SECRET/CLASSIFIED	NUMBER MH-1000TY
	SHEET 1 OF 29
	SUPERSEDES..

I-558.

ALBUM NO: 15

TECHNICAL PAPERS

FOR ARTICLE

"84/0848711-03-TE-40007

TECHNICAL SPECIFICATIONS

MH 1.000 TY.

I 558

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MH-1 000 Ty
Sheet 2 of 26

E 558

ELECTRIC MOTOR MH-1
TECHNICAL SPECIFICATIONS
MH1.000TY

Typed by: K.Durga Laxmi

Checked by: Quality C. Section

Name:

Signature

The present technical specifications refer to the electric motor MH-I of DC of series excitation which herein after is referred to as electric motor intended for the drive of oil pump.

The designation of electric motor while ordering: Electric motor MH-I, MHI.000.TY.

I. TECHNICAL REQUIREMENTS

Electric motor should meet the requirements of present technical specifications, set of documents as per the specifications MHI.000 and OST P3-II64-72.

All completing products and materials, used in the manufacture of the electric motor should correspond with the present standards and technical specifications for them.

1.1 BASIC PARAMETERS AND DIMENSIONS:

1.1.1 The electric moter has the following basic parameters:

a) Rated voltage - 24 V DC;
b) Nominal power - 500 watts;
c) Nominal rotational frequency - 2800 revolutions/minute
d) Mode of operation - Short time, period of switching should not exceed 3 minutes with subsequent interval untill complete cooling.
e) Diagram of connections - double-wire
f) Version - dust-proof and splash proof
g) operation position - horizontal
h) nominal moment - 0.17 kgf-m.
~~i) Mass should not exceed - 6.5 kg.~~
i) Direction of rotation of shaft - right hand
j) Mass should not exceed - 6.5 kg

Cont...2/-

MH-8007-1
Sheet 4 of 28
I-558

1.1.1 Overall dimensions of the electric motor as per the drawing MHI.000.ly.

1.2 CHARACTERISTICS

1.2.1 Electric motor by overall, mounting dimensions and outward appearance should correspond to the drawing MHI.000. and document set as per specifications MHI.000.

Electric motor at manufacturing plant should pass technological running until fitting of brushes as per the radius of the collector for not less than 2/3 of working surface, but not less than 4 hours.

1.2.2 Electric motor should withstand without damages and residual deformations the test at rotational frequency of 8500 revolutions/min. got two minutes.

1.2.3 Electric motor should:

a) at ON no load run at a voltage of 16 volts, consume current of not more than 13.2 ampers and build up rotational frequency of atleast 5000 revolutions/minute, but not more than 7900 revolutions/minute;

b) have right handed direction of rotation of the shaft;

c) consume a current not exceeding 40A and have rotational frequency of atleast 2800 revolutions/minute at a voltage of 24 volts and rated power.

d) have sparking below the brushes not higher than degree 2 as per GOST 183-74 at rated voltage and rated power.

e) have overheating of the collector not higher than 100° C and overheating of the body not higher than 80°C after a single switching on for a duration of 3 minutes at a voltage of 24V, with rated power.

f) Develops moment of 0.25 kgf/m at fixed armature consuming a current of not more than 55A

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1.2.4 When released from the manufacturer, the insulation resistance between electric circuits and the body should

a) not be less than 20 M ohms under normal climatic conditions in pratically cold conditions.

b) not be less than 5 Mohms at decreased temperature conditions of +70°C.

c) not less than 0.02 Mohms under conditions of increased humidity.

1.2.5 Insulation between electric circuits and the body should with stand test voltage of 500 V (effective value) of a.c with frequency of 50 Hertz without breakdown or superficial overlapping.

1.2.6 Parts and assembly units of articles of one series should be ~~inter-changeability.~~ interchangable

1.27 Electric motor should not have structural components and assembly units with resonance frequencies upto 40 Hertz

1.2.8 Electric motor should not produce interference to radio reception and perform of ТПУ (interphone equipment).

1.2.9 Electric motor should be efficient in operation and should maintain its parameters under conditions specified in OST B3-1164-72.

1.2.10 Version of the electric motor should be dust proof and splash proof.

1.2.11 During bench test to ensure the guarantee life, the electric motor should with stand 4000 switching-on:

1.2.12 During the bench test to ensure the life of 1000 motor hours the electric motor should with stand 8000 switchings-on with carrying out scheduled maintenance.

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1.3 SCOPE OF SET

1.3.1 Delivery set includes as follows:

a) electric motor MH-I
b) Certificate.

1.4 MARKING

1.4.1 Marking of the electric motor should be carried out in conformity with the set of documents as per specifications MHI.000.

1.5 PACKING

1.5.1 Packing and preservation should be carried out to meet the requirements of OST B3-1164-72 and valid drawing of packing.

Preservation of articles supplied for spares should be carried out with regard to the requirements of OST B3-2381-74.

2. ACCEPTANCE RULES

2.1 The present technical specifications, OST B3-1164-72 and set of documents as per specifications MHI.000 are main documents for the manufacture, test and acceptance of the electric motor.

2.2 All articles to be purchased before being installed into the electric motor should be checked by incoming Technical inspection department for acceptance. The extent and procedure of incoming control should be set as agreed with the representative of the customer.

2.3 Tests of electric motor are classified as acceptance tests, periodical tests and type tests.

2.4 Every electric motor is subjected to acceptance tests to the extent and sequence as per the Table I.

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- 6 -

Electric motors are submitted for acceptance in batches of 80-100 pieces.

2.5 Periodical tests are carried out twice in a year on two samples to the extent and sequence as per the Table 1.

2.6 Type tests are conducted for checking the conformity of electric motor to the requirements of present technical specifications: in case of basic changes in circuit diagram design, or manufacturing process of electric motor which can affect the operational properties in case of necessity of checking service life of electric motor and measures taken for elimination of the defects in electric motor as well as on mounting batch of serial production.

The necessity to conduct typical tests as well as for service life which is determined and agreed upon by the manufacturer and customer's representative in scope, which is enough for checking the effectiveness at measures taken or service life as per the test programme using types of tests, Table 1.

TABLE - I

TYPES OF TESTS AND CHECKINGS	POINT NUMBERS: Requirement	methods	CATEGORIES OF TESTS: acceptance test	Periodical tests	type tests
(1)	(2)	(3)	(4)	(5)	(6)
1. Checking of completeness and conformity with drawings	1.2.1	3.2	+	+	+
2- Test at increased rotational frequency	1.2.2	3.3	+	+	+
3. Checking of functional parameters-					
a) checking of noload current	1.2.3a	3.4a	+	+	+
b) checking of correctness of direction of rotation of staft of the electric motor	1.2.3 б	3.4 б	+	+	+

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