. Connections to the door are made as below indicated.

For further wiring example please see MD9842 datasheet, dwg. Nr. D32307.

## Descrizione

1 – “Collegamenti verso I/O Box MD9842, posizionata nella solita Fire Zone”

I collegamenti avvengono tramite cavo multipolare 7x1,5 mm<sup>2</sup> come indicato nella seguente tabella:

Terminal block	wire	name	description	connections
M1-1	TBD	24V MAGNET	power supply for holding magnet	from I/O box in FZn
M1-4		24 REF	power supply reference	from I/O box in FZn
M1-5		24V STEADY	steady 24V power supply for 2nd leaf hold magnet Used only if a double leaf door is connected	from I/O box in FZn
M1-6		24V PROX	proximity switch supply - from I/O box in FZn	from I/O box in FZn
M1-7		CONTACT 1A	door closed signal - to I/O box in FZn	from I/O box in FZn
M1-8		CONTACT 1B		from I/O box in FZn

Utilizzare il morsetto M1-5 solo se si deve collegare una porta a doppia anta. Con questa connessione il magnete della seconda anta è mantenuto alimentato durante la chiusura della prima anta.

## Description

1 – “Connections to I/O Box MD9842 located in the same Fire Zone”

Connections are made by a multiwire cable 7x1,5 mm<sup>2</sup> as indicated in the following table:

Terminal M1-5 is wired only if a double leaves door has to be connected. By this connection the second leaf magnet is maintained powered even when the first leaf is closing.

2 – “Segnale di Interlock”

I collegamenti avvengono tramite un cavo proveniente dalla zona adiacente **FZn+1**, come indicato:

Terminal block	wire	name	description	connections
M1-2	TBD	24V_AUX	optional 24Vdc for boundary door interlock	from I/O box in FZn+1
M1-3		24V_AUX_REF		

Con questa connessione la porta può essere chiusa attraverso un comando remoto; questa funzione è stata sviluppata in particolare per le “Boundary Doors”.

Se questo comando non è utilizzato, occorre cortocircuitare il morsetto M2-2 con M2-3 (vedi punto 3)

2 – “Interlock Signal”

Connections are made by a cable coming from **the FZn+1**, connected as indicated below:

By this connection the door can be closed by a remote command; this feature has been foreseen especially to close the Boundary Doors.

If this command is not provided, then M2-2 and M2-3 have to be jumpered (see point 3)

3 – “Pulsanti locali di chiusura porta 1 & 2”

I collegamenti avvengono come indicato:

Terminal block	wire	name	description	connections
M2-1	TBD	SW1-1	local release switch 1	to local release pushbutton 1
M2-2		SW1-2		
M2-3	TBD	SW2-1	local release switch 2	to local release pushbutton 2
M2-4		SW2-2		

Se il segnale di Interlock (vedi punto 2) non è utilizzato, occorre cortocircuitare il morsetto M2-2 con M2-3.

4 – “Magnete della prima anta”

I collegamenti avvengono come indicato:

Terminal block	wire	name	description	connections
M2-5	TBD		1st leaf holding magnet	first leaf holding magnet (only if two leaves door)
M2-6				

5 – “Magnete della seconda anta”

I collegamenti avvengono come indicato:

Terminal block	wire	name	description	connections
M2-7	TBD		2nd leaf holding magnet (only if 2 leaves door is foreseen)	second leaf holding magnet (only if two leaves door)
M2-8				

3 – “Fire door release switch 1 & 2”

Connections are made as indicated below:

If the Interlock Signal (see point 2) is not provided, a jumper must be connected between M2-2 and M2-3.

4 – “First leaf holding magnet”

Connections are made as indicated below:

5 – “Second leaf holding magnet”

Connections are made as indicated below:

Il magnete della seconda anta è mantenuto alimentato durante la chiusura della prima anta.

The second magnet is powered even during the first leaf closing.

Solo alla chiusura completa della prima anta si attua il rilascio della seconda.

When the first leaf is completely closed then the second leaf magnet is released.

## Descrizione

6 – “Proximity switch – Prima anta chiusa”

I collegamenti avvengono come indicato:

Terminal block	wire	name	description	connections
M2-9	TBD	proximity switch negative	1st leaf close signal	1st leaf close detector
M2-10		proximity switch output		
M2-11		proximity switch positive		

Proximity di tipo PNP, NC, a tre fili o NAMUR NC a due fili, devono essere collegati solo per porte a doppia anta.

Si toglie l'alimentazione al secondo magnete dopo che la prima anta è completamente chiusa, permettendo così la corretta sequenza di chiusura (1<sup>a</sup> anta per prima, 2<sup>a</sup> anta dopo che la prima è chiusa)

## Description

6 – “Proximity switch – first leaf closed”

Connections are made as indicated below:

The proximity switch, PNP – NC type three wires or NAMUR NC type two wires, has to be connected only in case the door is a double leaves type.

It cuts the power to the second leaf magnet after that the first leaf is completely closed allowing thus the correct sequence of closing (1<sup>st</sup> leaf first , 2<sup>nd</sup> leaf after first is close)

7 – “Proximity switch – Porta chiusa”

I collegamenti avvengono come indicato:

Terminal block	wire	name	description	connections
M2-12	TBD	proximity switch negative	fire door closed signal	fire door close detector
M2-13		proximity switch output		
M2-14		proximity switch positive		

Proximity di tipo PNP, NO, a tre fili o NAMUR NO a due fili, segnalano alla I/O Box MD9842 l'avvenuta chiusura della porta.

7 – “Proximity switch – door closed”

Connections are made as indicated below:

The proximity switch, PNP – NO type three wires or NAMUR NO type two wires give to the I/O box the signal that the door is closed.

8 – “Porte scorrevoli – Porta chiusa + guasto”

I collegamenti avvengono come indicato:

Terminal block	wire	name	description	connections
M2-15	TBD	door close	sliding door - contact free of potential	door close contact (Sliding Door control box)
M2-16				
M2-17		door fault	sliding door - contact free of potential	door fault contact (Sliding Door control box)
M2-18				

I morsetti M2-15..18 permettono il collegamento dei contatti (liberi da potenziale) delle porte scorrevoli. Questi segnali sono inviati direttamente a M1-9..12

8 – “Sliding door – door closed + fault”

Connections are made as indicated below:

The terminals M2-15..18 allow the connection of the free of potential contacts of the sliding doors. These signals are directly routed to M1-9..12.

9 – “Comando per porte di Classe C”

I collegamenti avvengono come indicato:

Terminal block	wire	name	description	connections
M2-19	TBD	C class command	"C class door" command	to C class door control box
M2-20				

Il contatto tra M2-19 e M2-20 si chiude ogni volta che la porta viene ritenuta chiusa. Il contatto è collegato alla Control Box della porta Classe C per consentirne l'apertura.

9 – “C class door command”

Connections are made as indicated below:

The contact between M2-19-20 is closed every time that the fire door is detected closed. This contact is connected to the “C class” door Control Box to open the door.

**Installazione**

Montaggio ..... Vedi ingombri

Conessioni .... Morsettiere a molla per cavi con conduttori di sezione compresa tra 0,75 ed 1,5 mm<sup>2</sup>.

Passacavi ..... IP68 Tipo PG7, PG16 e PG21

**Installation**

Fitting ..... See outline drawings

Connection..... Spring terminal block for wire section between 0.75 and 1.5 mm<sup>2</sup>.

Cable gland..... PG7, PG16 and PG21 IP68 type

**Codici di ordinazione**

<b>Modello Model</b>	<b>Codice Part Number</b>	<b>Descrizione Description</b>
MD2209 *	28498	<i>Fire Door Junction Box with magnet (Dry areas)</i>
MD2210	28499	<i>Fire Door Junction Box without magnet (Dry areas)</i>
MD2211 *	28500	<i>Fire Door Junction Box with magnet (Wet areas)</i>
MD2212	28501	<i>Fire Door Junction Box without magnet (Wet areas)</i>

\* models supplied with Kendrion magnet model GTR070.004601 and magnet door plate.

**Caratteristiche tecniche**

Tensione di Alimentazione ..... 24Vdc

Assorbimento massimo ..... A

Temperatura di funzionamento..... -°C ÷ +°C

Grado di protezione ..... IP65

Peso ..... 1,25 Kg

Colore ..... Grigio chiaro RAL7035

Materiale ..... ABS

Infiammabilità..... HB/1.6 (Secondo UL94)

**Technical Features**

Power Supply ..... 24Vdc

MAX Current ..... A

Operating temperature ..... -°C ÷ +°C

Ingress Protection rating ..... IP65

Weight ..... 1,25 Kg

Colour ..... Light gray RAL7035

Material ..... ABS

Combustibility ..... HB/1.6 (Acc. to UL94)

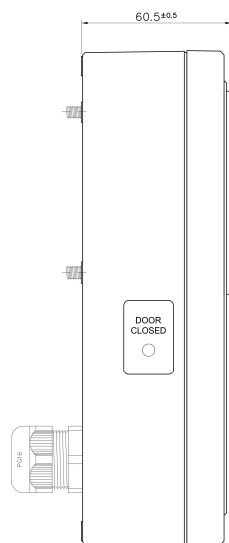
Glow Hot Wire Test ..... 650/2 (Acc. to ISO695)

Ingombri e dima di fissaggio

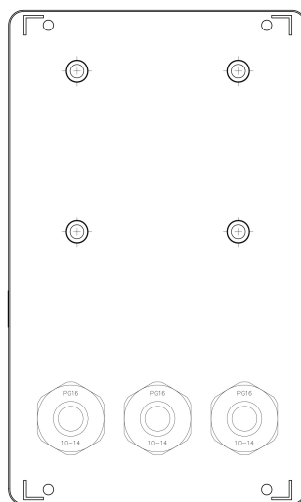
Outline & Cut-Out



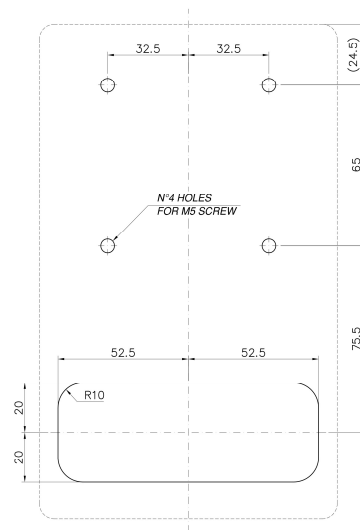
FRONT VIEW



SIDE VIEW

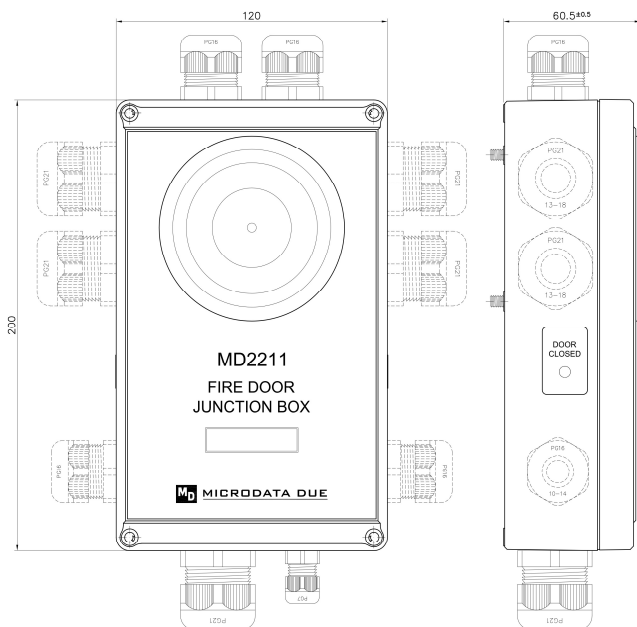


REAR VIEW



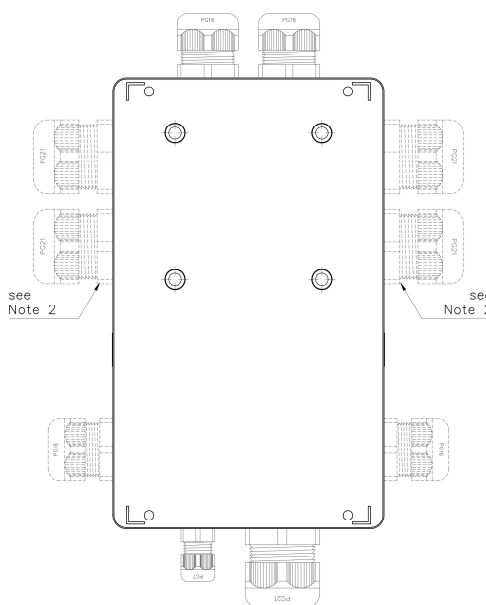
PANEL CUT-OUT

MD2209

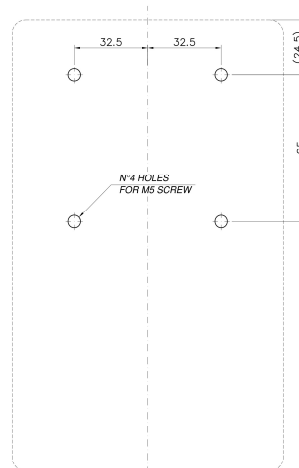


FRONT VIEW

SIDE VIEW



REAR VIEW



PANEL CUT-OUT

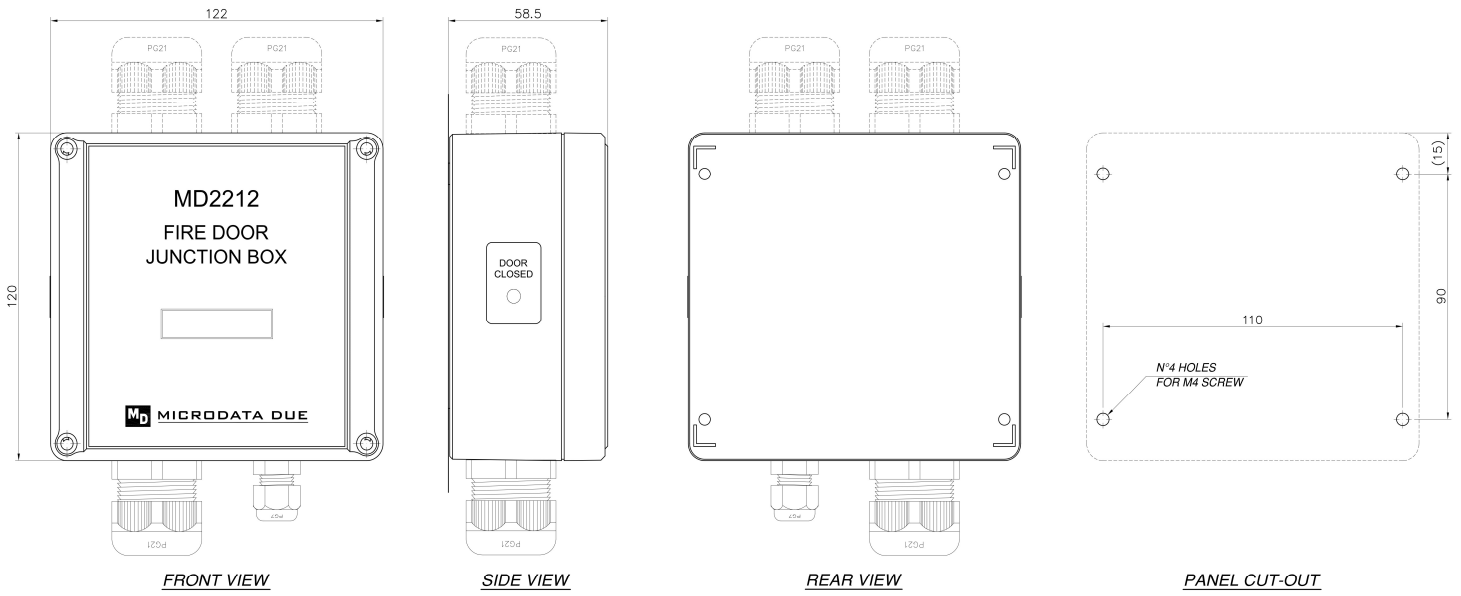
NOTES:

1. DASHED CABLE-GLAND ARE OPTIONAL.
2. BOX PRE-FORMED HOLES SUITABLE FOR BOTH PG16 OR PG21 CABLE-GLAND.

MD2211

Ingombri e dima di fissaggio

Outline & Cut-Out



MD2212