

TECOMAT TC700 – Binary output modules

Type	OS-7401	OS-7402	OS-7410	OS-7411
Number of outputs	16	32	64	32
Switching voltage	24 V DC	24 V DC	24 V DC	24 V DC
Switching current	2 A	0.5 A	0.05 A	0.05 A
Connection	20pin Screw type connector Screwless connector	2x 20pin Screwless connector	4x 20pin DIN 41651 Flat Cable Connector	2x 20pin DIN 41651 Flat Cable Connector

Basic features

- Expansion modules with 16, 32 and 64 binary semiconductor outputs for enlarging number of I/O of the TC700 configuration.
- Outputs are organized in groups with one common wire.
- Galvanic isolation of outputs from internal circuits of controller is provided.
- Status of the module and of each output is indicated by LED on the front panel.
- Modules can be placed in any position of the rack.
- Modules support a hot-swap. This feature is programmable and must be enabled by the programmer.
- Other details are given in tables.

Connecting

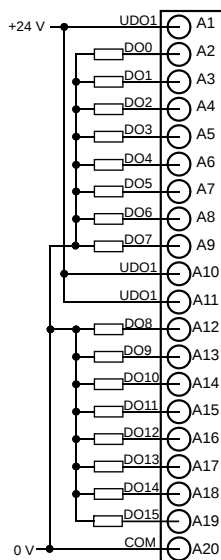
- Front end connectors are ordered separately since user can choose the screw/screwless one.
- The high density modules OS-7410 and OS-7411 has to be connected through the cable to external output modules with different switching and protection elements.
- Modules are to be fixed in the rack by one screw at the top of the module.
- Modules are addressed by their position in the rack.
- Modules are power supplied from the rack. The loads must be supplied by external power supply.

Use

- To switch on/off the loads of controlled process or machine at the 24V DC or 230V AC levels.

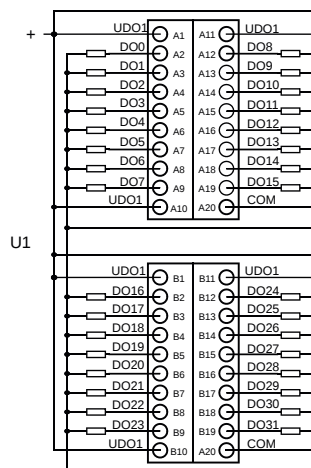
Connection examples

OS-7401



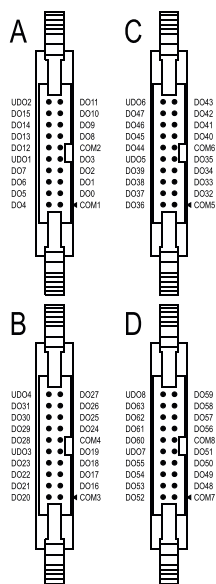
max. 2,5 mm²

OS-7402



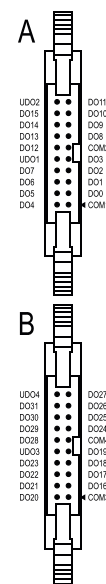
max. 1,0 mm²

OS-7410



Plug-in connector on cable according to DIN 41651 - KB-0211, KB-0212, KB-0213

OS-7411



Plug-in connector on cable according to DIN 41651

Conductors cross-section

Conductors cross-section



OS-7401



OS-7402



OS-7410



OS-7411

Binary outputs	OS-7401	OS-7402	OS-7410	OS-7411
No. of outputs / groups	16/ 1	32/ 1	64/ 8	32/ 4
Galvanic isolation	Yes	Yes	Yes	Yes
Type of output	Semiconductor switch	Semiconductor switch	Semiconductor switch	Semiconductor switch
Common pole	Plus	Plus	Minus, for each group	Minus
Switching voltage	24 V DC	24 V DC	24 V DC	24 V DC
Switching current	max. 2 A	max. 0.5 A	max. 0.05 A	max. 0.05 A
Common pole current	max. 10 A	max. 16 A	max. 2 A	max. 2 A
Leakage current	<300 µA	<300 µA	<300 µA	<300 µA
Switch on/switch off period	400 µs/ 400 µs	400 µs/ 400 µs	400 µs/ 400 µs	400 µs/ 400 µs
Short-circuit protection	Internal, <6.5 A	Internal, <1.1 A	–	–
Overload protection	Yes, <6.5 A	Yes, thermal protection	–	–
Reverse polarity protection	Yes	Yes	–	–
Spike suppressor of inductive load	External RC, varistor or diode snubber	External RC, varistor or diode snubber	External RC, varistor or diode snubber	External RC, varistor or diode snubber

Power supply	OS-7401	OS-7402	OS-7410	OS-7411
Power supply voltage from the rack	24 V DC,	24 V DC,	24 V DC,	24 V DC,
Power consumption	Max. 0.8 W	Max. 1.0 W	Max. 1.5 W	Max. 1.5 W
External power supply for output circuits	24 V DC/ 350 mA	24 V DC/350 mA	24 V DC/ 100 mA	24 V DC/ 50 mA
Module power dissipation	Max. 10 W	Max. 10 W	Max. 18 W	Max.10 W

Dimensions and weight	OS-7401	OS-7402	OS-7410	OS-7411
Dimensions	137 × 30 × 198 mm	137 × 30 × 198 mm	137 × 30 × 198 mm	137 × 30 × 198 mm
Weight	300 g	300 g	300 g	300 g

Order number	
TXN 174 01	OS-7401 16 outputs 24 V DC, 2 A
TXN 174 02	OS-7402 32 outputs 24 V DC, 0.5 A
TXN 174 10	OS-7410 64 × DO GO, 24 V, 0.5 A, basic module for external modules OS-04xx
TXN 174 11	OS-7411 32 × DO GO, 24 V, 0.5 A, basic module for external modules OS-04xx
TXN 102 30	Connector, screwless type, 20 pins, pitch 5,08
TXN 102 31	Connector, screw type, parallel direction, 20 pins, pitch 5,08
TXN 102 32	Connector, screw type, right angle, 20 pins, pitch 5,08
TXN 102 40	Set of 2 connectors, screwless type, 2 × 20 pins, pitch 3,5
TXN 102 11.04	KB-0211 cable for external I/ O modules, 20 pin/ 20 pin, shielded – (faston 2.8), 1m
TXN 102 12.04	KB-0212 cable for external I/ O modules, 20 pin/ 20 pin, unshielded 1m
TXN 102 13.04	KB-0213 cable for external I/ O modules, 20 pin/ free end, shielded-(faston 2.8), 1m



TXN 102 40



TXN 102 30



TXN 102 32



KB-0211
KB-0212
KB-0213