

DIESEL ENGINE

KDP SERIES FOR FIRE PUMP

Model: 3KDP-22

Prime power 22.0KW(30HP)/3000 rpm
Standby Power 24.2KW(33HP)/3000 rpm

Engine Specifications

In-Line, 4 stroke, water-cooled, Natural Aspiration
 Combustion type Direct injection
 Cylinders - Bore × stroke 3 - 85 × 90 mm
 Displacement 1532 cc
 Firing order 1 – 3 – 2
 Compression ratio 22 : 1
 Dry weight Approx. 190 kg
 Dimension(LxWxH) 642 × 494 × 639 mm
 Rotation Anti-clockwise
 Flywheel / Housing SAE # 7.5 / # 4

Fuel System

Injection pump Direct Injection type
 Governor Mechanicaltype
 Feed pump Mechanicaltype
 Injection nozzle Multi-hole type/ 0.23 mm
 Opening pressure 22+0.5MPa
 Fuel filter Single Stage, Paper

Fuel Consumption

Prime power at 3000rpm 6.3 liters/h
 Standby Power at 3000rpm 7.0 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 410 mm

Lubrication System

Lub. Oil Pan Capacity 4 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 1.39m³/min
 Exhaust Gas 3.49m³/min

Electric System

Charging generator 13.5 V × 36 A
 Starting motor 12 V × 3.0 kW
 Battery 12 Vx 80 Ah

Conversion Table

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