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Inline digital input terminal, complete with accessories (connector plug and labeling field), 16 inputs, 24 V DC, 2-, 3-wire connection technology

## Product description

The digital Inline input terminals are designed for the connection of digital signals as are supplied from control switches, limit switches or proximity switches.

All the typical applications are covered by the standard automation terminals.

The I/O equipment is connected by a simple or an extended Inline plug, depending on the number of channels. The multi-wire connection method is available in both cases.

The Inline terminals can be labeled using hinged labeling fields. The fields have insert cards that can be labeled individually to suit the application. Additionally, there is the proven ZBFM-6... Zack strip for labeling the terminal points.

### **Product Features**

- 16 digital inputs
- Connection of sensors in 2 and 3-wire technology
- Maximum permissible load current per sensor: 250 mA
- Diagnostic and status indicators
- Approved for use in potentially explosive areas (refer to data sheet)



## Key commercial data

Packing unit	11
Weight per Piece (excluding packing)	232.0 GRM
Custom tariff number	85389091
Country of origin	Germany

# Technical data

#### Note:

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
Dimensions	

## Dimensions

Width	48.8 mm
	28.10.2013 Page 1 / 9



# Technical data

### Dimensions

Height	140.5 mm
Depth	71.5 mm
Note on dimensions	Housing dimensions

#### Ambient conditions

Ambient temperature (operation)	-25 °C 55 °C
Ambient temperature (storage/transport)	-25 °C 85 °C
Permissible humidity (operation)	10 % 95 % (according to DIN EN 61131-2)
Permissible humidity (storage/transport)	10 % 95 % (according to DIN EN 61131-2)
Air pressure (operation)	70 kPa 106 kPa (up to 3000 m above sea level)
Air pressure (storage/transport)	70 kPa 106 kPa (up to 3000 m above sea level)
Degree of protection	IP20

## General

Weight	210 g
Note on weight specifications	with male connectors
Mounting type	DIN rail
Protection class	III, IEC 61140, EN 61140, VDE 0140-1
Test section	5 V supply, incoming remote bus/7.5 V supply (bus logics) 500 V AC 50 Hz 1 min
	5 V supply, outgoing remote bus/7.5 V supply (bus logics) 500 V AC 50 Hz 1 min
	7.5 V supply (bus logics)/24 V supply (I/O) 500 V AC 50 Hz 1 min
	24 V supply (I/O) / functional earth ground 500 V AC 50 Hz 1 min

## Interfaces

Fieldbus system	Lokalbus
Name	Inline local bus
Connection method	Inline data jumper
Transmission speed	500 kBit/s

# Power supply for module electronics

Supply voltage	24 V DC (via voltage jumper)
Supply voltage range	19.2 V DC 30 V DC (including all tolerances, including ripple)
Supply current	60 mA
Communications power $U_L$	7.5 V (via voltage jumper)
Current consumption	max. 60 mA (from the local bus)
Power consumption	max. 0.45 W (at $U_L$ )

## Inline potentials

Communications power UL	7.5 V DC



# Technical data

# Inline potentials

Current consumption from $U_L$	max. 60 mA
Main circuit supply $U_M$	24 V DC
Current consumption from $U_M$	max. 8 A DC
Segment supply voltage U <sub>s</sub>	24 V DC (nominal value)
Current consumption from U <sub>s</sub>	max. 4 A

# Digital inputs

Input name	Digital inputs
Connection method	Spring-cage connection
	2, 3-wire
Number of inputs	16 (EN 61131-2 type 1)
Typical response time	< 1 ms
Protective circuit	Short-circuit and overload protection
Input voltage	24 V DC (via voltage jumper)
Input voltage range "0" signal	-3 V DC 5 V DC
Input voltage range "1" signal	15 V DC 30 V DC

# Classifications

## eCl@ss

eCl@ss 4.0	27250302
eCl@ss 4.1	27250302
eCl@ss 5.0	27250302
eCl@ss 5.1	27242604
eCl@ss 6.0	27242604
eCl@ss 7.0	27242604
eCl@ss 8.0	27242604

## ETIM

ETIM 2.0	EC001430
ETIM 3.0	EC001599
ETIM 4.0	EC001599
ETIM 5.0	EC001599

## UNSPSC

UNSPSC 6.01	43172015
UNSPSC 7.0901	43201404
UNSPSC 11	43172015



## Classifications

### UNSPSC

UNSPSC 12.01	43201404
UNSPSC 13.2	43201404

## Approvals

#### Approvals

#### Approvals

UL Recognized / cUL Recognized / GOST / LR / GL / BV / DNV / ABS / RINA / BSH / LR / BSH / UL Recognized / cUL Recognized / GOST / GL / BV / DNV / ABS / RINA / cULus Recognized

#### Ex Approvals

UL Listed / cUL Listed / UL Listed / cUL Listed / ATEX / cULus Listed

Approvals submitted

#### Approval details

UL Recognized 🔊

cUL Recognized 🔊

GOST 📀

LR

GL

ΒV

28.10.2013 Page 4 / 9



# Approvals

DNV

ABS

RINA

BSH

LR

BSH

UL Recognized 🔊

cUL Recognized 🔊

GOST 📀

GL

ΒV

DNV

ABS

RINA

28.10.2013 Page 5 / 9



## Approvals

cULus Recognized

## Accessories

Accessories

Front adapter

Front adapters - FLKM 14-PA-INLINE/IN16 - 2302751



VARIOFACE front adapter for Inline modules, for transferring 16 (2 x 8) digital input signals.

Labeled terminal marker

Zack marker strip - ZB 6, QR: FORTL. ZAHLEN - 1051029



Zack marker strip, Strip, white, labeled, Can be labeled with: Plotter, Printed vertically: Consecutive numbers 1 - 10, 11 - 20, etc. up to 491 - 500, Mounting type: Snap into tall marker groove, For terminal block width: 6.2 mm, Lettering field: 6.15 x 10.5 mm

Labeling panel

Labeling field - IB IL FIELD 2 - 2727501

Labeling field, width: 12.2 mm



Labeling field - IB IL FIELD 8 - 2727515

Labeling field, width: 48.8 mm



28.10.2013 Page 6 / 9



## Accessories

### Marker pen

Marker pen - B-STIFT - 1051993



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

Marker pen - X-PEN 0,35 - 0811228



Marker pen without ink cartridge, for manual labeling of markers, labeling extremely wipe-proof, line thickness 0.35 mm

Plug

Inline plug - IB IL SCN-12-ICP - 2727611



Connector, color coded, for digital 4, or 16-channel Inline input terminals

Terminal marking

Insert strip - ESL 62X10 - 0809492



Insert strip, Sheet, white, Unlabeled, Can be labeled with: Office printing systems, Plotter: Laser printer, Mounting type: Insert, Lettering field: 62 x 10 mm



## Accessories

Insert strip - ESL 62X46 - 0809502



Insert strip, Sheet, white, Unlabeled, Can be labeled with: Office printing systems, Plotter: Laser printer, Mounting type: Insert, Lettering field: 62 x 46 mm

Zack marker strip - ZB 6:UNBEDRUCKT - 1051003



Zack marker strip, Strip, white, Unlabeled, Can be labeled with: Plotter, Mounting type: Snap into tall marker groove, For terminal block width: 6.2 mm, Lettering field: 6.15 x 10.5 mm

Zack marker strip - ZB 6/WH-100:UNBEDRUCKT - 5060935



Zack marker strip, Strip, white, Unlabeled, Can be labeled with: Plotter, Mounting type: Snap into tall marker groove, For terminal block width: 6.2 mm, Lettering field: 6.15 x 10.5 mm

Flat zack marker sheet - ZBFM 6/WH:UNBEDRUCKT - 0803618



Flat zack marker sheet, Sheet, white, Unlabeled, Can be labeled with: Plotter, Mounting type: Snap into flat marker groove, For terminal block width: 6.2 mm, Lettering field: 5 x 5.5 mm

Drawings



# N1 0

Connection diagram

Dimensioned drawing



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