IB IL 24 MUX MA-PAC - Field multiplexer

2861205

https://www.phoenixcontact.com/us/products/2861205

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.

Inline field multiplexer, complete with accessories (connector and labeling field), transmission of very remote signals without configuration

Product description

A field multiplexer system is a simple system for transmitting signals between two remote stations. It has a modular structure and is designed to reduce conventional parallel cabling. A field multiplexer system consists of two identical field multiplexer stations. The field multiplexer exchanges data with the remote station via a remote bus cable. The field multiplexer is the central unit of a field multiplexer station. All the necessary Inline I/O terminals of a station are connected to the field multiplexer.

Your advantages

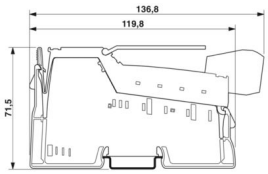
- Remote bus connections in copper technology (can be operated via fiber optics using an interface converter as an option)
- A field multiplexer station can be supplied with all of the required 24 V voltages
- Floating alarm output (“N/C” relay contact) for connecting alarm signals
- Up to 63 I/O terminals can be connected
- Up to 512 digital or 32 analog I/Os (or a mixture) can be connected
- Connection establishment and comparison of the I/O configuration of both stations

Commercial data

Item number	2861205
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DR01
Product key	DRI11M
Catalog page	Page 109 (C-6-2019)
GTIN	4017918902506
Weight per piece (including packing)	268.5 g
Weight per piece (excluding packing)	212 g
Customs tariff number	85389091
Country of origin	DE

Technical data

Dimensions

Dimensional drawing	
Width	48.8 mm
Height	135 mm
Depth	71.5 mm

Interfaces

Remote bus

Connection method	Inline shield connector
Transmission physics	RS-485

Inline local bus

Connection method	Inline data jumper
Transmission speed	500 kbps

System properties

System limits

Number of local bus devices that can be connected	32 (without additional power terminal block, observe allowable total current consumption)
Number of devices with parameter channel	0
Number of supported branch terminals with remote bus branch	0

Module

ID code (hex)	none

Output data

Relay

Contact switching type	N/C contact
Contact connection type	floating contacts
Switching voltage	typ. 24 V DC
	max. 150 V
	max. 125 V AC
Switching current	max. 1 A
Switching capacity	max. 30 W
	max. 60 VA

Product properties

Type	modular
Product type	I/O component
Product family	Inline

Insulation characteristics

Overvoltage category	II
Pollution degree	2 (in accordance with EN 50178)

Electrical properties

Protective circuit	Surge protection (segment supply, main supply, field multiplexer supply); Input protective diodes (can be destroyed by permanent overload)Pulse loads up to 1500 W are short circuited by the input protective diode.
	Protection against polarity reversal (segment supply/main supply); Parallel diodes for protection against polarity reversal; in the event of an error the high current flowing through the diodes causes the fuse connected upstream to blow.
	Protection against polarity reversal (field multiplexer supply); Serial diode in the lead path of the power supply unit; in the event of an error only a low current flows. In the event of an error, no fuse trips within the external power supply unit.

Potentials: Field multiplexer supply U_{MUX}; the communications power U_L (7.5 V) and the analog supply U_{ANA} (24 V) are generated from supply U_{MUX}.

Supply voltage	24 V DC (via Inline connector)
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Current draw	max. 1.25 A (with max. number of connected I/O terminal blocks)
	typ. 60 mA (without connected Inline I/O terminals)

Potentials: Communications power (U_L)

Supply voltage	7.5 V DC ±5 %

Potentials: Supply of analog modules (U_{ANA})

Supply voltage	24 V DC (via Inline connector)
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)

Potentials: Main circuit supply (U_M)

Supply voltage	24 V DC (via voltage jumper)
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)

Potentials: Segment circuit supply (U_S)

Supply voltage	24 V DC (via voltage jumper)
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)

Electrical isolation/isolation of the voltage ranges

Test voltage: RS-485 interface / supply voltage	500 V AC
Test voltage: RS-485 interface / local bus	500 V AC

Connection data

Connection technology

Connection name	Inline connector

Conductor connection

Connection method	Spring-cage connection
Conductor cross section rigid	0.08 mm² ... 1.5 mm²
Conductor cross section flexible	0.08 mm² ... 1.5 mm²
Conductor cross section AWG	28 ... 16
Stripping length	8 mm

Inline connector

Connection method	Spring-cage connection
Conductor cross section, rigid	0.08 mm² ... 1.5 mm²
Conductor cross section, flexible	0.08 mm² ... 1.5 mm²
Conductor cross section AWG	28 ... 16
Stripping length	8 mm

Environmental and real-life conditions

Ambient conditions

Ambient temperature (operation)	-25 °C ... 55 °C
Degree of protection	IP20
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)
Ambient temperature (storage/transport)	-25 °C ... 85 °C
Permissible humidity (operation)	10 % ... 95 % (non-condensing)
Permissible humidity (storage/transport)	10 % ... 95 % (non-condensing)

Standards and regulations

Protection class	III (IEC 61140, EN 61140, VDE 0140-1)

Mounting

Mounting type	DIN rail mounting

Classifications

ECLASS

ECLASS-11.0	27242608
ECLASS-12.0	27242608
ECLASS-13.0	27242608

ETIM

ETIM 9.0	EC001604

UNSPSC

UNSPSC 21.0	32151600

Environmental product compliance

REACh SVHC	Lead 7439-92-1

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com