

Multifunction programmable controllers

Racks

Selection, references

Dimensions :
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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).

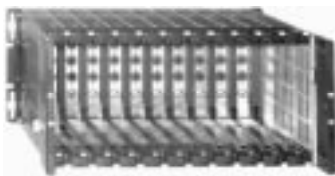
They are not suitable for TSX/PMX P87 4●● and TSX/PMX P107 4●● processors.

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

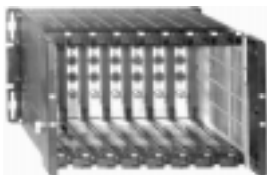
- The simplified bus enables data exchanges between the discrete I/O interfaces, the analogue interfaces, the counting interface and the TELWAY network module,
- The complete bus also enables the exchange of data required when using dedicated I/O modules and communication modules.

Base racks and I/O extension racks

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



TSX RKN 8/82



TSX RKN 5/52

Separate parts

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

(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

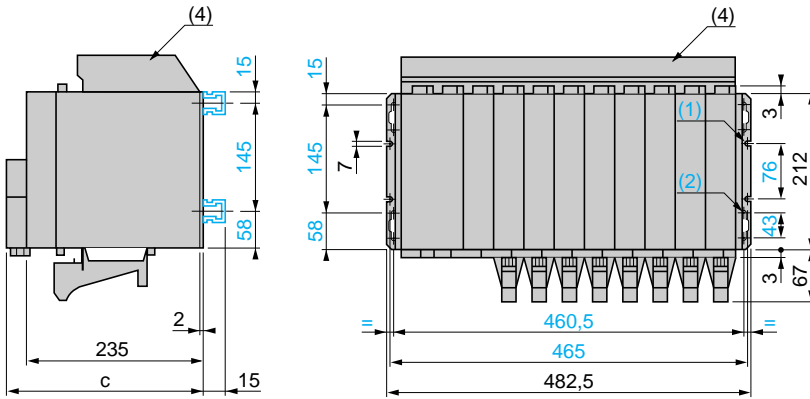
Dimensions, mounting

References :
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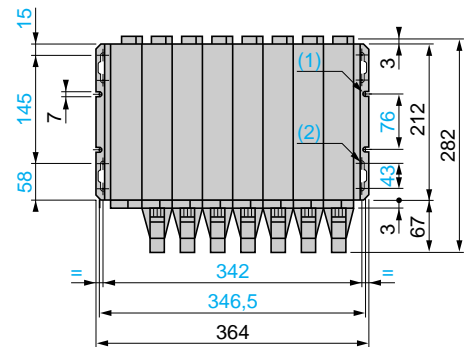
Rear mounted racks (mounting on 35 mm wide rails)

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

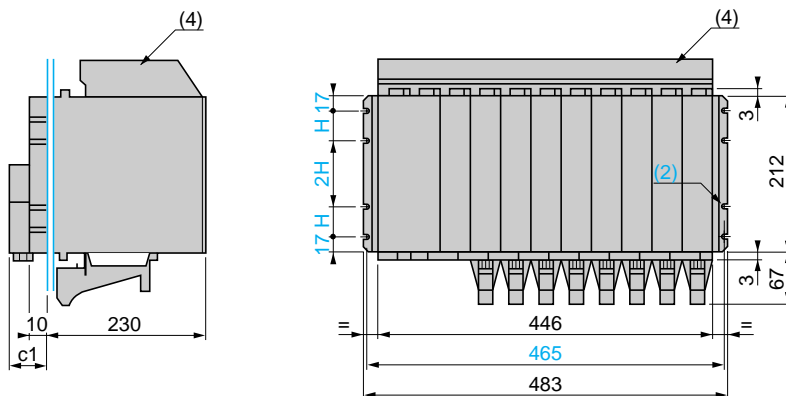


Short racks
TSX RKN 52, RKN 5, RKE 7

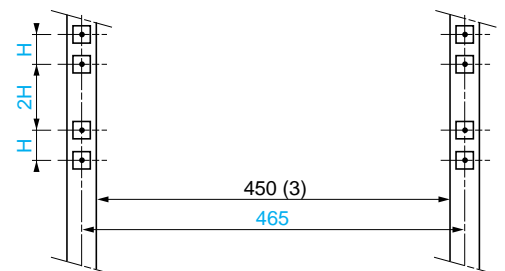


Front mounted racks (19")

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 TSX BLK terminal block | 235 | 10 |
| Modules with TSX BLK 4 terminal block | 267 | 42 |
| TSX MPT 107/MAP 107, TSX LES 20/ ETH ●●● | 262 | 37 |
| TSX AXT/AXM 172/DTM 100 (with TSX CAC 04 connector) | 275 | 50 |
| TSX LFS 20●/12● | 295 | 70 |
| TSX SCM/LES 120/LES 200 (with TSX CAC 01 connector) | 310 | 85 |
| TSX AXM 182/162 | 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

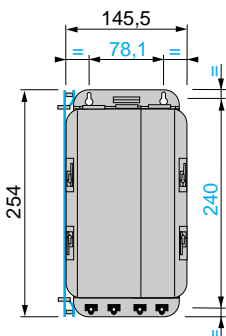
(2) 8 x Ø 7 mm

(3) 450 mm minimum

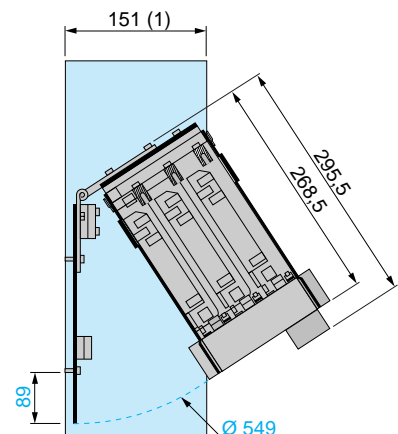
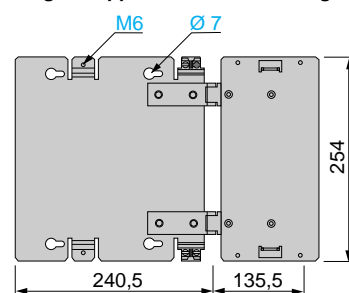
(4) For standard racks with fan, add 47 mm

H = 44.45 mm

TSX RKB 3
Short rack



TSX RK ACC 1
Hinged support for side mounting



(1) Minimum