

Test Report No. S09MEC01180-CLC
dated 12 FEB 2009



PSB Singapore

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SUBJECT:

Reversibility Test Reversible Axial Fan (TSS 1800).

TESTED FOR:

Kruger Ventilation Industries Pte Ltd
No.17 Tuas Avenue 10
Singapore: 639141

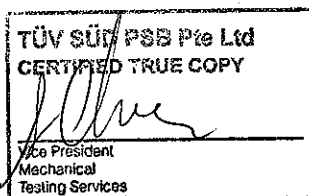
Attn: Mr Xie Yong Heng

TEST DATE:

12 Feb 2009

PURPOSE OF TEST

To test the reversibility start/stop capabilities of The Witt & Sohn Axial Fan.



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Laboratory:
TÜV SÜD PSB Pte. Ltd.
Testing Services
No.1 Science Park Drive
Singapore 118221

Phone : +65-6885 1333
Fax : +65-6776 8670
E-mail: testing@tuv-sud-psb.sg
www.tuv-sud-psb.sg
Co. Reg : 199002667R

Regional Head Office:
TÜV SÜD Asia Pacific Pte. Ltd.
3 Science Park Drive, #04-01/05
The Franklin, Singapore 118223
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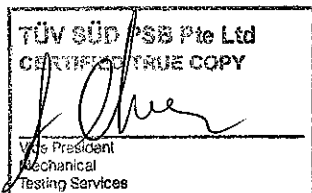
SAMPLE DESCRIPTION:

Fan Details

Model : TSS 1800
Brand : Witt & Sohn
Type : Reversible Axial Fan
Speed : 1190 rpm
Impeller material : Aluminium Alloy
Casing : Mild steel

Motor Details

Brand : Kruger
Rating : 150KW 6P
Voltage/Phase/Frequency : 380V-3Ph-60Hz
Rated ampere : 292Amp
IP rating : IP55
Class : H
Speed : 1188 rpm



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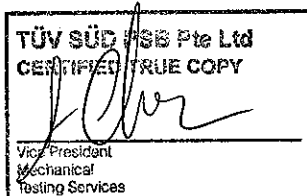
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TEST RESULTS :

S/N	Procedures	Recorded	
1.	Start the fan in clockwise (CW) direction.	-	-
2.	Fan should reach the rated speed within 20 seconds	TIME	17 sec
3.	Run the fan continuously in clockwise (CW) direction for 15min.	RPM	1190
4.	Switch off the fan.	-	-
5.	Apply motor brake.	-	-
6.	Impeller should stop rotating within 10 seconds.	TIME	8.6 sec
Cycle 1			
7.	Restart the motor in counterclockwise (CCW) direction.	-	-
8.	Fan should reach the rated speed within 30seconds.	TIME	30 sec
9.	Run the fan continuously in counterclockwise (CCW) direction for 30 min.	RPM	1190
10.	Switch off the fan.	-	-
11.	Apply motor brake.	-	-
12.	Impeller should stop rotating within 10 seconds.	TIME	9.0 sec
13.	Restart the motor in clockwise (CW) direction.	-	-
14.	Fan should reach the rated speed within 30 seconds.	TIME	30 sec
15.	Run the fan continuously in clockwise (CW) direction for 30 min.	RPM	1190
16.	Switch off the fan.	-	-
17.	Apply motor brake.	-	-
18.	Impeller should stop rotating within 10 seconds.	TIME	9.2 sec



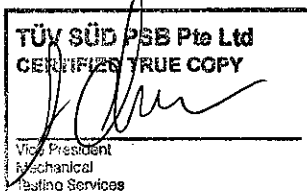
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TEST RESULTS :CON'T

S/N	Procedures	Recorded	
Cycle 2			
19.	Restart the motor in counterclockwise (CCW) direction.	-	-
20.	Fan should reach the rated speed within 30seconds.	TIME	30 sec
21.	Run the fan continuously in counterclockwise (CCW) direction for 30 min.	RPM	1190
22.	Switch off the fan.	-	-
23.	Apply motor brake.	-	-
24.	Impeller should stop rotating within 10 seconds.	TIME	9.1 sec
25.	Restart the motor in clockwise (CW) direction.	-	-
26.	Fan should reach the rated speed within 30seconds.	TIME	30 sec
27.	Run the fan continuously in clockwise (CW) direction for 30 min.	RPM	1190
28.	Switch off the fan.	-	-
29.	Apply motor brake.	-	-
30.	Impeller should stop rotating within 10 seconds.	TIME	9.1 sec
Cycle 3			
31.	Restart the motor in counterclockwise (CCW) direction.	-	-
32.	Fan should reach the rated speed within 30seconds.	TIME	30 sec
33.	Run the fan continuously in counterclockwise (CCW) direction for 30 min.	RPM	1190
34.	Switch off the fan.	-	-
35.	Apply motor brake.	-	-
36.	Impeller should stop rotating within 10 seconds.	TIME	9.2 sec
37.	Restart the motor in clockwise (CW) direction.	-	-
38.	Fan should reach the rated speed within 30seconds.	TIME	30 sec
39.	Run the fan continuously in clockwise (CW) direction for 30 min.	RPM	1190
40.	Switch off the fan.	-	-
41.	Apply motor brake.	-	-
42.	Impeller should stop rotating within 10 seconds.	TIME	9.2 sec



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TEST RESULTS :CON'T

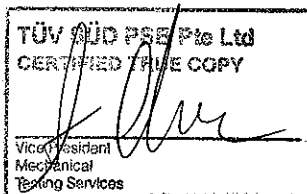
S/N	Procedures	Recorded	
Cycle 4			
43.	Restart the motor in counterclockwise (CCW) direction.	-	-
44.	Fan should reach the rated speed within 30seconds.	TIME	30 sec
45.	Run the fan continuously in counterclockwise (CCW) direction for 30 min.	RPM	1190
46.	Switch off the fan.	-	-
47.	Apply motor brake.	-	-
48.	Impeller should stop rotating within 10 seconds.	TIME	9.4 sec
49.	Restart the motor in clockwise (CW) direction.	-	-
50.	Fan should reach the rated speed within 30seconds.	TIME	30 sec
51.	Run the fan continuously in clockwise (CW) direction for 30 min.	RPM	1190
52.	Switch off the fan.	-	-
53.	Apply motor brake.	-	-
54.	Impeller should stop rotating within 10 seconds.	TIME	9.3 sec

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Chua Lee Choong
Testing Officer

Chua Peck Cheong

Chua Peck Cheong
Product Manager
Industrial & Polymer Products
Mechanical centre





Appendix

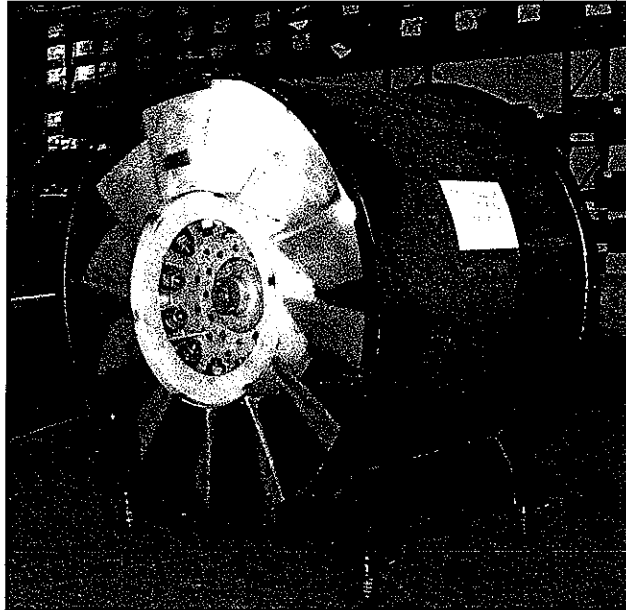
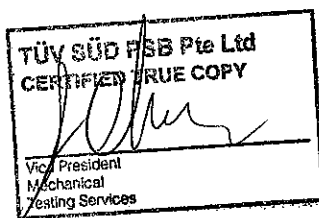


Photo 1 Reversible Axial Fan Model: TSS 1800
Test set-up

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January 2008

