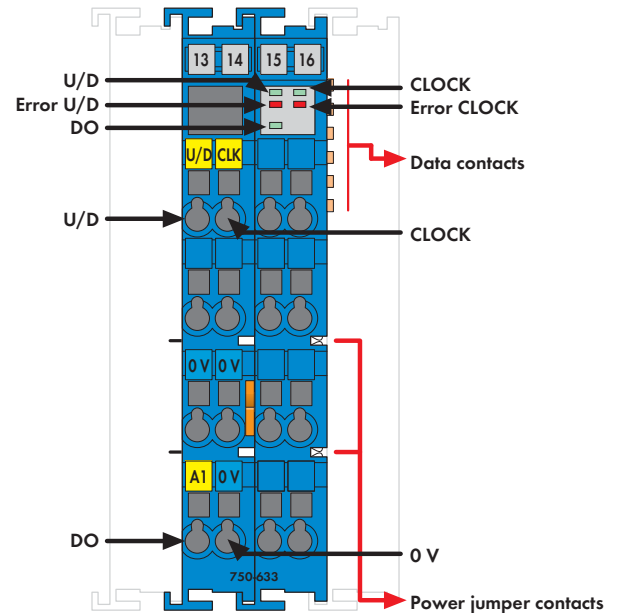


1 Up/Down Counter, Ex i

324



Delivered without miniature WSB markers

The 750-633 Counter records binary pulse signals with NAMUR-compliant levels and transmits the counter state to the fieldbus system. The U/D input allows either Up or Down counting. Counter and digital output (DO) can be set or reset via control byte. The output is short-circuit proof.


LED indicators:

- Green LED (Up/Down + CLK + DO status)
- Red LED (Up/Down + CLK error status)

Field and system levels are electrically isolated.

Note: Only use the up/down counter in connection with the 24VDC Ex i supply module (note the power supply instructions on page 23)!

General information (e.g., installation regulations) on explosion protection is available in the WAGO-I/O-SYSTEM 750 manuals!

Description	Item No.	Pack. Unit
Up/Down Counter, Ex i	750-633	1
Accessories		
Miniature WSB Quick marking system		
 plain	248-501	5
with marking	see pages 352 ... 353	

Technical Data	
No. of counters	1
No. of outputs	1
Current consumption typ. (internal)	25 mA
Voltage via power jumper contacts	Supply via 24 V DC Ex i supply module
Counter	
Signal current (0)	≤ 1.2 mA
Signal current (1)	≥ 2.1 mA
Input filter	10 μs
Switching hysteresis	0.2 mA
Input resistance	1 kOhm
Short-circuit current	8,2 mA (+/- 5 %)
Short-circuit monitoring	> 6.4 mA
Line break monitoring	≤ 0.3 mA
Switching frequency	20 kHz - 50 kHz
Counter depth	32 bits
Output	
Output data	24 VDC, Ri = 285 Ω (+/- 5 %)
Open-circuit voltage	24 VDC
Current consumption typ. (field side)	31 mA + sensor load + actuator load
Power consumption P (max.)	2.2 W
	(sensor load: 8.2 mA
	+ actuator load: 45 mA)
Power loss P _v	1.7 W
	(sensor load: 8.2 mA
	+ actuator load: 45 mA)
Isolation (peak value)	375 V system/supply
Bit width	1 x 32-bit data,
	1 x 8-bit status/diagnostics

1 Supply Module 24 V DC / 230 V AC/DC
passive

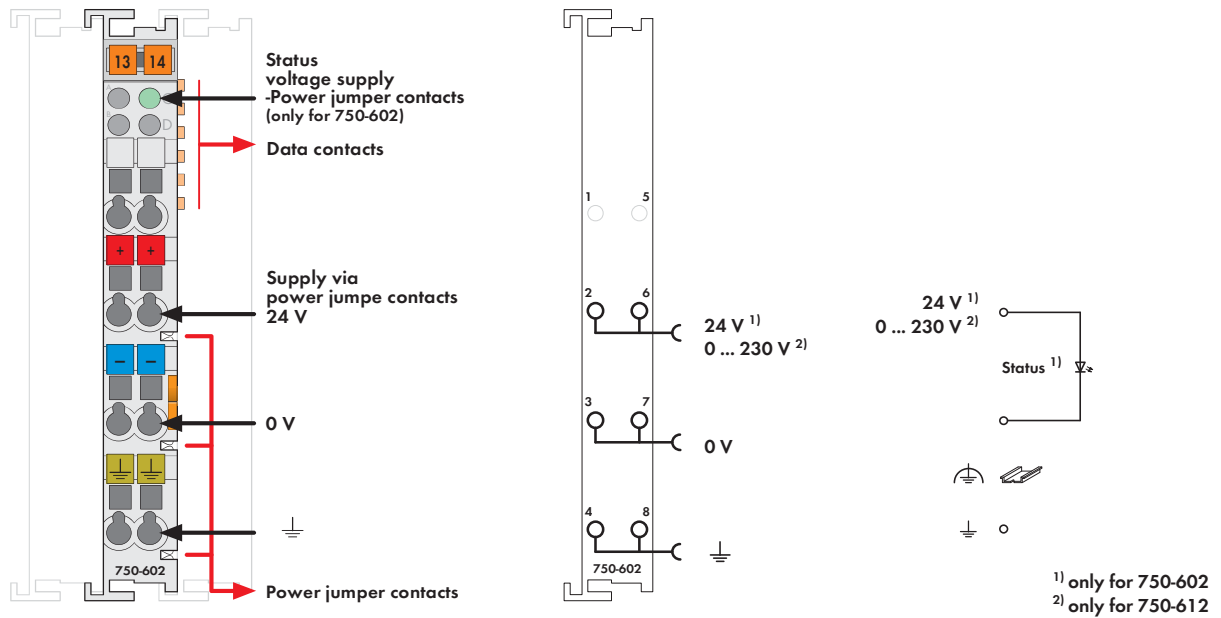



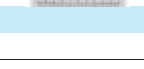


Fig. 750 Series/Technical data see page 24/Delivered without miniature WSB markers
750/753 Series marking see pages 10 ... 11 / 12 ... 13

The supply module provides the I/O modules with the corresponding supply potential.

The maximum current at the supply module is 10A. When configuring the system, it must be ensured that this total current is not exceeded.

Should higher currents be necessary, intermediate supply modules must be added in the assembly.

Description	Item No.	Pack. Unit
24V DC Power Supply	750-602	10 ¹⁾
24V DC Power Supply/T	750-602/025-000	1
(Operating temperature -20 °C ... +60 °C)		
0-230V AC/DC Power Supply	750-612	10 ¹⁾
24V DC Power Supply (without connector)	753-602	1
0-230V AC/DC Power Supply (without connector)	753-612	1
¹⁾ Also available individually		
Accessories	Item No.	Pack. Unit
 753 Series Connectors	753-110	25
 Coding elements	753-150	100
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)	ABS, BV, DNV, GL, KR, LR, NKK, PRS, RINA	
UL 508		
ANSI/ISA 12.12.01	Class I, Div. 2, Grp. ABCD, T4	750-602, -612
EN 60079-0, -15	I M2 / II 3 GD Ex nA IIC T4	750-602, -612
EN 61241-0, -1		

Technical Data	
Voltage via power jumper contacts (max.)	24 V DC (750-602 / 753-602)
	0 V ... 230 V AC/DC (750-612 / 753-612)
Current via power jumper contacts (max.)	10 A DC
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
	9 ... 10 mm / 0.37 in
Width	12 mm
Weight	44.5 g (750-602)
	51.5 g (750-612)
EMC: CE - immunity to interference	acc. to EN 61000-6-2 (2005) (750-602)
	acc. to EN 61000-6-2 (2001) (750-612)
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)