

Data sheet

750-435

1-CHANNEL DIGITAL INPUT MODULE NAMUR



Technical data

Package size 1 piece.

No. of inputs	1
Intrinsically safe per	Eex ia/ib
CURRENT CONSUMPTION (INTERNAL) mA	2.5 mA
Voltage via power jumper contacts (max)	SUPPLY VIA DC 24.7 V EEX I SUPPLY MODULE (750-625)
Sensor supply Uv1,2	DC 8.2 V
Signal current (0) (<)	1.2 mA
Signal current (1) (>)	2.1 mA
Input filter (ms)	3 ms
SWITCHING HYSTERESIS (mA)	0.2 mA
Open-circuit voltage	DC 8,2 V
Input resistance	1kOhm
Length of input pulse	≥ 5 ms
Input pulse interval	≥ 3 ms
Short-circuit current	< 8.2 mA
Short circuit monitoring	$> 6,4$ mA
Wire break monitoring	$< 0,2$ mA
Frequency (Hz)	100 Hz
Power consumption P max. (W)	0.5 W
Input current typ. (field side)	13 mA + load
Heat dissipation	0.5 W
Isolation	375 V System / Supply

Data sheet

750-435

1-CHANNEL DIGITAL INPUT MODULE NAMUR

Internal data width	2 BITS; -1 BIT INPUT; -1 BIT ERROR (SHORT CIRCUIT/OPEN CIRCUIT)
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	gem. EN 61000-6-2 (1999)
EMC emission of interference	gem. EN 61000-6-4 (2002)
Conformity marking	CE
EC EMC standards	89 / 336 / EWG
EC low voltage standards	73 / 23 / EWG
Ex guideline	94 / 9 / EG; EN 50014, EN 50020, EN 50021
Marking	Ex II 3 (1) GD EEx nA [ia] IIC / IIB T4
Electrical circuit, relevant safety data	U0 = 12 V; I0 = 16 mA; P0 = 48 mW; CHARACTERISTIC: LINEAR
Intrinsically safe / EEx ib IIB / EEx ib IIC	L0 / 560 mH / 180 mH
Intrinsically safe / EEx ib IIB / EEx ib IIC	C0 / 9 µF / 1,4 µF
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	48.5 g
Color	blue
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

Data sheet

750-435

1-CHANNEL DIGITAL INPUT MODULE NAMUR

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

Data sheet

750-435

1-CHANNEL DIGITAL INPUT MODULE NAMUR

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
RAIL-MOUNTED MODULES - POWER SUPPLYUNITS WITH UNIVERSAL MOUNTING CARRIER	288-810
RAIL-MOUNTED MODULES - POWER SUPPLYUNITS WITH UNIVERSAL MOUNTING CARRIER	288-812
RAIL-MOUNTED MODULES - POWER SUPPLYUNITS WITH UNIVERSAL MOUNTING CARRIER	288-813

Data sheet

750-435

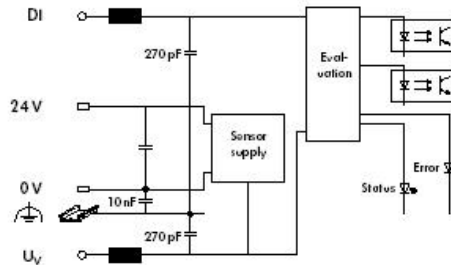
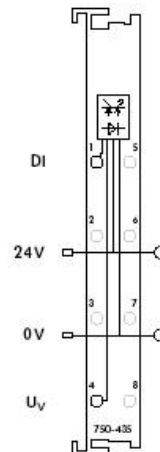
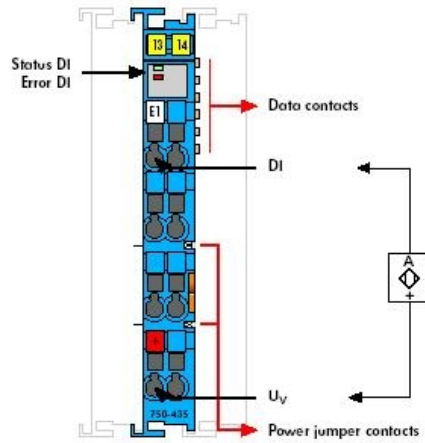
1-CHANNEL DIGITAL INPUT MODULE NAMUR

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 DC 24 V	750-625
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

Data sheet

750-435

1-CHANNEL DIGITAL INPUT MODULE NAMUR



Data sheet

750-435

1-CHANNEL DIGITAL INPUT MODULE NAMUR

The digital input module receives the binary signals from sensors operating in hazardous environments of Zones 0 and 1.

Namur sensors, optocouplers, mechanical contacts or other actuating elements can be connected by means of approved intrinsically safe devices.

The WAGO-I/O-SYSTEM 750 has to be installed in Zone 2 or in non-hazardous environments.

Each sensor is supplied with a short-circuit-protected 8.2 V supply.

Indicators: Green LED (signal on /off) Red LED(short circuit, wire breakage)

An optocoupler is used for electrical isolation between the bus and the field side.

Note: Only use the digital input module in connection with the 24 V DC EEx i supply module 750-625 (note the power supply instructions on page 1.14)!

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