

8300100349
VBS0560PTTPS

EC centrifugal fan - RadiPac

backward-curved, single-intake

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Nominal data

Item	8300100349	
Motor	E15037-85	
Phase		3~
Nominal voltage	VAC	400
Nominal voltage range	VAC	380 .. 480
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min ⁻¹	1625
Power consumption	W	3900
Current draw	A	5.7
Min. ambient temperature	°C	-40
Max. ambient temperature	°C	40

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

Data according to Commission Regulation (EU) 327/2011 (prEN 17166)

		Actual	Req. 2015			
01 Overall efficiency η_{es}	%	67.2	57.8	09 Power consumption P_{ed}	kW	3.96
02 Measurement category		A		09 Air flow q_v	m³/h	11135
03 Efficiency category		Static		09 Pressure increase p_{fs}	Pa	826
04 Efficiency grade N		71.4	62	10 Speed (rpm) n	min ⁻¹	1625
05 Variable speed drive		Yes		11 Specific ratio*		1.01

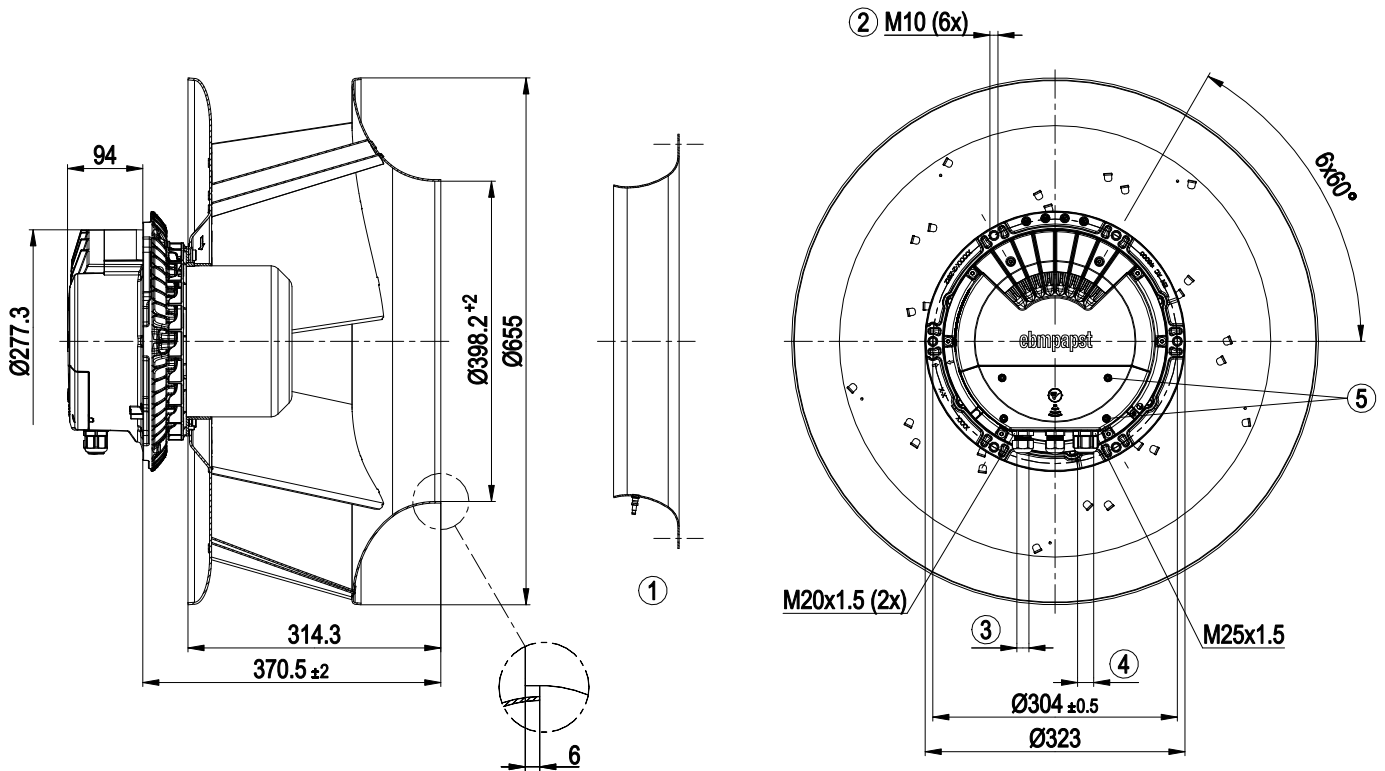
Data obtained at optimum efficiency level.
The efficiency values displayed for achieving conformity with the Ecodesign Regulation EU 327/2011 has been reached with defined air duct components (e.g. inlet rings).
The dimensions must be requested from ebm-papst. If other air conduction geometries are used on the installation side, the ebm-papst evaluation loses its validity/the conformity must be confirmed again.
The product does not fall within the scope of Regulation (EU) 2019/1781 due to the exception specified in Article 2 (2a) (motors completely integrated into a product).

* Specific ratio = $1 + p_b / 100\,000\text{ Pa}$ LU-222314

Technical description

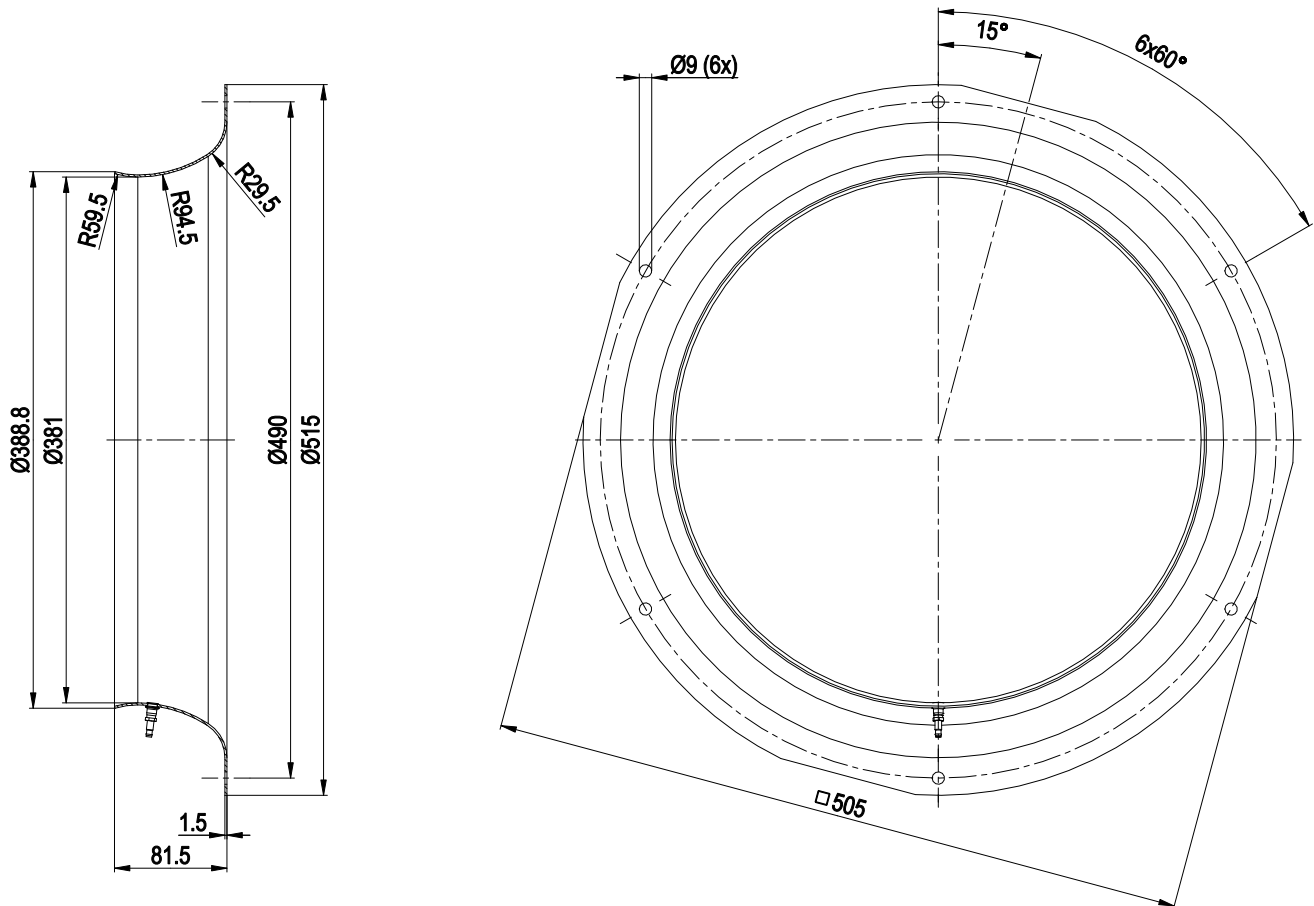
Weight	30.2 kg
Size	560 mm
Motor size	150
Rotor surface	Painted black
Electronics housing material	Die-cast aluminum
Impeller material	Sheet aluminum
Number of blades	5
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP55
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H1
Ambient temperature note	Occasional start-up at temperatures between -40°C and -25°C is permitted. For continuous operation at ambient temperatures below -25°C (such as refrigeration applications), use must be made of a fan design with special low-temperature bearings.
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; (sealed)
Technical features	- Operation and alarm display with LED - External 15-50 VDC input (parameterization) - Alarm relay - Integrated PI controller - Configurable inputs/outputs (I/O) - MODBUS V6.4 - Motor current limitation - PFC, active - RS-485 MODBUS-RTU - Soft start - Voltage output 3.3-24 VDC, Pmax = 800 mW - Control interface with SELV potential safely disconnected from the mains - Thermal overload protection for electronics/motor - Line undervoltage / phase failure detection - Vibration sensor
Power Factor Correction (PFC)	Active
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Electrical hookup	Terminal box
Motor protection	Electronic motor protection
Protection class assignment	I; If a protective earth is connected. The built-in component has several local protection class assignments. The final protection class is determined by the intended installation.
Conformity with standards	EN 61800-5-1; UKCA; CE
Approval	EAC; UL 1004-7 + 60730-1; CSA C22.2 No. 77 + CAN/CSA-E60730-1

Product drawing



1	Accessory part: Inlet ring 64030-2-4013 with pressure tap (k-factor: 348) not included in scope of delivery
2	Max. clearance for screw 20 mm
3	Cable diameter min. 4 mm, max. 10 mm, tightening torque 4 ± 0.6 Nm
4	Cable diameter min. 5 mm, max. 14 mm, tightening torque 6 ± 0.9 Nm
	(The tightening torque is designed for PVC cables. If the cable materials are different, the tightening torque may have to be adjusted)
5	Tightening torque 3 ± 0.3 Nm

Accessory part

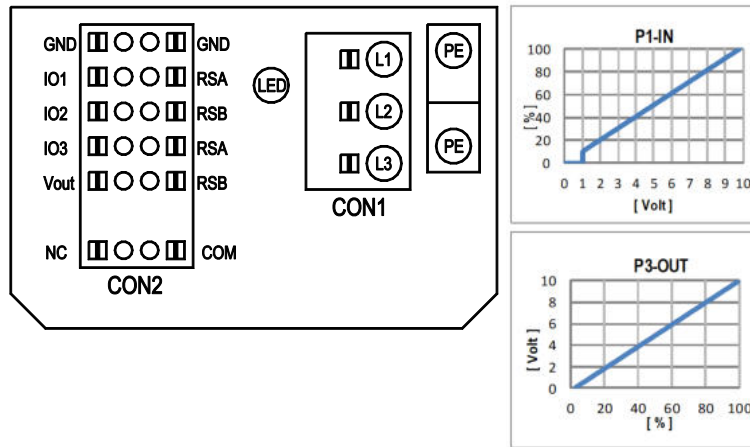


Inlet ring 64030-2-4013 with pressure tap (k-factor: 348)

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Connection diagram

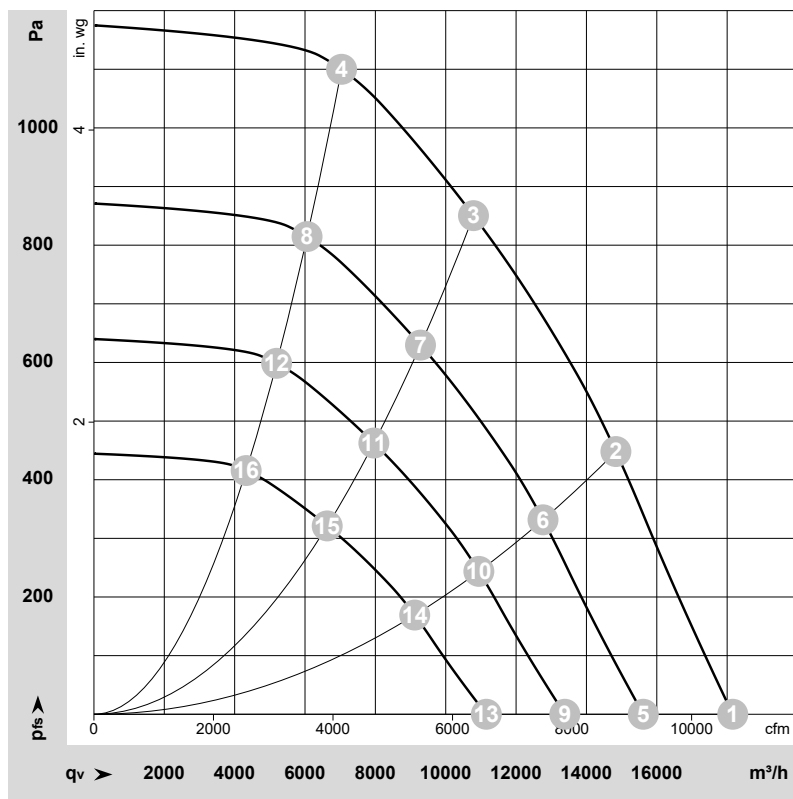


No.	Conn.	Designation	Function/assignment
	CON1	L1, L2, L3	Power supply, phase, see nameplate for voltage range
	PE	PE	Protective earth
	CON2	RSA	RS485 interface for MODBUS, RSA; SELV
	CON2	RSB	RS485 interface for MODBUS, RSB; SELV
	CON2	GND	Reference ground for control interface, SELV
	CON2	IO1	Function parameterizable (see "Optional interface functions" table) Factory setting: Digital input - high active, function: Disable input, SELV - inactive: Pin open or applied voltage < 1.5 VDC - active: applied voltage 3.5-50 VDC Reset function: Triggering of error reset on change of state from "enabled" to "disabled"
	CON2	IO2	Function parameterizable (see "Optional interface functions" table) Factory setting: Analog input 0-10 V/PWM, Ri=100 kΩ, function: set value Characteristic curve parameterizable (see input characteristic curve P1-IN), SELV
	CON2	IO3	Function parameterizable (see "Optional interface functions" table) Factory setting: Analog output 0-10 V, max. 5 mA, function: Actual speed Characteristic curve parametrizable (see output characteristic curve P3-OUT), SELV
	CON2	Vout	Voltage output 3.3-24 VDC +/-5%, Pmax=800 mW, voltage parameterizable Factory setting: 10 VDC short-circuit-proof, supply for external devices, SELV alternatively: 15-50 VDC input for parameterization via MODBUS without line voltage
	CON2	COM	Status relay, floating status contact, common connection, contact rating 250 VAC / 2 A (AC1) / min. 10 mA, reinforced insulation on supply side and on control interface side
	CON2	NC	Status relay, floating status contact, break for failure
		LED	green: status = good, ready for operation orange: status = warning red: status = failure
		P1-IN	Input characteristic curve
		P3-OUT	Output characteristic curve

Terminal/plug assignment

configurable option		configurable IO functions: normal / inverse	MODBUS Register for IO mode configuration	electrical specification		configurable IO mode		OUTPUT																									
CON2						Din1 (active high): digital input		Din2 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB							
IO1				Ain1 0-10V/PWM: analog input		Tach out (open collector output)		Diagnostics out (open collector output)		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB	
IO2				Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB							
IO3				Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB							
IO4				Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB							
IO5				Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB							
IO6				Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB							
IO7				Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB							
IO8				Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB							
IO9		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO10		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO11		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO12		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO13		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO14		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO15		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO16		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO17		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO18		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO19		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO20		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO21		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO22		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO23		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO24		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO25		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO26		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO27		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO28		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO29		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO30		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO31		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO32		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO33		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO34		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO35		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO36		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO37		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO38		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO39		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO40		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO41		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO42		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO43		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO44		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO45		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO46		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO47		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO48		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO49		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO50		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO51		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO52		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO53		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO54		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO55		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO56		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO57		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output		Diagnostics out (pulses)		RS485 bus connection,		RSA		RSB									
IO58		Ain2 0-10V/PWM: analog input		Ain2 4-20mA: analog input		Din3 (active high): digital input		Din3 (active low): digital input		PWMIn3: digital input idle level high		PWMIn3: digital input idle level low		Aout3 0-10V: analog output		Tacho out (pulses), analog output</																	

Curves: Air performance 50 Hz



$$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$$

Measurement: LU-222314-1
Date: 2022-08-03
Nozzle: 63071-2-4013

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}	LwA _{in}	LwA _{out}	LwA	q _v	P _{fs}	q _v	P _{fs}
		V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	dB(A)	dB	m³/h	Pa	cfm	in. wg
1	3~	400	50	1625	2337	3.38	96	101	101	104	18160	0	10690	0.00
2	3~	400	50	1625	3425	4.95	82	89	91	93	14840	450	8735	1.81
3	3~	400	50	1625	3900	5.70	74	81	86	87	10790	850	6350	3.41
4	3~	400	50	1625	3588	5.18	77	85	89	91	7040	1100	4145	4.42
5	3~	400	50	1400	1486	2.15	92	97	97	100	15615	0	9190	0.00
6	3~	400	50	1400	2182	3.15	79	86	87	89	12765	336	7515	1.35
7	3~	400	50	1400	2513	3.63	70	78	82	83	9285	631	5465	2.53
8	3~	400	50	1400	2287	3.30	73	81	85	87	6060	817	3565	3.28
9	3~	400	50	1200	936	1.35	88	93	93	96	13385	0	7880	0.00
10	3~	400	50	1200	1374	1.98	75	82	83	86	10940	247	6440	0.99
11	3~	400	50	1200	1582	2.28	66	74	78	80	7955	463	4685	1.86
12	3~	400	50	1200	1440	2.08	69	77	82	83	5195	600	3055	2.41
13	3~	400	50	1000	542	0.78	84	88	88	91	11155	0	6565	0.00
14	3~	400	50	1000	795	1.15	70	77	79	81	9120	171	5365	0.69
15	3~	400	50	1000	916	1.32	62	69	74	75	6630	322	3905	1.29
16	3~	400	50	1000	833	1.20	65	72	77	78	4325	417	2545	1.67

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
LwA_{out} = Sound power level outlet side · q_v = Air flow · P_{fs} = Pressure increase