

IBS IP 400 ME-VFD 1-3A DI4F - Frequency inverter



2836955

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1-channel variable frequency drive, with 4 digital inputs, sheet steel housing, electronic module without lower part of housing, IP65/67 protection

Product description

>>! Spare product (module electronics) for the motor starter: 28 36 955 IBS IP 400 ELR R-3A DI 4/4 without housing lower part 27 32 868 IBS IP 400 MBH-F - 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, reliably connected with a motor connection line of up to 5 meters.

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	2836955
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	NULL
Product key	DRFAAB
GTIN	4017918161439
Weight per piece (including packing)	4,242.5 g
Weight per piece (excluding packing)	4,242.5 g
Customs tariff number	85044090
Country of origin	DE

Technical data

Notes

Utilization restriction

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

Type	Stand-alone
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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 ² ... 4 mm ²
Pg screw connection	Pg11
Supply voltage	24 V DC (U_{S1})
Supply voltage range	20 V DC ... 30 V DC (including ripple)
Supply current	typ. 300 mA (at $U_{S1} = 24$ V; plus current of digital inputs/outputs)
Ripple	Permissible ripple 3.6 V _{pp} within the permissible voltage range
Max. current carrying capacity	16 A
Derating	Above 30°C: 0.3 A/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	MINI COMBICON
Connection technology	3-, 4-conductor
Number of positions	10
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

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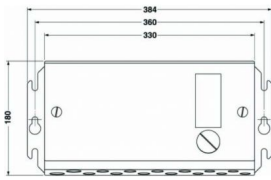


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Connection method	MINI COMBICON
Designation connection point	X30 (IN) and X31 (OUT)
Number of positions	10
Permissible conductor cross-section	max. 1.5 mm ² (flexible)

Dimensions

Dimensional drawing	
Width	355 mm
Height	180 mm
Depth	150 mm
Drill hole spacing	360 mm
Note on dimensions	Module electronics without lower part

Mechanical properties

Technical data

Drill hole spacing	360 mm
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Environmental and real-life conditions

Ambient conditions

Degree of protection	IP67
Ambient temperature (operation)	-15 °C ... 40 °C (Without derating)
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 (Temperature change 10 K/h)
Permissible humidity (operation)	4 % ... 100 % (non-condensing)
Permissible humidity (storage/transport)	75 % (slight temporary condensation may sometimes appear on the housing)

Standards and regulations

Protection class	I (IEC 61140, EN 61140, VDE 0140-1)
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Air clearances and creepage distances

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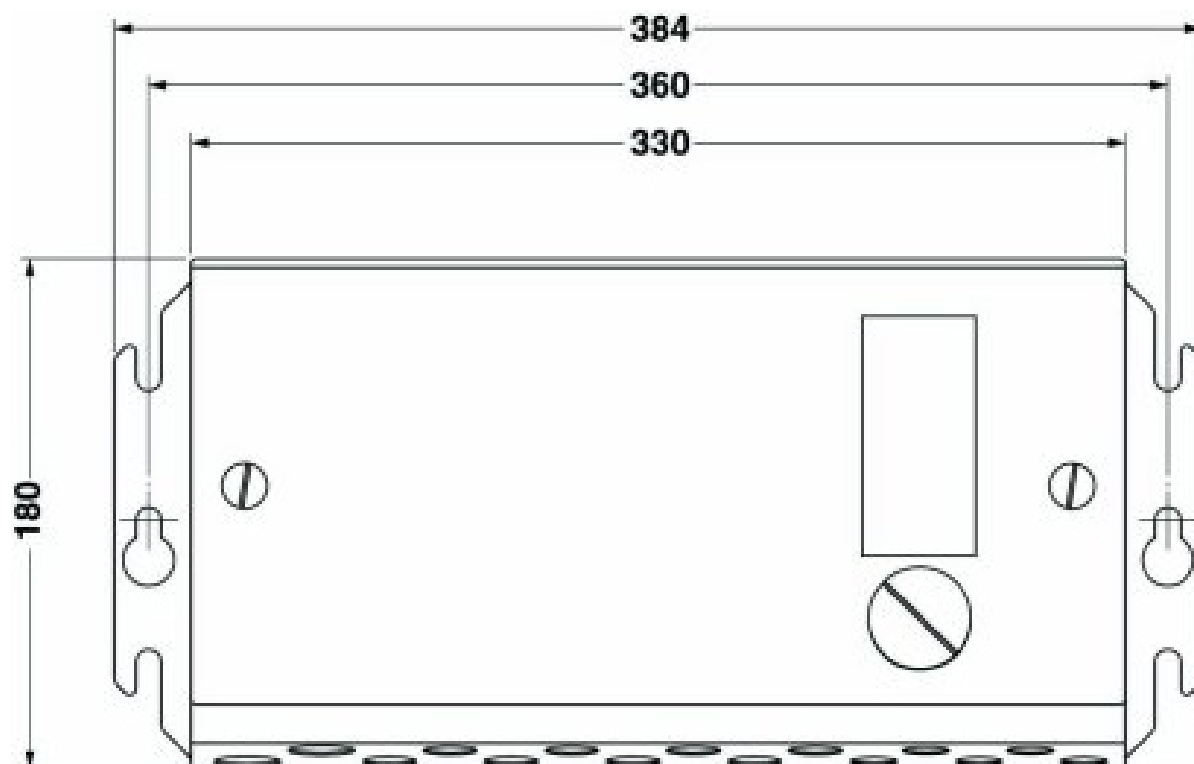


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Drawings

Dimensional drawing



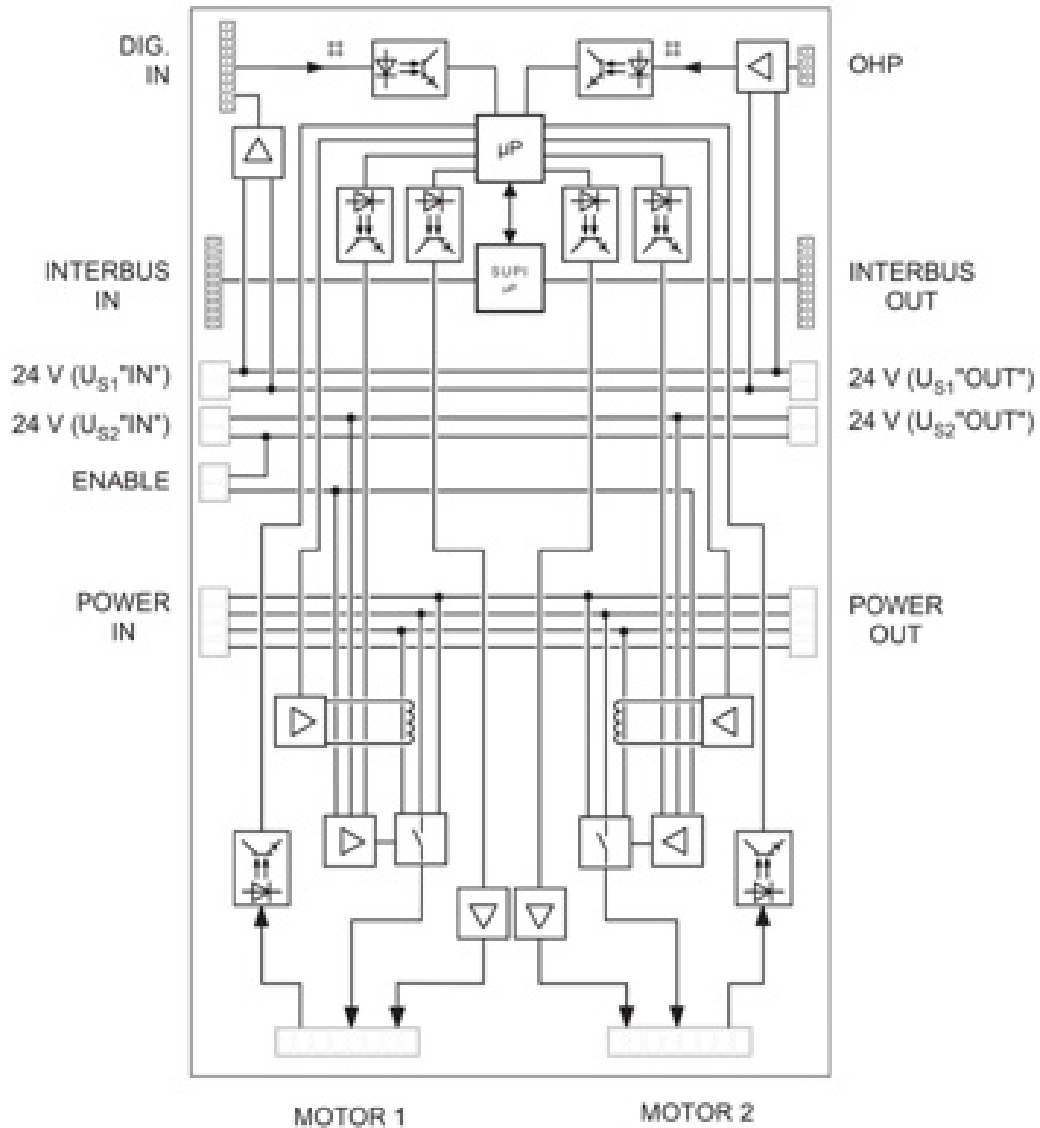
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Block diagram



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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-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)
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