

AC centrifugal fan

forward-curved, dual-intake
with housing (without flange)

D2E097-BI63-H1 ebmpapst Datasheet
sales@fansco.com
www.fansco.com

Nominal data

Type	D2E097-BI63-H1		
Motor	M2E052-CA		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		ml	ml
Valid for approval/standard		CE	CE
Speed (rpm)	min ⁻¹	2520	2540
Power consumption	W	70	85
Current draw	A	0.32	0.39
Capacitor	μF	1.5	1.5
Capacitor voltage	VDB	400	400
Capacitor standard		S0 (CE)	S0 (CE)
Min. back pressure	Pa	140	140
Min. back pressure	inH ₂ O	0.56	0.56
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	65	70
Starting current	A	0.47	0.46

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



AC centrifugal fan

forward-curved, dual-intake
with housing (without flange)

Technical description

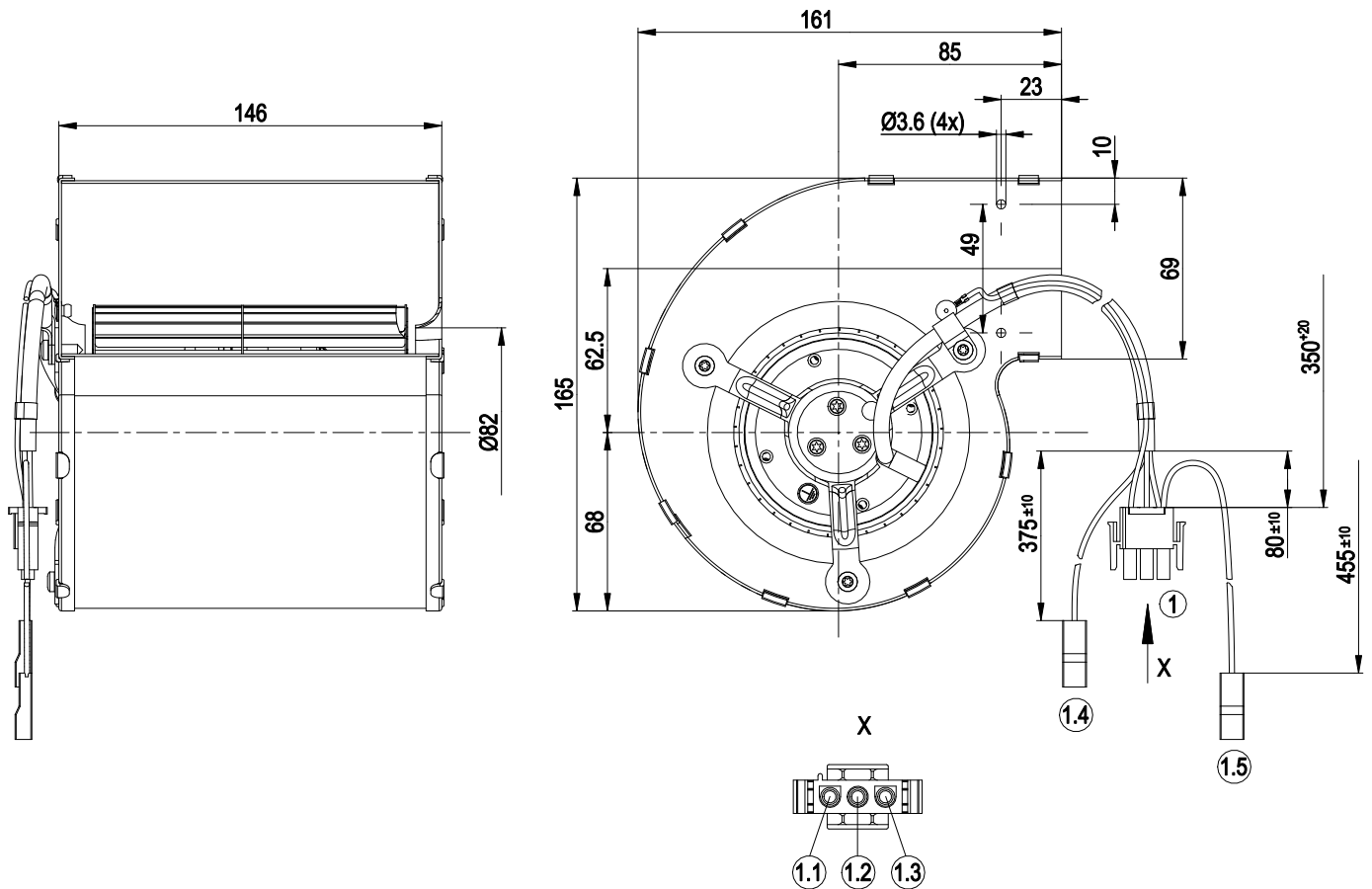
Weight	1.7 kg
Fan size	97 mm
Rotor surface	Unpainted
Impeller material	Sheet steel, galvanized
Housing material	Sheet steel, galvanized
Support structure material	Sheet steel, galvanized
Motor suspension	Motor mounted with brackets on one side
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"F"
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Condensation drainage holes	None
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE



AC centrifugal fan

forward-curved, dual-intake
with housing (without flange)

Product drawing

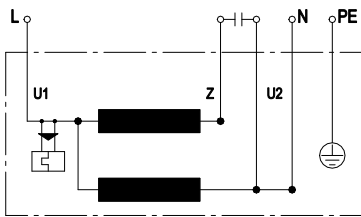


1	Cable AWG20, 3-pole connector housing tyco 1241809-2, 2x crimped plug pin tyco 926885-1, 1x crimped plug pin tyco 926883-1
1.1	PE (green/yellow)
1.2	L (blue)
1.3	N (black)
1.4	brown, flat push-on receptacle 6.3 x 0.8 with insulating sleeve
1.5	black, flat push-on receptacle 6.3 x 0.8 with insulating sleeve

AC centrifugal fan

forward-curved, dual-intake
with housing (without flange)

Connection diagram



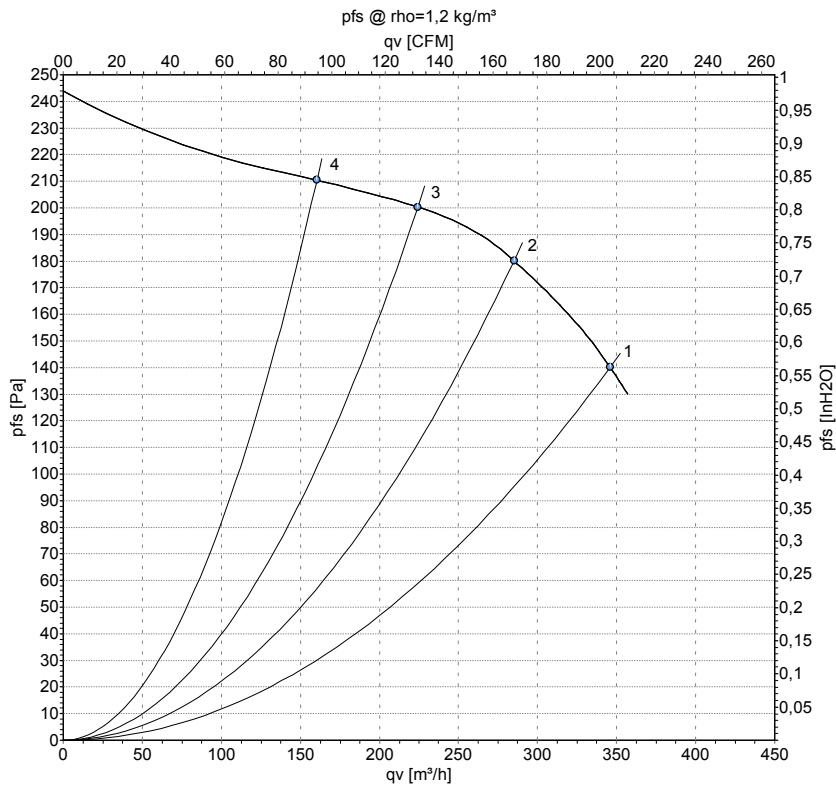
U1	blue	Z	brown	U2	black
PE	green/yellow		gray		



AC centrifugal fan

forward-curved, dual-intake
with housing (without flange)

Curves: Air performance 50 Hz



Measurement: LU-159060-1

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	f	n	P _e	I	q _v	p _{fs}	q _v	p _{fs}
	V	Hz	min ⁻¹	W	A	m³/h	Pa	cfm	inH2O
1	230	50	2520	70	0.32	345	140	205	0.56
2	230	50	2640	63	0.29	285	180	170	0.72
3	230	50	2730	58	0.27	225	200	130	0.80
4	230	50	2790	55	0.27	160	210	95	0.84

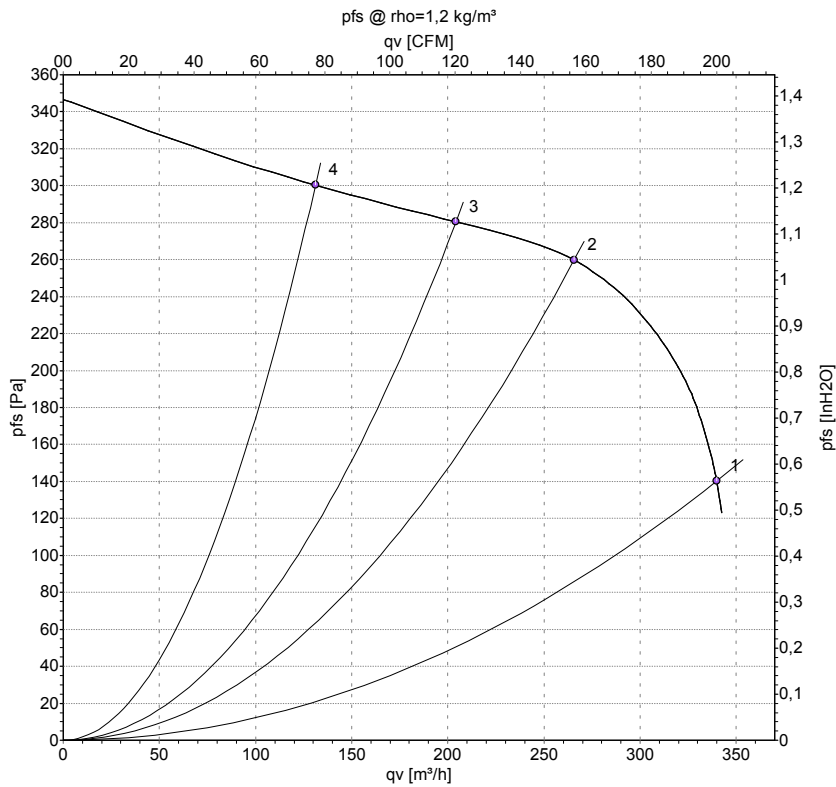
U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_v = Air flow · p_{fs} = Pressure increase



AC centrifugal fan

forward-curved, dual-intake
with housing (without flange)

Curves: Air performance 60 Hz



Measurement: LU-159123-1

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	f	n	P _e	I	q _v	p _{fs}	q _v	p _{fs}
	V	Hz	min ⁻¹	W	A	m³/h	Pa	cfm	inH2O
1	230	60	2540	85	0.39	340	140	200	0.56
2	230	60	3080	68	0.30	265	260	155	1.04
3	230	60	3230	59	0.26	205	280	120	1.12
4	230	60	3345	52	0.23	130	300	75	1.20

U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_v = Air flow · p_{fs} = Pressure increase

