

Data sheet

750-419

2-CHANNEL DIGITAL INPUT MODULE DC 24 V POSITIVE SWITCHING CARRIER RAIL DIN 35 CAGE CLAMP CONNECTION



Technical data

Package size 1 piece.

| | |
|---|--|
| No. of inputs | 2 |
| Number of outputs | 2 FOR TRANSMITTER SUPPLY |
| CURRENT CONSUMPTION (INTERNAL) (<) mA | 0 mA |
| Voltage via power jumper contacts (max) | DC 24 V (-15% / + 20%) |
| Signal voltage (0) | DC -3 V ... +5 V |
| Signal voltage (1) | DC 15 V ... 30 V |
| Input filter (ms) | 3 ms |
| Current supply (typ) | 3.7 mA |
| Sensor supply U _{v1,2} | DC 24 V |
| Output current max. (A) | 0.5 A |
| Short-circuit current | 1.5 A, undulating because of thermal overload protection |
| Isolation | 500 V system / supply |
| Internal data width (Bit in) | 4 Bit in |
| 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 (applied for) |
| Conformity marking | CE |
| Cross section from [mm ²] | 0.08 mm ² |

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|-------------------------------------|---------------------|
| Cross section to [mm ²] | 2.5 mm ² |
| Cross section from [AWG] | 28 AWG |
| Cross section to [AWG] | 14 AWG |
| Weight | 66 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 |
| 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 |

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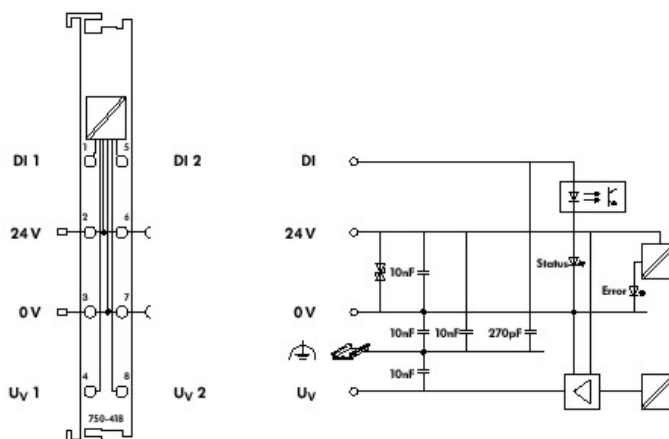
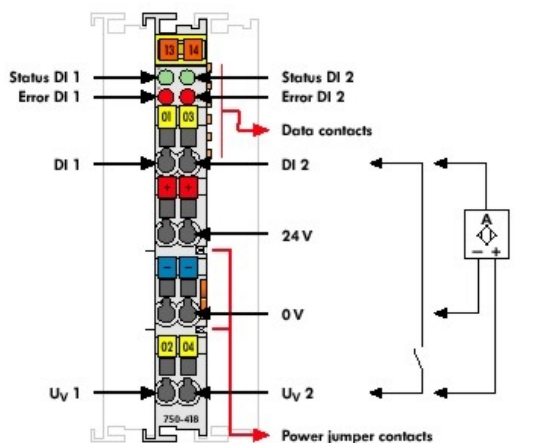
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|---|-----------------|
| RAIL-MOUNTED MODULES - POWER SUPPLY UNITS WITH UNIVERSAL MOUNTING CARRIER | 288-814 |
| RAIL-MOUNTED MODULES - POWER SUPPLY UNITS WITH UNIVERSAL MOUNTING CARRIER | 288-815 |
| SCREWDRIVER Type 1, bar (2,5 x 0,4) mm | 210-119 |
| 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 digital input module receives control signals from the field side and supplies a short-circuit proof voltage to the sensors.

The module transfers the control signals and other information via fieldbus coupler to a supervisory control.

Each input module has a noise-rejection filter.

Each sensor can be supplied separately. A short circuit to ground is indicated as an error/fieldbus failure and a message is sent to the supervisory control. After the error has been eliminated the input module 750-418 will require an acknowledgement (performed by the operator via control). The input module 750-419 will acknowledge automatically.

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