



ABB DRIVE MOTORS FOR SALE

Model : AMI 450L6L BAMH

DESIGN CAPACITY- 1400 KW

PetroRigs
Quantity available— 4 Units in Ex Stock

MADE IN FINLAND

Application: Industrial / Plant / Marine

ABB DRIVE MOTOR

- TYPE : AMI 450L6L BAMH
- OUT PUT : 1400 kw
- VOLTAGE : 6000 V
- FRIQUENCY : 50Hz
- SPEED : 991 rpm
- PHASES : 3 ~
- MADE IN : FINLAND
- QUANTITY AVAILABLE : 4 UNIT in Ex Stock

Current Location : Malaysia
www.PetroRigs.com



◆ ABB Electric Motor Available - Immediate Stock ◆

We have 4 units of ABB Electric Motor - AMI 450L6L BAMH
available ex stock.

- ✓ New / unused surplus
- ✓ No lead time
- ✓ Suitable for plant replacement & projects
- ✓ Worldwide shipping possible

If you're facing long ABB delivery times, this is a quick solution.

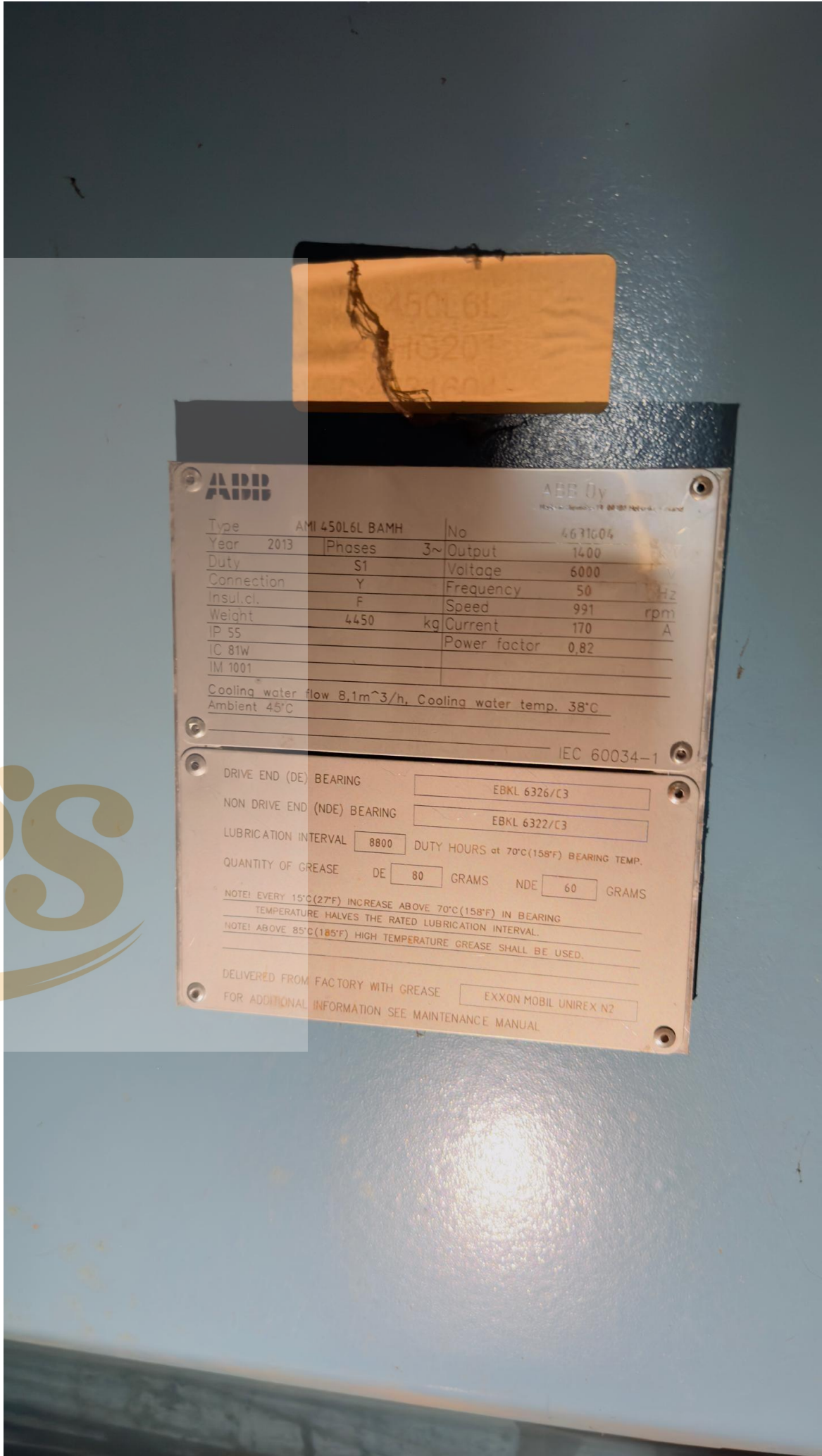
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ABB MOTOR CURRENT PICTURES



www.PetroRigs.com

ABB MOTOR CURRENT PICTURES



www.PetroRigs.com

ABB NO -1 F.A.T REPORT

Serial no. 4631606



Factory Acceptance Test Report

Test report for asynchronous machine

Customer

ABB AS

Project

51020405 - RR

Order ref.

1400kW, B3, CW

Machine

AMI 450L6L BAMH

Work no.

4443HG203

Serial no.

4631606

Date

8.4.2013

Approved on behalf of the manufacturer

Tarmo Juntunen

ABB Oy
Machines
Final Testing

Approved on behalf of the classification society

1864

1864

Digitally Signed By: Konttori, Jari

Location: DNV Helsinki, Finland

Signing Date: 2013-06-17

Jari Konttori / DNV

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Factory Acceptance Test Report

Customer

ABB AS

Machine

AMI 450L6L BAMH

Order ref.

4443HG203

Serial no.

4631606

Project

51020405 - RR

Approved

Tarmo Juntunen

Page

2

Revision

A

Report rev

B

Ratings

Machine

Standards

Specification

Classification society

Insulation class

Temperature class

Ambient temp., max.

IEC

NONE

DNV

F

F

45.0 °C

Mounting designation

Protected by enclosure

Method of cooling

IM 1001

IP 55

IC 81W

f [Hz]

Connection

P [kW] / [hp]

U [V]

I [A]

p.f.

Direction n. from

Duty

50.0

Y

1400 / 1877

6000

170

0.82

==>

991

S1

Cooling water flow

8.1 m³/h

Cooling water temp

38 °C

Table of contents / Test program

1) Visual inspection

2) Air gap measurement

3) Insulation resistances before tests

4) Resistance measurement of windings and elements

5) Direction of rotation, checking of phase sequence

6) Short-circuit point

7) No-load point

8) Vibration measurement

9) High voltage test

10) Insulation resistances after tests



Factory Acceptance Test Report

Customer

ABB AS

Machine

AMI 450L6L BAMH

Order ref.

4443HG203

Serial no.

4631606

Project

51020405 - RR

Approved

Tarmo Juntunen

Page

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Revision

A

Report rev

B

1) Visual inspection

Version

Notes

A

OK

2) Air gap measurement

Viewed from ND-end

2.2 mm

2.2 mm

2.2 mm

2.2 mm

3) Insulation resistances before tests

u = 23.6 °C

Winding

R [Mohm]

U [V]

Stator

41100

1000

Auxiliaries

R [Mohm]

U [V]

Space heater

699000

500

Temperature detectors

R [Mohm]

U [V]

Stator

673000

500

Other (1)

1500000

500

Notes

Other (1) = Pt-100 temperature detectors in cooling air

4) Resistance measurement of windings and elements

u = 20 °C

Winding

Ruv [ohm]

Ruw [ohm]

Rvw [ohm]

Stator

0.30938

0.30939

0.30915

u = 23.6 °C

Terminals

R [ohm]

Position

1 - 2

112.6

Space heater

3,4 - 5,6

109.2

Stator, U-phase

7,8 - 9,10

109.2

Stator, V-phase

11,12 - 13,14

109.2

Stator, W-phase

15,16 - 17,18

109.2

Stator, U-phase

19,20 - 21,22

109.3

Stator, V-phase

23,24 - 25,26

109.1

Stator, W-phase

27,28 - 29,30

109.1

Hot air

31,32 - 33,34

109.2

Cold air

Detector

RER-Z 21

PYR PT100LG4/4EX

PYR PT100LG4/4EX

PYR PT100LG4/4EX

PYR PT100LG4/4EX

PYR PT100LG4/4EX

PYR PT100LG4/4EX

PYR PT100PF5/4Z

PYR PT100PF5/4Z

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ABB NO -1 F.A.T REPORT

Serial no. 4631606



Factory Acceptance Test Report

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Project 51020405 - RR	Approved Tarmo Juntunen	Revision A
		Report rev B

5) Direction of rotation, checking of phase sequence

Result U-V-W | L1-L2-L3 | >>> (CW)

6) Short-circuit point

Connection	f [Hz]	U1 [V]	I1 [A]	P1 [kW]	p.f.	ψ [°C]	I _k [A]	U _n [V]
Y	50.0	1581.0	166.2	52.10	0.114	23.6	630.7	6000

7) No-load point

Connection	f [Hz]	U1 [V]	I1 [A]	P1 [kW]	p.f.	ψ [°C]	Direction
Y	50.0	5994.0	61.49	21.17	0.033	36.1	CW

8) Vibration measurement

Bearing position	U [V]	I [A]	f [Hz]	Horizontal	Vertical	Axial	Unit
D-END	5994	61	50.0	0.47	0.59	0.40	mm/s, rms
ND-END	5994	61	50.0	0.39	0.34	0.47	mm/s, rms

Measuring equipment

Id	Type	Name	Cal Date	Next Cal Due
715777	Vibration analyzer	CSI 1910, vibration analyzer	13.12.2012	13.6.2013

9) High voltage test

Winding	U [V]	t [s]	f [Hz]
Stator	15000	60	50
Auxiliaries			
Space heater	1500	60	50

Temperature detectors	U [V]	t [s]	f [Hz]
Stator	1500	60	50
Other (1)	500	60	50

Notes Other (1) = Pt-100 temperature detectors in cooling air

10) Insulation resistances after tests

υ = 36.1 °C

Winding	R [Mohm]	t [s]	U [V]		
Stator	20600	60	1000		
Auxiliaries	R [Mohm]	U [V]	Temperature detectors	R [Mohm]	U [V]
Space heater	388000	500	Stator	421000	500
			Other (1)	1500000	500

Notes Other (1) = Pt-100 temperature detectors in cooling air



Factory Acceptance Test Report

Customer ABB AS	Machine AMI 450L6L BAMH	Page 5
Order ref.	Work no. 4443HG203	Serial no. 4631606
Project 51020405 - RR	Approved Tarmo Juntunen	Revision A
		Report rev B

End of report

Test bay AMA-production line

Author Tarmo Juntunen, Petri Mäki

Number of pages 5

Printed: 28.5.2013
Kai Jauhiainen
2.2

www.PetroRigs.com

ABB NO -2 F.A.T REPORT

Serial no. 4631605



Factory Acceptance Test Report

Test report for asynchronous machine

Customer

ABB AS

Project

51020405 - RR

Order ref.

1400kW, B3, CW

Machine

AMI 450L6L BAMH

Work no.

4443HG202

Serial no.

4631605

Date

8.4.2013

Approved on behalf of the manufacturer

ABB Oy
Machines
Final Testing

Approved on behalf of the classification society

Digitally Signed By: Konttori, Jari
Location: DNV Helsinki, Finland
Signing Date: 2013-06-17

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Factory Acceptance Test Report

Customer

ABB AS

Machine

AMI 450L6L BAMH

Order ref.

4443HG202

Work no.

4631605

Project

51020405 - RR

Approved

Petri Mäki

Page

2

Revision

A

Report rev

A

Ratings

Machine

Standards

Specification

Classification society

Insulation class

Temperature class

Ambient temp., max.

IEC

NONE

DNV

F

F

45.0 °C

Mounting designation

Protected by enclosure

Method of cooling

IM 1001

IP 55

IC 81W

f [Hz]

Connection

P [kW] / [hp]

U [V]

I [A]

p.f.

Direction n [rpm]

Duty

50.0

Y

1400 / 1877

6000

170

0.82

==>

991

S1

Table of contents / Test program

1) Visual inspection

2) Air gap measurement

3) Insulation resistances before tests

4) Resistance measurement of windings and elements

5) Direction of rotation, checking of phase sequence

6) Short-circuit point

7) No-load point

8) Vibration measurement

9) High voltage test

10) Insulation resistances after tests



Factory Acceptance Test Report

Customer

ABB AS

Machine

AMI 450L6L BAMH

Order ref.

4443HG202

Work no.

4631605

Project

51020405 - RR

Approved

Petri Mäki

Page

3

Revision

A

Report rev

A

1) Visual inspection

Version

Notes

A

OK

2) Air gap measurement

Viewed from ND-end

2.0 mm

2.2 mm

2.1 mm

2.2 mm

3) Insulation resistances before tests

U = 20.6 °C

Winding

R [Mohm]

U [V]

Stator

48700

1000

Auxiliaries

R [Mohm]

U [V]

Space heater

680000

500

Temperature detectors

R [Mohm]

U [V]

Stator

476000

500

Other (1)

1500000

500

Notes

Pt100(Other1) = hot & cold air

4) Resistance measurement of windings and elements

U = 20 °C

Winding

R_{uv} [ohm]

R_w [ohm]

R_w [ohm]

Stator

0.30958

0.30963

0.30934

U = 20.6 °C

Terminals

R [ohm]

Position

1 - 2

114.0

Space heater

3,4 - 5,6

108.1

Stator, U-phase

7,8 - 9,10

108.0

Stator, V-phase

11,12 - 13,14

108.0

Stator, W-phase

15,16 - 17,18

107.9

Stator, U-phase

19,20 - 21,22

108.1

Stator, V-phase

23,24 - 25,26

108.0

Stator, W-phase

27,28 - 29,30

108.6

hot air

31,32 - 33,34

108.6

cold air

Detector

RER-Z 21

PYR PT100LG4/4EX

PYR PT100LG4/4EX

PYR PT100LG4/4EX

PYR PT100LG4/4EX

PYR PT100LG4/4EX

PYR PT100LG4/4EX

PYR PT100

PYR PT100

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ABB NO -2 F.A.T REPORT

Serial no. 4631605



Factory Acceptance Test Report

Customer ABB AS	Machine AMI 450L6L BAMH	Page 4
Order ref.	Work no. 4443HG202	Serial no. 4631605
Project 51020405 - RR	Approved Petri Mäki	Revision A
Report rev A		

5) Direction of rotation, checking of phase sequence

Result U-V-W | L1-L2-L3 | >>> (CW)

6) Short-circuit point

Connection	f [Hz]	U1 [V]	I1 [A]	P1 [kW]	p.f.	u [°C]	I _k [A]	U _n [V]
Y	50.0	1566.0	164.8	52.00	0.116	22.8	631.4	6000

7) No-load point

Connection	f [Hz]	U1 [V]	I1 [A]	P1 [kW]	p.f.	u [°C]	Direction
Y	50.0	5996.0	61.54	21.31	0.033	42.4	CW

8) Vibration measurement

Mounting Rigid

Bearing position	U [V]	I [A]	f [Hz]	Horizontal	Vertical	Axial Unit
D-END	5996	62	50.0	0.43	0.40	0.46 mm/s, rms
ND-END	5996	62	50.0	0.36	0.38	0.49 mm/s, rms

Measuring equipment

Id	Type	Name	Cal Date	Next Cal Due
715777	Vibration analyzer	CSI 1910, vibration analyzer	13.12.2012	13.6.2013

9) High voltage test

Winding	U [V]	t [s]	f [Hz]
Stator	15000	60	50
Auxiliaries			
Space heater	1500	60	50

Temperature detectors	U [V]	t [s]	f [Hz]
Stator	1500	60	50
Other (1)	500	60	50

Notes Pt100(Other1) = hot & cold air

10) Insulation resistances after tests

u = 42.4 °C

Winding	R [Mohm]	t [s]	U [V]
Stator	18600	60	1000
Auxiliaries			
Space heater	250000	500	

Temperature detectors	R [Mohm]	U [V]
Stator	240000	500
Other (1)	1500000	500

Notes Pt100(Other1) = hot & cold air



Factory Acceptance Test Report

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Report rev A		

End of report

Test bay AMA-production line

Author Petri Mäki, Tarmo Juntunen

Number of pages 5

Printed: 10.4.2013
Petri Mäki
2.2

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ABB NO -3 F.A.T REPORT

Serial no. 4631604



Factory Acceptance Test Report

Test report for asynchronous machine

Customer

ABB AS

Project

51020405 - RR

Order ref.

1400kW, B3, CCW

Machine

AMI 450L6L BAMH

Work no.

4443HG201

Serial no.

4631604

Date

9.4.2013

Approved on behalf of the manufacturer

Kai Jauhainen

ABB Oy
Machines
Final Testing

Approved on behalf of the classification society

DNV

1864

Digitally Signed By: Konttori, Jani

Location: DNV Helsinki, Finland

Signing Date: 2013-06-17

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Factory Acceptance Test Report

Customer

ABB AS

Machine

AMI 450L6L BAMH

Order ref.

4443HG201

Serial no.

4631604

Project

51020405 - RR

Approved

Kai Jauhainen

Report rev

B

Ratings

Machine

Standards

IEC

Classification society

DNV

Insulation class

F

Temperature class

F

Ambient temp., max.

45.0 °C

Mounting designation

IM 1001

Protected by enclosure

IP 55

Method of cooling

IC 81W

f [Hz]

50.0

Connection

Y

P [kW] / [hp]

1400 / 1877

U [V]

6000

I [A]

170

p.f.

0.82

Direction n [rpm]

<==

Duty

S1

Cooling water flow

8.1 m³/h

Cooling water temp

38 °C

Table of contents / Test program

1) Visual inspection

2) Air gap measurement

3) Insulation resistances before tests

4) Resistance measurement of windings and elements

5) Direction of rotation, checking of phase sequence

6) Temperature rise test

7) Overload test

8) Short-circuit point

9) No-load point

10) Vibration measurement

11) High voltage test

12) Insulation resistances after tests

Factory Acceptance Test Report

Customer

ABB AS

Machine

AMI 450L6L BAMH

Order ref.

4443HG201

Serial no.

4631604

Project

51020405 - RR

Approved

Kai Jauhainen

Report rev

B

1) Visual inspection

Version

A

Notes

OK

2) Air gap measurement

Viewed from ND-end

2.0 mm

2.1 mm

2.2 mm

2.3 mm

3) Insulation resistances before tests

U = 20.3 °C

Winding

R [Mohm]

U [V]

Stator

49400

1000

Auxiliaries

R [Mohm]

U [V]

Space heater

576000

500

Temperature detectors

R [Mohm]

U [V]

Stator

622000

500

Other (1)

1000000

500

Notes

Other (1) = Pt-100 temperature detectors in cooling air

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ABB NO -3 F.A.T REPORT

Serial no. 4631604

ABB

Factory Acceptance Test Report

Customer ABB AS	Machine AMI 450L6L BAMH	Page 4
Order ref.	Work no. 4443HG201	Serial no. 4631604
Project 51020405 - RR	Approved <i>Kai Jauhainen</i> Kai Jauhainen	Report rev B

4) Resistance measurement of windings and elements

v = 20 °C			
Winding	Ruv [ohm]	Ruw [ohm]	Rvw [ohm]
Stator	0.30980	0.30997	0.30975
v = 20.3 °C			
Terminals	R [ohm]	Position	Detector
1 - 2	111.8	Space heater	RER-Z 21
3,4 - 5,6	107.9	Stator, U-phase	PYR PT100LG4/4EX
7,8 - 9,10	107.9	Stator, V-phase	PYR PT100LG4/4EX
11,12 - 13,14	107.9	Stator, W-phase	PYR PT100LG4/4EX
15,16 - 17,18	107.9	Stator, U-phase	PYR PT100LG4/4EX
19,20 - 21,22	107.9	Stator, V-phase	PYR PT100LG4/4EX
23,24 - 25,26	107.9	Stator, W-phase	PYR PT100LG4/4EX
27,28 - 29,30	108.7	Hot air	PYR PT100PF5/4Z
31,32 - 33,34	108.6	Cold air	PYR PT100PF5/4Z

ABB

Factory Acceptance Test Report

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5) Direction of rotation, checking of phase sequence

Result U-V-W | L3-L2-L1 | <<< (CCW)

6) Temperature rise test

Test run A

Loading method		Loading machine			
Loading conditions					
U = 6035 V		Direction <==			
I = 171.2 A		f = 50.0 Hz			
n = 992 rpm		Water flow 8.10 m³/h			
Final temperatures					
Recorder	Channel	Terminal	Position	ϑ [°C]	Detector
Keithley 2700	1	3,4 - 5,6	Stator winding, U-phase	93.2 °C	PYR
	2	7,8 - 9,10	Stator winding, V-phase	92.5 °C	PYR
	3	11,12 - 13,14	Stator winding, W-phase	93.6 °C	PYR
	4	15,16 - 17,18	Stator winding, U-phase	92.6 °C	PYR
	5	19,20 - 21,22	Stator winding, V-phase	92.0 °C	PYR
	6	23,24 - 25,26	Stator winding, W-phase	93.0 °C	PYR
	7	External	D.E - bearing	58.1 °C	Pt100
	8	External	N.D.E - bearing	38.2 °C	Pt100
	9	27,28 - 29,30	Outlet cooling air(inner circul.)	67.5 °C	PYR
	10	31,32 - 33,34	Inlet cooling air(inner circul.)	25.8 °C	PYR
	11	External	Inlet cooling water (ref.)	11.8 °C	Pt100
	12	External	Outlet cooling water	16.5 °C	Pt100
	13	External	Ambient temperature	24.5 °C	Pt100

ABB

Factory Acceptance Test Report

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Graph of the temperatures

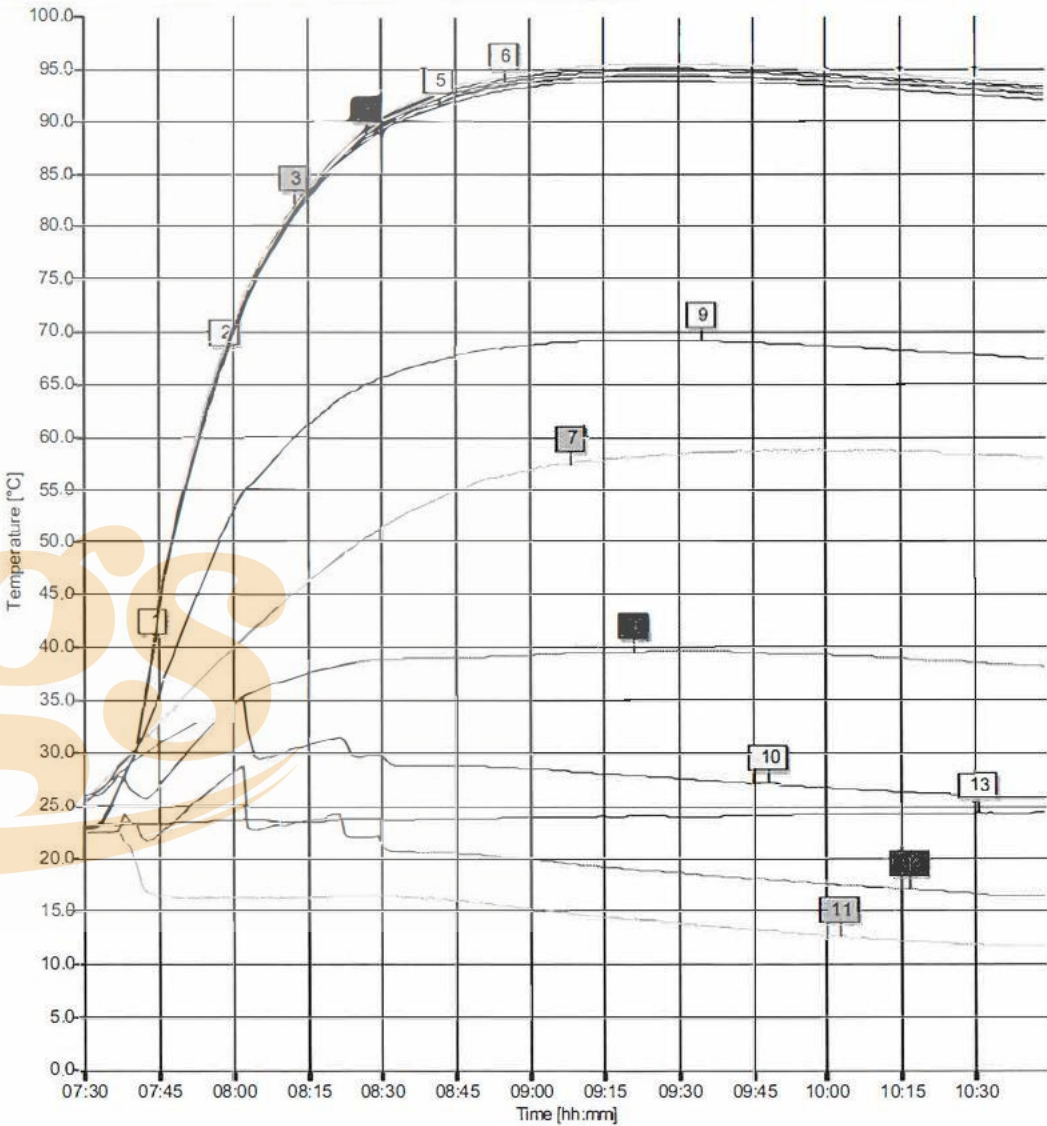


ABB NO -3

F.A.T REPORT

Serial no. 4631604



Factory Acceptance Test Report

Customer ABB AS	Machine AMI 450L6L BAMH	Page 7
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Temperature rise test - Continued

Stator: 1

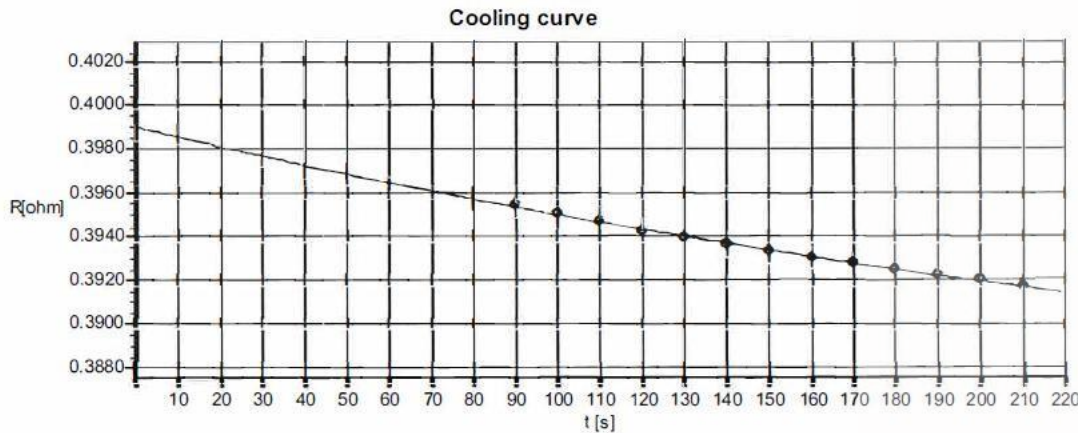
Determination of temperature rise from cooling curve

Winding cold resistance R1 = 0.31016 ohm v1 = 20.3 °C	Resistance after shutdown R2 = 0.39899 ohm / 0 s v2 = 93.4 °C	Resistances of other phases Ru = 0.39133 ohm / 240 s Rvw = 0.39065 ohm / 270 s
Temperature of the coolant v0 = 11.8 °C	Temperature rise Θ = v2 - v0 = 81.6 K	

Reference coolant:
Inlet cooling water (ref.)

$$v2 - v0 = \frac{R2 - R1}{R1} \times (k + v1) + v1 - v0$$

k is the temperature coefficient, for copper k = 235



Factory Acceptance Test Report

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Temperature rise test - Continued

Voltage and current balances

Uuv = 6035 V Uuw = 6034 V Uvw = 6035 V
Iu = 171.3 A Iv = 171.2 A Iw = 171.1 A

Machine loading values:

Time	U1 [V]	I1 [A]	Pe1 [kW]	p.f.	f [Hz]	n [rpm]	s [%]
07:41	6035	170.8	1454.4	0.82	50.0	993.0	0.70
08:12	6034	171.2	1454.9	0.81	50.0	992.2	0.78
08:42	6034	171.4	1454.2	0.81	50.0	992.1	0.79
09:12	6036	171.3	1453.2	0.81	50.0	992.1	0.79
09:42	6035	171.3	1452.5	0.81	50.0	992.1	0.78
10:12	6035	171.2	1452.2	0.81	50.0	992.1	0.78
10:42	6035	171.2	1451.8	0.81	50.0	992.2	0.78

7) Overload test

Loading conditions

t = 15 s U = 6034 V I = 273.1 A P = 2301.3 kW
f = 50.0 Hz p.f. = 0.806



Factory Acceptance Test Report

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8) Short-circuit point

Connection	f [Hz]	U1 [V]	I1 [A]	P1 [kW]	p.f.	θ [°C]	Ik [A]	Un [V]
Y	50.0	1620.8	170.1	58.08	0.122	68.7	629.9	6000

9) No-load point

Connection	f [Hz]	U1 [V]	I1 [A]	P1 [kW]	p.f.	θ [°C]	Direction
Y	50.0	6036.0	63.58	19.83	0.030	69.5	CCW

10) Vibration measurement

Mounting Rigid						
Bearing position	U [V]	I [A]	f [Hz]	Horizontal	Vertical	Axial Unit
D-END	6036	64	50.0	0.37	0.26	0.59 mm/s, rms
D-END	6036	64	50.0	0.35	0.30	0.61 m/s², rms
D-END	6036	64	50.0	0.96	0.77	1.00 µm, rms
ND-END	6036	64	50.0	0.60	0.29	0.63 mm/s, rms
ND-END	6036	64	50.0	0.99	0.37	0.97 m/s², rms
ND-END	6036	64	50.0	1.41	0.83	0.94 µm, rms

Measuring equipment

Id	Type	Name	Cal Date	Next Cal Due
715955	Vibration analyzer	CSI 1910, vibration analyzer (2)	12.12.2012	12.6.2013

Serial no. 4631604



Factory Acceptance Test Report

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Project 51020405 - RR	Approved <i>Kai Jauhainen</i> Kai Jauhainen	Report rev B

Temperature rise test - Continued

Stator: 1

Determination of temperature rise from cooling curve

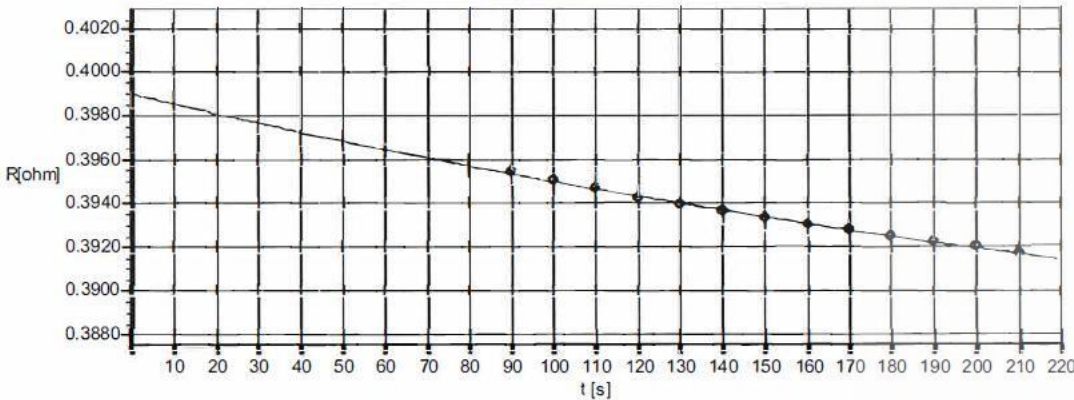
Winding cold resistance R1 = 0.31016 ohm v1 = 20.3 °C	Resistance after shutdown R2 = 0.39899 ohm / 0 s v2 = 93.4 °C	Resistances of other phases Ru = 0.39133 ohm / 240 s Rvw = 0.39065 ohm / 270 s
Temperature of the coolant v0 = 11.8 °C	Temperature rise Θ = v2 - v0 = 81.6 K	

Reference coolant:
Inlet cooling water (ref.)

$$v2 - v0 = \frac{R2 - R1}{R1} \times (k + v1) + v1 - v0$$

k is the temperature coefficient, for copper k = 235

Cooling curve



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11) High voltage test

Winding	U [V]	t [s]	f [Hz]
Stator	15000	60	50
Auxiliaries			
Space heater	1500	60	50

Temperature detectors	U [V]	t [s]	f [Hz]
Stator	1500	60	50
Other (1)	500	60	50

Notes Other (1) = Pt-100 temperature detectors in cooling air

12) Insulation resistances after tests

v = 63.2 °C					
Winding	R [Mohm]	t [s]	U [V]		
Stator	10050	60	1000		
Auxiliaries					
Space heater	49300	500			

Temperature detectors	R [Mohm]	U [V]
Stator	247000	500
Other (1)	1000000	500

Notes Other (1) = Pt-100 temperature detectors in cooling air



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End of report

Test bay AS4 (Asynchronous, test bench no. 4)
Author T.Kotilainen, M.Viljanen

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Printed: 28.5.2013
Kai Jauhainen
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ABB NO -4 F.A.T REPORT

Serial no. 4631603



Factory Acceptance Test Report

Test report for asynchronous machine

Customer

ABB AS

Project

51020405 - RR

Order ref.

1400kW, B3, CCW

Machine

AMI 450L6L BAMH

Work no.

4443HG200

Serial no.

4631603

Date

9.4.2013

Approved on behalf of the manufacturer

Petri Mäki

ABB Oy
Machines
Final Testing

Approved on behalf of the classification society

Hannu Suominen / DNV

HEL13-6335

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Factory Acceptance Test Report

Customer

ABB AS

Machine

AMI 450L6L BAMH

Order ref.

4443HG200

Work no.

4631603

Project

51020405 - RR

Approved

Petri Mäki

Page

2

Revision

A

Report rev

B

Ratings

Machine

Standards

IEC

Specification

NONE

Classification society

DNV

Insulation class

F

Temperature class

F

Ambient temp., max.

45.0 °C

Mounting designation

IM 1001

Protected by enclosure

IP 55

Method of cooling

IC 81W

f [Hz]

50.0

Connection

Y

P [kW] / [hp]

1400 / 1877

U [V]

6000

I [A]

170

p.f.

0.82

Direction n [rpm]

<==

Duty

S1

Table of contents / Test program

1) Visual inspection

2) Air gap measurement

3) Insulation resistances before tests

4) Resistance measurement of windings and elements

5) Direction of rotation, checking of phase sequence

6) Short-circuit point

7) No-load point

8) Vibration measurement

9) High voltage test

10) Insulation resistances after tests



Factory Acceptance Test Report

Customer

ABB AS

Machine

AMI 450L6L BAMH

Order ref.

4443HG200

Work no.

4631603

Project

51020405 - RR

Approved

Petri Mäki

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Revision

A

Report rev

B

1) Visual inspection

Version

A

Notes

OK

2) Air gap measurement

Viewed from ND-end

2.3 mm

2.3 mm

2.3 mm

2.3 mm

3) Insulation resistances before tests

u = 22.1 °C

Winding

Stator

Auxiliaries

Space heater

R [Mohm]

43500

R [Mohm]

607000

U [V]

1000

U [V]

500

Temperature detectors

Stator

Other (1)

R [Mohm]

735000

1500000

U [V]

500

500

Notes

Pt100(Other1) = hot & cold air

4) Resistance measurement of windings and elements

u = 20 °C

Winding

Stator

R_{uv} [ohm]

0.30957

R_{uw} [ohm]

0.30972

R_{vw} [ohm]

0.30938

u = 22.1 °C

Terminals

1 - 2

3,4 - 5,6

7,8 - 9,10

11,12 - 13,14

15,16 - 17,18

19,20 - 21,22

23,24 - 25,26

27,28 - 29,30

31,32 - 33,34

R [ohm]

114.2

108.5

108.6

108.6

108.6

108.6

108.5

108.5

108.5

Position

Space heater

Stator, U-phase

Stator, V-phase

Stator, W-phase

Stator, U-phase

Stator, V-phase

Stator, W-phase

hot air

cold air

Detector

RER-Z 21

PYR PT100LG4/4EX

PYR PT100LG4/4EX

PYR PT100LG4/4EX

PYR PT100LG4/4EX

PYR PT100LG4/4EX

PYR PT100LG4/4EX

PYR PT100

PYR PT100

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ABB NO -4 F.A.T REPORT

Serial no. 4631603



Factory Acceptance Test Report

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5) Direction of rotation, checking of phase sequence

Result U-V-W | L3-L2-L1 | <<< (CCW)

6) Short-circuit point

Connection	f [Hz]	U1 [V]	I1 [A]	P1 [kW]	p.f.	∅°C	Ik [A]	Un [V]
Y	50.0	1577.0	166.2	52.50	0.116	22.1	632.3	6000

7) No-load point

Connection	f [Hz]	U1 [V]	I1 [A]	P1 [kW]	p.f.	∅°C	Direction
Y	50.0	5995.0	61.56	21.34	0.033	32.0	CCW

8) Vibration measurement

Bearing position	U [V]	I [A]	f [Hz]	Horizontal	Vertical	Axial	Unit
D-END	5995	62	50.0	0.41	0.47	0.55	mm/s, rms
ND-END	5995	62	50.0	0.46	0.36	0.30	mm/s, rms

Measuring equipment

Id	Type	Name	Cal Date	Next Cal Due
715777	Vibration analyzer	CSI 1910, vibration analyzer	13.12.2012	13.6.2013

9) High voltage test

Winding	U [V]	t [s]	f [Hz]
Stator	15000	60	50
Auxiliaries			
Space heater	1500	60	50

Temperature detectors	U [V]	t [s]	f [Hz]
Stator	1500	60	50
Other (1)	500	60	50

Notes Pt100(Other1) = hot & cold air

10) Insulation resistances after tests

∅ = 32.0 °C

Winding	R [Mohm]	t [s]	U [V]
Stator	24900	60	1000
Auxiliaries	R [Mohm]	U [V]	Temperature detectors
Space heater	393999	500	Stator
			Other (1)

R [Mohm]	U [V]
487000	500
1500000	500

Notes Pt100(Other1) = hot & cold air



Factory Acceptance Test Report

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End of report

Test bay AMA-production line

Author Petri Mäki, Tarmo Juntunen

Number of pages 5

Printed: 28.5.2013
Kai Jauhiainen
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ABB NO 1 to 4 **PACKING LIST**

Seq.	Package ID. Description. ISPM 15	Dimensions L*W*H (m)	Volume (m ²)	Net Weight (kg)	Gross Weight (kg)
1	CR0217744 ev				
1	BX0302925 (Wooden pallet) ev	2.45*1.85*2.15	9.745	4450	4650
2	BX0302926 (Wooden pallet) ev	2.45*1.85*2.15	9.745	4450	4650
3	BX0302927 (Wooden pallet) ev	2.45*1.85*2.15	9.745	4450	4650
4	BX0302928 (Wooden pallet) ev	2.45*1.85*2.15	9.745	4450	4650