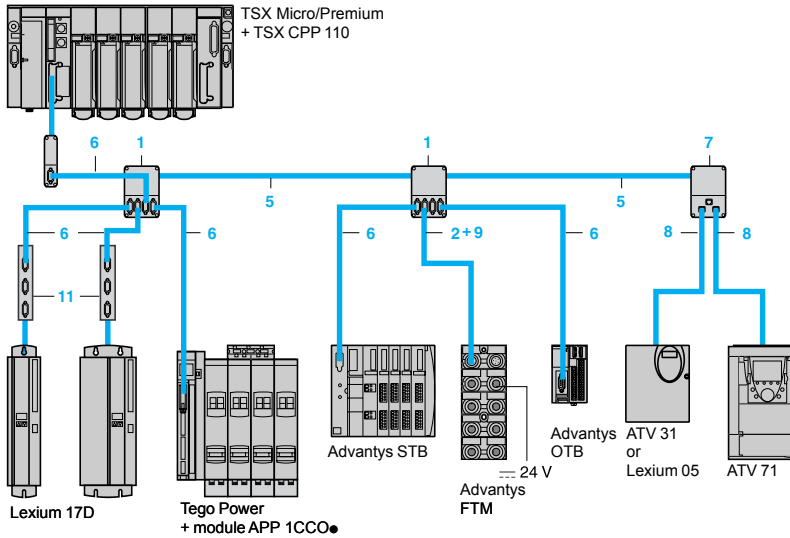


Presentation

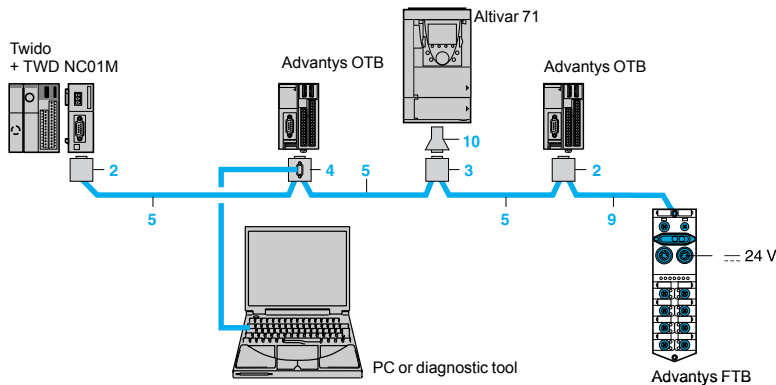
The IP 20 wiring offer for CANopen can be used to create different types of connection architecture.

In addition to this IP 20 wiring offer, there is also an:

- IP 67 wiring offer with M12 connectors for Advantys FTB/FTM inputs/outputs splitter boxes (1).
- IP 20 wiring offer with RJ45 connectors for Altivar variable speed drives or Lexium servo drives.



Example of Tap link



Example of Daisy chain

Type of connection architectures

Tap link

This flexible solution is easy to install, requiring the use of junction boxes, a cable reel (trunk cable) and cordsets (equipped with SUB-D connectors) for the tap links.

Once the taps have been installed (on a DIN rail or plate) and interconnected by means of the trunk cable (connection on screw terminals), the cordsets simply have to be connected between the taps and the various devices.

Daisy chain

This low-cost solution requires the use of a cable reel and SUB-D connectors.

SUB-D connectors should be fitted at the end of cables (connection on screw terminals) which have been cut to length. These three types of connector allows the simultaneous connection of 2 CANopen cables.

Mixed

This solution combines both the previous types

Note: In these three cases, there is necessary to check that the topology and the data rate of CANopen bus still taking account of the CANopen wiring rules.

Addresses:

- 1...8 : see page 43626/3.
- 9 FTX CN 3130/3150 : preassembled cordset, 1 x M12, 5-way connector with 1 free end.
- 10 VW3 CAN A71: RJ45/SUB-D 9 way male adaptor for Altivar 71 variable speed drive.
- 11 AMO 2CA 001V000: CANopen standard adaptor for Lexium 17D servo drive.

Description

Different types of cable are offered, making it possible to create any type of application, including those for harsh environments, see (1) page 43626/3. Various connectors are available to meet any requirement: straight or 90° elbowed connectors, with or without the option of connecting a PC or diagnostic pocket PC.

Power can be supplied to the equipment by means of cables, cordsets and taps: one AWG24 pair for the CAN signals and one AWG22 pair for the power supply and the ground.

Note: It is not possible, however, to supply the bus with power from the taps

Taps or SUB-D connectors are equipped with a switch for switching the line terminators on or off (required at the end of the CANopen segments).

(1) Consult our catalogue "Interfaces, I/O splitter boxes and power supplies".



TSX CAN TDM4



TSX CAN KCD F90T



TSX CAN KCD F180T



TSX CAN KCD F90TP



TSX CAN CA/CB/CD●●●



TSX CAN CADD●●
TSX CAN CBDD●●



VW3 CAN TAP2

IP 20 SUB-D standard TAP and connectors

Description	Composition	No.	Length m	Reference	Weight kg
CANopen junction box for tap links	- 4 SUB-D 9-way ports. Allows the connection of 4 drops on the trunk cable - Screw terminal for the connection of trunk cable - Includes a switch to set the bus termination	1	-	TSX CAN TDM4	-
IP 20 connectors CANopen SUB-D 9-way female connector Integrates a micro switch to set the bus termination	Bended at 90°	2	-	TSX CAN KCDF 90T	-
	Right (2)	3	-	TSX CAN KCDF 180T	-
	Bended at 90° with additional SUB-D 9-way connector to connect a pocket or a PC on the bus	4	-	TSX CAN KCDF 90TP	-

IP 20 standard cables and preassembled cordsets

Description	Composition	No.	Length m	Reference	Weight kg
CANopen cables	Standard cable, CE marking: - Low smoke, Halogen free - Flame retardant (IEC 60332-1)	5	50 m	TSX CAN CA50	-
			100 m	TSX CAN CA100	-
			300 m	TSX CAN CA300	-
	Standard cable, UL certification, CE marking: - Non flame propagating (IEC 60332-2).	5	50 m	TSX CAN CB50	-
			100 m	TSX CAN CB100	-
			300 m	TSX CAN CB300	-
	Flexible cable for heavy duty or mobile installation (1), CE marking: - Low smoke, Halogen free - Flame retardant - Oil resistant. (IEC 60332-1)	5	50 m	TSX CAN CD50	-
			100 m	TSX CAN CD100	-
			300 m	TSX CAN CD300	-
CANopen preassembled cordsets with moulded female SUB-D 9-way connectors at both end.	Standard cable, CE marking: - Low smoke, Halogen free - Flame retardant (IEC 60332-1).	6	0.3 m	TSX CAN CADD03	-
			1 m	TSX CAN CADD1	-
			3 m	TSX CAN CADD3	-
	Standard cable, UL certification, CE marking: - Non flame propagating (IEC 60332-2).	6	5 m	TSX CAN CADD5	-
			0.3 m	TSX CAN CBDD03	-
			1 m	TSX CAN CBDD1	-
	3 m	TSX CAN CBDD3	-		
	5 m	TSX CAN CBDD5	-		

RJ45 junction box and preassembled cordsets (2)

Description	Composition	No.	Length m	Reference	Weight kg
CANopen junction box for Altivar/Lexium 05	2 RJ45 ports and 1 RJ45 port to connect a pocket or a PC on the bus	7	-	VW3 CAN TAP2	-
CANopen preassembled cordsets	1 RJ45 connector at each end	8	0.3 m	VW3 CAN CARR03	-
			1 m	VW3 CAN CARR1	-

(1) Normal environment:

- without special environmental restrictions
- operating temperature between + 5 °C and + 60 °C
- fixed installations

A Harsh environment:

- resistance to hydrocarbons, industrial oils, detergents, solder chips
- up to 100% humidity
- saline environment
- operating temperature between - 10 °C and + 70 °C
- extreme variations in temperature
- mobile installations.

(2) Another connecting accessories, consult our catalogue "Soft starters and variables speed drives".