

# DIESEL ENGINE

## KDP SERIES FOR FIRE PUMP

### Model: 4KDP-75

#### Engine Specifications

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

Combustion type	Direct injection
Cylinders - Bore × stroke	4 - 108 × 118 mm
Displacement	4324 cc
Firing order	1 – 3 – 4 – 2
Compression ratio	18 : 1
Dry weight	Approx. 350 kg
Dimension(LxWxH)	885 × 640 × 810 mm
Rotation	Anti-clockwise
Flywheel / Housing	SAE # 10 / # 3

#### Cooling System

Cooling method	Fresh water forced type
Water pump	Centrifugal, Belt driven
Max. water Temp	95 degree C.
Cooling Fan	Blade 7EA - Ø 450 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 × 65 A
Starting motor	12 V × 3.7 kW
Battery	12 Vx 120 Ah

**Prime power**  
**Standby Power**

**75.0KW(100HP)/3000 rpm**  
**82.5KW(110HP)/3000 rpm**

#### Fuel System

Injection pump	Direct Injection type
Governor	Mechanicaltype
Feed pump	Mechanicaltype
Injection nozzle	Multi-hole type/ 0.255 mm
Opening pressure	20+0.5MPa
Fuel filter	Single Stage, Paper

#### Fuel Consumption

Prime power at 3000rpm	20.0 liters/h
Standby Power at 3000rpm	22.0 liters/h

#### Lubrication System

Lub. Oil Pan Capacity	8 liters
Max. allowable Oil Temp	110 degree C.
	Min. 294 kPa
	Max. 490 kPa
Oil pressure	

#### Engineering Data

Combustion Air	3.10m <sup>3</sup> /min
Exhaust Gas	7.76m <sup>3</sup> /min

#### Conversion Table

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

# PERFORMANCE CURVE

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Prime power 75.0KW(100HP)/3000 rpm  
 Standby Power 82.5KW(110HP)/3000 rpm

