

## Specification

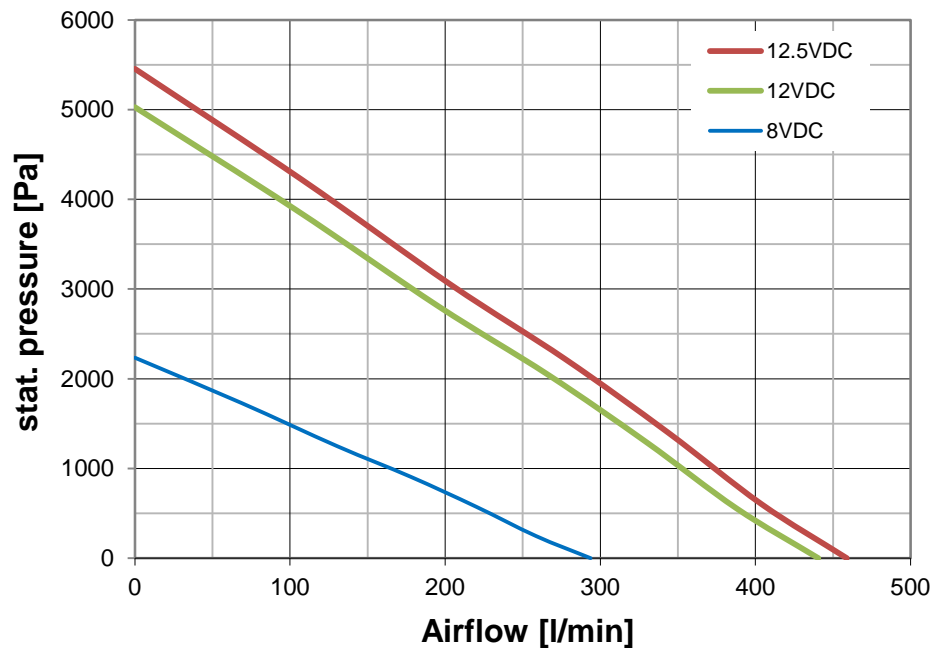
<b>Product</b>	<b>U51DX-012KK-5</b>	
<b>Product type</b>	Radial blower	
<b>Customer</b>	-	
<b>Modification No.</b>	-	
<b>Modification</b>	Standard Product	
<b>Design</b>	Motor	Electronic commutated Motor (brushless) Neodym - Ferrit Magnet 2 Ball bearing
	Impeller	Mat. Polyamide (PA6)
	Housing	Mat. Polycarbonate (PC)
	Motor support	Mat. Aluminium, anodised, natural colour
	Electric connection	Lead wire AWG 24, UL1007, PVC Lengths 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 12.5
Free blowing	Current	[mA]	3'500
	Power	[W]	41.0
	Speed	[min <sup>-1</sup> ]	40'400
	Air flow	[l/min]	440
Typ. Working point (Appr. 50% Q <sub>max</sub> )	Current	[mA]	3'300
	Power	[W]	40.0
	Speed	[min <sup>-1</sup> ]	41'400
	Air flow	[l/min]	265
	Pressure	[Pa]	2'000
Static pressure	Current	[mA]	2'100
	Power	[W]	26.0
	Speed	[min <sup>-1</sup> ]	53'800
	Pressure	[Pa]	5'000

**p/Q-Diagram**

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



**Blower limits**

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!**

**Power supply requirements**

Ripple voltage < 5%  
 4000 mA (nominal voltage)

**Mechanical**

Acoustic emission level at nominal voltage      LpA 1m [dB(A)]      -  
 Distance: 1 m

Weight      m [gr.]      90

Balancing class      G [mm/s]      <6.3

**Tests**

MTTF      15'000h at nominal voltage

Test conditions      Outlet orifice: 4.5 mm  
 Ambient temperature: 25°C  
 Cycle: 2.2 / 2.2 sec.  
 10k / 40k rpm  
 Air quality: free of dust, fumes and unnatural concentrations of gases.

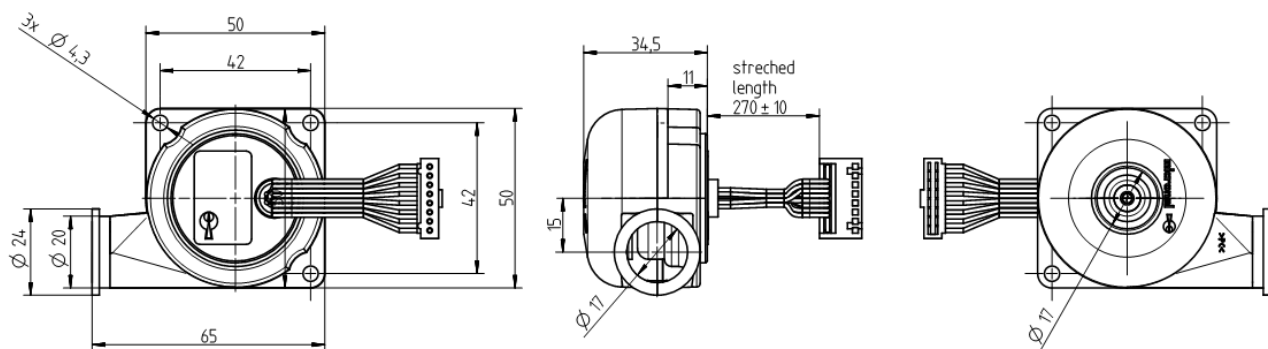
**Environmental**


Temperature range (operating and stock)      [°C]      -20 to +40

Humidity      % RH      10 to 85

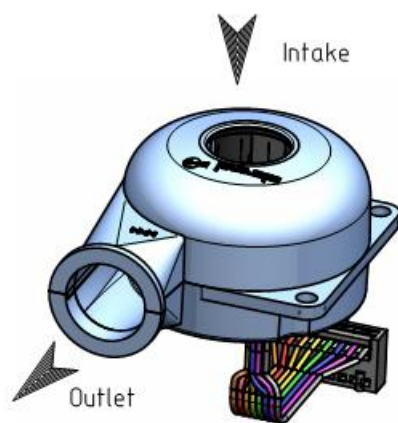
Protection class (Norm EN60529)      IP40

**Dimensional Drawing**



Direction of rotation CCW 

**Picture**



**Electrical circuit**

Connector pin assignment  
 Connector type: Stocko MKF 13268-6-0-808

AWG	PIN	Description	Colour
24	1	Motorwinding 1	Brown
24	2	Motorwinding 2	Red
24	3	Motorwinding 3	Orange
24	4	Vhall 4.5...18VDC	Yellow
24	5	GND	Green
24	6	Hall sensor 1	Blue
24	7	Hall sensor 2	Violet
24	8	Hall sensor 3	Grey

**Standards**

CE Document: CE-KE-X2012-U-Line.pdf  
 RoHS II Document: Conformity-  
 REACH Declaration\_Micronel\_Apr\_2013.pdf

**Additional document** -

**Disclaimer**

General All data can be subject to change without advanced notice.  
 Performance data Values listed are nominal and can vary due to component tolerances.

**Revision**

**0** 18.07.17 CP Basic Spec.  
**1** 31.10.17 CP Power supply requirements: 4'000mA