

## OPERATING/SAFETY INSTRUCTIONS

RAJAMANE MAKE MOTOR

(FOR DETAILED OPERATION AND MAINTENANCE MANUAL, WRITE TO US WITH MODEL/SERIES)

### SAFETY INSTRUCTIONS:

#### 1. GENERAL :

This operating manual gives basic instructions, which are to be observed during installation, operation & maintenance of the motor. It is therefore imperative that this manual be read by the responsible personnel and operator prior to the assembly & commissioning

It is only the general safety instructions contained under this main heading safety that are to be observed but also the specific information provided under the other main headings.

##### 1.1 identifications of safety instructions in the operating manual:

Safety instructions given in this manual non-compliance with which would affect the safety are identified by the following symbol



Where electrical safety is involved.

**ATTENTION** Where non-compliance with the safety instructions may cause a risk to the machine & its function.

- 1.2 When operating the motor, the safety instructions contained in this manual, the relevant national accident prevention regulations and any other service and safety instructions issued by the plant operator are to be observed.
- 1.3 Non-compliance with the safety instructions may produce a risk to the personnel as well as to the environment & the machine and results in a loss of any right to claim damages.
- 1.4 It shall be plant operator's responsibility to ensure that all maintenance, operation and assembly work is performed by the authorized & qualified personnel who have adequately familiarized themselves with the subject matter by studying this manual in detail.
- 1.5 Any modification may be done to the machine only after consultation with the manufacturer. Using spare parts and accessories authorised by the manufacturer is in the interest of safety. Use of other parts may exempt the manufacturer of any liability.
- 1.6 The reliability of the machine delivered will be only guaranteed if it is used in the manner it is intended to be. The limit values specified in the data sheet must be under no circumstances be exceeded.

### OPERATING INSTRUCTIONS:

#### 1. RECEIVING AND STORING:-

- 1.1 Store the motor in a clean and dry place if it is not to be installed immediately.  
Keep the motor **horizontally** only and avoid entry of solid **particles** or waste into the fan cover.



#### 2. APPLICATIONS:-

- 2.1 Rajamane make motors are designed for continuous operations. If the application calls for more than **10 on/off per hour** the suitability has to be checked with the factory. Other duty cycles are also available, check with the factory.

#### 3. INSTALLATION:-

- 3.1 Qualification and training of operating personnel:



The personnel responsible for operation, maintenance, inspection & assembly must be adequately qualified. Scope of responsibility And supervision of the personnel must be exactly defined by the plant operator. If the staff does not have the necessary knowledge, they must be trained and instructed, which may be performed by the machine manufacturer or supplier on behalf of the plant operator. Moreover, the plant operator should make sure that the contents of the operating manual are fully understood by the personnel.



#### 4. ELECTRICAL CONNECTION:-



**WARNING:- DO NOT CONNECT THE MOTOR DIRECTLY TO THE SUPPLY LINES, CONNECT THROUGH PROPER SWITCH & PROVIDE SUITABLE PROTECTION.**

Check the voltage and frequency marked on the motor nameplate make sure that the motor is suitable for the electricity supply on which it will be used. Three phase motors must be connected to a motor starter with suitable overload relay and single-phase preventor.

The motor should be connected to the supply as shown in the diagram inside the terminal box cover.

#### 5. OPERATION AND MAINTENANCE:-

##### 5.1. LUBRICATION AND MAINTENANCE:-

Motor installed as per these instructions needs very little maintenance. Also the design of the motor ensures a trouble free run for a long period. The motor surface must be kept free of dust.

The motor bearings are grease packed (zz) and sealed for life. No further lubrication is necessary.

##### 5.2 PERIODIC CHECKS:-

To ensure smooth operation of motor, following checks should be made:-

- Check that the motor is not overheating. In self (surface) cooled motors the body temperature, when felt by the bare hand, may be hot. In such cases check the temperature with a thermometer-both ambient and motor body and report to the manufacturer.
- Check the tripping of the motor Starter and functioning of other controls.

#### 6. SERVICE:-

Spare parts are available all over the country through our dealer's network. Motor can also be sent to us for servicing with proper report and documents, on freight paid basis, to K.R. puram (Bangalore) branch, by any reputed transporter

While ordering spares, please mention the type/ model / frame & machine number, as on the nameplate. Also mention the suffixes or prefixes given with the type/ model/frame, on the nameplate.

#### 7. TROUBLE SHOOTER'S GUIDE:

Fault	Cause	Remedy
Motor does not start, Noise.	At least two of the supply leads have failed or disconnected.	Check fuses, terminals and supply leads.
Motor does not start, humming Noise Motor Noise	Motor bearing faulty.	See above noise Replae bearing

##### TEST CERTIFICATE: MACHINE NO.: ACTUAL TEST DETAILS

Insulation resistance: 500 M  $\Omega$

H.V. test at 2 KV: Passed

No load current at 415/ V: A

Motor accelerates to full speed at  $1/\sqrt{3}$  rated voltage.

This motor is tested & found to be electrically & mechanically sound and in working order in all particulars, as per IS:325

##### GUARANTEE CERTIFICATE:

This motor is guaranteed against manufacturing defects TWELVE calendar months from the date of commissioning or FIFTEEN calendar months from the date of dispatch whichever is earlier. This guarantee is subject to the condition that no tempering or repairs is done to the motor. Failure due to single phasing, is are not covered by this guarantee. For repair/replacement the motor must be sent to our works in Bangalore, through any reputed transport having delivery godown in K.R.Puram, Bangalore, **FREIGHT PAID.**

In case of any complaints furnish full name plate details & the party from whom this motor was purchased.

DATE:

SIGN: