G4D180-CD34-20

AC centrifugal fan

forward-curved, single-intake

with housing (without flange), for rail applications

G4D180-CD34-20 ebmpapst Datasheet
sales@fansco.com
www.fansco.com

Nominal data

Type	**G4D180-CD34-20**
Motor	**M4D068-EC**

Nominal voltage	VAC	460
Wiring		Y
Frequency	Hz	60
Method of obtaining data		ml
Valid for approval/standard		CE
Speed (rpm)	min^{-1}	1400
Power consumption	W	245
Current draw	A	0.36
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60
Starting current	A	0.73

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

AC centrifugal fan

forward-curved, single-intake

with housing (without flange), for rail applications

Technical description

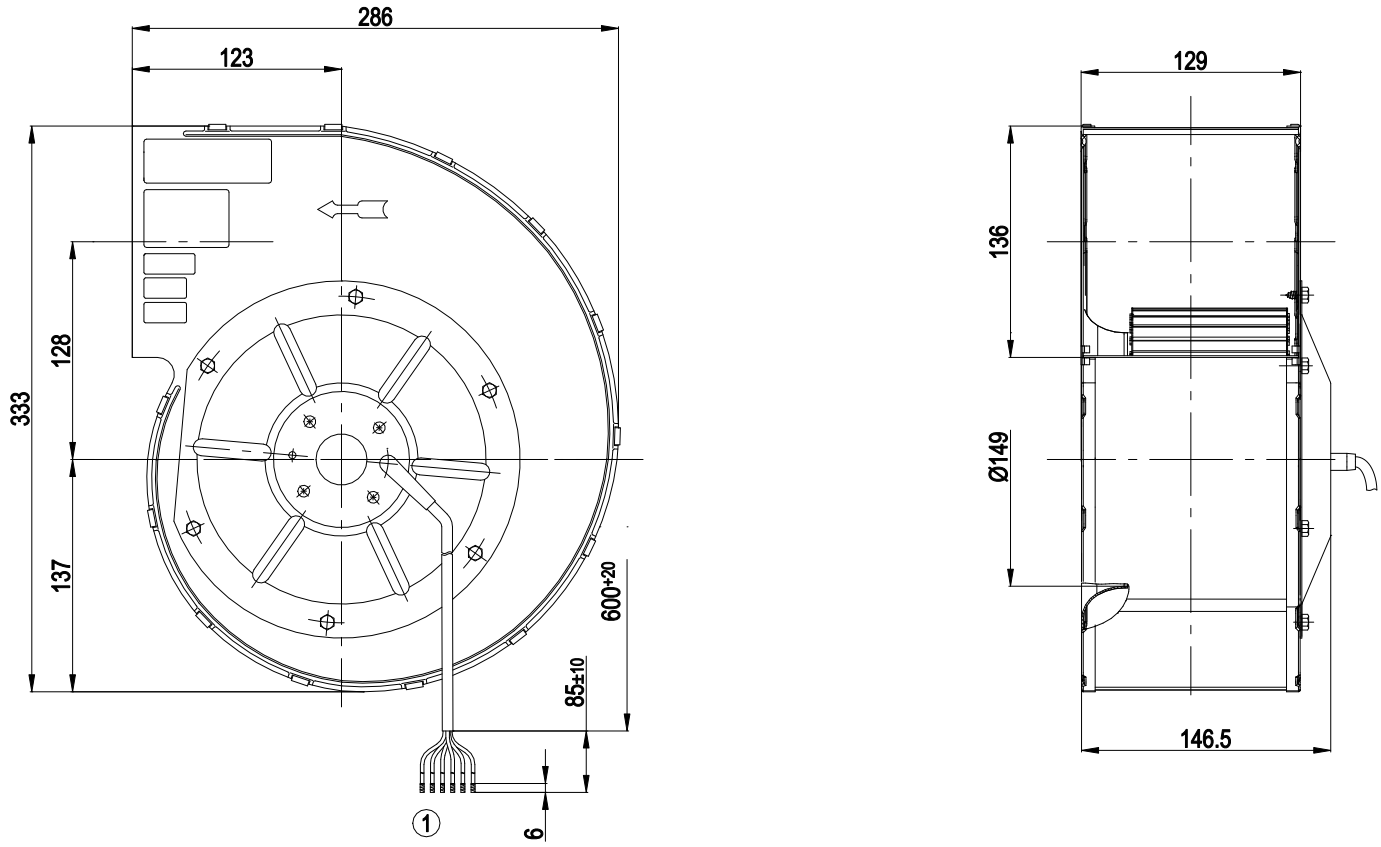
Weight	5.54 kg
Size	180 mm
Motor size	68
Rotor surface	Painted black
Impeller material	Sheet steel, galvanized
Housing material	Sheet steel, galvanized
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H1+; F5
Max. permitted ambient temp. for motor (transport/storage)	+80 °C
Min. permitted ambient temp. for motor (transport/storage)	-40 °C
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
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) with basic insulation
With cable	Axial
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 61373, Cat. 1B: 2010; CE

AC centrifugal fan

forward-curved, single-intake

with housing (without flange), for rail applications

Product drawing



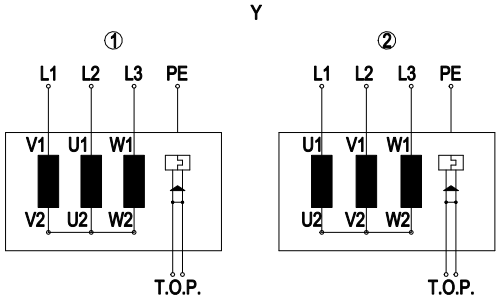
1	Cable halogen-free, BETAtrans® 3 GKW flex, sw 6G 0.5 mm², 6x crimped splices

AC centrifugal fan

forward-curved, single-intake

with housing (without flange), for rail applications

Connection diagram



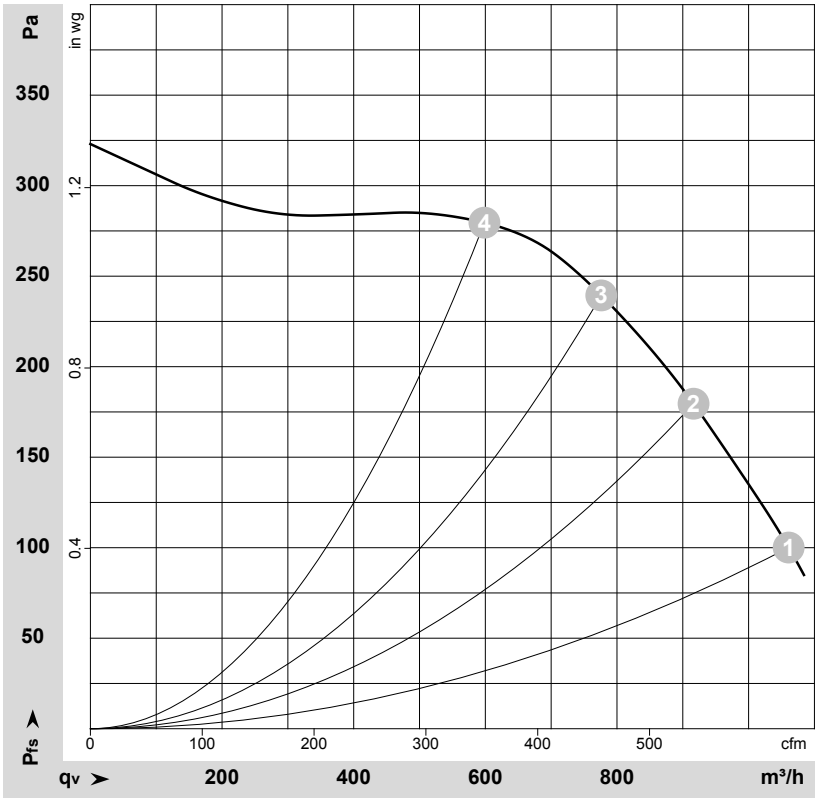
Y	Star connection, three-phase motor
1	Counterclockwise operation
L1	blue
L2	black
L3	brown
PE	green/yellow
TOP	gray
2	Clockwise operation
L1	black
L2	blue
L3	brown
PE	green/yellow
TOP	gray

AC centrifugal fan

forward-curved, single-intake

with housing (without flange), for rail applications

Curves: Air performance 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-54337-1

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	m^3/h	Pa	cfm	in. wg
1	460	60	1400	245	0.36	1060	100	625	0.40
2	460	60	1495	201	0.30	915	180	540	0.72
3	460	60	1565	166	0.25	775	240	455	0.96
4	460	60	1630	128	0.21	600	280	355	1.12

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