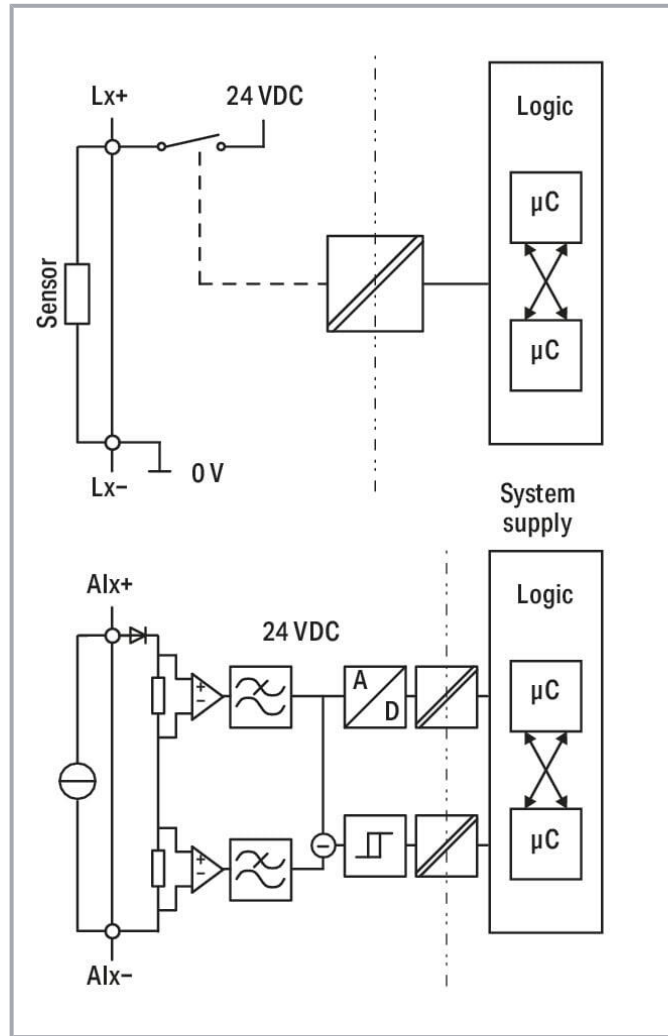
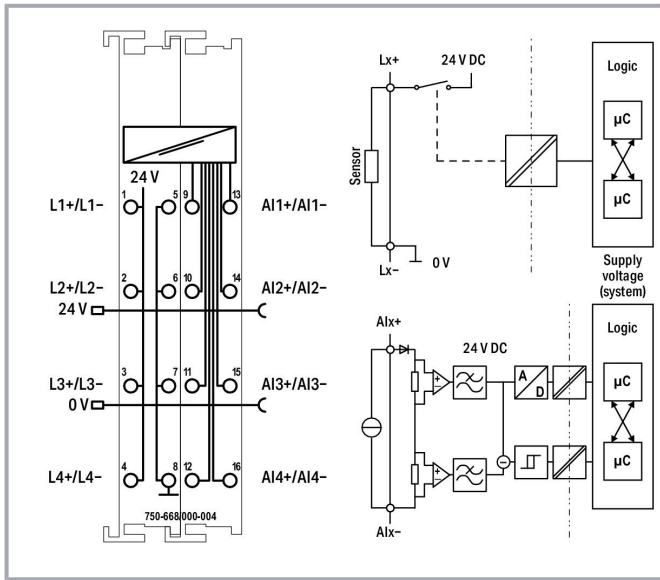


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WAGO GmbH & Co. KG
Hansastr. 27
32423 Minden
Phone: +49571 887-0 | Fax: +49571 887-169
Email: info.de@wago.com | Web: www.wago.com

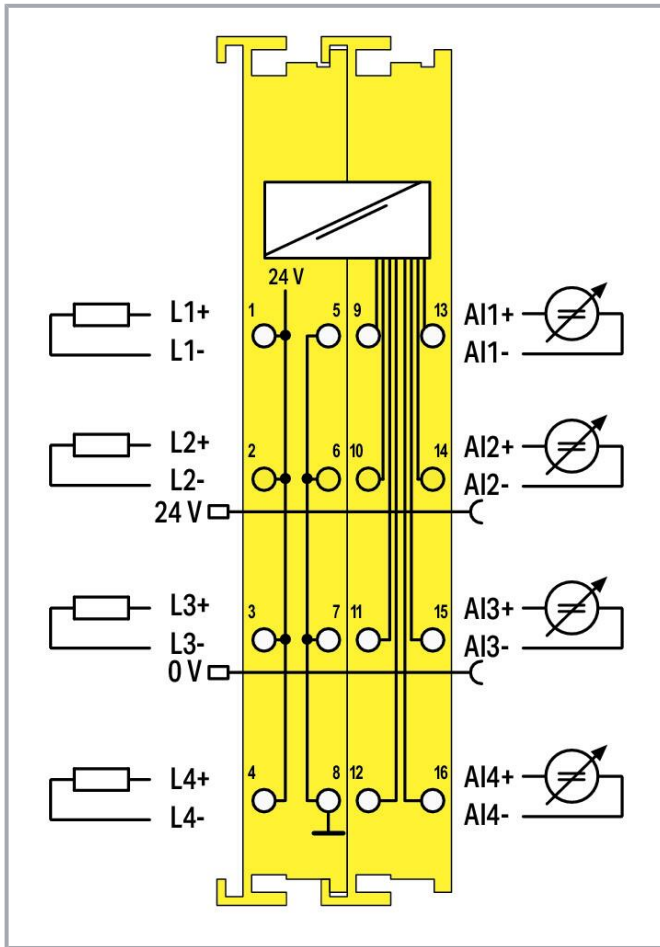
Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.



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Item description

The 75x-668/000-004 Module features four differential fail-safe analog inputs (AI1 ... AI4) and four current-limited sensor supply outputs (L1 ... L4). The sensors can be supplied directly by the module or via external 24 V. The fail-safe analog inputs can be used either in single-channel (up to SIL2 /PLd) or dual-channel mode (up to SIL3/PLe). Measurement cycle, filter times, encoder evaluation with discrepancy times and tolerance windows can be adjusted to meet the safety function requirements.

Overcurrent, overload and wire break are monitored at the fail-safe analog inputs. Both the monitoring and additional safety-relevant functions can be parameterized via *WAGO-I/O-CHECK*.

This configuration tool can be conveniently integrated into engineering systems supporting TCI (Tool Calling Interface) with CC2 or CC3.

When exchanging a module, parameters are automatically downloaded from the controller via PROFIsafe-compatible iPar server.

The PROFIsafe address can be set using the DIP switch or via *WAGO-I/O-CHECK*.

The module supports both PROFIsafe V2.4 (PROFIBUS) and V2.6 (PROFINET) protocols.

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

If, for example, the cable length of the 24 V supply is greater than 3 m, 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)!

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Data

Technical data

Device-specific	Common mode rejection: 87 dB (typ.); Sampling frequency 100 Hz, 60 Hz, 50 Hz, 10 Hz; configurable; Interference frequency suppression 38 dB at 50 Hz/60 Hz; Safety-related accuracy 1.25 % of the upper-range value (single-channel); 1.58 % of the upper-range value (two-channel)
Number of analog inputs	4
Total number of channels (module)	4
Signal type	Current
Signal type (current)	0 ... 20 mA; 4 ... 20 mA
Sensor supply	Outputs L1 ... L4
Sensor connection	4 x (2-wire, 3-wire, 4-wire)
Output current per channel	1.5 A
Output current (module)	1.5 A
Signal characteristics	Differential
Resolution [bit]	16 bits
Common-mode voltage (max.)	60 V
Load impedance	300 Ω
Measurement error (reference temperature)	25 °C
Measurement error, deviation (max.) from the upper-range value	0.05 %
Temperature error (max.) of the upper-range value	0.006 %/K
Configuration options	PROFIsafe address adjustable via DIP switch or engineering software
Supply voltage (system)	5 VDC; via data contacts
Current consumption (5 V system supply)	120 mA
Supply voltage (field)	24 VSELV/PELV DC (-15 ... +30 %); via power jumper contacts (power supply via blade contact; transmission via spring contact)
Current consumption, field supply (module with no external load)	40 mA
Isolation	500 V system/field
Indicators	LED (E) red, LED (F-H) red/green: Diagnostics; LED (I-M) red/green: Input/output status
Number of incoming power jumper contacts	2
Number of outgoing power jumper contacts	2
Current carrying capacity (power jumper contacts)	10 A
Current carrying capacity	40 mA

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Functional safety

Achievable safety classes	SIL 3; Category 4, PLe (two-channel); SIL 2; Category 2; PLd (one-channel)
Safety standards	IEC 61508-1 ... -7; EN ISO 13849-1; EN 62061

Connection data

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 inches

Physical data

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

Mechanical Data

Mounting type	DIN-35 rail
---------------	-------------

Material Data

Housing material	Polycarbonate; polyamide 6.6
Fire load	2.019 MJ
Weight	103.4 g
Conformity marking	CE

Environmental requirements

Ambient temperature (operation)	0 ... +55 °C
Ambient temperature (storage)	-25 ... +85 °C
Protection type	IP20
Pollution degree	2 per IEC 61131-2
Operating altitude	0 ... 2000 m / 0 ... 6562 ft
Mounting position	horizontal (standing/lying); vertical
Relative humidity (without condensation)	95 %
Shock resistance	15g per IEC 60068-2-27

Subject to changes. Please also observe the further product documentation!

EMC immunity to interference	per EN 61000-6-2, marine applications, EN 61000-6-7 (FS)
EMC emission of interference	per EN 61000-6-4, marine applications, EN 61000-6-3
Exposure to pollutants	Per IEC 60068-2-42 and IEC 60068-2-43

Commercial data






ETIM 8.0	EC001596
ETIM 7.0	EC001596
PU (SPU)	1 pcs
Packaging type	box
Country of origin	DE
GTIN	4055143899826
Customs tariff number	85389099990

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
------------------------	-------------------------


Approvals / Certificates

General approvals



Logo	Approval	Additional Approval Text	Certificate name
	CCC CNEX	CNCA-C23-01	2020312310000213 (Ex ec IIC T4 Gc)
	EAC Brjansker Zertifizierungsstelle	TP TC 020/2011	EAC RU C-DE.AM02. B.00087/19
	EAC Brjansker Zertifizierungsstelle	TP TC 012/2011	EAC RU C-DE.AZ58. B.2173-21 e (2Ex e IIC T4 Gc X)
	UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 61010-2-201	E175199
	UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	-	E175199

Subject to changes. Please also observe the further product documentation!

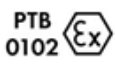




Declarations of conformity and manufacturer's declarations

Logo	Approval	Additional Approval Text	Certificate name
	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for marine applications

Logo	Approval	Additional Approval Text	Certificate name
	BSH Bundesamt fuer Seeschifffahrt und Hydrographie	-	1104
	DNV DNV GL SE	DNV-CG-0339, Aug. 2021	TAA0000194

Approvals for hazardous areas



Logo	Approval	Additional Approval Text	Certificate name
	ATEX TUEV Nord Cert GmbH	EN 60079-0	TUEV_14_ATEX_148929_X (II 3 G Ex ec IIC T4 Gc)
	CCC CNEX	CNCA-C23-01	2020312310000213 (Ex ec IIC T4 Gc)
	IECEX TUEV Nord Cert GmbH	IEC 60079-0	IECEX TUN 14.0035 X (Ex ec IIC T4 Gc)
	INMETRO TÜV Rheinland do Brasil Ltda.	IEC 60079-0	BR-Ex_TÜV 12.1297 X
	UKEx WAGO GmbH & Co. KG	EN 60079-0	UKCA_WAGO22UKEX003X_ec
	UL	UL 121201	E198726 Sec.1

Subject to changes. Please also observe the further product documentation!










Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)

Approvals for functional safety



Logo	Approval	Additional Approval Text	Certificate name
	Prod. Safety, Funct. Safety TUEV Rheinland Industrie Service GmbH	-	No. 968 /EZ 247.18 /21
	Profi-Safe Siemens AG/ComDeC	-	Z20240

Optional accessories

Shield termination

Shield clamping saddles		
	Item no.: 790-116 Shield clamping saddle; 19 mm wide; diameter of compatible conductor; 7 ... 16 mm	www.wago.com/790-116
	Item no.: 790-124 Shield clamping saddle; 27 mm wide; diameter of compatible conductor; 6 ... 24 mm	www.wago.com/790-124
	Item no.: 790-108 Shield clamping saddle; 11 mm wide; diameter of compatible conductor; 3 ... 8 mm	www.wago.com/790-108
	Item no.: 790-140 Shield clamping saddle; diameter of compatible conductor	www.wago.com/790-140
	Item no.: 790-216 Shield clamping saddle; 21.8 mm wide; 6 ... 16 mm	www.wago.com/790-216
	Item no.: 790-220 Shield clamping saddle; 30 mm wide; 6 ... 20 mm	www.wago.com/790-220
	Item no.: 790-208 Shield clamping saddle; 12.4 mm wide; 3 ... 8 mm	www.wago.com/790-208

Supply module

Supply module		
	Item no.: 750-601 Power Supply; 24 VDC; fuse holder	www.wago.com/750-601
	Item no.: 750-610	

Subject to changes. Please also observe the further product documentation!

Power Supply; 24 VDC; fuse holder; Diagnostics

www.wago.com/750-610

Item no.: 750-602
Power Supply; 24 VDC

www.wago.com/750-602

Item no.: 750-612
Power Supply; 0 ... 230 V AC/DC

www.wago.com/750-612

Carrier rail

Mounting accessories



Item no.: 210-197
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715; silver-colored

www.wago.com/210-197

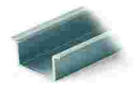
Item no.: 210-198
Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-colored

www.wago.com/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; silver-colored

www.wago.com/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; silver-colored

www.wago.com/210-505

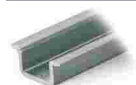
Item no.: 210-506
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715; silver-colored

www.wago.com/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; silver-colored

www.wago.com/210-508

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

www.wago.com/210-113

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

www.wago.com/210-118

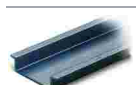
Item no.: 210-112
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 25 mm; silver-colored

www.wago.com/210-112

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

www.wago.com/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; silver-colored

www.wago.com/210-115

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

www.wago.com/210-196

Marking accessories

Subject to changes. Please also observe the further product documentation!

Marker carrier



Item no.: 750-103
Group marker carrier

www.wago.com/750-103

Marker



Item no.: 248-501/000-006
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue

www.wago.com/248-501/000-006



Item no.: 248-501/000-007
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray

www.wago.com/248-501/000-007



Item no.: 248-501/000-002
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow

www.wago.com/248-501/000-002



Item no.: 248-501/000-012
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange

www.wago.com/248-501/000-012



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

www.wago.com/248-501



Item no.: 248-501/000-017
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green

www.wago.com/248-501/000-017



Item no.: 248-501/000-005
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red

www.wago.com/248-501/000-005



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

www.wago.com/248-501/000-024



Item no.: 248-501/000-023
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green

www.wago.com/248-501/000-023

Group marker carrier
















Item no.: 750-107
Group marker carrier

www.wago.com/750-107

System housing

System enclosure

Subject to changes. Please also observe the further product documentation!

	Item no.: 850-814/002-000 IP65 enclosure; Sheet steel (RAL 7035); WxHxD (200x120x200 mm); without flange plate	www.wago.com/850-814/002-000
	Item no.: 850-815/002-000 IP65 enclosure; Sheet steel (RAL 7035); WxHxD (300x120x200 mm); without flange plate	www.wago.com/850-815/002-000
	Item no.: 850-816/002-000 IP65 enclosure; Sheet steel (RAL 7035); WxHxD (400x120x200 mm); without flange plate	www.wago.com/850-816/002-000
	Item no.: 850-817/002-000 IP65 enclosure; Sheet steel (RAL 7035); WxHxD (600x120x200 mm); without flange plate	www.wago.com/850-817/002-000
	Item no.: 850-825 IP65 enclosure; Aluminium (RAL 7032); WxHxD (160x100x160 mm); 9 x M12, 4 x M20	www.wago.com/850-825
	Item no.: 850-826 IP65 enclosure; Aluminium (RAL 7032); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip	www.wago.com/850-826
	Item no.: 850-827 IP65 enclosure; Aluminium (RAL 7032); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip	www.wago.com/850-827
	Item no.: 850-827/002-000 IP65 enclosure; Aluminium (RAL 7035); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip	www.wago.com/850-827/002-000
	Item no.: 850-826/002-000 IP65 enclosure; Aluminium (RAL 7035); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip	www.wago.com/850-826/002-000
	Item no.: 850-828/002-000 IP65 enclosure; Aluminium (RAL 7035); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip	www.wago.com/850-828/002-000
	Item no.: 850-828 IP65 enclosure; Aluminium (RAL 7032); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip	www.wago.com/850-828
	Item no.: 850-834 IP65 enclosure; Polyester (RAL 7032); WxHxD (164x100x164 mm); 9 x M12, 4 x M20	www.wago.com/850-834
	Item no.: 850-835 IP65 enclosure; Polyester (RAL 7032); WxHxD (244x100x164 mm); 4 x M20, 4 x M16, 14 x M12 cable grip	www.wago.com/850-835

Subject to changes. Please also observe the further product documentation!



Downloads

Documentation

Data sheet

750-668/000-004 4FAI 0/4-20 mA Diff PROFIsafe		pdf 177.7 kB	Download
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Manual

System Manual WAGO I/O System 750/753 Decentralized Automation Technology	V 3.3.0 2023 May 4	pdf 8.8 MB	Download
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Product Manual 4FAI 0/4-20 mA; Diff. PROFIsafe 4 Channel Analog Input Module PROFIsafe	V 1.1.0 2023 Feb 13	pdf 4.7 MB	Download
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System Manual Series 750/753 Online HTML		URL	Download
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Bid Text

750-668/000-004 X81 - Datei		xml 7.9 kB	Download
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750-668/000-004 doc - Datei		doc 31.7 kB	Download
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Instruction Leaflet

CCC Ex (Additional information) WAGO-I/O-SYSTEM *750-****/*	2023 Apr 26	pdf 163.6 kB	Download
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Gebrauchs- und Montageanleitung Sicherheitsklemmen PROFIsafe	V 1.0.0 2019 Nov 11	pdf 1.1 MB	Download
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Application Notes

Application note SIEMENS

Using iPar-Server option with WAGO PROFIsafe modules (a114802) Use of WAGO PROFIsafe modules generation 3 and generation 4 in combination under Siemens safety controllers with technologies iPar-Server and TCI.	V 14.1 2023 Feb 7	zip 99.8 MB	Download
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New version recommended for use with PROFIsafe modules generation 4.

Subject to changes. Please also observe the further product documentation!

WAGO GmbH & Co. KG
Hansastr. 27
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Phone: +49571 887-0 | Fax: +49571 887-169
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Supported surfaces TIA V15.1, V16, V17 and V18 in combination with CPU1xxF.

Step 7 Classic version available at WAGO IO-Support.

Libraries

SISTEMA library

SISTEMA-Bibliothek	2.08 2022 Jun 2	zip 204.1 kB	Download
VDMA-Bibliothek	0.0.11 2022 May 11	zip 411.7 kB	Download

Engineering-Software

Configuration and Commissioning Software

Safety Editor (SEDI) / 750-66x Loadable safety editor module for parameterisable failsafe modules for integration in IO-Check from version 3.25.3 or higher.	3.5.0.0 2022 Dec 13	zip 19.5 MB	Download
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CAD/CAE-Data

CAE data

EPLAN Data Portal 750-668/000-004	URL	Download
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CAD data

2D/3D Models 750-668/000-004	URL	Download
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Installation Notes

Product family

WAGO I/O System 750/753
[Show all products from the family](#)

Subject to changes. Please also observe the further product documentation!
