



België Frankrijk Luxemburg

Rucon Ventilatoren

Industrieweg 7
2630 Aartselaar
België

Telephone: 03 8770776
Facsimile: 03 8770857
e-mail: info@rucon.be
Web: www.rucon.net

Date 5/04/2004
Customer **M+W Zander**
Contact **Thomas Kuhn**
Project **IMEC**

Reference RO 129504
Item 5.3.2.059

Direct Driven Centrifugal Fan

Temperature	40	°C
Altitude	0	m
Density	1,128	kg/m³
Capacity	20.000	m³/h
Pressure	2.200	Pa(st)

CAEX FAB
813F01

Fan type	FAN900/875BL64 RD 0	
Capacity	20.000	m³/h
Density	1,205	kg/m³
Static pressure	2.361	Pa
Dynamic pressure	68	Pa
Total pressure	2.429	Pa @ 20°C
Impeller speed	1.460	rpm
Absorbed power	17.70	kW @ 20°C
Absorbed power	16.10	kW @ 40°C
Power installed	18.5	kW - 4 poles
Efficiency	76	%

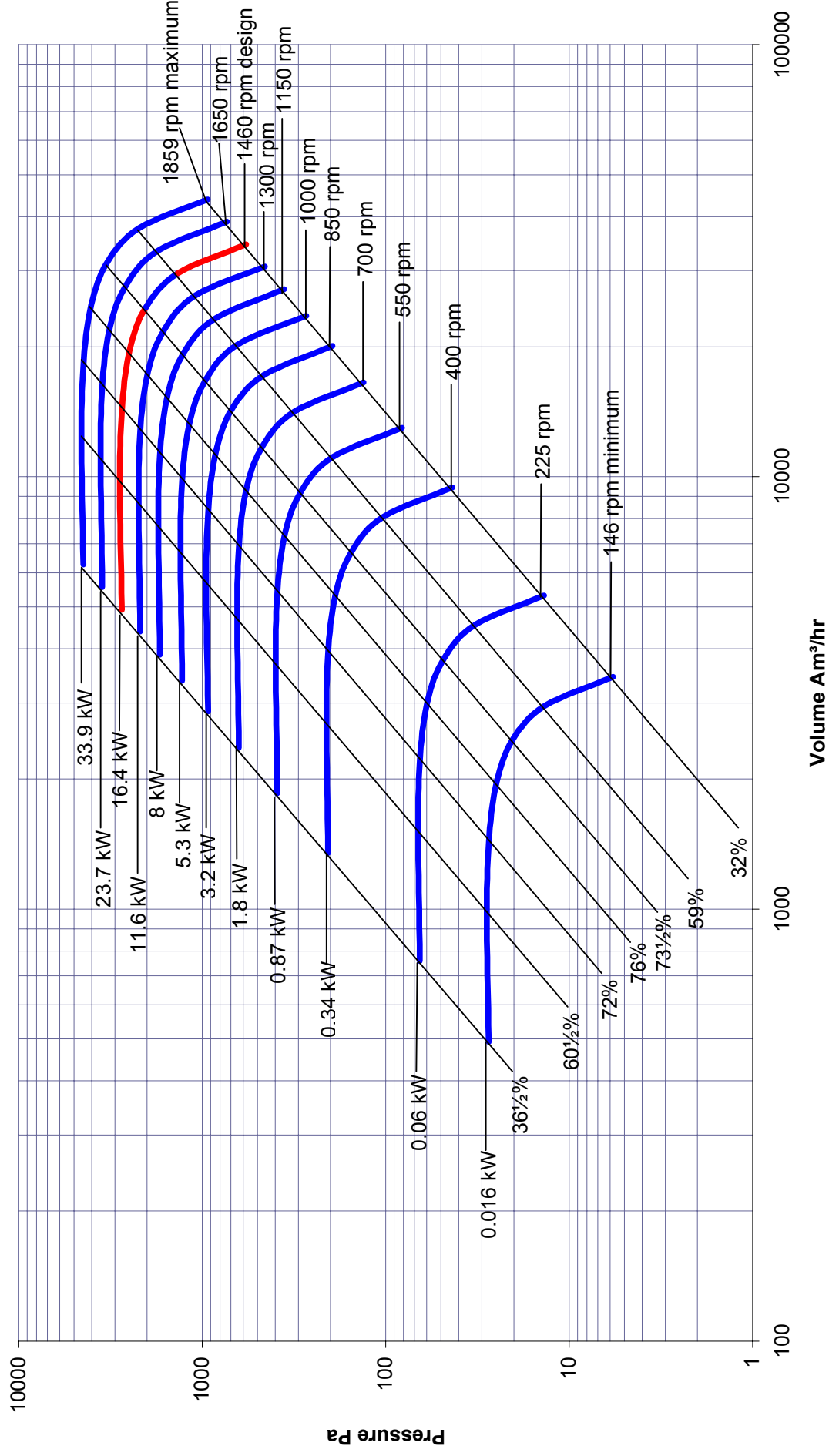
Arrangement	4	
Class	1	
Maximum speed	1859	rpm
Moment of inertia (PD²)		kgf/m²
Weight	553	kg
Starting time		secs

Sound pressure level	85			dB(A) @ 1,5m both sides duct connected					
Frequency	63	125	250	500	1k	2k	4k	8k	Hz
* Sound pressure outside fan	87	85	87	83	78	75	72	69	dB
* Sound power outside fan	97	95	97	93	88	85	82	79	dB
Sound power in outlet	104	102	104	100	95	92	89	86	dB

* Fan both sides duct connected, free field, unsilenced

RUCON Ventilatoren

5.3.2.059 900/875 BL64 fan at 20° C temperature





Technical Data Sheet		ABB ref. no. 7228310	
Customer: Rucon		Date: 12/08/2003	
Project name: IMEC		Handled by: Hambrouck	
Customer ref. RB232328/RO 129504		Item Name: 5.3.2.059 - FAN 900/875BL64	
Location:		Case:	
		Revision: A	
No.	Definition	Data / Unit	Remarks
1	Product	TEFC, 3-phase, squirrel cage induction motor	
2	Product code	3GAA 182 101-ADC	
3	Type/Frame	M3AA 180 M 4	
4	Mounting	IM1001, B3(foot)	
5	Rated output P _N	18,5 kW	
6	Rated output	25 HP	
7	Service factor	1	
8	Type of duty	S1(IEC)	
9	Rated voltage U _N	400 V D	± 5 % (IEC 60034-1)
10	Rated frequency f _N	50 Hz	± 2 % (IEC 60034-1)
11	Rated speed n _N	1470 r/min	
12	Rated current I _N	35 A	
13	No-load current	12,5 A	
14	Starting current I _s /I _N	7	
15	Nominal torque T _N	120 Nm	
16	Locked rotor torque T _s /T _N	2,9	
17	Maximum torque T _{max} /T _N	2,9	
18	Minimum torque T _{min} /T _N	2,1	
19	Speed at minimum torque	450 r/min	
20	Maximum starting time from hot DOL	15 s	
21	Maximum starting time from cold DOL	27 s	
22	Efficiency - full load 100%	92.3 / Eff1 %	Acc. to IEC 60034- 2
23	Efficiency - 75%	92,9 %	
24	Efficiency - 50%	92,5 %	
25	Power factor - full load 100%	0,84	
26	Power factor - 75%	0,8	
27	Power factor - 50%	0,72	
28	Power factor at start	0,53	
29	Insulation class / Temperature class	F B	
30	Ambient temperature	40 °C	
31	Altitude	1000 m.a.s.l.	
32	Enclosure	IP55	
33	Cooling system	IC411 self ventilated	
34	Bearing DE/NDE	6310-2Z/C3 - 6209-2Z/C3	
35	Lubrication / lubricant		
36	Sound pressure level (L _p dB(A) 1m)	62 dB(A)	+3dB(A)
37	Moment of inertia J = ¼ GD²	0,161 kg-m²	
38	Balancing		
39	Vibration class		
40	Terminal box arrangement		
41	Terminal box entries; no, dimens.		
42	Number of power terminals		
43	Direction of rotation	CW or CCW	
44	Weight	124 kg	
45	Dimension drawing no.		
46	Additional information		
Ex-motors			
47	Type of protection		
48	Certification No.		
49	t _E time	s	
Option Variant Codes / Definition			
436	PTC		
41	regreasable brgs		
Remarks:			
Data based on catalogue values 17/09/2003			
Guaranteed values on request			
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Page: 2.1			



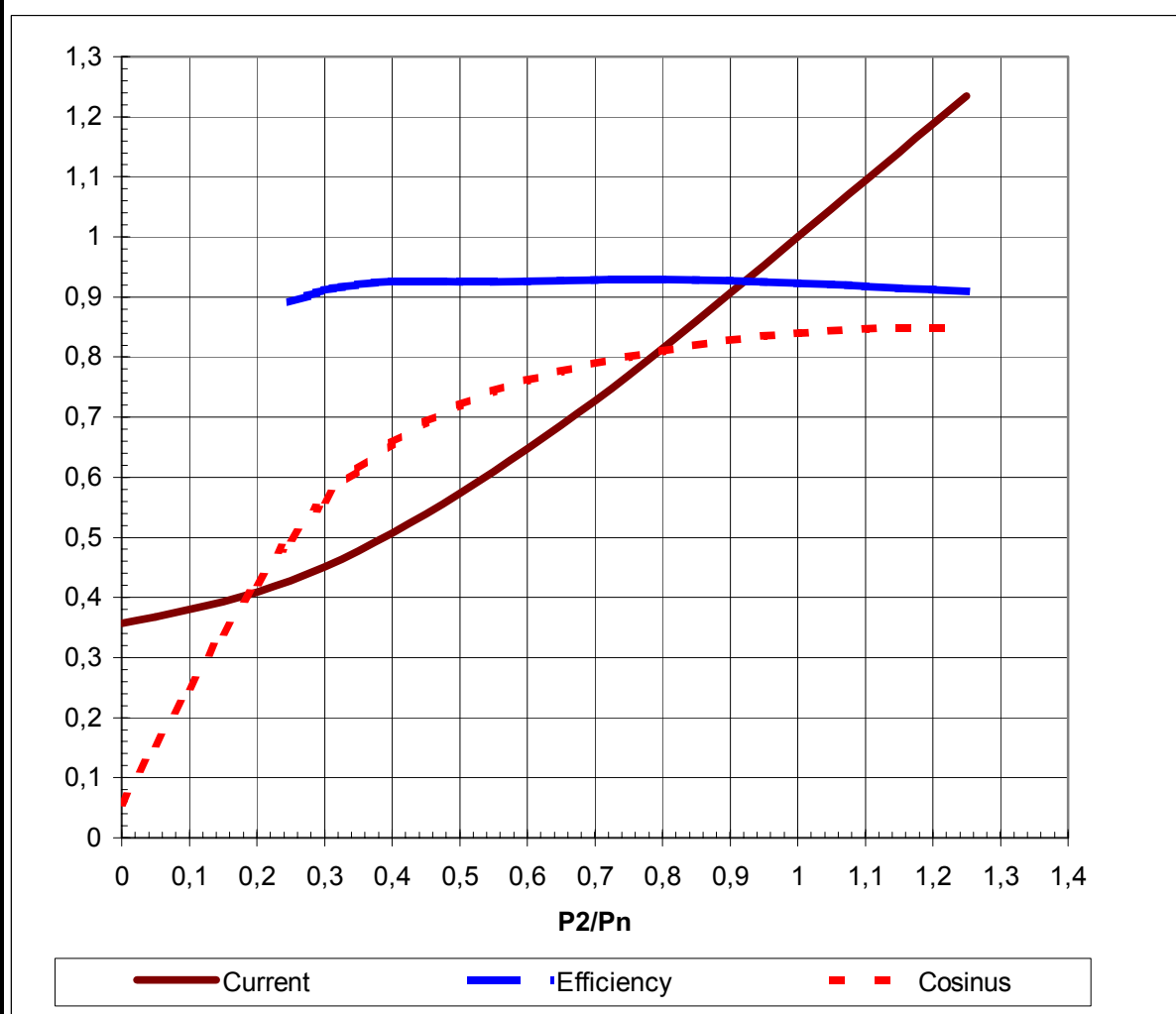
Load Curves

Customer: **Rucon**
Project name: **IMEC**
Customer ref: **RB232328/RO 129504**
Location:

ABB ref. no. **7228310**
Date: **12/08/2003**
Handled by: **Hambrouck**
Item Name: **5.3.2.059**
Case:
Revision: **A**

Product **TEFC, 3-phase, squirrel cage induction motor**
Type/Frame **M3AA 180 M 4**
Product code **3GAA 182 101-ADC**
Rated output P_N **18,5** kW
Type of duty **S1(IEC)**

Voltage (V)	400	Current I_N (A)	35	Power factor at P_N	0,84
Frequency (Hz)	50	Speed (r/min)	1470	Efficiency (%) at P_N	92,3



Data based on catalogue values 17/09/2003



Starting Curves

Customer: **Rucon**

Project name: **IMEC**

Customer ref. **RB232328/RO 129504**

Location:

ABB ref. no.

7228310

Date:

12/08/2003

Handled by:

Hambrouck

Item Name:

5.3.2.059

Case:

Revision:

A

Type of product **TEFC, 3-phase, squirrel cage induction motor**

Type/Frame **M3AA 180 M 4**

Product code **3GAA 182 101-ADC**

Rated output P_N **18,5** kW

Rated current I_N **35** A

Type of duty **S1(IEC)**

Starting from: **Hot**

J_{motor} (kgm²) **0,161**

Voltage (V) 100% **400**

Voltage (V) **400V(100%)**

J_{load} (kgm²)

Frequency (Hz) **50**

Frequency (Hz) **50**

Load speed (r/min) **1470**

Starting time (s)

Run-up time (s)

TN (Nm) **120**

Speed (r/min)

Speed (r/min)

T_{load} (Nm)

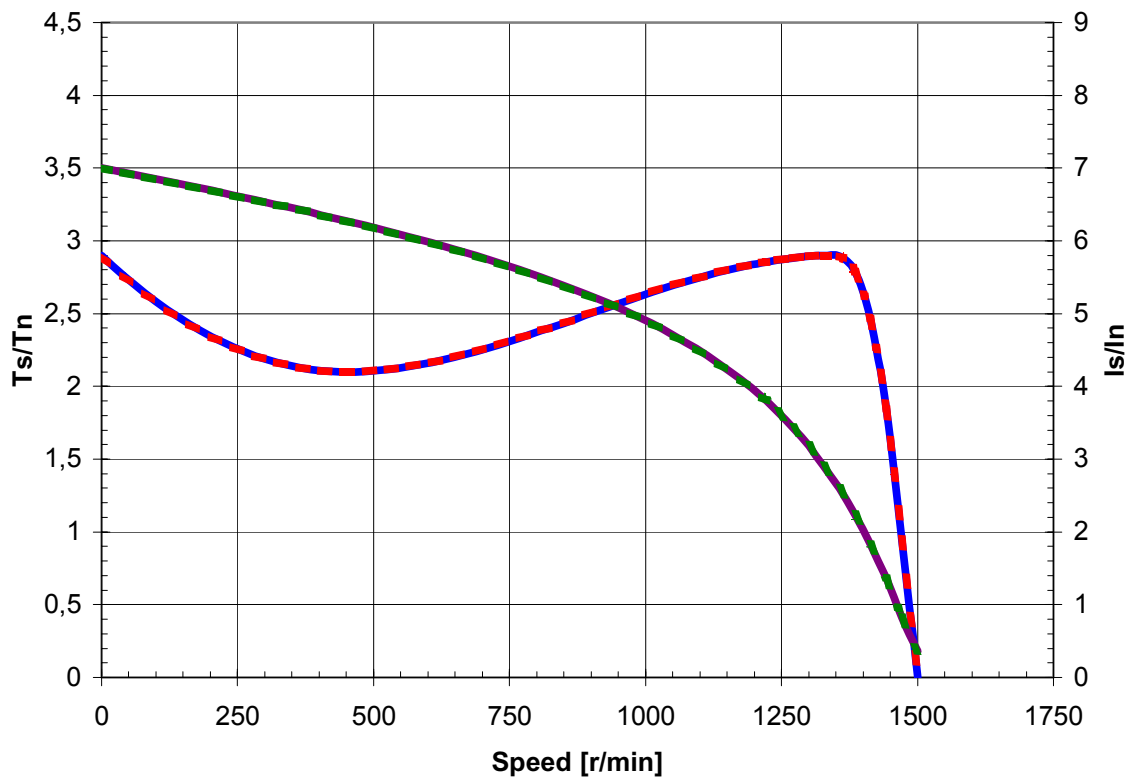
I_s/I_N

7

I_s/I_N

7

Number of cont. starts



Data based on catalogue values 17/09/2003