

750-812, 750-814, 750-815, 750-816

PLC - MODBUS Programmable Fieldbus Controller

16-bit CPU

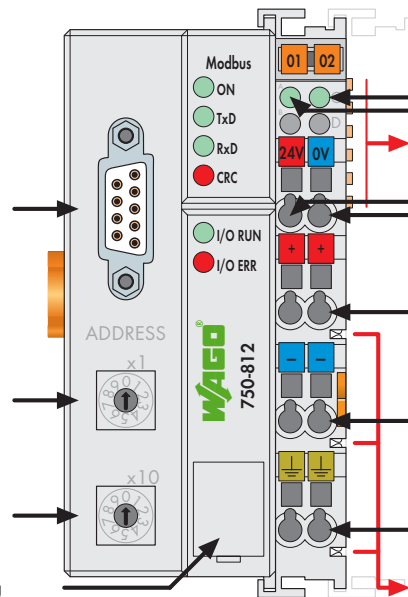


Fieldbus connection D-Sub

Address

Address

Configuration and programming 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

The MODBUS PLC is an expansion for the WAGO-I/O-SYSTEM.

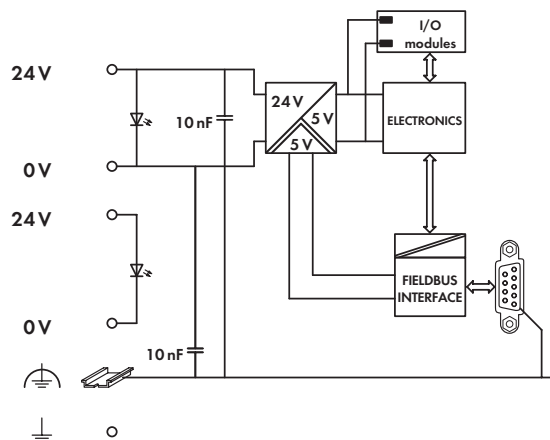
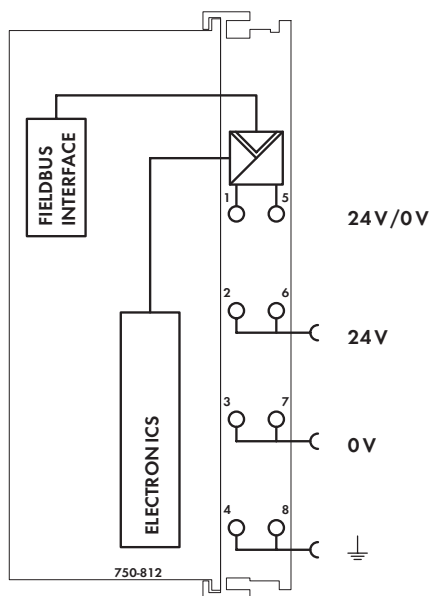
This controller combines the WAGO fieldbus coupler for MODBUS with the functionality of a PLC. Programming PLC applications is performed in compliance with IEC 61131-3. The programmer can access all fieldbus and I/O data.

Features and applications:

- Use of decentralized control can better support a PLC or PC
- Complex applications can be divided into individually testable units
- Programmable fault response in the event of a fieldbus failure
- Signal pre-processing reduces fieldbus transmissions
- Peripheral equipment can be controlled directly, resulting in faster system response times
- Stand-alone, compact controller

Description	Item No.	Pack. Unit
Contr. MODBUS / RS 485 / 150 ... 19200 Bd	750-812	1
Contr. MODBUS / RS 485 / 150 ... 19200 Bd/T	750-812/025-000	1
Extended temperature range: -20 °C ... +60 °C		
Contr. MODBUS / RS 232 / 150 ... 19200 Bd	750-814	1
Contr. MODBUS / RS 485 / 1.2 ... 115.2 kBd	750-815	1
Contr. MODBUS / RS 485 / 1.2 ... 115.2 kBd/T	750-815/025-000	1
Extended temperature range: -20 °C ... +60 °C		
Contr. MODBUS / RS 232 / 1.2 ... 115.2 kBd	750-816	1
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 (versions upon request)	ABS, BV, DNV, GL, KR, LR, NKK, PRS, RINA	
UL 508		
ANSI/ISA 12.12.01	Class I, Div. 2, Grp. ABCD, T4	750-812, -814, -815, -816
IEC 60079-0, -15	BR-Ex nA II T4	750-812, -814, -815, -816
EN 60079-0, -15	I M2 / II 3 GD Ex nA nL IIC T4	750-812, -814, -815, -816
EN 61241-0, -1		

System Data	
No. of controllers 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 (750-812, 750-814) 1.2 Kbaud ... 115.2 Kbaud (750-815, 750-816)
Buscoupler connection	1 x D-Sub 9; socket
Programming	WAGO-I/O-PRO 32
IEC 61131-3	IL, LD, FBD, ST, FC



Technical Data

Number of I/O modules	64
Fieldbus	
Max. input process image	1024 bytes
Max. output process image	1024 bytes
Max. input variables	512 bytes
Max. output variables	512 bytes
Configuration	automatic and via switches
Program memory	32 Kbytes
Data memory	32 Kbytes
Non-volatile memory (retain)	8 Kbytes
Cycle time	< 3 ms for 1,000 statements /
	256 dig. I/Os
Power supply	24 V DC (-25 % ... +30 %)
Max. input current (24 V)	500 mA
Efficiency of the power supply	87 %
Internal current consumption (5 V)	350 mA
Total current for I/O modules (5 V)	1650 mA
Isolation	500 V system/supply
Voltage via power jumper contacts	24 V DC (-25 % ... +30 %)
Current via power jumper contacts (max.)	10 A DC

General Specifications

Operating temperature	0 °C ... +55 °C
	-20 °C ... +60 °C
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm ² ... 2.5 mm ² / AWG 28 ... 14
Stripped lengths	8 ... 9 mm / 0.33 in
Dimensions (mm) W x H x L	51 x 65 x 100
	Height from upper-edge of DIN 35 rail
Weight	205 g
Storage temperature	-25 °C ... +85 °C
Relative air humidity (no condensation)	95 %
Vibration resistance	acc. to IEC 60068-2-6
Shock resistance	acc. to IEC 60068-2-27
Degree of protection	IP20
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)
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