



COMPACT SAFETY CONTROLLER  
**TALOS<sup>®</sup> TB-11403**

# COMPACT SAFETY CONTROLLER

## TALOS® TB-I14O3

### SAFETY

## Machine safety can be simple

**TALOS** is a compact configurable safety controller for the use in small and medium sized machines and plants. It provides numerous safety functions in a compact 45 mm housing. No programming work is necessary because of predefined standard configurations. **TB-I14O3** attains highest safety requirements category 4 / PL e and SILCL 3 according to EN ISO 13849-1 and EN 62061 and is thus ideally suited for machine tools and automatic machines. Additional, **TB-I14O3** also applies for furnaces and ancillary equipment in continuous operation according to EN 50156-1.

- 3 safe independent switching PNP-semiconductor outputs Stop Category 0 or 1.
- 14 safe inputs
- 3 start inputs  
(automatic start or monitored manual start)
- 6 safe independent switching PNP-semiconductor outputs
- 16 predefined standard configurations
- Detailed and clear monitoring
- Easy and intuitive operation. Direct control at the front via push- / rotary button
- Suitable and certified for highest safety standards: PL e / Cat. 4 according to EN ISO 13849-1, furnaces and ancillary equipment for continuous operation according to EN 50156-1



## Function

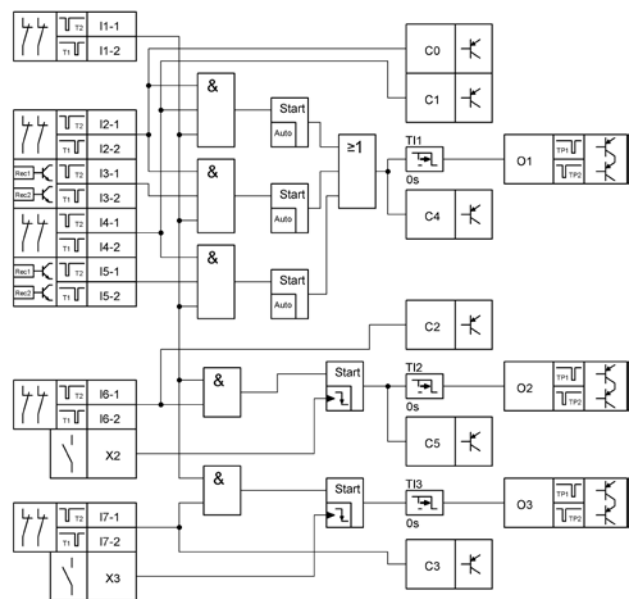
### Configuring instead of programming

**TB-I14O3** adapts flexibly to your application. Nevertheless, it does not need to be programmed. 16 certified stored standard configurations with several logical operations can be selected easily and quickly on the control menu - done.

Process times (e.g. delay time of selected outputs) can be parameterized according to your individual application via the front panel.

Special functions needed? Realization of customer specified configurations with up to 10 additional, custom-made configurations via SIM-Card, which is programmed by ZANDER AACHEN.

Insert the SIM-Card into the card slot. Select your preferred configuration via the front button - done.



### Logic combinations

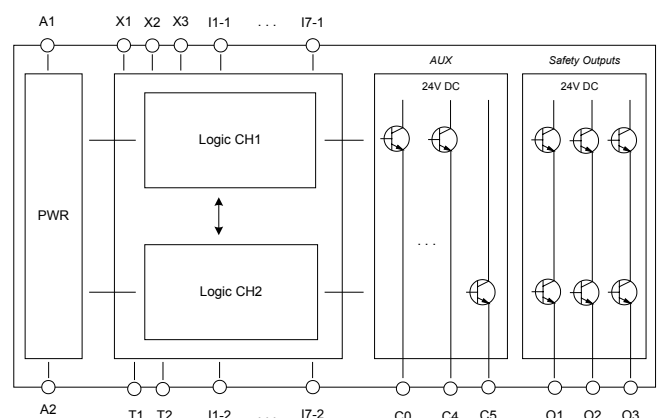
**TB-I14O3** offers a huge number of logical operations which enables any desired input - output combination. AND, OR, NOT operations and timer allowing quick and easy solutions from simple to complex applications.

### Safe input detection

**TB-I14O3** provides a safe signal processing and monitoring for various types of sensors. The evaluation of 1-channel or 2-channel sensors, e.g. emergency stop button, safety switches with semiconductor outputs or OSSD outputs will be realized by the **TALOS® TB-I14O3**.

### Safe switching

3 safe independent semiconductor can be connected with the safe inputs depending on the logical combination. Response- or release delay can be selected via the configuration and parameterised via the menu.



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## Economical because of ...

### ... the use of predefined standard configurations

**TB-I14O3** provides over 16 standard configurations in the delivery state, which covers the most common applications. Special applications, which are not covered by the standard predefined combinations, can be loaded via an external SIM card.

The selected configuration as well as the parameterisation of selected functions, e.g. delay times, can be easily and quickly realized at the **TALOS** front via a button.

This means:

- No expensive programming work
- Quick and simple installation direct at the device
- No further equipment necessary
- Quick and simple adaptation of single parameters/ settings direct at the device.

... configuration instead of programming!

### ... detailed and clear monitoring

The **TALOS® TB-I14O3** has an detailed monitoring. A diagnostic menu offers all necessary status information, e.g. the state of all in- and outputs or the call up of all delay times.

Possible errors such as defect sensors, cross short circuits or wiring defaults will be detected and will be visible immediately at the main display.

This means:

- Eliminates tedious process of troubleshooting
- Avoiding downtime during troubleshooting
- Quick commissioning due to status information

... perfect overview in any operation mode!





### ... easy operation

The operation of the **TB-I14O3** is easy and intuitive. All menu points are shown at the self-luminous display with clear abbreviations. Troublesome language changes are therefore not necessary. Intuitive operation via push- / rotary button at the front. Switching between each menu by rotating. Enter functions by pushing.

This means:

- Quick commissioning and maintenance directly at the device
- International display language

... safety as easy as pie!

### ... highest safety standards, also for furnaces and ancillary equipment in continuous operation.

The **TB-I14O3** complies with the essential safety requirements, Kat. 4 / PL e according to EN ISO 13849-1 and also for furnaces and ancillary equipment in continuous operation according to EN 50156-1.

This means:

- Highest possible safety level are achieved
- Lower downtime for furnaces and ancillary in continuous operation due to proof-test intervals according to EN 50156-1

... **TALOS® TB-I14O3** is ideally suited for machines, plants and furnaces in continuous operation.



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## TALOS® TB-I14O3

### SAFETY

Monitoring of various sensors, e.g.:



Order Number	Article
472600	TALOS® TB-I14O3
472592	EKLS4, set pluggable screw terminals
472593	EKLZ4, set pluggable tensile spring terminals

<b>General technical data</b>		<b>TALOS® TB-I14O3</b>
Order Number	472600	
Approvals	CE, TÜV-Rheinland, cULus	
<b>Electrical data</b>		
Operating voltage $U_B$	DC 24 V (+/- 15 %)	
Power consumption	3.8 W (all inputs activated / no load operation)	
<b>Inputs</b>		
Number	14 safe Inputs / 3 Start-Inputs	
Input voltage	DC 24 V (+/- 15 %)	
Switching thresholds	log. „0“: 0 V up to 5 V; log. „1“: 18 V up to $U_B$	
Input resistance	Approx. 3.3 k $\Omega$	
<b>Clock outputs</b>		
Number	4	
<b>Safe semiconductor outputs</b>		
Number	3	
Switching capacity per output	$U_B$ / 500 mA; PNP; short-circuit proof	
Period of test pulses (0 V)	< 3 ms	
Output voltage at full load	$U_B$ - 1 V	
<b>Auxiliary outputs</b>		
Number	6	
Switching capacity per output	1 x 24 V / 500 mA; 5 x 24 V / 50 mA; PNP; short-circuit proof	
Output voltage at full load	$U_B$ - 1 V	
<b>Temperatures</b>		
Ambient temperature	0 °C up to 50 °C	
Storage temperature	-20 °C up to 80 °C	
<b>Mechanical data</b>		
Dimensions	45 x 99 x 118 mm	
Degree of protection	IP20	
Max. cable cross function	2.5 mm <sup>2</sup>	
Assembly	Mounting rail according to DIN EN 60715 TH35	
Weight	approx. 190 g	



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SAFETY



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