

Motor reactor **MR3**



General Data

Rated voltage 3 x 400 Vac
Rated current 2.5 - 61.0 A
For motor rated output 0.75 - 30 kW
For clock frequencies of 3 to 8 kHz
Rated frequency from 0 to 50 Hz
Inductance 2.55 - 0.10 mH
Insulation class B
Maximum ambient temperature 40 °C

Advantages

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

Applications

Motor reactor for the limitation of the voltage peaks damaging to the motor insulation (du/dt).

Standards

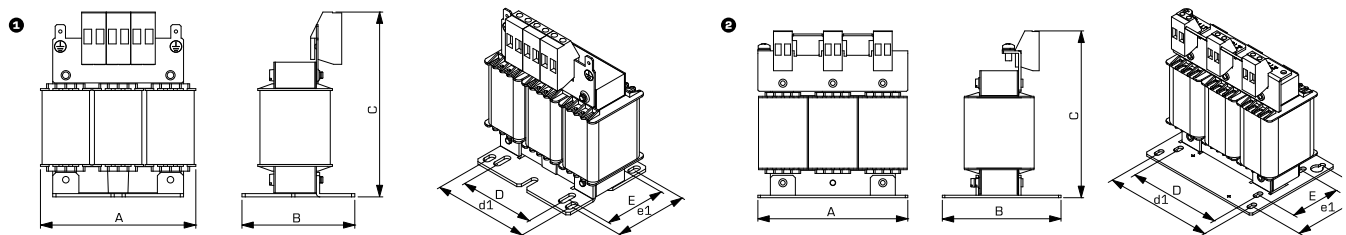
Output reactor for frequency converter
DIN EN 61558-2-20, IEC 61558-2-20



Motor reactor MR3

Type	MR3 400/2,5	MR3 400/4	MR3 400/6	MR3 400/8	MR3 400/10	MR3 400/13
Electrical data						
<u>Operating data</u>						
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 690 Vac	0 - 3 x 690 Vac	0 - 3 x 690 Vac	0 - 3 x 690 Vac	0 - 3 x 690 Vac	0 - 3 x 690 Vac
Rated current	2.5 A	4 A	6 A	8 A	10 A	13 A
for motor rated output approx.	0.75 kW	1.10 kW	2.20 kW	4.00 kW	4.00 kW	5.50 kW
Inductivity	2.550 mH	1.590 mH	1.060 mH	0.800 mH	0.640 mH	0.490 mH
Rated frequency	0 - 50 Hz	0 - 50 Hz	0 - 50 Hz	0 - 50 Hz	0 - 50 Hz	0 - 50 Hz
Switching frequency	3 - 8 kHz	3 - 8 kHz	3 - 8 kHz	3 - 8 kHz	3 - 8 kHz	3 - 8 kHz
<u>Environment</u>						
Ambient temperature max.	40 °C	40 °C	40 °C	40 °C	40 °C	40 °C
<u>Safety and protection</u>						
Type	open type	open type	open type	open type	open type	open type
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	4000 Vac, 50 Hz	4000 Vac, 50 Hz	4000 Vac, 50 Hz	4000 Vac, 50 Hz	4000 Vac, 50 Hz	4000 Vac, 50 Hz
Class of Insulation System	VDE=B, UL=class 130	VDE=B, UL=class 130	VDE=B, UL=class 130	VDE=B, UL=class 130	VDE=B, UL=class 130	VDE=B, UL=class 130
<u>Order numbers</u>						
Order Number	MR3 400/2,5	MR3 400/4	MR3 400/6	MR3 400/8	MR3 400/10	MR3 400/13
30 <u>Terminal and mounting</u>						
Fixing method	Fixing rail	Fixing rail	Fixing rail	Fixing rail	Fixing rail	Fixing rail
Fixing screws	M4	M4	M4	M4	M4	M4
Connections phase/N	Screw clamp, 4 mm ²	Screw clamp, 4 mm ²	Screw clamp, 4 mm ²	Screw clamp, 4 mm ²	Screw clamp, 4 mm ²	Screw clamp, 4 mm ²
Connections PE	Bolt, M4	Bolt, M4	Bolt, M4	Bolt, M4	Bolt, M4	Bolt, M5
<u>Measures and weights</u>						
Weight	0.70 kg	0.75 kg	0.90 kg	0.95 kg	1.70 kg	1.80 kg
Dimension picture (in mm)	①	①	①	①	②	②
A	78	78	96	96	120	120
B	63	63	69	69	85	85
C	100	100	117	117	140	140
D	50	50	56	56	90	90
d1	65	65	71	71	105	105
d2	-	-	-	-	-	-
E	42	42	42	42	35	35
e1	47	47	47	47	68	68
e2	-	-	-	-	-	-

Dimension pictures



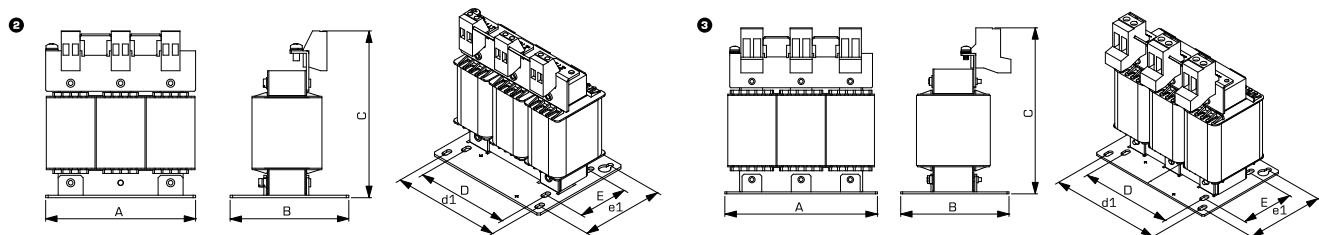
MOTOR-SIDE PSUPPRESSION/ MOTOR REACTORS



Motor reactor MR3

		MR3 400/18	MR3 400/24	MR3 400/30	MR3 400/37	MR3 400/42	MR3 400/48	
Electrical data	Type	MR3 400/18 MR3 400/24 MR3 400/30 MR3 400/37 MR3 400/42 MR3 400/48						
	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 690 Vac	0 - 3 x 690 Vac	0 - 3 x 690 Vac	0 - 3 x 690 Vac	0 - 3 x 690 Vac	0 - 3 x 690 Vac	
	Rated current	18 A	24 A	30 A	37 A	42 A	48 A	
	for motor rated output approx.	7.50 kW	11.00 kW	15.00 kW	18.50 kW	22.00 kW	22.00 kW	
	Inductivity	0.350 mH	0.270 mH	0.210 mH	0.170 mH	0.150 mH	0.130 mH	
	Rated frequency	0 - 50 Hz	0 - 50 Hz	0 - 50 Hz	0 - 50 Hz	0 - 50 Hz	0 - 50 Hz	
	Switching frequency	3 - 8 kHz	3 - 8 kHz	3 - 8 kHz	3 - 8 kHz	3 - 8 kHz	3 - 8 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		
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	4000 Vac, 50 Hz	4000 Vac, 50 Hz	4000 Vac, 50 Hz	4000 Vac, 50 Hz	4000 Vac, 50 Hz	4000 Vac, 50 Hz		
Class of Insulation System	VDE=B, UL=class 130	VDE=B, UL=class 130	VDE=B, UL=class 130	VDE=B, UL=class 130	VDE=B, UL=class 130	VDE=B, UL=class 130		
Order numbers								
Order Number	MR3 400/18	MR3 400/24	MR3 400/30	MR3 400/37	MR3 400/42	MR3 400/48		
Mechanical data	Terminal and mounting							
	Fixing method	Fixing rail	Fixing rail	Fixing rail	Fixing rail	Fixing rail	Fixing rail	
	Fixing screws	M4	M4	M5	M5	M5	M5	
	Connections phase/N	Screw clamp, 4 mm ²	Screw clamp, 4 mm ²	Screw clamp, 4 mm ²	Screw clamp, 4 mm ²	Screw clamp, 10 mm ²	Screw clamp, 16 mm ²	
	Connections PE	Bolt, M5	Bolt, M5	Bolt, M5	Bolt, M5	Bolt, M5	Bolt, M5	
	Measures and weights							
	Weight	2.50 kg	2.60 kg	3.50 kg	3.60 kg	5.20 kg	5.80 kg	
	Dimension picture (in mm)	2	2	3	3	3	4	
	A	120	120	155	155	155	185	
	B	95	95	95	95	110	102	
C	140	140	162	162	177	210		
D	90	90	113	113	113	90		
d1	105	105	135	135	135	136		
d2	-	-	-	-	-	-		
E	45	45	45	45	60	74		
e1	78	78	78	78	93	50		
e2	-	-	-	-	-	-		

Dimension pictures

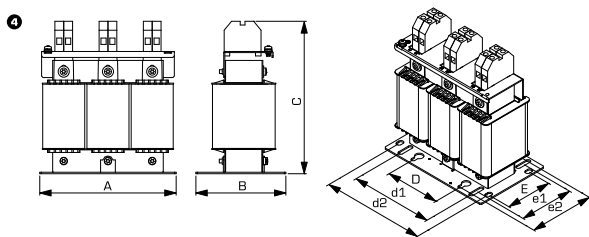




Motor reactor
MR3

Electrical data	Type	MR3 400/61
	Operating data	
	Rated voltage	3 x 400 Vac
	Voltage range	0 - 3 x 690 Vac
	Rated current	60 A
	for motor rated output approx.	30.00 kW
	Inductivity	0.100 mH
	Rated frequency	0 - 50 Hz
	Switching frequency	3 - 8 kHz
	Environment	
Ambient temperature max.	40 °C	
Safety and protection		
Type	open type	
Protection index	IP 00	
Safety class (prepared)	I	
Test voltage	4000 Vac, 50 Hz	
Class of Insulation System	VDE=B, UL=class 130	
Order numbers		
Order Number	MR3 400/61	
Mechanical data	Terminal and mounting	
	Fixing method	Fixing rail
	Fixing screws	M6
	Connections phase/N	Screw clamp, 16 mm ²
	Connections PE	Bolt, M6
	Measures and weights	
	Weight	7.40 kg
	Dimension picture (in mm)	
	A	185
	B	112
C	210	
D	90	
d1	136	
d2	-	
E	62	
e1	91	
e2	-	

Dimension pictures



3.1

3.2

3.3

3.4

3.5