

1 GENERAL

Manufacturer Micronel Ltd, Switzerland

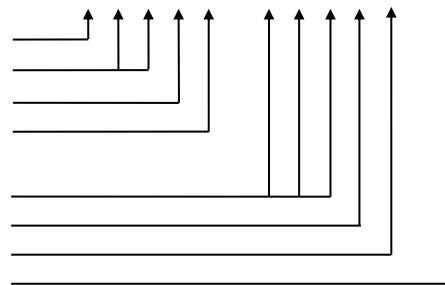
Product-Name Ultra slim fan

Manufacturer part number

F	6	2	M	Q	-	0	0	5	G	K	-	0
F	6	2	M	Q	-	0	1	2	G	K	-	0
F	6	2	M	Q	-	0	2	4	G	K	-	0

Structure:
 DC-Axial fan F
 Dimension 62 mm Q1
 Medium Speed M
 Tacho M

Nom. Voltage
 Sleeve Bearing G
 Housing Material: K
 Serial product 0



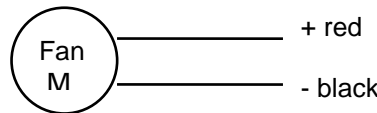
Test condition/ Reference:

ISO9001

2 ELECTRIC VALUES

Nominal Voltage	U _N	VDC	5	12	24	22°C
Voltage Range	U	VDC	3. 5-5. 5	8.4-13.8	15.6-27.6	„
Nom. Current	I _N	mA	168	70	41	„
Max. Current	I _{max}	mA	185	78	45	„
Stall Current (max.)	I _{block}	mA	308	130	62	„
Nom. Power	P _N	W	0.84	0.74	0.98	„
Locked Rotor Protection				yes		
Direction of Rotation (view on rotor)				CW		
Polarity Protection				yes		
Insulation resistance min				10 MΩ at 500 VDC		
Dielectric strength max.				1 mA at 600 VAC		

Circuit diagram



3 AIR VALUES

Air Flow Rate (average) (Δp=0, free blowing)	Q̇	l/min CFM	360 12.7	360 12.7	360 12.7	m=1.2kg m3 VF50325
Static pressure (average)	Δp	Pa inchWG	29 0.114	29 0.114	29 0.114	

GENERAL SPECIFICATION

F62MM SERIES

4 MECHANICAL

Nominal Speed	n	min-1	3450	3450	3450	SMV 016 VF50325 45°C/113°F
Acoustic Emission Level	LpA	dB(A)	28	27	27	
Life Expectancy (MTTF)	MTTF	h	40000	40000	40000	
Weight, Fan	m	gr		40		ISO 1940
	oz			1.6		
Lead length (minimum)	mm			310		
	inch			12.2		
Lead ends insulated and tinned	mm			4-6		
	inch			.15-.24		
Bearing				1 Sleeve Bearing		
Balancing class	G	mm/sec		< 6.3		

5 ENVIRONMENTAL

Ambient Temperature	T	°C		-20/+75		DIN 60529
		°F		-4/+167		
Storage Temperature	T	°C		-40/+75		
		°F		-4/+167		
Humidity				45-85% RH		
Protection standards		IP		44		
CE Conformity				yes		

6 MATERIAL

	Description	Approval	Manufacturer	
Housing				
Housing	PC, Polycarbonate black	UL94-V1	General Electric	5550W-01
Label	Grip white, (short time to +125°C)		Pago, CH	
Adhesive	Cyanoacrylate		Loctite	
Impeller				
Impeller	PC, Polycarbonate black	UL94-V1	General Electric	5550W-01
Motor				
Magnet	Ferrite permanent magnet		-	
Bearing	Sintered iron		-	
Lubricant	Synthetic hydrocarbon		-	
Shaft	Stainless steel, X40Cr13		-	
Flux disc	Electro sheet metal			
PCB	Epoxy, glass reinforced,	UL94-V0	Isola	
Coil	Enameled copper wire, Class F 155°C		-	
Lead Wire	Cu, AWG24, 0.22mm ²	UL94-V1	Coroplast	8121E-07
Electric-Comp.	SMD Standard Components		-	

7 DESIGN-PROCESS

- Press- and stick-connections are made for a static pressure of min. 100 G (981 m/s²) at 22°C
(Values are recorded based on a first pre-series of 10 pcs.)

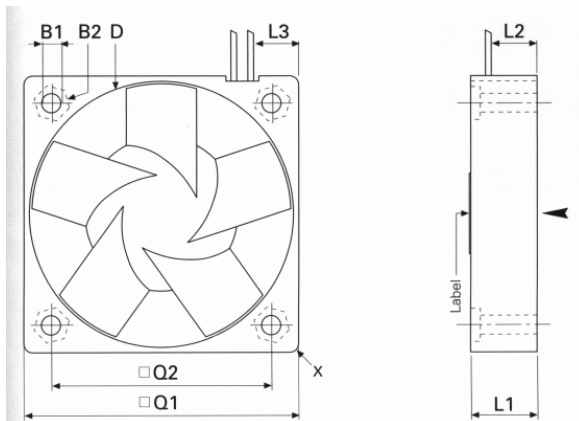
8 ADDITIONAL DOCUMENTS

CE - Conformity	CE-KE-X
General operating instruction	Z45-106, English

9 APPLICATION

- Very compact design (Ultra slim)
- Low noise
- Long life with electronic commutated motor
- Big temperature range

10 DIMENSIONAL DRAWINGS

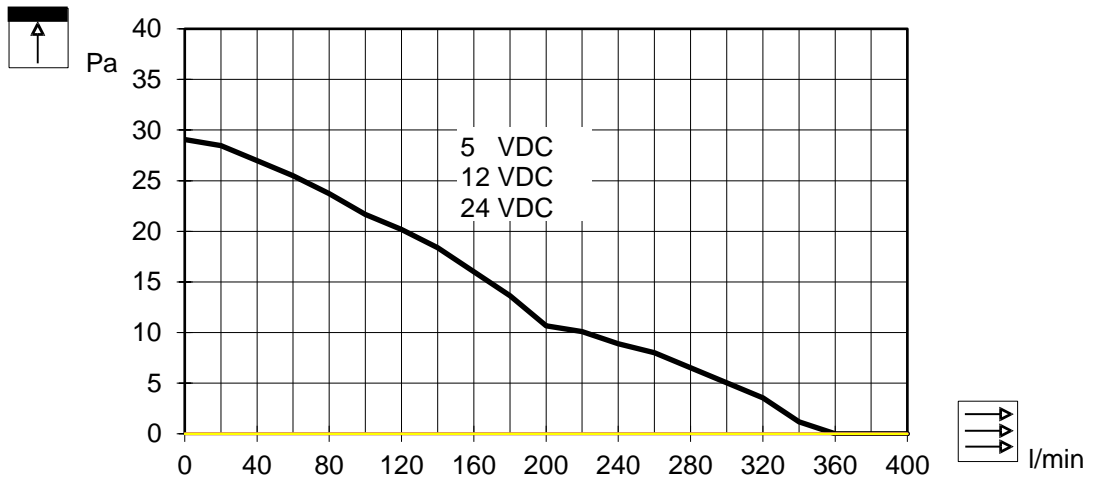


F62	mm	inch
B1 \varnothing	4.3	0.170
B2 \square	5.5 x 2	0.216
D \varnothing	59.4	2.340
L1	15 ^{+0.2} _{0.0}	0.590
L2	9	0.354
L3	12	0.472
Q1 \square	62 \pm 0.2	2.440
Q2 \square	50 \pm 0.1	1.968
X	0.5 x 45°	0.020

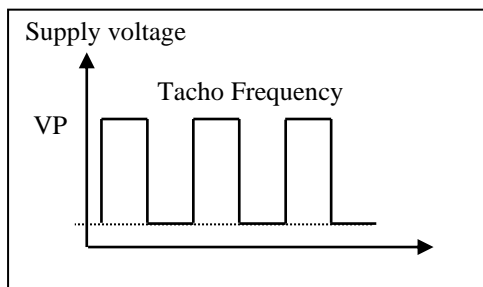


11 AIR FLOW DIAGRAM

F62MQ 5, 12 and 24 VDC



12 ELECTRONIC FUNCTION



Tacho signal: 3 pulses per rotation
 $\text{rpm} [1 / \text{min}] = f_{\text{Tacho}} [\text{Hz}] * 20$

Tacho signal	direct coil voltage	
maximum output voltage	VP	
maximum sink current	5 mA	at 25°C
output low voltage	5V LM/MM	≤ 1 V
	12V LM/MM	≤ 2 V
	24V LM/MM	≤ 3 V
output high voltage	5V LM/MM	≤ 4 V
	12V LM/MM	≤ 10 V
	24V LM/MM	≤ 21 V

13 BLOWER PINOUT

Pin	Color	Description	AWG
1	Red	VCC	24
2	Black	GND	24
3	Yellow	Tacho signal	24

14 UPDATES

1	created	16.08.2022 / DH
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