

# C90 380

## C87 ENT M38

### 6 CYLINDERS IN LINE - DIESEL CYCLE

301 kW (410 HP) @ 2000 rpm (C)

280 kW (380 HP) @ 2000 rpm (D)

#### Specifications

Thermodynamic cycle		Diesel 4 stroke
Air intake		TAA
Arrangement		6L
Bore x Stroke	mm	117 x 135
Total displacement	l	8.7
Valves per cylinder	n.	4
Cooling system		liquid
Direction of rotation (viewed facing flywheel)		CCW
Engine management		electrical
Injection system		Electronic Common Rail (E.C.R.)

#### Electrical system

Voltage	V	24
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#### Standard configuration

Flywheel housing	type	SAE 1
Flywheel size	inch	14
Air filter		rear side
Turbocharger		Waste Gate (water cooled) Turbo with Aftercooler (TAA)
Double water circuit heat exchanger		tube type
Exhaust cooled elbow		-
Water charge tank		included
Fuel filter	n.	1 - right side
Fuel prefilter		1 (supplied loose)
Fuel pump		1 gear driven
Oil filter	n.	2 - left side
Oil sump		aluminium
Oil vapours blow-by circuit		included
Oil heat exchanger		included
Oil filler		on timing cover
Starting motor		24V - 5.5kW
Alternator		28V - 90A
Engine stop device		by electronic central unit
Wiring harness		with EDC (Engine Diesel Control)
Painting	color	white "ICE"

#### Not included in the standard configuration

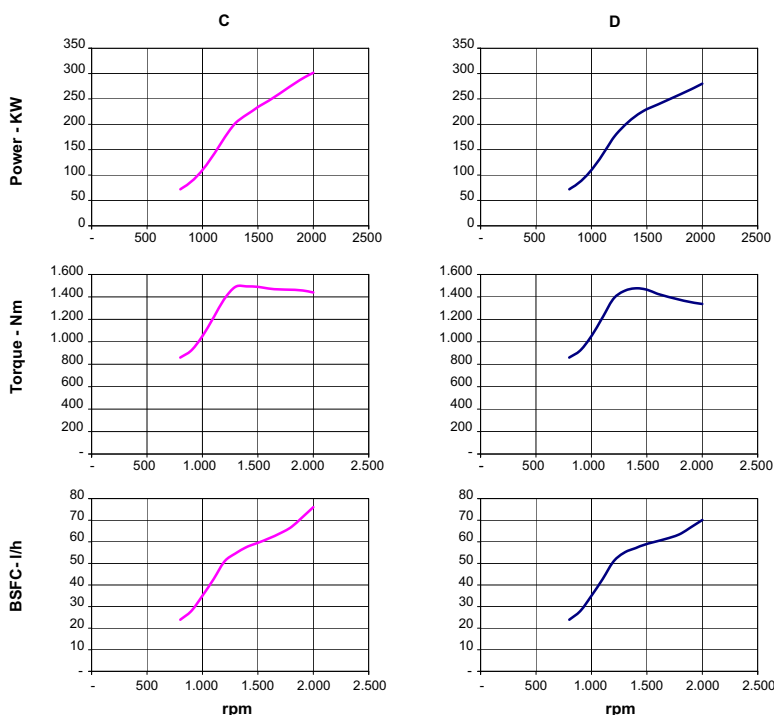
Battery - minimum capacity recommended		2 x 120 Ah
Battery - minimum cold cranking capacity recommended		900 A

FPT 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, CONTACT THE FPT SALES NETWORK.

Rating type		C	D
Maximum power [*]	kW(HP)	301 (410)	280 (380)
At speed	rpm	2000	2000
Maximum no load governed speed at max rating	rpm	2200	
Minimum idling speed	rpm	600	
Mean piston speed at rated speed	m/s	9	
BMEP at max power	kg/cm <sup>2</sup>	21.2	19.6
Specific fuel consumption at full load (best value)	g/kWh	214.9	210.3
Oil consumption at max rating	(% of fuel cons.)	≤ 0.2	
Minimum starting temperature without auxiliaries	°C	-10	
Oil and oil filter maintenance interval for replacement	hours	500	

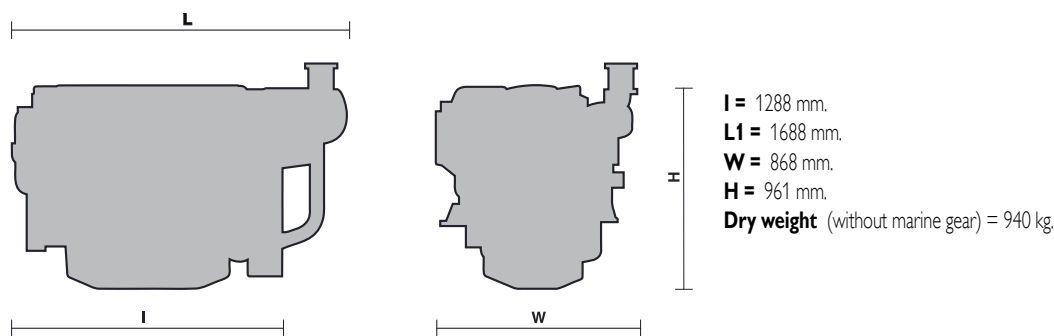
\* **Net Power** at flywheel according to ISO 3046/1, after 50 hours running, Fuel Diesel EN 590. Power tolerance 5%.

**Test conditions:** ISO 3046/1, 25 °C air temperature, 100 kPa atmospheric pressure, 30 % relative humidity .



**C** = Medium duty.  
 Full throttle operation < 25% of use period.  
 Crushing speed at engine rpm < 90% of rated speed setting.  
 Maximum usage 3000 hours per year.

**D** = Heavy duty.  
 Maximum rating utilization up to 100% of use period for unlimited hours per year.



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 Specifications subject to change without notice.  
 Illustrations may include optional equipment.