

DIESEL ENGINE

KDP SERIES FOR FIRE PUMP

Model: 4KDP-30

Engine Specifications

In-Line, 4 stroke, water-cooled, Natural Aspiration

Combustion type	Direct injection
Cylinders - Bore × stroke	4 - 85 × 95 mm
Displacement	2157 cc
Firing order	1 – 3 – 4 – 2
Compression ratio	22 : 1
Dry weight	Approx. 220 kg
Dimension(LxWxH)	750 × 500 × 650 mm
Rotation	Anti-clockwise
Flywheel / Housing	SAE # 7.5 / # 4

Cooling System

Cooling method	Fresh water forced type
Water pump	Centrifugal, Belt driven
Max. water Temp	95 degree C.
Cooling Fan	Blade 7EA - Ø 410 mm

Intake & Exhaust System

Max air restriction	Clean 2 kPa / Dirty 5 kPa
Exhaust back	Max 6 kPa

Electric System

Charging generator	13.5 V × 36 A
Starting motor	12 V × 3.7 kW
Battery	12 Vx 120 Ah

Prime power
Standby Power

30.0KW(40HP)/3000 rpm
33.0KW(44HP)/3000 rpm

Fuel System

Injection pump	Direct Injection type
Governor	Mechanicaltype
Feed pump	Mechanicaltype
Injection nozzle	Multi-hole type/ 0.245 mm
Opening pressure	20+0.5MPa
Fuel filter	Single Stage, Paper

Fuel Consumption

Prime power at 3000rpm	8.0 liters/h
Standby Power at 3000rpm	8.8 liters/h

Lubrication System

Lub. Oil Pan Capacity	5.5 liters
Max. allowable Oil Temp	110 degree C.
	Min. 294 kPa
Oil pressure	Max. 490 kPa

Engineering Data

Combustion Air	1.60m ³ /min
Exhaust Gas	3.90m ³ /min

Conversion Table

PS = kW × 1.3596	in. = mm × 0.0394
psi = kg/cm ² × 14.2233	
HP= PS x 0.98635	