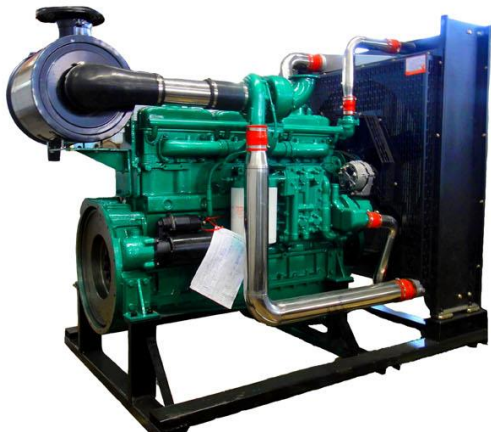


6MK**Diesel Engines for Generator Set**

- **Advanced Technology & Design** Origin from Germany FEV, Yuchai companies, with more compact structures, engine overhaul can met more than 12000 hours;
- **Common Parts Supply System** Parts will share Yuchai engines parts supply system, cheap and easy to get in current market;
- **Environmentally Operation** Fuel consumption will lower 205g/kw.h, with lesser vibration, noise; best choice for samll machines
- **Application** Diesel genset power range from 210kw to 310kw.

Model	6MK410L
Type	Vertical, in-line, water-cooled, 4-stroke
Intake Way	Turbocharged Inter-cooled
No Cylinders, Bore x Stroke (mm)	6-135x165
Displacement (L)	14.2
Compression ratio	17.5:1
Rated power/speed (kW/r/min)	275/1500
Standby power/speed (kW/r/min)	303/1500
Min fuel consumption g/(kW·h)	≤195
Oil capability(L)	28~30
Oil Consumption g/(kW·h)	≤1.2
Starting Type	Electric Sart
Noise limit dB (A)	≤103
Regulator Approach	Electric
Governing Rate	≤1%
Flywheel house/flywheel	1#14
Suitable height above sea level	≤2500
Dimmension(mm)	1680x920x1550
Net weight(kg)	1200

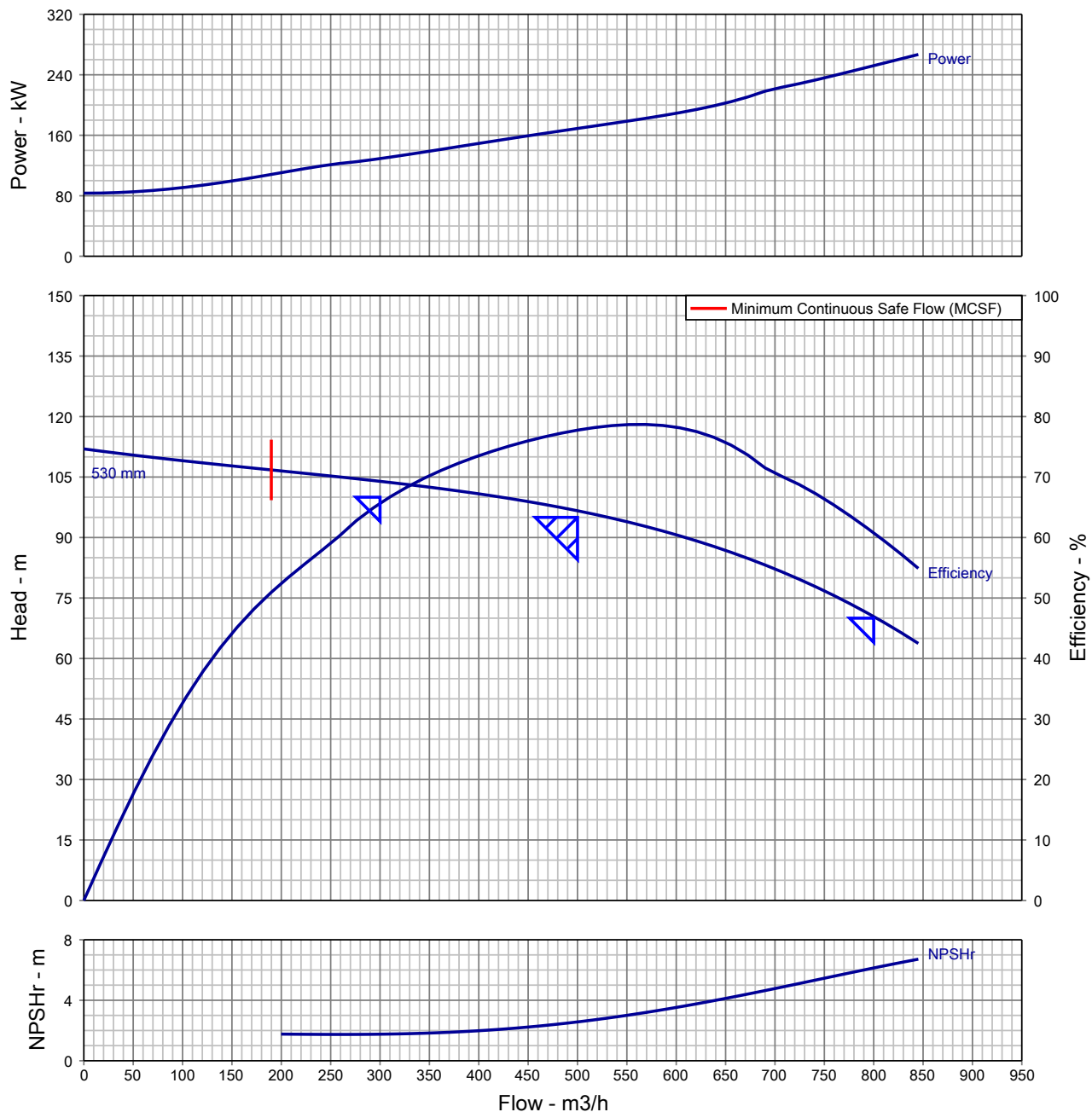
Liuzhou Long Dao Industrial & Trading Co.,Ltd

Mobile: +86 130 8772 3334 Tel:/Fax: +86 (0)772-2875155

Web: <http://longdaodieselengine.com>

Address:No.3-9-7, Sunshine 100, Guizhong Avenue South No.2, Liuzhou, Guangxi, China.

Pump Performance Curve

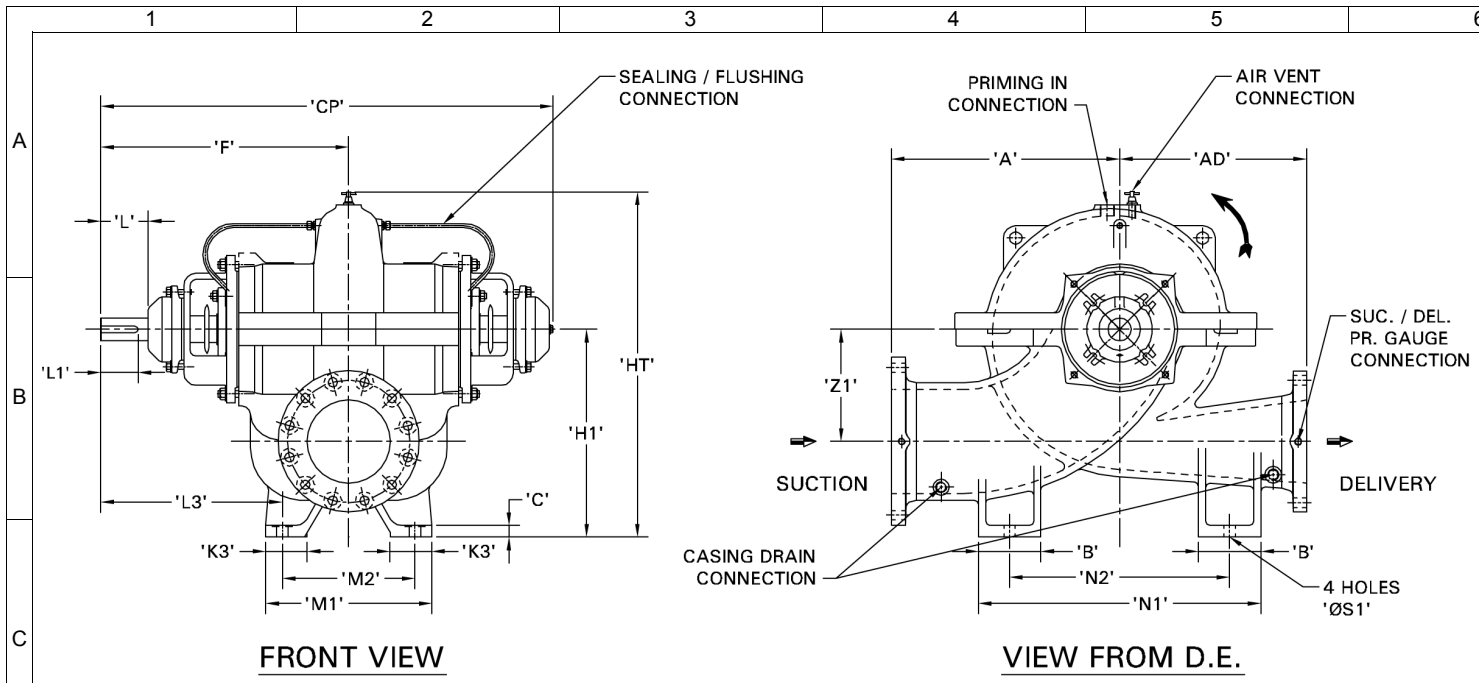



Customer	:	Pump Size/ Stages	: UP150/53F/ 1
Customer enquiry	:	Speed, rated	: 1487 rpm
Project	: Default	Based on curve number	: HA17407AB0 Rev 0
Quote number	: 312657	Viscosity	: 1.00 cSt
Item number	: 001	Cq/Ch/Ce/Cn [HI2010]	: 1.00 / 1.00 / 1.00 / 1.00
Quantity	: 1	Minimum recommended driver rating	: 275 kW / 369 hp
Flow, rated	: 500.0 m ³ /h	Performance testing standard	: ISO 9906 / ANSI-HI 14.6 Gr 2B
Differential Head	: 95.00 m	Date last saved	: 08 Dec 2020 12:03 PM
Fluid density rated	: 0.998 kg/dm ³	Notes:	
Efficiency	: 77.75 %	1.	Performance at shut off condition is approximate.
Power, rated	: 169 kW	2.	Rated impeller diameter is approximate.
NPSH required	: 2.57 m	3.	Only duty point is guaranteed as per testing standard.
Liquid Type/ Application	: Water		



Enriching Lives

Pump Performance Datasheet			
General			
Customer	:	Quote number	: 312657
Customer Enquiry No.	:	Pump model	: UP150/53F
Project	: Default	Stages	: 1
End user	: -	Based on curve number	: HA17407AB0 Rev 0
Tag number	: 001	Date last updated	: 08 Dec 2020 12:03 PM
Service	: -	Quantity of pumps	: 1
Operating Conditions		Liquid	
Flow, rated	: 500.0 m3/h	Liquid handled	: Water
Suction pressure, rated / max	: 0.00 bar.g / 0.00 bar.g	Additional liquid description	: Fresh Water
Discharge pressure, rated	: 9.46 bar.g	Temperature, max	: 20.00 deg C
Head, rated (requested)	: 95.00 m	Solids diameter, max	: 0.00 mm
NPSH available, rated	: Value not specified	Solids in suspension by volume	: 0.00 %
Frequency	: 50 Hz	Specific gravity, rated / max	: 0.998 / 0.998 kg/dm3
Performance		Viscosity, Rated / Max.	: 1.00 cSt / -
Pump speed, rated	: 1487 rpm	Driver & Power Data	
Impeller Dia, Rated (Approx.)	: 530 mm	Driver sizing specification	: Maximum Power
Impeller diameter, maximum	: 530 mm	Margin over specification	: 0.00 %
Impeller diameter, minimum	: 440 mm	Power, rated	: 169 kW
Efficiency at duty point	: 77.75 %	-	: 0.00 kW
NPSH required / margin required	: 2.57 m / 0.50 m	-	: -
MCSF	: 189.9 m3/h	Driver Rating	: 275KW
Cq/Ch/Ce: [-]	: 1.00 / 1.00 / 1.00	Pressure Data	
Water eq. duties (Qw/Hw/Ew)	: 500.0 m3/h / 95.00 m / 77.75 %	Maximum working pressure	: 10.96 bar.g
Suction / Delivery nozzle size	: 200 mm / 150 mm	Maximum allowable working pressure	: 10.79 bar.g
Noise level	: 90 dB	Maximum allowable suction pressure	: 1.96 bar.g
Vibration level (RMS)	: 6.1 mm/s	Hydrostatic test pressure	: 16.18 bar.g
Test standard	: ISO 9906 / ANSI-HI 14.6 Gr 2B	Construction	
Starting condition	: Closed Delivery Valve	Basic construction	: Horizontal Split Case Pump-BB1
		Impeller type	: Enclosed
		Selection status	: Near Miss
		Rec. Pipe Size (Suc / Del)	: 300 mm / 300 mm
Material			
MOC Code	: 01MOC		
Material (Casing / Impeller / Shaft)	: CI IS210:FG260 (012) / CI IS210:FG260 (012) / CS IS1570:40C8 HOT RLD (053)		
-	: -		



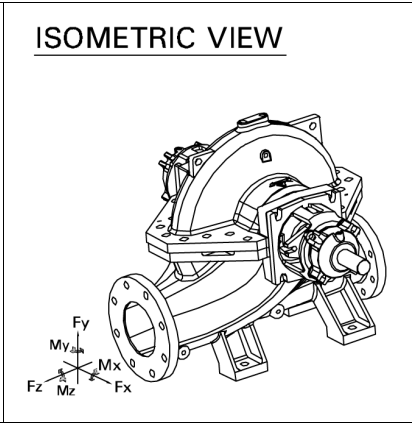
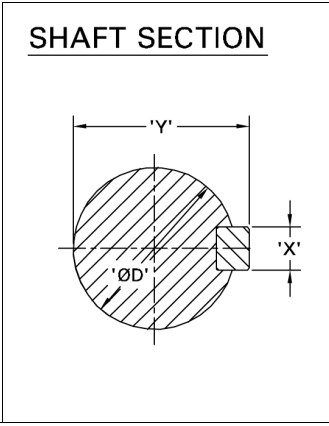

 Enriching Lives

PUMP DUTIES			
CAPACITY	500.0 m ³ /h	EFFICIENCY	77.75 %
TOTAL HEAD	95.00 m	PUMP INPUT	169 kW
DENSITY	0.998 kg/dm ³	NPSHR	2.57 m

FLANGE DRILLING STANDARD AND DETAILS					
SUCTION	BSEN 1092 PN16 FF		DELIVERY	BSEN 1092 PN16	
	NOM. SIZE	RF DIA.	P.C.D.	NO OF HOLES	HOLE DIA.
SUCTION	200 mm	N.A.	295 mm	12	22.0
DELIVERY	150 mm	N.A.	240 mm	8	22.0

ALLOWABLE NOZZLE LOADING						
	FORCES			MOMENTS		
	Fx	Fy	Fz	Mx	My	Mz
SUCTION	178.1 kgf	445.2 kgf	356.1 kgf	2,668 N.m	1,334 N.m	1,334 N.m
DELIVERY	133.0 kgf	334.1 kgf	267.1 kgf	2,001 N.m	1,001 N.m	1,001 N.m

TAPPING DETAILS		DESCRIPTION	SIZE / TYPE
		Suction Gauge	3/8"BSP
		Delivery Gauge	3/8"BSP
		Casing Drain	1/2"BSP
		Casing Vent	3/8"BSP
		Bearing Cooling in / out	-
		Pad Cooling in / out	-
		Priming in	1/2"BSP
		Base Drain	1 BSP



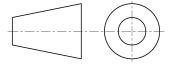
NOTES:
 • ALL DIMENSIONS ARE IN mm
 ..

IMPORTANT: THIS DRAWING IS THE PROPERTY OF Kirloskar Brothers Limited AND MUST NOT BE USED OR COPIED WITHOUT THEIR AUTHORITY IN WRITING.

A	AD	B	C	CP	F	-	-	H1	HT	K3	L1	L3	M1	M2	N1
500	450	150	25.00	1,077	592	-	-	500	890	100	85.00	432	400	320	750

N2	-	-	S1	Z1	D	X	Y	L	-	-	-	-	-	-	-
600	-	-	27.00	320	55.00	16.00	59.00	110	-	-	-	-	-	-	-

DIRECTION OF ROTATION FROM DE		COUNTER CLOCKWISE	
PUMP	UP150/53F	PUMP WT.	588.0
		GD*2	5.07 kg
REC. DRIVER RATING	275KW	RATED SPEED	1487R
ENQ. NO./DATE	/	QUANTITY	1
PO. NO./DATE	-	TAG NO.	001
QUOTATION NO.	0	DATE	-
O/A NO.	-	MISI	-
CUSTOMER	-		
END USER	-		
PROJECT	Default		
CONSULTANT	-		
SERVICE	-		



Kirloskar Brothers Limited
 KIRLOSKARVADI - 416308, DIST. - SANGLI (INDIA)