



ASSEMBLY, APPLICATION and MAINTENANCE MANUAL

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AIM



This manual contains assembly, application, maintenance instructions and security attentions during the assembly and running.

WARNING !



Don't assemble and run the machine motor without reading the Manual completely!



1. COMPANY PROFILE

Akis, founded in 1978, has began manufacturing elevator machines and motors as integrated production by means of gained experience and knowledge during the period with its new investments.. Akis has become one of the most important company in our country and also in elevator sector in worldwide due to continuous investment policy into its technology.

It carries out its activities in its modern and integrated production facilities in total 100.000 m² area with 45.000 m²closed area in Konya Organized Industrial Zone.

Akis realizes production elevator machine and motors in the international standards in the biggest and modern foundry facility in Europe, machining department equipped with high technology and high quality control laboratory.

Akis gives great importance to research and development activities with cooperation between R&D department and university. In this context, it constantly increases its product range. It started serial production of gearless elevator motors after complete gearless motor project which it run together with TUBİTAK.

It gives great importance to quality and safety during each production phase. It studies and analysis each part which is utilized to produce elevator machine motors in its laboratory. Akis has domestic and international certificates such as ISO 9001:2008, GOST, CE, TÜV SÜD, TSEK and etc.

In 2007, as a result of its cooperation agreement with Siemens Akis started production of Control Panel Board with Frequency Control. It keeps producing control panels as a unique partner of Siemens.

Akis is the biggest manufacturer of Turkey and the region with its monthly production capacity and it meets requirement of elevator machine and motor in Turkey.

1.1 Introduction

This manual covers introduction, assembling, maintenance and repair instructions for AKIŞ brand magnetic synchronic gearless motor models such as AK1, AK2, AK3, AK4, AK5, AK6 . The instructions that into manual , have to be applied completely.

All personel who will use the motor, must carefully read, , understand and apply the information into manual. In case of damages because of any act at out of this manual instructions, AKIŞ COMPANY is not responsible.

1.2 Copyright

AKIŞ COMPANY is COPYRIGHT holder of this manual. In case of quotation or copying of this manual partially or completely without permission, legal sanctions will be applied concerned people or companies.

1.3 Basics

AKIŞ AK type magnetic gearless machines are composed of synchronic motor, driving pulley, side bearing, encoder and magnetic brake system.

It is 40% more effective than asynchronous motor machines. Thereby, it great benefits to user together with obtained energy saving, is long life as a result of to be gearless. And also, it great benefits for costs of environmental pollution, fire danger during using due to be motor oil free. V3F control makes the machine very silent and comfortable , and also low motor speed increases of system safety maximal.

Through its compact constitution, no need machine house and so much space. It can easily be integrated to every kind of building. It avoids vibration through regular period on speed changing. Through fine control system, it has sensitive stopping and moving capability.

1.4 General Attention

Our motors have been running with the power values which written on them, if their temperature values are between 0°C-40°C. In case of exceeding of these temperature values, please contact us or realize external applications that obtaining permanent atmosphere temperature.

The maximum speed that shown on the motor label, is composed of motor speed number and pulley diameter.

Motor has been designed as workable at 40% occupancy rate and 240 s/h.

2. TRANSPORTATION

- Please control general outlook of the machine during delivery. If it is damaged, please notify us its serial number.
- A wedge is available under the machine to transport easily.
- Please dismount this wedge during the montage and then mount it.
- The machine transport has to be realized in safe. During the machine loading and putting down, has to be very careful against to knocking, vibration, and descending.
- The machine has to be loaded and put down slowly.
- Due to level difference between machine and driving pulley, be careful that the driving pulley must not be lied down and touch ground roughly. This may cause curving of machine axis and bolt detaching.
- During putting down, the machine has to put down as fastened with hawser to crooks which are above the machine



IN EVERY PHASE OF THE MACHINE FASTENING TO CROOKS, LIFTING, REPLACEMENT , TO BE CAREFULL AND ATTENTION IS VITALLY IMPORTANT.

In this chapter, the technics and important points that used lifting the machines which manufactured by AKIŞ, are displayed.

The customer is responsible of steel hawsers, chains, belts, crooks, cranes conformity, that will be used for those all operations.



Figure 1. AK Machine and Motor Transportation

AKIS ELEVATOR MACHINE WEIGHT TABLE			
AK TYPE (GEARLESS) MACHINES			
PRODUCT NAME	POWER (KW)	WEIGHT (Kg)	PULLEY (mm)
AK 1	1,4	119	210X4X6,5
AK 1	2,2	120	240X4X6,5
AK 1	2,4	119	210X4X6,5
AK 2	1,4	150	240X5X6,5
AK 2	2,2	158	320X4X8
AK 2	2,7	152	240X7X6,5
AK 2	2,8	155	240X4X6,5
AK 2	2,8	167	400X5X10
AK 2	2,8	158	320X4X8
AK 2	2,8	157	320X4X8
AK 2	2,8	147	240X4X6,5
AK 2	3,3	158	320X4X8
AK 2	3,3	149	210X5X6,5
AK 2	3,3	146	240X5X6,5
AK 2	4,4	167	400X5X10
AK 2	4,4	149	210X7X6,5
AK 2	4,5	155	240X7X6,5
AK 2	5,3	154	240X5X6,5
AK 2	6,9	154	240X7X6,5
AK 3	4,4	196	320X5X8
AK 3	5,5	185	240X8X6,5
AK 3	6,9	185	240X10X6,5
AK 3	8,8	185	240X8X6,5
AK 4	3,5	214	320X5X8
AK 4	6,9	227	320X8X8
AK 4	6,9	219	320X5X8
AK 4	17,1	222	320X7X8
AK 5	8,2	258	320X8X8
AK 5	13,7	259	320X8X8
AK 6	7	314	320X10X8
AK 6	11	315	320X10X8
AK 6	13,7	346	400X7X10
AK 6	17,5	313	320X10X8
AK 6	27,3	280	320X10X8

Table 1. Machine Motor Weights Table

AK Type Machines Wedge Weight : 8 Kg,

DEFLECTION PULLEY WEIGHT TABLE	
Product Name	Weight (Kg)
40X4 ball deflection pulley	40
40X5 ball deflection pulley	43
40X6 ball deflection pulley	44

Table 2. Deflection Pulley Weights Table

3. STORAGE

- The machine has to be kept in dry and without humidity place in its package.
- The machine has to be protected against dust in case of long time storage.
- The machines should not be stacked consecutively, must be protected as stability of other else materials touch.
- It must be prevented of water touch.

4. WARNINGS

From machine assembling to testing, all mounting, connection, and running processes have to be conducted by authorized staff. The best place has to be chosen and considered every facts for efficient operate. Environment conditions has to be considered, dusty, humid, sweaty or cold atmosphere has to be taken into consideration.

- In the building that the machine will be mounted onto it, grounding system has to be for electricity obviously.
- The connection that between machine and electricity grounding system, has to be obtain with screened power cables.
- Micro-switches investigates brake opening-closing system. Certainly, they must not be dismantled or out-of-service.
- The U,V,W phase conductors connection to connector terminals, that onto the cable, has to be connected according to Auto-Tuning process's successful result concatenation.
- Please set right the capacity of machine and motor. Otherwise, the machine becomes short-life and does not work in safe.
- During the motor connection, do PTC connection certainly.
- Before intervention the machine and motor, the elevator has to be out-of-service. Otherwise, it may cause injury.
- It is advises that the rope clutch angle to be 160°-165° for stopping as aligned to floor.
- Mounting of machine and motor has to be done by educated and authorized staff according to concerned standards and regulations.
- Replacement of machine and motor has to be done according to concerned article of **TS 10922 EN 81-1** standards
- On the machine there are 2 rope protection barriers. These barriers must not certainly dismantled.

5. ASSEMBLING

5.1. Mounting to ground

- The elevator machine mounting is done onto steel construction or concrete. The machining fitting place has to be stability and without vibration.
- Before mounting the machine, the place, that machine will be mounted there, has to be cleaned of metallic dust and concrete bulges completely
- If the concrete is appropriate in safe, please screw the fixation bolts.
- Rubber materials have to be placed under the steel construction in order to decrease the vibration.
- The base connection bolts have to be screwed mutually.
- The bolts and nuts, that will be used for connection the machine, should be 6 pieces as M16.
- After mounting the machine, all bolts and nuts have to be controlled that they are tight or not..

5.2. Motor Electricity Connection

- Connect the coming from driver 3 phase connection cables to the U,V,W switches on the connectors.
- Connect the grounding connection cables coming from driver, to the grounding switch (yellow-green) on the connector.
- Connect the cables coming from self-controlling the temperature PTC, which is in the bobbin, to the PTC contacts on the connector.
- Connect the brake cables to brake contacts on the connector.
- Connect the NO, COM and NC cables one-to-one to the contacts on the connector.
- Prefer the cables with thermic protection relay, and pass the PTC ends over the relay without bridge. It is important to make your machine long-life.
- In case of very high of temperature gauge, a thermostat controlled relay can give good results.
- The cables used for motor connection have to be conform of **TS IEC 60227-6** standards.
- The cables used for motor connection, have to be insulated properly.
- While the cables are going to the electricity box, they have to be as stability.
- After motor electricity connection, the connector cover has to be closed.
- Motor electricity connection has to be realized according to concerned regulations and standards.

6. ENCODER MONTAGE

6.1 Encoder Mounting Process

1. Remove the protective cover on the Encoder.
2. Place the Encoder to the connection socket on the motor as figure 2.
3. Squeeze the DIN6912-M5-8.8 screw with ID 350 378-14 torque wrench up to 5 - 5.5 Nm.

4. Squeeze the joint screw which is on the circle joint of encoder flange with 1,2 Nm torque by using allen wrench upto 2 mm.

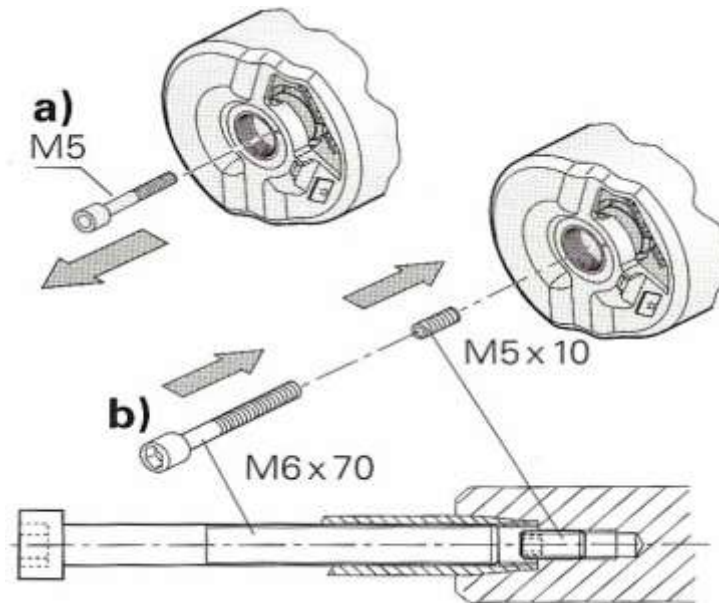


Figure 2. Encoder Mounting Operation

6.2 Encoder Dismounting Process

1. Remove the protective cover on the Encoder.
2. Remove M5 screw at the middle.
3. Remove the bolts on the flange connection circumference.
4. Insert M6x70 screw to the middle part of encoder to pitch and squeeze until slacken encoder.
5. After unscrewing the Encoder by under side, remove it slowly.

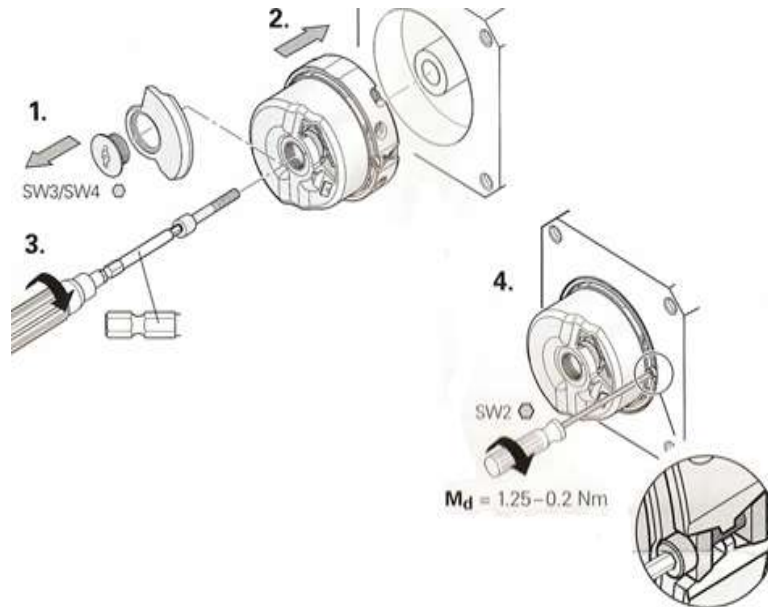


Figure 3. Encoder Dismounting Operation

6.3 Encoder Connection Schemas

6.3.1 Encoder Color Codes

SIGNAL CODE	CABLE COLOR (EnDat) Heidenhain ECN 1313 / ECN113
5 V (Up)	Brown / Green (Blue)
0V (GND)	Green / white (white)
A+	Green / Black
A-	Yellow / Black
B+	Blue / Black
B-	Red / Black
Clock+	Purple
Clock-	Yellow
Data+	Gray
Data-	Pink
Screen (Signal)	Dark Black (Thin)
Screen	Dark Black (Thick)

Table 3. Encoder Cable Color

6.3.2 Arkel Adrive (ECN 1313 / ECN 113)

Arkel Adrive (ECN 1313 / ECN 113)

If cable is longer than 10m then connect blue and white color cables if not do not connect.

ENCODER CABLE COLOR	CODE
Green - White (+White)	GND (0V)
Brown + Green (+ Blue)	UP (5V)
Green - Black	A+
Yellow - Black	A-
Blue - Black	B+
Red - Black	B-
Purple	C+
Yellow	C-
Grey	D+
Pink	D-
Black	Chassis

Connect cable screen to the Chassis !

magnet excited synchronous motor and frequency inverter encoder connection diagram

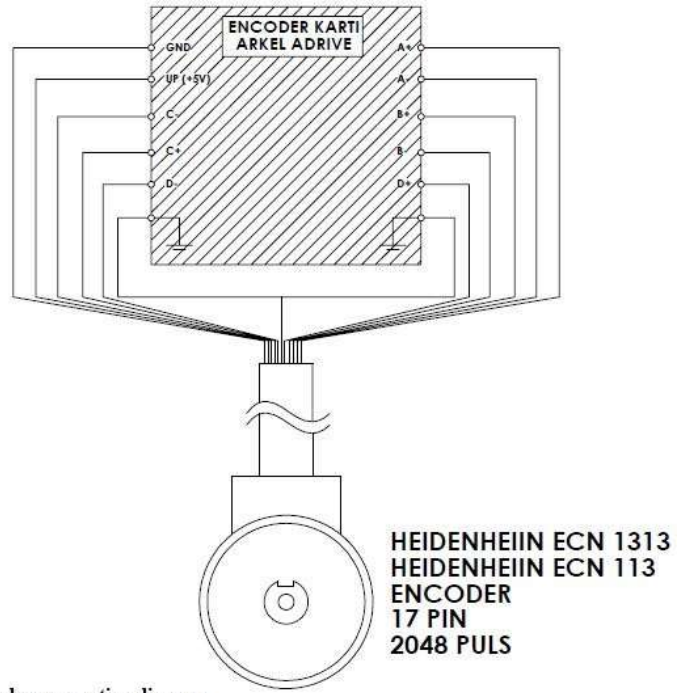


Figure 4. Arkel Adrive Connection schema

6.3.3 Fuji Frenic Lift (ECN 1313 / ECN 113)

ENCODER CABLE COLOR	CODE
Brown - Green	P0
Blue	P0
Green - White	CM
White	CM
Empty	CM
Green - Black	PA+
Yellow - Black	PA-
Blue - Black	PB+
Red - Black	PB-
Purple	CK+
Yellow	CK-
Gray	DT+
Pink	DT-
Screen	Chassis

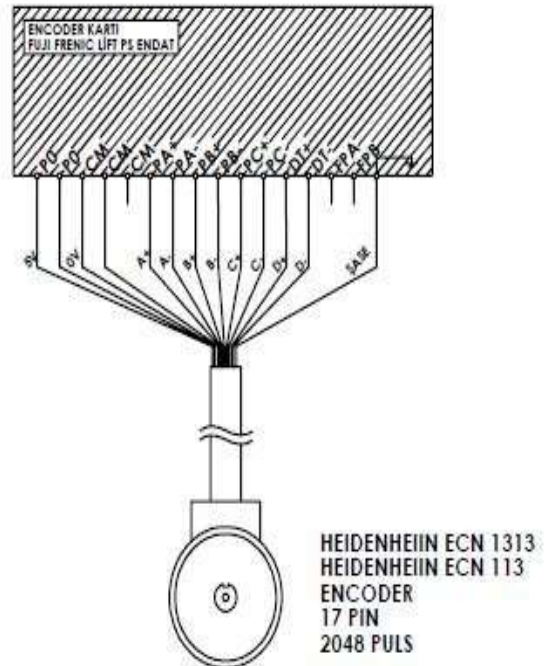


Figure 5. Fuji Frenic Lift Connection Schema

6.3.4 Fuji Frenic Lift (ECN 1387 Sin-Cos)

ENCODER CABLE COLOR	CODE
Brown - Green	P0
Blue	P0
Green - White	CM
White	CM
Empty	CM
Green - Black	PA+
Yellow - Black	PA-
Blue - Black	PB+
Red - Black	PB-
Purple	CK+
Yellow	CK-
Gray	DT+
Pink	DT-
Screen	Chassis

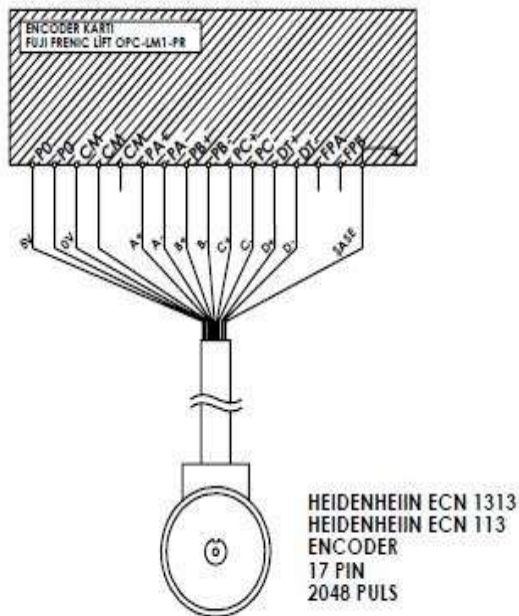


Figure 6. Fuji Frenic Lift Connection Schema

6.3.5 Omron Yaskawa (ECN 1313 / ECN 113)

Omron Yaskawa (ECN 1313 / ECN 113)



ENCODER CABLE COLOR	CODE
Blue	UP
White	GND
Green - Black	A+
Yellow - Black	A-
Blue - Black	B+
Red - Black	B-
Purple	C+
Yellow	C-
Gray	D+
Pink	D-
Screen	Chassis

CONNECT CABLE SCREEN TO THE CHASSIS !

magnet excited synchronous motor and frequency inverter encoder connection diagram

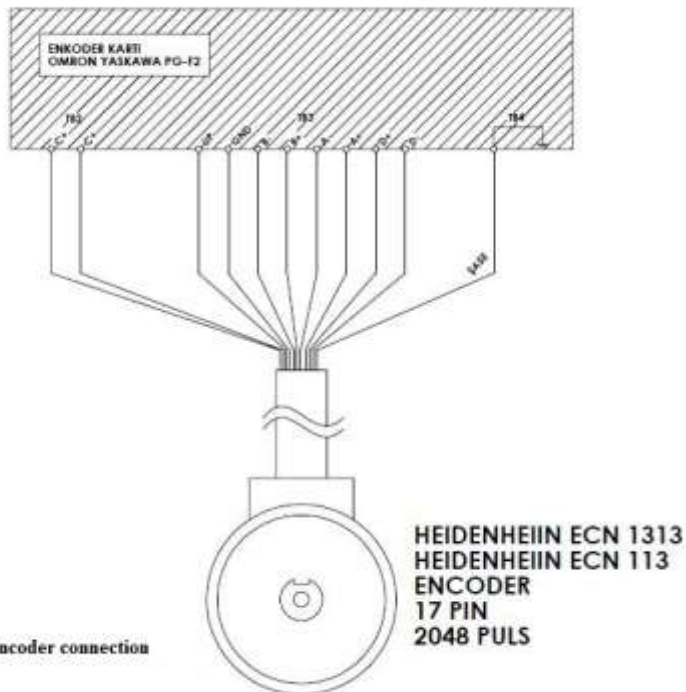
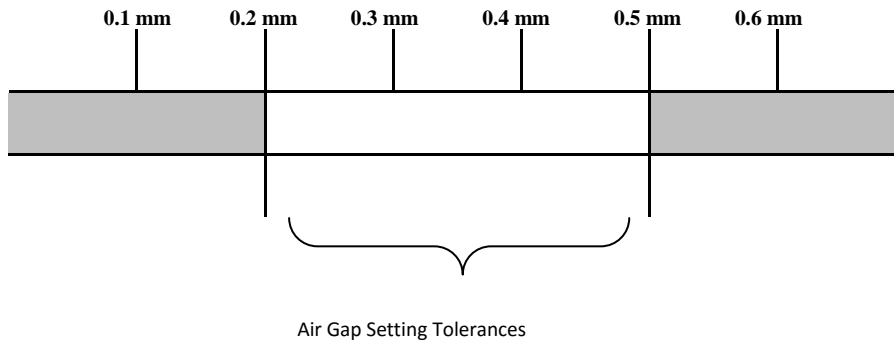


Figure 7. Omron Yaskawa Connection Schema



7. BRAKE SETTING PROCEDURE

7.1 Air Gap Setting Tolerance



7.2 Air Gap Control and Setting

7.3 Brake Air Gap Control

Measure the air gap among brake socket and armature.

The brake runs correct if the air gap is among 0,25-0,30mm.

7.4 Brake Air Gap Setting

Loosen the nut on brake set screw

To prevent joints and spring vibration put 2 sheets with the 0,25 mm thickness to the air gap.
So you can easily move the plates alternately tighten the set screws.

Re-lock the nuts holding the screws firmly.

Finally, be sure to check the setting. The result is successful, go to the setting of the Micro-Switch.

7.5 Brake Act Checking

Activate the brake.
Check the voices during every braking.
Check the pulley turns facility as a result of brake fluctuation.

8. MICRO - SWITCHES CONTROL and SETTING

Each brake has a micro-switch
While brakes are on, micro-switches are off.
Micro-switches are cabled serially.
Control micro-switches using a ohmmeter.
Control each micro-switch respectively making short circuit the others.
Controlling must be repeated a few times activating the brake as long as turning of the brake disc at least 3 rounds as equal distance.
The setting, must be repeated a few times while the brake is active.
Tighten softly the nut using M6 tool set, and set the screw and tighten it properly. Then lock the nut tightening more than half round.
Apply first and second phase again.

	AEMF8	AEMF9	AEMF10
CURRENT VOLTAGE	190 VDC	190 VDC	190 VDC
HOLD VOLTAGE	110 VDC	110 VDC	110 VDC
MAX. TORQUE	1000 Nm	1500 Nm	2000 Nm
SPRING QUANTITY	4x6 ADET	4x8 ADET	4x10 ADET
DELAY TIME	0,35 sn	0,35 sn	0,35 sn
BRAKE LINING DIAMETER	Ø340 mm	Ø340 mm	Ø340 mm
CURRENT POWER	4x135 WATT	4x135 WATT	4x135 WATT
CURRENT AMPER	4x0.7	4x0.7	4x0.7
IZOLATION CLASS	F	F	F
IP	34	34	34
REVOLUTION	298 RPM	298 RPM	298 RPM

Table 4. Brake Date



8.1 USING

Our machine and motors have been designed and manufactured to be used at elevators that carry human and load.

Different features cannot be used at your orders except your stated specifications (as carried load, speed, cruising distance etc.).

Assembling, maintenance and periodical maintenance of the machine and motor should be implemented by people who have sufficient technical data.

8.2 MAINTENANCE AND CONTROLS

To get better efficiency from the machine, the points that are stated in this manual should be obeyed for benefits of our customers. In this section, how the maintenance will be and what points will be cared at the maintenance will be told to get longer time benefit from the machine.

9. MAINTENANCE

9.1. A Month Later After Mounting

Check the screws and electricity connections that are steady.

Check the vibration of the machine.

Pay attention any unusual voice coming from machine.

Measure the voice that coming from brake discs. If the measured value is more than 60 Dba , contact to AKIŞ COMPANY.

For checking of brake lining wear, apply the method that expressed at chapter 6.

9.2 Every Year

Check the noise that coming from brake disc is lower than 60 Dba, if it is more than this value set it as expressed at chapter 5.

Check the brake wear. If the distance is more than 0,5mm, don't run the motor if the brakes are not active, and contact to AKIŞ COMPANYY.

10. MACHINE AND MACHINE PARTS GENERAL INTRODUCTION

Introduction of the AK type (gearless) machines that manufactured by AKIŞ COMPANYY, expressed at this chapter.

10.1. AK Type Machines General Introduction

AK (gearless) type machines have lifting capability between 320-1600 kg.

New And Former Brake System Of Gearless

New generation brake system is consist of individual two rectangular magnets which are positioned next to another one. In this brake system provides to save up substantially on the time of working air gap. In addition the working air gap is pre-set and doesn't have to be re-adjusted. Therefore, operation faults could be minimized and new generation system ensures highest safety.

10.2 Gearless Elevator Machine Brake Equipment Changing Instructions



1. Pls remove encoder protection cap,3 pcs M5*20 allen screw with M5 allen key.

2. Pls remove M12 cable protect screw in the middle of encoder,with allen key.



3. Pls take out cable protect cap by softly pull with your hands.

4. Pls take out softly pull encoder jumper cable from socket on encoder.



5. Pls remove M5*40 retainer screw in the middle of encoder, with M4 allen key.

6. Pls remove M2 screw on top side of encoder with M2 allen key.





7. Pls insert M6 device screw to screw hole in the middle of encoder and after tightening up adequately, remove it softly pulling towards to out.

Removed encoder is shown in picture.



8. After removing encoder, take out the triangle encoder socket pulling by hand.



Figure 8. AK type machines Exploted view

PART NO	COMPONENTS	ITEM
1	M6X10 A.A. BOLT	2
2	ENCODER ALUMINYUM CONNRCTION BOX	1
3	M10X100 BOLT	8
4	ENCODER	1
5	BRAKE PANEL	2
6	M6X5 BOLT	2
7	BRAKE SPINDLE	2
8	BRAKE PRESSURE SPRING	8
9	BRAKE ADJUSTMENT BOLT	8
10	BRAKE BLOCK	2
11	BRAKE LINING	2
12	BRAKE LINING ALUMINYUM DISC	1
13	TRANSPORT HOOK	2
14	GEARLESS BACK COVER	1
15	6210 BEARING	1
16	GEARLESS BODY	1
17	ROTOR	1
18	STATOR	1
19	ROTOR SHAFT	1
20	TERMINAL BOX	1
21	M10GIJON (LONG)	2
22	M10 GIJON (SHORT)	2
23	6313 BEARING	1
24	20X60X10 ROTOR SHAFT WEDGE	1
25	GEARLESS FRONT COVER	1
26	PULLEY	1
27	M10 NUT	6
28	PULLEY ROPE PIN	2
29	M12X50 BOLT	3
30	FRONT LINER PULLEY	1

Table 5 . AK Elevator Machine Parts

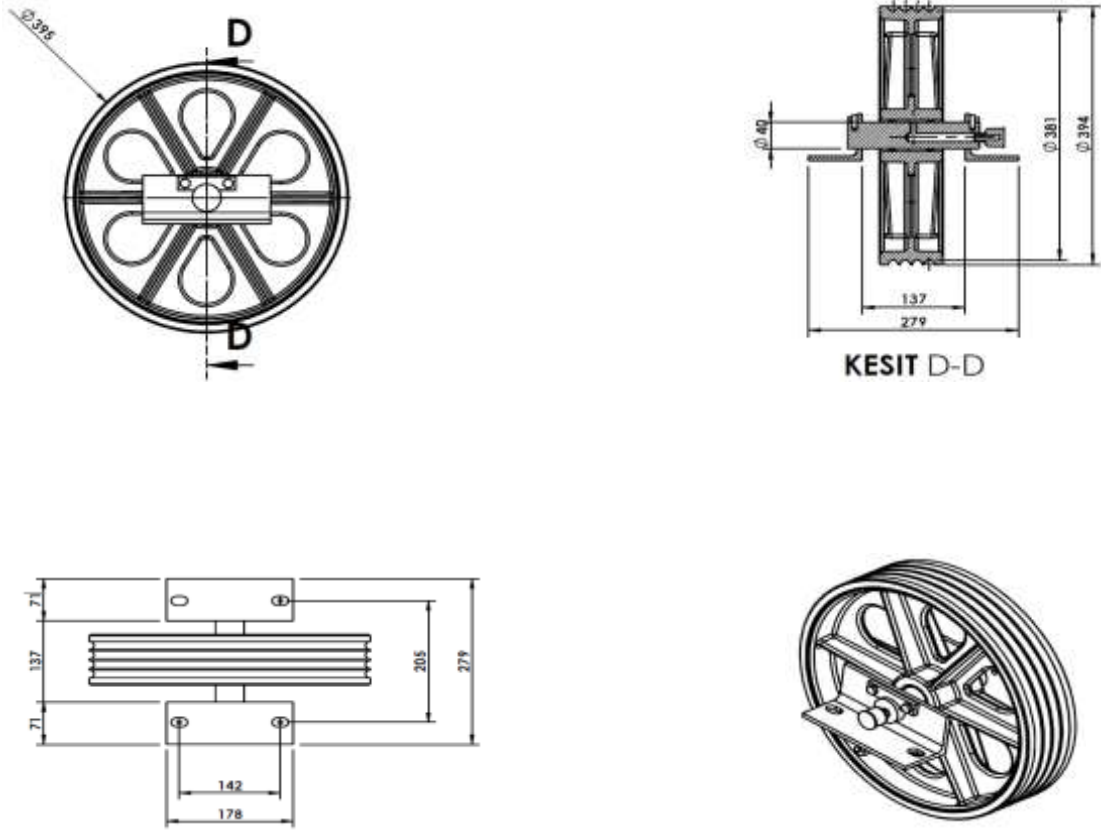


Figure 9. Bushing Deflection Pulley

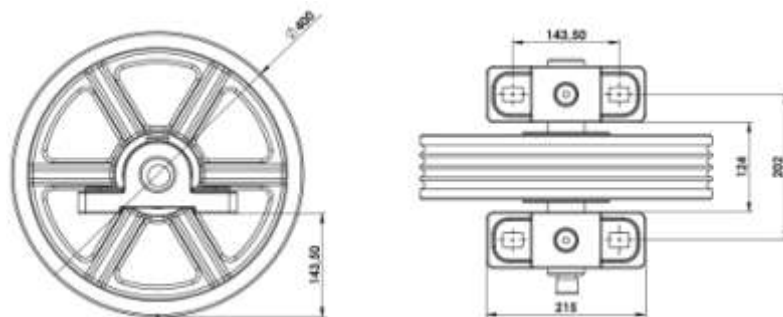
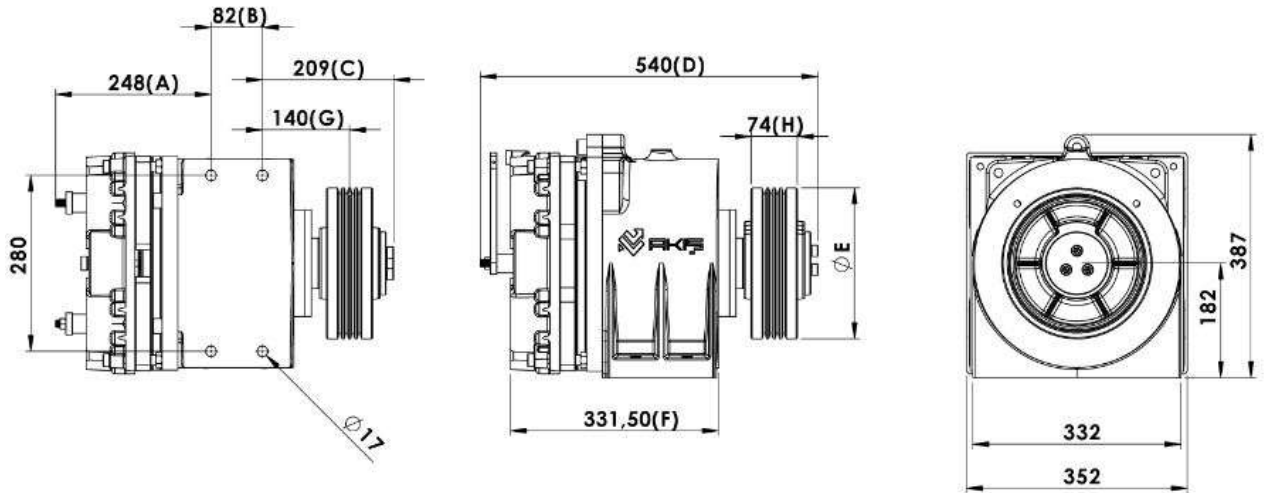


Figure 10. Bearing Deflection Pulley

11. MACHINE SIZE AND TECHNICAL FEATURES

The sizes of all products that manufactured by AKIŞ COMPANY in this chapter.

11.1. AK 1 Elevator Machine Size and Technical Feature

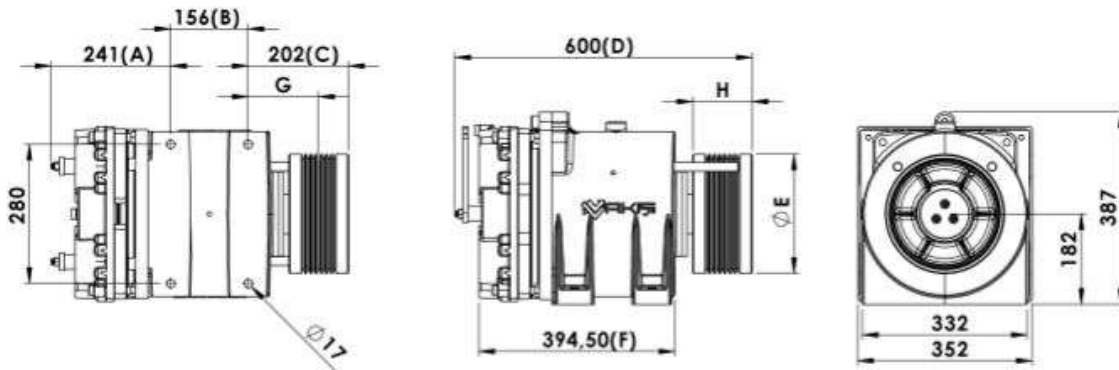


MAKİNE TİPİ	A	B	C	D	E	F	G	H
AK1	248	82	209	540	210*4*6,5	331,50	140	74
AK1	248	82	209	540	240*4*6,5	331,50	140	74

SUSPENSION TYPE	2:1						STATIC LOAD	7000 kg
CAPACITY (kg)	POWER (kw)	TYPE	PULLEY SIZES	IN (A)	POLE FREQUENCY	REVOLUTION (RPM)	TORC (Nm)	SPEED (m/s)
320	1,4	AK1	210X4x6,5mm	4,5	20P - 13,3Hz	100	114	0,63
320	2,2	AK1	210X4x6,5mm	5,5	20P - 21,4Hz	160	114	1,00
320	3,5	AK1	210X4x6,5mm	9,5	20P - 34Hz	255	114	1,6
320	4,4	AK1	210X4x6,5mm	11	20P - 42,6Hz	319	114	2,00
320	5,5	AK1	210X4x6,5mm	13	20P - 53,1Hz	398	114	2,50

SUSPENSION TYPE	2:1						STATIC LOAD	7000 kg
CAPACITY (kg)	POWER (kw)	TYPE	PULLEY SIZES	IN (A)	POLE FREQUENCY	REVOLUTION (RPM)	TORC (Nm)	SPEED (m/s)
320	1,4	AK1	240x4x6,5mm	4,5	20P - 13.3Hz	100	132	0,63
320	2,2	AK1	240x4x6,5mm	5,5	20P - 21.3Hz	160	132	1,00
320	3,5	AK1	240x4x6,5mm	9,5	20P - 34Hz	255	132	1,60
320	4,4	AK1	240x4x6,5mm	11	20P - 42.5Hz	319	132	2,00
320	5,5	AK1	240x4x6,5mm	13	20P - 53Hz	398	132	2,50

11.2. AK 2 Elevator Machine Size and Technical Features



MAKİNA TİPİ	A	B	C	D	E	F	G	H
AK2	241	156	202	600	210*5*6,5	394,50	132	74
AK2	241	156	202	600	210*5*6,5	394,50	132	74
AK2	241	156	202	600	210*7*6,5	394,50	142	120
AK2	241	156	202	600	240*5*6,5	394,50	132	74
AK2	241	156	202	600	240*5*6,5	394,50	132	74
AK2	241	156	202	600	240*7*6,5	394,50	142	120
AK2	241	156	202	600	320*4*8	394,50	132	92
AK2	241	156	202	600	320*5*8	394,50	132	92
AK2	241	156	202	600	320*6*8	394,50	132	92
AK2	241	156	202	600	400*4*10	394,50	138	112
AK2	241	156	202	600	400*5*10	394,50	138	112
AK2	241	156	202	600	400*6*10	394,50	138	112

SUSPENSION TYPE	2:1						STATIC LOAD	7000 kg
CAPACITY (kg)	POWER (kw)	TYPE	PULLEY SIZES	IN (A)	POLE FREQUENCY	REVOLUTION (RPM)	TORC (Nm)	SPEED (m/s)
400	1,7	AK2	210X4x6,5mm	6	20P 13.3Hz	100	143	0,63
480	2,1	AK2	210X5x6,5mm	7	20P 13.3Hz	100	171	0,63
630	2,7	AK2	210X7x6,5mm	8,5	20P 13.3Hz	100	225	0,63
400	2,8	AK2	210X4x6,5mm	7,5	20P - 21,4Hz	160	143	1,00
480	3,3	AK2	210X5x6,5mm	9	20P - 21,4Hz	160	171	1,00
630	4,4	AK2	210X7x6,5mm	12	20P - 21,4Hz	160	225	1,00
400	4,4	AK2	210X4x6,5mm	11,5	20P - 34Hz	255	143	1,60
480	5,3	AK2	210X5x6,5mm	14	20P - 34Hz	255	171	1,60
630	6,9	AK2	210X7x6,5mm	18	20P - 34Hz	255	225	1,60
400	5,5	AK2	210X4x6,5mm	13	20P - 42,6Hz.	319	143	2,00
480	6,6	AK2	210X5x6,5mm	16	20P - 42,6Hz.	319	171	2,00
630	8,6	AK2	210X7x6,5mm	20	20P - 42,6Hz.	319	225	2,00
400	6,9	AK2	210X4x6,5mm	16	20P - 53,1Hz.	398	143	2,50
480	8,2	AK2	210X5x6,5mm	19	20P - 53,1Hz.	398	171	2,50
630	10,8	AK2	210X7x6,5mm	25	20P - 53,1Hz.	398	225	2,50

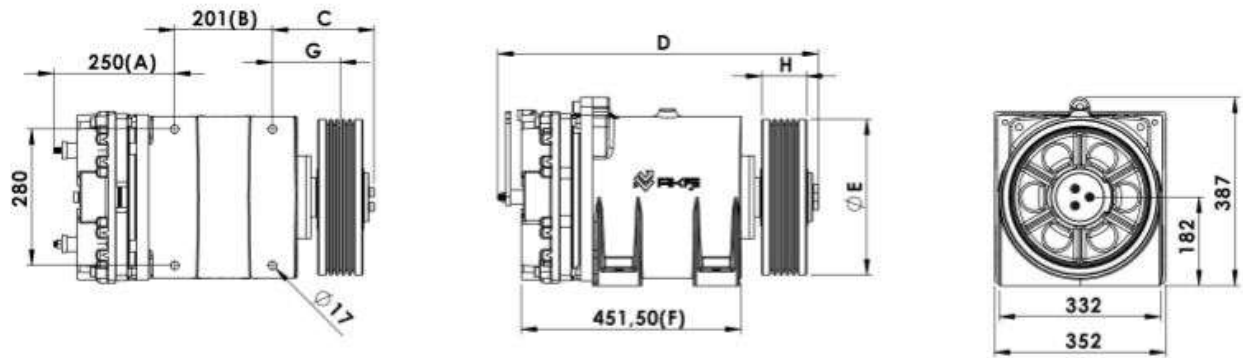
SUSPENSION TYPE	2:1						STATIC LOAD	7000 kg
CAPACITY (kg)	POWER (kw)	TYPE	PULLEY SIZES	IN (A)	POLE FREQUENCY	REVOLUTION (RPM)	TORC (Nm)	SPEED (m/s)
400	1,7	AK2	240x4x6,5mm	6	20P - 13.3Hz	100	164	0,63
480	2,1	AK2	240x5x6,5mm	7	20P - 13.3Hz	100	196	0,63
630	2,7	AK2	240x7x6,5mm	8,5	20P - 13.3Hz	100	258	0,63
400	2,8	AK2	240x4x6,5mm	7,5	20P - 21.3Hz	160	164	1,00
480	3,3	AK2	240x5x6,5mm	9	20P - 21.3Hz	160	196	1,00
630	4,4	AK2	240x7x6,5mm	12	20P - 21.3Hz	160	258	1,00
400	4,4	AK2	240x4x6,5mm	11,5	20P - 34Hz	255	164	1,60
480	5,3	AK2	240x5x6,5mm	14	20P - 34Hz	255	196	1,60
630	6,9	AK2	240x7x6,5mm	18	20P - 34Hz	255	258	1,60
400	5,5	AK2	240x4x6,5mm	13	20P - 42.5Hz.	319	164	2,00
480	6,6	AK2	240x5x6,5mm	16	20P - 42.5Hz.	319	196	2,00
630	8,6	AK2	240x7x6,5mm	20	20P - 42.5Hz.	319	258	2,00
400	6,9	AK2	240x4x6,5mm	16	20P - 53Hz.	398	164	2,50
480	8,2	AK2	240x5x6,5mm	19	20P - 53Hz.	398	196	2,50
630	10,8	AK2	240x7x6,5mm	25	20P - 53Hz.	398	258	2,50

SUSPENSION TYPE	2:1						STATIC LOAD	7000 kg
CAPACITY (kg)	POWER (kw)	TYPE	PULLEY SIZES	IN (A)	POLE FREQUENCY	REVOLUTION (RPM)	TORC (Nm)	SPEED (m/s)
320	1,4	AK2	320x4x8mm	5	20P - 10Hz	76	175	0,63
400	1,8	AK2	320x4x8mm	5,5	20P - 10Hz	76	218	0,63
480	2,1	AK2	320x4x8mm	6,5	20P - 10Hz	76	262	0,63
320	2,2	AK2	320x4x8mm	6	20P - 15.92Hz	120	175	1,00
400	2,8	AK2	320x4x8mm	8	20P - 15.92Hz	120	218	1,00
480	3,3	AK2	320x4x8mm	9,5	20P - 15.92Hz	120	262	1,00
320	3,5	AK2	320x4x8mm	10	20P - 25.5Hz	191	175	1,60
400	4,4	AK2	320x4x8mm	12,5	20P - 25.5Hz	191	218	1,60
480	5,3	AK2	320x4x8mm	14,5	20P - 25.5Hz	191	262	1,60
320	4,4	AK2	320x4x8mm	10,5	20P - 42.5Hz.	239	175	2,00
400	5,5	AK2	320x4x8mm	13	20P - 42.5Hz.	239	218	2,00
480	6,6	AK2	320x5x8mm	15,5	20P - 42.5Hz.	239	262	2,00
320	5,5	AK2	320x5x8mm	13	20P - 53Hz.	299	175	2,50
400	6,9	AK2	320x5x8mm	16,5	20P - 53Hz.	299	218	2,50
480	8,2	AK2	320x6x8mm	20	20P - 53Hz.	299	262	2,50

SUSPENSION TYPE	2:1						STATIC LOAD	7000 kg
CAPACITY (kg)	POWER (kw)	TYPE	PULLEY SIZES	IN (A)	POLE FREQUENCY	REVOLUTION (RPM)	TORC (Nm)	SPEED (m/s)
320	1,4	AK2	400x4x10mm	5,5	20P - 8.1Hz	60	218	0,63
400	1,8	AK2	400x4x10mm	6	20P - 8.1Hz	60	273	0,63
320	2,2	AK2	400x4x10mm	7	20P - 12.8Hz	96	218	1,00
400	2,8	AK2	400x4x10mm	8	20P - 12.8Hz	96	273	1,00
320	3,5	AK2	400x4x10mm	10	20P - 20.4Hz	153	218	1,60
400	4,4	AK2	400x5x10mm	13	20P - 20.4Hz	153	273	1,60
320	4,4	AK2	400x4x10mm	10	20P - 25.46Hz.	191	218	2,00
400	5,5	AK2	400x5x10mm	13	20P - 25.46Hz.	191	273	2,00
320	5,5	AK2	400x6x10mm	13	20P - 31.9Hz.	239	218	2,50
400	6,9	AK2	400x6x10mm	16	20P - 31.9Hz.	239	273	2,50

SUSPENSION TYPE	1:1						STATIC LOAD	3500 kg
CAPACITY (kg)	POWER (kw)	TYPE	PULLEY SIZES	IN (A)	POLE FREQUENCY	REVOLUTION (RPM)	TORC (Nm)	SPEED (m/s)
320	1,4	AK2	240x5x6,5mm	5	20P - 6.66Hz	50	235	0,63
320	2,2	AK2	240x5x6,5mm	6,5	20P - 10.66Hz	80	235	1,00
320	3,5	AK2	240x5x6,5mm	10	20P - 17Hz	128	235	1,60
320	4,5	AK2	240x5x6,5mm	14	20P - 21.4Hz	160	235	2,00

11.3. AK 3 Elevator Machine Size and Technical Features



MAKİNE TİPİ	A	B	C	D	E	F	G	H
AK3	250	201	209,50	660	240*8*6,5	451,50	149,50	120
AK3	250	201	209,50	660	240*10*6,5	451,50	149,50	120
AK3	250	201	209,50	660	320*4*8	451,50	139,50	92
AK3	250	201	209,50	660	320*5*8	451,50	139,50	92
AK3	250	201	209,50	660	320*6*8	451,50	139,50	92
AK3	250	201	245,50	660	320*7*8	451,50	167,50	156
AK3	250	201	209,50	660	400*5*10	451,50	145,50	112
AK3	250	201	209,50	660	400*6*10	451,50	145,50	112

SUSPENSION TYPE	2:1						STATIC LOAD	7000 kg
CAPACITY (kg)	POWER (kw)	TYPE	PULLEY SIZES	IN (A)	POLE FREQUENCY	REVOLUTION (RPM)	TORC (Nm)	SPEED (m/s)
800	3,5	AK3	240x8x6,5mm	12	20P - 13.3Hz	100	328	0,63
1000	4,3	AK3	240x10x6,5mm	12	20P - 13.3Hz	100	410	0,63
800	5,5	AK3	240x8x6,5mm	14,5	20P - 21.3Hz	160	328	1,00
1000	6,9	AK3	240x10x6,5mm	18	20P - 21.3Hz	160	410	1,00
800	8,8	AK3	240x8x6,5mm	22	20P - 34Hz	255	328	1,60
1000	11	AK3	240x10x6,5mm	27,5	20P - 34Hz	255	410	1,60
800	11	AK3	240x8x6,5mm	26	20P - 42.5Hz.	319	328	2,00
1000	13,7	AK3	240x10x6,5mm	32	20P - 42.5Hz.	319	410	2,00
800	13,7	AK3	240x8x6,5mm	32	20P - 53Hz.	398	328	2,50
1000	17,1	AK3	240x10x6,5mm	40	20P - 53Hz.	398	410	2,50

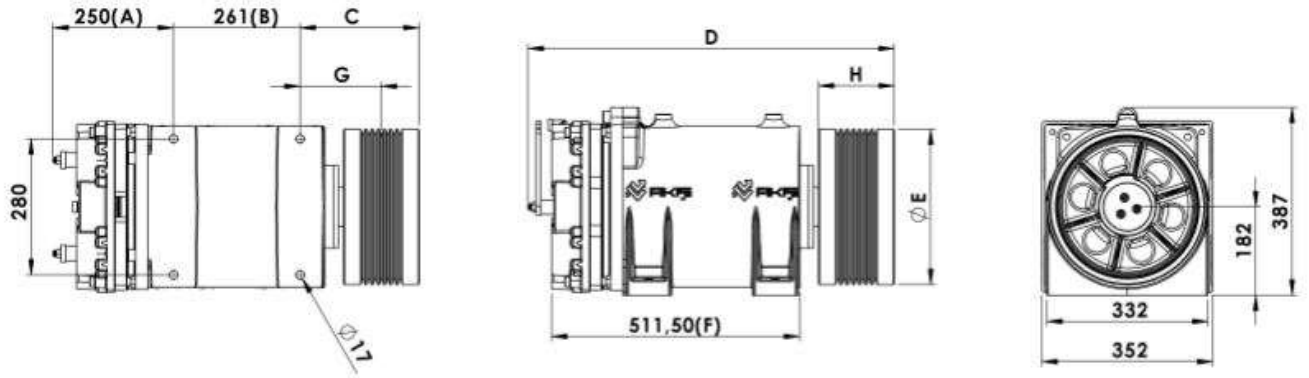
SUSPENSION TYPE	2:1						STATIC LOAD	7000 kg
CAPACITY (kg)	POWER (kw)	TYPE	PULLEY SIZES	IN (A)	POLE FREQUENCY	REVOLUTION (RPM)	TORC (Nm)	SPEED (m/s)
630	2,8	AK3	320x5x8mm	8	20P - 10Hz	76	343	0,63
630	4,4	AK3	320x5x8mm	12,5	20P - 15.92Hz	120	343	1,00
630	6,7	AK3	320x5x8mm	21	20P - 25.5Hz	191	343	1,60
630	8,6	AK3	320x6x8mm	21	20P - 42.5Hz.	239	343	2,00
630	10,8	AK3	320x7x8mm	26	20P - 53Hz.	299	343	

SUSPENSION TYPE	2:1						STATIC LOAD	7000 kg
CAPACITY (kg)	POWER (kw)	TYPE	PULLEY SIZES	IN (A)	POLE FREQUENCY	REVOLUTION (RPM)	TORC (Nm)	SPEED (m/s)
480	2,1	AK3	400x5x10mm	7,5	20P - 8.1Hz	60	327	0,63
480	3,3	AK3	400x5x10mm	11	20P - 12.8Hz	96	327	1,00
480	5,3	AK3	400x5x10mm	17	20P - 20.4Hz	153	327	1,60
480	6,7	AK3	400x5x10mm	16	20P - 25.46Hz.	191	327	2,00
480	8,2	AK3	400x6x10mm	19	20P - 31.9Hz.	239	327	2,50

SUSPENSION TYPE	1:1						STATIC LOAD	3500 kg
CAPACITY (kg)	POWER (kw)	TYPE	PULLEY SIZES	IN (A)	POLE FREQUENCY	REVOLUTION (RPM)	TORC (Nm)	SPEED (m/s)
400	1,8	AK3	240x6x6,5mm	6	20P - 6.66Hz	50	294	0,63
480	2,1	AK3	240x10x6,5mm	6,5	20P - 6.66Hz	50	353	
400	2,8	AK3	240x6x6,5mm	9	20P - 10.66Hz	80	294	1,00
480	3,3	AK3	240x10x6,5mm	10	20P - 10.66Hz	80	353	1,00
400	4,4	AK3	240x6x6,5mm	12	20P - 17Hz	128	294	1,60
480	5,3	AK3	240x10x6,5mm	14	20P - 17Hz	128	353	1,60
400	5,5	AK3	240x6x6,5mm	17	20P - 21.4Hz	160	294	2,00
480	6,6	AK3	240x10x6,5mm	21	20P - 21.4Hz	160	353	2,00

SUSPENSION TYPE	1:1						STATIC LOAD	3500 kg
CAPACITY (kg)	POWER (kw)	TYPE	PULLEY SIZES	IN (A)	POLE FREQUENCY	REVOLUTION (RPM)	TORC (Nm)	SPEED (m/s)
320	1,4	AK3	320x4x8mm	5	20P - 5Hz	38	313	0,63
320	2,2	AK3	320x4x8mm	7	20P - 8Hz	60	313	1,00
320	3,5	AK3	320x5x8mm	11	20P - 12.8Hz	96	313	1,60
320	4,4	AK3	320x5x8mm	14	20P - 16Hz	120	313	2,00

11.4. AK 4 Elevator Machine Size and Technical Features



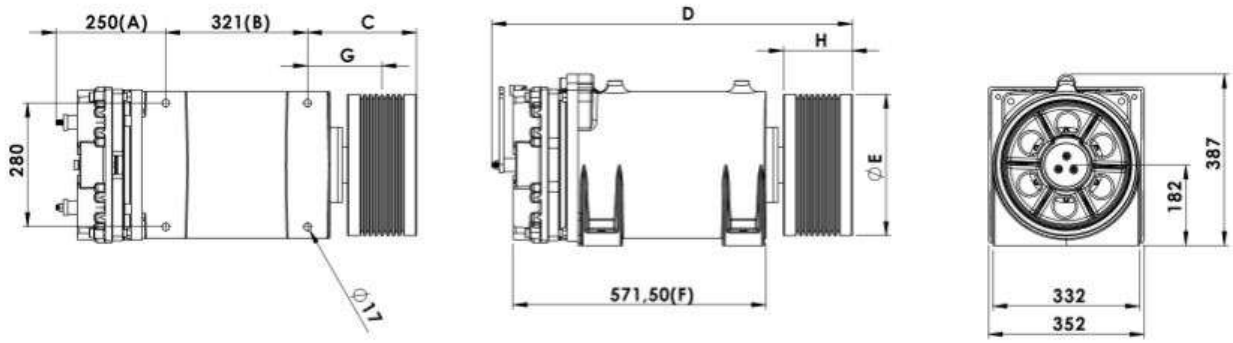
MAKİNE TİPİ	A	B	C	D	E	F	G	H
AK4	250	261	209,50	720	320*5*8	511,50	139,50	92
AK4	250	261	209,50	720	320*6*8	511,50	139,50	92
AK4	250	261	245,50	755	320*7*8	511,50	167,50	156
AK4	250	261	245,50	755	320*8*8	511,50	167,50	156
AK4	250	261	245,50	755	320*9*8	511,50	167,50	156
AK4	250	261	209,50	720	400*5*10	511,50	145,50	112
AK4	250	261	209,50	720	400*6*10	511,50	145,50	112

SUSPENSION TYPE	2:1						STATIC LOAD	7000 kg
CAPACITY (kg)	POWER (kw)	TYPE	PULLEY SIZES	IN (A)	POLE FREQUENCY	REVOLUTION (RPM)	TORC (Nm)	SPEED (m/s)
800	3,5	AK4	320x5x8mm	10,5	20P - 10Hz	76	436	0,63
1000	4,4	AK4	320x7x8mm	12,5	20P - 10Hz	76	545	0,63
800	5,5	AK4	320x5x8mm	15	20P - 15.92Hz	120	436	1,00
1000	6,9	AK4	320x7x8mm	18	20P - 15.92Hz	120	545	1,00
800	8,8	AK4	320x5x8mm	23	20P - 25.5Hz	191	436	1,60
1000	11	AK4	320x7x8mm	30	20P - 25.5Hz	191	545	1,60
800	11	AK4	320x7x8mm	26	20P - 42.5Hz.	239	436	2,00
1000	13,7	AK4	320x8x8mm	33	20P - 42.5Hz.	239	545	2,00
800	13,7	AK4	320x8x8mm	32	20P - 53Hz.	299	436	2,50
1000	17,1	AK4	320x9x8mm	40	20P - 53Hz.	299	545	2,50

SUSPENSION TYPE	2:1						STATIC LOAD	7000 kg
CAPACITY (kg)	POWER (kw)	TYPE	PULLEY SIZES	IN (A)	POLE FREQUENCY	REVOLUTION (RPM)	TORC (Nm)	SPEED (m/s)
630	2,7	AK4	400x5x10mm	9	20P - 8.1Hz	60	430	0,63
800	3,5	AK4	400x5x10mm	10,5	20P - 8.1Hz	60	545	0,63
630	4,3	AK4	400x5x10mm	14	20P - 12.8Hz	96	430	1,00
800	5,5	AK4	400x5x10mm	15	20P - 12.8Hz	96	545	1,00
630	6,9	AK4	400x5x10mm	18,5	20P - 20.4Hz	153	430	1,60
800	8,8	AK4	400x5x10mm	23	20P - 20.4Hz	153	545	1,60
630	8,6	AK4	400x5x10mm	20	20P - 25.46Hz.	191	430	2,00
800	11	AK4	400x5x10mm	25	20P - 25.46Hz.	191	545	2,00
630	10,8	AK4	400x6x10mm	25	20P - 31.9Hz.	239	430	2,50
800	13,7	AK4	400x6x10mm	32	20P - 31.9Hz.	239	545	2,50

SUSPENSION TYPE	1:1						STATIC LOAD	3500 kg
CAPACITY (kg)	POWER (kw)	TYPE	PULLEY SIZES	IN (A)	POLE FREQUENCY	REVOLUTION (RPM)	TORC (Nm)	SPEED (m/s)
400	1,8	AK4	320x4x8mm	6	20P - 5Hz	38	392	0,63
480	2,1	AK4	320x5x8mm	6,5	20P - 5Hz	38	470	0,63
400	2,8	AK4	320x5x8mm	9	20P - 8Hz	60	392	1,00
480	3,3	AK4	320x6x8mm	10	20P - 8Hz	60	470	1,00
400	4,4	AK4	320x6x8mm	12	20P - 12.8Hz	96	392	1,60
480	5,3	AK4	320x6x8mm	14,5	20P - 12.8Hz	96	470	1,60
400	5,5	AK4	320x6x8mm	17	20P - 16Hz	120	392	2,00
480	6,6	AK4	320x6x8mm	21	20P - 16Hz	120	470	2,00

11.5 AK 5 Elevator Machine Size and Technical Features



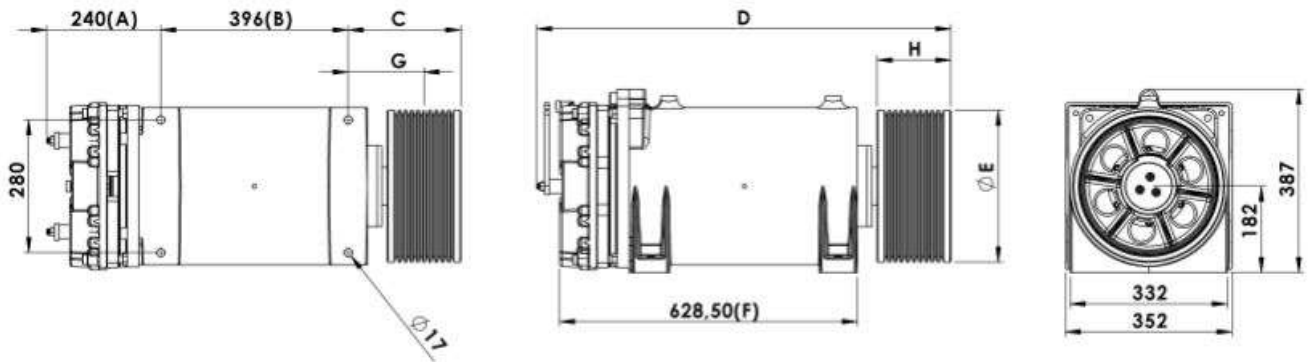
MAKİNE TİPİ	A	B	C	D	E	F	G	H
AK5	250	321	210	780	320*6*8	571,50	139,50	92
AK5	250	321	246	816	320*7*8	571,50	167,50	156
AK5	250	321	246	816	320*8*8	571,50	167,50	156
AK5	250	321	246	816	320*9*8	571,50	167,50	156
AK5	250	321	246	816	320*10*8	571,50	167,50	156
AK5	250	321	210	780	400*5*10	571,50	145,50	112
AK5	250	321	210	780	400*6*10	571,50	145,50	112
AK5	250	321	282	952	400*7*10	571,50	185,50	192

SUSPENSION TYPE	2:1							STATIC LOAD	7000 kg
CAPACITY (kg)	POWER (kw)	TYPE	PULLEY SIZES	IN (A)	POLE FREQUENCY	REVOLUTION (RPM)	TORC (Nm)	SPEED (m/s)	
1250	5,5	AK5	320x8x8mm	15,5	20P - 10Hz	76	681	0,63	
1250	8,6	AK5	320x8x8mm	23	20P - 15.92Hz	120	681	1,00	
1250	13,7	AK5	320x8x8mm	35	20P - 25.5Hz	191	681	1,60	
1250	17,1	AK5	320x9x8mm	40	20P - 42.5Hz.	239	681	2,00	
1250	21,3	AK5	320x10x8mm	50	20P - 53Hz.	299	681	2,50	

SUSPENSION TYPE	2:1							STAIC LOAD	7000 kg
CAPACITY (kg)	POWER (kw)	TYPE	PULLEY SIZES	IN (A)	POLE FREQUENCY	REVOLUTION (RPM)	TORC (Nm)	SPEED (m/s)	
1000	4,3	AK5	400x5x10mm	14	20P - 8.1Hz	60	681	0,63	
1000	6,9	AK5	400x5x10mm	18,5	20P - 12.8Hz	96	681	1,00	
1000	11	AK5	400x5x10mm	30	20P - 20.4Hz	153	681	1,60	
1000	13,7	AK5	400x6x10mm	32	20P - 25.46Hz.	191	681	2,00	
1000	17,1	AK5	400x7x10mm	40	20P - 31.9Hz.	239	681	2,50	

SUSPENSION TYPE	1:1						STATIC LOAD	3500 kg
CAPACITY (kg)	POWER (kw)	TYPE	PULLEY SIZES	IN (A)	POLE FREQUENCY	REVOLUTION (RPM)	TORC (Nm)	SPEED (m/s)
630	2,8	AK5	320x6x8mm	9	20P - 5Hz	38	618	0,63
630	4,4	AK5	320x7x8mm	12	20P - 8Hz	60	618	1,00
630	6,9	AK5	320x8x8mm	17	20P - 12.8Hz	96	618	1,60
630	8,7	AK5	320x8x8mm	27	20P - 16Hz	120	618	2,00

11.6. AK 6 Elevator Machine Size and Technical Features



MAKİNE TİPİ	A	B	C	D	E	F	G	H
AK6	240	396	238	875	320*10*8	628,50	160	156
AK6	240	396	274	911	400*7*10	628,50	178	192

SUSPENSION TYPE	2:1						STATIC LOAD	7000 kg
CAPACITY (kg)	POWER (kw)	TYPE	PULLEY SIZES	IN (A)	POLE FREQUENCY	REVOLUTION (RPM)	TORC (Nm)	SPEED (m/s)
1600	7	AK6	320x10x8mm	17,5	20P - 10Hz	76	872	0,63
1600	11	AK6	320x10x8mm	28	20P - 15.92Hz	120	872	1,00
1600	17,5	AK6	320x10x8mm	45	20P - 25.5Hz	191	872	1,60
1600	22	AK6	320x10x8mm	52	20P - 42.5Hz.	239	872	2,00
1600	27,3	AK6	320x10x8mm	64	20P - 53Hz.	299	872	2,50

SUSPENSION TYPE	2:1						STATIC LOAD	7000 kg
CAPACITY (kg)	POWER (kw)	TYPE	PULLEY SIZES	IN (A)	POLE FREQUENCY	REVOLUTION (RPM)	TORC (Nm)	SPEED (m/s)
1250	5,4	AK6	400x7x10mm	15	20P - 8.1Hz	60	852	0,63
1250	8,6	AK6	400x7x10mm	23	20P - 12.8Hz	96	852	1,00
1250	13,7	AK6	400x7x10mm	32	20P - 20.4Hz	153	852	1,60
1250	17,1	AK6	400x7x10mm	40	20P - 25.46Hz.	191	852	2,00
1250	21,3	AK6	400x7x10mm	50	20P - 31.9Hz.	239	852	2,50

12. ERROR RECOVERY

ERROR	REASON	SOLUTION
THE NOISE WHEN MACHINE RUNING	VVVF SETTINGS ARE INCORRECT.	Control VVVF Settings.
	Encoder Failed.	Change Encoder.
	Bearing Damaged.	Please Contact Customer Service.
Over heat	Medium Temperature Over +40°	Develop The Ventilation System
	VVVF Settings Incorrect.	Control VVVF Settings.
Motor Does Not Start.	Motor Phases Are Connected incorrectly.	Check The Connections Of The Motor Phase.
	VVVF Faild.	VVVF'i kontrol ediniz.
	Brake Does Not Release.	Refer To Brake Failure.
Brake noise.	Brake Connected To DC Phases.	Connect To AC . Add High-voltage protection.
	Air gap too large.	Replace brake discs cooled range.
Brake Does Not Release.	The power supply is too low. The voltage are not enough for brakes.	Check the power supply. Change the size of cable.
	Brake control wrong.	Check the connection of the brake.
	Brake coil defective.	Chnage The Brake and use oniginal AKIŞ ELEVATOR Pieces.
	Brake worn-out.	Change Brake Discs and Use AKIŞ ELEVATOR MACHINE Pieces.
Brake on-off monitoring Does not wrench.	Micro-switchs are Faild.	Change Micro-switchs or Brake.
	Contacts are contaminated.	Wrench Micro-switchs With higher current (at least 10 mA) or Change micro-switchs.



ENSURE THAT THE QUALIFIED PERSONNEL IN THE ENGINE ADJUST ELECTRICAL CONNECTION.

CERTIFICATE | ZERTIFIKAT | ΠΙΣΤΟΠΟΙΗΤΙΚΟ | CERTIFICA | 証明書 | сертификат

CERTIFICATE



**Management System as per
EN ISO 9001 : 2008**

In accordance with TÜV AUSTRIA HELLAS procedures, it is hereby certified that

AKIS ASANSOR MAKINE MOTOR DOKUM SAN. TIC. LTD. STI.
Organize Sanayi Bolgesi Ziyaeddin Cad. 6. Sok. No:2
423 00 KONYA TURKEY

Applies a Quality Management System in line with the above Standard for the following Scope

DESIGN AND MANUFACTURING OF ELEVATOR MACHINERY, MOTORS AND CONTROL PANEL.

Report No.: **911058/TR**
Certificate Registration No.: **0109104**

Valid until: 2012-05-19
Initial certification: 2009-05-20

Certification Body
at TÜV AUSTRIA HELLAS

Athens, 2010-05-06

This certification was conducted in accordance with TÜV AUSTRIA HELLAS auditing and certification procedures and is subject to regular surveillance audits.

TÜV AUSTRIA HELLAS
55-59, Deligiorgi Str.
GR-104 37 Athens, Greece
www.tuvaustriahellas.gr



CeP90416_010



The Issuance of this Certificate is subject to the approval by TÜV AUSTRIA HELLAS. Issuance of this Certificate is subject to the approval by TÜV AUSTRIA HELLAS.

EC TYPE-EXAMINATION CERTIFICATE

Acting under the Warenwetbesluit liften, issued by Liftinstituut B.V.
Identification number Notified Body 0403,
commissioned by Besluit no. ARBO/WPA/97/00291, April 23rd, 1997

Certificate nr.	: NL 13-400-1002-182-02	Revision nr.:	-
Description of the product	: Brakes as part of Ascending Car Overspeed Protection (ACOP) and/or Unintended Car Movement Protection (UCMP)		
Trademark, type	: Akış, DEMF1, DEMF2, DEMF3, DEMF4, DEMF5, DEMF6 and DEMF7		
Name and address of the manufacturer	: Akış ASANSÖR MAKİNA MOTOR DÖKÜM SAN. VE TİC. LTD. ŞTİ. Konya Organize Sanayi Bölgesi, Ziyaeddin Caddesi 6. Sokak No:2, Selçuklu 42300 KONYA TÜRKİYE		
Name and address of the certificate holder	: Akış ASANSÖR MAKİNA MOTOR DÖKÜM SAN. VE TİC. LTD. ŞTİ. Konya Organize Sanayi Bölgesi, Ziyaeddin Caddesi 6. Sokak No:2, Selçuklu 42300 KONYA TÜRKİYE		
Certificate issued on the following requirements	: Lifts Directive 95/16/EC		
Certificate based on the following standard	: EN 81-1:1998+A3:2009		
Test laboratory	: None		
Date and number of the laboratory report	: None		
Date of EC type-examination	: March 2013		
Annexes with this certificate	: Report belonging to the type-examination certificate nr.: NL 13-400-1002-182-02		
Additional remarks	: None		
Conclusion	: The (model) lift meets the requirements of the Lifts Directive 95/16/EC taking into account any additional remarks mentioned above.		

Issued in Amsterdam

Date of issue : 26-03-2013

Ing. A.J. van Ommen
Manager Business Unit
Certification

Certification decision by

EC TYPE-EXAMINATION CERTIFICATE

Acting under the Warenwetbesluit liften, issued by Liftinstituut B.V.
identification number Notified Body 0400.
commissioned by Besluit no. ARBO/APM/97/00293, April 23rd, 1997

Certificate nr.	: NL 13-400-1002-182-03	Revision no.	: -
Description of the product	: Brakes as part of Ascending Car Overspeed Protection (ACOP) and/or Unintended Car Movement Protection (UCMP)		
Trademark, type	: Akiş, AEMF1, AEMF2, AEMF3 and AEMF4		
Name and address of the manufacturer	: Akiş ASANSÖR MAKİNA MOTOR DÖKÜM SAN. VE TİC. LTD. ŞTİ. Konya Organize Sanayi Bölgesi, Ziyaeddin Caddesi 6. Sokak No:2, Selçuklu 42300 KONYA TÜRKİYE		
Name and address of the certificate holder	: Akiş ASANSÖR MAKİNA MOTOR DÖKÜM SAN. VE TİC. LTD. ŞTİ. Konya Organize Sanayi Bölgesi, Ziyaeddin Caddesi 6. Sokak No:2, Selçuklu 42300 KONYA TÜRKİYE		
Certificate issued on the following requirements	: Lifts Directive 95/16/EC		
Certificate based on the following standard	: EN 81-1:1998+A3:2009		
Test laboratory	: None		
Date and number of the laboratory report	: None		
Date of EC type-examination	: March 2013		
Annexes with this certificate	: Report belonging to the type-examination certificate nr.: NL 13-400-1002-182-03		
Additional remarks	: None		
Conclusion	: The (model) lift meets the requirements of the Lifts Directive 95/16/EC taking into account any additional remarks mentioned above.		

Issued in Amsterdam

Date of issue : 26-03-2013

ing. A. J. van Ommen
Manager Business Unit
Certification

Certification decision by



Strojirenský zkušební ústav, s. p., Brno
Engineering Test Institute, Brno
branch Jablonec nad Nisou, Czech Republic

ATTESTATION OF CONFORMITY

Ref No: **SZU-36-8023**

Owner of attestation:	Akış Asansör Makina Motor Döküm San. Tic. Ltd. Şti 3. Organize Sanayi Bölgesi Kayacık Mah. Ziyaeddin Cad.6.Sokak No:2 Konya, Turkey
Manufacturer:	Akış Asansör Makina Motor Döküm San. Tic. Ltd. Şti 3. Organize Sanayi Bölgesi Kayacık Mah. Ziyaeddin Cad.6.Sokak No:2 Konya, Turkey
Product:	Elevator Machine
Type/Model:	A-125, A-140, A-150, A-160, C-125, C-150, CF-125, CF-160
Base of attestation:	File of technical documentation, Ref No. 36-8023

Strojirenský zkušební ústav – Engineering Test Institute, hereby confirms, that the presented file of technical documentation declares conformity of the above mentioned product with the technical requirements of Parliament and Council Directive 2006/95/EC (Low Voltage Directive).



Brno, Date 2008-03-05


Jiří Malach
Director
of branch Jablonec nad Nisou

SZU-36-8023.doc Page 1/1

Strojirenský zkušební ústav, s. p., Mláčkova 38b, 602 00 Brno, Česká republika
Engineering Test Institute, public enterprise, headoffice: Šp. 821/01 Brno, Czech Republic

www.szufest.cz



Strojirenský zkušební ústav, s. p., Brno
Engineering Test Institute, Brno
branch Jablonec nad Nisou, Czech Republic

ATTESTATION OF CONFORMITY

Ref No: **SZU-36-8016**

Owner of attestation: Akıç Asansör Makina Motor Döküm San. Tic. Ltd. Şti
3. Organize Sanayi Bölgesi Kayaok Mah. Ziyaeddin Cad.8. Sokak
No.2 Konya, Turkey

Manufacturer: Akıç Asansör Makina Motor Döküm San. Tic. Ltd. Şti
3. Organize Sanayi Bölgesi Kayaok Mah. Ziyaeddin Cad.8. Sokak
No.2 Konya, Turkey

Product: Cage Induction Motor

Type/Model: AOM 132 SA, AOM 160 SA, AOM 160 MA, AOM 160 LA, AOM 160 A

Base of attestation: File of technical documentation, Ref No: 36-8016

Strojirenský zkušební ústav – Engineering Test Institute, hereby confirms, that the presented file of technical documentation declares conformity of the above mentioned product with the technical requirements of Parliament and Council Directive 2006/95/EC (Low Voltage Directive).



Brno, Date 2008-02-19


Jiří Malach
Director
of branch Jablonec nad Nisou

SZU-36-8016, Page 1/1

Strojirenský zkušební ústav, s. p., Husova 98b, 601 00 Brno, Czech republic
Engineering Test Institute, s.p.a. Husova 98b, 601 00 Brno, Czech Republic

www.szutest.cz



T.C.
TÜRK PATENT ENSTİTÜSÜ

MARKA TESCİL BELGESİ

Marka No : 2011 82203 - Ticaret - Hizmet

 AKISOĞLU

Marka Sahibi : AKIŞ ASANSÖR MAKİNA MOTOR DÖKÜM
SANAYİ VE TİCARET LİMİTED ŞİRKETİ
TÜRKİYE CUMHURİYETİ

3. Örg. San. Böl. Kayacık Mah. Ziyaettin Cad. 6. Sk.
No:2 KONYA

Emtia : 06 , 07 , 11 , 12 , 13 , 19 , 20 , 31 , 32 , 35 , 37 , 39 , 41 ,
43 , 44
İlişiktir.

Markaların Korunması Hakkında 556 Sayılı Kanun Hükmünde
Kararınameye göre 17/10/2011 tarihinden itibaren ON YIL müddetle
14/11/2013 tarihinde tescil edilmiştir.




Elif B. AKIN
Enstitü Başkanı a.
Markalar Dairesi Başkanı

TÜRK PATENT [●] ENSTİTÜSÜ

TÜRK STANDARTLARI ENSTİTÜSÜ



HİZMET YETERLİLİK BELGESİ

Belge No	:42-HYB-155
İlk Veriliş Tarihi	:04.04.2002
Son Geçerlilik Tarihi	:04.04.2015
Firmanın Adı	:AKIŞ ASANSÖR MAKİNA MOTOR DÖKÜM SANAYİ VE TİCARET LTD. ŞTİ.
Firmanın Adresli	:KONYA ORGANİZE SANAYİ BÖLGESİ ZİYAEDDİN CAD.6.SOKAK NO:2 BELÇUKLU KONYA/TÜRKİYE
Hizmet Yeri Adresli	:KONYA ORGANİZE SANAYİ BÖLGESİ ZİYAEDDİN CAD.6.SOKAK NO:2 BELÇUKLU KONYA/TÜRKİYE
Sicil No	:1634

Verilen Hizmetin Kapsamı

1. ZİYETKİLİ SERVİSLER ASANSÖR TAHRİK MAKİNASINA HİZMET YERİ YETERLİLİK BELGESİ VERİLMESİNE ESAS KRİTERLER STANDARDINA UYGUN HİZMET VEREN
* AKIŞ ASANSÖR MAKİNA MOTOR DÖKÜM SANAYİ VE TİCARET LTD. ŞTİ. YETKİLİ SERVİSİ (370065)
(AKIŞ OĞLU) MARKALI



Türk Standartları Enstitüsü Hizmet Belgelerinde Yinelemeye göre yapılan inceleme neticesinde firma yetkin, kapsamında belirlenen hizmetler için yeterli olduğu tespit edilerek bu belge verilmektedir.

31.03.2014

MEHMET ALİ DÖKSEL

KONYA BELGELENDİRME MÜDÜRÜ

Organize Sanayi Bölgesi Vefiköy Çi. Kuvvetler Sokak 42300 KONYA Telefon: 0 332 239 04 60 (2H) (239 04 64 Faks: 0 332 239 04 63

Bu belge hiçbir şekilde aktarılmamalıdır, kullanılmayan okunmayan zorlayıcı şekilde değiştirilmemelidir, kağıt ve silerle yenilenir. Sayfa: 1 / 1





TÜRK STANDARDLARI ENSTİTÜSÜ
TÜRK STANDARDLARINA UYGUNLUK BELGESİ
TURKISH STANDARDS INSTITUTION
CERTIFICATE OF CONFORMITY TO TURKISH STANDARDS

Markanın Tanımı Description of the Mark
TSE  TSE

BELGE NUMARASI
REFERENCE NUMBER OF LICENCE 14.0.10.0.01.00/TSE-65838

BELGENİN İLK VERİŞ TARİHİ
DATE OF FIRST ISSUE OF LICENCE 28.02.2014

BELGENİN SON GEÇERLİLİK TARİHİ
LICENCE VALID UNTIL 28.02.2015

BELGE SAHİBİ KURULUŞUN ADI
NAME OF THE LICENCE HOLDER AKIŞOĞLU KABLO SANAYİ VE TİCARET LTD.ŞTİ

BELGE SAHİBİ KURULUŞUN ADRESİ
ADDRESS OF THE LICENCE HOLDER KONYA ORGANİZE SANAYİ BÖLGESİ ZİYAEDDİN CADESİ NO:12
SELÇUKLU KONYA/TÜRKİYE

ÜRETİM YERİ ADI
NAME OF THE MANUFACTURING PLACE AKIŞOĞLU KABLO SANAYİ VE TİCARET LTD.ŞTİ

ÜRETİM YERİ ADRESİ
ADDRESS OF THE MANUFACTURING PLACE KONYA ORGANİZE SANAYİ BÖLGESİ ZİYAEDDİN CADESİ NO:12
SELÇUKLU KONYA/TÜRKİYE

İPTAL EDİLEN BELGE NUMARASI (Varsa)
INDICATION OF SUPERSEDED LICENCE (if any)

TESCİLLİ TİCARİ MARKASI
REGISTERED TRADE MARK AKIŞOĞLU

İLGİLİ TÜRK STANDARDI
RELATED TURKISH STANDARD TS EN 50214 / Kablolar - Polivinil klorür kılıflı-Yassı, bükülgeli / 19.01.2010

BELGE KAPSAMI
SCOPE OF LICENCE
KISA MESAFELİ ASANSÖRLER İÇİN BEYAN GERİLİMİ 300/500 V. YASSI PVC KILIFLI BÜKÜLGELİ KABLolar.
(DÜŞÜK HIZLI)

H05VHS-F
24 DAMARLI 0,75 mm² KESİTLİ.



28.02.2014

NİYAZI SEÇGİN
ELEKTROTEKNİK SEKTÖRÜ
MÜDÜRÜ

"Bu belge belgelemenin amacı için, ancak yasal zorunluluklar nedeniyle başka amaçlarla kullanılmamalıdır."
"This certificate is issued for the purpose of certification, but it should not be used for other purposes."
"Bu belge bir belgeleme belgesidir. İzlenebilir veya diğer amaçlarla kullanılmak üzere değiştirilmemelidir. İzlenebilir ve izlenir belgelerdir."

CERTIFICATE / ZERTIFIKAT / ΠΕΡΙΠΤΩΣΗ ΚΕΡΤΙΦΙΚΑΤΙΣ / 證書 / CERTIFICAT

CERTIFICATE



**Management System as per
EN ISO 9001 : 2008**

In accordance with TÜV AUSTRIA HELLAS procedures, it is hereby certified that

AKIS ASANSOR MAKINE MOTOR DOKUM SAN. TIC. LTD. STI.
Organize Sanayi Bolgesi Ziyaeddin Cad. 6.Sokak No:2
423 00 KONYA TURKEY

Applies a Quality Management System in line with the above Standard for the following Scope

DESIGN AND MANUFACTURING OF ELEVATOR MACHINERY, MOTORS AND CONTROL PANEL.

Certificate Registration No.: 01012275

Valid until: 2015-07-04
Initial certification: 2012-07-05

Certification Body
at TÜV AUSTRIA HELLAS

Athens, 2012-07-05

This certification was conducted in accordance with TÜV AUSTRIA HELLAS auditing and certification procedures and is subject to regular surveillance audits.

TÜV AUSTRIA HELLAS
42B, Mesogeion Ave.
GR-153 43 Athens, Greece
www.tuv.austria/hellas.gr



020114_010



TÜV AUSTRIA
GROUP

Image taken from TÜV AUSTRIA HELLAS website. Copyright © TÜV AUSTRIA HELLAS



TÜRK STANDARDLARI ENSTİTÜSÜ
TÜRK STANDARDLARINA UYGUNLUK BELGESİ
TURKISH STANDARDS INSTITUTION
CERTIFICATE OF CONFORMITY TO TURKISH STANDARDS

Markanın Tanımı Description of the Mark
TSE  TSE

BELGE NUMARASI REFERENCE NUMBER OF LICENCE	14.11.35/TSE-20810
BELGENİN İLK VERİLİŞ TARİHİ DATE OF FIRST ISSUE OF LICENCE	27.09.2011
BELGENİN SON GEÇERLİLİK TARİHİ LICENCE VALID UNTIL	27.09.2014
BELGE SAHİBİ KURULUŞUN ADI NAME OF THE LICENCE HOLDER	AKIŞ ASANSÖR MAKİNA MOTOR DÖKÜM SANAYİ VE TİCARET LTD. ŞTİ.
BELGE SAHİBİ KURULUŞUN ADRESİ ADDRESS OF THE LICENCE HOLDER	KONYA ORGANİZE SANAYİ BÖLGESİ ZİYAEDDİN CAD.5.SOKAK NO:2 SELÇUKLU KONYA/TÜRKİYE
ÜRETİM YERİ ADI NAME OF THE MANUFACTURING PLACE	AKIŞ ASANSÖR MAKİNA MOTOR DÖKÜM SANAYİ VE TİCARET LTD. ŞTİ.
ÜRETİM YERİ ADRESİ ADDRESS OF THE MANUFACTURING PLACE	KONYA ORGANİZE SANAYİ BÖLGESİ ZİYAEDDİN CAD.5.SOKAK NO:2 SELÇUKLU KONYA/TÜRKİYE
İPTAL EDİLEN BELGE NUMARASI (Varsa) INDICATION OF SUPERSEDED LICENCE (if any)	
TESCİLLİ TİCARİ MARKASI REGISTERED TRADE MARK	AKIŞOĞLU
İLGİLİ TÜRK STANDARDI RELATED TURKISH STANDARD	TS 3205 EN 60034-1 / Döner elektrik makineler – Bölüm 1: Bayan değerleri ve performans / 29.04.2005
BELGE KAPSAMI SCOPE OF LICENCE	

3 FAZLI ASENKRON SİNCAP KAFESLİ ELEKTRİK MOTORLAR

ANMA ÇALIŞMA GERİLİMİ / FREKANSI:380-440 V / 50-60 Hz
GÜÇ FAKTÖRÜ (COS PHI) : 0,85 - 0,88
FAZ SAYISI : 3
İZOLASYON SINIFI : F / H
ÇALIŞMA TİPİ : S3
KORUMA DEREJESİ : IP 21
KUTUP SAYISI : 4, 6, 16
DEVİR (HZ) : 1800/1500, 1200/1000, 450/375
GÜÇ ARALIĞI : 1 - 20 KW
MODEL/TİP: AOM 132 M , AOM 160 S, AOM 180 L, AOM 160 M , AOM 160 XL

3 FAZLI SABİT MIKNATISLI SENKRON MOTOR



28.01.2014

MEHMET ALI GÖKSEL

KONYA BELGELENDİRME MÜDÜRÜ

*Bu belge, ilgili ürünün, hizmetin, işlemin veya sisteminin belirlenmiş şartları karşıladığını gösterir.

KONYA: KONYA BELGELENDİRME MÜDÜRLÜĞÜ Organize Sanayi Bölgesi Yerleşik Cad. Kavaklıca Sokak 42020 KONYA * Tel: 0 332 239 04 66 (F) 0 332 94 94 Faks: 0 332 239 04 63 * web: tse.gov.tr

Bu belge hiç bir şekilde taraf alınmaz, kopya veya muayyen amaçlarla çekim yapılmaz, basılı ve diğer yollarla.

1 / 2



TÜRK STANDARTLARI ENSTİTÜSÜ
TÜRK STANDARTLARINA UYGUNLUK BELGESİ EKİ
TURKISH STANDARDS INSTITUTION
CERTIFICATE OF CONFORMITY TO TURKISH STANDARDS APPENDIX

BELGE KAPSAMI (14.11.35TSE-20810 nolu belge devamı) : AKIŞ ASANSÖR MAKİNA MOTOR DÖKÜM SANAYİ VE TİCARET LTD. ŞTİ.

ANMA ÇALIŞMA GERİLİMİ / FREKANSI:380-400 V / 50-60 Hz
GÜÇ FAKTÖRÜ (COS PHI) : 1
FAZ SAYISI : 0ç
İZOLASYON SINIFI : F / H
ÇALIŞMA TİPİ : S3
KORUMA DERECEİ : IP 21
KUTUP SAYISI : 1E
DEVİR (HIZ) : 35-450
GÜÇ ARALIĞI : 1 - 30 KW
MODEL/TİP: AGM AK1, AGM AK2, AGM AK3, AGM AK4, AGM AK5, AGM AK6,



28/01.2014

MEHMET ALI GÖKSEL

KONYA BELGELENDİRME MÜDÜRÜ

*Bu belge, belgeleştirilen ürünün, üretim yerinin Enstitülerimiz tarafından yapılan karşılaştırma ile girilmiştir.

KONYA KONYA BELGELENDİRME MÜDÜRLÜĞÜ Çeşitli ölçümler için belgeleme ve denetim hizmetleri için. Başlıca Sanayi Alanları KONYA * Tel: 0332 219 04 88 (Diy. 229 66 66) Faks: 0332 219 04 53 * web: * www.tse.gov.tr

Bu belge için sadece MÜH kullanılır, ancak belge okunmasını kolaylaştırmak için gerekli değişiklikler, kısıtlamalar ve ekler yapılabilir.

2 / 2

TSEK**TÜRK STANDARDLARI ENSTİTÜSÜ
KRİTERE UYGUNLUK BELGESİ****TURKISH STANDARDS INSTITUTION
CERTIFICATE OF CONFORMANCE TO CRITERIA**

Markanın Tanımı Description of the Mark

TSEK veya / or **Т-СЕК**

BELGE NUMARASI REFERENCE NUMBER OF LICENCE	14.11.42/TSEK-219
BELGENİN İLK VERİLİŞ TARİHİ DATE OF FIRST ISSUE OF LICENCE	11.12.1997
BELGENİN SON GEÇERLİLİK TARİHİ LICENCE VALID UNTIL	11.12.2014
BELGE SAHİBİ KURULUŞUN ADI NAME OF THE LICENCE HOLDER	AKIŞ ASANSÖR MAKİNA MOTOR DÖKÜM SANAYİ VE TİCARET LTD. ŞTİ.
BELGE SAHİBİ KURULUŞUN ADRESİ ADDRESS OF THE LICENCE HOLDER	KONYA ORGANİZE SANAYİ BÖLGESİ ZİYAEDDİN CAD. 6. SOKAK NO:2 BELÇUKLU KONYA
ÜRETİM YERİ ADI NAME OF THE MANUFACTURING PLACE	AKIŞ ASANSÖR MAKİNA MOTOR DÖKÜM SANAYİ VE TİCARET LTD. ŞTİ.
ÜRETİM YERİ ADRESİ ADDRESS OF THE MANUFACTURING PLACE	KONYA ORGANİZE SANAYİ BÖLGESİ ZİYAEDDİN CAD. 6. SOKAK NO:2 BELÇUKLU KONYA
TEBİLLİ TİCARİ MARKASI REGISTERED TRADE MARK	AKIŞ
İLGİLİ BELGELENDİRME KRİTERİ RELATED TURKISH STANDARD	ÜBM-00-BK-000 24.05.2010
BELGE KAPSAMI SCOPE OF LICENCE	

ELEKTRİK MÖTÖRLÜ ASANSÖR TAHRİK MAKİNASI (4 KW DAHİDEN, 22 KW DAHİL'E KADAR)



28.01.2014

MEHMET ALI GÖKSEL

KONYA BELGELENDİRME MÜDÜRÜ

*Bu belge, belge sahibinin özünü, imzalı yerden, Enstitüdeki elektronik ortamda sorgulayarak teyit edilebilir.

*Bu belge ile her ne kadar TSEK Markası, ancak TSEK tarafından hakları korunan markaların kullanılması ve bu amaçla diğer belge sahiplerinin de bu belgeyi kullanmaları için izin verilmektedir.

Bu belge KİT ile ayrıca teyit edilebilir, ancak bu amaçla diğer belge sahiplerinin de bu belgeyi kullanmaları için izin verilmektedir.

11



T.C.
TÜRK PATENT ENSTİTÜSÜ

MARKA YENİLEME BELGESİ

Marka No : 196701 - Ticaret

AKIŞ OĞLU

Marka Sahibi : AKIŞ ASANSÖR MAKİNA MOTOR DÖKÜM SANAYİ VE
TİCARET LİMİTED ŞİRKETİ
TÜRKİYE CUMHURİYETİ
Ankara Yolu Üzeri Döktümcüler Sanayi Fevzi Çakmak Mah.
Hüdaî Cad. Azimet Sk. No:5 KONYA

Emtians : 07
Asansör maldnaları.

İş bu Marka ilk defa 28/01/1998 tarihinde tescil edilmiş
olup, 556 Sayılı Markaların Korunması Hakkında Kanun Hükmünde
Kararnamenin 40. Maddesi gereğince 28/01/2008 tarihinden itibaren
ON YIL süreyle yenilenmiştir.

Kutay RUMELİSAR
Enstitü Başkanı
Markalar Dairesi Başkanı

TÜRK PATENT [●] ENSTİTÜSÜ



T.C.
TÜRK PATENT ENSTİTÜSÜ

MARKA TESCİL BELGESİ

Marka No : 2005 32045 - Ticaret

mugen

Marka Sahibi : AKIŞ ASANSÖR MAKİNA MOTOR DÖKÜM
SANAYİ VE TİCARET LİMİTED ŞİRKETİ
TÜRKİYE CUMHURİYETİ
3. Org. San. Böl. Kayacık Mah. Ziyaettin Cad. 6. Sk.
No:2 42030 KONYA

Emlası

1 07

Kaldırma ve işletme makineleri: İnsan ve yük
asansörleri, asansör makineleri, hareketli platformlar,
rampalar, lifler, vinçler, cecaskallar, yürüyen
merdivenler, yürüyen bantlar (konveyörler),
elevatörler...

Markaların Korunması Hakkında 556 Sayılı Kanun Hükmünde
Kararınameye göre 02/08/2005 tarihinden itibaren ON YIL müddetle
tescil edilmiştir.

Kutay KUMBASAR
Enstitü Başkanı a.
Markalar Dairesi Başkanı

TÜRK PATENT [] ENSTİTÜSÜ

SANAYİ ve TİCARET BAKANLIĞI SATIŞ SONRASI HİZMETLERİ YETERLİLİK BELGESİ



T.C.
SANAYİ VE TİCARET BAKANLIĞI
Tüketicinin ve Rekabetin Korunması Genel Müdürlüğü



SATIŞ SONRASI HİZMETLERİ YETERLİLİK BELGESİ

Belgenin Veriliş Tarihi ve Sayısı :

İMALATCI / İTHALATCI FİRMANIN

UNVANI : AKIŞ ASANSÖR MAKİNE MOTOR DÖKÜM
SAN. VE TIC. LTD.ŞTİ

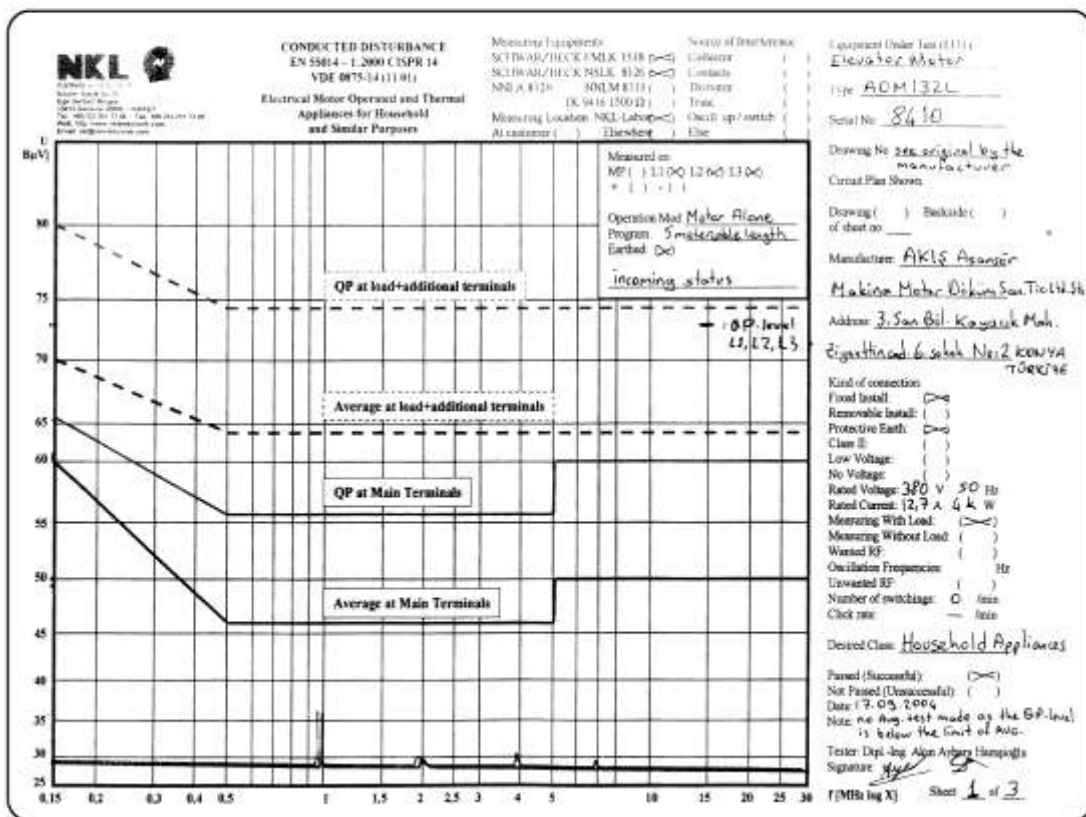
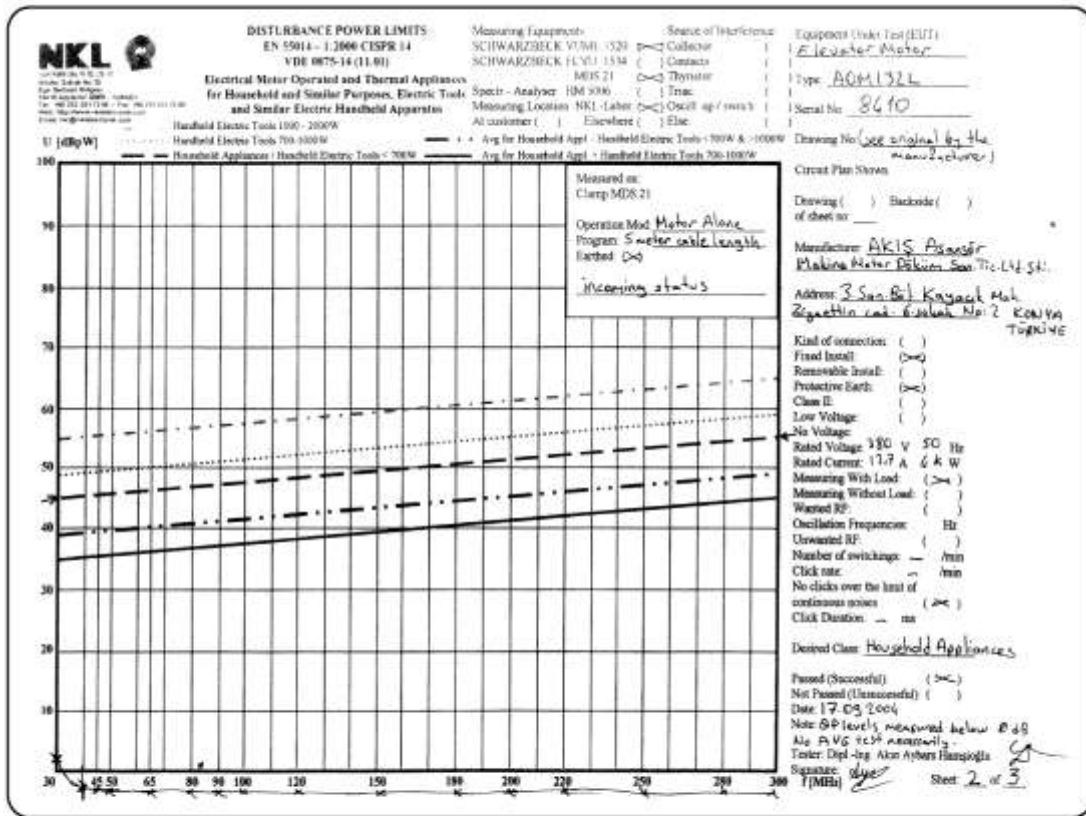
MERKEZ ADRESİ : 3. ORGANİZE SANAYİ BÖLGESİ KAYACIK MAH.
ZİYAEDDİN CAD. 6. SOK. NO:2 KONYA

VERİLEN HİZMETİN KAPSAMI : YETKİLİ SERVİSLER-ASANSÖR TAHRİK MAKİNESİNE
HİZMET YETERLİLİK BELGESİ VERİLMESİNE ESAS
KRİTERLER


Bu Belgenin Kullanılmasına 4077 sayılı Tüketicinin Korunması Hakkında Kanun ve bu Kanun'a dayanılarak yürürlüğe konulan Sanayi Mallarının Satış Sonrası Hizmetleri Hakkında Yönetmelik uyarınca , T.C. Sanayi ve Ticaret Bakanlığı Tüketicinin ve Rekabetin Korunması Genel Müdürlüğü tarafından izin verilmiştir.


Mehmet Turgut
Bakan B.
Genel Müdür Yardımcısı

MOTOR EMC TEST SERTİFİKASI DÖKÜMANLARI



MOTOR EMC TEST SERTİFİKASI DÖKÜMANLARI



NKL
ELECTRONIC SAN. VE TIC. LTD. ŞTİ.

Niğde Sokak No: 25 Ege Serbest Bölgesi
35410 Gazimihal / İZMİR
Tel: 0 (232) 251 72 08 - Fax: 0 (232) 251 72 09
Web: <http://www.nklelektronik.com>
E-Posta: aklas@nklelektronik.com

EMC-Protocol

Protocol-Number: 17092004-1 **Date:** 17.09.2004

Test date: 17- Eylül-2004

Test time: 09:00 - 16:00 = 6 hours (including 1 hour break)

At measurement present: Akın Aybars HAMŞIOĞLU, Klaus LORENZEN

This protocol consists of:
Total 6 pages,
3 pages Measurement Protocol,
3 pages Measurement Report

Customer: AKIŞ Aсанor Mak. Motor Döküm San.Tic.Ltd.Şti
KONYA - TÜRKİYE

Aim of giving this Protocol: Measurements for CE marking according to EMC (Electromagnetic Compatibility) directive from 30.08.1995

Device Type: Elevator Motor (5,5HP)
Type-Number: AGM 132L, 160MA, 160LA
Serial-Number: 8410
Plan-Number: (original plan prepared by the manufacturer company)
Devices used as a load: (the motor has been tested alone)

Testing location: NKL Elektronik San. ve Tic. Ltd. Şti.
EMC Laboratory
Niğde Sokak No:25 Ege Serbest Bölgesi
35410 Gazimihal - İzmir - TR

Compatibility tests made according to the norms:
EN 55014-10 Household App. & Handheld tools
EN 61000-4-5 (Surge Immunity Test)

EMC-Test results: IEC / EN 55014:2001-11 **SUCCESSFUL**
IEC / EN 61000-4-5:2001-04 **SUCCESSFUL**

IMPORTANT: Keeping of the product that is tested (sample or prototype) in a suitable place by the manufacturer company, will provide advantages in case of using as a reference/evidence when it's needed.

NOTE: The type that we make the tests is ACMI32L, but according to the information given by the manufacturer that the other models written above have only differences in horse power and speed and have no units that will have diversity in case of electromagnetic compatibility point of view, so the test results can be applicable to those models.

International / European Standard EN55014-1:2001-11
Household appliances, similar devices and handheld tools

Tools used for the measurements: SCHWARZBECK FMK 1518-C
SCHWARZBECK NSLK 8126
SCHWARZBECK VUME 1520
LÜTHI MDS 21 Absorber Clamp
ABB GOERZ SE 790 Plotter
NKL Proof Line

Noise Emission: 0,15-20MHz

Test Protocol:

This test has been made with 5 meter long 3 x 2,5mm² cable for the connection of the motor and the machine.

"Elevator Motor (5,5HP)" that is brought by AKIŞ Aсанor Mak. Motor Döküm San.Tic. Ltd. Şti. for the EMC testing purpose, has been kept under the limitations given by the related norm with its incoming status. (Refer to protocol sheet no:1/3)

Test result: SUCCESSFUL

Noise Emission: 30-300MHz

Test Protocol:

This test has been made with 3 meter long 3 x 2,5mm² cable for the connection of the motor and the machine.

"Elevator Motor (5,5HP)" that is brought by AKIŞ Aсанor Mak. Motor Döküm San.Tic. Ltd. Şti. for the EMC testing purpose, has been kept under the limitations given by the related norm with its incoming status. (Refer to protocol sheet no:2/3)

Test result: SUCCESSFUL

IMPORTANT: Keeping of the product that is tested (sample or prototype) in a suitable place by the manufacturer company, will provide advantages in case of using as a reference/evidence when it's needed.

NOTE: The type that we make the tests is ACMI32L, but according to the information given by the manufacturer that the other models written above have only differences in horse power and speed and have no units that will have diversity in case of electromagnetic compatibility point of view, so the test results can be applicable to those models.

International / European Standard EN / CEI / IEC 61000-4-5:2001-04
Surge Immunity Test

Tools used for the measurements: EMC PARTNER TRA-1000
NKL Proof Line

2kV between L1-L2, L1-L3, L2-L3 and 4kV between L1,2,3-PE

Test Protocol:

"Elevator Motor (5,5HP)" that is brought by AKIŞ Aсанor Mak. Motor Döküm San.Tic. Ltd. Şti. for the EMC testing purpose, has been kept under the limitations given by the related norm with its incoming status. (Refer to protocol sheet no:3/3)

Test result: SUCCESSFUL

Akın Aybars HAMŞIOĞLU
EMC Laboratory Dipl.-Ing.



Klaus LORENZEN
Manager / Committee Chairman



IMPORTANT: Keeping of the product that is tested (sample or prototype) in a suitable place by the manufacturer company, will provide advantages in case of using as a reference/evidence when it's needed.

NOTE: The type that we make the tests is ACMI32L, but according to the information given by the manufacturer that the other models written above have only differences in horse power and speed and have no units that will have diversity in case of electromagnetic compatibility point of view, so the test results can be applicable to those models.

EMC Immunity Test 1 (Surge/Şokaj)
(EN 61000-4-5 / IEC 61000-4-5)

EMC PARTNER TRA-1000


2kV between L1-L2, L1-L3, L2-L3 and 4kV between L1,2,3-PE

Test Protocol:


"Elevator Motor (5,5HP)" that is brought by AKIŞ Aсанor Mak. Motor Döküm San.Tic. Ltd. Şti. for the EMC testing purpose, has been kept under the limitations given by the related norm with its incoming status. (Refer to protocol sheet no:3/3)

Test result: SUCCESSFUL

Akın Aybars HAMŞIOĞLU
EMC Laboratory Dipl.-Ing.



Klaus LORENZEN
Manager / Committee Chairman



IMPORTANT: Keeping of the product that is tested (sample or prototype) in a suitable place by the manufacturer company, will provide advantages in case of using as a reference/evidence when it's needed.

NOTE: The type that we make the tests is ACMI32L, but according to the information given by the manufacturer that the other models written above have only differences in horse power and speed and have no units that will have diversity in case of electromagnetic compatibility point of view, so the test results can be applicable to those models.



AT UYGUNLUK BEYANI
EC- DECLARATION of CONFORMITY

İMALATÇI / MANUFACTURER :

AKIŞ ASANSÖR MAKİNA MOTOR DÖKÜM SAN. TİC. LTD. ŞTİ.

İMALATÇI ADRESİ / MANUFACTURER ADRESS:

3. ORGANİZE SANAYİ BÖLGESİ KAYACIK MAHALLESİ. ZİYAEDDİN CAD.6. SK NO:2 KONYA /TÜRKİYE

ÜRÜN ADI / PRODUCT NAME :

ELEKTRİKLI SENKRON ASANSÖR MOTORU / ELECTRICAL LIFT GEARLESS MOTOR

ÜRETİM YILI / YEAR OF MANUFACTURE:

Büket Üzerinde / See data plate on product

TİP / TYPE :

AK1, AK2, AK3, AK4, AK5, AK6

SERİ NO/ SERIAL NUMBER :

Büket Üzerinde / See data plate on product

UYGULANAN DİREKTİFLER / THE FOLLOWING DIRECTIVES

ELEKTRİKLI TEÇHİZAT İLE İLGİLİ YÖNETMELİK 2006/95/AT -LVD DIRECTIVE 2006/95/EC

UYGULANAN STANDARTLAR / THE FOLLOWING STANDARTS

TS EN 60034-1

TS EN 81-1

ÜZERİNDE SERİ NUMARASI VE KAPASİTE BİLGİLERİ YER ALAN ÜRÜNÜN TESLİM EDİLEN KULLANIM VE BAKIM KILAVUZLARINDAKİ ŞARTLARA UYMASI DURUMUNDA YUKARIDA BELİRTİLEN STANDARTLARA VE DİREKTİFE UYGUNLUĞUNU BEYAN EDERİZ.

FİRMA SORUMLUSU / RESPONCE OF COMPANY :

İLKER ATALAY

YER-TARİH / PLACE-DATE :

01.01.2012 / KONYA

YETKİLİ İMZA / LEGALLY BINDING SIGNATURE :