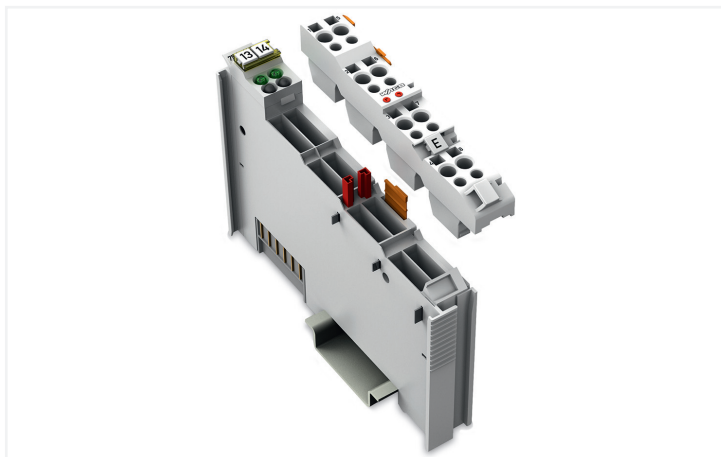


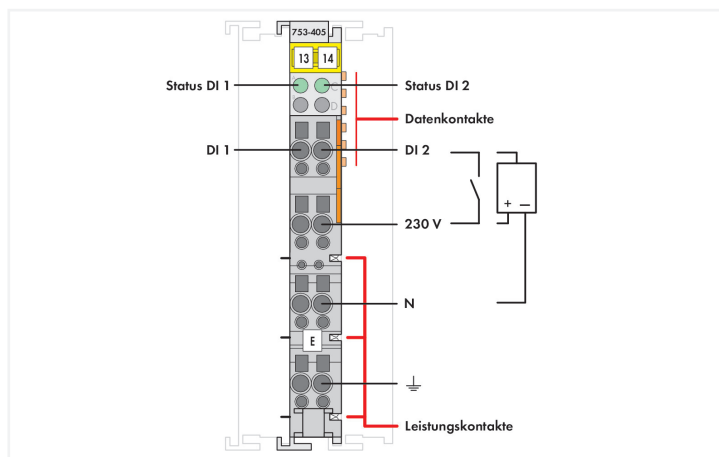
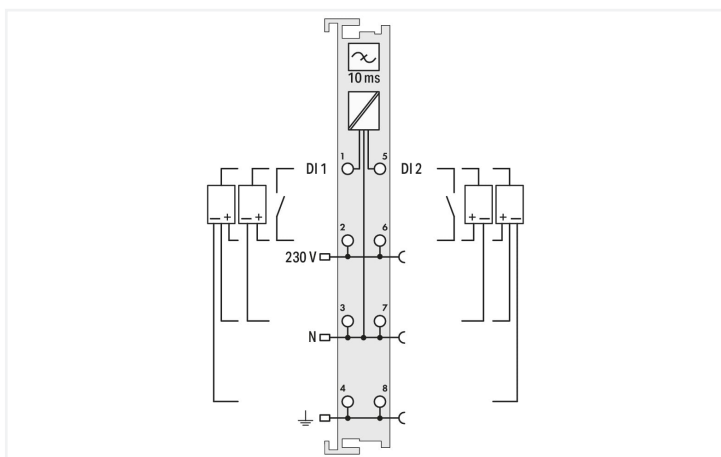
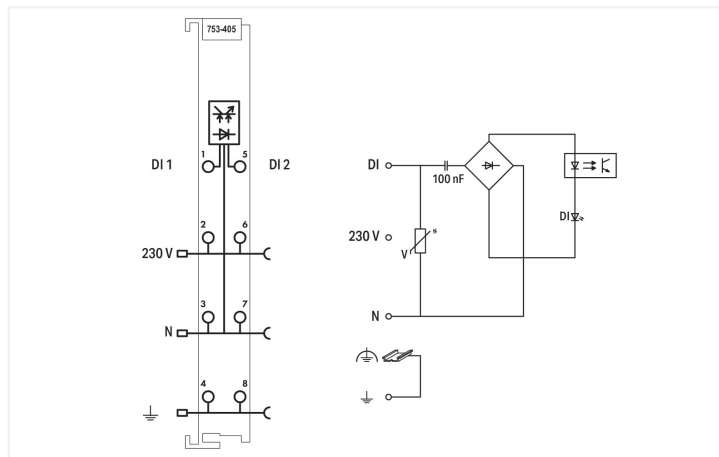
Data Sheet | Item Number: 753-405

2-channel digital input; 230 VAC

<https://www.wago.com/753-405>



Color: ■ light gray



This digital input module receives control signals from field devices (e.g., sensors).

Field and system levels are electrically isolated. **Notice:**

An additional supply module must be added for 230 VAC supply!

Notes

Note Pluggable connectors and coding fingers (753 Series) are not included.

Technical data

| | |
|---|----------------------------------|
| Number of digital inputs | 2 |
| Total number of channels (module) | 2 |
| Signal type | Digital |
| Signal type (voltage) | 230 VAC |
| Sensor connection | 2 x (2-wire, 3-wire, 4-wire) |
| Input characteristic | high-side switching |
| Input filter (digital) | 10 ms |
| Input current per channel for signal (1) typ. | 6.5 mA |
| Voltage range for signal (0) | 0 ... 40 VAC |
| Voltage range for signal (1) | 164 VAC ... 1.1 x U _N |
| Signal frequency (min.) | 45 Hz |
| Signal frequency (max.) | 65 Hz |
| Input data width (internal) max. | 2 bits |
| Supply voltage (system) | 5 VDC; via data contacts |
| Current consumption (5 V system supply) | 2 mA |

Technical data

| | |
|---|--|
| Supply voltage (field) | 230 VAC (-15 ... +20 %); via power jumper contacts (power supply via blade contact; transmission via spring contact) |
| Isolation | 1500 V (system/field) |
| Indicators | LED (A, C) green: Status DI 1, DI 2 |
| Number of incoming power jumper contacts | 3 |
| Number of outgoing power jumper contacts | 3 |
| Current carrying capacity (power jumper contacts) | 10 A |

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 | 9 ... 10 mm / 0.35 ... 0.39 inches |

Physical data

| | |
|-----------------------------------|------------------------|
| Width | 12 mm / 0.472 inches |
| Height | 100 mm / 3.937 inches |
| Depth | 69.8 mm / 2.748 inches |
| Depth from upper-edge of DIN-rail | 62.6 mm / 2.465 inches |

Mechanical data

| | |
|---------------------|-------------|
| Mounting type | DIN-35 rail |
| Pluggable connector | pluggable |

Material data

| | |
|--------------------|------------------------------|
| Color | light gray |
| Housing material | Polycarbonate; polyamide 6.6 |
| Fire load | 1.119 MJ |
| Weight | 40 g |
| Conformity marking | CE |

Environmental requirements

| | |
|--|---------------------------------------|
| Ambient temperature (operation) | 0 ... +55 °C |
| Ambient temperature (storage) | -40 ... +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 61000-6-4, 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 |
| GTIN | 4045454394387 |
| Customs tariff number | 85389099990 |

Environmental Product Compliance

| | |
|---|--|
| CAS-No. | 12060-00-3 1303-86-2 1317-36-8 25550-51-0 7439-92-1 79-94-7 |
| REACH Candidate List Substance | 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol 4-Methyl-1,2-cyclohexanedicarboxylic anhydride Diboron trioxide Lead Lead monoxide Lead titanium oxide (PbTiO ₃) |
| RoHS Compliance Status | Compliant,With Exemption |
| RoHS Exemption | 6(c) 7(a) 7(c)-I 7(c)-II |
| SCIP notification number (Austria) | 9436dba4-573d-42c9-a553-aad79cc02fb4 |
| SCIP notification number (Belgium) | 6c4bcc1d-36ea-4893-bd4d-560e3ecaa21b |
| SCIP notification number (Bulgaria) | b754b9b2-e218-4dab-8c7c-e8e2fb53cbb1 |
| SCIP notification number (Czech Republic) | 94d56ce4-aff6-488a-a1c3-15ef60907d29 |
| SCIP notification number (Denmark) | 2b97416a-137f-4daf-86e2-92a8212735ba |
| SCIP notification number (Finland) | 335742ff-b584-4c7a-8a29-57bdc4d10668 |
| SCIP notification number (France) | a4626bb6-50dc-4fd4-be92-6c96fd9c9d2c |
| SCIP notification number (Germany) | 382e593d-50df-4d21-8520-ff09812e2f47 |
| SCIP notification number (Hungary) | b38d34d0-87ad-4939-8791-f4a975d76c06 |
| SCIP notification number (Italy) | 03182ec3-b33c-491f-bfb1-0f747aaedeade |
| SCIP notification number (Netherlands) | 022d161e-88ac-4958-857c-49797f82ac9d |
| SCIP notification number (Poland) | a164ed17-1262-47a0-8b61-5faecaa728c |
| SCIP notification number (Romania) | f719ada6-e7e1-417f-97e7-293902405d1f |
| SCIP notification number (Sweden) | 03e21154-47b9-40cd-b046-68ffbb98edce |

Approvals / Certificates

General approvals



| Approval | Standard | Certificate Name |
|---|------------------------|---------------------------------|
| EAC Brjansker Zertifizierungs- stelle | 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-DIM750 |

General approvals

| | | |
|---|--------|---------------|
| UL Underwriters Laboratories Inc. (ORDINARY LOCATI- ONS) | UL 508 | E175199 Sec.1 |
|---|--------|---------------|

Approvals for marine applications



| Approval | Standard | Certificate Name |
|---|------------------------|-------------------|
| ABS American Bureau of Shipping | - | 22-2219060 |
| BSH Bundesamt fuer Seeschifffahrt und Hydrographie | - | 1104 |
| 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 |
|--|----------------|---|
| ATEX TUEV Nord Cert GmbH | EN 60079-0 | TUEV14ATEX148929X (II 3 G Ex ec IIC T4 Gc) |
| CCCEX CQST/CNEx | CNCA-C23-01 | 2020312310000213 (Ex ec IIC T4 Gc) |
| EAC Brjansker Zertifizierungsstelle | TP TC 012/2011 | EAC RU C-DE.AM02. B.00163/19 (2Ex nA IIC T4 Gc X) |
| IECEX TUEV Nord Cert GmbH | IEC 60079-0 | IECEX TUN 14.0035 X (Ex ec IIC T4 Gc) |
| INMETRO TUV Rheinland do Brasil Ltda. | IEC 60079-0 | BR-Ex_TUV 12.1297 X |
| UKEx WAGO GmbH & Co. KG | EN 60079-0 | UKCA_WA GO22UKEX003X_ec |
| UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS) | UL 121201 | E198726 Sec.1 |

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 753-405



Documentation

Manual

| | | | |
|---------------------------------------|-----------------------|-------------------|--|
| Product Manual 2-channel, 230VAC | V 1.2.0 | pdf 2132.57 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 Product Information | pdf 953.35 KB | |
| Overview on WAGO-I/O-SYSTEM 750 approvals | pdf 770.48 KB | |

Bid Text

| | | | |
|---------|------------|-----------------|--|
| 753-405 | 19.02.2019 | xml 4.67 KB | |
| 753-405 | 13.07.2017 | doc 29.00 KB | |

Instruction Leaflet

| | | | |
|---------------------------------|------------|------------------|--|
| CCC Ex (Additional information) | 26.04.2023 | pdf 159.76 KB | |
|---------------------------------|------------|------------------|--|

CAD/CAE-Data

| CAD data | CAE data |
|----------------------|---------------------------|
| 2D/3D Models 753-405 | EPLAN Data Portal 753-405 |
| | WSCAD Universe 753-405 |
| | ZUKEN Portal 753-405 |

1 Compatible Products

1.1 Required Accessories

1.1.1 Pluggable connector

1.1.1.1 Male connector/plug



[Item No.: 753-110](#)
Plug

1.2 Optional Accessories

1.2.1 DIN-rail

1.2.1.1 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











1.2.2 Marking

1.2.2.1 Group marker carrier




[Item No.: 750-106](#)
Group marker carrier

1.2.2.2 Marker


| | | | |
|---|---|---|--|
|  | | | |
| <p>Item No.: 750-100 Marker card; as a DIN A4 sheet; plain</p> | <p>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</p> | <p>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</p> | <p>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</p> |
| | | | |
| <p>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</p> | <p>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</p> | <p>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</p> | <p>Item No.: 2009-145 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white</p> |
| |  |  |  |
| <p>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</p> | <p>Item No.: 248-501/000-006 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue</p> | <p>Item No.: 248-501/000-007 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray</p> | <p>Item No.: 248-501/000-023 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green</p> |
|  |  |  |  |
| <p>Item No.: 248-501/000-017 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green</p> | <p>Item No.: 248-501/000-012 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange</p> | <p>Item No.: 248-501/000-005 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red</p> | <p>Item No.: 248-501/000-024 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; violet</p> |
|  |  | | |
| <p>Item No.: 248-501 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white</p> | <p>Item No.: 248-501/000-002 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow</p> | | |

1.2.2.3 Marker carrier

| |
|---|
|  |
| <p>Item No.: 750-103 Group marker carrier</p> |

1.2.3 Pluggable connector

1.2.3.1 Coding

| |
|---|
|  |
| <p>Item No.: 753-150 753 Series coding elements</p> |

1.2.4 Shield termination

1.2.4.1 Shield clamping saddles

| | | | |
|---|--|---|---|
|  |  |  |  |
| <p>Item No.: 790-108 Shield clamping saddle; 11 mm wide; diameter of compatible conductor; 3 ... 8 mm</p> | <p>Item No.: 790-208 Shield clamping saddle; 12.4 mm wide; 3 ... 8 mm</p> | <p>Item No.: 790-116 Shield clamping saddle; 19 mm wide; diameter of compatible conductor; 7 ... 16 mm</p> | <p>Item No.: 790-216 Shield clamping saddle; 21.8 mm wide; 6 ... 16 mm</p> |
|  |  |  | |
| <p>Item No.: 790-124 Shield clamping saddle; 27 mm wide; diameter of compatible conductor; 6 ... 24 mm</p> | <p>Item No.: 790-220 Shield clamping saddle; 30 mm wide; 6 ... 20 mm</p> | <p>Item No.: 790-140 Shield clamping saddle; diameter of compatible conductor</p> | |

1.2.5 Supply module

1.2.5.1 Supply module



Item No.: 750-612

Power Supply; 0 ... 230 V AC/DC



Item No.: 753-612

Power Supply; 0 ... 230 V AC/DC



Item No.: 750-609

Power Supply; 230 VAC; fuse holder



Item No.: 750-611

Power Supply; 230 VAC; fuse holder; Diagnostics

1.2.6 System enclosure

1.2.6.1 System enclosure



Item No.: 850-825

IP65 enclosure; Aluminium (RAL 7032); WxHxD (160x100x160 mm); 9 x M12, 4 x M20



Item No.: 850-826

IP65 enclosure; Aluminium (RAL 7032); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip



Item No.: 850-827

IP65 enclosure; Aluminium (RAL 7032); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip



Item No.: 850-828

IP65 enclosure; Aluminium (RAL 7032); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip



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



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



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



Item No.: 850-834

IP65 enclosure; Polyester (RAL 7032); WxHxD (164x100x164 mm); 9 x M12, 4 x M20



Item No.: 850-835

IP65 enclosure; Polyester (RAL 7032); WxHxD (244x100x164 mm); 4 x M20, 4 x M16, 14 x M12 cable grip



Item No.: 850-836

IP65 enclosure; Polyester (RAL 7032); WxHxD (324x100x164 mm); 4 x M20, 8 x M16, 17 x M12 cable grip



Item No.: 850-814/002-000

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (200x120x200 mm); without flange plate



Item No.: 850-815/002-000

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (300x120x200 mm); without flange plate



Item No.: 850-816/002-000

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (400x120x200 mm); without flange plate



Item No.: 850-817/002-000

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (600x120x200 mm); without flange plate