







<b>Surge withstand</b>	2 kV power lines (AC) common mode conforming to EN/IEC 61000-4-5 2 kV relay output common mode conforming to EN/IEC 61000-4-5 1 kV I/O common mode conforming to EN/IEC 61000-4-5 1 kV shielded cable common mode conforming to EN/IEC 61000-4-5 0.5 kV power lines (DC) differential mode conforming to EN/IEC 61000-4-5 1 kV power lines (AC) differential mode conforming to EN/IEC 61000-4-5 1 kV relay output differential mode conforming to EN/IEC 61000-4-5 0.5 kV power lines (DC) common mode conforming to EN/IEC 61000-4-5
<b>Resistance to conducted disturbances</b>	10 V 0.15...80 MHz conforming to EN/IEC 61000-4-6 3 V 0.1...80 MHz conforming to Marine specification (LR, ABS, DNV, GL) 10 V spot frequency (2, 3, 4, 6.2, 8.2, 12.6, 16.5, 18.8, 22, 25 MHz) conforming to Marine specification (LR, ABS, DNV, GL)
<b>Electromagnetic emission</b>	Conducted emissions - test level: 79 dB $\mu$ V/m QP/66 dB $\mu$ V/m AV ( power lines (AC)) at 0.15...0.5 MHz conforming to EN/IEC 55011 Conducted emissions - test level: 73 dB $\mu$ V/m QP/60 dB $\mu$ V/m AV ( power lines (AC)) at 0.5...300 MHz conforming to EN/IEC 55011 Conducted emissions - test level: 120...69 dB $\mu$ V/m QP ( power lines) at 10...150 kHz conforming to EN/IEC 55011 Conducted emissions - test level: 63 dB $\mu$ V/m QP ( power lines) at 1.5...30 MHz conforming to EN/IEC 55011 Radiated emissions - test level: 40 dB $\mu$ V/m QP class A ( 10 m) at 30...230 MHz conforming to EN/IEC 55011 Conducted emissions - test level: 79...63 dB $\mu$ V/m QP ( power lines) at 150...1500 kHz conforming to EN/IEC 55011 Radiated emissions - test level: 47 dB $\mu$ V/m QP class A ( 10 m) at 200...1000 MHz conforming to EN/IEC 55011
<b>Immunity to microbreaks</b>	10 ms
<b>Ambient air temperature for operation</b>	-10...55 °C (horizontal installation) -10...35 °C (vertical installation)
<b>Ambient air temperature for storage</b>	-25...70 °C
<b>Relative humidity</b>	10...95 %, without condensation (in operation) 10...95 %, without condensation (in storage)
<b>IP degree of protection</b>	IP20 with protective cover in place
<b>Pollution degree</b>	<= 2
<b>Operating altitude</b>	0...2000 m
<b>Storage altitude</b>	0...3000 m
<b>Vibration resistance</b>	3.5 mm at 5...8.4 Hz on symmetrical rail 3.5 mm at 5...8.4 Hz on panel mounting 1 gn at 8.4...150 Hz on symmetrical rail 1 gn at 8.4...150 Hz on panel mounting
<b>Shock resistance</b>	147 m/s <sup>2</sup> for 11 ms

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	11.129 cm
<b>Package 1 Width</b>	14.031 cm
<b>Package 1 Length</b>	14.163 cm
<b>Package 1 Weight</b>	551.0 g
<b>Unit Type of Package 2</b>	CAR
<b>Number of Units in Package 2</b>	20
<b>Package 2 Height</b>	28.8 cm
<b>Package 2 Width</b>	39.1 cm
<b>Package 2 Length</b>	56.6 cm
<b>Package 2 Weight</b>	11.98 kg
<b>Unit Type of Package 3</b>	P12
<b>Number of Units in Package 3</b>	240
<b>Package 3 Height</b>	105.0 cm

Package 3 Width	120.0 cm
Package 3 Length	80.0 cm
Package 3 Weight	150 kg

## Offer Sustainability

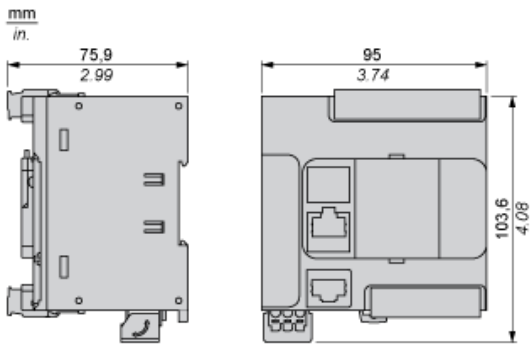
Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS declaration</a>
RoHS exemption information	Yes
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

## Contractual warranty

Warranty	18 months
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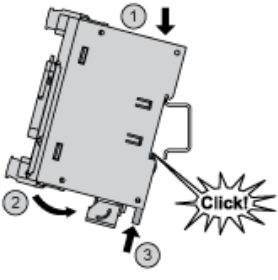
**Dimensions**

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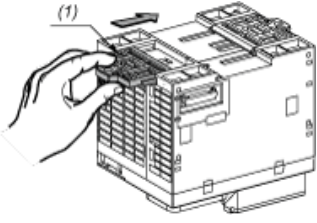
**Mounting on a Rail**

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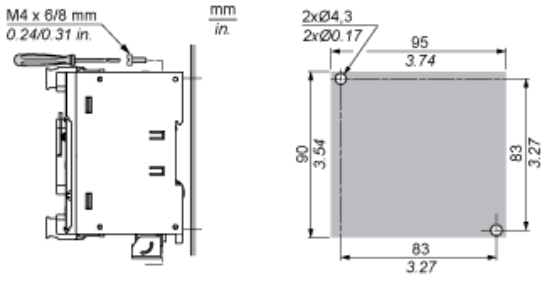
**Direct Mounting on a Panel Surface**

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(1) Install a mounting strip

**Mounting Hole Layout**





**Mounting**

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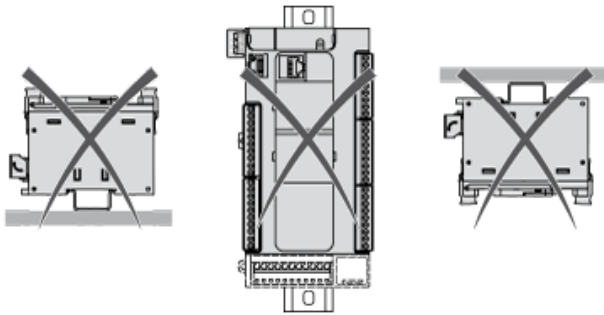
**Correct Mounting Position**



**Acceptable Mounting Position**

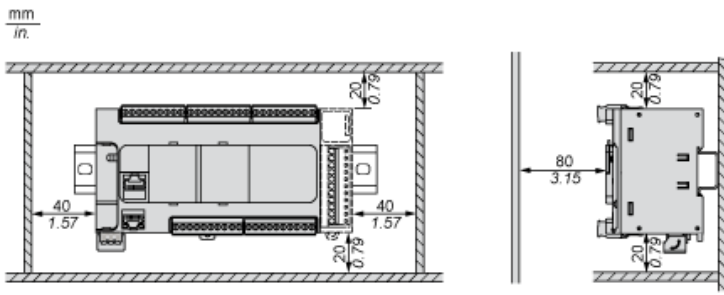


**Incorrect Mounting Position**



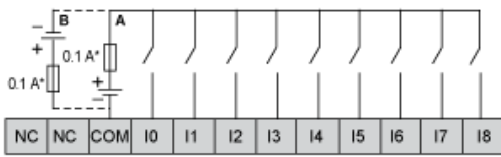
**Clearance**

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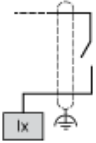
**Digital Inputs**

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- (\*) Type T fuse
- (A) Sink wiring (positive logic).
- (B) Source wiring (negative logic).

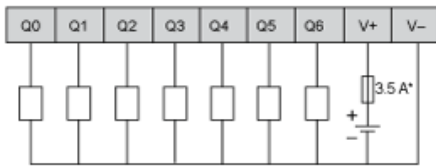
**Connection of the Fast Inputs**



I0, I1, I6, I7

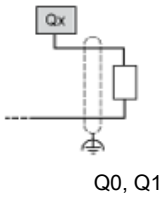
**Transistor Outputs**

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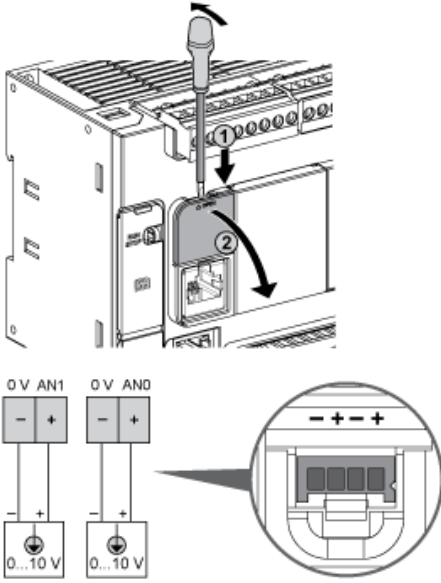


(\*) Type T fuse

**Connection of the Fast Outputs**



**Analog Inputs**

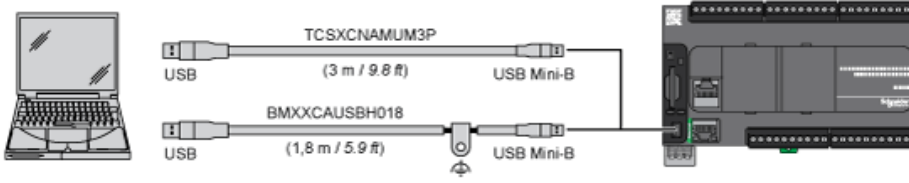


The (-) poles are connected internally.

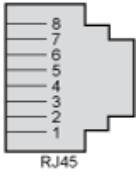
Pin	Wire Color
0 V	Black
AN1	Red
0 V	Black
AN0	Red

## USB Mini-B Connection

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**SL1 Connection**

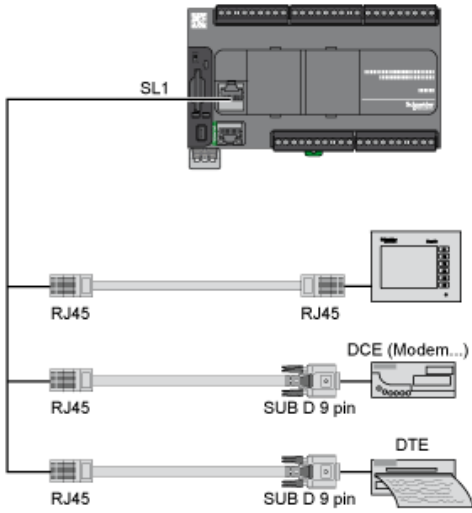


SL1

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

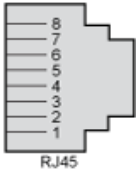
N.C.: not connected

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



**SL2 Connection**

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N °	RS 485
1	N.C.
2	N.C.
3	N.C.
4	D1
5	D0
6	N.C.
7	N.C.
8	Common

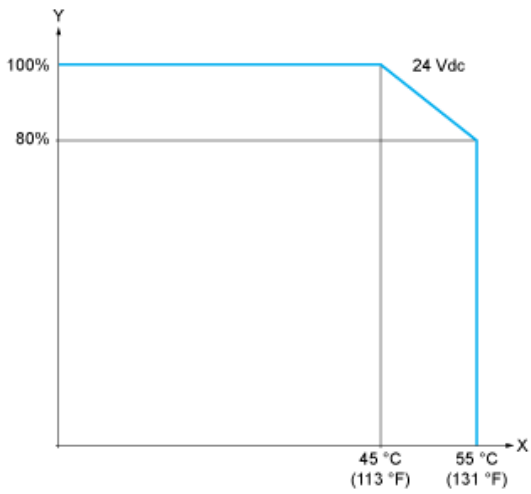
N.C.: not connected



**Derating Curves**

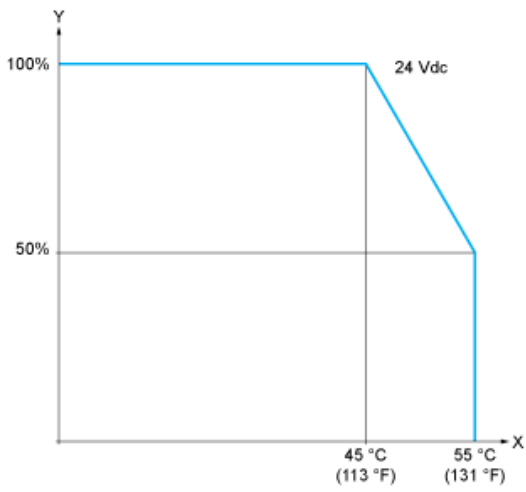
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**Embedded Digital Inputs (No Cartridge)**



X : Ambient temperature  
Y : Input simultaneous ON ratio

**Embedded Digital Inputs (with Cartridge)**

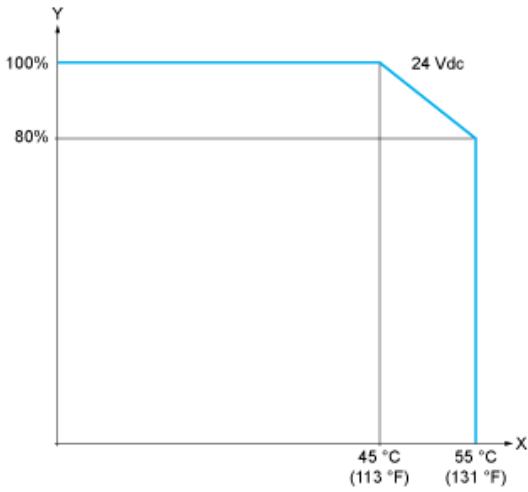


X : Ambient temperature  
Y : Input simultaneous ON ratio

**Derating Curves**

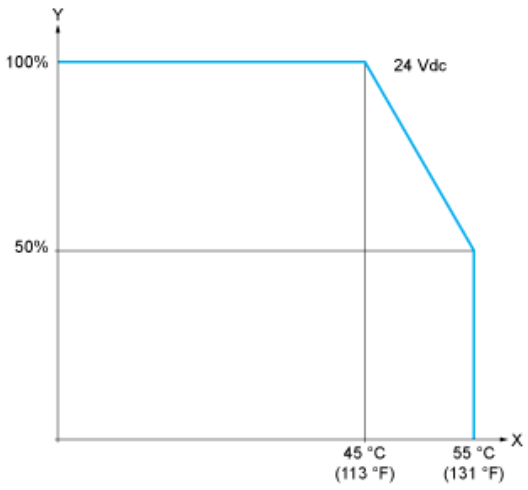
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**Embedded Digital Outputs (No Cartridge)**



X : Ambient temperature  
Y : Output simultaneous ON ratio

**Embedded Digital Outputs (with Cartridge)**



X : Ambient temperature  
Y : Output simultaneous ON ratio

**Recommended replacement(s)**