

<b>CUSTOMER:</b> Bemel Norge A/S	<b>ORDER:</b> from 09.02.2016 Follotunnelen	<b>Item:</b> 1	<b>ORDER NO.:</b> <b>72868</b>
Røhrtsvei 10a 1181 OSLO	<b>PROJECT:</b> Temporary ventilation	<b>Units:</b> 24	<b>Handled by:</b> Modell/BL
<b>YOUR REF.:</b> Mr. Steinsrud	<b>Y/DESC.:</b> High efficient: 1800N @ 37kW		15.06.2016 11:58:46 / sch505

**Type : A-N8JL5/V1.00/1250/GT/6**

**TECHNICAL DATA**

		forward	reverse	average	
Density	$\rho$	<b>1.2</b>			kg/m <sup>3</sup>
Equivalent thrust in tunnel	TN	<b>1800</b>			N
Thrust, still air	T	<b>1450</b>	<b>~30%</b>		N
Thrust with backgr. velocity	Tred				N
Fan shaft power	Pw	<b>35.3</b>			kW
Absorbed (electrical) power	Pel	<b>37.3</b>			kW
Flow speed	u	<b>32.2</b>			m/s
Background-velocity	c	<b>0</b>			m/s
Flow rate	V	<b>39.5</b>			m <sup>3</sup> /s
Speed	n	<b>1470</b>			1/min
average Lp, 45°, 3m, free field Lp		<b>85</b>			dB(A)
Fan weight (without motor) approx.		<b>814,4</b>			kg
ERP 2015: N acc. EU regulation No 327/2011 (axial/A/static)					<b>40</b>
Target efficiency / max. total eff. fan (w/o VSD) in %					<b>40,9/61,0</b>

for speed control: block resonance frequencies, max speed see above

Banana Jet® design factor: 7° / 1.25

**above techn. data valid for jetfan without accessories**

**estimated power consumption @ -15°C:**

**39,6 kW (shaft) / 42,1 kW (electric)**

**estimated power consumption @ +5°C:**

**35,9 kW (shaft) / 38.2 kW (electric)**

**MOTOR**

Make	<b>Standard IEC Motor</b>
Type/Size	<b>TEAO - W22 / 225</b>
Rated voltage U/Frequency f	V/Hz <b>3x400 / 50</b>
Rated speed n approx.	1/min <b>1480</b>
Rated power P	kW (acc. eff.-cl.) <b>41 (IE3)</b>
Design/protection class	<b>B5 / IP55</b>
Motor-flange hole circle	M= <b>400 mm</b>
Motor weight approx.	kg <b>265</b>
Classification	<b>IEC 60034</b>
Insulation class/utilised	<b>F/F</b>
Rated current I/ Starting current I approx. A	<b>72 / 6,6-times</b>
efficiency / cos phi	<b>94,6% / 0,86</b>

Ex-protection

Multi speed

Direct-Connection

Thermistor protection

Space heater

no term.box,cable on top /location B side

1 set lose rating plates

Standard paint system

without fan

Bearing with external lubrication

**OTHER REQUIREMENTS**

Contract basis: Tolerances acc. to ISO 13350 & 13348 AN3  
 General Conditions for the Supply of Products and Services of the [German] Electrical and Electronics Industry. Payment terms only after positive credit rating by Atradius Kreditversicherung. German law applies.

**JET FAN**

Casing thickness 6 mm

Temperature resistance: -

Reversible

Adjustable pitch impeller (standstill)

1 x Transport costs to site (offloading not included)

**MAIN MATERIALS**

Impeller, main mat. Cast Al-alloy, steel reinforced (N-TG)

- hub w. key

Motor support S235JR+N=RSt37-2 - Hot dip galvanized

Casing S235JR+N=RSt37-2 - Hot dip galvanized

**SURFACE TREATMENT**

Impeller A8- cast Al cleaned, blade bolt w. zinc primer

color/corr.-cl. - / -

Casing no paint

color/corr.-cl. - / -

**SILENCER**

Size 1250 mm

Length 1000 mm

Casing thickness 3,0 mm

Thickn. of perf.sheet 1,0 mm

Inlet sil. with inlet cone, outlet sil. with def. separation edge

Both silencers with inlet cone for max. reverse thrust

Mineral wool: Non flammable class A2 DIN 4102 T1

Silencer mass 2 x 194 kg

**MAIN MATERIALS**

Casing S235JR+N=RSt37-2 (hot dip galv.)

Perforated sheet X6CrNiMoTi17-12-2 = 1.4571 (316Ti)

**SURFACE TREATMENT**

Casing no paint

color/corr.-cl. - / -

Perforated sheet no paint

color/corr.-cl. - / -

**MOUNTING STRUCTURE**

**MAIN MATERIALS**

**SURFACE TREATMENT**

color/corr.-cl. - / -

Motor

2 x Silencer

1 x Protection grill 1.4571, jet fan type (SG T)

Protection grill outlet

External terminal box

1 x Mounting feet galvanized, tunnel type

2 x Vib.sensor, Hauber 640K, 2m cable, SMP-Plug

**SEPARATE PARTS**

Documentation as attached

Mounting structure

4 x Vibration attenuators

**Warranty**

30 months from delivery,w&t parts 12 months