

Data sheet

750-638

**2-CHANNEL UP/DOWN COUNTER DC 24 V, 500 Hz
CAGE CLAMP CONNECTION**



Technical data

Package size 1 piece.

No. of counters	2
Nominal voltage	DC 24 V (-15% / + 20%)
Current consumption max (internal)	10 mA
Signal voltage (0)	DC -3 V ... +5 V (ACC. TO EN 61131 TYPE 1)
Signal voltage (1)	DC 15 V ... 30 V (ACC. TO EN 61131 TYPE 1)
Input filter (ms)	0.2 ms
Sensor connection	differential
Max. switching frequency (kHz)	0.5 kHz
Minimal pulse width	1 ms
Counter depth	16 Bit
Isolation	500 V system / supply
Current consumption typ (field side)	8 mA
Data size	2 x 16 Bit Data 2 x 8 Bit control / status (optional)
Operating temperature	0 °C ... + 55 °C
Storage temperature	-25 °C ... +85 °C
Relative air humidity	95 %
Vibration resistance	acc. IEC 60068-2-6
Shock resistance	acc. IEC 60068-2-27
Degree of protection	IP 20
EMC immunity to interference	acc. EN 50082-2 (96)
EMC emission of interference	per EN 50081-1 (93)
UL 508	E175199, UL 508
Conformity marking	CE

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Cross section from [mm ²]	0.08 mm ²
Cross section to [mm ²]	2.5 mm ²
Cross section from [AWG]	28 AWG
Cross section to [AWG]	14 AWG
Weight	58 g
Color	light gray
Height	64 mm
Height	2.52 in
Width	12 mm
Width	0.472 in
Depth	100 mm
Depth	3.937 in
Strip length from	8 mm
Strip length to	9 mm
Strip length	0.33 in

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Approval	Voltage	Current	Approval number	Notes
cULus	24		E175199	

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Accessories

Item number

ALUMINUM CARRIER RAIL 35 X 7.5 MM, 1.5 MM / 0.059 IN THICK	210-196
CAL FIELDBUS COUPLER 10 kBaud - 1 MBaud	750-305
CANopen ECO FIELDBUS COUPLER D-Sub 10 kBaud - 1 MBaud	750-348
CANopen ECO FIELDBUS COUPLER MSS 10 kBaud - 1 MBaud	750-347
CANopen FIELDBUS COUPLER 10 kBaud - 1 MBaud	750-307
CANopen FIELDBUS COUPLER 10 kBaud - 1 MBaud	750-337
CANopen FIELDBUS COUPLER WITH D-SUB	750-338
CANopen PROGRAMMABLE FIELDBUS CONTROLLER 10 kBaud - 1 MBaud	750-837
CANopen PROGRAMMABLE FIELDBUS CONTROLLER WITH D-SUB	750-838
CC-LINK 156 kBaud - 10 MBaud	750-310
COPPER CARRIER RAIL 35 X 15 MM, 2.3 MM / 0.091 IN THICK	210-198
DeviceNet ECO FIELDBUS COUPLER 125-500 kBaud	750-346
DeviceNet FIELDBUS COUPLER 125-500 kBaud	750-306
DEVICENET PROGRAMMABLE FIELDBUS -CONTROLLER 125-500 kBaud	750-806
END MODULE CARRIER RAIL DIN 35	750-600
ETHERNET TCP/IP FIELDBUS COUPLER 10 MBit/s	750-342
ETHERNET TCP/IP FIELDBUS COUPLER 10/100 Mbit/s	750-341
FIRE WIRE FIELDBUS COUPLER DIGITAL AND ANALOG SIGNALS	750-339
I/O-LIGHTBUS FIELDBUS COUPLER 2.5 MBaud	750-300
I/O-LIGHTBUS FIELDBUS COUPLER 2.5 MBaud	750-320
Individual wire jumpers	individual jumper
INTERBUS ECO FIELDBUS COUPLER 2 MBaud	750-345
INTERBUS ECO FIELDBUS COUPLER 500 kBaud	750-344
INTERBUS FIELDBUS COUPLER 500 kBaud	750-324
INTERBUS FIELDBUS COUPLER DIGITAL AND ANALOG SIGNALS	750-304
INTERBUS FIELDBUS COUPLER DIGITAL AND ANALOG SIGNALS	750-334
INTERBUS PROGRAMMABLE FIELDBUS CONTROLLER DIGITAL AND ANALOG SIGNALS	750-804
IP65 ENCLOSURE SHEET STEEL	850-811
IP65 ENCLOSURE SHEET STEEL	850-812
IP65 ENCLOSURE SHEET STEEL	850-813
LON DATA EXCHANGE COUPLER (PEER TO PEER) 78 kbps	750-319/004-000
LON FIELDBUS COUPLER 78 kbps	750-319
LONWORKS PROGRAMMABLE FIELDBUS COUPLER 78 kbps	750-819
MARKERS FOR GROUP MARKER CARRIERS MARKER CARD DIN A4 (160 MARKERS)	750-100
MINIATURE WSB QUICK MARKING STRIPS PLAIN	248-501
MINIATURE WSB QUICK MARKING STRIPS PLAIN	248-501/000-002
MINIATURE WSB QUICK MARKING STRIPS PLAIN	248-501/000-005
MINIATURE WSB QUICK MARKING STRIPS PLAIN	248-501/000-006
MINIATURE WSB QUICK MARKING STRIPS PLAIN	248-501/000-007

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MINIATURE WSB QUICK MARKING STRIPS PLAIN	248-501/000-012
MINIATURE WSB QUICK MARKING STRIPS PLAIN	248-501/000-017
MINIATURE WSB QUICK MARKING STRIPS PLAIN	248-501/000-023
MINIATURE WSB QUICK MARKING STRIPS PLAIN	248-501/000-024
MODBUS FIELDBUS COUPLER RS 232 / 1,2 - 115,2 kBaud	750-316
MODBUS FIELDBUS COUPLER RS 232 / 150 - 19200 Baud	750-314
MODBUS FIELDBUS COUPLER RS 485 / 1,2 - 115,2 kBaud	750-315
MODBUS FIELDBUS COUPLER RS 485 / 150 - 19200 Baud	750-312
MODBUS PROGRAMMABLE FIELDBUS CONTROLLER RS 232 / 1,2 - 115,2 kBaud	750-816
MODBUS PROGRAMMABLE FIELDBUS CONTROLLER RS 232 / 150 - 19200 Baud	750-814
MODBUS PROGRAMMABLE FIELDBUS CONTROLLER RS 485 / 1,2 - 115,2 kBaud	750-815
MODBUS PROGRAMMABLE FIELDBUS CONTROLLER RS 485 / 150 - 19200 Baud	750-812
MODULE BUS EXTENSION, COUPLER MODULE	750-628
MODULE BUS EXTENSION, END MODULE	750-627
MP-BUS (MULTI POINT-BUS) MASTER MODULE CARRIER RAIL DIN 35	750-643
Open individual wire jumpers ends	individual jumper open end
POWER SUPPLY PASSIVE	750-613
POWER SUPPLY UNIT PRIMARY TRIGGERED	787-903
POWER SUPPLY UNIT PRIMARY TRIGGERED	787-904
POWER SUPPLY UNIT PRIMARY TRIGGERED	787-912
PROFIBUS DP ECO FIELDBUS COUPLER 12 MBaud	750-343
PROFIBUS DP FIELDBUS COUPLER 1,5 MBaud	750-331
PROFIBUS DP FIELDBUS COUPLER 12 MBaud	750-323
PROFIBUS DP/FMS FIELDBUS COUPLER 1,5 MBaud	750-301
PROFIBUS DP/FMS FIELDBUS COUPLER 12 MBaud	750-303
PROFIBUS DP/V1 FIELDBUS COUPLER 12 MBaud	750-333
PROFIBUS DP/V1 PROGRAMMABLE FIELDBUS CONTROLLER 12 MBaud	750-833
PROFINET IO FIELDBUS COUPLER 100 Mbit	750-340
PROFINET PROGRAMMABLE FIELDBUS CONTROLLER 100 Mbit	750-840
RADIO RECEIVER MODULE CARRIER RAIL DIN 35	750-642
RAIL-MOUNTED MODULES - POWER SUPPLYUNITS WITH UNIVERSAL MOUNTING CARRIER	288-808
RAIL-MOUNTED MODULES - POWER SUPPLYUNITS WITH UNIVERSAL MOUNTING CARRIER	288-809
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RAIL-MOUNTED MODULES - POWER SUPPLYUNITS WITH UNIVERSAL MOUNTING CARRIER	288-812
RAIL-MOUNTED MODULES - POWER SUPPLYUNITS WITH UNIVERSAL MOUNTING CARRIER	288-813

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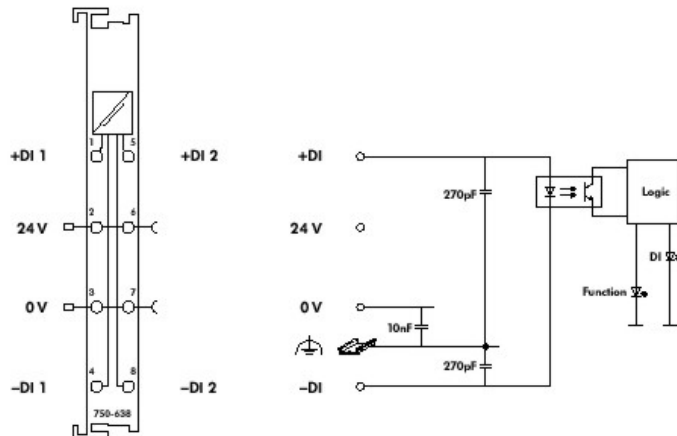
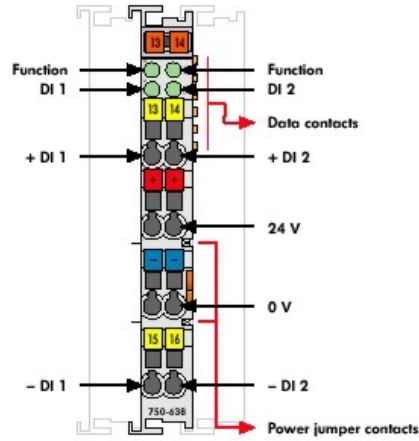
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RAIL-MOUNTED MODULES - POWER SUPPLY UNITS WITH UNIVERSAL MOUNTING CARRIER	288-814
RAIL-MOUNTED MODULES - POWER SUPPLY UNITS WITH UNIVERSAL MOUNTING CARRIER	288-815
SCREWDRIVER Type 1, bar (2,5 x 0,4) mm	210-119
SCREWDRIVER Type 2, bar (3,5 x 0,5) mm	210-120
SCREWDRIVER WITH PARTIALLY INSULATED SHAFT Type 1, bar (2,5 x 0,4) mm	210-619
SCREWDRIVER WITH PARTIALLY INSULATED SHAFT Type 2, bar (3,5 x 0,5) mm	210-620
SCREWLESS END STOP 10 MM / 0.394 IN WIDE	249-117
SDS FIELDBUS COUPLER DIGITAL AND ANALOG SIGNALS	750-313
SEPARATION MODULE CARRIER RAIL DIN 35	750-616
SHIELD CLAMPING SADDLE 11 MM / 0.433 IN WIDE	790-108
SHIELD CLAMPING SADDLE 19 MM / 0.741 IN WIDE	790-116
SHIELD CLAMPING SADDLE 27 MM / 1.053 IN WIDE	790-124
SHIELD CLAMPING SADDLE 43 MM / 1.677 IN WIDE	790-140
STEEL CARRIER RAIL 35 X 15 MM, 1.5 MM / 0.059 IN THICK	210-114
STEEL CARRIER RAIL 35 X 15 MM, 1.5 MM / 0.059 IN THICK	210-197
STEEL CARRIER RAIL 35 X 15 MM, 1.5 MM / 0.059 IN THICK	210-506
STEEL CARRIER RAIL 35 X 15 MM, 1.5 MM / 0.059 IN THICK	210-508
STEEL CARRIER RAIL 35 X 15 MM, 2.3 MM / 0.091 IN THICK	210-118
STEEL CARRIER RAIL 35 X 15 MM, 2.3 MM / 0.091 IN THICK	210-548
STEEL CARRIER RAIL 35 X 7.5 MM, 1 MM / 0.039 IN THICK	210-112
STEEL CARRIER RAIL 35 X 7.5 MM, 1 MM / 0.039 IN THICK	210-113
STEEL CARRIER RAIL 35 X 7.5 MM, 1 MM / 0.039 IN THICK	210-504
STEEL CARRIER RAIL 35 X 7.5 MM, 1 MM / 0.039 IN THICK	210-505
STEEL IP65 ENCLOSURES 10 MBit/s	750-842
STEEL IP65 ENCLOSURES 10/100 Mbit/s	750-841
STEEL IP65 ENCLOSURES 10/100 Mbit/s	750-841/025-000
STEPPER MODULE FOR THE WAGO-I/O-SYSTEM 750	750-670
STÜTZELKO-MODUL SMOOTHES UNSTABLE DC 24 V POWER SUPPLIES	288-824
SUPPLY MODULE PASSIVE	750-602
SUPPLY MODULE PASSIVE	750-612
SUPPLY MODULE WITH FUSE HOLDER	750-601
SUPPLY MODULE WITH FUSE HOLDER / DIAGN.	750-610

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The Up/Down counter has two counters that allow independent counting of 24 V DC binary pulses. The data is then transmitted to the control via the fieldbus. The counters can be set or reset with the control bytes. A counter lock-out is also possible. The control bytes also determine the direction of counting.