

IB ST 24 CNT - Function module



2750400

<https://www.phoenixcontact.com/us/products/2750400>

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.



INTERBUS-ST counter module, 4 counter inputs, 24 V or 5 V DC signal level, IP20 protection, consisting of: Terminal part with screw connection and module electronics

Product description

INTERBUS ST counter module

The IB ST 24 CNT module is designed for counting pulses, measuring frequencies and periods, and generating square-wave pulses.

The module has 4 channels which can be operated independently of one another. The counter then has a 16-bit resolution. Cascading is possible by simply connecting several counters in a row.

Each channel has a digital output that can be set according to the event. Simple applications can use a single device.

The module is available with either screw or spring-cage connection.

Your advantages

- Connection of actuators in 2-conductor technology
- Connection of sensors in 2- or 3-conductor technology
- Short-circuit and overload-protected outputs

Commercial data

Item number	2750400
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DR03
Product key	DRI363
GTIN	4017918120122
Weight per piece (including packing)	737.4 g
Weight per piece (excluding packing)	660 g
Customs tariff number	85389091
Country of origin	DE

IB ST 24 CNT - Function module

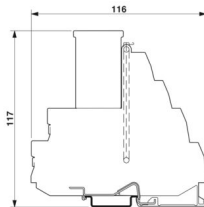
2750400

<https://www.phoenixcontact.com/us/products/2750400>



Technical data

Dimensions

Dimensional drawing	
Width	118 mm
Height	117 mm
Depth	116 mm

Interfaces

ST local bus

Connection method	ST local bus connector
Transmission speed	500 kbps

ST local bus

Connection method	ST local bus connector
Transmission speed	500 kbps
Transmission physics	Copper

Input data

Counter:

Input name	Counter input for 24 V signals
Connection method	Screw connection
Number of inputs	4
Operating mode	Event counting, frequency/time measurement
Input voltage	5 V DC 24 V DC
Input frequency	90 kHz (max. 300 kHz)
Input current	11 mA (typ., 24 V DC input) 8 mA (typ., 5 V DC input)
Resolution	16 bit (quantization)

Output data

Digital:

Output name	Digital outputs
Number of outputs	4
Protective circuit	Polarity reversal protection, electronic short-circuit protection of the outputs

IB ST 24 CNT - Function module



2750400

<https://www.phoenixcontact.com/us/products/2750400>

Output voltage	$U_S - 0.5 \text{ V DC} \leq U_{\text{Out LED}} \leq U_S$
Output current	500 mA (per output, up to 300 Hz)
	250 mA (per output, up to 10 kHz)

Product properties

Product type	I/O component
Product family	Smart Terminal ST
Type	modular
	INTERBUS Smart Terminal
Operating mode	Process data multiplex operation with 1 parameter channel, 3 INTERBUS IN and 3 INTERBUS OUT words

Electrical properties

Electrical isolation/isolation of the voltage ranges

Test voltage: Bus/Outputs	500 V AC, 50 Hz, 1 min
Test voltage: Bus/Inputs	500 V AC, 50 Hz, 1 min
Test voltage: Bus/Ground conductor	500 V AC, 50 Hz, 1 min
Test voltage: I/O / Ground conductor	500 V AC, 50 Hz, 1 min

Connection data

Conductor connection

Connection method	Screw connection
Conductor cross-section rigid	0.2 mm ² ... 2.5 mm ²
Conductor cross-section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross-section AWG	24 ... 12
Stripping length	8 mm
Connection method	Screw connection
Conductor cross-section, rigid	0.2 mm ² ... 2.5 mm ²
Conductor cross-section, flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross-section AWG	24 ... 12
Stripping length	8 mm

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
----------------------	------

Standards and regulations

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

Mounting

Mounting type	DIN rail mounting
---------------	-------------------

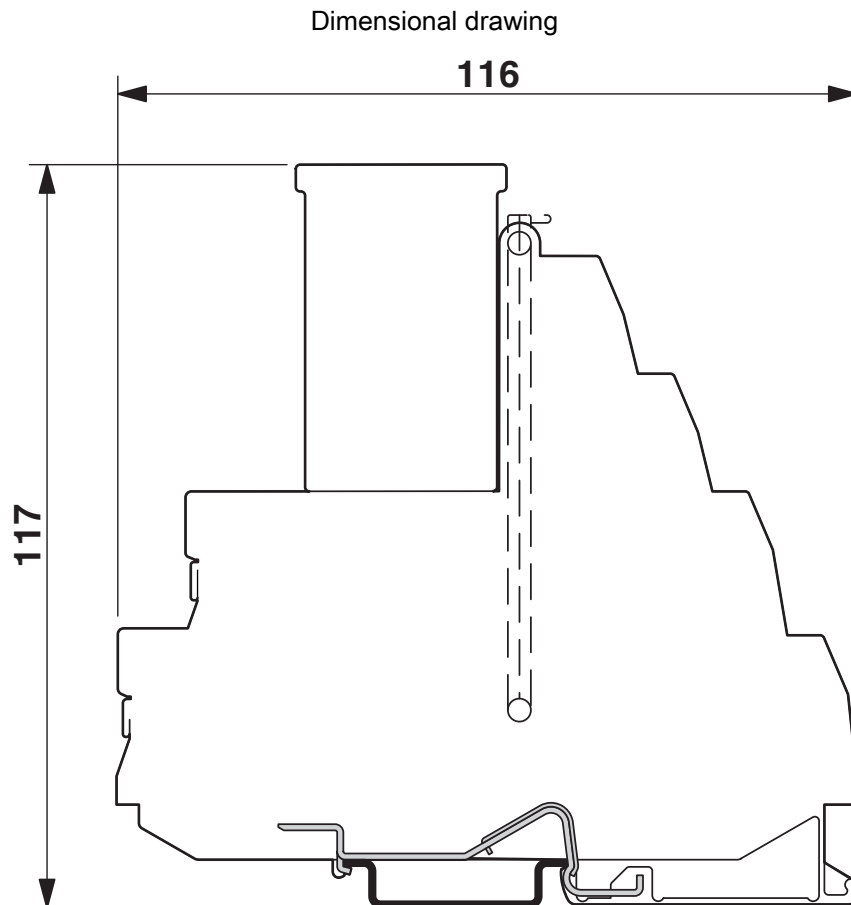
IB ST 24 CNT - Function module

2750400

<https://www.phoenixcontact.com/us/products/2750400>



Drawings



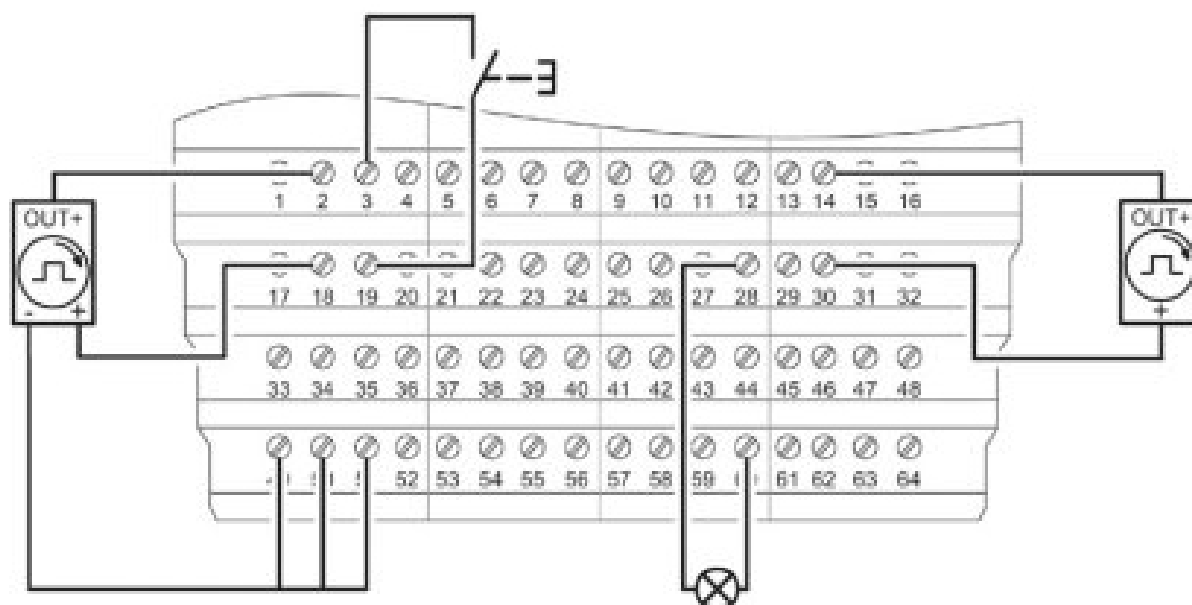
IB ST 24 CNT - Function module

2750400

<https://www.phoenixcontact.com/us/products/2750400>



Connection diagram



IB ST 24 CNT - Function module



2750400

<https://www.phoenixcontact.com/us/products/2750400>

Classifications

UNSPSC

UNSPSC 21.0	32151602
-------------	----------

2750400

<https://www.phoenixcontact.com/us/products/2750400>

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(a), 6(a)-I, 6(c), 7(a), 7(c)-I

China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
-------------------------------------	----------------------

Phoenix Contact 2025 © - all rights reserved

<https://www.phoenixcontact.com>

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