

## Specification

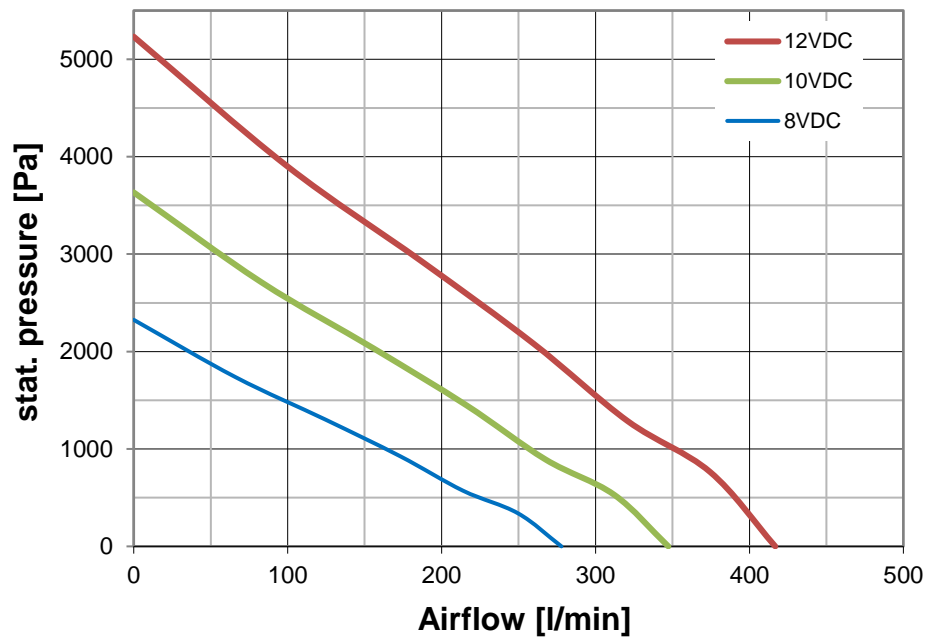
<b>Product</b>	<b>U51DL-012KK-5</b>	
<b>Product type</b>	Radial blower	
<b>Customer</b>	-	
<b>Modification No.</b>	-	
<b>Modification</b>	Standard Product	
<b>Design</b>	Motor	Electronic commutated Motor (brushless, sensorless) Neodym - Ferrit Magnet 2 Ball bearing
	Impeller	Mat. Polyamid (PA6)
	Housing	Mat. Polycarbonate (PC)
	Motor support	Mat. Aluminium, anodised, natural colour
	Electric connection	Lead wire AWG 24, UL1007, PVC Length see dimensional drawing.
	Label	Mat. Plastic, size 16x26mm

**Performance**  
Density 1.2 g/dm<sup>3</sup>

Operating range	Nominal voltage	[V]	12
	Voltage range	[V]	8 to 12
Free blowing	Current	[mA]	2'800
	Power	[W]	35
	Speed	[min <sup>-1</sup> ]	38'500
	Air flow	[l/min]	410
Typ. Working point (Appr. 50% Q <sub>max</sub> )	Current	[mA]	2'300
	Power	[W]	30
	Speed	[min <sup>-1</sup> ]	40'400
	Air flow	[l/min]	190
	Pressure	[Pa]	2'900
Static pressure	Current	[mA]	1'700
	Power	[W]	20
	Speed	[min <sup>-1</sup> ]	50'600
	Pressure	[Pa]	5'200

**p/Q-Diagram**

Density 1.2g/dm<sup>3</sup>



<b>Blower limits</b>	Maximum speed	45'000 1/min
	Max. allowed temperature on motor surface:	65°C

**Exceeding the blower limits during continuous operation may cause permanent damage!  
 Handle only in currentless condition!**

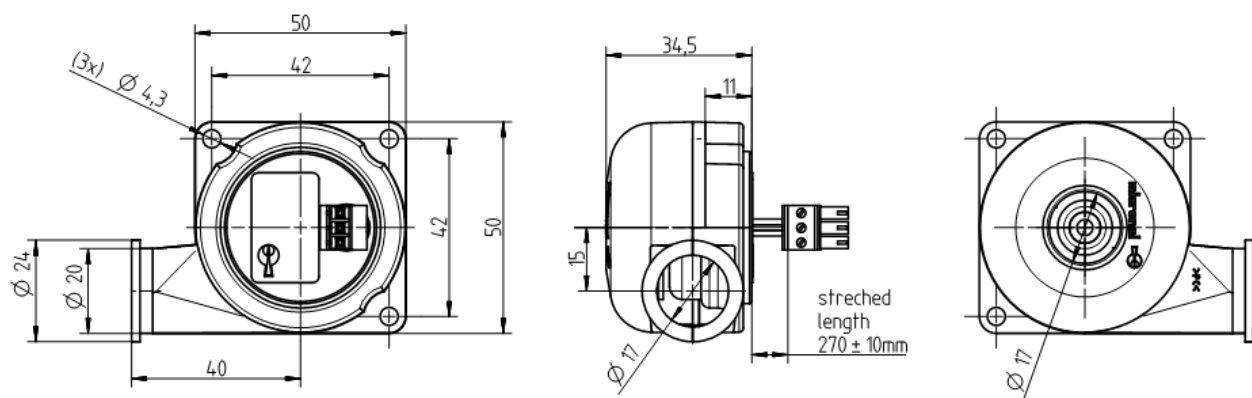
<b>Power supply requirements</b>	Ripple voltage < 5% 3000 mA (nominal voltage)
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<b>Mechanical</b>	Acoustic emission level at nominal voltage	LpA 1m [dB(A)] Distance: 1 m	58 at 1'000 Pa (10mbar)
	Weight	m [gr.]	90
	Balancing class	G [mm/s]	<2.5

<b>Tests</b>	MTTF	15'000h at nominal voltage
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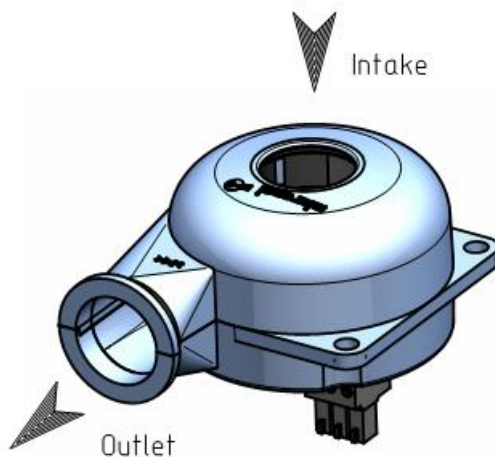
<b>Environmental</b>	Temperature range (operating and stock)	[°C]	-20 to +40
	Humidity	% RH	10 to 85
	Protection class (Norm EN60529)		IP40

**Dimensional Drawing**



Direction of rotation CCW 

**Picture**



<b>Electrical circuit</b>	Connector pin assignment Connector type: Phoenix MC1.5-3			
	AWG	PIN	Description	Colour
	24	1	Motorwinding 1	Brown
	24	2	Motorwinding 2	Red
	24	3	Motorwinding 3	Orange
<b>Phase-Phase Inductance</b>	0.19 mH			
<b>Standards</b>	CE RoHS II REACH	Document: CE-KE-X2012-U-Line.pdf Document: Conformity-Declaration_Micronel_Apr_2013.pdf		
<b>Additional document</b>	-			
<b>Disclaimer</b>	General	All data can be subject to change without advanced notice.		
	Performance data	Values listed are nominal and can vary due to component tolerances.		
<b>Revision</b>	<b>0</b>	23.04.2013 LT	Basic Spec.	
	<b>1</b>	23.04.2013 LT	Basic Spec.	
	<b>2</b>	22.10.2014 CP	Layout updated	
	<b>3</b>	21.04.2023 PMa	Motor inductance added	