

Motor reactor MR3 400



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 at low construction volumes
Long shielded cable lengths possible
High efficiency
Very good corrosion protection and low noise thanks to vacuum impregnation

Applications

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

Standards

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

Approvals



Motor reactor MR3 400



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	3 x 0 - 500 Vac	3 x 0 - 500 Vac	3 x 0 - 500 Vac	3 x 0 - 500 Vac	3 x 0 - 500 Vac	3 x 0 - 500 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
Inductance	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
Insulation class	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	3 x 0 - 500 Vac	3 x 0 - 500 Vac	3 x 0 - 500 Vac	3 x 0 - 500 Vac	3 x 0 - 500 Vac	3 x 0 - 500 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
Inductance	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
Insulation class	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 400



	Typ	MR3 400/61
Electrical data	Operating data	
	Rated voltage	3 x 400 Vac
	Voltage range	3 x 0 - 500 Vac
	Rated current	61 A
	for motor rated output approx.	30.00 kW
	Inductance	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	
Insulation class	VDE=F, UL=class 130	
Order numbers		
Order Number	MR3 400/61	



Motor reactor
MR3 400



Typ	Terminals phase	Terminals PE	Fixing method	Fixing screws	Weight	Dimension picture (in mm)	Dimensions (mm)										
							A	B	C	D	d1	d2	E	e1	e2	F	
MR3 400/2,5	Screw clamp, 4 mm ²	Bolt, M4	Fixing rail	M4	0.8 kg	1	78	63	100	50	65	-	42	47	-	-	
MR3 400/4	Screw clamp, 4 mm ²	Bolt, M4	Fixing rail	M4	0.9 kg	1	77	63	100	50	65	-	42	47	-	-	
MR3 400/6	Screw clamp, 4 mm ²	Bolt, M4	Fixing rail	M4	1.1 kg	2	95	60	117	56	71	-	38	45	-	-	
MR3 400/8	Screw clamp, 4 mm ²	Bolt, M4	Fixing rail	M4	1.2 kg	2	95	60	117	56	71	-	38	45	-	-	
MR3 400/10	Screw clamp, 4 mm ²	Bolt, M4	Fixing rail	M4	1.8 kg	2	120	85	140	90	105	-	35	68	-	-	
MR3 400/13	Screw clamp, 4 mm ²	Bolt, M5	Fixing rail	M4	1.9 kg	2	240	170	276.8	90	105	-	39	63.5	-	-	
MR3 400/18	Screw clamp, 4 mm ²	Bolt, M5	Fixing rail	M4	2.1 kg	2	240	190	274.6	49	73.5	-	45	78	-	-	
MR3 400/24	Screw clamp, 4 mm ²	Bolt, M5	Fixing rail	M4	2.2 kg	2	120	95	142	90	105	-	49	73.5	-	-	
MR3 400/30	Screw clamp, 4 mm ²	Bolt, M5	Fixing rail	M5	3.5 kg	2	155	95	170	113	135	-	50	72.4	-	-	
MR3 400/37	Screw clamp, 4 mm ²	Bolt, M5	Fixing rail	M5	3.6 kg	3	310	190	335.4	113	135	-	50	72.4	-	-	
MR3 400/42	Screw clamp, 10 mm ²	Bolt, M5	Fixing rail	M5	6.5 kg	3	155	110	170	113	135	-	65	87.4	-	-	
MR3 400/48	Screw clamp, 16 mm ²	Bolt, M5	Fixing rail	M5	6.5 kg	4	185	100	211	136	170	-	70	57.5	-	-	
MR3 400/61	Screw clamp, 16 mm ²	Bolt, M6	Fixing rail	M6	7.8 kg	4	185	112	210	136	170	-	80	67	-	-	

Dimension pictures

