D2E160-GL25-23

AC centrifugal fan

forward-curved, dual-intake

with housing (flange)

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Nominal data

Type	**D2E160-GL25-23**	
Motor	**M2E074-HA**	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Method of obtaining data		ml
Valid for approval/standard		CE
Speed (rpm)	min^{-1}	2200
Power consumption	W	390
Current draw	A	1.7
Capacitor	µF	10
Capacitor voltage	VDB	400
Capacitor standard		S2 (CE)
Min. back pressure	Pa	330
Min. back pressure	inH2O	1.32
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	45

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

Data according to ErP Directive

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	34.3	34.3
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		44	44
05 Variable speed drive		No	

09 Power consumption P_e	kW	0.29
09 Air flow q_v	m^3/h	750
09 Pressure increase p_{fs}	Pa	476
10 Speed (rpm) n	min^{-1}	2590
11 Specific ratio*		1.00

Data obtained at optimum efficiency level.
The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

* Specific ratio = 1 + p_{fs} / 100 000 Pa

LU-168136

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Technical description

Weight	6.9 kg
Fan size	160 mm
Rotor surface	Unpainted
Terminal box material	PP plastic
Impeller material	Sheet steel, galvanized
Housing material	PP plastic
Motor suspension	Motor vibration-damped on both sides
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP20
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H0 - dry environment
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
Speed levels	3
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Electrical hookup	Via terminal box, capacitor integrated and connected; With plug
Motor protection	Thermal overload protector (TOP) with basic insulation
With cable	Axial
Protection class	I (with customer connection of protective earth)
Motor capacitor according to EN 60252-1 in safety protection class	S2
Conformity with standards	EN 60335-1; CE

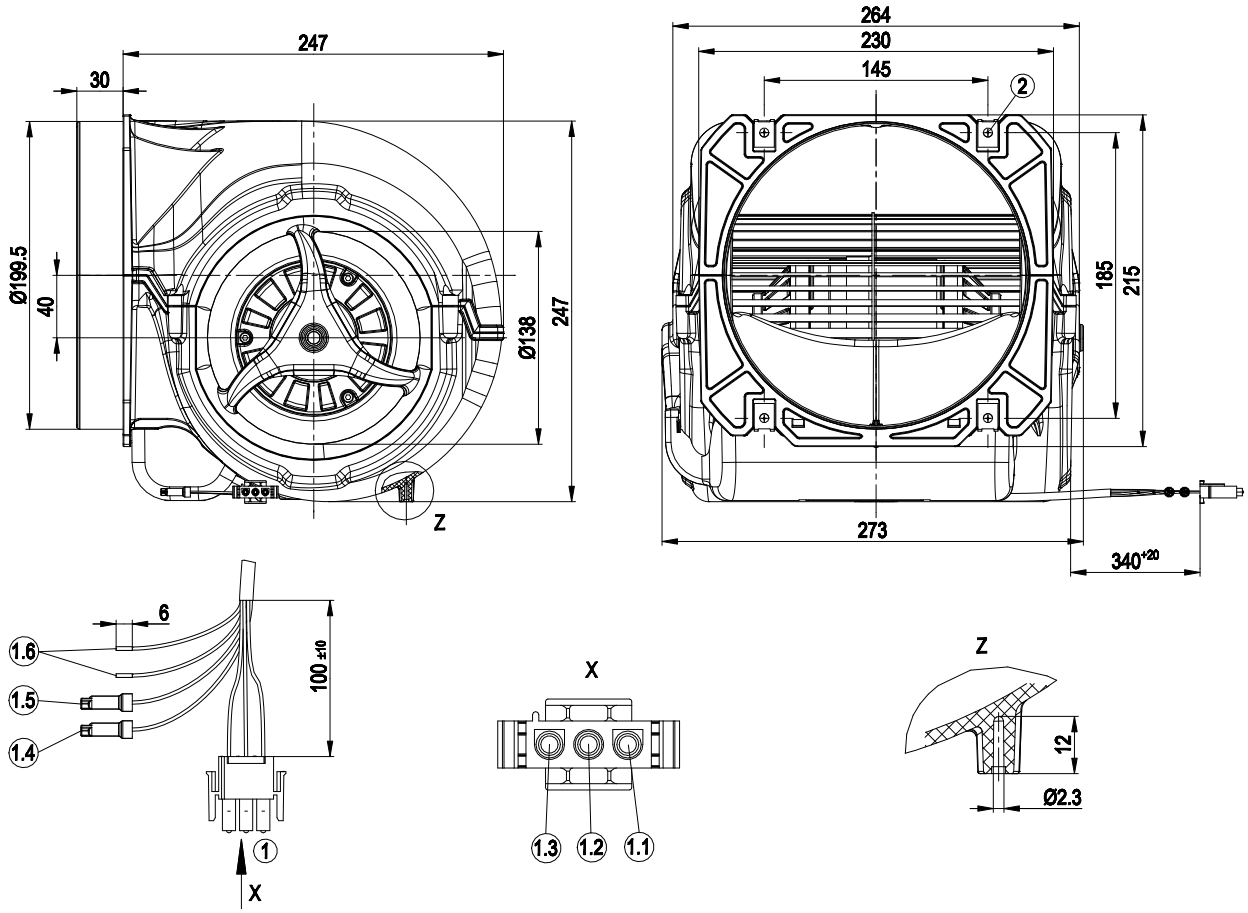
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Product drawing



1	Cable ETFE AWG20 with AMP connector housing 350766-4
1.1	black, plug pin AMP 926886-1 crimped
1.2	blue, plug pin AMP 926886-1 crimped
1.3	green/yellow, plug pin AMP 926886-1 crimped
1.4	white, connector AMP 36964-0 crimped
1.5	gray, connector AMP 36964-0 crimped
1.6	2x yellow, crimped splice

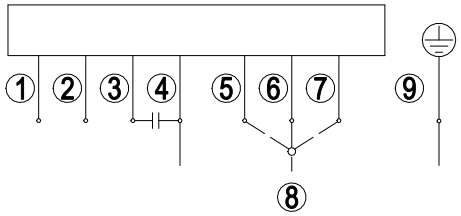
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Connection diagram



Note: High speed (step III); low speed (step I)

1	= TOP = yellow
2	= TOP = yellow
3	brown
4	N = blue
5	Step I black 1/white
6	Step II black 2/gray
7	Step III black 3/black
8	L1
9	= PE = green/yellow

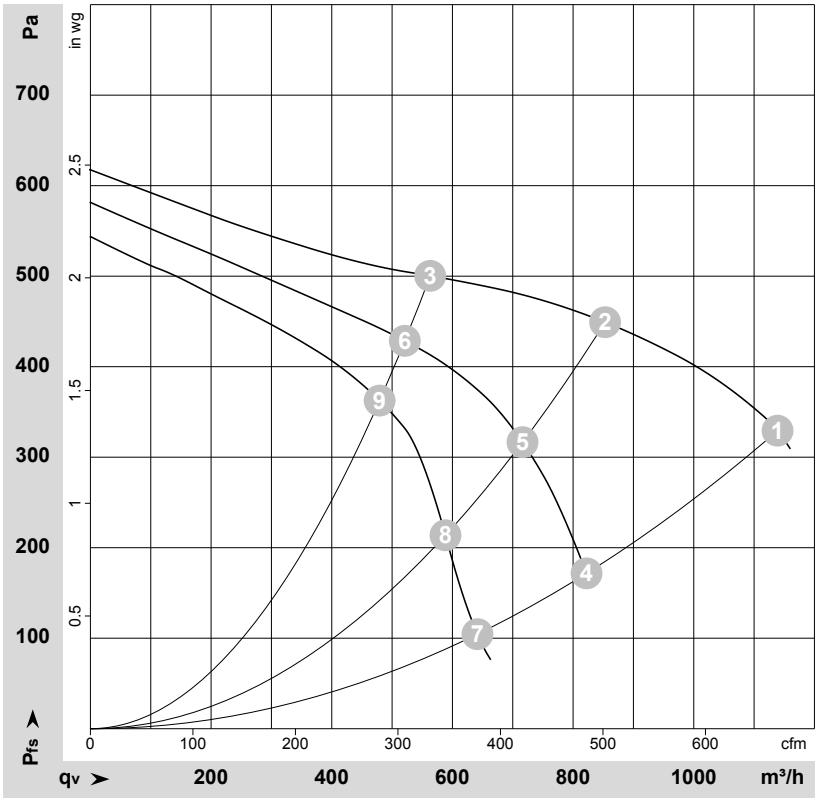
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-168136-1
Measurement: LU-168138-1
Measurement: LU-168141-1

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

	Stage	U	f	n	P_e	I	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	3	230	50	2200	390	1.70	1140	330	670	1.32
2	3	230	50	2515	320	1.44	855	450	500	1.81
3	3	230	50	2680	265	1.24	565	500	330	2.01
4	2	230	50	1625	337	1.49	820	181	485	0.73
5	2	230	50	2120	288	1.32	715	320	420	1.28
6	2	230	50	2480	225	1.11	520	429	305	1.72
7	1	230	50	1195	320	1.41	640	94	375	0.38
8	1	230	50	1705	283	1.27	590	214	345	0.86
9	1	230	50	2285	228	1.09	480	363	280	1.46

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

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