

# DIESEL ENGINE

## KDP SERIES FOR FIRE PUMP

### Model: 4KDP-45

**Prime power** 45.0KW(60HP)/3000 rpm  
**Standby Power** 49.5KW(66HP)/3000 rpm

#### Engine Specifications

In-Line, 4 stroke, water-cooled, Natural Aspiration  
 Combustion type Direct injection  
 Cylinders - Bore × stroke 4 - 90 × 105 mm  
 Displacement 2672 cc  
 Firing order 1 – 3 – 4 – 2  
 Compression ratio 18 : 1  
 Dry weight Approx. 250 kg  
 Dimension(LxWxH) 800 × 636 × 765 mm  
 Rotation Anti-clockwise  
 Flywheel / Housing SAE # 7.5 / # 4

#### Fuel System

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

#### Fuel Consumption

Prime power at 3000rpm 11.1 liters/h  
 Standby Power at 3000rpm 12.2 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 6.5 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

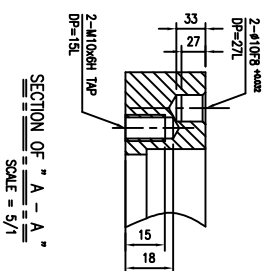
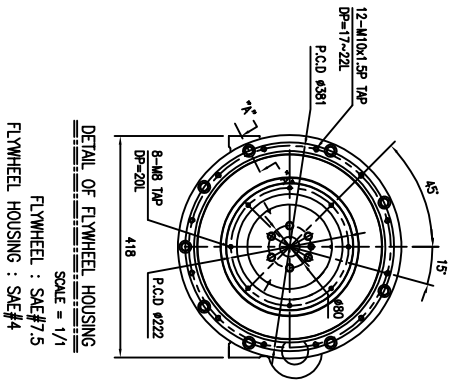
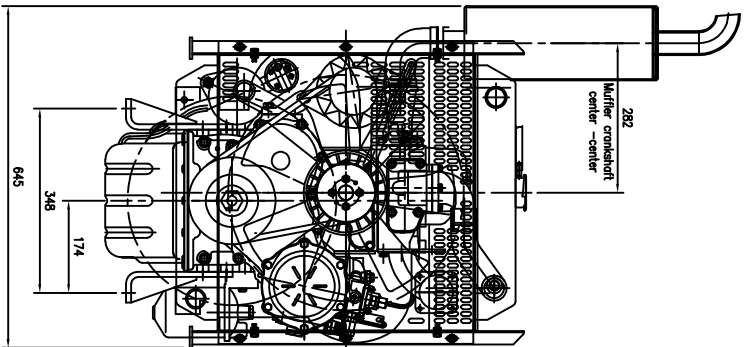
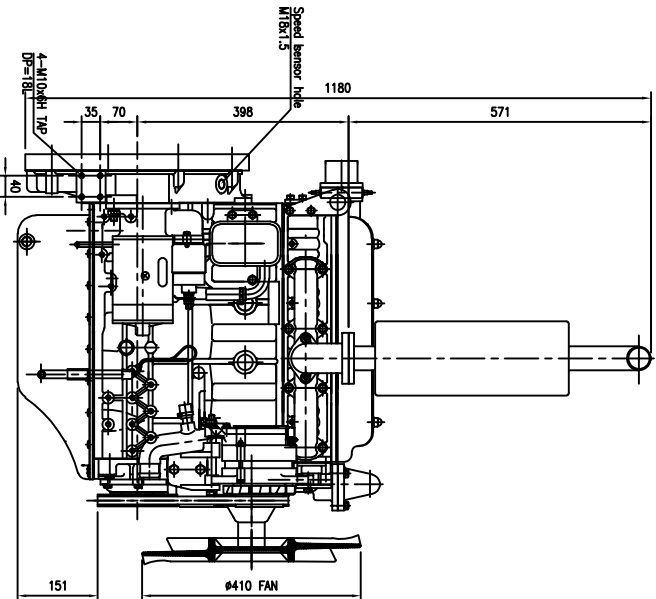
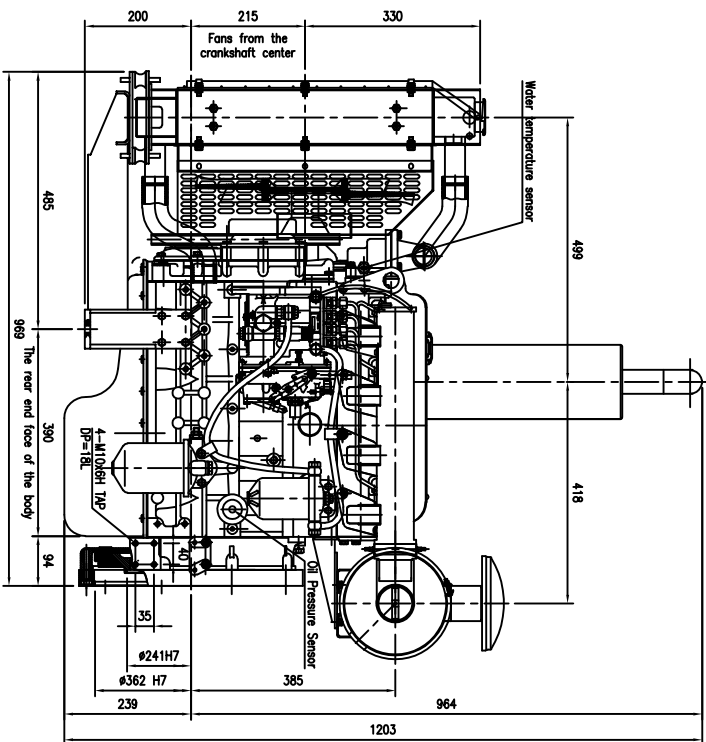
Combustion Air 1.92m<sup>3</sup>/min  
 Exhaust Gas 4.79m<sup>3</sup>/min

#### Electric System

Charging generator 13.5 V × 36 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/cm<sup>2</sup> × 14.2233  
 HP= PS x 0.98635



CUSTOMER		TITLE	
-		KODDEC ENGINE ASSEMBLY	
SCALE	1/11	DATE	
DESIGN		16/09/20	
CHECKED			
APPROVAL			
DESIGN APPROVAL			
CONTRACT NO.		REV. NO.	
JOB NO. 2011109-08		4KDP-45	
REVISED		REVISION	