

DATA SHEET FOR CENTRIFUGAL BLOWER

CUSTOMER:	ENQUIRY:	Item:	
		1	
YOUR REF.:	PROJECT:	Units:	
	Y/DESC.:	1	

Type : 140

TECHNICAL DATA

		60 Hz
Volume flow rate	V m ³ /h	2'000
Static pressure at $\rho = 1.2$	kg/m ³ Δp_{sf} Pa	23'463
Total pressure at $\rho = 1.2$	kg/m ³ Δp_t Pa	24'245
Static pressure at $\rho = 1.13$	kg/m ³ Δp_{sf} Pa	21'999
Total pressure at $\rho = 1.13$	kg/m ³ Δp_t Pa	22'732
Rated speed	n 1/min	3'162
Impeller power at $\rho = 1.2$	kg/m ³ P_r kW	28.11
Impeller power at $\rho = 1.13$	kg/m ³ P_r kW	26.36
Sound pressure, free field	L_p dB(A)	87-1m
for installation type D (ISO) calculated acc. to VDI 3731		
Sound pressure at free inlet	L_p dB(A)	104-1m
Fan weight (without motor) approx.	kg	290
Inlet temperature	t °C	10
maximum inlet temperature	t _{max} °C	60
Flow medium	<input type="checkbox"/> Air <input type="checkbox"/> Dust free <input type="checkbox"/> Biogas up to 49% rel. humidity	
Ex-protection	<input checked="" type="checkbox"/> II 2G / 3G c IIA T1	
<input checked="" type="checkbox"/> for speed control: block resonance frequencies, max speed see above		

Operating Range 30 - 60 Hz

Ambient Temp. -20 to +30°C

Temp. increase approx. 32°C

INSTALLATION TYPE according to ISO 13349

- A -Free inlet, free outlet
- B -Free inlet, ducted outlet
- C -Ducted inlet, free outlet
- D -Ducted inlet and outlet

Exhaust position according to ISO 13349 **LG270**

MOTOR

Rated voltage U/Frequency f	V/Hz	3x400 / 50
Rated speed n approx.	1/min	2980
Rated power P	kW (acc. eff.-cl.)	37
Design/protection class		B5 / IP55
Motor weight approx.	kg	310
Classification		
Insulation class/utilised		F/B
Rated current I / Starting current I approx. A		64 / 8.7-times
Ex-protection	EEx nA II T3	
Multi speed		
Star/delta-connection	<input type="checkbox"/> with fan	
Thermistor protection 3-times	<input type="checkbox"/> Bearing with external lubrication	
Space heater		
terminal box on Top /loc. Mid,A o.B side		
without separate rating plate		
Standard paint system		
Extended Motorshaft N95-Rev.2, Stainless Steel		

Motor suitable for FC operation 30 to max. 60 Hz

Frequency converter NOT incl.

OTHER REQUIREMENTS

Contract basis: Without obligation. Tolerances acc. to ISO 13348, AN3

CENTRIFUGAL FAN

- Single inlet
- Direct drive, impeller mounted on motor shaft
- Belt drive
- Drive through elastic coupling
- Enclosed bearing lubr. for life
- Outdoor installation
- 1 x Shaft seal FPM
- Split casing
- 1 x Housing Gastight to ISO13349 Kat.H1

MAIN MATERIALS

Impeller, main mat. Aluminium
 Casing 1.4301(V2A/304)/1.4307(304L)
 Base frame/support 1.4301(V2A/304)/1.4307(304L)

SURFACE TREATMENT

Impeller	no paint
color/corr.-cl.	- / -
Casing outside	pickled and passivated
color/corr.-cl.	- / -
Casing inside	pickled and passivated
color/corr.-cl.	- / -
Base frame/support	pickled and passivated
color/corr.-cl.	- / -

- Centrifugal fan
- Motor incl.
- 1 x Inlet/outlet flange DN150/PN10 incl.
- Cooling disc
- 1 x Drain plug 1" incl.
- Protection grill inlet
- Protection grill outlet
- 1 x Anti-spark lining ATEX to EN14986 incl.
- Inspection opening
- 1 x Autom. Greasing Cartridge incl.

SEPARATE PARTS

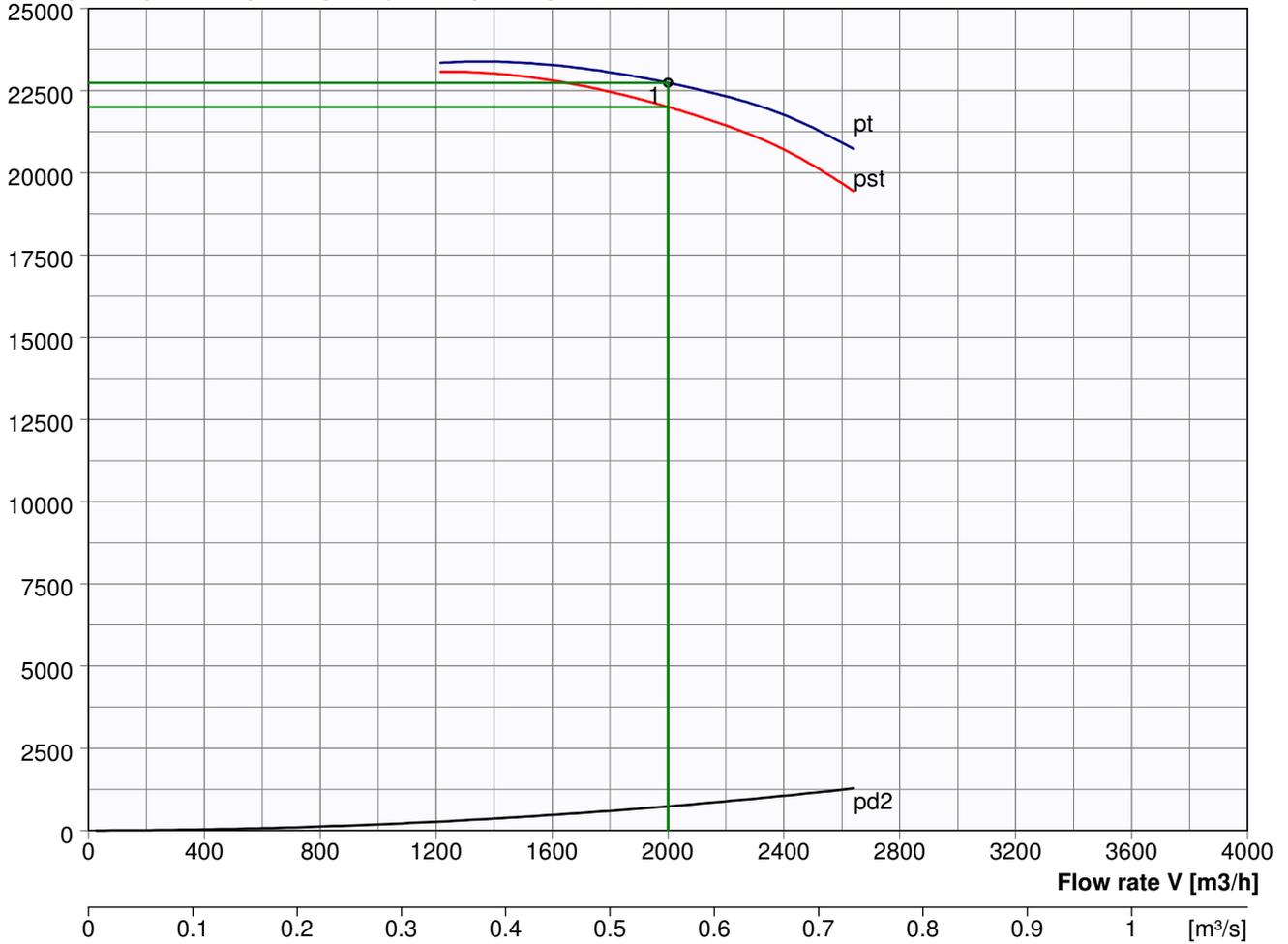
- 4 x Vibration attenuators incl.
- Counter flange inlet
- 2 x Counter flange inlet/outlet (1.4301/V2A) incl.
- 1 x Compensators DN150/PN10, (1.4301/V2A) incl.
- Guide duct inlet
- Flex.connect. outlet
- Guide duct outlet
- 1 x Atex - Certificate Gr. II Kat. 2G/3G c IIA T1 incl.
- 1 x Operating Manual in D/E/RU as pdf incl.
- 1 x Manufacturers Certificate incl.

FAN CURVE FOR CENTRIFUGAL FAN

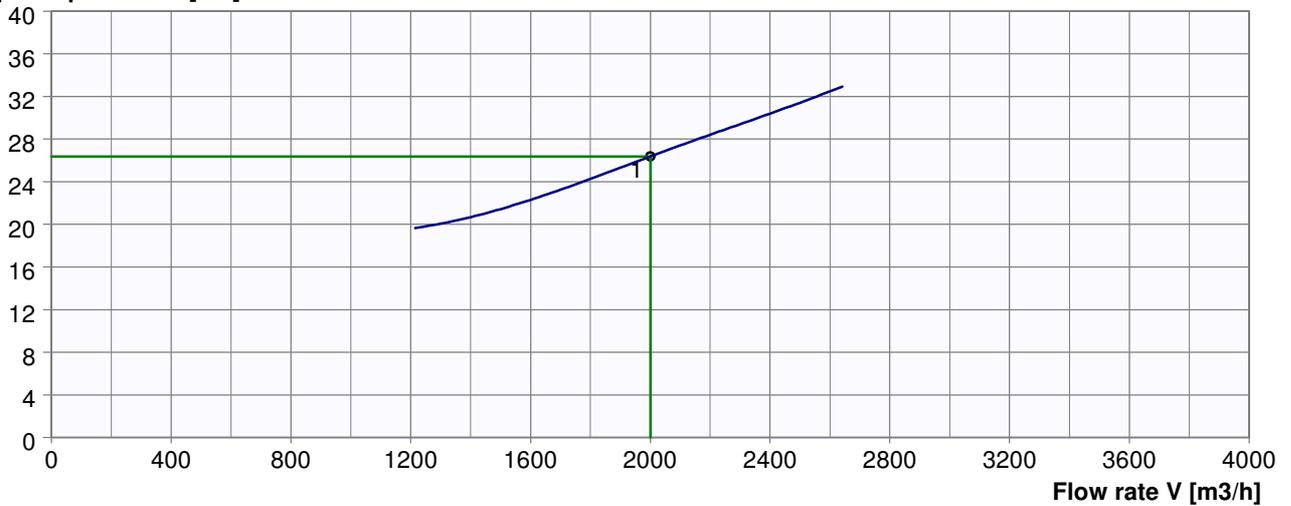
CUSTOMER:	ENQUIRY:	Item:	
	PROJECT:	Units:	
YOUR REF.:	Y/DESC.:	1	

Fan type : 140

Total press. pt, static press. pst, dynamic press. pd2 [Pa]



Impeller power Pw [kW]



Flow rate	V [m3/h]	2'000			
Inlet density	Rho [kg/m3]	1.125			
Fan speed	n [1/min]	3'162			

The fan data is for naked fan and NOT taking into account the effects from additional parts/accessories unless explicitly stated. Dotted lines above indicate stall zone: NOT allowed for the operation of the fan!