

G4D250-DC10-03

AC centrifugal fan

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



ebm-papst Mulfingen GmbH & Co. KG

Bachmühle 2 · D-74673 Mulfingen

Phone +49 7938 81-0

Fax +49 7938 81-110

info1@de.ebmpapst.com

www.ebmpapst.com

Limited partnership · Headquarters Mulfingen

Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen

Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	G4D250-DC10-03		
Motor	M4D094-HA		
Phase		3~	3~
Nominal voltage	VAC	400	400
Connection		Y	Y
Frequency	Hz	50	60
Method of obtaining data		fa	ml
Valid for approval/standard		CE	CE
Speed (rpm)	min ⁻¹	1350	1560
Power consumption	W	590	710
Current draw	A	1.17	1.26
Min. back pressure	Pa	0	150
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	80	60
Starting current	A	4	3.7

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	%	37.2	34
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		47.2	44
05 Variable speed drive		No	

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

09 Power consumption P_e	kW	0.26
09 Air flow q_v	m ³ /h	1060
09 Pressure increase p_{fs}	Pa	334
10 Speed (rpm) n	min ⁻¹	1445
11 Specific ratio *		1.00

*Specific ratio = $1 + p_{fs} / 100\,000\text{ Pa}$

LU-56377



G4D250-DC10-03

AC centrifugal fan

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

Technical description

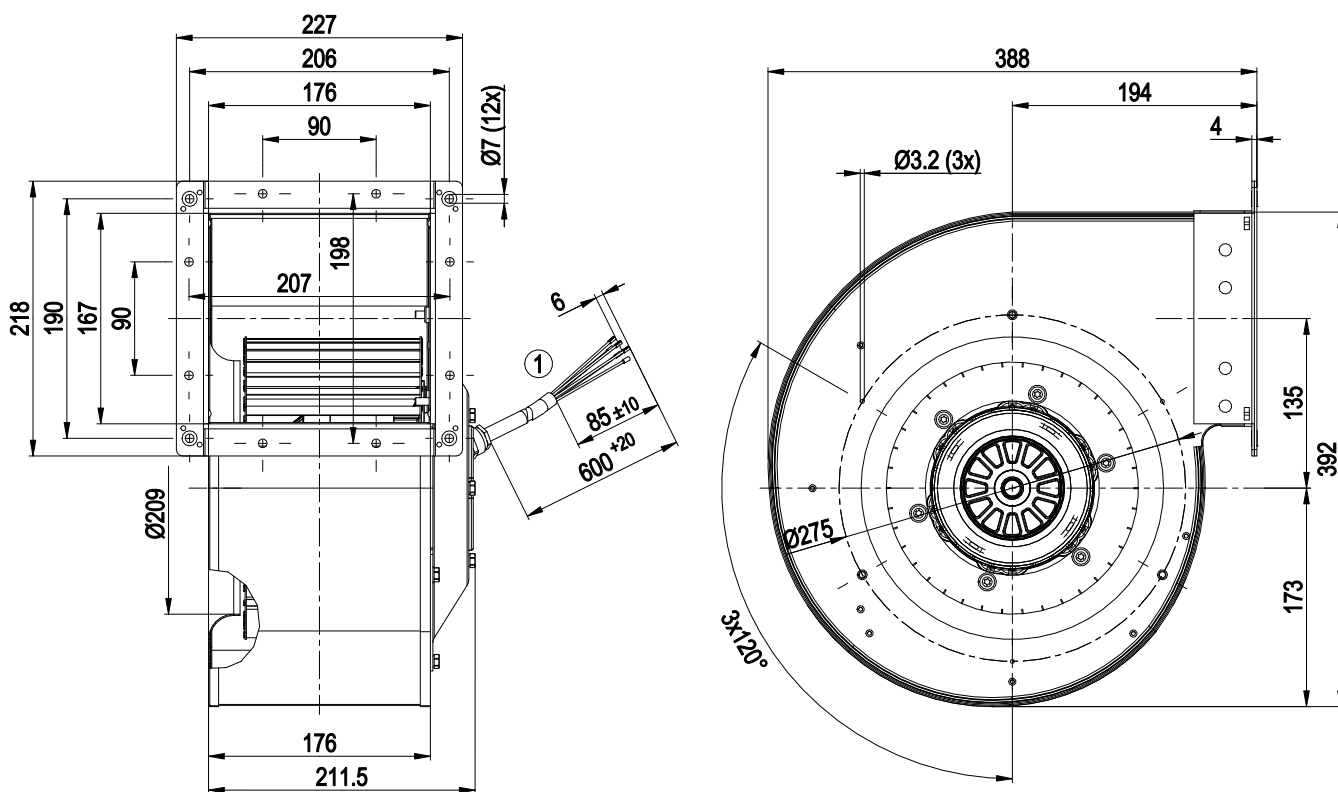
Weight	13.4 kg
Fan size	250 mm
Motor size	94
Rotor surface	Painted black
Impeller material	Sheet steel, galvanized
Housing material	Sheet steel, galvanized
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	«F»
Moisture (F) / Environmental (H) protection class	H1
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	—
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) brought out, basic insulation
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60034-1 (2010); CE
Approval	EAC



AC centrifugal fan

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

Product drawing



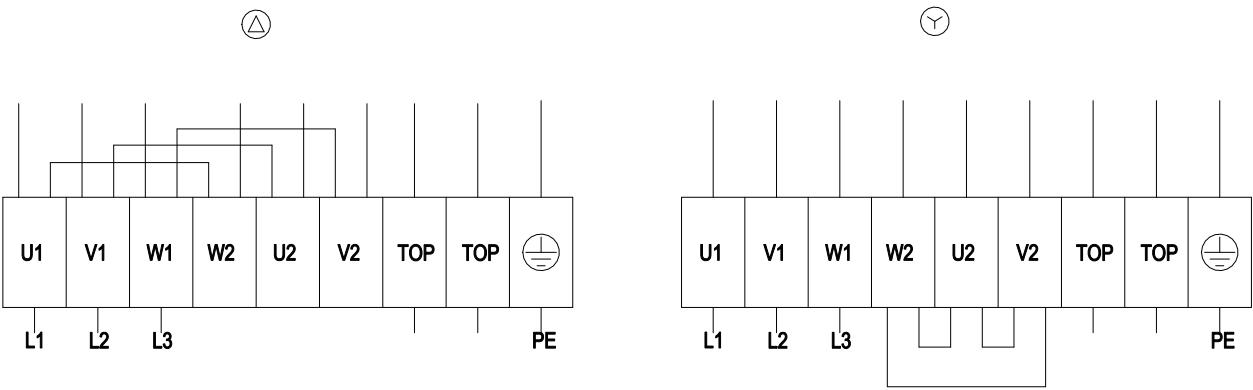
1	Cable silicone 6G 0.5 mm ²
	6x crimped ferrules



AC centrifugal fan

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

Connection diagram



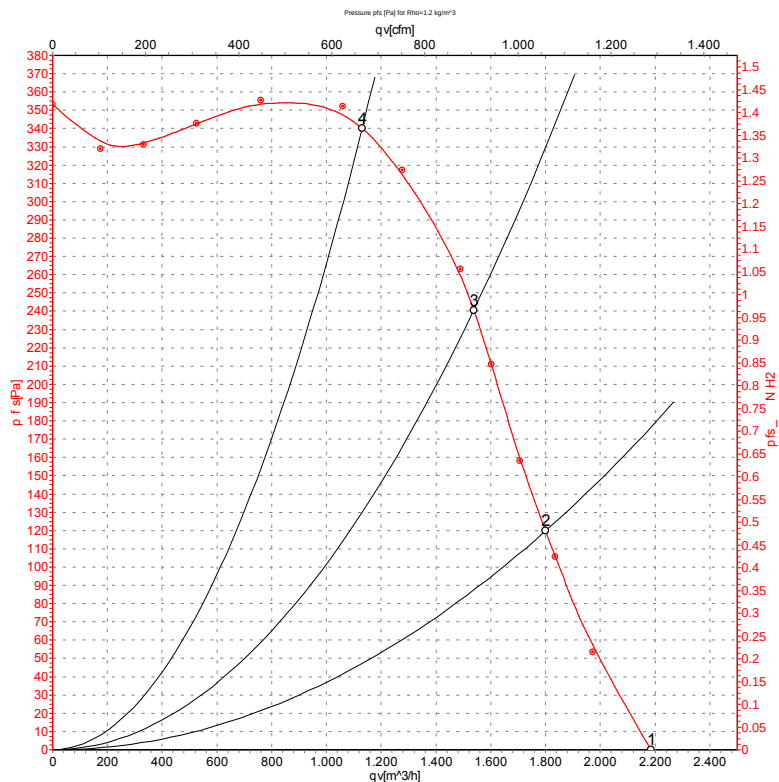
Δ	Delta connection
Y	Star connection
L1	= U1 = black
L2	= V1 = blue
L3	= W1 = brown
W2	yellow
U2	green
V2	white
TOP	2 x grey
PE	green/yellow



AC centrifugal fan

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

Curves: Air performance 50 Hz



Measurement: LU-56377-1

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 must be checked in 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	in. wg
1	400	50	1350	590	1.17	2185	0	1285	0.00
2	400	50	1390	467	1.02	1800	120	1060	0.48
3	400	50	1410	391	0.93	1540	240	905	0.96
4	400	50	1440	282	0.84	1130	340	665	1.36

U = Power supply · f = Frequency · n = Speed (rpm) · P

e = Power consumption · I = Current draw · q_v = Air flow · p

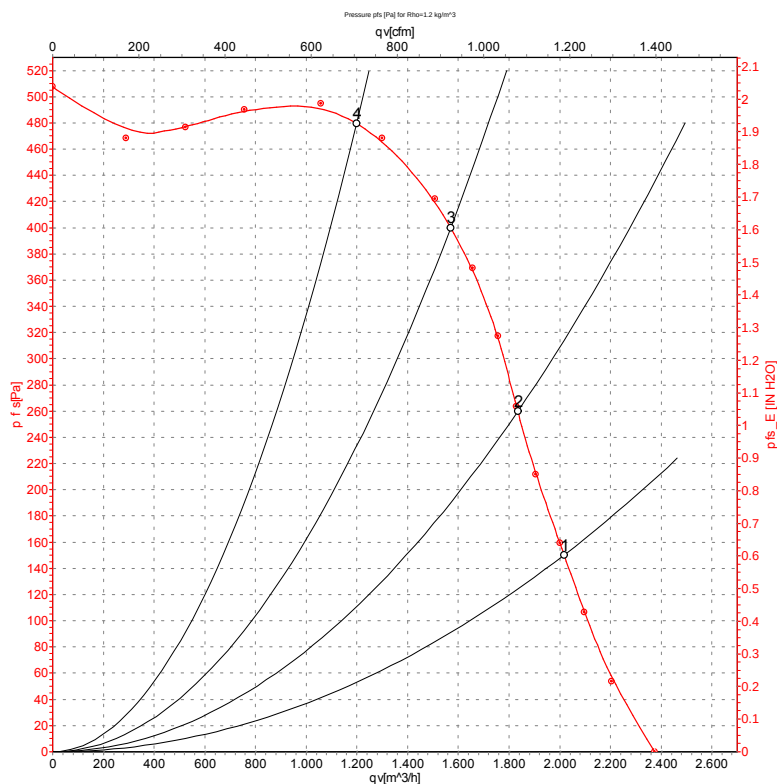
fs = Pressure increase



AC centrifugal fan

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

Curves: Air performance 60 Hz



Measurement: LU-56378-1

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 must be checked in 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	400	60	1560	710	1.26	2015	150	1185	0.60
2	400	60	1590	635	1.14	1835	260	1080	1.04
3	400	60	1640	516	0.97	1570	400	925	1.61
4	400	60	1690	380	0.80	1200	480	705	1.93

U = Power supply · f = Frequency · n = Speed (rpm) · P

e = Power consumption · I = Current draw · q_v = Air flow · p

s = Pressure increase

