Motor reactor
MDB

BLOCK Website

General Data

Rated voltage 3 x 400 Vac
Rated current 6.3 - 176 A
For motor rated output 2.2 - 90 kW
For switching frequencies of 2 to 6 kHz
Rated frequency from 0 to 120 Hz
Insulation class F
Maximum ambient temperature 40 °C
Degree of protection IP 00

Advantages

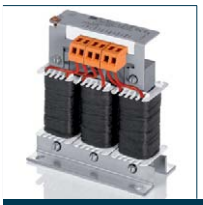
High damping of edge steepness
High damping of inverter switching frequency
Reduction of leakage current
Long shielded cable lengths possible
High efficiency
Very good corrosion protection and low noise thanks to BLOCKIMPEX vacuum impregnation

Standards

Output reactor for frequency inverter
DIN EN 61558-2-20, IEC 61558-2-20

Approvals

EAC



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Typ	MDB 400/6,3	MDB 400/9,4	MDB 400/13	MDB 400/16	MDB 400/24	MDB 400/30
Operating data						
Rated voltage	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac
Voltage range	0 - 3 x 500 Vac	0 - 3 x 500 Vac	0 - 3 x 500 Vac	0 - 3 x 500 Vac	0 - 3 x 500 Vac	0 - 3 x 500 Vac
Rated current	6.30 A	9.40 A	13.00 A	16.00 A	24.00 A	30.00 A
for motor rated output approx.	2.20 kW	4.00 kW	5.50 kW	7.50 kW	11.00 kW	15.00 kW
Inductivity	2.000 mH	0.900 mH	0.900 mH	0.900 mH	0.450 mH	0.450 mH
Rated frequency	0 - 120 Hz	0 - 120 Hz	0 - 120 Hz	0 - 120 Hz	0 - 120 Hz	0 - 120 Hz
Switching frequency	2 - 6 kHz	2 - 6 kHz	2 - 6 kHz	2 - 6 kHz	2 - 6 kHz	2 - 6 kHz
Environment						
Ambient temperature max.	40 °C	40 °C	40 °C	40 °C	40 °C	40 °C
Safety and protection						
Type	Open type	Open type	Open type	Open type	Open type	Open type
Class of Insulation System	F	F	F	F	F	F
Protection index	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00
Safety class (prepared)	I	I	I	I	I	I
Test voltage	2500 Vac, 50 Hz	2500 Vac, 50 Hz	2500 Vac, 50 Hz	2500 Vac, 50 Hz	2500 Vac, 50 Hz	2500 Vac, 50 Hz
Order numbers						
Order Number	**MDB 400/6,3**	**MDB 400/9,4**	**MDB 400/13**	**MDB 400/16**	**MDB 400/24**	**MDB 400/30**
Terminal and mounting						
Fixing method	Fixing rail	Fixing rail	Fixing rail	Fixing rail	Fixing rail	Fixing rail
Fixing screws	M5	M5	M5	M6	M6	M6
Connections phase	Screw clamp, 2.5 mm²	Screw clamp, 2.5 mm²	Screw clamp, 4 mm²	Screw clamp, 10 mm²	Screw clamp, 10 mm²	Flat copper
Connections PE	Bolt, M4	Bolt, M4	Bolt, M4	Bolt, M4	Bolt, M4	Bolt, M6
Measures and weights						
Weight	4.50 kg	4.50 kg	5.50 kg	10.00 kg	10.00 kg	11.20 kg
Dimension picture (in mm)	❶	❶	❶	❶	❶	❷
A	155	155	155	190	190	210
B	70	70	85	115	115	130
C	160	160	160	193	193	-
D	130	130	130	170	170	175
E	55	55	70	75	75	95
F	128	128	128	155	155	182
G	75	75	90	100	100	115
H	10	10	10	12.5	12.5	10

Dimension pictures

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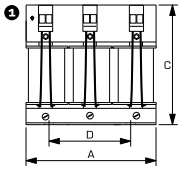

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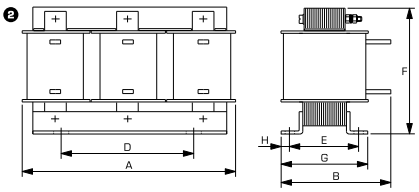

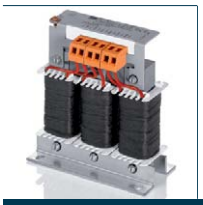

Motor reactor
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Typ	MDB 400/39	MDB 400/46	MDB 400/61	MDB 400/72	MDB 400/91	MDB 400/110
Electrical data						
Operating data						
Rated voltage	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac	3 x 400 Vac
Voltage range	0 - 3 x 500 Vac	0 - 3 x 500 Vac	0 - 3 x 500 Vac	0 - 3 x 500 Vac	0 - 3 x 500 Vac	0 - 3 x 500 Vac
Rated current	39.00 A	46.00 A	61.00 A	72.00 A	91.00 A	110.00 A
for motor rated output approx.	18.50 kW	22.00 kW	30.00 kW	37.00 kW	45.00 kW	55.00 kW
Inductivity	0.300 mH	0.150 mH	0.100 mH	0.050 mH	0.050 mH	0.050 mH
Rated frequency	0 - 120 Hz	0 - 120 Hz	0 - 120 Hz	0 - 120 Hz	0 - 120 Hz	0 - 120 Hz
Switching frequency	2 - 6 kHz	2 - 6 kHz	2 - 6 kHz	2 - 6 kHz	2 - 6 kHz	2 - 6 kHz
Environment						
Ambient temperature max.	40 °C	40 °C	40 °C	40 °C	40 °C	40 °C
Safety and protection						
Type	Open type	Open type	Open type	Open type	Open type	Open type
Class of Insulation System	F	F	F	F	F	F
Protection index	IP 00	IP 00	IP 00	IP 00	IP 00	IP 00
Safety class (prepared)	I	I	I	I	I	I
Test voltage	2500 Vac, 50 Hz	2500 Vac, 50 Hz	2500 Vac, 50 Hz	2500 Vac, 50 Hz	2500 Vac, 50 Hz	2500 Vac, 50 Hz
Order numbers						
Order Number	**MDB 400/39**	**MDB 400/46**	**MDB 400/61**	**MDB 400/72**	**MDB 400/91**	**MDB 400/110**
Mechanical data						
Terminal and mounting						
Fixing method	Fixing rail	Fixing rail	Fixing rail	Fixing rail	Fixing rail	Fixing rail
Fixing screws	M6	M6	M6	M6	M6	M8
Connections phase	Flat copper	Flat copper	Flat copper	Flat copper	Flat copper	Flat copper
Connections PE	Bolt, M6	Bolt, M6	Bolt, M6	Bolt, M6	Bolt, M6	Bolt, M8
Measures and weights						
Weight	11.30 kg	10.30 kg	10.30 kg	10.30 kg	10.30 kg	20.00 kg
Dimension picture (in mm)	❷	❷	❷	❷	❷	❷
A	210	210	210	210	210	240
B	130	120	120	120	120	131
C	-	-	-	-	-	-
D	175	175	175	175	175	190
E	95	85	85	85	85	95
F	182	182	182	182	182	205
G	115	105	105	105	105	121
H	10	10	10	10	10	13

Dimension pictures

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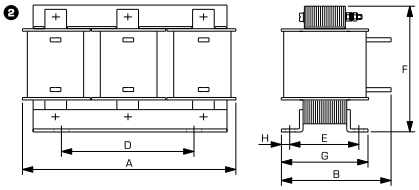

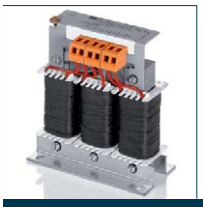

Motor reactor
MDB

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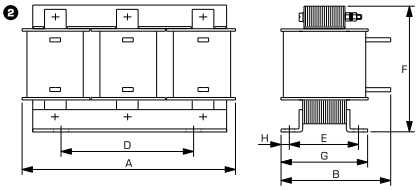
Electrical data

Typ	MDB 400/150	MDB 400/176
Operating data		
Rated voltage	3 x 400 Vac	3 x 400 Vac
Voltage range	0 - 3 x 500 Vac	0 - 3 x 500 Vac
Rated current	150.00 A	176.00 A
for motor rated output approx.	75.00 kW	90.00 kW
Inductivity	0.050 mH	0.050 mH
Rated frequency	0 - 120 Hz	0 - 120 Hz
Switching frequency	2 - 6 kHz	2 - 6 kHz
Environment		
Ambient temperature max.	40 °C	40 °C
Safety and protection		
Type	Open type	Open type
Class of Insulation System	F	F
Protection index	IP 00	IP 00
Safety class (prepared)	I	I
Test voltage	2500 Vac, 50 Hz	2500 Vac, 50 Hz
Order numbers		
Order Number	**MDB 400/150**	**MDB 400/176**

Mechanical data

Terminal and mounting		
Fixing method	Fixing rail	Fixing rail
Fixing screws	M8	M8
Connections phase	Flat copper	Flat copper
Connections PE	Bolt, M8	Bolt, M8
Measures and weights		
Weight	24.30 kg	27.50 kg
Dimension picture (in mm)	❷	❷
A	240	240
B	141	165
C	-	-
D	190	190
E	105	129
F	205	205
G	131	155
H	13	13

Dimension pictures

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