

# Motors for Firefighting Pumps



## Performance you can count on. Reliable Motors for Firefighting Pumps/ Fire Engines.

LHP offers a range of motors for firefighting pump/fire engine application that ensures best-in-class performance and reliable operation. These motors are designed to operate in humid and dusty environment for defined operating duty. They are mainly used in high-rise buildings, industries, amenity spaces, malls, airports, stations and on infrastructure projects in which fire control system is essential to avoid any untoward incident.

#### Special Features of LHP Motors for Firefighting Pumps

• LHP motors are designed for ambient temperature of up to 50°C with optimum starting torque to operate high-pressure fire pumps. The motors are with class F insulation and temperature rise limited to Fclass.

#### Applicable Specifications

• The motors manufactured conform to the following National Standards and equivalent International Standards.

National Standards	Title	IEC/BS
IS12469	Guidelines for firefighting installations	
IS12615	Energy Efficient Induction Motors - 3 Phase Squirrel Cage	IEC 60034-30
IS15999-1	Rotating electrical machines	IEC 60034-1
IS15999-2	Methods of determination of efficiency of rotating electrical machines	IEC 60034-2-1
IS: 12824	Types of duty and classes of rating assigned to rotating electrical machines	
IS/IEC 60034-5	Degree of protection provided by enclosure for rotating electrical machinery	IEC 60034-5
IS: 1231	Dimensions of three phase foot mounted induction motors	IEC 60072-1
IS: 2223	Dimensions of flange mounted induction motors	IEC 60072-1
IS: 12065	Permissible limits of noise levels for rotating electrical machines	IEC 60034-9
IS: 12075	Mechanical vibration of rotating electrical machines with shaft height 56 mm and higher measurement, evaluation and limits of vibration severity	IEC 60034-14

LHP motors complies with standard: IS15999-1/IEC 60034-1 for general specifications and IS 12615/ IEC 60034-30 for energy efficiency class requirements. It also comply to IS12469 for guidelines for firefighting installations.

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#### Overview

LHP Firefighting Pump Series Motors with 3 phase squirrel cage construction are specially designed to work in hot and humid conditions during the event of fire in premises. The reason why these motors have been named as Motors for Firefighting Pumps.

LHP motors meets the requirements stipulated under various accepted standards and certifications for such applications.

#### Paint Finish

The motors painted with RAL 3002 colour shade.

#### **Application**

- Commercial Complexes
- Government Offices & Buildings
- High-Rise Residential Complexes
- Manufacturing Industries
- Petrochemical & Refineries
- Chemical & Pharma Industries
- Educational Institutes
- Airports, Dockyards & Shipyards
- Marine & Defence

#### Technical Specifications, Range Standards & Regulations

In addition to the relevant standards and regulations, IS12469 for guidelines for firefighting installations applies.

kW	5.5 to 200 kW
Voltage	415 V
Frequency	50 Hz
Duty	S1
Pole	2, other on request
Frame size	132S to 315L

Efficiency Class	IE2, IE3 & IE4
Mounting	B3, B5, B14 and other on request
MOC	CI/ Aluminium
Method of Cooling	TEFC - other on request
Method of Starting	DOL/VFD

Note: For other voltage / frequency requirements, please refer LHP sales office.





Ambient Temp.	% Output of Motor	Altitude above Sea Level Meter	% Output of Motor
40°C	100%	1000	100%
45°C	100%	1500	95%
50°C	100%	2000	90%
55°C	85%	2500	84%
60°C	78%	3000	78%
65°C	70.5%	3500	75%
		4000	70%



The rating of motor is reduced when ambient temperature exceeds  $50^{\circ}\text{C}$  and/or the altitude of the site is more than  $1000\,\text{meter}$  above sea level.



Corporate office & manufacturing plant

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