

Product availability: Stock - Normally stocked in distribution facility

Price\*: 369.00 USD



### Main

Range of product	Modicon M221
Product or Component Type	Logic controller
Discrete output type	Relay normally open

### Complementary

Discrete I/O number	40
Supply voltage limits	85...264 V
Network Frequency	50/60 Hz
Inrush current	40 A
Discrete input voltage	24 V
Discrete input voltage type	DC
Analogue input resolution	10 bits
LSB value	10 mV
Voltage state 1 guaranteed	>= 15 V for input
Voltage state 0 guaranteed	<= 5 V for input
Switching frequency	20 switching operations/minute with maximum load
Mechanical durability	20000000 Cycles relay output
Maximum size of object areas	512 %M memory bits 512 %KW constant words 8000 %MW memory words 255 %C counters 255 %TM timers
Realtime clock	With
Control signal type	Single phase Pulse/Direction A/B
Local signalling	1 LED (green) for PWR 1 LED (green) for RUN 1 LED (red) for module error (ERR) 1 LED (green) for SD card access (SD) 1 LED (red) for BAT 1 LED (green) for SL1 For SL2 1 LED (green) 1 LED per channel (green) for I/O state

Marking	CE
Mounting support	Top hat type TH35-15 rail conforming to IEC 60715 Top hat type TH35-7.5 rail conforming to IEC 60715 plate or panel with fixing kit
Height	3.54 In (90 mm)
Depth	2.76 In (70 mm)
Width	6.30 In (160 mm)
Product Weight	1.01 Lb(US) (0.456 kg)

## Environment

Standards	EN/IEC 61131-2 EN/IEC 60664-1 EN/IEC 61010-2-201
Product Certifications	RCM IACS E10 LR CSA CULus DNV-GL ABS EAC
Environmental characteristic	Ordinary and hazardous location
Immunity to microbreaks	10 Ms
Ambient Air Temperature for Storage	-13...158 °F (-25...70 °C)
Pollution degree	<= 2
Operating altitude	0...6561.68 ft (0...2000 m)
Storage altitude	0.00...9842.52 Ft (0...3000 m)
Shock resistance	98 m/s <sup>2</sup> 11 ms

## Ordering and shipping details

Category	22533 - M2XX PLC & ACCESSORIES
Discount Schedule	MSX
GTIN	3606480648731
Nbr. of units in pkg.	1
Package weight(Lbs)	29.28 Oz (830 g)
Returnability	Yes
Country of origin	TW

## Packing Units

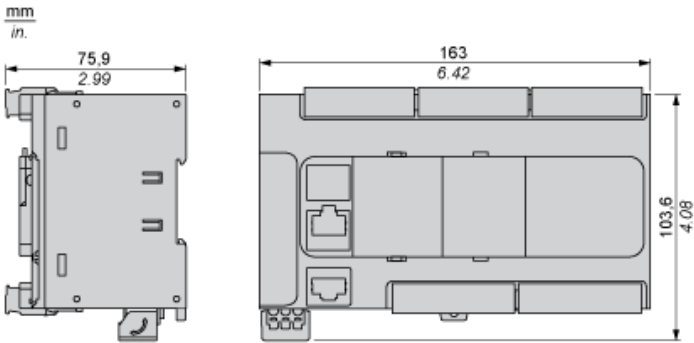
Unit Type of Package 1	PCE
Package 1 Height	4.49 In (11.403 cm)
Package 1 width	5.56 In (14.118 cm)
Package 1 Length	8.29 In (21.062 cm)

## Offer Sustainability

Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS Declaration</a>

Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
PVC free	Yes

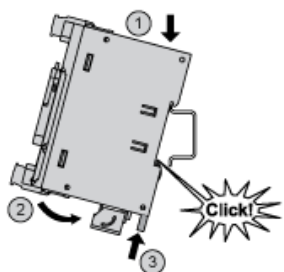
Dimensions



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### Mounting on a Rail

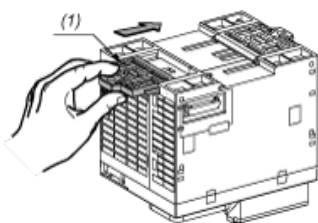
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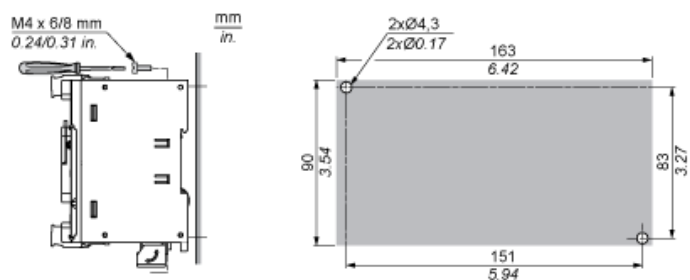
### Direct Mounting on a Panel Surface

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- (1) Install a mounting strip

### Mounting Hole Layout

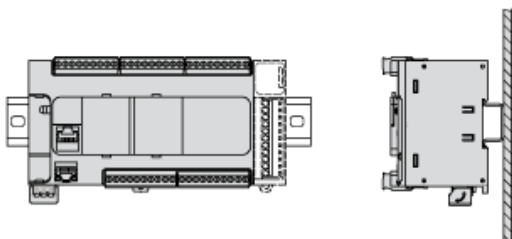


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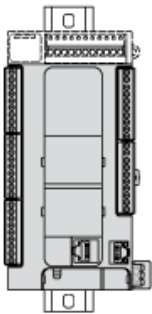
### Mounting

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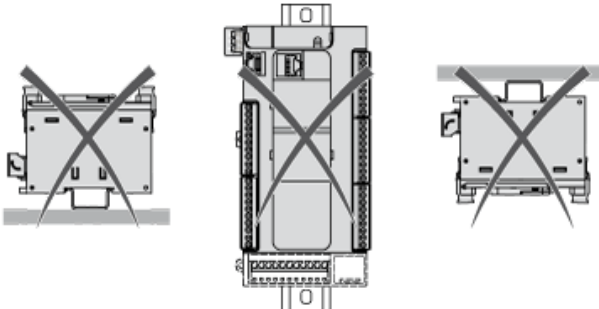
#### Correct Mounting Position



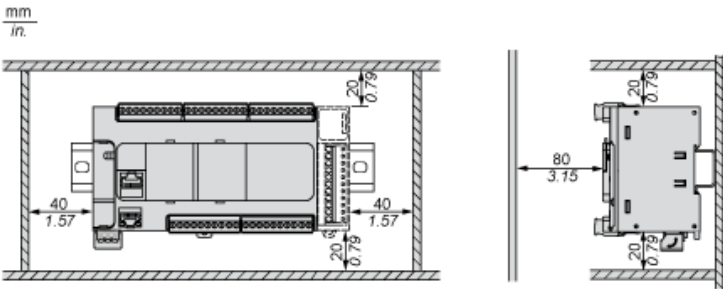
Acceptable Mounting Position



Incorrect Mounting Position

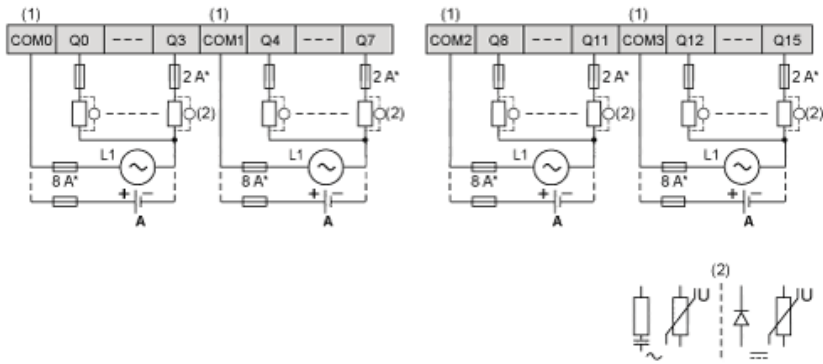


Clearance





## Positive Logic (Source)



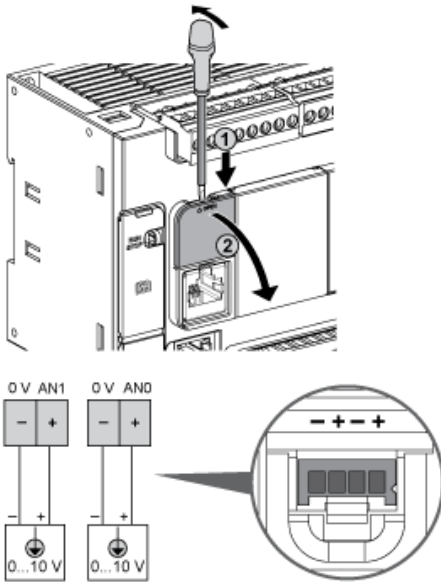
(\*) Type T fuse

(1) The COM0, COM1, COM2 and COM3 terminals are not connected internally.

(2) To improve the life time of the contacts, and to protect from potential inductive load damage, you must connect a free wheeling diode in parallel to each inductor.

A Source wiring (positive logic)

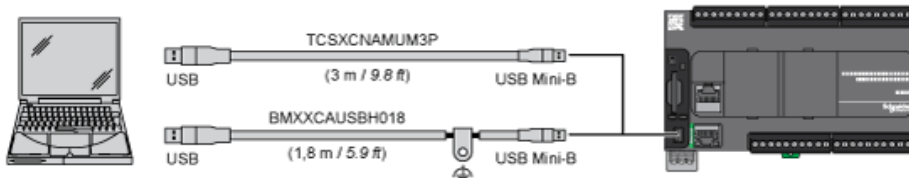
## Analog Inputs



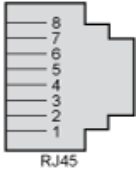
The (-) poles are connected internally.

Pin	Wire Color
0 V	Black
AN1	Red
0 V	Black
AN0	Red

## USB Mini-B Connection



## SL1 Connection

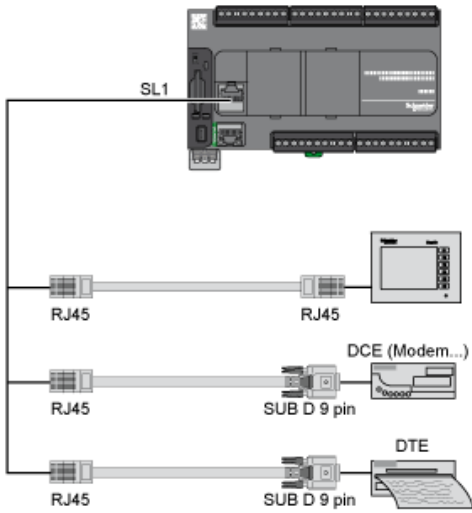


SL1

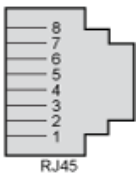
N °	RS 232	RS 485
1	RxD	N.C.
2	TxD	N.C.
3	RTS	N.C.
4	N.C.	D1
5	N.C.	D0
6	CTS	N.C.
7	N.C.*	5 Vdc
8	Common	Common

N.C.: not connected

\* : 5 Vdc delivered by the controller. Do not connect.



## SL2 Connection



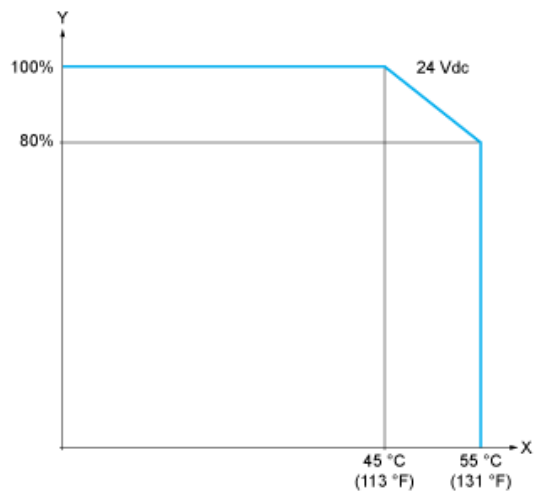
N °	RS 485
1	N.C.
2	N.C.
3	N.C.
4	D1
5	D0

N °	RS 485
6	N.C.
7	N.C.
8	Common

N.C.: not connected

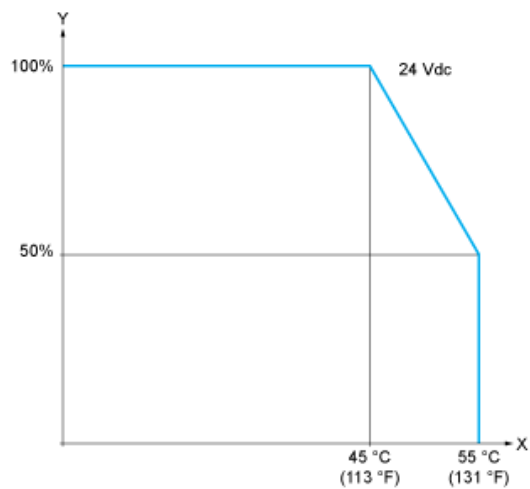
Derating Curves

Embedded Digital Inputs (No Cartridge)



X : Ambient temperature  
Y : Input simultaneous ON ratio

Embedded Digital Inputs (with Cartridge)



X : Ambient temperature  
Y : Input simultaneous ON ratio

Product Life Status : **Commercialised**