

TEST REPORT IEC 60529

Degrees of protection provide by enclosure(IP code)

| Report Number | : Q02A2 | 3030179Q00101 | |
|--|--|---|--|
| Date of issue: 2023-03-13 | | 3-13 | |
| Total number of pages | : 9 pages | 9 pages | |
| Name of Testing Laboratory preparing the Report | : Guango | Guangdong Meide Testing Technology Co., Ltd. | |
| Applicant's name | | FOSHAN SHUNDE SAM HING CHEUNG FANS AND EQUIPMENT LIMTED. | |
| Address | | Building B1,Jiangyi Hongyu Industrial Park,Leliu Town,Shunde District,Foshan City,Guangdong Province. | |
| Test specification: | | | |
| Standard | .: IEC 605 | 529:1989+A1:1999+A2:2013 | |
| Test procedure | : IP54 Te | est | |
| Non-standard test method | : N/A | | |
| Test Report Form No | : 02-Q02 | 4-1A | |
| Test Report Form(s) Originator | .: GTG | | |
| Master TRF | : Dated 2 | 2022-07-01 | |
| A 1 1 1 1 | | | |
| | | | |
| The test results presented in this rep This report shall not be reproduced, The authenticity of this Test Report a | except in ful | ly to the object tested. I, without the written approval of the Testing Laboratory. nts can be verified by contacting the GTG, responsible for | |
| The test results presented in this rep This report shall not be reproduced, The authenticity of this Test Report a this Test Report. | except in ful and its conte | l, without the written approval of the Testing Laboratory. | |
| The test results presented in this rep This report shall not be reproduced, The authenticity of this Test Report a this Test Report. Responsible Testing Laboratory | except in ful and its conte | I, without the written approval of the Testing Laboratory. nts can be verified by contacting the GTG, responsible for | |
| The test results presented in this rep This report shall not be reproduced, The authenticity of this Test Report a this Test Report. Responsible Testing Laboratory Testing Laboratory: | except in ful and its conte (as applical | I, without the written approval of the Testing Laboratory. I, without the written approval of the Testing Laboratory. Ints can be verified by contacting the GTG, responsible for ble), testing procedure and testing location(s): Guangdong Meide Testing Technology Co., Ltd. | |
| The test results presented in this rep This report shall not be reproduced, The authenticity of this Test Report a this Test Report. Responsible Testing Laboratory Testing Laboratory: Testing location/ address | except in ful and its conte (as applical | I, without the written approval of the Testing Laboratory. Its can be verified by contacting the GTG, responsible for ble), testing procedure and testing location(s): Guangdong Meide Testing Technology Co., Ltd. 1st Floor, Area B, Jinbaisheng Industrial Park, 2nd Road, Songshan Lake High-tech Industrial Development Zone, | |
| The test results presented in this rep This report shall not be reproduced, The authenticity of this Test Report a this Test Report. Responsible Testing Laboratory Testing Laboratory: Testing location/ address Tested by (name, function, signat | except in ful and its conte (as applical | I, without the written approval of the Testing Laboratory. I, without the written approval of the Testing Laboratory. Ints can be verified by contacting the GTG, responsible for ble), testing procedure and testing location(s): Guangdong Meide Testing Technology Co., Ltd. Ist Floor, Area B, Jinbaisheng Industrial Park, 2nd Road, Songshan Lake High-tech Industrial Development Zone, Dongguan City, Guangdong Pr., China. Abel Chen | |
| The authenticity of this Test Report a this Test Report. Responsible Testing Laboratory | except in ful and its conte (as applical (ure): | I, without the written approval of the Testing Laboratory. I, without the written approval of the Testing Laboratory. Ints can be verified by contacting the GTG, responsible for ble), testing procedure and testing location(s): Guangdong Meide Testing Technology Co., Ltd. Ist Floor, Area B, Jinbaisheng Industrial Park, 2nd Road, Songshan Lake High-tech Industrial Development Zone, Dongguan City, Guangdong Pr., China. Abel Chen Project handler Louis Lu | |

| Test item description: | Electric Motor | |
|------------------------|--|--|
| Trade Mark: | WingTon | |
| Manufacturer: | FOSHAN SHUNDE SAM HING CHEUNG FANS AND | |
| | EQUIPMENT LIMTED. | |
| | Building B1,Jiangyi Hongyu Industrial Park,Leliu Town,Shunde District,Foshan City,Guangdong Province | |
| Model/Type reference: | Y63,Y71,Y80,Y90 | |
| Ratings: | 0.06KW-1.5KW | |

List of Attachments (including a total number of pages in each attachment):

Attachment 1: Photo

| Summary of testing: | | |
|---|---|--|
| Tests performed (name of test and test clause): IEC 60529:1989+A1:1999+A2:2013 | Testing location: Guangdong Meide Testing Technology Co., Ltd. 1st floor, B Area, Jinbaisheng Industrial Park, Headquarters 2 Road, Songshan Lake Hi-tech Industrial Development Zone, Dongguan City, Guangdong Pr., China. | |
| Summary of compliance with National Differ List of countries addressed N/A | rences: | |
| Copy of marking plate: The artwork below may be only a draft. The authorized by the respective NCBs that own N/A | use of certification marks on a product must be I these marks. | |

| Test item particulars | | | | |
|---|--|--|--|--|
| Classification of installation and use: / | | | | |
| Supply Connection: / | | | | |
| : | | | | |
| Possible test case verdicts: | | | | |
| - test case does not apply to the test object: | N/A | | | |
| - test object does meet the requirement: | P (Pass) | | | |
| - test object does not meet the requirement: | F (Fail) | | | |
| Testing: | | | | |
| Date of receipt of test item: 2023-03-06 | | | | |
| Date (s) of performance of tests: | 2023-03-08 | | | |
| - | | | | |
| General remarks: | | | | |
| "(See Enclosure #)" refers to additional information appended to the report. "(See appended table)" refers to a table appended to the report. Throughout this report a □ comma / ☑ point is used as the decimal separator. Clause numbers between brackets refer to clauses in IEC 60598-1 Manufacturer's Declaration per sub-clause 4.2.5 of IECEE 02: The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has | | | | |
| been provided: | | | | |
| When differences exist; they shall be identified in the General product information section. | | | | |
| Name and address of factory (ies): | FOSHAN SHUNDE SAM HING CHEUNG FANS AND EQUIPMENT LIMTED. | | | |
| | Building B1, Jiangyi Hongyu Industrial Park, Leliu Town, Shunde District, Foshan City, Guangdong Province PROVINCE | | | |
| General product information: | | | | |
| All models have the same IP protection structure, ex Model selection :Y90 as the test model. | cept for the model name and power. | | | |

| | IEC 60529 | | |
|--------|--|--|---------|
| Clause | Requirement – Test | Result - Remark | Verdict |
| 11 | General requirements for tests | | Р |
| 11.1 | Atmospheric conditions for water or dust tests | IP54: 23.2°C, 64% | Р |
| 11.2 | Test samples | The tests specified are Commissioned tests. | Р |
| 11.3 | Application of test requirements and interpretation of test results | | Р |
| 11.4 | Combination of test conditions for the first characteristic numeral | | Р |
| 11.5 | Empty enclosures | | N/A |
| 12 | Test for protection against access to hazardous characteristic numeral | parts indicated by the first | N/A |
| 12.1 | Access probes | Not considered. | N/A |
| 12.2 | Test conditions | | N/A |
| 12.3 | Acceptance conditions | | N/A |
| 12.3.1 | For low-voltage equipment. (Rated voltage not exceeding 1000V a.c. and 1500V d.c.) | | N/A |
| 12.3.2 | For high-voltage equipment(Rated voltage exceeding 1000V a.c. and 1500V d.c.) | | N/A |
| 12.3.3 | For equipment with hazardous mechanical parts | | N/A |
| 13 | Test for protection against solid foreign objects characteristic numeral | indicated by the first | Р |
| 13.1 | Test means | | Р |
| | Test means and the main test conditions are given in table 7 | | Р |
| 13.2 | Test conditions for first characteristic numerals 1, 2, 3, 4 | | N/A |
| 13.3 | Acceptance conditions for first characteristic numerals 1, 2, 3, 4 | | N/A |
| 13.4 | Dust test for first characteristic numerals 5 and 6 | IP5X | Р |
| 13.5 | Special conditions for first characteristic numeral 5 | | Р |
| 13.5.1 | Test conditions for first characteristic numeral 5 | | Р |
| 13.5.2 | Acceptance conditions for first characteristic numeral 5 | | Р |
| 13.6 | Special conditions for first characteristic numeral 6 | | N/A |
| 13.6.1 | Test conditions for first characteristic numeral 6 | | N/A |
| 13.6.2 | Acceptance conditions for first characteristic numeral 6 | | N/A |
| 14 | Test for protection against water indicated by th numeral | ne second characteristic | Р |
| 14.1 | The test means and the main test conditions are given in table 8 | IPX4 | Р |

| Clause | IEC 60529 | Deput Demend | \/₽_(|
|--------|---|-----------------|---------|
| Clause | Requirement – Test | Result - Remark | Verdict |
| Test | Test conditions | | P |
| | Test means and main test conditions are given in table 8 | | P |
| | During the tests for IPX1 TO IPX6 the water temperature should not differ by more than 5K from the temperature of the specimen under test | | Р |
| | For IPX7 details of the water temperature are given in 14.2.7 | | N/A |
| | Test for second characteristic numeral 8, the test conditions are subject to agreement between manufacturer and user, but they shall be more severe than those prescribed in 14.2.7 and they shall take account of the condition than the enclosure will be continuously immersed in actual use | | N/A |
| 14.2.1 | Test for second characteristic numeral 1 with the drip box | | N/A |
| 14.2.2 | Test for second characteristic numeral 2 with the drip box | | N/A |
| 14.2.3 | Test for second characteristic numeral 3 with oscillating tube or spray nozzle | | N/A |
| 14.2.4 | Test for second characteristic numeral 4 with oscillating tube or spray nozzle | | Р |
| 14.2.5 | Test for second characteristic numeral 5 with the 6.3mm nozzle | | N/A |
| 14.2.6 | Test for second characteristic numeral 6 with the 12.5mm nozzle | | N/A |
| 14.2.7 | Test for second characteristic numeral 7: temporary immersion between 0.15m and 1m | | N/A |
| | The test is made by completely immersing the enclosure in water in its service position as specified by the manufacturer so that the following conditions are satisfied | | N/A |
| | a) the lowest point of enclosures with a height less than 850mm is located 1000mm below the surface of the water | | N/A |
| equ | b) the highest point of enclosures with a height equal to or greater than 850mm is located 150mm below the surface of the water | | N/A |
| | c) the duration of the test is 30min | | N/A |
| | d)the water temperature does not differ from that of the equipment by more 5K | | N/A |
| 14.2.8 | Test for second characteristic numeral 8: continuous immersion subject to agreement | | N/A |
| 14.2.9 | Test for second characteristic numeral 9 by high pressure and temperature water jetting | | N/A |

| | IEC 60529 | | |
|--------|--|-----------------------|---------|
| Clause | Requirement – Test | Result - Remark | Verdict |
| | The test is made by spraying the enclosure with a stream of water from a standard test nozzle as shown in Figures 7, 8 and 9. | | N/A |
| | The set-up for measuring the impact force of the water jet is given in Figure 10. | | N/A |
| | The distribution force shall be verified at upper and lower limits of distance tolerance range (see Figure 11). | | N/A |
| | a) For small enclosures (largest dimension less than 250 mm), the enclosure shall be mounted on the test device shown in Figure 12. | | N/A |
| | b) For large enclosures (largest dimension greater than or equal to 250 mm), the enclosure shall be mounted as per intended use. The entire exposed surface area of the enclosure shall be subjected to the spray at some point during the test procedure. | | N/A |
| 14.3 | After testing in accordance with the appropriate requirements of 14.2.1 to 14.2.9 the enclosure shall be inspected for ingress of water | No water has entered. | Р |
| | It is the responsibility of the relevant technical committee to specify the amount of water which may be allowed to enter the enclosure and the details of a dielectric strength test | | N/A |
| | In general, if any water has entered, it shall not: | | N/A |
| | -be sufficient to interfere with the correct operation of the equipment or impair safety | | N/A |
| | -deposit on insulation parts where it could lead to tracking along the creepage distances | | N/A |
| | –reach live parts or windings not designed to operated when wet | | N/A |
| | -accumulate near the cable end or enter the cable if any | | N/A |
| | If the enclosure is provided with drain-holes, it should be proved by inspection that any water which enters does not accumulate and that it drains away without doing any harm to the equipment | No Drain-holes | N/A |
| | For enclosure without drain-holes, the relevant product standard shall specify the acceptance conditions if water can accumulate to reach live parts | | P |
| 15 | Test for protection against access to hazardous parts indicated by the additional letter | | N/A |
| 15.1 | Access probes | No additional letter | N/A |
| | The access probe are given in table 6 | | N/A |
| 15.2 | Test conditions | | N/A |
| | The access probe is pushed against any openings of the enclosure with the force specified in table 6 | | N/A |
| 15.3 | Acceptance conditions | | N/A |

Page 7 of 9 Report No.: Q02A23030179Q00101

| IEC 60529 | | | |
|-----------|--|-----------------|---------|
| Clause | Requirement – Test | Result - Remark | Verdict |
| | Test for the additional letter B | | N/A |
| | Test for the additional letter C and D | | N/A |

Attachment 1: Photo



Figure 1: Outlook view



Figure 2: Outlook view

Attachment 1: Photo

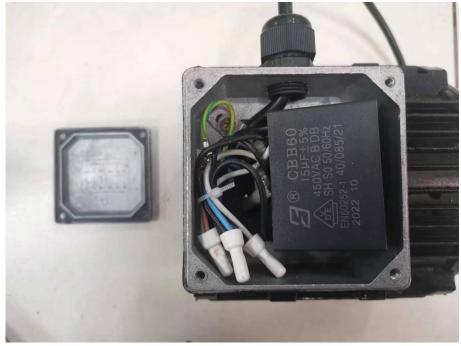


Figure 3: After the first IP54 test

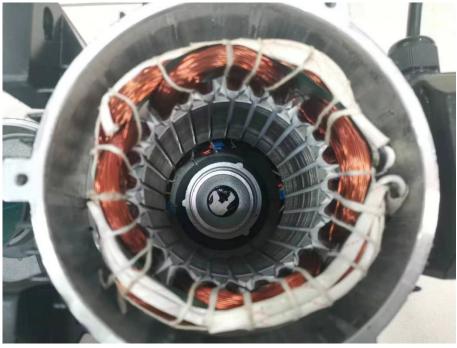


Figure 4:After the first IP54 test ---End of Report---