

EC centrifugal fan

forward-curved, single-intake

with housing (flange)

G1G140-AC37-51 ebmpapst Datasheet

sales@fansco.com

www.fansco.com

Nominal data

Type	G1G140-AC37-51	
Motor	M1G074-BF	
Nominal voltage	VDC	24
Nominal voltage range	VDC	16 .. 28
Frequency	Hz	-
Method of obtaining data		fa
Speed (rpm)	min ⁻¹	2250
Power consumption	W	100
Current draw	A	5.0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change



EC centrifugal fan

forward-curved, single-intake
with housing (flange)

Technical description

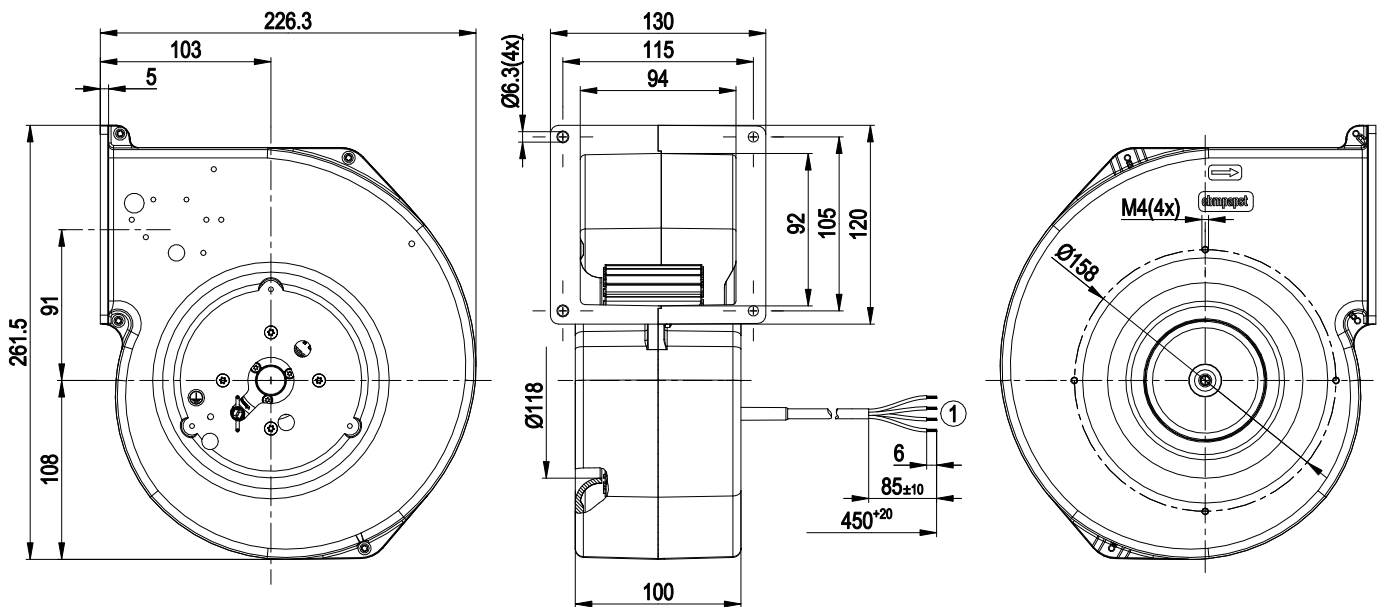
Weight	2.5 kg
Fan size	140 mm
Rotor surface	Painted black
Impeller material	Sheet steel, galvanized
Housing material	Die-cast aluminum
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP42; installation- and position-dependent
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F0
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Mode	S1
Motor bearing	Ball bearing
Technical features	- Tach output - Motor current limitation - Soft start - Control input 0-10 VDC / PWM
Motor protection	Reverse polarity and locked-rotor protection
With cable	Axial
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1



EC centrifugal fan

forward-curved, single-intake
with housing (flange)

Product drawing

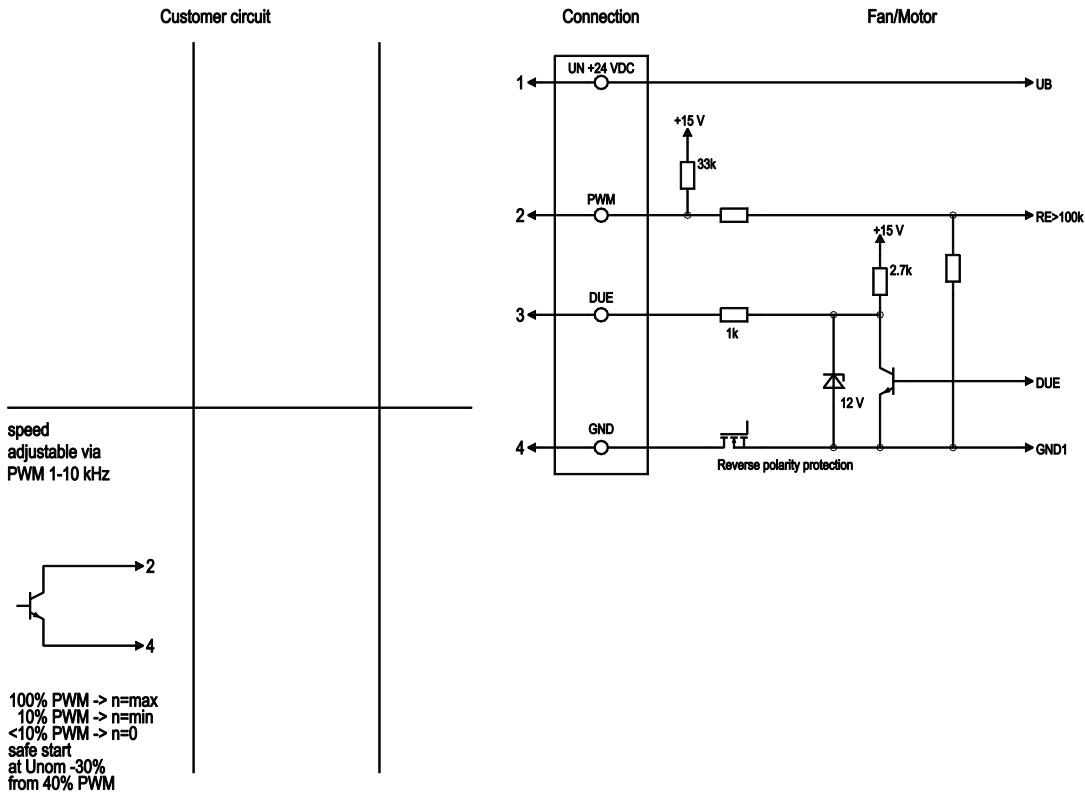


1 Cable PVC AWG20, 4x crimped splices

EC centrifugal fan

forward-curved, single-intake
with housing (flange)

Connection diagram



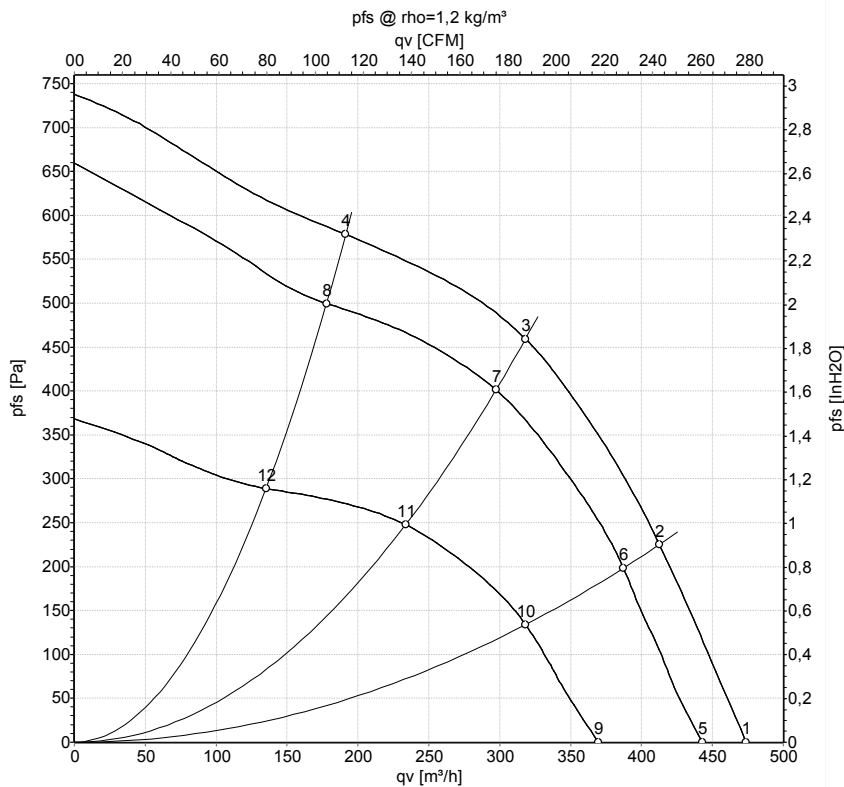
No.	Conn.	Designation	Color	Function/assignment
1	1	UN +24 VDC	red	Power supply 24 VDC, maximum ripple 3.5 %
1	2	PWM	black	PWM control input
1	3	DUE	white	Tach output, 3 pulses per revolution, Isink max = 10 mA
1	4	GND	blue	Reference ground



EC centrifugal fan

forward-curved, single-intake
with housing (flange)

Curves: Air performance



Measurement: LU-51630-1
Measurement: LU-51629-1
Measurement: LU-51631-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

Measured values

	U	n	P _{ed}	I	qv	p _{fs}	qv	p _{fs}
	V	min ⁻¹	W	A	m³/h	Pa	CFM	inH2O
1	28	2430	123	5.55	475	0	280	0.00
2	28	2600	117	5.13	415	226	245	0.91
3	28	2925	108	4.51	320	462	185	1.85
4	28	3370	93	3.72	190	579	110	2.32
5	24	2250	100	5.00	445	0	260	0.00
6	24	2435	96	4.69	385	200	230	0.80
7	24	2735	89	4.16	295	400	175	1.61
8	24	3155	78	3.54	180	500	105	2.01
9	16	1910	58	3.98	370	0	220	0.00
10	16	2010	54	3.70	320	134	185	0.54
11	16	2195	46	3.15	235	250	140	1.00
12	16	2425	36	2.50	135	288	80	1.16

U = Power supply · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

