

# IB ST 24 DIO 8/8/3-2A - I/O module



2753708

<https://www.phoenixcontact.com/us/products/2753708>

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 digital input/output module, eight inputs, 24 V DC, eight outputs, 24 V DC, 2 A, IP20 degree of protection, consisting of: Terminal part with screw connection and module electronics

## Product description

INTERBUS-ST digital input and output modules

The digital INTERBUS input/output modules provide connection options for 8 sensors and 8 actuators in 3-conductor technology.

The module electronics have a plug-in design. In the event of an error, the passive basic terminal block remains on the DIN rail and the active electronics are replaced in just a few steps.

The modules are protected against polarity reversal and the outputs are additionally protected against short circuits with fuses. The state of the fuses is monitored; any errors that occur are reported to the controller.

Contact with the protective grounding is established directly when the modules are snapped onto the DIN rail.

The input/output status LED and bus diagnostics indicators on the top of the module electronics provide information about the module state at all times.

All modules can be marked individually via the large pull-out marking field. The insert cards can be marked by hand or using a plotter or printer. In addition, the terminal points can be marked individually with zack marker strips.

## Your advantages

- 8 digital outputs
- 8 digital inputs
- Connection of actuators in 3-conductor technology
- Connection of sensors in 3-conductor technology
- Electrical isolation
- Diagnostic and status indicators
- DIN rail mount

## Commercial data

Item number	2753708
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DR03
Product key	DRI334
Catalog page	Page 165 (C-6-2019)
GTIN	4017918062880
Weight per piece (including packing)	691 g
Weight per piece (excluding packing)	710 g
Customs tariff number	85389091

# IB ST 24 DIO 8/8/3-2A - I/O module

2753708

<https://www.phoenixcontact.com/us/products/2753708>



Country of origin	DE
-------------------	----

# IB ST 24 DIO 8/8/3-2A - I/O module

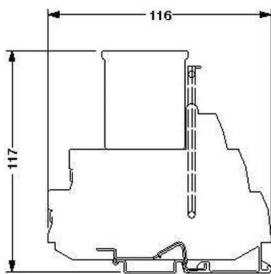
2753708

<https://www.phoenixcontact.com/us/products/2753708>



## 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

### Input data

#### Digital

Input name	Digital inputs
Number of inputs	8
Connection method	Screw connection
Connection technology	3-conductor
Input voltage	24 V DC
Input voltage range "0" signal	-30 V DC ... 5 V DC
Input voltage range "1" signal	13 V DC ... 30 V DC
Nominal input current at $U_{IN}$	typ. 5 mA (per channel)
Typical response time	3 ms (typ.)
Protective circuit	Overload protection; Fuse in header

### Output data

#### Digital

Output name	Digital outputs
Connection method	Screw connection
Connection technology	3-conductor
Number of outputs	8
Protective circuit	Short-circuit protection; Fuse Overload protection; Fuse in header
Maximum output current per group	8 A

# IB ST 24 DIO 8/8/3-2A - I/O module



2753708

<https://www.phoenixcontact.com/us/products/2753708>

Maximum output current per channel	2 A
Maximum output current per module / terminal block	16 A
Maximum operating frequency with ohmic nominal load	max. 150 Hz (12 $\Omega$ )

## Product properties

Type	modular INTERBUS Smart Terminal
Product type	I/O component
Product family	Smart Terminal ST
Mounting position	Horizontal DIN rail
No. of channels	16

## Electrical properties

No. of channels	16
-----------------	----

### Supply: Module electronics

Supply voltage	24 V DC
Supply voltage range	20 V DC ... 30 V DC (including ripple)
Current consumption	0.2 A
Ripple	3.6 V <sub>pp</sub> within the allowable voltage range

### Electrical isolation/isolation of the voltage ranges

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

## Connection data

### Connection technology

Connection name	Termination block
-----------------	-------------------

### Conductor connection

Connection method	Screw connection
Conductor cross section rigid	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section AWG	24 ... 12
Stripping length	8 mm

### Termination block

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

## Environmental and real-life conditions

### Ambient conditions

# IB ST 24 DIO 8/8/3-2A - I/O module



2753708

<https://www.phoenixcontact.com/us/products/2753708>

Ambient temperature (operation)	0 °C ... 55 °C
Degree of protection	IP20
Air pressure (operation)	86 kPa ... 108 kPa (1500 m above sea level)
Air pressure (storage/transport)	66 kPa ... 108 kPa (3500 m above sea level)
Ambient temperature (storage/transport)	-25 °C ... 70 °C
Permissible humidity (operation)	30 % ... 75 % (non-condensing)
Permissible humidity (storage/transport)	30 % ... 95 % (non-condensing)

## Standards and regulations

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

## Mounting

Mounting type	DIN rail mounting
Mounting position	Horizontal DIN rail

# IB ST 24 DIO 8/8/3-2A - I/O module

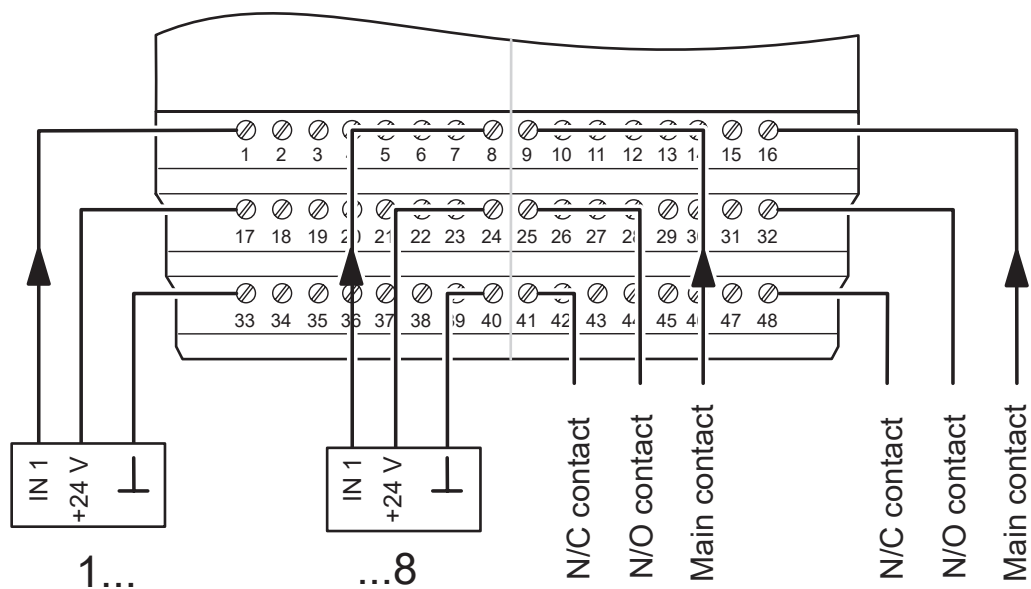
2753708

<https://www.phoenixcontact.com/us/products/2753708>



## Drawings

Connection diagram



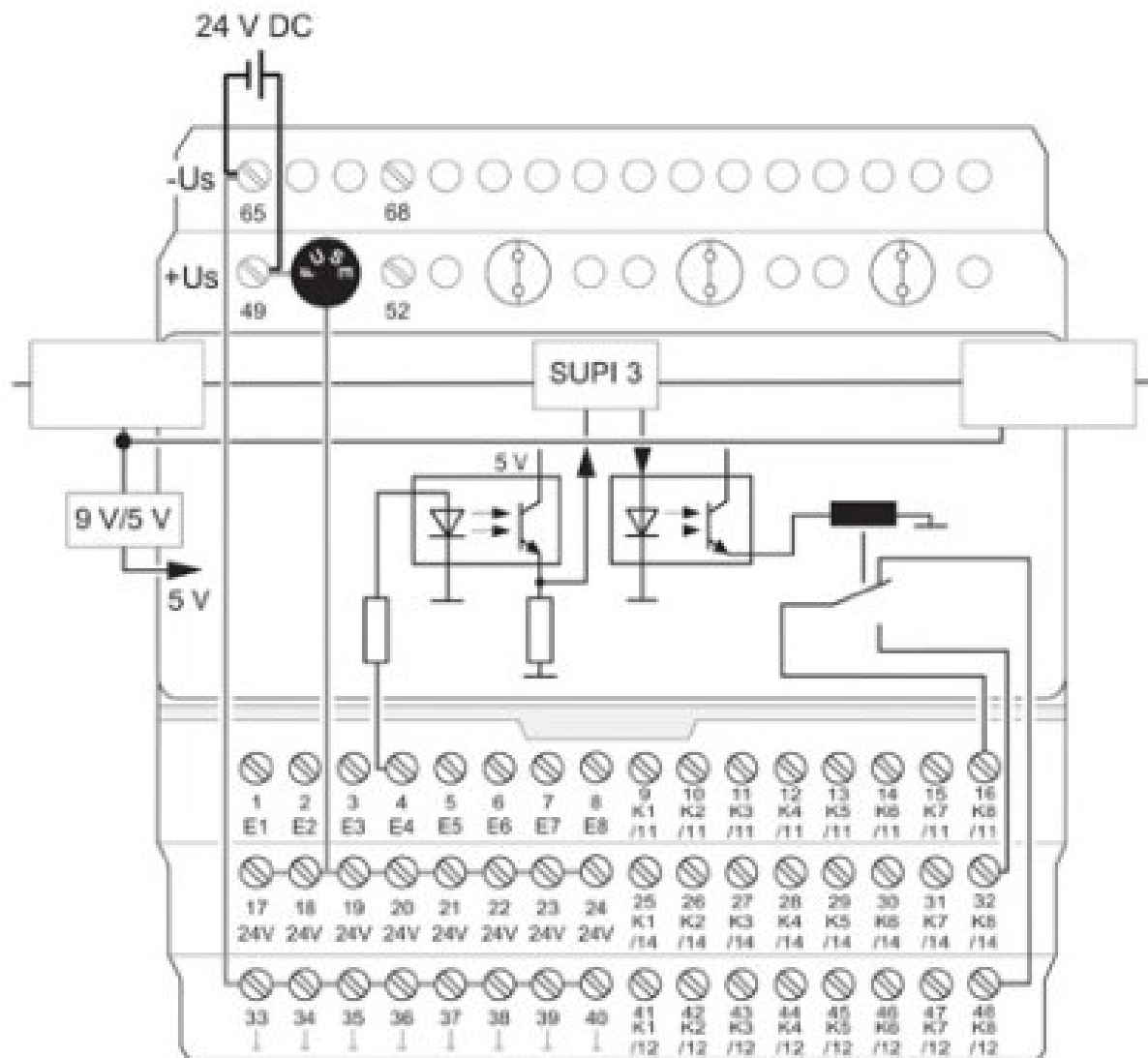
# IB ST 24 DIO 8/8/3-2A - I/O module

2753708

<https://www.phoenixcontact.com/us/products/2753708>



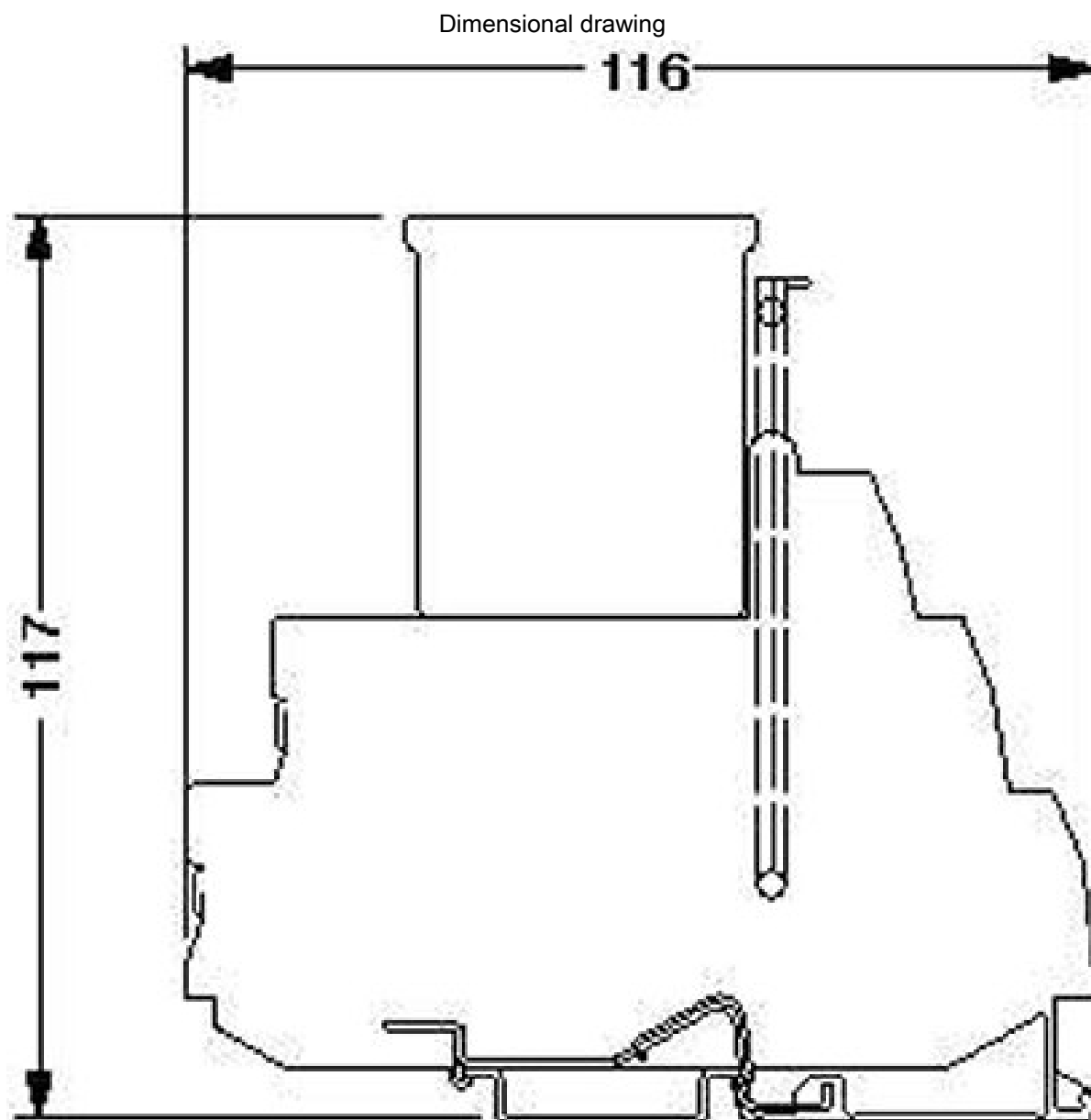
Block diagram



# IB ST 24 DIO 8/8/3-2A - I/O module

2753708

<https://www.phoenixcontact.com/us/products/2753708>





# IB ST 24 DIO 8/8/3-2A - I/O module


2753708


<https://www.phoenixcontact.com/us/products/2753708>



## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2753708>

 <b>cUL Recognized</b> Approval ID: FILE E 140324				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
	-	-	30 - 12	-

 <b>UL Recognized</b> Approval ID: FILE E 140324				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
	-	-	30 - 12	-

<b>cULus Recognized</b>				
-------------------------	--	--	--	--

# IB ST 24 DIO 8/8/3-2A - I/O module



2753708

<https://www.phoenixcontact.com/us/products/2753708>

## Classifications

### ECLASS

ECLASS-11.0	27242604
-------------	----------

### ETIM

ETIM 8.0	EC001599
----------	----------

### UNSPSC

UNSPSC 21.0	32151600
-------------	----------

# IB ST 24 DIO 8/8/3-2A - I/O module

2753708

<https://www.phoenixcontact.com/us/products/2753708>



## Environmental product compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

# IB ST 24 DIO 8/8/3-2A - I/O module

2753708

<https://www.phoenixcontact.com/us/products/2753708>



## Accessories

### IB STME 24 DIO 8/8/3-2A - Replacement electronics module

2752945

<https://www.phoenixcontact.com/us/products/2752945>



Replacement module electronics for IB ST (ZF) 24 DIO 8/8/3-2A

---

### IBS TR5 4AF - Fuse

2753465

<https://www.phoenixcontact.com/us/products/2753465>



Replacement fuse, for INTERBUS-ST modules

# IB ST 24 DIO 8/8/3-2A - I/O module

2753708

<https://www.phoenixcontact.com/us/products/2753708>

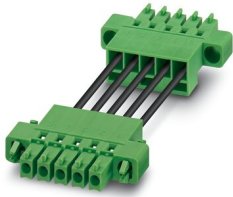


## IB ST LBC - Bridge

2836492

<https://www.phoenixcontact.com/us/products/2836492>

Spare local bus cable, for INTERBUS-ST modules



---

## EB 84 IB ST BU - Insertion bridge

2836269

<https://www.phoenixcontact.com/us/products/2836269>

Insertion bridges, divisible, isolated comb spine, color blue, 84-pos.



## IB ST 24 DIO 8/8/3-2A - I/O module

2753708

<https://www.phoenixcontact.com/us/products/2753708>



## EB 84 IB ST RD - Insertion bridge

2836272

<https://www.phoenixcontact.com/us/products/2836272>

Insertion bridges, divisible, isolated comb spine, color red, 84-pos.



## AX+ BASIC - Software

2985068

<https://www.phoenixcontact.com/us/products/2985068>

Software CD for FDT container for integrating device DTMs (free download)



# IB ST 24 DIO 8/8/3-2A - I/O module

2753708

<https://www.phoenixcontact.com/us/products/2753708>



## AX DTM LIB - Programming software

2988065

<https://www.phoenixcontact.com/us/products/2988065>



DTM library

---

Phoenix Contact 2023 © - 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](mailto:info@phoenixcon.com)