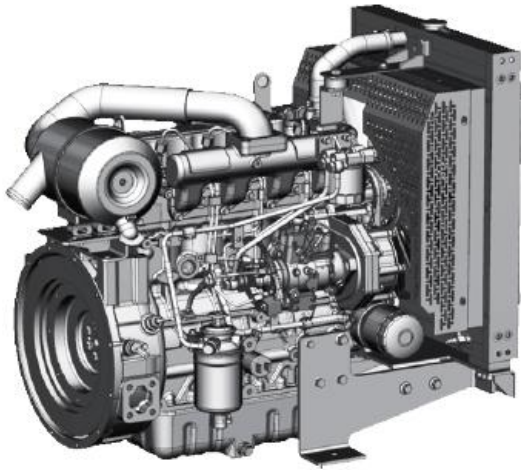


Water Pump Application



General Engine Data

Family name	4D24
Type	Vertical In-line, Water Cooled, diesel Four Stroke
Combustion System	Direct Injection
Cylinder NO.	4
Bore x Stroke	87 mm x 103 mm
Displacement	2.45 litres
Compression Ratio	19.0 : 1
Induction System	Naturally Aspirated
Firing Order	1 - 3 - 4 - 2
Flywheel (inch)	7.5"
Flywheel Housing	SAE #4
Emission Level	Stage IIIA

Water Pump Performance

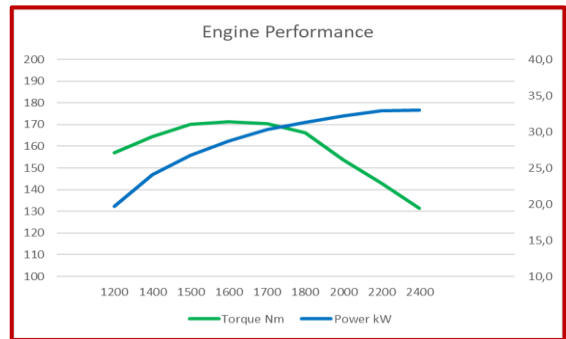
Raywin Engine Power

Model	Max Power (*) @ engine speed (kW / rpm)
4D2401/A	33 @ 2400

Note: Oil consumption (% fuel): ≤ 0.1

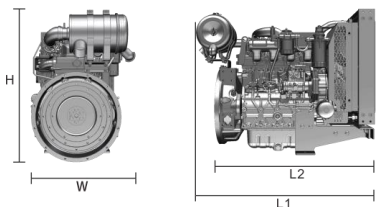
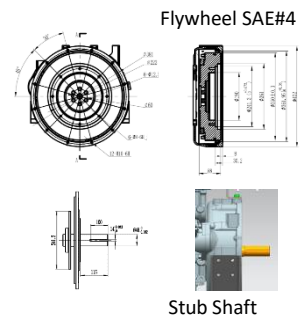
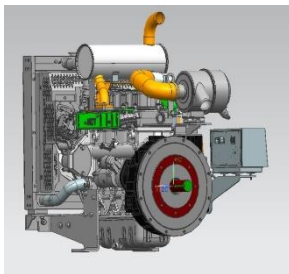
(*): **Net power** at flywheel according to 97/68 EC (including fan), after 50 hours running, 3% tolerance Fuel Diesel EN590

Test conditions: 25°C air temperature, 100kPa atmospheric pressure, 30% relative humidity



Characteristic

1. Natural aspirated engine, very compact, small in size and light in weight;
2. The tunnel type with no cylinder liner block body, good rigidity and low oil consumption (the fuel oil ratio is less than 0.1%);
3. Original Stanadyne fuel pump, low swirl rate air flue, porous small aperture injector, strong power and excellent performance.
4. With NVH optimization, low noise, low vibration, small heat load, to achieve the international advanced level of similar models.
5. Equipped with muffler (loose), air filter and radiator configuration.
6. 12V electrical system, equipped with rotational speed, water temperature and oil gauge sensor.
7. Available with SAE #4 (standard) or #3 flywheel Housing or with stub shaft.



Installation Information: Engine Dimension & Weight

Model	Weight (kg)	Dimensions (mm)			
		L1	L2	W	H
4D2401/A	240	982	851	534	775

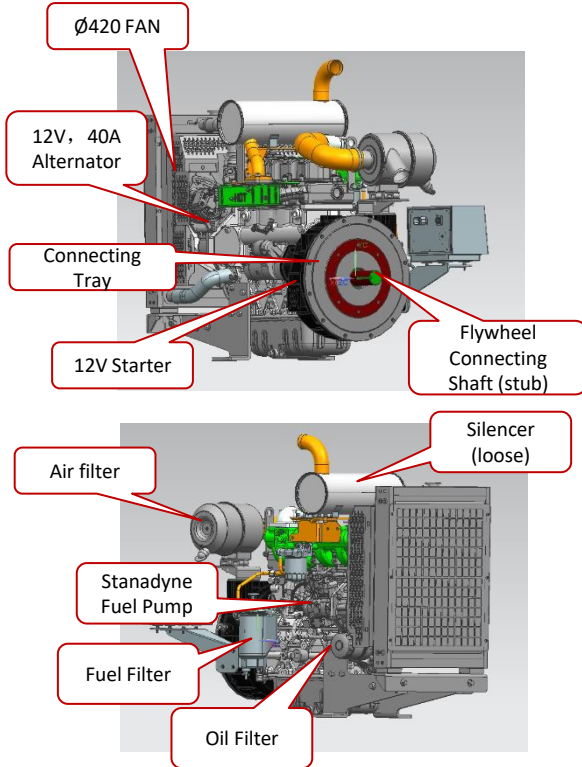
Water Pump Application

Raywin Engine Scope of Supply

Standard & Options Scope of delivery

Standard: Rigid Supports, Air/Water radiator mounted, double V-belts, moving guards, air filter, oil filter, fuel filter, fuel pre-filter, SAE#4/7,5 inch, HWT alarm & sensor, LOP alarm & sensor, 12V electric system, electrical feed pump;

Options: Silencer (*given loose*), SAE#3/11,5 inch, Stub shaft, control panel, 24V electric system



Raywin Engine Features

Startability & Operating Temperatures

Unaided Starting	-10°C
Aided Starting	-30°C
Ambient operating temperatures	-30°-45°C
Options: Solutions for more than 45°C and below -30°C	

Raywin Engine Features

Easy Service Features

Same side maintenance: Oil, Fuel and Air filter are on the same side	
Fuel filter change interval (hr)	250 or each 12 months
Oil filter change interval (hr)	250 or each 12 months
Alternator belt replacement (hr)	800 or each 24 months
Coolant change (months)	24



Note: As per technology improvements, the above parameters will continue to evolve in accordance with new legislations. The information in this brochure may be changed or upgraded without prior notice