

# Multifunction programmable controllers

## Racks

### Selection, references

Dimensions :  
page 42201/3

## Selection

### Standard racks

These racks have 11 slots of which 8 are reserved for the I/O modules. They are fitted with mechanical locating devices to avoid mistakes when installing or replacing a module. Two types of rack mounting are available :

- Rear mounting : these racks are rear mounted, enabling them to be fixed to a plate or rail.
- Front mounting (19 inch) : front mounted racks for mounting in a standard 19 inch cabinet. The standardised method of fixing and mechanical strength provide good withstand to vibration.

All front mounted PLCs comply with maritime standards (BV, DNV, RINA).

These racks are supplied with or without fans. The version with fan must be used with TSX/PMX P67 425/455, TSX/PMX P87 4●● and TSX/PMX P107 4●● processors (recommended for TSX/PMX P47 40●● processors to improve the MTBF). It is also compulsory for use in racks, including TSX AXM 292/492 multi-axis control modules.

### Short racks

These racks are designed for compact configurations. They have 8 slots which are :

- 3 slots (1) for TSX ●7 455 type processors intended for remote I/O architectures (FIPIO),
- 5 slots for I/O modules (base rack and extension),
- 7 slots for I/O modules (direct extension unit).

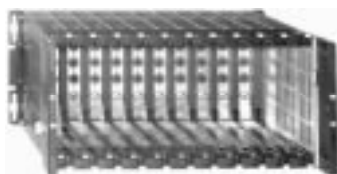
They are not suitable for TSX/PMX P87 4●● and TSX/PMX P107 4●● processors.

**Note** : standard and short racks are available with either a simplified or a complete bus :

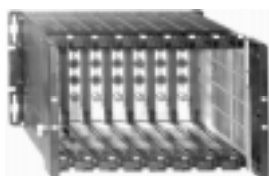
- The simplified bus enables data exchanges between the discrete I/O interfaces, the analogue interfaces, the counting interface and the TELWAY network module,
- The complete bus also enables the exchange of data required when using dedicated I/O modules and communication modules.

## Base racks and I/O extension racks

Type	Use	Format	Bus	Reference	Weight kg
<b>PLC base</b>	TSX/PMX 47-40 TSX/PMX 67-40	Standard	Complete	<b>TSX RKN 82</b>	3.200
		Short	Complete	<b>TSX RKN 52</b>	2.000
		19" mounting	Complete	<b>TSX RKN 82 W11</b>	3.200
		Short (1)	–	<b>TSX RKB 3</b>	1.950
	TSX/PMX 67-40 TSX/PMX 87-40 TSX/PMX 107-40	Standard (2)	Complete	<b>TSX RKN 82F</b>	5.200
		Standard (3)	Complete	<b>TSX RKN 82FD</b>	5.200
19" mounting (2)		Complete	<b>TSX RKN 82F W11</b>	5.200	
	19" mounting (3)	Complete	<b>TSX RKN 82FD W11</b>	5.200	
<b>Local or remote extension</b>	With intelligent I/O modules	Standard	Complete	<b>TSX RKN 8</b>	3.200
		Standard (2)	Complete	<b>TSX RKN 8F</b>	5.200
		Short	Complete	<b>TSX RKN 5</b>	2.000
		19" mounting	Complete	<b>TSX RKN 8 W11</b>	3.200
	Without intelligent I/O modules	Standard	Simplified	<b>TSX RKS 8</b>	3.200
		19" mounting	Simplified	<b>TSX RKS 8 W11</b>	3.200
<b>Direct extension</b>	Without intelligent I/O module	Standard	Simplified	<b>TSX RKE 8</b>	3.300
		Short	Simplified	<b>TSX RKE 7</b>	2.100
		19" mounting	Simplified	<b>TSX RKE 8 W11</b>	3.300



TSX RKN 8/82



TSX RKN 5/52

## Separate parts

Description	Use	Order in multiples of	Unit reference	Weight kg
<b>Wire guide</b>	Wiring the I/O	10	<b>TSX RAC 10</b>	0.220
<b>Earthing strip</b> essential for connecting cable screening to :	Standard rack	1	<b>TSX RAC 20</b>	0.260
	Short rack	1	<b>TSX RAC 25</b>	0.240
- TSX LES 6●/7● cable connectors	19" rack mounting	1	<b>TSX RAC 20W11</b>	0.250
- TSX BLK 4 terminal blocks	3 slot rack TSX RKB 3	1	<b>TSX RK ACC 1</b>	2.150
<b>Hinged support</b> for side mounting	Optional locating	10	<b>TSX RAC 40</b>	0.025
<b>Backplane locating device</b>	Empty I/O slot	10	<b>TSX RAC 50</b>	0.600
<b>Module slot cover</b>	Empty cartridge slot	3	<b>TSX RAC 80</b>	1.340
<b>Cartridge slot cover</b>	Removing module	1	<b>TSX MNC 30</b>	0.210
<b>Extractor tool</b>				

(1) Rack with 3 slots designed to receive 1 TSX SUP power supply (2 slots) and 1 processor (1 slot) with integrated FIPIO link (for TBX remote I/O).

(2) With cooling fan unit for ~ 110/240 V 50/60 Hz power supply, also suitable for TSX/PMX 47/67-40.

(3) With cooling fan unit for ~ 24/48 V power supply, also suitable for TSX/PMX 47/67-40.

# Multifunction programmable controllers

## Racks

### Dimensions, mounting

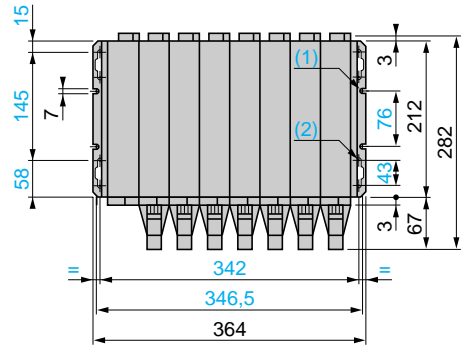
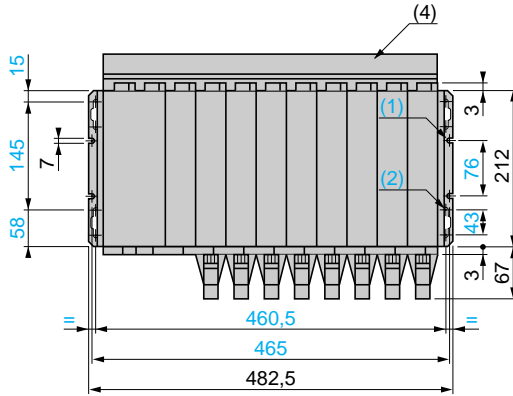
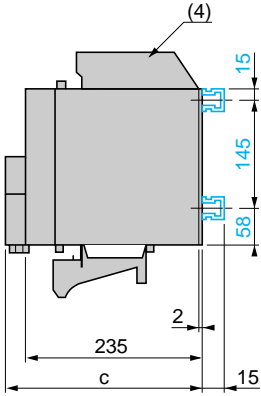
References :  
pages 42201/2

**Rear mounted racks** (mounting on 35 mm wide rails)

View of common rail

**Standard racks**  
TSX RKN 82, RKN 8, RKS 8, RKE 8  
**Standard racks with fan**  
TSX RKN 82F, RKN 82FD, RKN 8F

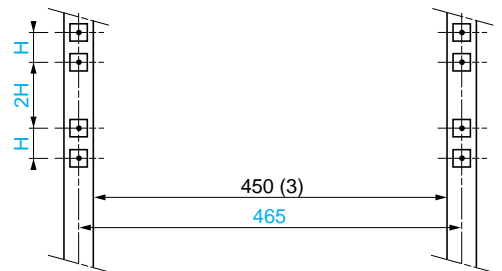
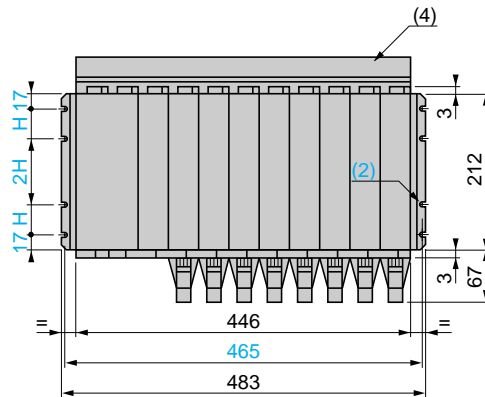
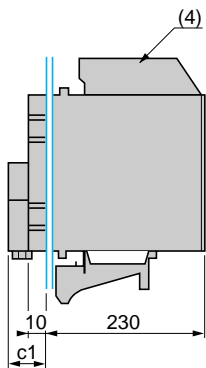
**Short racks**  
TSX RKN 52, RKN 5, RKE 7



**Front mounted racks (19")**

**Standard racks**  
TSX RKN 82 W11, RKN 8 W11, TSX RKS 8 W11, RKE 8 W11  
**Racks with fan**  
TSX RKN 82F W11, RKN 82FD W11

Mounted in 19" cabinet



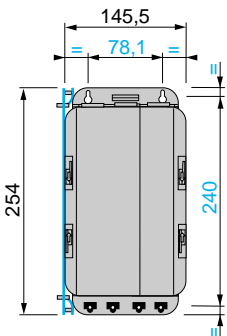
Type of module	c	c1
Discrete I/O modules with <b>TSX BLK</b> terminal block	235	10
Modules with <b>TSX BLK 4</b> terminal block	267	42
<b>TSX MPT 107/MAP 107, TSX LES 20/ ETH ●●●</b>	262	37
<b>TSX AXT/AXM 172/DTM 100</b> (with <b>TSX CAC 04</b> connector)	275	50
<b>TSX LFS 20●/12●</b>	295	70
<b>TSX SCM/LES 120/LES 200</b> (with <b>TSX CAC 01</b> connector)	310	85
<b>TSX AXM 182/162</b>	310	85

c, c1 = dimension including connections

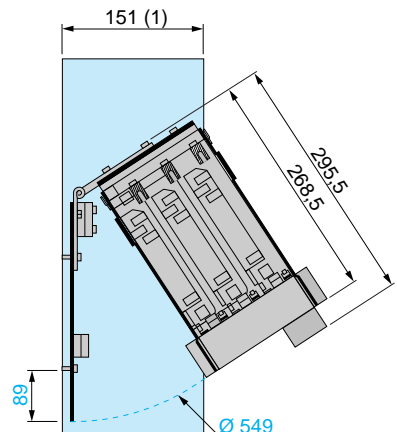
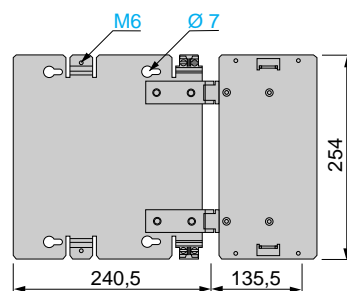
**Note** : when the racks are mounted in a cabinet :  
- minimum distance between racks is : 150 mm  
- maximum distance between rack and extension is : 800 mm

- (1) 4 x Ø 7 mm
- (2) 8 x Ø 7 mm
- (3) 450 mm minimum
- (4) For standard racks with fan, add 47 mm  
H = 44.45 mm

**TSX RKB 3**  
Short rack



**TSX RK ACC 1**  
Hinged support for side mounting



(1) Minimum