Diesel Engines for Fire Pumps

FM APPROVED · UL LISTED · NFPA 20 Requirements · CE

Never Compromise on Safety.

kirloskar
Oil Engines

A rich tradition of engineering excellence

The Kirloskar Legacy stands for a tradition of excellence for more than a century now. A personification of patronizing values and visionary goals, the name 'Kirloskar' is engraved on numerous nation-building milestones. Today, the Kirloskar Group, with a turnover exceeding USD 1.6 billion, stands as an enormous industrial conglomerate.

Incorporated in 1946, Kirloskar Oil Engines Limited (KOEL) is the flagship company of the Kirloskar group. We have four state-of-the-art manufacturing units in India that offer world-class service.

The company has a sizable presence in international markets, with offices in the USA, UAE., South Africa, Kenya and representatives in Indonesia, Vietnam and Nigeria. KOEL also has a strong distribution network throughout the Middle East and Africa.

Today KOEL is an acknowledged leader in the manufacturing of diesel engines, agricultural pumpsets, power tillers and generating sets. The company currently ranks among the leading manufacturers of diesel engines, which are manufactured and sold under Kirloskar Brand. Kirloskar engines cover a power envelop span ranging from 4 hp to 1250 hp in air-cooled and liquid cooled versions.

KOEL manufactures over 225,000 engines annually, which are used in over 100 different applications. These applications are found in sectors such as agriculture, power generation, construction, material handling, earth-moving, mining, offshore, fluid handling and agro-industrial market segments that include defence and marine applications. KOEL exports to over 60 countries worldwide.

Kirloskar Engines for Fire Pumps

Reliability of the fire protection systems is a major concern for insurance companies and end users. A prime contributor to the reliability of fire pumps is a dependable driver.

With over sixty years of experience in engine designing and manufacturing, Kirloskar Oil Engines Ltd. has the capability to offer dependable diesel engines for critical applications.

The company's work with OEMs, contractors, consultants and end users over the years, has given it a comprehensive understanding of the need for cost effective and reliable diesel engines for fire pump packages.

Kirloskar KFP series engines have been designed to meet the stringent requirements of Factory Mutual (FM), Underwriters Laboratories (UL) as well as NFPA 20 standards.

KFP series engines are currently available in 19 different ratings approved by FM and listed by UL. These stringent approval criteria cover performance and functional requirements, examination of manufacturing facility, quarterly audits of quality assurance procedures and a follow up programme to verify approved products' conformance.

Salient features of KFP series

- Heat exchanger for engine coolant
- Liquid cooled charge air cooler for after-cooled engine models
- FM approved cooling loop with raw water solenoid, flow switch and manual valves in main & emergency lines as per NFPA20 requirements
- Engine mounted instrument panel duly isolated from vibration
- Junction box integral with instrument panel for AC wiring
- Interconnection to main controller
- Engine coolant heater
- Starter Contactors (DC)
- Splitter for splitting the charging current coming from alternator to dual battery
- Heat shield on exhaust manifold, turbo charger & CAC pipes
- Fire resistant flexible supply & return lines in fuel connections
- UL listed drive shafts

Optional Accessories offered with Kirloskar KFP range for Fire Pump OEMs

- Drive Shaft Assembly: Listed or Non-Listed along with Drive Shaft Guard
- Fabricated Base Frames customized to suite various Engine-Pump combinations for Drop-in assembly of pumps
- Engine Base frames for VT pump installations
- Torsional Couplings with free service of TV analysis report
- Battery kits
- Weather Proof / Sound Attenuated Enclosures
- Standard Tool Kit
- Engine Maintenance Kits

FM Approved & UL Listed Ratings

Engine Model	FM APPROVED & UL LISTED RATINGS							
	1760 RPM	2100 RPM	2200 RPM	2350 RPM	2600 RPM	2800 RPM	2900 RPM	3000 RPM
	HP	HP	HP	HP	HP	HP	HP	HP
KFP4R-FM05D1 Naturally Aspirated							43*	
KFP4R-UF05 Naturally Aspirated						57	56	55
KFP4R-UF07 Naturally Aspirated	62	70	74	74	77			
KFP4R-UF08 Naturally Aspirated						77	77	76
KFP4R-UF15 Turbocharged After cooled	108	111	117	143	151			
KFP4R-UF16R1 Turbocharged After cooled						105	128	152
KFP4R-UF16R2 Turbocharged After cooled						146	131	116
KFP6R-UF25 Turbocharged After cooled	169	191	196	203	225			
KFP6R-UF26R1 Turbocharged After cooled						251	249	247
KFP6R-UF26R2 Turbo-charged						164	191	217
KFP6S-UF35 Turbocharged After cooled	288	336	332	330				

*FM only rating

Values are rounded off from the decimals to the nearest whole value
The Final offered Listed Ratings may vary slightly

Above mentioned Engine Ratings are as per NFPA 20 & FM approved guidelines and are applicable for stationary emergency standby fire pump service alone Engines are rated at Standard site conditions with Temperature of 25°C, Altitude of 91 m (300 ft) above sea level and humidity of 60%

Engines are subjected to deration when operating at other site conditions. Please contact Kirloskar Oil Engines Ltd. for duration guidelines.

Brief specifications

Models	KFP4R- UF 05	KFP4R-UF 07/08	KFP4R-UF 15/16	KFP6R-UF 25/26	KFP6S-UF 35
Engine Description	Vertical, Liquid Cooled, Compression Ignition, Four Stroke, Naturally Aspirated		Vertical, Liquid Cooled, Compression Ignition, Four Stroke, / Turbo After-Cooled Diesel Engines		
Bore x Stroke (mm)	96 x 112	105 x 120		105 x 125	118 x 135
Displacement (cc)	3242	4160		6480	8800
Compression Ratio	18:01	18:01	18:01	17.6:1	17.5:1
Direction of Rotation	Counter- Clockwise (Looking from Flywheel End)				
Speed-Max Operating (rpm)	3000				2350
Min. Operating (rpm)	1760				
Dimensions (mm) L x W x H	1248x878x1120	1840x1140x1580	1840x1140x1580	2130x1330x1630	2270x1580x1890
Weight (kg)	500	580	630	880	1160

FM APPROVED

UL LISTED

NFPA 20 Requirements

CE

Global Presence

KIRLOSKAR DMCC
JBC - 5, Cluster W, Jumeirah Lake Towers, P.O. Box 37745 Dubai U.A.E
Tel.: +971 4 443 8591
Fax : +971 4 441 4532
Email : enquiry@kirloskarib.com
Email : enquiry@kirloskar.ae
Website : www.kirloskarib.com

KIRLOSKAR TRADING SA (PTY) LTD.
Unit B1, The Stables Business Park, Cnr of Third Avenue & Second Road, Limbro Park, Modderfontein, Johannesburg.
Tel. : +27 11 553 6900 / 6903
Email : prem.shankar@kirloskar.com

KIRLOSKAR KENYA LTD.
P.O Box 60061, Off Dunga Road, Nairobi, Kenya,
Tel. : +254 20 653 6632
Fax : +254 20 653 3390
Email : raj.patil@kirloskar.com

KIRLOSKAR AMERICAS CORPORATION
33300 Egypt Lane, Suite C300
Mangolia, TX 77354
Tel. : +1 346 248 5777
Cell Ph : +1 832 675 1595
Fax : +1 830 423 8060
Email : info@koelamerica.com

kirloskar Oil Engines

KIRLOSKAR OIL ENGINES LIMITED
A Kirloskar Group Company

Regd. Office : 13, Laxmanrao Kirloskar Road, Khadki,
Pune, Maharashtra 411 003 INDIA
Tel.: +91(20) 2581 0341 Fax: +91(20) 2581 3208, 2581 0209
Helpline: +91 8806 33 44 33
Email: koel.helpdesk@kirloskar.com Website: www.kirloskaroilengines.com

• Technical details mentioned above may vary as per site condition / situation. As continuous improvements are contemplated the description and illustrations are not binding.
• This catalogue is copyrighted and may not be reproduced in any form, not even parts of it, without previous written permission by copyright owners, Kirloskar Oil Engines Ltd.
• Mark 'Kirloskar' used in any form as prefix or suffix is owned by Kirloskar Proprietary Limited and Kirloskar Oil Engines Limited is permitted user.

IBG.U.164 Rev2