

GOVERNMENT OF INDIA MINISTRY OF MICRO, SMALL & MEDIUM ENTERPRISES (MSME)

TEST REPORT



MSME - TESTING STATION

(NABL ACCREDITED LABORATORY)

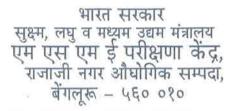
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TEST REPORT

Report No: MSME-TS/BNG/014/2022-23 37

Job No: MSME-TS/BNG/014/22-23

equest Ref: Dt 04/11/22

Issued To

M/s ADOR WELDING LIMITED EQUIPMENT PLANT PB NO9 AKURDI CHICHWAD PUNE-411019 Issue Date: 01-12-2022

Transaction Ref No.: 0311220029272. Dt. 07-11-22

Date of Test Performed: Dt. 16-11-22 &17-11-22

Page:1/7

Description of the Sample as Stated by the Party: ARC WELDING MACHINE Model Champ-600.

TESTS CONDUCTED AS PER :

As per IS:4559-1993 & IS:12063-1987 & Customer's Request.

TEST CHARACTERISTIC

TYPE TESTS.

DESCRIPTION OF SAMPLE ::

01 Number of ARC WELDING MACHINE Model Champ-600.

GENERAL REMARKS

The sample tested on site as per IS: 4559-1993 & IS:12063-1987 & Customer 's Request. Please see the continuation in sheet No 02 to

07 for detailed test results.

Note:

1. This Test Report pertains to the particular sample submitted by the party for the Testing.

This Test Report should not be reproduced in-part without written approval of the Director, MSME-TS, Bangalore.

Reviewed By: (G Nagaraja)

संयुक्त निदेशक/Joint Director सूक्ष्म, लघु एवं मध्यम उद्यम परीक्षण स्टेशन/MSME Testing Station

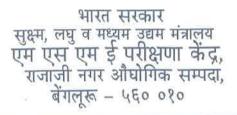
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सूक्ष्म, लघु एवं मध्यम उद्यम मंत्रालय/Ministry of MSME राजाजीनगर, वेंगलुरु/Rajajinagar, Bengaluru - 560 010 Approved By: (K.Socrates) Joint Director

Asst Director

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TEST REPORT

Report No: MSME-TS/BNG/014/2022-23 Job No : MSME-TS/BNG/014/2022-23 Page 2/7 Sl Name of the Test. Specification Requirement. Actual Remarks Sample No Results. Shall not be less than 2meg-ohms 850 meg-Meets the 1. Insulation Which measured with 500V DC. ohms Resistance Requirements Test.(Cl. 11.2) a) Shall withstand full specified supply Voltage. Withstood Meets the 2. Over Voltage b) Shall withstand AC supply Voltage of 110% Withstood Requirements Test. applied instantaneously and maintained for 5 (CI. 11.3) minutes. Withstood Meets the c) Shall withstand repeated switching-off of the Requirements AC supply Voltage of 110% d) Shall withstand repeated switching-off of Withstood Meets the the ac Supply Voltage of 110% for 50 times. Requirements 3 Open- Circuit With Input connected to Rated supply Voltage, 87V Meets the Voltage Test .(Cl. the open-Circuit Voltage is measured. The Requirements 11.4 Rated the open-Circuit Voltage shall not exceed 100V. Load Characteristic With Output connected to Variable load, Test.(Cl. 11.5) The welding load voltage. Meets the a)Shall be 28V for 200 A Welding current. Requirements 28V b) Shall be36V for 400 A Welding current. 36V c)Shall be 44V for 600 A Welding current. 44V

Authorized by:

(B.Narayanaswamy)

Instructor

Reviewed by:

G. Nagin

(G.Nagaraja)

Asst Director (Mech)

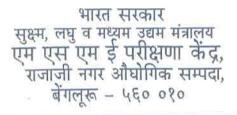
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(K.Socrates) Hayer পিইগুকু /Joint Director

म्युक्त निद्शाक John Director मुख्य मध्यम उद्यम पराक्षण स्टेशन Misme Testing Station

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TEST REPORT

Report No: MSME-TS/BNG/014/2022-23 1371

| | | Job No | : MSME-TS/BN | G/014/2022-23 Page 3/7 |
|-----------|--|--|---------------------------|---------------------------|
| SI. No | Name of the Test. | Specification Requirement. | Actual Sample Results. | Remarks |
| 5. | Short-Circuit Test:(Cl. 11.6) | Welding Current shall not be more than 200% when measured at Max setting. | 180% | Meets the requirements |
| 1 | | and the Voltage between output terminal shall not exceed 3V | 2.3V | Meets the requirements |
| 6. | Temperature- Rise Test:(Cl. 11.7) | The Temperature-Rise measured at rated I/P Voltage with a current equal to max continuous hand welding current at a duty cycle of 60% shall not exceed the following i) Windings: a) by Resistance method: 125 °C b) by Thermometer method: 105 °C ii)Un-Insulated parts: by Thermometer method: | 21°C 52°C 28.4°C | Meets the requirements |
| 7. | High Voltage test (Cl. 11.8) | Shall withstand a)2KV rms for Transformer alone b)1.5KV rms for complete unit c)1.0KV rms for auxiliary circuits | Withstood | Meets the Requirements |
| 8. | Insulation Resistance test (after High Voltage test (Sl.no.7) (Cl. 11.2) | Shall not be less than 2meg-ohms measured with 500V DC | 500 meg-ohms | Meets the Requirements |

Authorized by:

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(G.Nagaraja) Asst Director (Mech) Approved by:

संयुक्त निद्शक Fjolin birector

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Government of India Ministry of Micro, Small & **Medium Enterprises MSME Testing Station** Rajajinagar Industrial Estate, Bengaluru - 560 010

TEST REPORT

Report No: MSME-TS/BNG/014/2022-23

Job No: MSME-TS/BNG/014/2022-23

Page 4/7

| SI. No | Name of t he Test. | Specification Requirement. | Actual Sample Results. | Remarks |
|-----------|---|--|---|---------------------------|
| 9 | Input Voltage . | 415V, 3 Phase 50 Hz. | 415V 3 Phase 50 Hz. | Meets the Requirements |
| 10 | Input Voltage range | 415V+15%, Over Volts 477 Volts . 415 Volts , Under Volts 373.5V | 415V+15%, -10% H- 477 Volts low- 373.5V | Meets the Requirements |
| 11 | Phase | 3 Phase,415 Volts. 50Hz, | 3 phase, 415 Volts. 50Hz. | Meets the Requirements |
| 12 | Frequency | 50/60 Hz | 50/60 Hz | Meets the Requirements |
| 13 | Welding Current Range | 10A To 600Amps | 10A To 600Amps | Meets the Requirements |
| 14 | Input Power @415V AC in MMA Mode @100% Duty Cycle @60% Duty Cycle @ No load | 22 KVA (Max) 32 KVA (Max) 0.31 KVA (Max) | 22 KVA 32 KVA 0.2 KVA | Meets the Requirements |

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Asst Director (Mech)

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Director Director सूक्म, लघु एवं मध्यम

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Government of India Ministry of Micro, Small & Medium Enterprises MSME Testing Station Rajajinagar Industrial Estate, Bengaluru - 560 010

TEST REPORT

Report No: MSME-TS/BNG/014/2022-23

Job No: MSME-TS/BNG/014/2022-2

| page 5/ Remarks | Actual Sample | Specification Requirement. | Name of t | SI. |
|--------------------|------------------|---|---------------------|-----|
| | Results. | | he Test. | No |
| | | G. | Input Supply | 15 |
| | | | Current @415VAC | |
| Meets the | 31Amps | 31Amps | @100% Duty Cycle | |
| Requirement | 45A | 45A | @60% Duty Cycle | |
| | 0.43A | 0.43A | @ No load | |
| | 0.43A | <i>57.57</i> . | C 110 load | |
| Meets the | 86% | >85% | Efficiency | 16 |
| Requirement | | | | |
| - | | | Welding Current | 17 |
| | | | (at 40°C) | |
| Meets the | 465A | 465A | @100% Duty | |
| Requirement | 40371 | | Cycle | |
| , rioquir ciricine | 600A | 600A | @60% Duty Cycle | |
| | | | | |
| Meets the | 0-80 Amps more | 0-80 Amps more current than set current | ARC Force | 18 |
| Requirement | current than set | | Control | |
| | Current | | | |
| Meets the | 1.6mm To 6.3 | 1.6. To 6-3mm | Welding | 19 |
| Requirement | mm | 2.0. 10 0 311111 | Electrode | |
| Requirement | 111111 | | Sizes(Diameter) | |
| | | | | |
| | | | | |
| | | | | |

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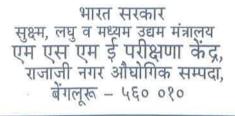
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371





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Report No: MSME-TS/BNG/014/2022-23

Job No: MSME-TS/BNG/014/2022-23

Page 6/7

| | | | | Page 6/7 |
|-----------|---|--|---|---------------------------|
| SI. No | Name of t he Test. | Specification Requirement. | Actual Sample Results. | Remarks |
| 20 | Power Factor | 0.93 Max | 0.90 | Meets the |
| | 2 | | | Requirements |
| 21 | Remote control (optional) | As optional for current setting | Provided as optional for current setting | Meets the Requirements |
| 22 | D. H.I. | OCV reduces to 12V-18V in | 0.004 | |
| 22 | Build in VRD(Voltage Reducing Device) Unit Optional | MMA mode when machine is in no load condition for 3minutes | OCV reduces to 12V-18V in MMA mode when machine is in no load condition for 3minutes | Meets the Requirements |
| | | 1)Panel/Remote Mode Selection | | |
| 23 | Front Panel Function | Switch. 2)MMA/TIG Mode Selection Switch. 3) Current and ARC force adjustment pot. 4)Mains on 'GREEN' Color Indication. 5) Trip RED color LED for indication of machine is under protection mode. 6)DPM for display of set current and actual current. | 1)Panel/Remote Mode Selection Switch. 2)MMA/TIG Mode Selection Switch. 3) Current and ARC Force adjustment pot. 4)Mains on 'GREEN' Color Indication'. 5) Trip RED color LED for indication of machine is under protection mode. 6) DPM for display of set current and actual current. | Meets the Requirements |

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(B.Narayanaswamy) Instructor Reviewed by:

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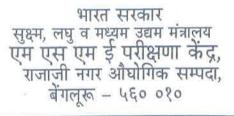
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TEST REPORT

Report No: MSME-TS/BNG/014/2022-23

| | Job No : MSME-TS/BNG/014/2022- Page 7 | | | | | |
|-----|--|--|--|---------------------------|--|--|
| SI. | SI. Name of t Specification Requirement. Actual Sample Results Remains | | | | | |
| No | | op osmoution requirement. | Actual Sample Results. | Remarks | | |
| 24 | Protection(Auto Resettable) | 1) Over Voltage, Under Voltage, Single-Phase Protection. 2) Over Temperature Protection 3) Output short circuit protection | 1) Over Voltage, Under Voltage, Single-Phase Protection. 2)Over Temperature Protection 3)Output short circuit protection | Requirements | | |
| 25 | Cooling | Forced Air | Forced Air | Meets the Requirements | | |
| 26 | Insulation | н | н | | | |
| 27 | Degree of Protection (IP 23S) IS: 12063-1987) (CL 7.2) | 2X The object probe sphere of 12.mm dia shall not fully penetrate. | There was no passing rigid sphere of 12 mm dia. | Meets the Requirement | | |
| | (CL 8.3) | X3 Water sprayed at an angle of 60 degree on either side of the Vertical shell have no harmful effects. | No seepage water inside when sprayed with water at an angle of 60 degree to all the sides of the equipment. | Meets the Requirements | | |
| 28 | Dimension (LXWXH) | 700 x 460 x 575 | 700 x 460 x 575 | Meets the Requirements | | |
| 29 | Weight(approx) | 55 KG | 54KG | Meets the requirements | | |

(B.Narayanaswamy) Instructor

Reviewed by:

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End Report*

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