


K	Fan			Item N°	NPK0-K-001
Applicable to :		R.F.Q. <input type="checkbox"/>		Purchase <input type="checkbox"/>	
Installation :		AZOMURES - FLUE GAS CLEANING		Unit : NPK0	
Service :		Scrubber Fan		Quantity: 1	
Manufacturer:		HOWDEN		Type: Centrifugal fan	
Fluid : Treated Flue Gas (FG) with less than 15 mg/Nm ³ of dust					
OPERATING CONDITIONS FAN			PERFORMANCE		
Fluid handled : Treated gas with less than 15 mg/Nm ³ of dust			Proposal curve n° : 513295-01		
Analysis :		Suction :		Speed : 1485 rpm	
Abs. humidity: 53,1 g/kg dry air		Temperature : 40 - 42 °C		Rotation coupling end (CW/CCW): CW	
		Pressure : -500 mmWG		kW rated : 463 kW	
				Max.: 521 kW	
Density@suction : 1.00 kg/m ³		Discharge :		MD2: 242 (to be confirmed) kg.m ²	
Cp/Cv : 0.9772		Temperature : 42°C		Motor mass power: kW	
Visc.: (*) mPa.s		Pressure : 130 mmWG		Start up type: direct	
Capacity:.		Diff. pressure: 630 mmWG		Starting time : 18 s (to be confirmed)	
Rated: 183 000 Nm ³ /h Wet air		Local b-pressure : 730 mmHg		Efficiency 85 %	
Rated: 231 000 m ³ /h Wet air				Maximum noise level at 1 meter 85 dBA (2)	
				Speed compared to max. speed 100 %	
MATERIALS (1)			DRIVING MOTOR BY: (4)		
Housing : SS 316L		Gland : -		Item n° : NPK0-K-001	
Rotor : URANUS 45N(Wn 1.4462)		Bearings: cast iron		Installed by : VENDOR	
Shaft : 42CrMo4		gaskets : Butyl (to be confirmed)		Nominal Power 600 kW	
Packing : seal (method to be determined)		Bolts : ISO Grade A2 & A4		Manufacturer : SIEMENS	
Stuff. box :				Absorbed power : 521 kW	
CONSTRUCTION			LOUVERS/DAMPER: RADIAL VANE CONTROL		
NOZZLES		SIZE		Volts/phase/Hz : 6,6 kV / 3 ph / 50 Hz	
Suction :		On hold		Starting torque : 5002 Nm	
Discharge:		On hold		GEAR BY : VENDOR (N/A)	
Rotor type:		MVC 1605.00.15 SOV4T		Item n° :	
Impeller Diam:		1605 mm		Manufacturer/type :	
Bearings:		HFB GOS 228		AGMA factor :	
Type of drive :		Direct coupling		Ratio :	
Housing :		6 mm		Rated power : kW	
Completed drainability req'd (yes/no) : YES (drain in the volute)					
Flow control : Yes (RVC) type : Electrical – SS construction				Analog signal operation : yes	
Fan Type : Centrifugal				Detector of opening rate : yes	
Fan arrangement: Overhung				Safety switch : no	
Fan orientation: RD62° (to be confirmed later)				Tightness at closed position: no	
AUXILIARIES (*)			MANUFACTURER FINAL DATA (*)		
Baseplate (common for fan and driver) by : VENDOR				Type: Electrical actuator	
Coupling type : Direct coupling				MASS (kg) (*)	
Manufacturer : on hold By : Vendor				Fan : (to be confirmed) 5800 kg	
				Motor : (to be confirmed) 3400 kg	
Guard (yes/no) : Yes By : Vendor				Base plate : (to be confirmed) 1000 kg	
V-belts : n°/type: NO				Gear: N/A	
Silent blocs Number & type : No				MANUFACTURER FINAL DATA (*)	
Anchor bolts: Yes by vendor type : Number : on hold				Test curve n° : on hold	
Expansion bellows: Yes				Final outline dwg n° on hold	
REMARKS: (*) To be completed by vendor					
(1) Copper and copper alloys are prohibited – all part in contact with fluid must be SS316L or chemically equivalent					
(2) Vendor shall specify a noise insulation if required with fixation (type/thickness/location)					
(3) Please quote separately					
(4) See specification 701848-0000-47ES-0001 for Medium voltage and Low Voltage induction motors					
(5) cancelled					
Rev.	PA	PB	00		
By	STO	STO	JH		
Date	18/12/2014	10/02/2015	04/06/2015		
Prepared	S. TOURNAIRE				
Checked					
Approved	P. COGNAUD				
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