D4D250-CA02-01

AC centrifugal fan

forward-curved, dual-intake

with housing (large flange)

ASIA PACIFIC SHENGRUI LIMITED
Phone +00852 56261528
info@apacfan.com
www.apacfan.com

ErP2015 EXCEEDS THE NORM

Nominal data

Type	**D4D250-CA02-01**
Motor	**M4D094-LA**

Phase		3~	3~
Nominal voltage	VAC	400	400
Wiring		Y	Y
Frequency	Hz	50	60
Method of obtaining data		ml	ml
Valid for approval/standard		CE	CE
Speed (rpm)	min^{-1}	1200	1410
Power consumption	W	1270	1270
Current draw	A	2.3	2.2
Min. back pressure	Pa	50	350
Min. back pressure	inH2O	0.2	1.41
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	45	45
Starting current	A	4.6	4

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_e	%	46.2	40.9
02 Measurement category		B	
03 Efficiency category		Total	
04 Efficiency grade N		54.3	49
05 Variable speed drive		No	

09 Power consumption P_e	kW	0.53
09 Air flow q_v	m^3/h	2190
09 Pressure increase p_f	Pa	411
10 Speed (rpm) n	min^{-1}	1400
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_f / 100 000 Pa

LU-42113

ebmpapst

AC centrifugal fan

forward-curved, dual-intake

with housing (large flange)

Technical description

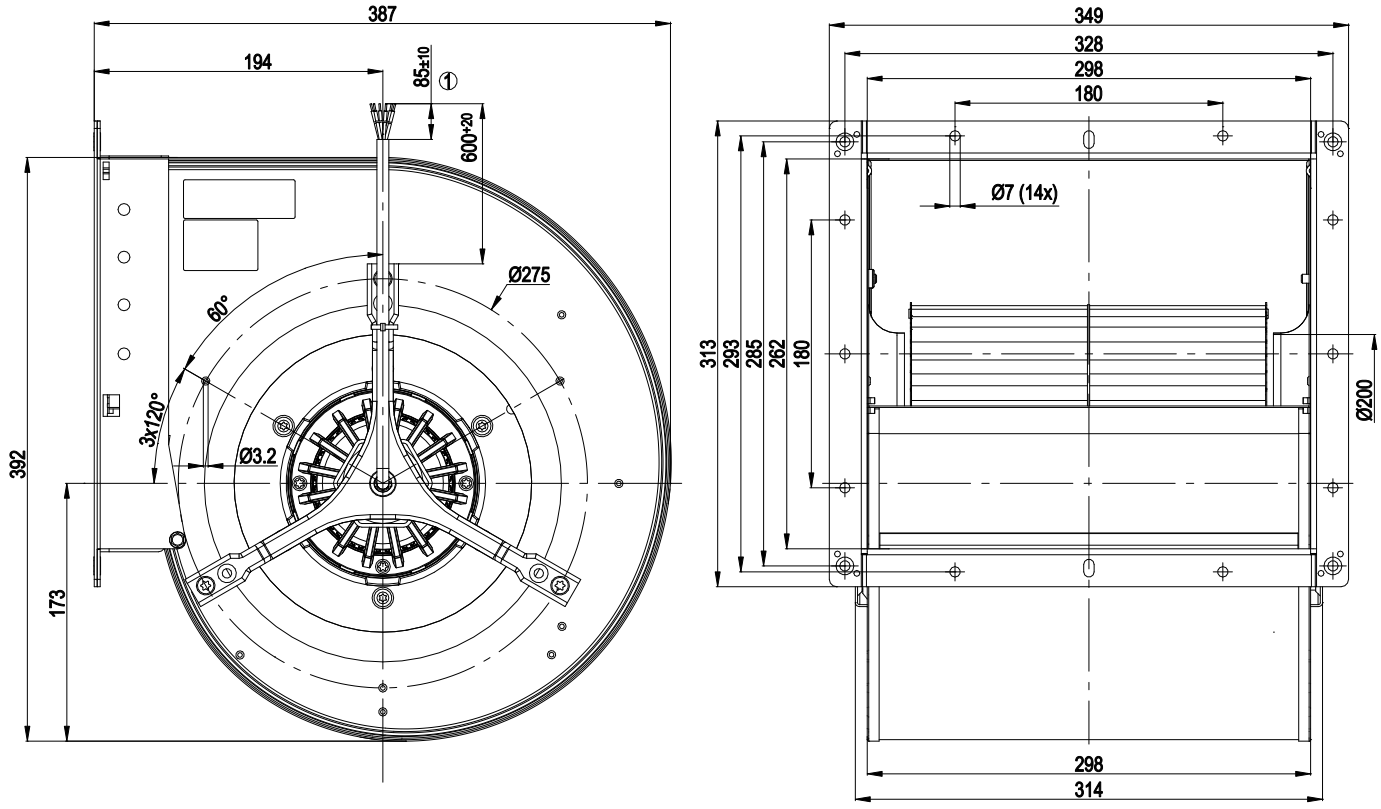
Weight	16.7 kg
Fan size	250 mm
Rotor surface	Cast in aluminum
Impeller material	Sendzimir galvanized sheet steel
Housing material	Sendzimir galvanized sheet steel
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP20
Insulation class	"F"
Moisture (F) / Environmental (H) protection 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
Condensation drainage holes	None
Mode	Continuous operation (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 60034-1 (2004); CE
Approval	CCC; EAC

AC centrifugal fan

forward-curved, dual-intake

with housing (large flange)

Product drawing



1	Cable ETFE AWG18, 6x crimped splices

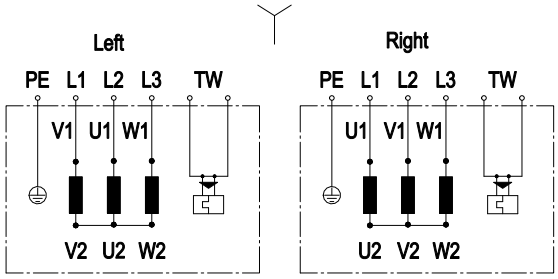
ebmpapst

AC centrifugal fan

forward-curved, dual-intake

with housing (large flange)

Connection diagram



Note: Change of rotation direction by reversing two phases

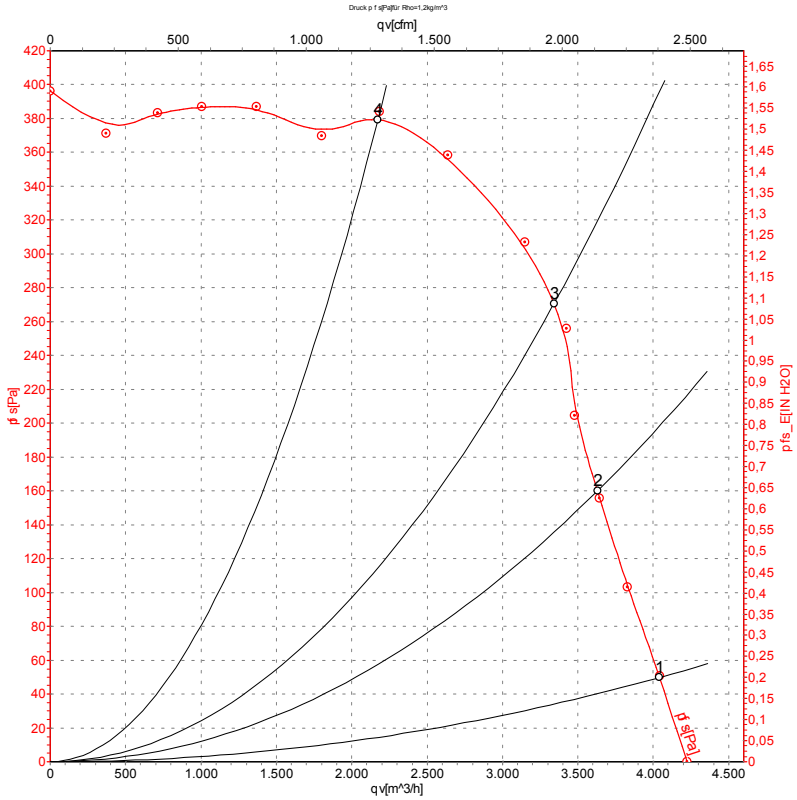
Y	Star connection	L1	=U1=black	L2	=V1=blue
L3	=W1=brown	TOP	2x gray	PE	green/yellow

AC centrifugal fan

forward-curved, dual-intake

with housing (large flange)

Curves: Air performance 50 Hz



Measurement: LU-42113-1

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

	Wired	U	f	n	P_e	I	LpA_{in}	qv	p_{fs}	qv	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	m^3/h	Pa	CFM	inH2O
1	Y	400	50	1200	1270	2.30	76	4040	50	2380	0.20
2	Y	400	50	1255	1075	1.97		3630	160	2135	0.64
3	Y	400	50	1300	925	1.74		3340	270	1965	1.08
4	Y	400	50	1400	536	1.22		2175	380	1280	1.53

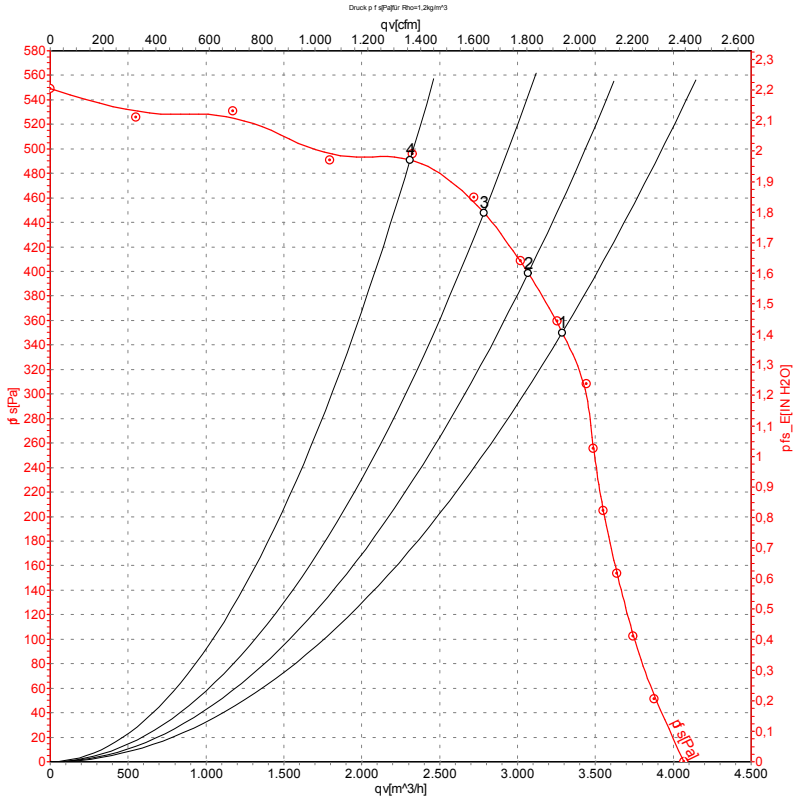
Wired = Wiring · U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · qv = Air flow · p_{fs} = Pressure increase

AC centrifugal fan

forward-curved, dual-intake

with housing (large flange)

Curves: Air performance 60 Hz



Measurement: LU-42114-1

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

	Wired	U	f	n	P_e	I	LpA_{in}	qv	p_{fs}	qv	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	m^3/h	Pa	CFM	inH2O
1	Y	400	60	1410	1270	2.20	72	3285	350	1935	1.41
2	Y	400	60	1465	1072	1.94		3070	400	1805	1.61
3	Y	400	60	1525	942	1.72		2785	450	1640	1.81
4	Y	400	60	1590	764	1.44		2310	500	1360	2.01

Wired = Wiring · U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · qv = Air flow · p_{fs} = Pressure increase