

SPECIFICATIONS

Thermodynamic Cycle	Diesel 4 stroke	
Air Handling	TAA	
Arrangement	4L	
Bore x Stroke (mm)	99 X 104	
Total Displacement (L)	3,2	
Valves per cylinder (n°)	2	
InjectionSystem	M	
Speed governor	mechanical	
Cooling System	liquid (water - parafu 50%)	
Direction of Rotation (viewed facing flywheel)	CCW	
Oil specifications	ACEA E3-E5	
Oil consumption	<0.1% of fuel consumption	
Fuel specifications	EN 590	
Oil and oil filter maintenance interval for replacement [***] (hours)	600	
Specific fuel consumption at:	1500	1800
- Stand-By l/h (g/kWh)	-	-
- 100% load l/h (g/kWh)	12,6 (219)	-
- 80% load l/h (g/kWh)	10,2 (220)	-
- 50% load l/h (g/kWh)	6,5 (225,5)	-
ATB (without canopy) (°C)	50	-
Coolant capacity: engine + radiator (l)	~ 19,5	
Coolant capacity: engine only (l)	~ 4,5	
Lube oil total system capacity including pipes, filters etc. (l)	~ 10,5	
Electric system (isolated return)	12	
Starting batteries: recommended capacity (Ah)	100	
Discharge Current (EN50342) A	650	
Cold starting: without preheating (°C)	-10	
Cold starting: with preheating (°C)	-25	

WEIGHT AND DIMENSIONS

Dimensions (LxWxH)	1200 X 600 X 930
Dry Weight	Kg 400

PERFORMANCE

Ratings ¹	1500 rpm		1800 rpm	
	PRIME	STAND-BY	PRIME	STAND-BY
Rated Power kWm ²	47	51,5	-	-

1) Ratings in accordance with ISO 8528. For duty at temperature over 40°C and/or altitude over 1000 meters must be considered a power derating factor. Contact the FPT sales organization.
2) Net power at flywheel available after 50 hours running with a ±3% tolerance.

PRIME POWER: The prime power is the maximum power available with varying loads for an unlimited number of hours. The average power output during a 24h period of operation must not exceed 80% of the declared prime power between the prescribed maintenance intervals and at standard environmental conditions. A 10% overload is permissible for 1 hour every 12 hours of operation.

STAND-BY POWER: The stand-by power is the maximum power available for a period of 500 hours/year with a mean load factor of 90% of the declared stand-by power. No kind of overloads is permissible for this use.

CONTINUOUS POWER: Contact the FPT sales organization.

Legend

Arrangement	Air Handling	InjectionSystem	Emission Standard
L (in line) V (90° "V" configuration)	TAA (Turbocharged with aftercooler) TC (Turbocharged) NA (Naturally Aspirated)	M (Mechanical) ECR (Electronic Common Rail) EUI (Electronic Unit Injector)	I-EGR (Internal EGR)

FOR INFORMATION ON THE AVAILABLE RATINGS NOT LISTED IN THIS DOCUMENT PLEASE CONTACT THE FPT INDUSTRIAL SALES NETWORK OR VISIT OUR SITE WWW.FPTINDUSTRIAL.COM

FEATURES	BENEFITS
PERFORMANCE Class G2 of ISO 8528 standard certification excellent performance related to load acceptance.	EXCELLENT TRANSIENT LOAD RESPONSE FOR SEVERAL POWER GENERATION APPLICATIONS
MECHANICAL INJECTION SYSTEM Based on simple and proven mechanical rotary pump F5 engine have a direct fuel injection system which is state of the art for accurate fuel delivery. The mechanical pump is the best compromise between performance and easy engine installation.	SIMPLE AND EASY TO INSTALL SOLUTION, CONSISTENT WITH STANDARD AND ALTERNATIVE FUELS
ENGINE DESIGN Camshaft in crankcase, suspended oil pan, balancer counterweights incorporated in crankshaft webs.	VIBRATION & NOISE REDUCTION
SPECIFIC FEATURES Leanean layout; starting temperature without auxiliaries down to -10°C (with grid heater down to -25°). Tier 4A and Stage IIIA performance achieved without external EGR, VGT or electronics.	HIGH PERFORMANCE GUARANTEED IN ALL CONDITIONS
AIR HANDLING F5 Series engines are available in naturally aspirated, turbocharged and turbocharged with aftercooler versions, in order to reach the highest engine performance in terms of load acceptance and fuel consumption. These features allow final users to optimize their engine installation & final genset performance.	HIGH ENGINE POWER DENSITY WITH THE SHORTEST LOAD RESPONSE TIME
600H OIL INTERVAL CHANGE Optimum engine design in terms of mechanical clearances, piston rings, engine oil system calculation and optimized engine structure to limit cylinder liners deformation.	REDUCED MAINTENANCE NEEDS AND OPERATING COSTS
COMPONENT INTEGRATION Integrated CCV (Closed Crankcase Ventilation) system and engine design oriented to high components integration. Water-oil cooler, oil and water pumps with by-pass are fully integrated in the block.	LEAKAGE PREVENTION
SERVICEABILITY & MAINTENABILITY One side (left) engine maintenance layout and worldwide service network.	QUICK SERVICE SUPPORT AND EASY MAINTENANCE
OPTION LIST Options for electronic speed governor; hot part guards, water jacket heater, alarm senders, oil drain systems, front radiator guard.	CUSTOMER ORIENTATION AND SPECIFIC ENGINE ARCHITECTURE BASED ON APPLICATION TYPE

STANDARD CONFIGURATION

- FPT engine F32 TM1A equipped with:
- Mounted radiator incorporating air-to-air charge cooler
 - Fan guard
 - Mounted belt driven pusher fan
 - Fan guard
 - Mounted air filter with replaceable cartridge
 - Fuel filter
 - Primary fuel filter/water separator
 - Replaceable oil filter
 - Front engine mounting brackets
 - Flywheel housing SAE3 and flywheel 11" 1/2
 - Re-directable exhaust gas elbow
 - Recircled oil breather system
 - Oil dipstick
 - 12 Vdc electrical system
 - User's handbook
- THE ENGINE IS SUPPLIED WITHOUT LIQUIDS

OPTIONAL EQUIPMENT

- On request the engine can be supplied with:
- Oil drain pump
 - Oil drain valve
 - 120/230 Volt water jacket heater
 - WT and OP sensors for gauges
 - Low water level sensor
 - Turbo and exhaust gas guards
 - Exhaust gas flexible joint

FPT INDUSTRIAL OFFERS THE WIDEST AVAILABILITY OF ENGINE BUILD OPTIONS TO CUSTOMER SPECIFIC REQUIREMENTS WITHIN THE ENGINE SUPPLY. TO FIND OUT MORE ABOUT THE CONFIGURATIONS AND ACCESSORIES WHICH ARE AVAILABLE