## FILTERKREISDROSSELN DETUNED REACTORS

# DROSSELN MATRIX



## Filter Reactors

### MATRIX SERIES

In today's industry, power and frequency converters are being abundantly used on the mains. This causes harmonic oscillations, which elevates losses, especially inside reactive power compensation capacitors.

Using MATRIX detuned reactors reduces the risk of resonant overcurrent to a minimum and offers adequate protection of capacitors used, as well as an improvement of voltage quality.



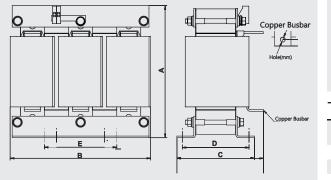
#### REACTOR FOR PFC HARMONIC FILTERING

- Iron core. High quality materials
- Air gaps multiple gaps. Design optimised to reduce total losses, low noises
- Terminal Copper bar connection. Small mechanical size
- Complete with over temperature, bi-metal 145°C, normally closed thermostat

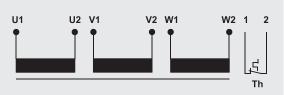
#### Technical specifications

Standards	IEC60289, IEC60076 EN61558-2-20, CE	Ambient temperature	- 20 +60 °C T60			
Design	Ironcore multible aircap, low loss	Protection class	IP00			
Design	core	Installation	Screw fastening			
Tolerance,	-3/+3% 3-phase average	Color	Light brown or black			
Inductance	o, concernage	Noise level	Max. 50 dB with rated harmonics			
Linearity/%	1,75 x In 95% inductance		currents at 1 m distance			
Insulation level	3 kVac					
Insulation level	5 KVdC	Optional	• Temperature switch 145 °C +-5%,			
Insulation temperature class	Class H - 180 °C		250 Vac (<6,3A)500 Vac (<2A) • Stranded wire outputs (flexible cable 110 °C)			
Cooling	Natural cooling		Lateral mounting			

#### Drawing & Dimension



#### Connection diagram



#### Terminals

Туре	Terminals	Clamp size	Tightening torque / Nm
10-25	Busbar/Blocks/ Cable Lugs	M6	10
30-50	Busbar	M8	10
60-100	Busbar	M10	10/16

Capacitor 230V	Matrix Series	Ith	А	В	С	D	E	Holes	Pw	Terminal	kg
Qc/V	Ordering Code	(A)	(mm)	(mm)	(mm)	(mm)	(mm)	(ømm)	(W)	Туре	(-5/ +10%)
P = 7% - 189Hz, S	ystem 3 Phase 200/210V	ac 50Hz									
10	AFR-0307008V200	29.6	205	210	115	75	116	10	45	Blocks/ Cable Lugs	9
15	AFR-0307013V200	44.4	205	235	135	82	116	10	65	Blocks/ Cable Lugs	11
20	AFR-0307017V200	59.2	220	240	145	87	116	10	70	Busbar	15
25	AFR-0307020V200	74.0	220	240	150	96	136	10	80	Busbar	17
30	AFR-0307025V200	88.8	220	240	155	100	136	10	90	Busbar	20
40	AFR-0307033V200	118.5	230	285	170	114	136	10	110	Busbar	24
50	AFR-0307040V200	148.1	265	295	170	122	170	10	125	Busbar	26
60	AFR-0307049V200	177.7	265	352	245	122	170	10	155	Busbar	37
75	AFR-0307061V200	221.0	280	352	245	168	300	16	170	Busbar	40
80	AFR-0307065V200	236.9	280	352	255	168	300	16	170	Busbar	42
90	AFR-0307073V200	266.4	280	355	265	180	300	16	180	Busbar	45
100	AFR-0307082V200	296.0	280	355	265	180	300	16	190	Busbar	45
Capacitor 440V Qc/V	Matrix Series Ordering Code	Ith (A)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Holes (ømm)	Pw (W)	Terminal Type	kg (-5/ +10%
	ystsem 3 Phase 400Vac 5	0Hz		<u> </u>	<u> </u>	1	<u> </u>				<u>I</u>
10	AFR-0307009V400	15.4	205	210	115	75	116	10	45	Blocks/ Cable Lugs	9
15	AFR-0307013V400	23.1	205	210	135	82	116	10	65	Blocks/ Cable Lugs	11
20	AFR-0307017V400	30.8	200	240	140	87	116	10	70	Busbar	15
25	AFR-0307022V400	38.5	220	240	150	96	136	10	80	Busbar	17
30	AFR-0307026V400	46.2	220	240	155	100	136	10	90	Busbar	20
40	AFR-0307035V400	61.7	220	240	170	114	136	10	110	Busbar	24
50	AFR-0307044V400	77.1	265	240	175	122	136	10	125	Busbar	26
60	AFR-0307053V400	92.5	265	240	170	122	136	10	155	Busbar	37
75	AFR-0307067V400	115.5	280	305	185	145	170	16	170	Busbar	40
		123.3	280	305	185	145	170	16	170	Busbar	42
80	AFR-03070717400			505	105	1-1-5	1/0				12
80 90	AFR-0307071V400			305	195	145	170	16	180	Bushar	45
90	AFR-0307080V400	138.6	280	305	195	145 145	170 170	16 16	180 190	Busbar Busbar	45 45
				305 305	195 200	145 145	170 170	16 16	180 190	Busbar Busbar	45 45
90 100 Capacitor 525V	AFR-0307080V400	138.6	280								
90 100 Capacitor 525V Qc/V	AFR-0307080V400 AFR-0307089V400 Matrix Series	138.6 154.1 Ith ( A )	280 280 A	305 B	200 C	145 D	170 E	16 Holes	190 Pw	Busbar Terminal	45 kg
90 100 Capacitor 525V Qc/V	AFR-0307080V400 AFR-0307089V400 Matrix Series Ordering Code	138.6 154.1 Ith ( A )	280 280 A	305 B	200 C	145 D	170 E	16 Holes	190 Pw	Busbar Terminal	45 kg
90 100 Capacitor 525V Qc/V P = 7% - 189Hz, S	AFR-0307080V400 AFR-0307089V400 Matrix Series Ordering Code ystem 3 Phase 400Vac 50	138.6 154.1 Ith (A)	280 280 A (mm)	305 B (mm)	200 C (mm)	145 D (mm)	170 E (mm)	16 Holes (ømm)	190 Pw (W)	Busbar Terminal Type	45 kg (-5/+10%
90 100 Capacitor 525V Qc/V P = 7% - 189Hz, S 10	AFR-0307080V400 AFR-0307089V400 Matrix Series Ordering Code ystem 3 Phase 400Vac 50 AFR-0307010V525	138.6 154.1 Ith (A) Hz 10.8 16.2	280 280 A (mm) 225	305 B (mm) 210	200 C (mm) 130	145 D (mm) 67	170 E (mm) 116	16 Holes (ømm) 10	190 Pw (W) 45	Busbar Terminal Type Blocks/ Cable Lugs	45 kg (-5/ +10%
90 100 Capacitor 525V Qc/V P = 7% - 189Hz, S 10 15 20	AFR-0307080V400 AFR-0307089V400 Matrix Series Ordering Code system 3 Phase 400Vac 50 AFR-0307010V525 AFR-0307015V525 AFR-0307020V525	138.6 154.1 Ith (A) Hz 10.8 16.2 21.7	280 280 A (mm) 225 225 195	305 B (mm) 210 210 210	200 C (mm) 130 135 135	145 D (mm) 67 74 78	170 E (mm) 116 116 116	16 Holes (ømm) 10 10 10	190 Pw (W) 45 55 65	Busbar Terminal Type Blocks/ Cable Lugs Blocks/ Cable Lugs Busbar	45 kg (-5/ +10% 9 11 11.5
90 100 Capacitor 525V <u>Qc/V</u> P = 7% - 189Hz, S 10 15 20 25	AFR-0307080V400 AFR-0307089V400 Matrix Series Ordering Code ystem 3 Phase 400Vac 50 AFR-0307010V525 AFR-0307015V525 AFR-0307025V525 AFR-0307025V525	138.6 154.1 Ith (A) Hz 10.8 16.2 21.7 25.9	280 280 A (mm) 225 225 195 195	305 B (mm) 210 210 210 210 210	200 C (mm) 130 135 135 140	145 D (mm) 67 74 78 88	170 E (mm) 116 116 116 116	16 Holes (ømm) 10 10 10 10	190 Pw (W) 45 55 65 70	Busbar Terminal Type Blocks/ Cable Lugs Blocks/ Cable Lugs Busbar Busbar	45 kg (-5/+10% 9 11 11.5 15
90 100 Capacitor 525V <u>Qc/V</u> P = 7% - 189Hz, S 10 15 20 25 30	AFR-0307080V400 AFR-0307089V400 Matrix Series Ordering Code ystem 3 Phase 400Vac 50 AFR-0307010V525 AFR-0307015V525 AFR-0307020V525 AFR-0307025V525 AFR-0307030V525	138.6 154.1 Ith (A) HZ 10.8 16.2 21.7 25.9 32.5	280 280 A (mm) 225 225 195 195 220	305 B (mm) 210 210 210 210 240	200 C (mm) 130 135 135 140 145	145 D (mm) 67 74 78 88 94	170 E (mm) 116 116 116 116 136	16 Holes (ømm) 10 10 10 10 10	190 Pw (W) 45 55 65 70 80	Busbar Terminal Type Blocks/ Cable Lugs Blocks/ Cable Lugs Busbar Busbar Busbar Busbar	45 kg (-5/+10% 9 11 11.5 15 15 17
90 100 Capacitor 525V Qc/V P = 7% - 189Hz, S 10 15 20 25 30 40	AFR-0307080V400 AFR-0307089V400 Matrix Series Ordering Code system 3 Phase 400Vac 50 AFR-0307010V525 AFR-0307015V525 AFR-0307020V525 AFR-0307025V525 AFR-0307030V525 AFR-0307040V525	138.6 154.1 Ith (A) HZ 10.8 16.2 21.7 25.9 32.5 43.3	280 280 (mm) 225 225 195 195 220 220	305 B (mm) 210 210 210 210 240 240	200 C (mm) 130 135 135 140 145 150	145 D (mm) 67 74 78 88 94 97	170 E (mm) 116 116 116 116 136 136	16 Holes (ømm) 10 10 10 10 10 10	190 Pw (W) 45 55 65 70 80 90	Busbar Terminal Type Blocks/ Cable Lugs Blocks/ Cable Lugs Busbar Busbar Busbar Busbar Busbar	45 kg (-5/+10%) 9 11 11.5 15 17 20
90 100 Capacitor 525V Qc/V P = 7% - 189Hz, S 10 15 20 25 30 40 50	AFR-0307080V400 AFR-0307089V400 Matrix Series Ordering Code system 3 Phase 400Vac 50 AFR-0307010V525 AFR-0307015V525 AFR-0307020V525 AFR-0307025V525 AFR-0307030V525 AFR-0307040V525 AFR-0307050V525	138.6 154.1 Ith (A) HZ 10.8 16.2 21.7 25.9 32.5 43.3 54.1	280 280 (mm) 225 225 195 220 220 220 220	305 B (mm) 210 210 210 210 240 240 240 240	200 C (mm) 130 135 135 140 145 150 165	145 D (mm) 67 74 78 88 94 97 110	170 E (mm) 116 116 116 116 136	16 Holes (ømm) 10 10 10 10 10 10 10 10	190 Pw (W) 45 55 65 70 80 90 110	Busbar Terminal Type Blocks/ Cable Lugs Blocks/ Cable Lugs Busbar Busbar Busbar Busbar Busbar Busbar Busbar	45 kg (-5/+10% 9 11 11.5 15 17 20 23
90 100 Capacitor 525V Qc/V P = 7% - 189Hz, S 10 15 20 25 30 40	AFR-0307080V400 AFR-0307089V400 Matrix Series Ordering Code system 3 Phase 400Vac 50 AFR-0307010V525 AFR-0307015V525 AFR-0307020V525 AFR-0307025V525 AFR-0307030V525 AFR-0307040V525	138.6 154.1 Ith (A) HZ 10.8 16.2 21.7 25.9 32.5 43.3 54.1 65.0	280 280 (mm) 225 225 195 220 220 220 220 220	305 B (mm) 210 210 210 210 240 240 240 240 240	200 C (mm) 130 135 135 140 145 150 165 170	145 D (mm) 67 74 78 88 94 97	170 E (mm) 116 116 116 136 136 136	16 Holes (ømm) 10 10 10 10 10 10 10 10 10	190 Pw (W) 45 55 65 70 80 90 110 125	Busbar Terminal Type Blocks/ Cable Lugs Blocks/ Cable Lugs Busbar Busbar Busbar Busbar Busbar	45 kg (-5/+10%) 9 11 11.5 15 17 20
90 100 Capacitor 525V Qc/V P = 7% - 189Hz, S 10 15 20 25 30 40 50 60 75	AFR-0307080V400 AFR-0307089V400 Matrix Series Ordering Code ystem 3 Phase 400Vac 50 AFR-0307010V525 AFR-0307015V525 AFR-0307020V525 AFR-0307020V525 AFR-0307040V525 AFR-0307040V525 AFR-0307060V525 AFR-0307060V525 AFR-0307075V525	138.6 154.1 Ith (A) HZ 10.8 16.2 21.7 25.9 32.5 43.3 54.1 65.0 77.7	280 280 (mm) 225 225 195 220 220 220 220 220 220 220	305 B (mm) 210 210 210 210 240 240 240 240 305	200 C (mm) 130 135 135 140 145 150 165 170 170	145 D (mm) 67 74 78 88 94 97 110 124 124	170 E (mm) 116 116 116 116 136 136 136 136 136 136	16 Holes (ømm) 10 10 10 10 10 10 10 10 10 10	190 Pw (W) 45 55 65 70 80 90 110 125 155	Busbar Terminal Type Blocks/ Cable Lugs Blocks/ Cable Lugs Busbar Busbar Busbar Busbar Busbar Busbar Busbar	45 kg (-5/+10% 9 11 11.5 15 17 20 23 25 36
90 100 Capacitor 525V Qc/V P = 7% - 189Hz, S 10 15 20 25 30 40 50 60	AFR-0307080V400 AFR-0307089V400 Matrix Series Ordering Code ystem 3 Phase 400Vac 50 AFR-0307010V525 AFR-0307020V525 AFR-0307020V525 AFR-0307030V525 AFR-0307040V525 AFR-0307060V525 AFR-0307060V525 AFR-030705V525 AFR-030705V525	138.6 154.1 Ith (A) Hz 10.8 16.2 21.7 25.9 32.5 43.3 54.1 65.0 77.7 86.6	280 280 (mm) 225 225 195 220 220 220 220 220 220 220 220 220	305 B (mm) 210 210 210 240 240 240 240 305 305	200 C (mm) 130 135 135 140 145 150 165 170 170 175	145 D (mm) 67 74 78 88 94 97 110 124 124 130	170 E (mm) 116 116 116 136 136 136 136 136 136 136	16 Holes (ømm) 10 10 10 10 10 10 10 10 10 10 10	190 Pw (W) 45 55 65 70 80 90 110 125 155 170	Busbar Terminal Type Blocks/ Cable Lugs Blocks/ Cable Lugs Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar	45 kg (-5/+10% 9 11 11.5 15 17 20 23 25 36 36 36
90 100 Capacitor 525V Qc/V P = 7% - 189Hz, S 10 15 20 25 30 40 50 60 75 80	AFR-0307080V400 AFR-0307089V400 Matrix Series Ordering Code ystem 3 Phase 400Vac 50 AFR-0307010V525 AFR-0307015V525 AFR-0307020V525 AFR-0307020V525 AFR-0307040V525 AFR-0307040V525 AFR-0307060V525 AFR-0307060V525 AFR-0307075V525	138.6 154.1 Ith (A) HZ 10.8 16.2 21.7 25.9 32.5 43.3 54.1 65.0 77.7	280 280 (mm) 225 225 195 220 220 220 220 220 220 220	305 B (mm) 210 210 210 210 240 240 240 240 305	200 C (mm) 130 135 135 140 145 150 165 170 170	145 D (mm) 67 74 78 88 94 97 110 124 124	170 E (mm) 116 116 116 116 136 136 136 136 136 136	16 Holes (ømm) 10 10 10 10 10 10 10 10 10 10	190 Pw (W) 45 55 65 70 80 90 110 125 155	Busbar Terminal Type Blocks/ Cable Lugs Blocks/ Cable Lugs Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar	45 kg (-5/+10% 9 11 11.5 15 17 20 23 25 36
90 100 Capacitor 525V Qc/V P = 7% - 189Hz, S 10 15 20 25 30 40 50 60 75 80 90	AFR-0307080V400 AFR-0307089V400 Matrix Series Ordering Code system 3 Phase 400Vac 50 AFR-0307010V525 AFR-0307015V525 AFR-0307020V525 AFR-0307025V525 AFR-0307030V525 AFR-0307060V525 AFR-0307060V525 AFR-0307075V525 AFR-0307080V525 AFR-0307090V525	138.6 154.1 Ith (A) HZ 10.8 16.2 21.7 25.9 32.5 43.3 54.1 65.0 77.7 86.6 97.5	280 280 225 225 195 220 220 220 220 220 220 220 220 220 22	305 B (mm) 210 210 210 240 240 240 240 305 305 305	200 C (mm) 130 135 135 140 145 150 165 170 175 175	145 D (mm) 67 74 78 88 94 97 110 124 124 130 130	170 E (mm) 116 116 116 136 136 136 136 136 136 170 170 170	16 Holes (ømm) 10 10 10 10 10 10 10 10 10 10 10 10	190 Pw (W) 45 55 65 70 80 90 110 125 155 170 175	Busbar Terminal Type Blocks/ Cable Lugs Blocks/ Cable Lugs Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar	45 kg (-5/+10% 9 111 11.5 15 17 20 23 25 36 36 36 41 41 41 kg
90 100 Capacitor 525V Qc/V P = 7% - 189Hz, S 10 15 20 25 30 40 50 60 75 80 90 100 Capacitor 525V Qc/V	AFR-0307080V400 AFR-0307089V400 Matrix Series Ordering Code system 3 Phase 400Vac 50 AFR-0307010V525 AFR-0307015V525 AFR-030702V525 AFR-030702V525 AFR-0307030V525 AFR-0307040V525 AFR-0307060V525 AFR-0307050V525 AFR-0307080V525 AFR-0307090V525 AFR-0307100V525 AFR-0307100V525 Matrix Series	138.6 154.1 Ith (A) Hz 10.8 16.2 21.7 25.9 32.5 43.3 54.1 65.0 77.7 86.6 97.5 108.3 Ith (A)	280 280 (mm) 225 225 195 220 220 220 220 220 220 220 220 220 22	305 B (mm) 210 210 210 240 240 240 240 305 305 305 305 305	200 C (mm) 130 135 135 140 145 150 165 170 175 175 175 175 2	145 D (mm) 67 74 78 88 94 97 110 124 124 124 130 130 130 D	170 E (mm) 116 116 116 136 136 136 136 136	16 (ømm) 10 10 10 10 10 10 10 10 10 10 10 10 10	190 Pw (W) 45 55 65 70 80 90 110 125 155 170 175 175 275	Busbar Terminal Type Blocks/ Cable Lugs Blocks/ Cable Lugs Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar	45 kg (-5/+10% 9 111 11.5 15 17 20 23 25 36 36 36 41 41 41 kg
90 100 Capacitor 525V $Q_{C}/V$ P = 7% - 189Hz, S 10 15 20 25 30 40 50 60 75 80 90 100 Capacitor 525V $Q_{C}/V$	AFR-0307080V400 AFR-0307089V400 Matrix Series Ordering Code system 3 Phase 400Vac 50 AFR-0307010V525 AFR-0307015V525 AFR-0307020V525 AFR-0307020V525 AFR-0307030V525 AFR-0307060V525 AFR-0307060V525 AFR-0307075V525 AFR-0307080V525 AFR-0307090V525 AFR-0307100V525 AFR-0307100V525	138.6 154.1 Ith (A) Hz 10.8 16.2 21.7 25.9 32.5 43.3 54.1 65.0 77.7 86.6 97.5 108.3 Ith (A)	280 280 (mm) 225 225 195 220 220 220 220 220 220 220 220 220 22	305 B (mm) 210 210 210 240 240 240 240 305 305 305 305 305	200 C (mm) 130 135 135 140 145 150 165 170 175 175 175 175 2	145 D (mm) 67 74 78 88 94 97 110 124 124 124 130 130 130 D	170 E (mm) 116 116 116 136 136 136 136 136	16 (ømm) 10 10 10 10 10 10 10 10 10 10 10 10 10	190 Pw (W) 45 55 65 70 80 90 110 125 155 170 175 175 275	Busbar Terminal Type Blocks/ Cable Lugs Blocks/ Cable Lugs Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar	45 kg (-5/+10% 9 11 11.5 15 17 20 23 25 36 36 36 41 41 41 kg
90 100 Capacitor 525V $Q_{C/V}$ P = 7% - 189Hz, S 10 15 20 25 30 40 50 60 75 80 90 100 Capacitor 525V $Q_{C/V}$ P = 14% -134Hz, S	AFR-0307080V400   AFR-0307089V400   Matrix Series   Ordering Code   system 3 Phase 400Vac 50   AFR-0307010V525   AFR-0307015V525   AFR-0307020V525   AFR-0307020V525   AFR-0307020V525   AFR-0307030V525   AFR-0307040V525   AFR-0307050V525   AFR-0307060V525   AFR-0307075V525   AFR-0307080V525   AFR-0307080V525   AFR-0307080V525   AFR-03070100V525   AFR-0307020V525   AFR-0307080V525   AFR-0307080V525   AFR-0307080V525   AFR-0307080V525   AFR-0307090V525   AFR-0307000V525   AFR-0307100V525   AFR-0307100V525	138.6 154.1 Ith (A) HZ 10.8 16.2 21.7 25.9 32.5 43.3 54.1 65.0 77.7 86.6 97.5 108.3 Ith (A) HZ	280 280 (mm) 225 225 195 220 220 220 220 220 220 220 220 220 22	305 B (mm) 210 210 210 240 240 240 240 305 305 305 305 305 305	200 C (mm) 130 135 135 140 145 150 165 170 175 175 175 175 C (mm)	145 D (mm) 67 74 78 88 94 97 110 124 124 124 124 130 130 130 130	170 E (mm) 116 116 116 136 136 136 136 136	16 Holes (ømm) 10 10 10 10 10 10 10 10 10 10 10 10 10	190 Pw (W) 45 55 65 70 80 90 110 125 155 170 175 175 175 Pw (W)	Busbar Terminal Type Blocks/ Cable Lugs Blocks/ Cable Lugs Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar	45 kg (-5/+10% 9 11 11.5 15 17 20 23 25 36 36 36 41 41 41 kg (-5/+10%
90 100 Capacitor 525V Qc/V P = 7% - 189Hz, S 10 15 20 25 30 40 50 60 75 80 90 100 Capacitor 525V Qc/V P = 14% -134Hz, S 10	AFR-0307080V400   AFR-0307089V400   AFR-0307089V400   Matrix Series Ordering Code   system 3 Phase 400Vac 50   AFR-0307010V525   AFR-0307015V525   AFR-0307020V525   AFR-0307020V525   AFR-0307020V525   AFR-0307030V525   AFR-0307050V525   AFR-0307060V525   AFR-0307075V525   AFR-0307080V525   AFR-0307080V525   AFR-0307000V525   AFR-0307000V525   AFR-0307000V525   AFR-0307000V525   AFR-0307000V525   AFR-0307000V525   AFR-0307000V525   AFR-0307100V525   AFR-0307100V525   AFR-0307100V525   AFR-0307100V525   AFR-0307100V525   AFR-0307100V525   AFR-0307100V525   AFR-0307100V525   AFR-0307100V525	138.6 154.1 Ith (A) HZ 10.8 16.2 21.7 25.9 32.5 43.3 54.1 65.0 77.7 86.6 97.5 108.3 Ith (A) HZ 11.2	280 280 (mm) 225 195 225 195 220 220 220 220 220 220 220 220 220 22	305 B (mm) 210 210 210 240 240 240 240 305 305 305 305 305 305 305 30	200 C (mm) 130 135 135 140 145 150 165 170 175 175 175 175 175 27 (mm)	145 D (mm) 67 74 78 88 94 97 110 124 124 124 124 130 130 130 130 0 (mm)	170 E (mm) 116 116 116 136 136 136 136 136	16 (ømm) 10 10 10 10 10 10 10 10 10 10 10 10 10	190 Pw (W) 45 55 65 70 80 90 110 125 155 170 175 175 275 Pw (W)	Busbar Terminal Type Blocks/ Cable Lugs Blocks/ Cable Lugs Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Terminal Type	45 kg (-5/+10% 9 11 11.5 15 17 20 23 25 36 36 36 41 41 41 kg (-5/+10%
90 100 Capacitor 525V Qc/V P = 7% - 189Hz, S 10 15 20 25 30 40 50 60 75 80 90 100 Capacitor 525V Qc/V P = 14% -134Hz, S 10 15	AFR-0307080V400   AFR-0307089V400   AFR-0307089V400   Matrix Series Ordering Code   ystem 3 Phase 400Vac 50   AFR-0307010V525   AFR-0307015V525   AFR-0307020V525   AFR-0307020V525   AFR-0307030V525   AFR-0307030V525   AFR-0307060V525   AFR-0307060V525   AFR-0307080V525   AFR-0307090V525   AFR-0307090V525   AFR-0307090V525   AFR-0307090V525   AFR-0307100V525   AFR-0307100V525   AFR-0307100V525   AFR-0307100V525   AFR-0307100V525   AFR-0307100V525   AFR-0307100V525   AFR-0307100V525   AFR-0307100V525   AFR-031401V525   AFR-0314015V525	138.6 154.1 Ith (A) HZ 10.8 16.2 21.7 25.9 32.5 43.3 54.1 65.0 77.7 86.6 97.5 108.3 URA (A) HZ 11.2 16.8	280 280 (mm) 225 195 220 220 220 220 220 220 220 220 220 22	305 B (mm) 210 210 240 240 240 240 305 305 305 305 305 305 305 30	200 C (mm) 130 135 135 140 145 150 140 145 150 175 175 175 175 175 175 175 175 175	145 D (mm) 67 74 78 88 94 97 110 124 124 124 124 130 130 130 130 130 5 7 4	170 E (mm) 116 116 116 136 136 136 136 136	16 (ømm) 10 10 10 10 10 10 10 10 10 10 10 10 10	190 Pw (W) 45 55 65 70 80 90 110 125 155 170 175 175 175 20 84 96	Busbar Terminal Type Blocks/ Cable Lugs Blocks/ Cable Lugs Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar	45 kg (-5/+10% 9 11 11.5 15 17 20 23 25 36 36 36 41 41 41 41 kg (-5/+10% 10 13.5
90 100 Capacitor 525V Qc/V P = 7% - 189Hz, S 10 15 20 25 30 40 50 60 75 80 90 100 Capacitor 525V Qc/V P = 14% -134Hz, S 10 15 20	AFR-0307080V400   AFR-0307089V400   AFR-0307089V400   Matrix Series   Ordering Code   ystem 3 Phase 400Vac 50   AFR-0307010V525   AFR-0307015V525   AFR-0307020V525   AFR-0307020V525   AFR-0307030V525   AFR-0307030V525   AFR-0307060V525   AFR-0307060V525   AFR-0307075V525   AFR-0307090V525   AFR-0307000V525   AFR-0307000V525   AFR-0307000V525   AFR-0307000V525   AFR-0307000V525   AFR-0307100V525   AFR-0307100V525   AFR-0307100V525   AFR-03107100V525   AFR-0314010V525   AFR-0314010V525   AFR-0314010V525   AFR-0314012V525	138.6 154.1 Ith (A) HZ 10.8 16.2 21.7 25.9 32.5 43.3 54.1 65.0 77.7 86.6 97.5 108.3 Ith (A) HZ HZ 11.2 16.8 22.4	280 280 225 225 195 220 220 220 220 220 220 220 220 220 22	305 B (mm) 210 210 210 240 240 240 305 305 305 305 305 305 305 30	200 C (mm) 130 135 135 140 145 150 140 145 150 175 175 175 175 175 175 175 175 175 175	145 D (mm) 67 74 78 88 94 97 110 124 124 124 130 130 130 130 130 5 7 4 7 8	170 E (mm) 116 116 116 136 136 136 136 136	16 (ømm) 10 10 10 10 10 10 10 10 10 10 10 10 10	190 Pw (W) 45 55 65 70 80 90 110 125 155 170 175 175 175 175 84 96 115	Busbar Terminal Type Blocks/ Cable Lugs Blocks/ Cable Lugs Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar	45 kg (-5/+10% 9 11 11.5 15 17 20 23 25 36 36 36 41 41 41 kg (-5/+10% 10 13.5 16.5
90 100 Capacitor 525V Qc/V P = 7% - 189Hz, S 10 15 20 25 30 40 50 60 75 80 90 100 Capacitor 525V Qc/V P = 14% -134Hz, S 10 15 20 25 10 15 20 10 15 10 10 10 10 10 15 10 10 10 10 10 10 10 10 10 10	AFR-0307080V400   AFR-0307089V400   Matrix Series   Ordering Code   system 3 Phase 400Vac 50   AFR-0307010V525   AFR-0307015V525   AFR-0307020V525   AFR-0307020V525   AFR-0307030V525   AFR-0307030V525   AFR-0307040V525   AFR-0307050V525   AFR-0307060V525   AFR-0307050V525   AFR-0307050V525   AFR-0307060V525   AFR-0307090V525   AFR-0307000V525   AFR-0307100V525   AFR-0307100V525   AFR-0307100V525   AFR-0307100V525   AFR-0307100V525   AFR-03107100V525   AFR-0314010V525   AFR-0314010V525   AFR-0314010V525   AFR-0314020V525   AFR-0314025V525	138.6 154.1 Ith (A) HZ 10.8 16.2 21.7 25.9 32.5 43.3 54.1 65.0 77.7 86.6 97.5 108.3 Ith (A) HZ Ith2 16.8 22.4 25.9	280 280 (Mmm) 225 195 220 220 220 220 220 220 220 220 220 22	305 B (mm) 210 210 210 240 240 240 240 305 305 305 305 305 305 305 30	200 C (mm) 130 135 135 140 145 150 165 170 175 175 175 175 275 175 175 175 175 175 175 175 175	145 D (mm) 67 74 78 88 94 97 110 124 124 124 130 130 130 130 130 5 7 4 78 88	170 E (mm) 116 116 116 136 136 136 136 136	16 (ømm) 10 10 10 10 10 10 10 10 10 10 10 10 10	190 Pw (W) 45 55 65 70 80 90 110 125 175 175 175 175 Pw (W) 84 96 115 122	Busbar Terminal Type Blocks/ Cable Lugs Blocks/ Cable Lugs Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar	45 kg (-5/+10%) 9 11 11.5 15 17 20 23 25 36 36 41 41 kg (-5/+10%) 10 13.5 16.5 18
90 100 Capacitor 525V Qc/V P = 7% - 189Hz, S 10 15 20 25 30 40 50 60 75 80 90 100 Capacitor 525V Qc/V P =14% -134Hz, S 10 15 20 25 30 10 10 15 20 10 10 10 10 10 10 10 10 10 1	AFR-0307080V400   AFR-0307089V400   Matrix Series   Ordering Code   system 3 Phase 400Vac 50   AFR-0307010V525   AFR-0307015V525   AFR-030702V525   AFR-030702V525   AFR-0307030V525   AFR-0307040V525   AFR-0307040V525   AFR-0307060V525   AFR-0307060V525   AFR-0307060V525   AFR-0307000V525   AFR-0307000V525   AFR-0307000V525   AFR-0307000V525   AFR-0307000V525   AFR-0307000V525   AFR-0307100V525   AFR-0307100V525   AFR-0307100V525   AFR-0307100V525   AFR-0314010V525   AFR-0314015V525   AFR-0314020V525   AFR-0314025V525   AFR-0314030V525	138.6 154.1 Ith (A) Hz 10.8 16.2 21.7 25.9 32.5 43.3 54.1 65.0 77.7 86.6 97.5 108.3 Ith (A) OHz 11.2 16.8 22.4 25.9 33.6	280 280 225 225 195 220 220 220 220 220 220 220 220 220 22	305 B (mm) 210 210 210 240 240 240 305 305 305 305 305 305 305 30	200 C (mm) 130 135 135 140 145 150 165 170 175 175 175 175 275 175 175 175 175 175 175 175 175	145 D (mm) 67 74 78 88 94 97 110 124 124 124 130 130 130 130 130 0 0 (mm) 67 74 78 88 94	170 E (mm) 116 116 116 136 136 136 136 136	16 (ømm) 10 10 10 10 10 10 10 10 10 10 10 10 10	190 Pw (W) 45 55 65 70 80 90 110 125 175 175 175 175 Pw (W) 84 96 115 122 132	Busbar Terminal Type Blocks/ Cable Lugs Blocks/ Cable Lugs Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar	45 kg (-5/+10% 9 111 11.5 15 17 20 23 25 36 36 41 41 41 kg (-5/+10% 10 13.5 16.5 18 21.5
90 100 Capacitor 525V Qc/V P = 7% - 189Hz, S 10 15 20 25 30 40 50 60 75 80 90 100 Capacitor 525V Qc/V P = 14% -134Hz, S 10 15 20 25 30 40 50 10 10 10 10 10 10 10 10 10 1	AFR-0307080V400   AFR-0307089V400   Matrix Series   Ordering Code   ystem 3 Phase 400Vac 50   AFR-0307010V525   AFR-0307015V525   AFR-0307025V525   AFR-0307030V525   AFR-0307030V525   AFR-0307040V525   AFR-0307050V525   AFR-0307060V525   AFR-0307060V525   AFR-0307000V525   AFR-0307000V525   AFR-0307000V525   AFR-0307000V525   AFR-0307000V525   AFR-0307000V525   AFR-0307000V525   AFR-0307100V525   AFR-0307100V525   AFR-0307100V525   AFR-0307100V525   AFR-0314010V525   AFR-0314020V525   AFR-0314020V525   AFR-0314030V525   AFR-0314030V525   AFR-0314040V525	138.6 154.1 Ith (A) Hz 10.8 16.2 21.7 25.9 32.5 43.3 54.1 65.0 77.7 86.6 97.5 108.3 VT.7 86.6 97.5 108.3 Ith (A) DHz 11.2 16.8 22.4 25.9 33.6 44.8	280 280 (mm) 225 195 220 220 220 220 220 220 220 220 220 22	305 B (mm) 210 210 240 240 240 240 305 305 305 305 305 305 305 30	200 C (mm) 130 135 135 140 145 150 165 170 175 175 175 175 175 175 175 175 175 175	145 D (mm) 67 74 78 88 94 97 110 124 124 130 130 130 130 130 0 0 (mm) 67 74 78 88 94 97	170 E (mm) 116 116 116 136 136 136 136 136	16 (ømm) 10 10 10 10 10 10 10 10 10 10 10 10 10	190 Pw (W) 45 55 65 70 80 90 110 125 155 170 175 175 Pw (W) 84 96 115 122 132 132 165	Busbar Terminal Type Blocks/ Cable Lugs Blocks/ Cable Lugs Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar	45 kg (-5/+10%) 9 11 11.5 15 17 20 23 25 36 36 41 41 41 41 kg (-5/+10%) 10 13.5 16.5 18 21.5 25
90 100 Capacitor 525V Qc/V P = 7% - 189Hz, S 10 15 20 25 30 40 50 60 75 80 90 100 Capacitor 525V Qc/V P = 14% -134Hz, S 10 15 20 P = 14% -134Hz, S 10 15 20 25 30 40 50 40 50 40 50 40 50 50 40 50 50 50 50 50 50 50 50 50 5	AFR-0307080V400   AFR-0307089V400   AFR-0307089V400   Matrix Series Ordering Code   system 3 Phase 400Vac 50   AFR-0307010V525   AFR-0307015V525   AFR-0307020V525   AFR-0307020V525   AFR-0307030V525   AFR-0307030V525   AFR-0307050V525   AFR-0307050V525   AFR-0307060V525   AFR-0307075V525   AFR-0307080V525   AFR-0307090V525   AFR-0307000V525   AFR-0307100V525   AFR-03070100V525   AFR-0307090V525   AFR-0307100V525   AFR-0307000V525   AFR-0314010V525   AFR-0314010V525   AFR-0314020V525   AFR-0314020V525   AFR-0314030V525   AFR-0314030V525   AFR-0314030V525   AFR-0314040V525   AFR-0314030V525	138.6 154.1 Ith (A) Hz 10.8 16.2 21.7 25.9 32.5 43.3 54.1 65.0 77.7 86.6 97.5 108.3 77.7 86.6 97.5 108.3 108.3 1th (A) 0Hz 11.2 16.8 22.4 25.9 33.6 44.8 56.0	280 280 (mm) 225 225 195 220 220 220 220 220 220 220 220 220 22	305 B (mm) 210 210 240 240 240 240 305 305 305 305 305 305 305 30	200 C (mm) 130 135 140 145 150 165 170 175 175 175 175 175 175 175 175 175 175	145 D (mm) 67 74 78 88 94 97 110 124 124 124 130 130 130 130 130 130 5 (mm) 67 74 78 88 94 97 110	170 E (mm) 116 116 116 136 136 136 136 170 170 170 170 170 170 170 170	16 (ømm) 10 10 10 10 10 10 10 10 10 10 10 10 10	190 Pw (W) 45 55 65 70 80 90 110 125 155 170 175 175 70 84 96 115 122 132 165 205	Busbar Terminal Type Blocks/ Cable Lugs Blocks/ Cable Lugs Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar	45 kg (-5/+10% 9 11 11.5 15 17 20 23 25 36 41 41 41 kg (-5/+10% 10 13.5 16.5 18 21.5 25 33
90 100 Capacitor 525V P = 7% - 189Hz, S 10 15 20 25 30 40 50 60 75 80 90 100 Capacitor 525V Qc/V P = 14% -134Hz, S 10 15 20 Capacitor 525V Qc/V P = 14% -134Hz, S 10 15 20 10 15 20 10 10 15 10 10 10 10 10 10 10 10 10 10	AFR-0307080V400   AFR-0307089V400   AFR-0307089V400   Matrix Series Ordering Code   system 3 Phase 400Vac 50   AFR-0307010V525   AFR-0307015V525   AFR-0307020V525   AFR-0307020V525   AFR-0307020V525   AFR-0307030V525   AFR-0307050V525   AFR-0307060V525   AFR-0307060V525   AFR-0307090V525   AFR-0307090V525   AFR-0307090V525   AFR-0307090V525   AFR-0307090V525   AFR-0307090V525   AFR-0307090V525   AFR-0307090V525   AFR-0307090V525   AFR-0314010V525   AFR-0314010V525   AFR-0314010V525   AFR-031402V525   AFR-0314030V525   AFR-0314030V525   AFR-0314030V525   AFR-0314030V525   AFR-0314040V525   AFR-0314060V525	138.6 154.1 Ith (A) HZ 10.8 16.2 21.7 25.9 32.5 43.3 54.1 65.0 77.7 86.6 97.5 108.3 07.5 108.3 Ith (A) 0HZ 11.2 16.8 22.4 25.9 33.6 44.8 56.0 67.2	280 280 4 (mm) 225 195 220 220 220 220 220 220 220 220 220 22	305 B (mm) 210 210 240 240 240 305 305 305 305 305 305 305 30	200 C (mm) 130 135 135 140 145 150 165 170 175 175 175 175 175 175 175 175	145 D (mm) 67 74 78 88 94 97 110 124 124 130 130 130 130 130 130 130 7 4 8 8 8 8 8 9 4 97 110 7 2 4 97	170 E (mm) 116 116 116 136 136 136 136 170 170 170 170 170 170 170 170	16 (ømm) 10 10 10 10 10 10 10 10 10 10 10 10 10	190 Pw (W) 45 55 65 70 80 90 110 125 155 170 175 175 175 175 175 175 175 175	Busbar Terminal Type Blocks/ Cable Lugs Blocks/ Cable Lugs Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Blocks/ Cable Lugs Blocks/ Cable Lugs	45 kg (-5/+10% 9 11 11.5 15 17 20 23 25 36 36 41 41 41 41 41 10 13.5 16.5 18 21.5 25 33 35.5
90 100 Capacitor 525V Qc/V P = 7% - 189Hz, S 10 15 20 25 30 40 50 60 75 80 90 100 Capacitor 525V Qc/V P =14% -134Hz, S 10 15 20 25 30 40 50 60 75 80 10 10 10 10 10 10 10 10 10 1	AFR-0307080V400   AFR-0307089V400   AFR-0307089V400   Matrix Series Ordering Code   ystem 3 Phase 400Vac 50   AFR-0307010V525   AFR-0307015V525   AFR-030702V525   AFR-0307030V525   AFR-0307030V525   AFR-0307040V525   AFR-0307060V525   AFR-0307050V525   AFR-0307060V525   AFR-0307090V525   AFR-0307090V525   AFR-0307090V525   AFR-03070100V525   AFR-0307090V525   AFR-0307090V525   AFR-0307100V525   AFR-0307100V525   AFR-0314010V525   AFR-0314010V525   AFR-0314010V525   AFR-031402V525   AFR-031402V525   AFR-031402V525   AFR-031402V525   AFR-031400V525   AFR-0314060V525   AFR-0314060V525   AFR-0314060V525   AFR-0314060V525	138.6 154.1 Ith (A) HZ 10.8 16.2 21.7 25.9 32.5 43.3 54.1 65.0 77.7 86.6 97.5 108.3 VHZ 108.3 Ith (A) HZ 11.2 16.8 22.4 25.9 33.6 44.8 56.0 67.2 84.0	280 280 280 225 195 225 225 220 220 220 220 220 220 220 22	305 B (mm) 210 210 210 240 240 240 305 305 305 305 305 305 305 30	200 C (mm) 130 135 135 140 145 150 165 170 175 175 175 175 175 175 175 175	145 D (mm) 67 74 78 88 94 97 110 124 124 130 130 130 130 130 130 67 74 78 88 94 97 110 124 124	170 E (mm) 116 116 116 136 136 136 136 170 170 170 170 170 170 170 170	16 (ømm) 10 10 10 10 10 10 10 10 10 10 10 10 10	190 Pw (W) 45 55 65 70 80 90 110 125 155 170 175 175 175 175 175 175 175 175	Busbar Terminal Type Blocks/ Cable Lugs Blocks/ Cable Lugs Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Busbar Blocks/ Cable Lugs Blocks/ Cable Lugs	45 kg (-5/+10% 9 11 11.5 15 17 20 23 25 36 36 36 41 41 41 41 10 13.5 16.5 18 21.5 25 33 36.5 45

\* Dimension subject to change without prior notice \* Other specification available upon request



**AUTHORISED DISTRIBUTOR**