






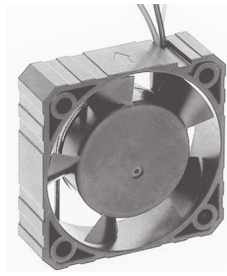
Fans, Blowers + Heat Sinks

Prices see shop.griederbauteile.ch

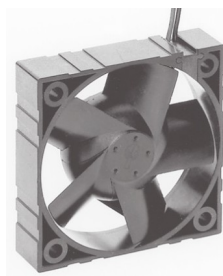
Ultra Flat Fans	Page 2				
Protective Grids suits Micronel Series	Page 2				
DC Fans + Blowers	Page 3				
AC Fans + Blowers	Page 4				
Accessories	Page 5				
Heat Sinks	Page 6				
Extruded Heat Sinks	Page 7				
Mounting Material	Page 8				

Some vintage components are available while stock lasts.

Ultra-Slim Axial Fan



F41MM






F62MM






F80MM




Series F41MM (41 x 41mm)

Order No	Rated Voltage VDC	Rated Current	Revolutions Rpm	Air Flow L/m in	Sound DB	Air Flow	MicroneI
FLA.41MM5	5	113mA	5'400	140	20	suction	
FLA.41MM12	12	63mA	5'000	125	18		
FLA.41MM24	24	36mA	5'400	140	20		

Series F62MM (62 x 62mm)

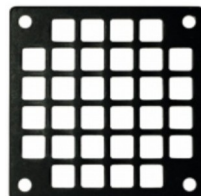
Order No	Rated Voltage VDC	Rated Current	Revolutions Rpm	Air Flow L/m in	Sound DB	Air Flow	MicroneI
FLA.62MM5	5	168mA	3'450	360	28	suction	
FLA.62MM12	12	70mA			27		
FLA.62MM24	24	41mA			27		

Series F80MM (80 x 80mm)

Order No	Rated Voltage VDC	Rated Current	Revolutions Rpm	Air Flow L/m in	Sound DB	Air Flow	MicroneI
FLA.80MM5	5	1000mA	3'600	1000	34	suction	
FLA.80MM12	12	420mA					
FLA.80MM24	24	210mA					

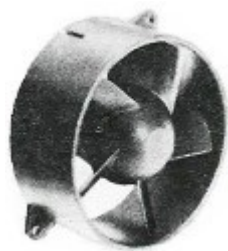
Protective Grids

Suitable above MicroneI Series



Order No	Suitable Fan Size					
FLG.360	40x40mm + 41x41mm					
FLG.480	52 x 52mm					
FLG.6000	62 x 62mm					

DC Fans



FLB.72JM220



FLA.365xx
FLA.464xx
FLA.465xx
FLA.484xx
FLA.485xx



FLA.F62MMx



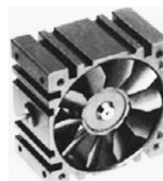
FLA.F41MMx



FLA.F80MMx



FLA.60268



FLA.571xx
FLA.579xx

5V DC



Order No	Rated Voltage VDC	Rated Current	Revolutions Rpm (min-1)	Air Flow Rate	Sound DB	Air Flow	Size	Depth	Make	Series
FLA.41MM5	5	113mA	5'400	140 l/min	20	suction	41 x 41mm	12mm	Micronel	F41MM
FLA.62MM5		168mA	3'450	360 l/min	28	suction	62 x 62mm	15mm		F62MM
FLA.80MM5		1000mA	3'600	1000 l/min	34	suction	80 x 80mm	18mm		F80MM
FLA.25S05		115mA	13'000	3.0 CFM	31		25 x 25mm	6mm	Sunon	MC25060V1

6V DC



Order No	Rated Voltage VDC	Rated Current	Revolutions Rpm (min-1)	Air Flow Rate	Sound DB	Air Flow	Size	Depth	Make	Series
FLA.365M6	6	300mA	12'800	250 l/min	53	blow	40 x 40mm	45mm	Micronel	D360
FLA.464M6		33mA	4'200	260 l/min	27	suction	52 x 52mm	36mm		D460
FLA.571M6		60mA	3'650	422 l/min	24	suction	62 x 62mm	36mm		D570
FLA.579M6		60mA	3'700	540 l/min	37	blow	62 x 62mm	36mm		D570

12V DC



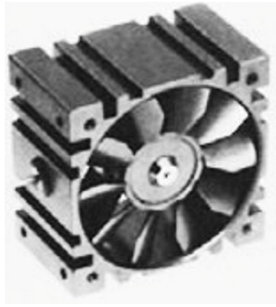
Order No	Rated Voltage VDC	Rated Current	Revolutions Rpm (min-1)	Air Flow Rate	Sound DB	Air Flow	Size	Depth	Make	Series
FLA.1230	12	0.8W	7'500	1.4 l/sec	20		30 x 30mm	10mm	ETRI	260DM1
FLA.1235		1.1W	7'000	2.6 l/sec	22		35 x 35mm	10mm		263DH1
FLA.S5012		1.1W	4'800	18.66 m³/h	26		50 x 50mm	10mm	Sunon	
FLA.41MM12		63mA	5'000	125 l/min	18	suction	41 x 41mm	12mm	Micronel	F41MM
FLA.60268		125mA	5'500	6.97 m³/h	41		50 x 50mm	15mm	Y.S. Tech	BD125015MB
FLA.484M12		330mA	11'000	610 l/min	55	blow	52 x 52mm	60mm	Micronel	D480
FLA.485M12		330mA	11'000	720 l/min	58	blow	52 x 52mm	60mm		D480
FLC.1206N		200mA	4'900	39 m³/h	35		60 x 60mm	25mm	NMB	2410ML
FLA.571M12		35mA	3'650	422 l/min	24	suction	62 x 62mm	36mm	Micronel	D570
FLA.62MM12		70mA	3'450	360 l/min	27	suction	62 x 62mm	15mm		F62MM
FLA.579M12		35mA	3'700	540 l/min	37	blow	62 x 62mm	36mm		D570
FLC.1208N		230mA	3'250	66 m³/h	34		80 x 80mm	25.4mm	NMB	3110KL
FLA.80MM12		420mA	3'600	1000 l/min	34	suction	80 x 80mm	18mm	Micronel	F80MM
FLC.1209N		315mA	3'200	93 m³/h	41		92 x 92mm	25.4mm	NMB	3610KL
FLC.1212N		570mA	2'400	153 m³/h	39		119 x 119mm	25.5mm		4710KL

24V DC

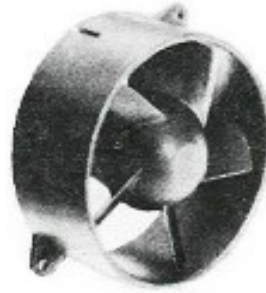


Order No	Rated Voltage VDC	Rated Current	Revolutions Rpm (min-1)	Air Flow Rate	Sound DB	Air Flow	Size	Depth	Make	Series
FLA.364M24	24	42mA	12'800	250 l/min	45	suction	40 x 40mm	45mm	Micronel	D360
FLA.41MM24		36mA	5'400	140 l/min	20	suction	41 x 41mm	12mm		F41MM
FLA.484M24		150mA	11'000	610 l/min	55	suction	52 x 52mm	60mm		D480
FLA.485M24		150mA	11'000	720 l/min	58	blow	52 x 52mm	60mm		D480
FLC.2406N		100mA	4'900	39 m³/h	35		60 x 60mm	25mm	NMB	2410ML
FLA.62MM24		41mA	3'450	360 l/min	27	suction	62 x 62mm	15mm	Micronel	F62MM
FLC.2408N		120mA	3'250	66 m³/h	34		80 x 80mm	25.4mm	NMB	3110KL
FLA.80MM24		210mA	3'600	1000 l/min	34	suction	80 x 80mm	18mm	Micronel	F80MM
FLC.2409N		160mA	3'200	93 m³/h	41		92 x 92mm	25.4mm	NMB	3610KL
FLC.2412N		240mA	2'400	153 m³/h	39		119 x 119mm	25.5mm		4710KL

AC Fan



FLB.579Mxx



FLB.72JM24



12V + 24V AC

Order No	Rated Voltage VAC	Rated Current	Revolutions Rpm (min-1)	Air Flow Rate	Sound DB	Air Flow	Size	Depth	Make	Series
FLB.579M12	12	260mA	2950	420 l/min	30	blow	62 x 62mm	36mm	Micronel	A570
FLB.579M24	24	130mA								A72
FLB.72JM24		280mA	2750	1030 l/min	24	suction				

AC Fan



FLC.120N25



FLC.108N
FLC.109N
FLC.120N38



FLB.M220

230V AC

Order No	Rated Voltage VAC	Rated Current	Revolutions Rpm (min-1)	Air Flow Rate	Sound DB	Air Flow	Size	Depth	Make	Series
FLC.108N	230	72mA	2800	48 m³/h	33		80 x 80mm	38mm	NMB	3115PS
FLC.109N		81mA	2600	48 m³/h	34		92 x 92mm	25.4mm		3610PS
FLC.120N25		0.1A/0.09A	2300	108 m³/h	23/38		120 x 120mm	25mm		4710PS
FLC.120N38		130mA	2650	170 m³/h	37		120 x 120mm	38mm		4715MS
FLC.150N		160mA	2700	333 m³/h	52		150 x 172mm	38mm		5915PC

Suitable Connection Cables NMB Fan

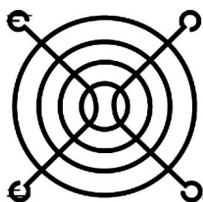
Order No	Length
FLC.K10	1m
FLC.K15	1.5m

Suitable C-Module for Micronel Fan

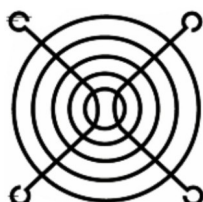
Order No
FLB.M220
Suitable fan no FLB.72JM220

Metal Guard for Fans

Suitable NMB Series



FLC.G106



FLC.G108



FLC.G109



FLC.G120

Order No	Suitable Fan Size	Suitable NMB Series
FLC.G106	60 x 60mm	2406KL, 2408NL, 2410ML, 2412PS
FLC.G108	80 x 80mm	3108NL, 3110KL, 3110PS, 3112KL, 3115FS, 3115PS
FLC.G109	92 x 92mm	3610KL, 3610PS, 3612KL, 3615KL
FLC.G120	120 x 120mm	4710KL, 4710PS, 4712KL, 4715FS, 4715KL, 4715MS, 4715SL, 5015KL, 5020KL

Plastic Filter Set

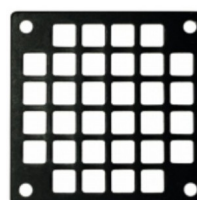
Suitable NMB Fan Guards



Order No Filter	Order No Replacement Mats	Suitable Fan Size	Suitable Metal Guards
FLC.KF108	FLC.FM 108	80 x 80mm	FLC.G108
FLC.KF109	FLC.FM 109	92 x 92mm	FLC.G109
FLC.KF120	FLC.FM 120	120 x 120mm	FLC.G120

Protective Grids

Suitable Micronel Fans



Order No	Suitable Fans Sizes
FLG.360	40 x 40mm + 41 x 41mm
FLG.480	52 x 52mm
FLG.6000	62 x 62mm

Rubber Mount

Rubber Mount Reduces Electromechanical Vibrations in Fans
Suitable for holes: Ø 3.5mm to 4.5mm



Best.Nr.
FLC.DG

Heat Sinks



FKA.B48C



FKB.A30A



FKA.B60A



FKA.C80



FKB.B15C



FKB.B18C



FKB.B25A



FKB.F25C



FKB.C40C



FKB.G14C



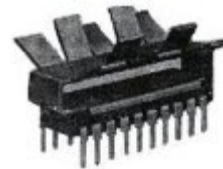
FKG.A12K



FKG.A25K



FKI.20




















FKI.28

Order No	Thermal Resistance Rth (K/W)	Suits	Width mm	Length mm	Height mm	
FKI.18	18	DIL-18				IC
FKI.20	20	DIL-20				IC
FKI.28	28	DIL-28				IC
FKI.40	20	DIL-40				IC
FKA.A85A		TO-18	Ø15		5	
FKA.A48C	48		Ø16.3		9.5	
FKG.A12K	8	SOT9 SOT32 TO3 TO66 TO220	46	46	12.7	
FKG.A25K	6		46	46	25.4	
FKB.A30A	30	SOT32	12	25	15	
FKB.B21A	21		25.4	18	12.7	
FKB.B25A	25		25.4	18	8	
FKB.E20S	20	SOT32 TO220	25.4	33.8	12.7	Clip-On
FKB.F25C	14		22	35.6	6.7	
FKB.G14C	21		22	35.6	6.7	
FKB.B15C	15		25.4	30	12.7	
FKB.B18C	18		25.4	30	8	
FKA.B48C	48	TO5 TO39	Ø 18.3		9.5	
FKA.B60A	60		Ø 19		8	
FKA.B33D	40		Ø 29		11	
FKA.C80	80	TO92	9.5	15	3.5	
FKB.H40A	25	TO202	25	19	12.5	Clip-On
FKB.H40B	25		25	20.5	7	Clip-On
FYS	26.8	TO202 TO220	12.7	18	25.4	
FKB.A29C	20	TO220	14	25	15	
FKB.A25C	17		17	35	13	
FKB.C40C	40		12.6	25	6.5	
FKT.COOLKIT		Raspberry PI Heatsink Coolink Kit				

Heat Sinks



Order No	Thermal Resistance Rth (K/W)	Suits	Width	Length	Height	
FKC.A37K	8.7	TO220	29	37.5	12	
FKC.B50	7.2	SOT93 TO220	29	50	11.5	
FKE.A37	5.5	SOT32	54	37.5	22.5	
FKE.B37	4.1	TO220	70	37.5	25	
FKF.A84	3.9	SOT93 TO220	50	84	28	
FKF.A84N	3.6	SOT93 TO220	55	84	28	
FKF.B50	4.8	3x TO220	46	50	33	
FKF.B100	3.1	7x TO220	46	100	33	
FKF.B1000		SOT93 TO220	46	1m	33	
FKP.A37K	3.2	SOT9 TO3 TO66	65	37.5	27	
FKP.A75	2.5		65	75	27	
FKP.B37K	2.7	SOT9 TO3 TO66	97	37.5	25	
FKP.B75	1.8		97	75	25	
FKP.E37K	2.7	SOT9 TO3 TO66	100/120	37.5	32	
FKP.E75	2.1		100/120	75	32	
FKP.E1000			100/120	1m	32	
FKP.F37K	1.7	SOT9 TO3 TO66	92/115	37.5	63	
FKP.F50K	1.5	SOT9 TO3 TO66	92/115	50	63	
FKP.F75	1.2		92/115	75	63	
FKP.F1000			92/115	1m	63	
FKP.G75	1.4		125	75	65	
FKP.K37K	4.8	SOT9 TO3 TO66	70	37.5	15	
FKP.K50K	4.5	SOT9 TO3 TO66	70	50	15	
FKP.K75	3.8		70	75	15	
FKP.Q50K	2.5	SOT9 TO3 TO66	88	37.5	25	
FKP.Q1000		SOT9 TO3 TO66	88	1m	25	
FKP.R37K	2.4	SOT9 TO3 TO66	88	37.5	35	
FKP.R50K	2.2	SOT9 TO3 TO66	88	50	35	
FKP.R75	1.8		88	75	35	
FKP.R75.ML		same dimensions as FKP.R75 with 2x M4 holes				
FKP.U37K	1.6	TO3	100	37.5	50	
FKP.U50K	1.3	TO3	100	50	50	
FKP.W1000		SOT9 TO3 TO66	107	1m	107	

Heat Paste (Thermal Transfer Compound)



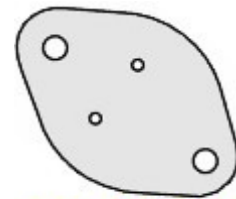
Order No	Weight		
FKZ.20S	20g		
FKZ.50	50g		



FKY.G13	Mica wafer	DO-13
FKS.G9	Mounting Kit	SOT-9
FKY.G3PH	Kapton Insulator Washer	SOT-3, TO-3P
FKY.G9	Mica Insulating Disc	SOT-9
FKY.G126	Mica Wafer Muscovite	SOT-32, TO-126
FKS.G126	Mounting Kit	
FKY.G3P	Mica Wafer Muscovite	SOT-93, TO-3P
FKS.G3P	Mounting Kit	
FKY.G3	Mica Wafer Muscovite	TO-3
FKW.3	Insulating Cap	
FKY.G3K	Insulator Washer	
FKS.G3	Mounting Kit	
FKY.G66	Mica Wafer Muscovite	TO-66
FKW.66	Insulating Cap	
FKS.G66	Mounting Kit	
FKY.G220	Mica Wafer Muscovite	TO-220



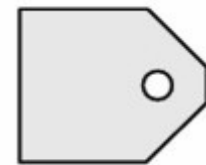
FKW.3



FKY.G3



FKY.G3K



FKY.G3P



FKY.G220

Insulating Bushes

FKY.E1	Insulating Bush	6-32UNC
FKY.D1		M3
FKY.D4		M3



FKY.D4