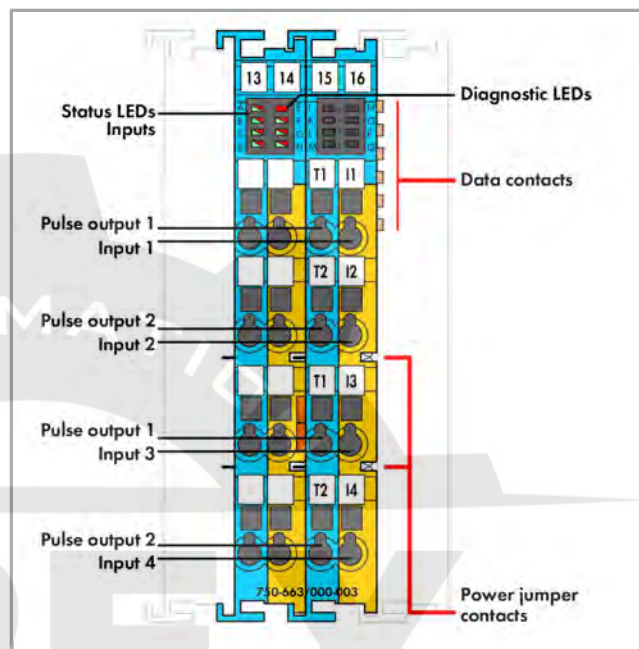
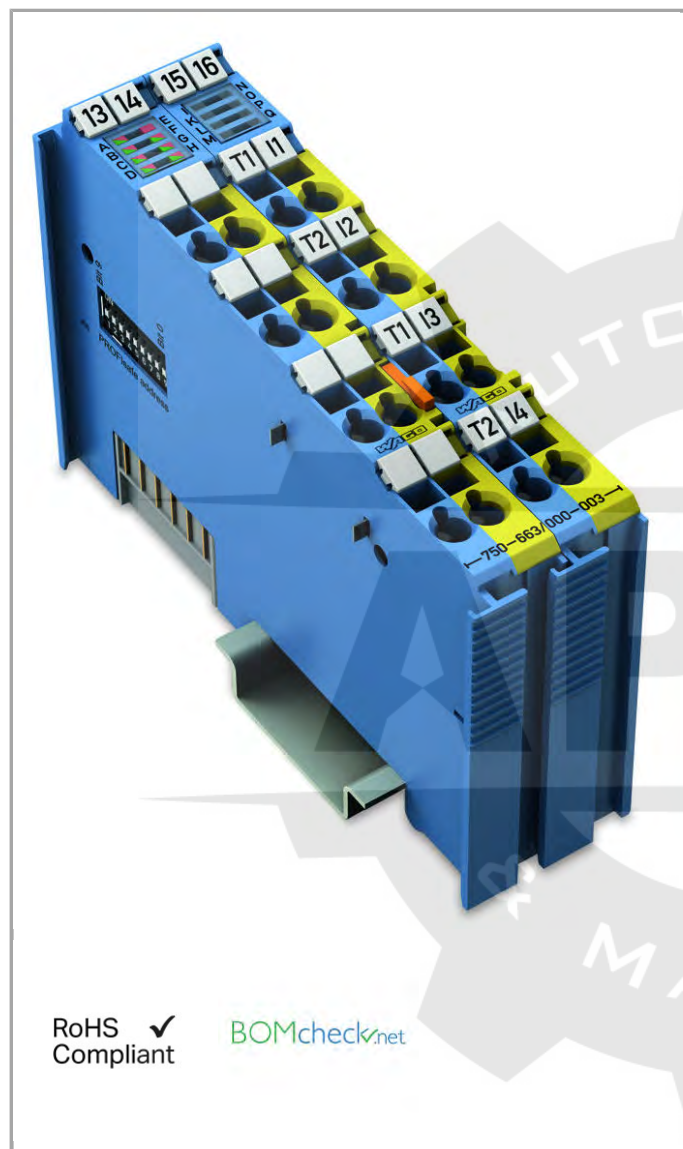
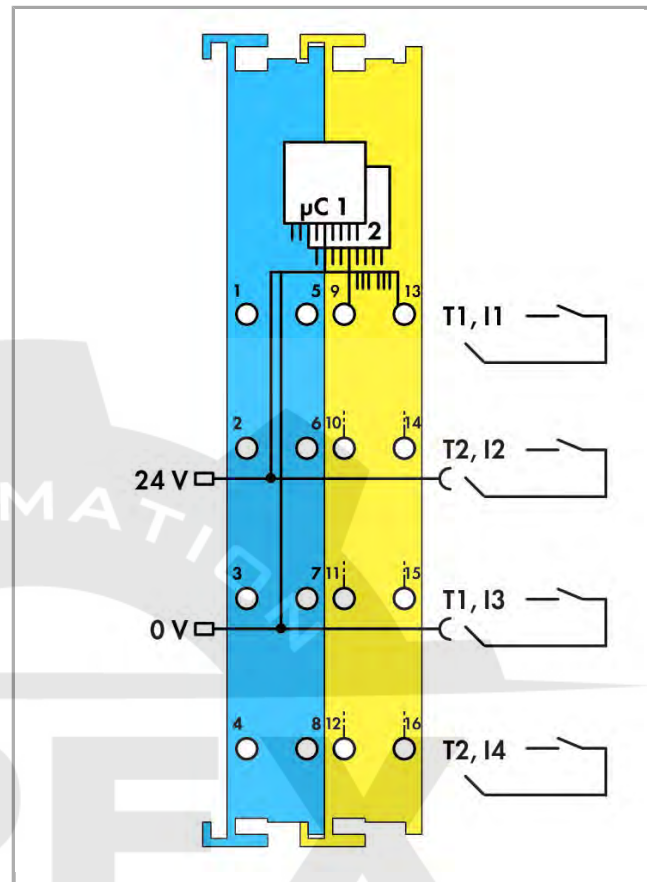
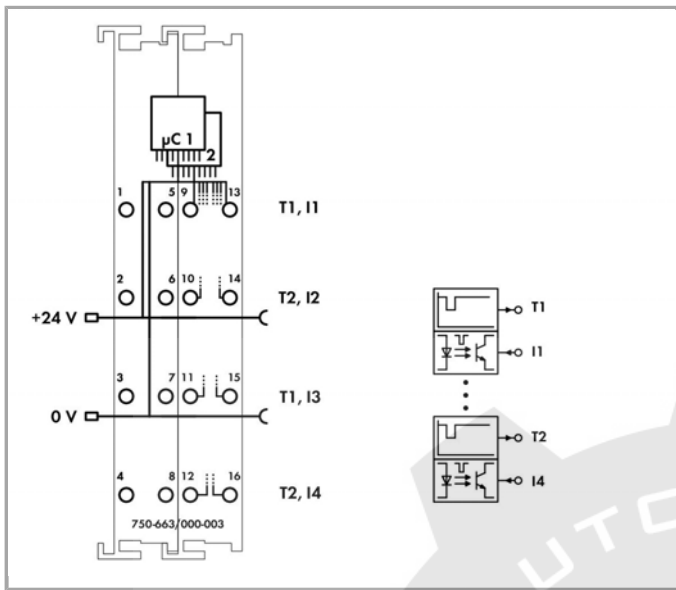


750-663/000-003



RoHS  Compliant

[BOMcheck.net](https://www.bomcheck.net)



Item description

The intrinsically safe 750-663/000-003 PROFIsafe input module for functional safety provides risk reductions up to SIL 3, Cat. 4, PL e, and connects to potential-free, contact-based emergency stop switches, safety door switches, mode selectors, as well as safety sensors, that are located hazardous environments 0, 1 and 2. The fail-safe input module must be located in Zone 2.

The input module has 4 clock-sensitive inputs (I1 ... I4) that are fed by 2 differently clocked, short circuit-proof outputs (T1 ... T2). Inputs are continually monitored for cross circuits and power supply from separate sources.

Additional safety-relevant functions (e.g., operating modes, switching off test pulses, discrepancy or filter times) can be configured via WAGO-I/O-CHECK. This configuration tool supports both CC2 and CC3 tool calling interfaces (TCI). When exchanging the module, parameters are automatically downloaded by the controller via PROFIsafe-compatible iPar server – depending on settings. The module supports both PROFIsafe V1 and V2 (PROFIBUS, PROFINET) protocols.

Individual I/O modules can be arranged in any combination within the fieldbus node's Ex segment.

Note 1:

The PROFIsafe input module shall only be operated using an Ex i 24 VDC power supply (e.g., 750-606, 750-625/000-001)! General information (e.g., installation regulations) on explosion protection is available in the WAGO-I/O-SYSTEM 750 manuals!

Note 2:

To protect the module against surge voltages (surge protection per IEC 61000-4-5), a filter module (750-626 or 750-624) or an external surge filter must be used upstream of the Ex i 24 VDC power supply.

Reference the product manual for further information!

Data

Technical Data

Number of digital inputs	4
Total number of channels (module)	4
Achievable safety classes	SIL 3 acc. to IEC 61508; SIL 3 acc. to IEC 61511; SIL 3 acc. to IEC 62061; Cat. 4, PL e acc. to EN ISO 13849
Type of signal	Voltage
Sensor connection	4 x (sicherer Eingang mit Testpuls)
Input characteristic	clock sensitive
Input characteristic	Type 1
Input filter (digital)	0.5 ms 1 ms 2 ms 3 ms 5 ms 10 ms 20 ms 50 ms 100 ms 200 ms 0 ms
Input filter	0 ms ... 200 ms, configurable in steps
Input filter: parametrizable (channel by channel)	yes
Input current per channel for signal (1) typ.	3 mA
Output current per channel	0.05 A
Short-circuit current	≤ 25 mA
Signal frequency max.	50 Hz
Intrinsic safety Ex i	yes
System supply voltage	DC 5 V; via data contacts
Current consumption, system supply (5 V)	145 mA
System and sensor supply voltage	)
Field supply voltage	DC 24 V; (Versorgung über Einspeisung Ex i U _O = max. 27,3 V); über Leistungskontakte (Einspeisung über Messerkontakt; Weiterleitung über Federkontakt)
Current consumption, field supply (module with no external load)	20 mA
Isolation	300 VAC system/supply
Indicators	LED (A-D) green/red: Status/Error I1 ... I4; LED (E) red: Group error; LED (F-H) green/red: Diagnostics
Number of incoming power jumper contacts	2
Number of outgoing power jumper contacts	2
Current carrying capacity of the power jumper contacts	1 A
Ex guideline	EN/IEC 60079-0, -7, -11, -26, -31
Electric circuit, safety-relevant data	

$U_o = 27.3 \text{ V}$; $I_o = 23 \text{ mA}$; $P_o = 157 \text{ mW}$; Characteristic: Linear

Reactances Ex ia IIC	$L_o = 61 \text{ mH}$; $C_o = 64 \text{ nF}$
Reactances Ex ia IIB	$L_o = 100 \text{ mH}$; $C_o = 552 \text{ nF}$
Ex ia IIA reactances	$L_o = 100 \text{ mH}$; $C_o = 2,28 \mu\text{F}$
Reactances Ex ia I	$L_o = 100 \text{ mH}$; $C_o = 2.95 \mu\text{F}$
Reactances	(The above-listed ratings do not account for the coincidental occurrence of capacitances and inductances. For ratings taking the coincidental occurrence of capacitances and inductances into account, see manual)
Marking	ATEX, IECEx, Underwriters Laboratories Inc.

Connection data

Connection technology: In-/Outputs	8 x CAGE CLAMP®
Connection type (1)	Inputs/Outputs
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inch
Anschlussanforderung zulässige Leitungslänge	100 m

Geometrical Data

Width	24 mm / 0.945 inch
Height	67.8 mm / 2.669 inch
Height from upper-edge of DIN-35 rail	60.6 mm / 2.386 inch
Depth	100 mm / 3.937 inch

Mechanical data

Type of mounting	DIN-35 rail
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Material Data

Housing material	Polycarbonate, polyamide 6.6
Fire load	0 MJ
Weight	91.988 g
Conformity marking	1

Environmental Requirements

Surrounding air (operating) temperature	0 ... 55 °C
Surrounding air (storage) temperature	-40 ... 85 °C
Protection class	IP20

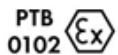
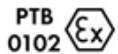
Degree of pollution (5)	2 per IEC 61131-2
Operating altitude	0 ... 2000 m
Mounting position	horizontal (standing/lying) or vertical
Relative air humidity (no condensation)	95 %
Vibration resistance	4g per IEC 60068-2-6
Shock resistance	15g per IEC 60068-2-27
EMC immunity to interference	acc. to EN 61000-6-2, marine applications
EMC emission of interference	acc. to EN 61000-6-3, marine applications
Exposure to pollutants	Per IEC 60068-2-42 and IEC 60068-2-43
Permissible H ₂ S contaminant concentration at a relative humidity 75 %	10 ppm
Permissible SO ₂ contaminant concentration at a relative humidity 75 %	25 ppm

Commercial data

Product Group	15 (Remote I/O)
Country of origin	DE
GTIN	4050821531432
Customs Tariff No.	85389099990

Approvals / Certificates

Ex-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	AEx UL International Germany GmbH	UL 60079	E480271
	ATEX TUEV Nord Cert GmbH	EN 60079-0	TUEV_12_ATEX_106032X
	IECEx TUEV Nord Cert GmbH	IEC 60079	IECEx TUN 12.0039X
	INMETRO TÜV Rheinland do Brasil Ltda.	-	TÜV_14.1911_X
	TUEV Nord TUEV Nord Cert GmbH	EN 60079-0	TUEV_12_ATEX_106032X

Country specific Approvals

Certificate

Logo	Approval	Additional Approval Text	name
	KC National Radio Research Agency	Article 58-2, Clause 3	MSIP- REM-W43- DIM750
	TUEV Rheinland TUEV Rheinland Industrie Service GmbH	-	No. 968 /EZ 247.14 /16

Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	-	19- HG1821926
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAA0000194
	GL Germanischer Lloyd	-	11 631 - 10 HH
	PRS Polski Rejestr Statków	-	TE/2236 /880590/19

UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL UL International Netherlands B.V. (ORDINARY LOCATIONS)	UL 508	E175199 Sec.1

Compatible products

Marking accessories

	Item no.: 2009-145 Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	2009-145
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	Item no.: 2009-145/000-002 Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	/000-002	2009-145
	Item no.: 2009-145/000-005 Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	/000-005	2009-145
	Item no.: 2009-145/000-006 Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	/000-006	2009-145
	Item no.: 2009-145/000-007 Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	/000-007	2009-145
	Item no.: 2009-145/000-012 Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	/000-012	2009-145
	Item no.: 2009-145/000-023 Mini-WSB Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	/000-023	2009-145
	Item no.: 2009-145/000-024 Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	/000-024	2009-145
	Item no.: 248-501 Miniature WSB Quick marking system; plain; Marker width 5 mm; 10 strips with 10 markers per card		248-501
	Item no.: 248-501/000-002 Mini-WSB marking card; as card; not stretchable; plain; snap-on type	/000-002	248-501
	Item no.: 248-501/000-005 Mini-WSB marking card; as card; not stretchable; plain; snap-on type	/000-005	248-501
	Item no.: 248-501/000-006 Mini-WSB marking card; as card; not stretchable; plain; snap-on type	/000-006	248-501
	Item no.: 248-501/000-007 Mini-WSB marking card; as card; not stretchable; plain; snap-on type	/000-007	248-501
	Item no.: 248-501/000-012 Mini-WSB marking card; as card; not stretchable; plain; snap-on type	/000-012	248-501
	Item no.: 248-501/000-017 Mini-WSB marking card; as card; not stretchable; plain; snap-on type	/000-017	248-501
	Item no.: 248-501/000-023 Mini-WSB marking card; as card; not stretchable; plain; snap-on type	/000-023	248-501



Item no.: 248-501/000-024
 Mini-WSB marking card; as card; not stretchable; plain; snap-on type

248-501

/000-024



Item no.: 750-103
 Group marker carrier

750-103



Item no.: 750-107
 Group marker carrier

750-107

shield connection



Item no.: 790-108
 Shield clamping saddle; 11 mm wide; diameter of compatible conductor

790-108



Item no.: 790-116
 Shield clamping saddle; 19 mm wide; diameter of compatible conductor; 7 ... 16 mm

790-116



Item no.: 790-124
 Shield clamping saddle; 27 mm wide; diameter of compatible conductor; 6 ... 24 mm

790-124



Item no.: 790-140
 Shield clamping saddle; diameter of compatible conductor

790-140



Item no.: 790-208
 Shield clamping saddle; 12.4 mm wide; 3 ... 8 mm

790-208



Item no.: 790-216
 Shield clamping saddle; 21.8 mm wide; 6 ... 16 mm

790-216



Item no.: 790-220
 Shield clamping saddle; 30 mm wide; 6 ... 20 mm

790-220

Supply module



Item no.: 750-606
 Power Supply; 24 VDC; Diagnostics; Intrinsically safe

750-606



Item no.: 750-625/000-001
 Power Supply; 24 VDC; Intrinsically safe

750-625

/000-001

Carrier rail



Item no.: 210-112
 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 25 mm

210-112



Item no.: 210-113
 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715

210-113



Item no.: 210-114
 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715

210-114



Item no.: 210-115
 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 18 mm

210-115



Item no.: 210-118
 Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715

210-118



Item no.: 210-196
 Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715

210-196

	Item no.: 210-197 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715	210-197
	Item no.: 210-198 Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715	210-198
	Item no.: 210-504 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715	210-504
	Item no.: 210-505 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715	210-505
	Item no.: 210-506 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715	210-506
	Item no.: 210-508 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715	210-508

Downloads

Documentation

Data sheet

750-663/000-003, 4F Ex i DI 24V PROFI-safe V2 iPar, data sheet	pdf 470.3 kB	Download
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Manual

4-channel, Ex i, 24 V, PROFI-safe V2 iPar with inputs for functional safety	V 1.7.0	pdf 4.2 MB	Download
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Bid Text

750-663/000-003 IO-Klemmen	Oct 2, 2014	doc 31.2 kB	Download
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Instruction Leaflet

Operating and Assembly Instructions PROFI-safe Safety Modules, Ex i		pdf 1.6 MB	Download
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Additional Information

Disposal; Electrical and electronic equipment, Packaging	V 1.0.0	pdf 265.8 kB	Download
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System Description

Functional Safety – General Product Information		pdf 374.6 kB	Download
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750/753 Series I/O-System – General Product Information		pdf 1.7 MB	Download
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Ex i Overview		pdf 616.0 kB	Download
Design Notes	V 2.0.0	pdf 1.5 MB	Download
Basic conditions and recommendations for higher operational safety			
Use in Hazardous Environments	V 1.0.0	pdf 1.0 MB	Download
Term definition, marking and installation regulations			
Overview on WAGO-I/O-SYSTEM 750 approvals		pdf 780.2 kB	Download

Libraries

Security Library

SISTEMA-Bibliothek	V 2.06	zip 170.0 kB	Download
VDMA-Bibliothek	V 0.0.8	zip 287.6 kB	Download
Gültigkeitsprüfung	V 0.0.8	xlsx 11.2 kB	Download
SISTEMA-Bibliothek	V 1.15	zip 142.1 kB	Download

Engineering-Software

Configuration and Commissioning Software

Safety Editor (SEDI) / 750-66x	2.2.9	zip 3.5 MB	Download
Loadable safety editor module for configurable safety I/O modules to be integrated into IO-Check (version 3.3.2 or higher).		Oct 2, 2013	

CAD/CAE - Smart Data

CAD data

3D Download 750-663/000-003	URL	Download
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Product family

750/753 Series I/O-System

[Learn more about the product family.](#)

[Show all products from the family](#)



Subject to changes.
