

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 switching 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 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

Applications

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

Standards



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

Approvals





Motor reactor MR3



Typ	MR3 400/2,5	MR3 400/4	MR3 400/6	MR3 400/8	MR3 400/10	MR3 400/13
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 - 690 Vac	0 - 690 Vac	0 - 690 Vac	0 - 690 Vac	0 - 690 Vac	0 - 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	3.00 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
Approvals						
Approvals	cURus	cURus	cURus	cURus	cURus	cURus
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=F, UL=class 130	VDE=F, UL=class 130
Order numbers						
Order Number	MR3 400/2,5	MR3 400/4	MR3 400/6	MR3 400/8	MR3 400/10	MR3 400/13

Typ	MR3 400/18	MR3 400/24	MR3 400/30	MR3 400/37	MR3 400/42	MR3 400/48
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 - 690 Vac	0 - 690 Vac	0 - 690 Vac	0 - 690 Vac	0 - 690 Vac	0 - 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
Approvals						
Approvals	cURus	cURus	cURus	cURus	cURus	cURus
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=F, UL=class 130	VDE=F, UL=class 130	VDE=F, UL=class 130	VDE=F, UL=class 130	VDE=F, UL=class 130	VDE=F, 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



Motor reactor MR3



Electrical data	Typ	MR3 400/61
	Operating data	
	Rated voltage	3 x 400 Vac
	Voltage range	0 - 690 Vac
	Rated current	61 A
	for motor rated output approx.	30.00 kW
	Inductivity	0.100 mH
	Rated frequency	0 - 50 Hz
	Switching frequency	3 - 8 kHz
	Approvals	
	Approvals	cURus
	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=F, UL=class 130
	Order numbers	
Order Number	MR3 400/61	



Motor reactor
MR3



Typ	Fixing method	Fixing screws	Connections phase	Connections PE	Weight	Dimension picture (in mm)	Dimension picture (in mm)										
							A	B	C	D	d1	d2	E	e1	e2	F	
MR3 400/2,5	Fixing rail	M4	Screw clamp, 4 mm ²	Bolt, M4	0.80 kg	1	78	63	100	50	65	-	42	47	-	-	
MR3 400/4	Fixing rail	M4	Screw clamp, 4 mm ²	Bolt, M4	0.90 kg	1	77	63	100	50	65	-	42	47	-	-	
MR3 400/6	Fixing rail	M4	Screw clamp, 4 mm ²	Bolt, M4	1.10 kg	1	95	60	113.7	56	71	-	38	45	-	-	
MR3 400/8	Fixing rail	M4	Screw clamp, 4 mm ²	Bolt, M4	1.20 kg	1	189.4	120	229.6	56	71	-	38	45	-	-	
MR3 400/10	Fixing rail	M4	Screw clamp, 4 mm ²	Bolt, M4	1.80 kg	2	240	170	273	90	105	-	39	63.5	-	-	
MR3 400/13	Fixing rail	M4	Screw clamp, 4 mm ²	Bolt, M5	1.90 kg	2	240	170	276.8	90	105	-	39	63.5	-	-	
MR3 400/18	Fixing rail	M4	Screw clamp, 4 mm ²	Bolt, M5	2.10 kg	2	240	190	274.6	49	73.5	-	45	78	-	-	
MR3 400/24	Fixing rail	M4	Screw clamp, 4 mm ²	Bolt, M5	2.20 kg	2	120	95	142	90	105	-	49	73.5	-	-	
MR3 400/30	Fixing rail	M5	Screw clamp, 4 mm ²	Bolt, M5	3.50 kg	3	155	95	170	113	135	-	50	72.4	-	-	
MR3 400/37	Fixing rail	M5	Screw clamp, 4 mm ²	Bolt, M5	3.60 kg	3	310	190	335.4	113	135	-	50	72.4	-	-	
MR3 400/42	Fixing rail	M5	Screw clamp, 10 mm ²	Bolt, M5	6.50 kg	3	155	110	170	113	135	-	65	87.4	-	-	
MR3 400/48	Fixing rail	M5	Screw clamp, 16 mm ²	Bolt, M5	6.50 kg	4	185	100	211	136	170	-	70	57.5	-	-	
MR3 400/61	Fixing rail	M6	Screw clamp, 16 mm ²	Bolt, M6	7.80 kg	4	185	112	210	136	170	-	80	67	-	-	

Dimension pictures

