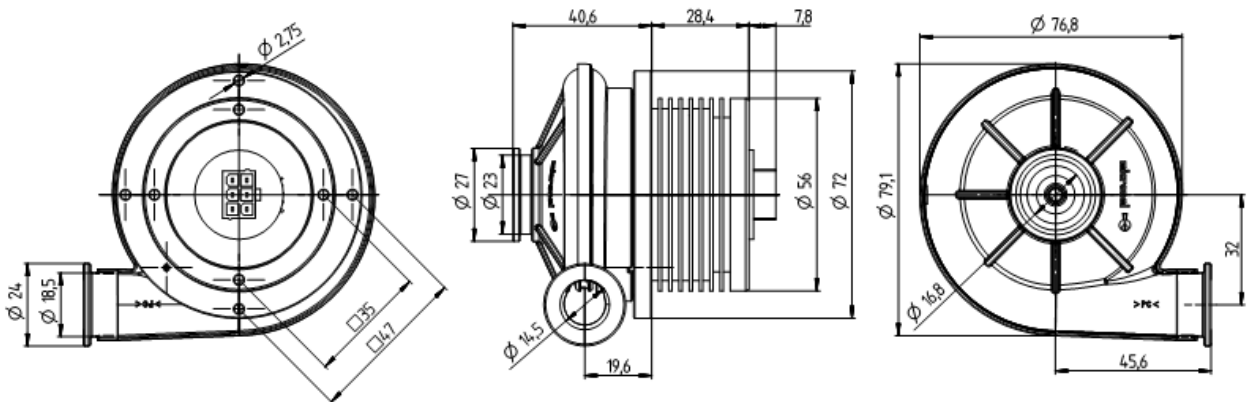
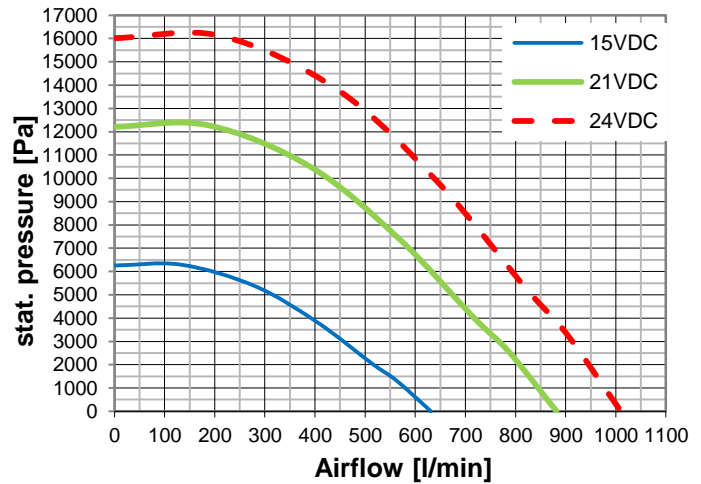
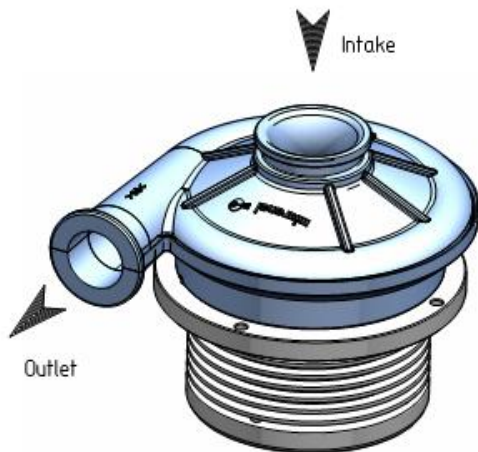



Miniatur Radial Gebläse mit integrierter Elektronik
Miniature Radial Blower with integrated electronic



Direction of rotation CCW 

Technische Daten

Allgemeine Beschreibung

Kompakter Lüfter mit effizientem Motor. Eigenschaften: Gehäuse: PC, Flügelrad: PA. Bürstenloser und sensorloser 3-Phasen Motor mit integrierter Treiber Elektronik. Anschluss über MOLEX-Stecker.

Technical data


General description

Compact blower with an efficient motor. Features: housing: PC, impeller: PA. Brushless and sensorless 3-Phase motor with integrated driver electronic. Connection via MOLEX-connector.

		U85MX-024KX-4
U_N	VDC	21
U	VDC	15.0-24.0
I_N freeblowing	mA	8'500
I_N typ. work. point	mA	5'900
I_N static	mA	2'400
P_N typ. work. point	W	125
n freeblowing	min ⁻¹	39'000
n typ. work. point	min ⁻¹	41'500
n static	min ⁻¹	46'100
V freeblowing	l/min	885
V typ. work. point	l/min	390
p work. point	Pa	10'500
p static	Pa	12'300
$LpA_{(WP)}$	dB(A)	77
T	°C	-20...+45
m	gr	390
Housing material		PC
Impeller material		PA6
Sleeve Bearing		N/A
Ball Bearing		•
Tacho		•
Speed control SP		•
NTC		NTCG164KF104F TDK

Data's at Density: 1.2kg/m³

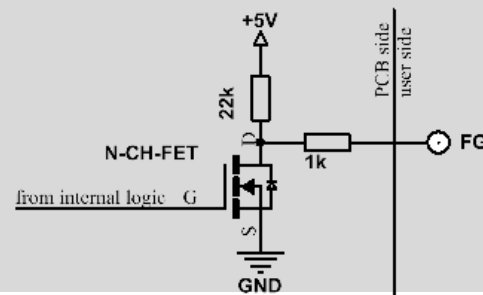
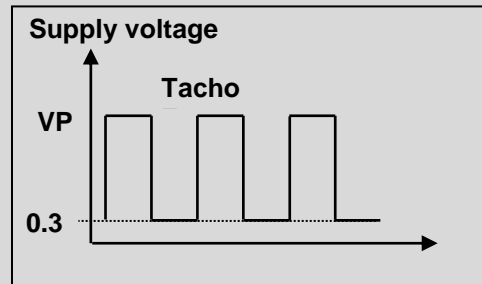
Operating Instruction and Warning

U85MX-024KX-4					
Electrical connection	Connector type: MOLEX 46015-0603				
	PIN	Description			
	1	GND	3		6
	2	Frequency	2		5
	3	NTC	1		4
	4	Vcc + Power			
	5	Set Speed			
	6	NTC			

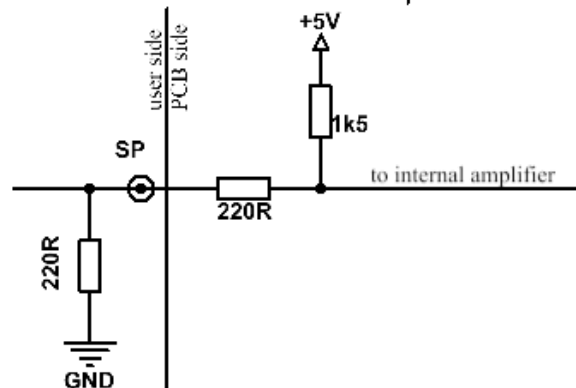
- Blower Features**
- Integrated speed control input
 - FG frequency signal output
 - ON / OFF control by logic signal
 - Locked rotor protection
 - ESD Protection 16 kV
 - Polarity protection

FG Frequency signal (yellow wire)

Speed calculation $f * 20 = \text{rpm (3 pulse / rotation)}$
 $f = \text{FG Frequency Generator [Hz]}$
 $\text{rpm} = \text{Rotation speed [min-1]}$

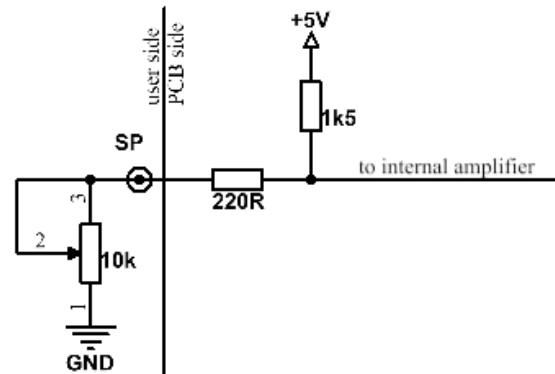


SP Set speed (green wire)



Input voltage 0.0-0.2 VDC → Stop (short to ground to stop)
 0.3-3.9 VDC → Fan is running compare to VDC
 3.9-5.0 VDC → Fan is running with 100% speed

>> or >>



Input resistor Connect between SP (green) and GND (black)

SP not connected Blower operates at 100% Speed
 SP to GND Speed zero → Stop

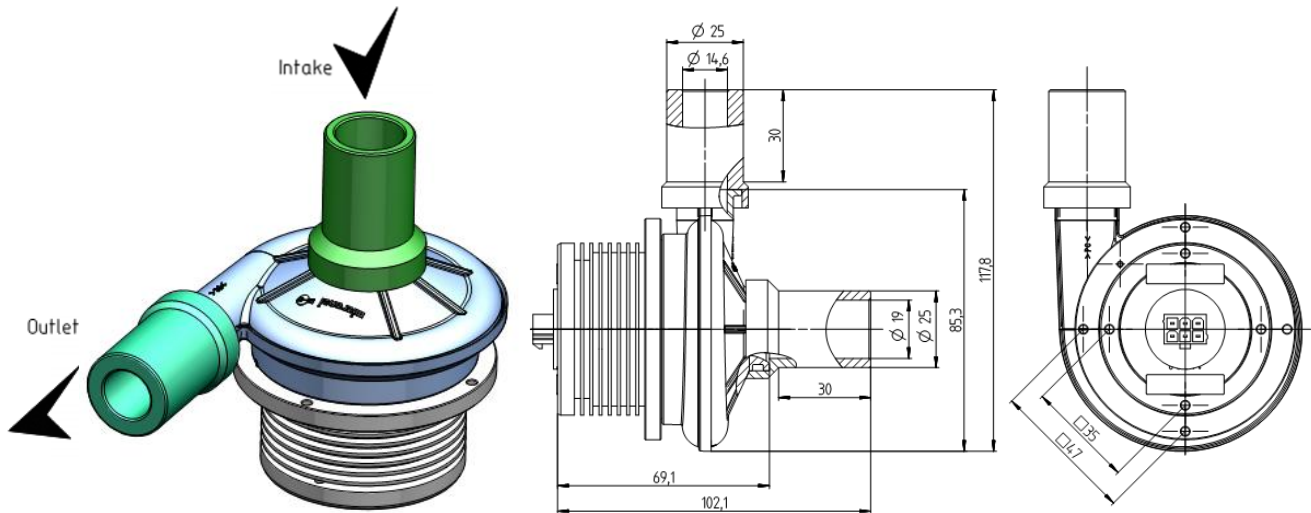
Blower limits		
- Max. allowed temperature on heat sink surface:		65° C
- Maximum speed		45'000 1/min
- Max. Power consumption		160W
- Orifice diameter at outlet / inlet		diameter > 4mm (Q > 80 l/min)

Power supply requirement Ripple voltage < 5%
 10000 mA

Info **Specifications are subject to change without notice.**
Specifications on this Datasheet are for reference.

Version: 26.10.16 / DH
 Doc: U85MX-024KX-4 with integrated electronics.doc

Options for intake and outlet connections*



Product no. incl. option / Product Nr. inkl. Option	Intake / Einlass	Outlet / Auslass	Description / Beschreibung
U85MX-024KX-4			Without intake / without outlet Ohne Einlass / ohne Auslass
U85MX-024KX-41	•		With intake / without outlet Mit Einlass / ohne Auslass
U85MX-024KX-42		•	Without intake / with outlet Ohne Einlass / mit Auslass
U85MX-024KX-43*	•	•	With intake / with outlet Mit Einlass / mit Auslass

* The drawings show intake and outlet connections. Both options are independent of each other.
 Die Zeichnungen stellen beide Anschlussmöglichkeiten (Ein-und Auslass) dar.