

750-312, 750-314, 750-315, 750-316

MODBUS Fieldbus Coupler

RS 232/485; 150 (1200) baud ... 19.2 (115.2) Kbaud; digital and analog signals

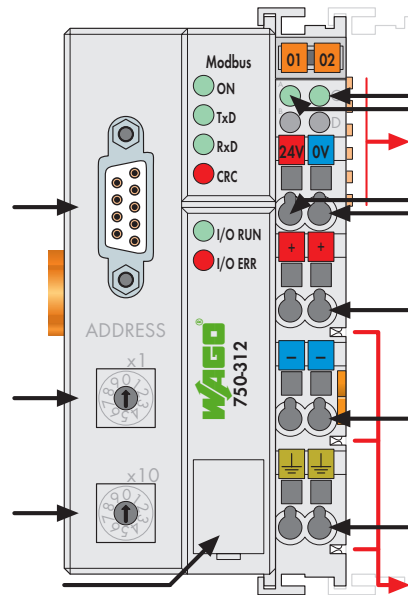


Fieldbus connection D-Sub

Address

Address

Configuration interface



Status voltage supply
-Power jumper contacts
-System

Data contacts

Supply
24 V
0 V

Supply via power jumper contacts
24 V

0 V




Power jumper contacts

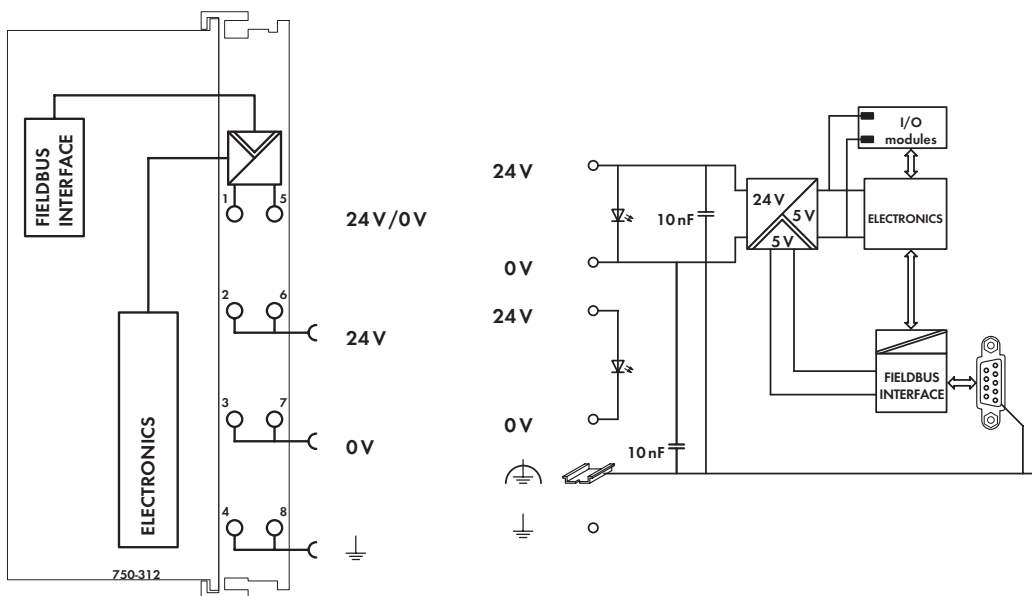
This buscoupler allows connection of the WAGO-I/O-SYSTEM as a slave to the MODBUS fieldbus.

The buscoupler automatically configures, creating a local process image which may include analog, digital or specialty modules. Analog and specialty module data is sent via words and/or bytes, digital data is sent bit by bit.

The data of the analog modules is stored in the process image which is created automatically according to the order in which the modules are connected to the buscoupler. The bits of the digital modules are sent byte by byte and added to the analog data. If the amount of digital information exceeds 8 bits, the buscoupler automatically starts with a new byte.

| Description | Item No. | Pack. Unit |
|---|--|------------|
| MODBUS / RS 485 / 150 ... 19200 Bd | 750-312 | 1 |
| Product discontinuation | Last Call: 31.05.2018 | |
| Product substitutes: | 750-315/300-000 | |
| MODBUS / RS 232 / 150 ... 19200 Bd | 750-314 | 1 |
| Product discontinuation | Last Call: 31.05.2018 | |
| Product substitutes: | 750-316/300-000 | |
| MODBUS / RS 485 / 1.2 ... 115.2 kBd | 750-315 | 1 |
| Product discontinuation | Last Call: 31.05.2018 | |
| Product substitutes: | 750-315/300-000 | |
| MODBUS / RS 232 / 1.2 ... 115.2 kBd | 750-316 | 1 |
| Product discontinuation | Last Call: 31.05.2018 | |
| Product substitutes: | 750-316/300-000 | |
| Accessories | Item No. | Pack. Unit |
| Miniature WSB Quick marking system | | |
|  plain | 248-501 | 5 |
| with marking | see pages 352 ... 353 | |
| Approvals | Also see "Approvals Overview" in Section 1 | |
| Conformity marking | CE | |
| Shipbuilding | ABS, BV, DNV, GL, KR, LR, NKK, PRS, RINA | |
| UL 508 | Class I, Div. 2, Grp. ABCD, T4 | |
| ANSI/ISA 12.12.01 | 750-314 | |
| IEC 60079-0, -15 | 750-315 | |
| | 750-316 | |
| EN 60079-0, -15 | I M2 / II 3 GD Ex nA nL IIC T4 | |
| EN 61241-0, -1 | | |

| System Data | |
|-------------------------------------|--|
| No. of couplers connected to Master | 99 with repeater |
| Max. no. of I/O points | approx. 6000 (depends on master) |
| Transmission medium | Shielded Cu cable 2 (4) x 0.25 mm ² |
| Max. length of fieldbus segment | 1200 m (depends on baud rate/cable) |
| Baud rate | 150 baud ... 19200 baud (750-312, 750-314) 1.2 Kbaud ... 115.2 Kbaud (750-315, 750-316) |
| Buscoupler connection | 1 x D-Sub 9; socket |



| Technical Data | | General Specifications | |
|--|--|---|--|
| Number of I/O modules | 64 | Operating temperature | 0 °C ... +55 °C |
| Fieldbus | | Wire connection | CAGE CLAMP® |
| Max. input process image | 512 bytes | Cross sections | 0.08 mm ² ... 2.5 mm ² / AWG 28 ... 14 |
| Max. output process image | 512 bytes | Stripped lengths | 8 ... 9 mm / 0.33 in |
| Configuration | DIP switch and 2 decimal coders or via PC or PLC | Dimensions (mm) W x H x L | 51 x 65 x 100 |
| Power supply | 24 V DC (-25 % ... +30 %) | Height from upper-edge of DIN 35 rail | |
| Max. input current (24 V) | 500 mA | Weight | 199 g |
| Efficiency of the power supply | 87 % | Storage temperature | -25 °C ... +85 °C |
| Internal current consumption (5 V) | 350 mA | Relative air humidity (no condensation) | 95 % |
| Total current for I/O modules (5 V) | 1650 mA | Vibration resistance | acc. to IEC 60068-2-6 |
| Isolation | 500 V system/supply | Shock resistance | acc. to IEC 60068-2-27 |
| Voltage via power jumper contacts | 24 V DC (-25 % ... +30 %) | Degree of protection | IP20 |
| Current via power jumper contacts (max.) | 10 A DC | EMC: CE - immunity to interference | acc. to EN 61000-6-2 (2005) |
| | | EMC: CE - emission of interference | acc. to EN 61000-6-4 (2007) |
| | | EMC: marine applications | |
| | | - immunity to interference | acc. to Germanischer Lloyd (2003) |
| | | EMC: marine applications | |
| | | - emission of interference | acc. to Germanischer Lloyd (2003) |