

RH45M-4DK.6F.1R

article no. with cable side

460V 112 930



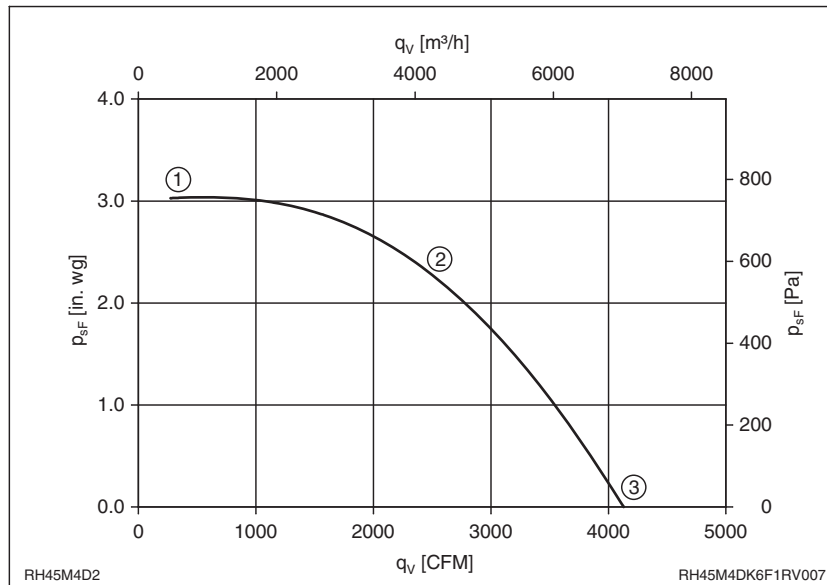
Performance data

3~ 460V ±10% Y 60Hz IP54

Connection diagram 106XA

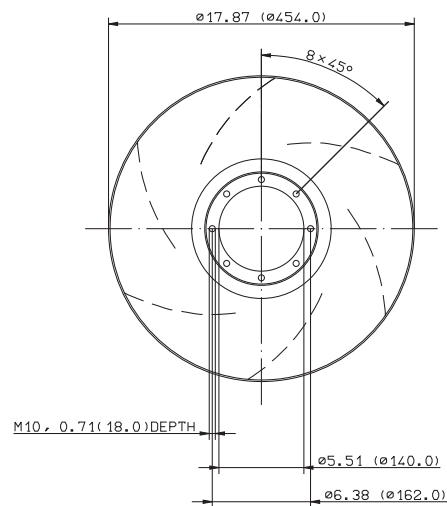
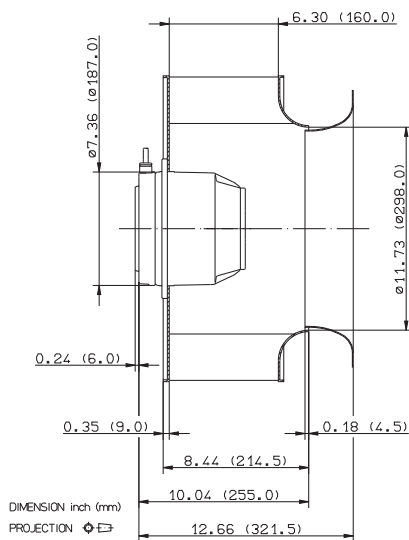
P_1	1.4	kW
I	2.2	A
n	1630	rpm
I_A	10	A
ΔI	5	%
t_R	40/104	°C/°F
m	16/35	kg/lbs.

Characteristic data



	U	I	P_1	n	L_{WA}
	V	A	W	rpm	dB
①		1.6	860	1700	
②	460	2.2	1400	1630	80
③		1.85	1100	1680	84

$$p_{d2} = 9.4 \cdot 10^{-7} \cdot q_v^2$$



L-KL-1785/9-1 INCH

Technical Data

The listed specifications and information are based on tests and test series. They are of a standard nature and therefore deviations may occur in connection with specific applications. The suitability for a specific application must be individually tested by the user. Please contact us for advise and support.



C01, CK1 and C02 are the basis for the following variations. Standard version is without base insulation

- Multi-purpose usability
- Optimal thermal coupling of the switching device
- Live contact of housing therefore - when fitting - base insulation has to be provided.

S01, SK1 and S02 are provided with an insulation cap for base insulation

- Various types with different insulation materials and protection classes available
- Suitable for mounting **into** and **onto** windings of **electro-motors, transformers or ballasts**.

K1= 01 for the lower temperatures

Switching contact type: NC = normally closed, NO = normally open
Insulated: insulation cap Version S

Ⓐ Nominal Switching Temperature (NST), in 5K-steps [°C]
Ⓐ Tolerance range - Standard Tol [K]

Rated voltage U_n 50/60 Hz [V_{AC}]
Max. AC-operating voltage range up to... [V_{AC}]
Ⓐ Max. DC-operating voltage range up to... [V_{DC}]

Rated current I_n 50/60 Hz
At U_n : ohmic - $\cos \phi = 1.0$ [A] / [n]
At U_n : inductive - $\cos \phi = 0.6$ [A] / [n]
⚠ At U_n : inductive - $\cos \phi = 0.35-0.45$ [A]
Ⓜ At 500 V_{AC}: ohmic - $\cos \phi = 1.0$ [A] / [n]
Ⓜ At 500 V_{AC}: inductive - $\cos \phi = 0.6$ [A] / [n]
Ⓜ Max. switching current I_{max} at U_n - $\cos \phi = 1.0$ [A] / [n]

NST: 70°C-180°C, K1: 60°C-180°C VDE/IEC
NST: 60°C-200°C UL
NST: 70°C-200°C, K1: 60°C-200°C CSA/cUL
NST: 70°C-180°C BEAB
NST: 70°C-180°C SEMKO

⚠ Approvals for Ballasts *applied for

Diameter $\varnothing d$ [mm (inch)]
Overall height (with standard connection) h [mm (inch)]
Length insulation cap (S) l [mm (inch)]
Ⓐ feasible wiring connections Lead wire
Single wire
Standard wiring connection

C01 C02 S01 S02

	C01	C02	S01	S02
Switching contact type	NC ○	NO ○	NC ●	NO ●
60 - 200	60 - 200	60 - 200	60 - 200	60 - 200
± 5	± 5	± 5	± 5	± 5
Rated voltage U_n 50/60 Hz [V _{AC}]	250 (VDE, IEC, BEAB, SEMKO, CSA)	277 (UL)	250 (VDE, IEC, BEAB, SEMKO, CSA)	277 (UL)
Max. AC-operating voltage range up to... [V _{AC}]	500	500	500	500
Ⓐ Max. DC-operating voltage range up to... [V _{DC}]	60	60	60	60
Rated current I_n 50/60 Hz	2.5/10,000 (VDE, IEC, BEAB, SEMKO)		2.5/10,000 (VDE, IEC, BEAB, SEMKO)	
At U_n : ohmic - $\cos \phi = 1.0$ [A] / [n]	1.6/10,000 (VDE, IEC, BEAB, SEMKO)		1.6/10,000 (VDE, IEC, BEAB, SEMKO)	
At U_n : inductive - $\cos \phi = 0.6$ [A] / [n]	*1.8 (VDE, IEC)		*1.8 (VDE, IEC)	
⚠ At U_n : inductive - $\cos \phi = 0.35-0.45$ [A]	○		○	
Ⓜ At 500 V _{AC} : ohmic - $\cos \phi = 1.0$ [A] / [n]	0.75/10,000		0.75/10,000	
Ⓜ At 500 V _{AC} : inductive - $\cos \phi = 0.6$ [A] / [n]	0.50/10,000		0.50/10,000	
Ⓜ Max. switching current I_{max} at U_n - $\cos \phi = 1.0$ [A] / [n]	*6.3/3,000 (VDE, IEC)		*6.3/3,000 (VDE, IEC)	
	*7.5/300 (VDE, IEC)		*7.5/300 (VDE, IEC)	
dependent on version (NST, insulation etc.) acc. to inquiry	●		●	
	●		●	
	●		●	
	●		●	
	●		●	
	●		●	
	●		●	
	●		●	
Diameter $\varnothing d$ [mm (inch)]	9.0 (.354)	9.0 (.354)	9.4 (.370)	9.4 (.370)
Overall height (with standard connection) h [mm (inch)]	4.3 (.169)	4.3 (.169)	4.8 (.189)	4.8 (.189)
Length insulation cap (S) l [mm (inch)]	○	○	16 (.630)	16 (.630)
Ⓐ feasible wiring connections Lead wire	●	●	●	●
Single wire	●	●	●	●
Standard wiring connection	Lead wire: 0.25 mm ² AWG 22		Lead wire: 0.25 mm ² AWG 22	

Ventilatorbaureihen Fan types

Radialventilatoren der Baureihe RG/RD..P sind mit gefalteten Spiralgehäusen in Normabmessungen ausgeführt.

Centrifugal fans of design RG/RD..P are designed with folded scroll in standard dimensions.

Die P-Reihe ist mit vorwärtsgekrümmter Beschauflung ausgeführt.

The P-series is designed with forward curved blades.

Räder mit vorwärtsgekrümmter Beschauflung - auch Trommelläufer genannt - zeichnen sich durch ihre hohe Leistungsdichte aus. Das bedeutet, daß - verglichen mit Rädern rückwärtsgekrümmter Bauart - bei gleicher Baugröße und Drehzahl bedeutend mehr Luft gefördert wird und höhere Drücke erreicht werden.

Impellers with forward curved blades - also known as drum impellers - are characterised by their high power density. This means that, compared with impellers where the blades are backward curved, considerably more air can be conveyed and higher pressures achieved using the same construction size and speed.

Aufgrund der hohen Schaufelzahl bei Trommelläufern ergibt sich bei diesen Ventilatoren ein sehr angenehmes Geräuschverhalten, da ein störender Schaufeldrehen nicht hörbar ist.

Due to the high number of blades used for drum impellers, the noise behaviour of these fans is very pleasing, as no disturbing noise issues from the turning blades.

Laufblätter mit rückwärtsgekrümmten Schaufeln zeichnen sich durch einen vergleichsweise höheren Wirkungsgrad gegenüber Trommelläufern aus.

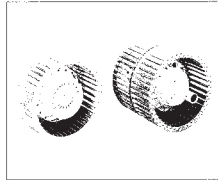
Impellers with backward curved blades are having a better efficiency compared with the drum impellers.

Motorläufer der Bauart RH..M mit rückwärtsgekrümmten Schaufeln weisen einen hohen Reaktionsgrad auf und können infolgedessen ohne Spiralgehäuse betrieben werden. Bei Einbau in Spiralgehäusen ist links vom Bestpunkt (Punkt 2 auf der Ventilator-kennlinie) eine Erhöhung des statischen Druckes p_0 gegeben, rechts vom Bestpunkt ergibt sich infolge der Querschnittsreduzierung durch das Gehäuse eine leichte Volumenstromreduzierung.

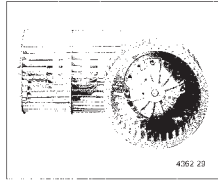
Motorized impellers of design RH..M with backward curved blades have a high degree of reaction and can therefore be operated without any scroll. If installed in a scroll there is an increase in the static pressure p_0 to the left of the maximum economical rating (point 2 on the fan characteristic curve), and to the right of the maximum economical rating there is a slight reduction in volume flow owing to the reduction in cross section due to the housing.

Motorläufer der Bauart RH..G mit rückwärtsgekrümmten Schaufeln sind drehleisere Laufräder aus Aluminium für den Einsatz ohne Spiralgehäuse.

Motorized impellers of design RH..G with backward curved blades are low-acoustic operating-noise impellers made of aluminium for use without scroll.



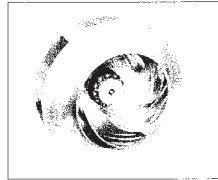
Motorlüfterräder Bauart RE P/RZ P
Motorized impellers design RE P/RZ P



Motorlüfterräder Bauart RE P/RZ P
Motorized impellers design RE P/RZ P



Motorlüfterrad Bauart RH M
Motorized impeller design RH M



Motorlüfterräder Bauart RH G
Motorized impellers design RH G

Technische Beschreibung

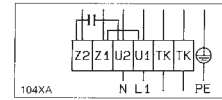
Technical Description

Anschlußschaltbilder

Connection diagrams

104 XA

1~ Motor mit Betriebskondensator und Temperaturwächter
1~ motor with capacitor and thermal contacts

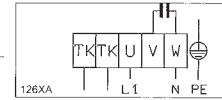


U1 Farben braun
U2 blau
Z1 schwarz
Z2 orange

Colours brown
blue
black
orange

126 XA

1~ Motor mit Betriebskondensator und Temperaturwächter in Steinmetzschaltung
1~ motor with capacitor and thermal contacts in "Steinmetz" - connection

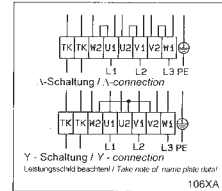


U Farben braun
V blau
W schwarz

Colours brown
blue
black

106 XA

3~ Motor mit einer Drehzahl und Temperaturwächter
3~ motor with single speed and thermal contacts



U1 Farben braun
U2 rot
U3 blau
V1 grau
V2 schwarz
W1 orange

Colours brown
red
blue
grey
black
orange

Drehrichtungsänderung durch Vertauschen von 2 Phasen möglich. Beachten Sie die Drehrichtungspfeile auf dem Laufrad oder Ventilatorgehäuse.

Rotation is reversed by changing the supply connection of any 2 phases. Please note the arrow for direction of rotation on the impeller or fan scroll.