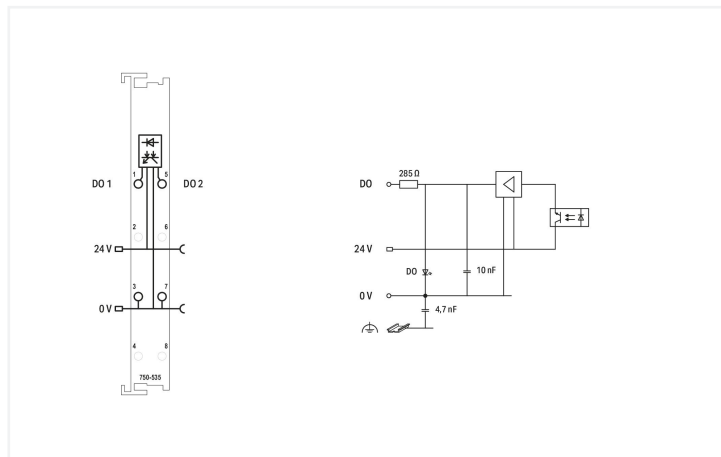
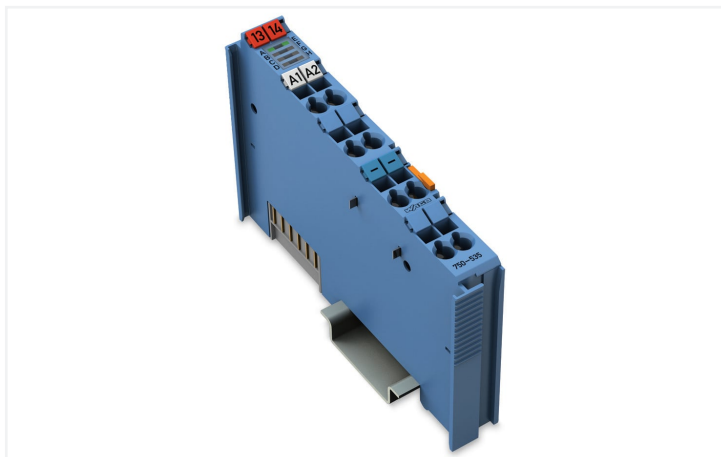
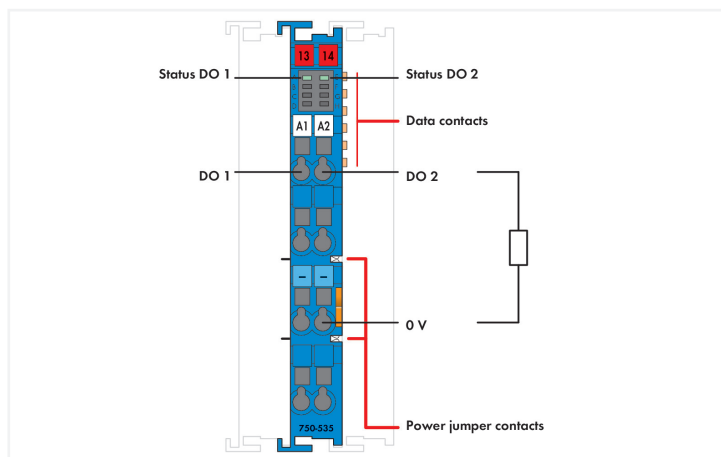
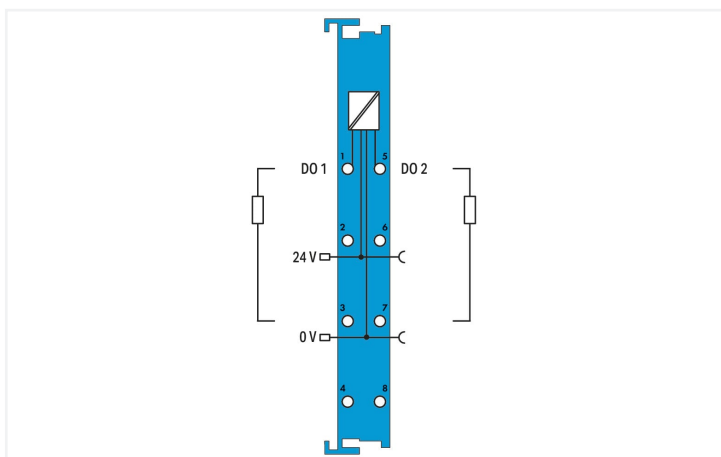


Data Sheet | Item Number: 750-535
2-channel digital output; 24 VDC; Intrinsically safe

<https://www.wago.com/750-535>



Color: ■ blue



This digital output module controls actuators operating in Zone 0+1 hazardous areas. Intrinsically safe magnetic valves can be directly controlled. The WAGO I/O System 750 must be installed either in Zone 2 or in a non-hazardous area. All outputs are electronically short-circuit-protected.

Indicators:

- Green LED (output status)
- Field and system levels are electrically isolated.

Notes

Note	The digital output module must only be operated via 24 VDC Ex i! General information (e.g., installation regulations) on explosion protection is available in the WAGO I/O System 750 manuals!
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Technical data

Number of digital outputs	2
Total number of channels (module)	2
Signal type	Digital
Signal type (voltage)	24 VDC
Actuator connection	2 x (2-wire)
Output characteristic	high-side switching
Switching frequency (max.)	1 kHz
Load type	Resistive, inductive, lamp load
Internal resistance R_i	285 Ω
Intrinsic safety Ex i	Yes
Output data width (internal) max.	2 bits

Technical data

Supply voltage (system)	5 VDC; via data contacts
Current consumption (5 V system supply)	7 mA
Supply voltage (field)	24 VDC; (Ex i power supply: $U_o = \text{max. } 27.3 \text{ V}$); via power jumper contacts (power supply via blade contact; transmission via spring contact)
Current consumption, field supply (module with no external load)	8.5 mA
Power consumption P_{max}	2.1 W (at 40 mA output current)
Power loss P_l	1.1 W (at 40 mA output current)
Isolation	300 VAC system/supply
Number of incoming power jumper contacts	2
Number of outgoing power jumper contacts	2
Current carrying capacity (power jumper contacts)	1 A
Indicators	LED (A, E) green: Status DO 1, DO 2
Marking	ATEX/IECEx: II 3 (1) G Ex ec [ia Ga] IIC T4 Gc; II (1) D [Ex ia Da] IIIC; I (M1) [Ex ia Ma] I

Explosion protection

Ex standard	EN IEC 60079-0, -7, -11
Safety-relevant data (circuit)	$U_o = 27.3 \text{ V}$; $I_o = 106 \text{ mA}$; $P_o = 723 \text{ mW}$; linear characteristic curve
Reactances Ex ia IIC	$L_o = 3 \text{ mH}$; $C_o = 88 \text{ nF}$
Reactances Ex ia IIB	$L_o = 12 \text{ mH}$; $C_o = 680 \text{ nF}$
Reactances Ex ia IIA	$L_o = 18 \text{ mH}$; $C_o = 2.2 \mu\text{F}$
Reactances Ex ia I	$L_o = 20 \text{ mH}$; $C_o = 3.6 \mu\text{F}$
Reactances (note)	Reactances without accounting for the concurrence of capacitance (C_o) and inductance (L_o)

Connection data

Connection technology: inputs/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 inches

Physical data

Width	12 mm / 0.472 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
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Material data

Color	blue
Housing material	Polycarbonate; polyamide 6.6
Fire load	1.034 MJ
Weight	50.6 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 %
Vibration resistance	4g per IEC 60068-2-6
Shock resistance	15g per IEC 60068-2-27
EMC immunity to interference	per EN 61000-6-2, marine applications
EMC emission of interference	per 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 (I/O System)
eCl@ss 10.0	27-24-26-04
eCl@ss 9.0	27-24-26-04
ETIM 8.0	EC001599
ETIM 7.0	EC001599
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	DE
Customs tariff number	85371098990

Environmental Product Compliance

CAS-No.	11120-22-2 1303-86-2 1317-36-8 7439-92-1
REACH Candidate List Substance	Diboron trioxide Lead Lead monoxide Lead silicate
RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	6(c) 7(a) 7(c)-I 7(c)-II
SCIP notification number (Austria)	3e8a7c97-7b4c-474f-8496-a74b87b60f3a
SCIP notification number (Belgium)	c678f146-be73-484d-b0de-61357b04328e
SCIP notification number (Bulgaria)	d76645dc-92f6-42bf-b85b-a6283a5e8cf9
SCIP notification number (Czech Republic)	9115435c-3460-47a9-8ceb-24f4edf25ec4
SCIP notification number (Denmark)	0a6e1a82-33d4-4c0e-a321-1e09a38cffc6
SCIP notification number (Finland)	e55ceb70-edb6-41e8-b9f6-7c5c0cc1a8a8
SCIP notification number (France)	196b02a7-97b4-46ba-b4ef-72e1e9851dc1
SCIP notification number (Germany)	0d000e2e-b07c-48cd-a924-0b87e6f27ed3
SCIP notification number (Hungary)	ec63c6e2-00bf-453b-8860-e9ea2efc8b98
SCIP notification number (Italy)	e2235fe7-3bf1-4430-98f5-9d59c75f8261
SCIP notification number (Netherlands)	63345460-c84a-4e9c-8209-e8fbab45e814
SCIP notification number (Poland)	eb32fd0f-3adb-470f-83b8-915ff70fca7c
SCIP notification number (Romania)	7c292429-f237-4f30-8bdd-96319a6914b5
SCIP notification number (Sweden)	b2dae171-c90d-4037-8b49-57d02324377b

Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
EAC Brjansker Zertifizierungsstelle	TP TC 020/2011	EAC RU C-DE.AM02. B.00087/19
KC National Radio Research Agency	Article 58-2, Clause 3	MSIP-REM-W43-DOM750
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 508	E175199 Sec.1

Declarations of conformity and manufacturer's declarations

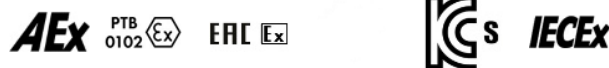
Approval	Standard	Certificate Name
EU-Ex-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Shipping	-	22-2219060
BV Bureau Veritas S.A.	-	13453/E0 BV
DNV DNV GL SE	DNV-CG-0339, Aug.2021	TAA0000194
KR Korean Register of Shipping	-	KR HMB05880-AC001
LR Lloyds Register EMEA	-	LR22180952TA
PRS Polski Rejestr Statków	-	TE/2236/880590/19
RINA RINA Germany GmbH	-	ELE343521XG001

Approvals for hazardous areas



Approval	Standard	Certificate Name
AEx UL International Germany GmbH	UL 60079	E480271
ATEX TUEV Nord Cert GmbH	EN 60079-0	TUEV_12_ATEX_106032X [Ex ec[iaGa] IIC T4 Gc, [Ex iaDa] IIIC, [Ex iaMa] I]
CCC CNEX	CNCA-C23-01	2020312310000211 ([Ex ec[iaGa] IIC T4 Gc, [Ex iaDa] IIIC, [Ex iaMa] I])
EAC Brjansker Zertifizierungsstelle	TP TC 012/2011	EAC RU C-DE.AM02. B.00163/19 ([Ex iaMa] I X, 2Ex e[iaGa] IIC T4 Gc X, [Ex iaDa] IIIC X)
INMETRO TÜV Rheinland do Brasil Ltda.	-	TÜV_14.1911_X
KTL Korea Testing Laboratory	KOSHA Article 34, IEC60079-0	21-KA4BO-0559X
TUEV Nord TUEV Nord Cert GmbH	IEC 60079, IEC 60079-0	IECEx TUN 12.0039X ([Ex ec[iaGa] IIC T4 Gc, [Ex iaDa] IIIC, [Ex iaMa] I])
UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	E198726 Sec.1

Downloads

Environmental Product Compliance


Compliance Search


Environmental Product
Compliance 750-535



Documentation

Manual


Product Manual 2-
channel, 24VDC, Ex i V 1.2.0 pdf
1212.09 KB 


System Manual WAGO
I/O System 750/753 V 3.3.3
29.08.2023 pdf
8512.61 KB 

System Manual Series
750/753 


System Description


750/753 Series I/O-
System – General Pro-
duct Information pdf
953.35 KB 

Overview on WAGO-I/
O-SYSTEM 750 appro-
vals pdf
770.48 KB 

Ex i Overview pdf
442.07 KB 

Bid Text

750-535 19.02.2019 xml
5.70 KB 


750-535 06.10.2017 doc
30.50 KB 

Instruction Leaflet


CCC Ex (Additional in-
formation) 26.04.2023 pdf
143.96 KB 


CAD/CAE-Data


CAD data

2D/3D Models 750-535 

CAE data


EPLAN Data Portal
750-535 

WSCAD Universe
750-535 

ZUKEN Portal 750-535 

Device Files

Device Driver

WAGO USB Service Ka-
bel Treiber / Serie 750
und 857 6.5.3.0
10.09.2014 zip
4721.96 KB 

1 Compatible Products

1.1 Optional Accessories

1.1.1 DIN-rail

1.1.1.1 Mounting accessories



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



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



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



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



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



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



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



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



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



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



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



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

1.1.2 Marking

1.1.2.1 Group marker carrier



Item No.: 750-107

Group marker carrier

1.1.2.2 Marker



Item No.: 2009-145/000-006

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue



Item No.: 2009-145/000-007

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray



Item No.: 2009-145/000-023

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green



Item No.: 2009-145/000-012

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange



Item No.: 2009-145/000-005

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red



Item No.: 2009-145/000-024

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet



Item No.: 2009-145

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white



Item No.: 2009-145/000-002

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow



Item No.: 248-501/000-006

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue



Item No.: 248-501/000-007

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray



Item No.: 248-501/000-023

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green



Item No.: 248-501/000-017

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green



Item No.: 248-501/000-012

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange



Item No.: 248-501/000-005

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red



Item No.: 248-501/000-024

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; violet



Item No.: 248-501

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white



Item No.: 248-501/000-002

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow

1.1.2.3 Marker carrier



Item No.: 750-103

Group marker carrier

1.1.3 Shield termination

1.1.3.1 Shield clamping saddles



Item No.: 790-108

Shield clamping saddle; 11 mm wide; diameter of compatible conductor; 3 ... 8 mm



Item No.: 790-208

Shield clamping saddle; 12.4 mm wide; 3 ... 8 mm



Item No.: 790-116

Shield clamping saddle; 19 mm wide; diameter of compatible conductor; 7 ... 16 mm



Item No.: 790-216

Shield clamping saddle; 21.8 mm wide; 6 ... 16 mm



Item No.: 790-124

Shield clamping saddle; 27 mm wide; diameter of compatible conductor; 6 ... 24 mm



Item No.: 790-220

Shield clamping saddle; 30 mm wide; 6 ... 20 mm



Item No.: 790-140

Shield clamping saddle; diameter of compatible conductor

1.1.4 Supply module

1.1.4.1 Supply module



Item No.: 750-606

Power Supply; 24 VDC; Diagnostics; Intrinsically safe



Item No.: 750-625/000-001

Power Supply; 24 VDC; Intrinsically safe