

# IBS IP 400 ME-ELR R-3A DI4 - Motor starter



2732884

<https://www.phoenixcontact.com/us/products/2732884>

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.

Electronic motor starter, electronic module without lower part of housing, 1-channel reversing starter



## Product description

>>! Spare product (module electronics) for the motor starter: 28 36 832 IBS IP 400 ELR R-3A DI 4/4 without housing lower part 27 32 871 IBS IP 400 MBH - see motor starter accessories) !<<

The motor starter modules allow three-phase standard motors to be switched via INTERBUS and are available with two housing variants.

The standard housing in IP54 protection is especially suited for direct use in machines and systems in conveyor technology, whereas the high-grade steel variant in IP67 protection is designed for installation in food industry systems.

Since they are available in different versions, INTERBUS motor starters cover the most important applications.

The 1 and 2-channel motor starters allow direct drives to be controlled and there are reversing load versions for applications involving different drive directions.

If different speeds are required, the variable frequency drives provide the right control.

The features include:

- Easy installation and pluggable connections
- Removable module electronics
- Power networking:

Motor starter 400 V AC / 20 A

Variable frequency drive 500 V AC / 20 A

- Comprehensive status and diagnostics displays on the module
- Startup without bus possible with manual operate function (with VFD also with RS-232)
- Initiator inputs for the connection of sensors and
- High-grade steel housing, which is extremely resistant to cleaning agents and
- Sheet steel housing, ideal for use in the plant, with pluggable cable feed-throughs for ready-assembled cable.

## Commercial data

Item number	2732884
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	DR15
Product key	DRFAAA
GTIN	4017918173609
Weight per piece (including packing)	3,304 g
Weight per piece (excluding packing)	3,224 g
Customs tariff number	85389091
Country of origin	DE

## Technical data

### Notes

#### Utilization restriction

EMC note	EMC: class A product, see manufacturer's declaration in the download area
----------	---------------------------------------------------------------------------

### Product properties

Type	Stand-alone
Diagnostics messages	Mains failure, phase failure Error message in the diagnostic code (bus) and display via the LED ERR on the module
	Motor connector not plugged in, motor temperature exceeded, thermistor line short-circuited Error message in the diagnostic code (bus) and display via the LED ERR on the module
	Sensor supply failure Error message in the diagnostic code (bus) and display via the LED ERR on the module
	Overcurrent Error message in the diagnostic code (bus) and display via the LED ERR on the module
	Output stage cannot be controlled Error message in the diagnostic code (bus) and display via the LED ERR on the module
	Short-circuit or overload of the digital outputs Message in the diagnostic code
	Module error during self test Message to the master

### Electrical properties

#### Supply: Module electronics

Connection method	POWER-COMBICON
Designation	Terminal strip X13 and X15
Number of positions	2
Permissible conductor cross-section	1.5 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Pg screw connection	Pg16R
Supply voltage	24 V DC ( $U_{S1}$ )
Supply voltage range	20 V DC ... 30 V DC (including ripple)
Supply current	typ. 0.11 A (at $U_{S1} = 24$ V; plus current of digital inputs/outputs)
Ripple	Permissible ripple 3.6 V <sub>pp</sub> within the permissible voltage range
Max. current carrying capacity	16 A
Derating	from 30 °C 0.1A/K

#### Electrical isolation/isolation of the voltage ranges

Test voltage: Incoming/outgoing remote bus	350 V AC, 50 Hz, 1 min
Test voltage: Remote bus / supply voltage $U_{S1}$	350 V AC, 50 Hz, 1 min

### Input data

#### Digital: Digital inputs

Number of inputs	4
Connection method	M12 connector
Connection technology	3-, 4-conductor
Number of positions	5
Input voltage	24 V DC ( $U_{S1}$ )
Input voltage range "0" signal	-30 V ... 5 V (binary "0")
Input voltage range "1" signal	13 V ... 30 V (binary "1")
Filter time	3 ms
Typical input current per channel	approx. 5 mA (for $U_{S1} = 24$ V)

## Interfaces

### INTERBUS

Connection method	MINI COMBICON
Designation connection point	X30 (IN) and X31 (OUT)
Number of positions	10
Permissible conductor cross-section	max. 1.5 mm <sup>2</sup>

## Signaling

### Diagnostic messages

Diagnostics	Mains failure, phase failure
Message	Error message in the diagnostic code (bus) and display via the LED ERR on the module

### Diagnostic messages

Diagnostics	Motor connector not plugged in, motor temperature exceeded, thermistor line short-circuited
Message	Error message in the diagnostic code (bus) and display via the LED ERR on the module

### Diagnostic messages

Diagnostics	Sensor supply failure
Message	Error message in the diagnostic code (bus) and display via the LED ERR on the module

### Diagnostic messages

Diagnostics	Overcurrent
Message	Error message in the diagnostic code (bus) and display via the LED ERR on the module

### Diagnostic messages

Diagnostics	Output stage cannot be controlled
Message	Error message in the diagnostic code (bus) and display via the LED ERR on the module

### Diagnostic messages

Diagnostics	Short-circuit or overload of the digital outputs
Message	Message in the diagnostic code

# IBS IP 400 ME-ELR R-3A DI4 - Motor starter



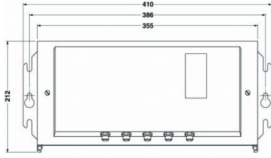
2732884

<https://www.phoenixcontact.com/us/products/2732884>

## Diagnostic messages

Diagnostics	Module error during self test
Message	Message to the master

## Dimensions

Dimensional drawing	
Width	355 mm
Height	180 mm
Depth	100 mm
Drill hole spacing	386 mm
Note on dimensions	Module electronics without lower part

## Material specifications

Housing material	Sheet-steel housing, IP54
------------------	---------------------------

## Mechanical properties

### Technical data

Drill hole spacing	386 mm
--------------------	--------

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP54
Ambient temperature (operation)	-20 °C ... 55 °C (non-condensing)
Note	Notes on operation Line protection for the network supply line, max. 20 A. Observe derating of the POWER-COMBICON connector Notes on operation Permitted network type TN network, TT network, IT network available on request
Air pressure (operation)	86 kPa ... 106 kPa (up to 2000 m above sea level)
Air pressure (storage/transport)	86 kPa ... 106 kPa (up to 2000 m above sea level)
Ambient temperature (storage/transport)	-25 °C ... 75 °C
Permissible humidity (operation)	4 % ... 100 % (non-condensing)
Permissible humidity (storage/transport)	75 % (slight temporary condensation may sometimes appear on the housing)

### Mechanical test

Shock in accordance with EN 60068-2-27/IEC 60068-2-27	10g, evaluation criterion 1
-------------------------------------------------------	-----------------------------

# IBS IP 400 ME-ELR R-3A DI4 - Motor starter



2732884

<https://www.phoenixcontact.com/us/products/2732884>

Vibration resistance in accordance with EN 60068-2-6/IEC 60068-2-6	2g, evaluation criterion 1
--------------------------------------------------------------------	----------------------------

## Standards and regulations

Protection class	I (IEC 61140, EN 61140, VDE 0140-1)
Noise emission	Test of emitted interference, housing, in acc. with EN 50081-2:1993 EN 55011:1991 class A

## Air clearances and creepage distances

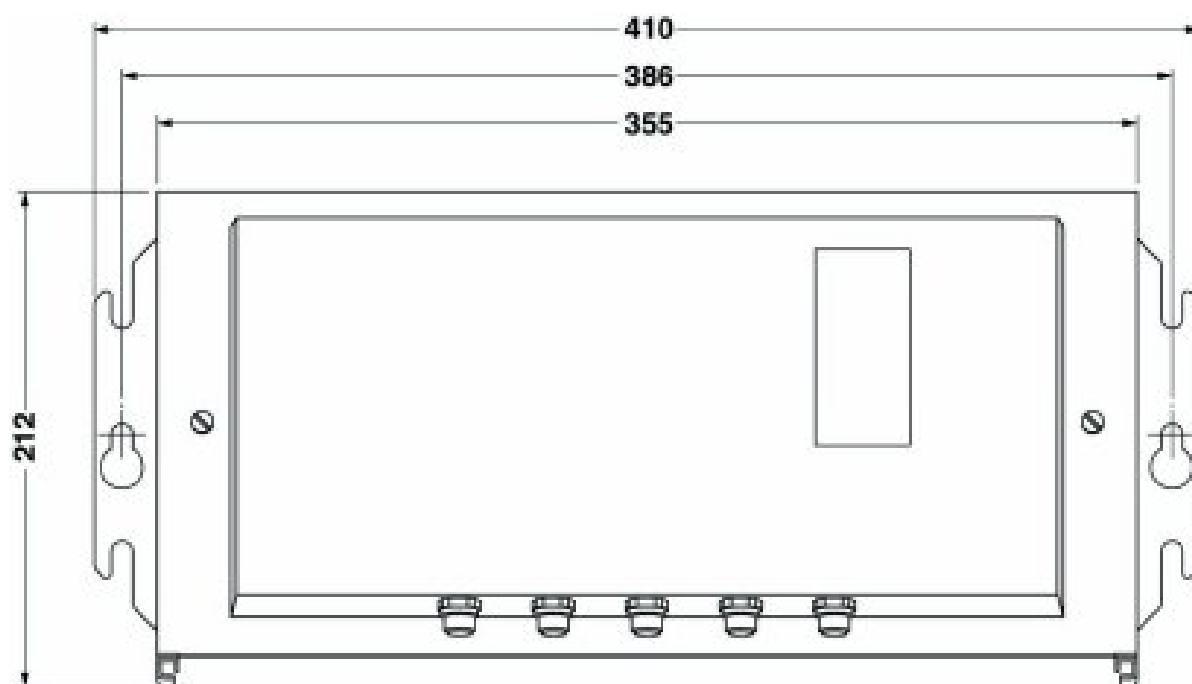
Air clearances and creepage distances	in accordance with EN 50178: 1998
---------------------------------------	-----------------------------------

## Mounting

Mounting type	Panel mounting
---------------	----------------

## Drawings

Dimensional drawing



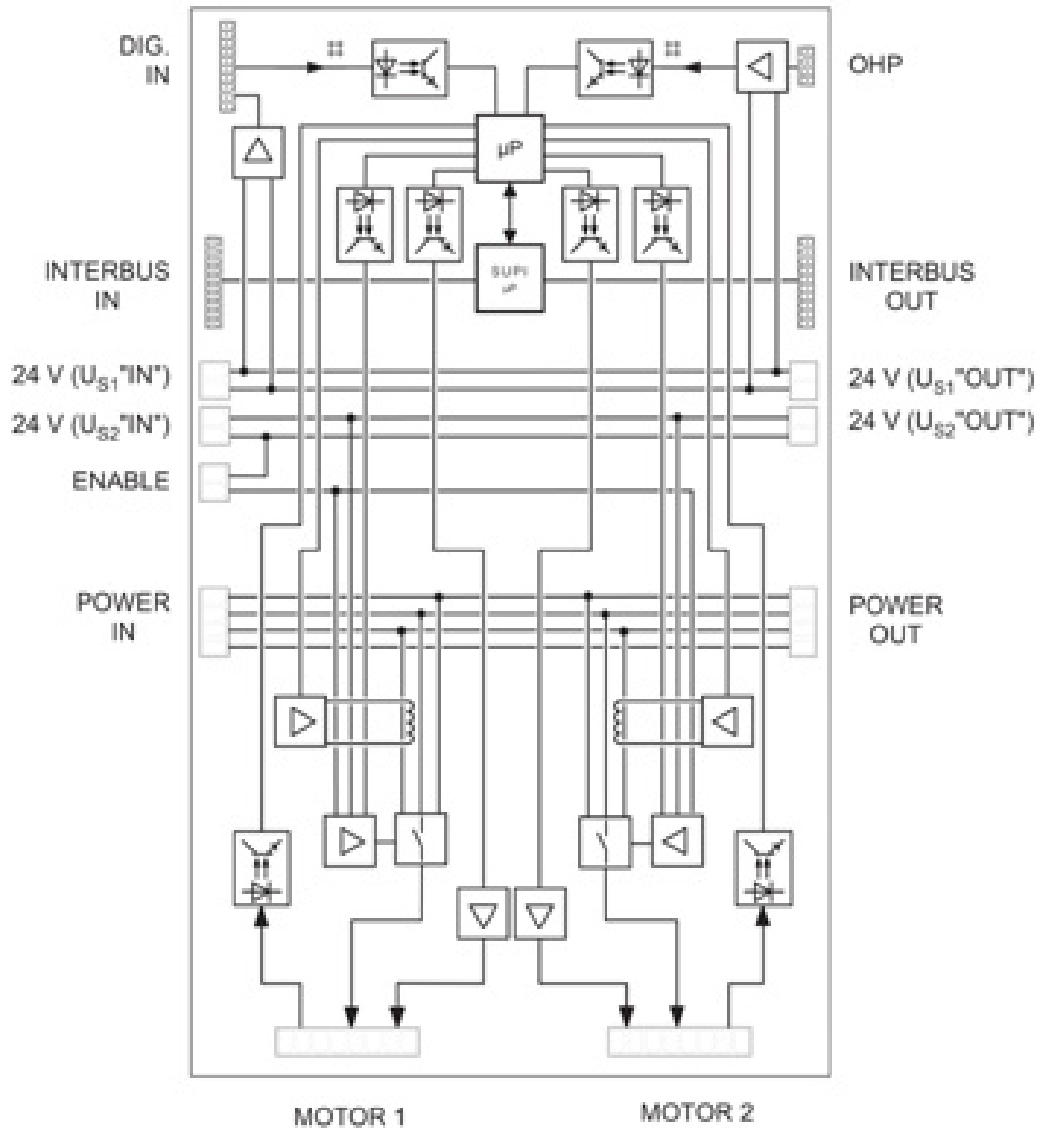
The figure shows the product with lower part of the housing

# IBS IP 400 ME-ELR R-3A DI4 - Motor starter

2732884

<https://www.phoenixcontact.com/us/products/2732884>

Block diagram



2732884

<https://www.phoenixcontact.com/us/products/2732884>

## Environmental product compliance

### EU RoHS

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

### China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

### EU REACH SVHC

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

Phoenix Contact 2026 © - 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)