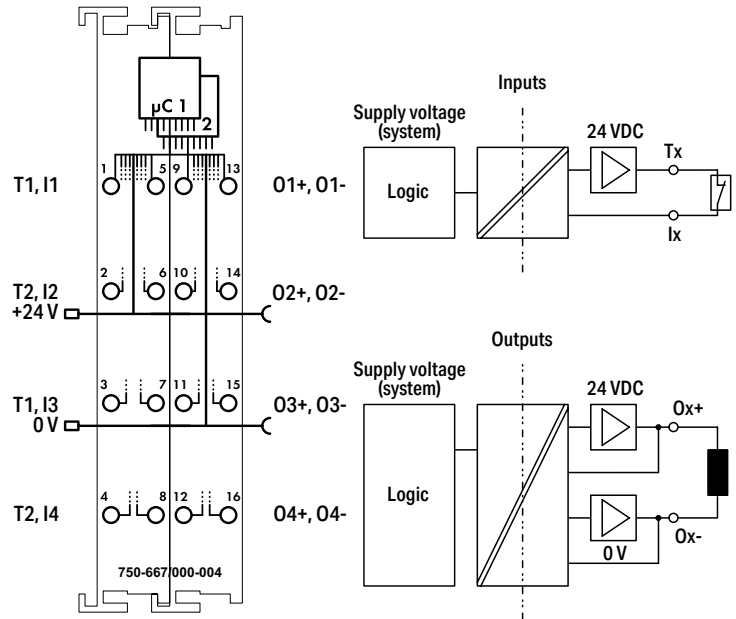
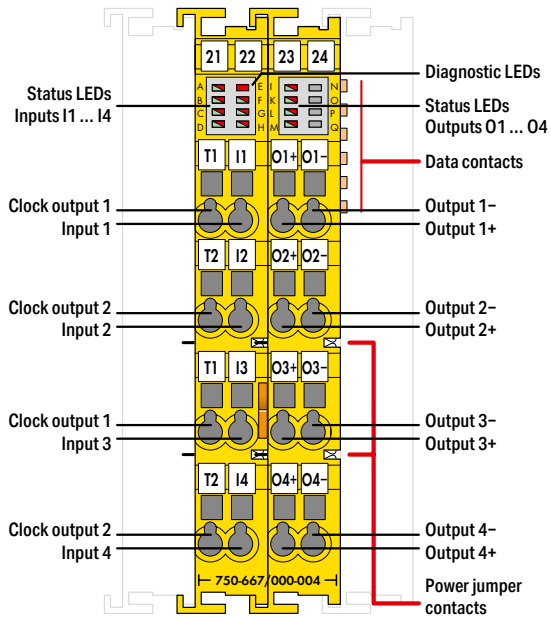


## Safe 4/4 channel digital input/output; 24 VDC; 2 A; PROFIsafe



The 75x-667/000-004 module is equipped with 4 power outputs (O1 ... O4) and 4 clock sensitive inputs (I1 ... I4). The sensors can be supplied directly with 24V, or fed by 2 differently clocked outputs (T1 ... T2).

The inputs connect potential-free, emergency-off switches with contacts, protection door switches, mode selectors, as well as both safety sensors and semiconductor outputs (e.g., light barriers, PLC outputs). The power outputs switch both resistive loads and inductive loads according to DC13 loads with up to a 2A-rated current without requiring any additional external circuit.

The power outputs operate in both bipolar (high-side/low-side switching) and unipolar (common potential on one side of the load) modes.

The module monitors short-circuits, cross circuits and 24V voltage supply from separate sources. Both the monitoring and additional safety relevant parameters (e.g., operating modes, switching off test pulses, discrepancy or filter times) can be configured via WAGO-I/O-CHECK.

The configuration tool can be conveniently integrated into engineering systems supporting both CC2 and CC3 tool calling interfaces (TCI).

When exchanging modules, parameters are automatically downloaded into the control

unit via PROFIsafe-compatible iPar server – depending on settings. The PROFIsafe address can be set using the DIP switch on the side of the module, or via WAGO-I/O-CHECK. The module supports the PROFIsafe V2.6 (PROFINET) protocol.

Individual modules can be arranged in any combination when configuring the fieldbus node.

Field and system level are galvanically separated from each other.

If necessary (e.g. cable length of the 24V supply greater than 3 meters), a WAGO filter module or an appropriate external filter must be used for the 24 V power supply to protect the module against surge and burst (per IEC 61000-6-7 and marine applications). Additional information can be found in the product manual (available in German and English).

The module 75x-667/000-004 has been evaluated by UL in accordance with the standards UL/CSA 61010-1, UL/CSA 61010-2-201 and UL 121201, CSA-C22.2 No. 213. Functional safety evaluations according to the specified standards were carried out by TÜV Rheinland.

Description	Item No.	Pack. Unit
4FDI/4FDO 24V/2A PROFIsafe	750-667/000-004	1
4FDI/4FDO 24V/2A PROFIsafe (without connector)	753-667/000-004	1
Accessories	Item No.	Pack. Unit
Mini-USB Quick Marking System;		
plain	248-501	50
Plug; Safety	753-120	25
Coding elements	753-150	100
Standards and Approvals		
Safety standards	IEC 61508-1 ... -7; EN ISO 13849-1; EN 62061	
Conformity marking	CE	
Marine applications	DNV	
EC EMC guideline 2014/30/EU		
EMC immunity of interference	EN 61000-6-2; Marine; EN 61000-6-7 (FS)	
EMC emission of interference	EN 61000-6-4; Marine; EN 61000-6-3	
☉ E175199 Ordinary Locations		
☉ UL E198726 Hazardous Locations	Class I, Div2 ABCD T4	
Technical Data		
Connection technology: inputs/outputs	CAGE CLAMP®	
Conductor cross sections	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 14 AWG	
Strip length	8 ... 9 mm / 0.33 inch (750 Series); 9 ... 10 mm / 0.37 inch (753 Series)	
Dimensions W x H x D	24 x 100 x 67.8 mm	
Weight	Approx. 100 g	
Surrounding air temperature (operation)	0 ... 55 °C	
Relative humidity (without condensation)	95 %	
Operating altitude	0 ... 2000 m	

Technical Data	
<b>Inputs:</b>	
Numer of digital inputs	4 inputs (single channel evaluation); 2 pairs (dual channel evaluation)
Number of clock outputs	2
Output current	max. 100 mA; per clock output
Interface types according to ZVEI CB24I	sink; A, C0, C1, C2, C3
Sensor inputs	I1 ... I4; clock sensitive to T1 ... T2; Type 1 per IEC 61131
Input current (typ.)	3.0 mA
Input frequency (max.)	50 Hz
<b>Outputs:</b>	
Numer of digital outputs	4 (single-channel / dual-channel)
Interface types according to ZVEI CB24I	source; C0, C1, C2, C3, D0, D1, D2, D3
Power outputs	O1 ... O4; power outputs for actuators
Output current (per channel)	O1 ... O4: 2 A; per IEC 61131
Total output current	8 A
Switching frequency (max.)	Resistive load = 50 Hz; Inductive load (DC13) = 0.1 Hz; Capacitive load = 0.1 Hz; 47 µF
Capacitive load for each channel	O1 ... O4; 47 µF
Test pulse length	0 ... 500 ms
Achievable safety classes (dual-channel)	SIL 3; Category 4, PL <sub>e</sub>
Achievable safety classes (single-channel)	SIL 2; Category 2; PL <sub>d</sub>
Supply voltage (system)	5 VDC; via data contacts
Supply voltage (field)	SELV/PELV DC 24 V (-25 ... +20 %); via power jumper contacts (power supply via blade contact; transmission via spring contact)
Power consumption (5 V system supply)	max. 120 mA
Power consumption, field supply (module with no external load)	35 mA
Number of outgoing power jumper contacts	2
Current carrying capacity (power jumper contacts)	max. 10 A