

DIESEL ENGINE

KDP SERIES FOR FIRE PUMP

Model: 4KDP-90

Prime power 90.0KW(120HP)/3000 rpm
Standby Power 99.0KW(132HP)/3000 rpm

Engine Specifications

In-Line, 4 stroke, water-cooled, Turbocharger
 Combustion type Direct injection
 Cylinders - Bore × stroke 4 - 105 × 118 mm
 Displacement 4087 cc
 Firing order 1 – 3 – 4 – 2
 Compression ratio 18 : 1
 Dry weight Approx. 395 kg
 Dimension(LxWxH) 950 × 660 × 830 mm
 Rotation Anti-clockwise
 Flywheel / Housing SAE # 10 / # 3

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 25.0 liters/h
 Standby Power at 3000rpm 27.5 liters/h

Cooling System

Cooling method Fresh water forced type
 Water pump Centrifugal, Belt driven
 Max. water Temp 95 degree C.
 Cooling Fan Blade 7EA - Ø 500 mm

Lubrication System

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

Intake & Exhaust System

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

Engineering Data

Combustion Air 3.72m³/min
 Exhaust Gas 9.31m³/min

Electric System

Charging generator 13.5 V × 65 A
 Starting motor 12 V × 3.7 kW
 Battery 12 Vx 120 Ah

Conversion Table

PS = kW × 1.3596 in. = mm × 0.0394
 psi = kg/cm² × 14.2233
 HP= PS x 0.98635