

Technical Report



Technical Report No.: 64.105.23.30092.01

Date: 2023-05-15

Name: China Leadshine Technology Co.,Ltd.

Address: 15-20/F, Block B, Nanshan I Valley, No.3157, Shahe West Road Nanshan District 518055 Shenzhen PEOPLE'S REPUBLIC OF CHINA

Client:

Contact person: Xu, Yong

Manufacturer's name: Same as applicant

Address: Same as applicant

Factory:

Factory's name: Same as applicant

Address: Same as applicant

Product: AC SERVO MOTOR
ACM1S-06002H2, ACM2-06002H2, ACM2S-06002H2,
ACM2C-06002H2, ACM1H-0602, ACM1H-0602B, ACM2H-0602,
ACM2H-0602B, ACM3H-0602, ACM3H-0602B, ACM1-06004H2, ACM1S-06004H2, ACM2-06004H2,
ACM2S-06004H2, ACM2C-06004H2, ACM1H-0604,
ACM1H-0604B, ACM2H-0604, ACM2H-0604B, ACM3H-0604,
ACM3H-0604B, ACM0H-0604, ACM0H-0604B, ACM1S-06006H2, ACM2-06006H2, ACM1H-0606,
ACM1H-0606B, ACM2H-0606, ACM2H-0606B, ACM3H-0606,
ACM3H-0606B, ACM2L-0602, ACM2L-0602B, ACM3L-0602, ACM3L-0602B, ACM2L-0604,
ACM2L-0604B, ACM3L-0604, ACM3L-0604B, ACM2L-0606, ACM2L-0606B, ACM3L-0606,
ACM3L-0606B,

Test object:

Model:

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- Test specification:
- EN 60034-1:2010 EN IEC 60034-5:2020
- Purpose of examination:
- Testing (visual / partial) for compliance with specified requirements to assess conformity with the essential safety and health requirements of the following European Directives:
 - Low Voltage Directive 2014/35/EU
- Test result:
- The test results show that the presented product is in compliance with the above listed test specifications.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question. It does not imply a general statement regarding the quality of products from regular production. For further details please see testing and certification regulation, chapter A-3.4.

1. Description of the test object

1.1 Picture(s)

Overview of ACM1S-06006H2



Others refer to photo documentation for details.

1.2 Function

This is the AC SERVO MOTOR.

1.3 Consideration of the foreseeable use

- Not applicable
- Covered through the applied standard
- Covered by the following comment*
- Covered by attached risk analysis

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1.4 Technical Data

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Parameter concerns	Specification									
Type designation:	ACM1 S-06002 H2	ACM2-06002 H2	ACM2 S-06002 H2	ACM2 C-06002 H2	ACM1 H-0602	ACM1 H-0602B	ACM2 H-0602	ACM2 H-0602B	ACM3 H-0602	ACM3 H-0602B
Phase:	3P	3P	3P	3P	3P	3P	3P	3P	3P	3P
Rated voltage (for driver):	0~240 VAC	0~240 VAC	0~240 VAC	0~240 VAC	0~240 VAC	0~240 VAC	0~240 VAC	0~240 VAC	0~240 VAC	0~240 VAC
Rated voltage (for motor):	220VAC	220VAC	220VAC	220VAC	220VAC	220VAC	220VAC	220VAC	220VAC	220VAC
Rated current:	1.5A	1.5A	1.5A	1.5A	1.5A	1.5A	1.5A	1.5A	1.5A	1.5A
Rated frequency:	250Hz	250Hz	250Hz	250Hz	250Hz	250Hz	250Hz	250Hz	250Hz	250Hz
Rated output:	200W	200W	200W	200W	200W	200W	200W	200W	200W	200W
Rated torque:	0.64N·m	0.64N·m	0.64N·m	0.64N·m	0.64N·m	0.64N·m	0.64N·m	0.64N·m	0.64N·m	0.64N·m
Duty class:	S1	S1	S1	S1	S1	S1	S1	S1	S1	S1
Class of equipment:	Class I	Class I	Class I	Class I	Class I	Class I	Class I	Class I	Class I	Class I
Rated speed:	3000r/min	3000r/min	3000r/min	3000r/min	3000r/min	3000r/min	3000r/min	3000r/min	3000r/min	3000r/min
Thermal classification according to IEC 62114:	Class H	Class H	Class H	Class H	Class H	Class H	Class H	Class H	Class H	Class H
Type of cooling:	Natural cold	Natural cold	Natural cold	Natural cold	Natural cold	Natural cold	Natural cold	Natural cold	Natural cold	Natural cold
Primary coolant:	Air	Air	Air	Air	Air	Air	Air	Air	Air	Air

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Secondary coolant:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum ambient air temperature:	40°C	40°C	40°C	40°C	40°C	40°C	40°C	40°C	40°C	40°C
Minimum ambient air temperature:	0°C	0°C	0°C	0°C	0°C	0°C	0°C	0°C	0°C	0°C
Altitude above sea level:	Not exceed 1000m	Not exceed 1000m	Not exceed 1000m	Not exceed 1000m	Not exceed 1000m	Not exceed 1000m	Not exceed 1000m	Not exceed 1000m	Not exceed 1000m	Not exceed 1000m
IP degree:	IP 65	IP 65	IP 65	IP 65	IP 65	IP 65	IP 65	IP 65	IP 65	IP 65
Mass of equipment:	0.9kg	0.9kg	0.9kg	0.9kg	0.9kg	0.9kg	0.9kg	0.9kg	0.9kg	0.9kg
Cooling method:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Parameters concerns	Specification									
Type designation:	ACM1-06004 H2	ACM1 S-06004 H2	ACM2-06004 H2	ACM2 S-06004 H2	ACM2 C-06004 H2	ACM1 H-0604	ACM1 H-0604B	ACM2 H-0604	ACM2 H-0604B	ACM3 H-0604
Phase:	3P	3P	3P	3P	3P	3P	3P	3P	3P	3P
Rated voltage (for driver):	0~240 VAC	0~240 VAC	0~240 VAC	0~240 VAC	0~240 VAC	0~240 VAC	0~240 VAC	0~240 VAC	0~240 VAC	0~240 VAC
Rated voltage (for motor):	220VAC	220VAC	220VAC	220VAC	220VAC	220VAC	220VAC	220VAC	220VAC	220VAC

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Rated current:	2.1A	2.1A	2.1A	2.1A	2.1A	2.1A	2.1A	2.1A	2.1A	2.1A
Rated frequency:	250Hz	250Hz	250Hz	250Hz	250Hz	250Hz	250Hz	250Hz	250Hz	250Hz
Rated output:	400W	400W	400W	400W	400W	400W	400W	400W	400W	400W
Rated torque:	1.27N·m	1.27N·m	1.27N·m	1.27N·m	1.27N·m	1.27N·m	1.27N·m	1.27N·m	1.27N·m	1.27N·m
Duty class:	S1	S1	S1	S1	S1	S1	S1	S1	S1	S1
Class of equipment:	Class I	Class I	Class I	Class I	Class I	Class I	Class I	Class I	Class I	Class I
Rated speed:	3000r/min	3000r/min	3000r/min	3000r/min	3000r/min	3000r/min	3000r/min	3000r/min	3000r/min	3000r/min
Thermal classification according to IEC 62114:	Class H	Class H	Class H	Class H	Class H	Class H	Class H	Class H	Class H	Class H
Type of cooling:	Natural cold	Natural cold	Natural cold	Natural cold	Natural cold	Natural cold	Natural cold	Natural cold	Natural cold	Natural cold
Primary coolant:	Air	Air	Air	Air	Air	Air	Air	Air	Air	Air
Secondary coolant:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum ambient air temperature:	40°C	40°C	40°C	40°C	40°C	40°C	40°C	40°C	40°C	40°C
Minimum ambient air temperature:	0°C	0°C	0°C	0°C	0°C	0°C	0°C	0°C	0°C	0°C

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Altitude above sea level:	Not exceed 1000m	Not exceed 1000m	Not exceed 1000m	Not exceed 1000m	Not exceed 1000m	Not exceed 1000m	Not exceed 1000m	Not exceed 1000m	Not exceed 1000m	Not exceed 1000m
IP degree:	IP 65	IP 65	IP 65	IP 65	IP 65	IP 65	IP 65	IP 65	IP 65	IP 65
Mass of equipment:	1.3kg	1.3kg	1.3kg	1.3kg	1.3kg	1.3kg	1.3kg	1.3kg	1.3kg	1.3kg
Cooling method:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Parameter concerns	Specification									
Type designation:	ACM3 H-0604B	ACM0 H-0604	ACM0 H-0604B	ACM1 S-06006 H2	ACM2-06006 H2	ACM1 H-0606	ACM1 H-0606B	ACM2 H-0606	ACM2 H-0606B	ACM3 H-0606
Phase:	3P	3P	3P	3P	3P	3P	3P	3P	3P	3P
Rated voltage (for driver):	0~240 VAC	0~240 VAC	0~240 VAC	0~240 VAC	0~240 VAC	0~240 VAC	0~240 VAC	0~240 VAC	0~240 VAC	0~240 VAC
Rated voltage (for motor):	220VAC	220VAC	220VAC	220VAC	220VAC	220VAC	220VAC	220VAC	220VAC	220VAC
Rated current:	2.1A	2.1A	2.1A	3.7A	3.7A	3.7A	3.7A	3.7A	3.7A	3.7A
Rated frequency:	250Hz	250Hz	250Hz	250Hz	250Hz	250Hz	250Hz	250Hz	250Hz	250Hz
Rated output:	400W	400W	400W	600W	600W	600W	600W	600W	600W	600W
Rated torque:	1.27N·m	1.27N·m	1.27N·m	1.91N·m	1.91N·m	1.91N·m	1.91N·m	1.91N·m	1.91N·m	1.91N·m
Duty class:	S1	S1	S1	S1	S1	S1	S1	S1	S1	S1
Class of equipment:	Class I	Class I	Class I	Class I	Class I	Class I	Class I	Class I	Class I	Class I

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Rated speed:	3000r/min	3000r/min	3000r/min	3000r/min	3000r/min	3000r/min	3000r/min	3000r/min	3000r/min	3000r/min
Thermal classification according to IEC 62114:	Class H	Class H	Class H	Class H	Class H	Class H	Class H	Class H	Class H	Class H
Type of cooling:	Natural cold	Natural cold	Natural cold	Natural cold	Natural cold	Natural cold	Natural cold	Natural cold	Natural cold	Natural cold
Primary coolant:	Air	Air	Air	Air	Air	Air	Air	Air	Air	Air
Secondary coolant:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum ambient air temperature:	40°C	40°C	40°C	40°C	40°C	40°C	40°C	40°C	40°C	40°C
Minimum ambient air temperature:	0°C	0°C	0°C	0°C	0°C	0°C	0°C	0°C	0°C	0°C
Altitude above sea level:	Not exceed 1000m	Not exceed 1000m	Not exceed 1000m	Not exceed 1000m	Not exceed 1000m	Not exceed 1000m	Not exceed 1000m	Not exceed 1000m	Not exceed 1000m	Not exceed 1000m
IP degree:	IP 65	IP 65	IP 65	IP 65	IP 65	IP 65	IP 65	IP 65	IP 65	IP 65
Mass of equipment:	1.3kg	1.3kg	1.3kg	1.5kg	1.5kg	1.5kg	1.5kg	1.5kg	1.5kg	1.5kg
Cooling method:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Parameter concerns	Specification									

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Type designation:	ACM3 H-0606B	ACM2L-0602	ACM2L-0602B	ACM3L-0602	ACM3L-0602B	ACM2L-0604	ACM2L-0604B	ACM3L-0604	ACM3L-0604B	ACM2L-0606
Phase:	3P	3P	3P	3P	3P	3P	3P	3P	3P	3P
Rated voltage (for driver):	0~240 VAC	0~240 VAC	0~240 VAC	0~240 VAC	0~240 VAC	0~240 VAC	0~240 VAC	0~240 VAC	0~240 VAC	0~240 VAC
Rated voltage (for motor):	220VAC	220VAC	220VAC	220VAC	220VAC	220VAC	220VAC	220VAC	220VAC	220VAC
Rated current:	3.7A	1.5A	1.5A	1.5A	1.5A	2.4A	2.4A	2.4A	2.4A	4.7A
Rated frequency:	250Hz	250Hz	250Hz	250Hz	250Hz	250Hz	250Hz	250Hz	250Hz	250Hz
Rated output:	600W	200W	200W	200W	200W	400W	400W	400W	400W	600W
Rated torque:	1.91Nm	0.64Nm	0.64Nm	0.64Nm	0.64Nm	1.27Nm	1.27Nm	1.27Nm	1.27Nm	1.91Nm
Duty class:	S1	S1	S1	S1	S1	S1	S1	S1	S1	S1
Class of equipment:	Class I	Class I	Class I	Class I	Class I	Class I	Class I	Class I	Class I	Class I
Rated speed:	3000r/min	3000r/min	3000r/min	3000r/min	3000r/min	3000r/min	3000r/min	3000r/min	3000r/min	3000r/min
Thermal classification according to IEC 62114:	Class H	Class H	Class H	Class H	Class H	Class H	Class H	Class H	Class H	Class H
Type of cooling:	Natural cold	Natural cold	Natural cold	Natural cold	Natural cold	Natural cold	Natural cold	Natural cold	Natural cold	Natural cold
Primary coolant:	Air	Air	Air	Air	Air	Air	Air	Air	Air	Air
Secondary coolant:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Maximum ambient air temperature:	40°C	40°C	40°C	40°C	40°C	40°C	40°C	40°C	40°C	40°C
Minimum ambient air temperature:	0°C	0°C	0°C	0°C	0°C	0°C	0°C	0°C	0°C	0°C
Altitude above sea level:	Not exceed 1000m	Not exceed 1000m	Not exceed 1000m	Not exceed 1000m	Not exceed 1000m	Not exceed 1000m	Not exceed 1000m	Not exceed 1000m	Not exceed 1000m	Not exceed 1000m
IP degree:	IP 65	IP 65	IP 65	IP 65	IP 65	IP 65	IP 65	IP 65	IP 65	IP 65
Mass of equipment:	1.5kg	0.85Kg	0.85Kg	0.85Kg	0.85Kg	1.19kg	1.19kg	1.19kg	1.19kg	1.57kg
Cooling method:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Parameter concerns	Specification									
Type designation:	ACM2L-0606B	ACM3L-0606	ACM3L-0606B							
Phase:	3P	3P	3P							
Rated voltage (for driver):	0~240 VAC	0~240 VAC	0~240 VAC							
Rated voltage (for motor):	220VAC	220VAC	220VAC							
Rated current:	4.7A	4.7A	4.7A							

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Rated frequency:	250Hz	250Hz	250Hz						
Rated output:	600W	600W	600W						
Rated torque:	1.91N·m	1.91N·m	1.91N·m						
Duty class:	S1	S1	S1						
Class of equipment:	Class I	Class I	Class I						
Rated speed:	3000r/min	3000r/min	3000r/min						
Thermal classification according to IEC 62114:	Class H	Class H	Class H						
Type of cooling:	Natural cold	Natural cold	Natural cold						
Primary coolant:	Air	Air	Air						
Secondary coolant:	N/A	N/A	N/A						
Maximum ambient air temperature:	40°C	40°C	40°C						
Minimum ambient air temperature:	0°C	0°C	0°C						
Altitude above sea level:	Not exceed 1000m	Not exceed 1000m	Not exceed 1000m						

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IP degree:	IP 65	IP 65	IP 65							
Mass of equipment:	1.57kg	1.57kg	1.57kg							
Cooling method:	N/A	N/A	N/A							

Remark:

ACM naming and ELM naming are mainly used for channel management.

It's just named differently, but everything else is the same.

ACM series servo motors are used for domestic machine makers while they export the machines to overseas market, ELM series servo motors are used for overseas machine makers directly

The models correspond to the following table:

Model	Alternative model name
ACM1S-06002H2	-
ACM2-06002H2	-
ACM2S-06002H2	-
ACM2C-06002H2	-
ACM1H-0602	ELM1H-0200MA60F
ACM1H-0602B	ELM1H-0200MA60E
ACM2H-0602	ELM2H-0200LA60F
ACM2H-0602B	ELM2H-0200LA60E
ACM3H-0602	ELM3H-0200NA60F
ACM3H-0602B	ELM3H-0200NA60E
ACM1-06004H2	-
ACM1S-06004H2	-
ACM2-06004H2	-
ACM2S-06004H2	-
ACM2C-06004H2	-
ACM1H-0604	ELM1H-0400MA60F
ACM1H-0604B	ELM1H-0400MA60E
ACM2H-0604	ELM2H-0400LA60F
ACM2H-0604B	ELM2H-0400LA60E
ACM3H-0604	ELM3H-0400NA60F
ACM3H-0604B	ELM3H-0400NA60E
ACM0H-0604	ELM0H-0400FA60F
ACM0H-0604B	ELM0H-0400FA60E
ACM1S-06006H2	-
ACM2-06006H2	-
ACM1H-0606	ELM1H-0600MA60F
ACM1H-0606B	ELM1H-0600MA60E

ACM2H-0606	ELM2H-0600LA60F
ACM2H-0606B	ELM2H-0600LA60E
ACM3H-0606	ELM3H-0600NA60F
ACM3H-0606B	ELM3H-0600NA60E
ACM2L-0602	ELM2L-0200LA60F
ACM2L-0602B	ELM2L-0200LA60E
ACM3L-0602	ELM3L-0200NA60F
ACM3L-0602B	ELM3L-0200NA60E
ACM2L-0604	ELM2L-0400LA60F
ACM2L-0604B	ELM2L-0400LA60E
ACM3L-0604	ELM3L-0400NA60F
ACM3L-0604B	ELM3L-0400NA60E
ACM2L-0606	ELM2L-0600LA60F
ACM2L-0606B	ELM2L-0600LA60E
ACM3L-0606	ELM3L-0600NA60F
ACM3L-0606B	ELM3L-0600NA60E
It is represented by the "-", It means there is no corresponding model at present.	

2. Order

1.1. Date of Purchase Order, Customer’s Reference

2022-11-08

1.2. Test Sample(s)

- Reception date(s): 2023-04-12
- Location(s) of reception: TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch 5F, Communication Building, 163 Pingyun Rd, Huangpu Ave. West Guangzhou 510656 P. R. China
- Condition of test sample(s): Completed and can be normal operation

1.3. Date(s) of Testing

2023-04-12~2023-04-26

China Leadshine Technology Co.,Ltd.
15-20/F, Block B, Nanshan I Valley,
No.3157, Shahe West Road Nanshan
District 518055 Shenzhen PEOPLE’S
REPUBLIC OF CHINA

1.4. Location(s) of Testing

1.5. Points of Non-Compliance or Exceptions of the Test Procedure

- None

2. Test Results

- “Decision rule according to IEC Guide 115:2021, clause 4.4.3, 4.5.1 was applied.

2.1. Positive Test Results

Test specification(s)	Report no. / Rev. No.	Date	Remark
Electrical safety:	64.105.23.30092.01	2023-05-15	N/A

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2.2. Points of Non-Compliance according to the test specification

- None

3. Remarks

3.1. General

The user manual has been examined according to the minimum requirements described in the product standard. The manufacturer is responsible for the accuracy of further particulars as well as of the composition and layout.

- 3.2.** When the product is placed on the market, it must be accompanied with safety Instructions written in official language of the country. The instructions shall give information regarding safe operation, installation and maintenance.
- 3.3.** According to the EU directives which have been aligned with EU NLF (new legislative framework), both of manufacturer and importer’s name and address shall be affixed on the product or, where that is not possible, on its packaging or in a document accompanying the product before the product is placed on the EU market.
- 3.4.** The manufacturer/ Importer has to ensure the appliance placing on the EU market conforms to the applicable EU directives which provide the affixing of the CE marking, such as LVD, EMC, RoHS, ErP, and so on.

4. Documentation

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File	File name	Date
Data form (CDF):	CDF_64.105.23.30092.01	2023-05-15
Photo documentation:	Attachment No.1 photo document_64.105.23.30092.01	2023-05-15

5. Summary

"The test specifications are met".

TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch TÜV SÜD Group

Tested by:

Damon Wang, Project handler

Approved by:

San Huang, Desi



--- End of Report ---