

CR16 TE1W

559 kW (1500 rpm) - 582 kW (1800 rpm)

Engine CR16 TE1W

1/ GENERAL		1500 rpm	1800 rpm
Engine model		CR16TE1W	
Basic engine type		F3JFA615A*D001 - 5802085824 XZ	
Number of cylinders		6	
Firing order (cylinder 1 nearest to fan)		1-4-2-6-3-5	
Cylinder arrangement		in line	
Valves per cylinder		4	
Cycle		diesel 4 stroke	
Injection system		direct E.U.I	
Electronic engine control unit		BOSCH EDC17 UC41	
Induction System		turbo intercooler	
Bore	mm	141	
Stroke	mm	170	
Total displacement	lit	15,90	
Mean piston speed	m/s	8,5	10,2
Compression ratio		16.5:1	
Flywheel rotation		anti clockwise viewed on flywheel	
Housing flywheel		SAE 1	
Flywheel		14"	
Moment of inertia			
	without flywheel	kgm ²	-
	flywheel only	kgm ²	2,17
BMEP gross			
	Prime Power	bar/kPa	25,60 22,70
	Stand-by Power	bar/kPa	28,60 25,00
Dry weight (including cooling package)	kg	1450	
Energy to coolant	kcal/kWh	179,5 kW	117,2kW
Energy to charge cooler	kcal/kWh	108,7kW	112kW
Energy to radiation	kcal/kWh	-	-
Dimensions L x W x H	mm	2353x1114x1605	

2/ PERFORMANCES		1500 rpm	1800 rpm
Continuous Power	(gross)	kWm	(% (37
Prime Power	(gross)	kWm	51, 54*
Stand-By Power	(gross)	kWm	570 601
Fan consumption		kWm	% " &&"9
Continuous Power	(net)	kWm	(\$% (%
Prime Power	(net)	kWm	50) 52'
Stand-By Power	(net)	kWm	55+ 5+,
Performance condition			
	temperature	°C	≤ 40
	altitude a.s.l	m	≤ 1000
Derating			
	temperature > T 40°C	%/5°C	4%
	altitude >1000 <3000 m	%/500m	3%
	altitude >3000 m	%/500m	6%
Noise Level (ISO 3744-1981)*		(dBA)	103
Load Acceptance (ISO 8528-5)*		%(G2)	65%

*preliminary

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3/ COOLING SYSTEM		1500 rpm	1800 rpm	
Type			liquid	
Recommended coolant			see dedicated table	
Coolant capacity				
engine only	liter		27	
radiator and hoses	liter		25,5	
Coolant pump flow	l/min	409	488	
Pressure cap setting	kPa (bar)		100 (1)	
Shutdown switch setting	°C		103	
Maximum additional restriction	kPa		30	
Air To Boil	Prime Power	°C	53	54
Fan				
diameter	mm		890	
number of blades			9	
drive ratio			1:1	
speed	rpm	1500	1800	
air flow	m ³ /s	0,007	0,008	
power consumption	kWm	11	19	

4/ LUBRICATION SYSTEM		1500 rpm	1800 rpm
Oil sump capacity			
max	liter		32
min	liter		24
Oil system capacity including filter	liter		32
Oil pressure at rated speed	kPa		250-500
Oil temperature			
normal	°C		---
max	°C		98,2
Engine Angularity			
longitudinal	degrees		10
transverse	degrees		10
Servicing interval	hours		depending on lube oil
Oil specification			see dedicated table
Oil consumption	%fuel		0.2 max

5/ INTAKE SYSTEM		1500 rpm	1800 rpm
Air consumption at 100 % of load	m ³ /h (Kg/h)	2630 (2250)	2995 (2560)
Air intake restriction, clean filter	kPa (mbar)		3.5 (35)
Air intake restriction, dirty filter	kPa (mbar)		6.5 (65)
Air filter type			dry

6/ EXHAUST SYSTEM		1500 rpm	1800 rpm
Gas flow at stand-by Power	kg/h	2548	2853
Max temperature at PRP (25°C)	°C	557,4	553,8
Max allowable back pressure	kPa (mbar)		7 (70)
Energy to exhaust	kcal/kWh	628	596

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7/ FUEL SYSTEM*

		1500 rpm	1800 rpm
Fuel consumption at			
Stand-By	(l/h)	132	143
Full load PRP	(l/h)	115	128
80%	(l/h)	85	102
50%	(l/h)	57	66
Fuel specifications		EN 590	
Feed pump max suction head	m	---	

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8/ ELECTRIC SYSTEM

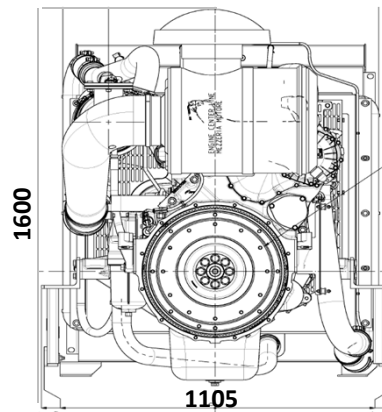
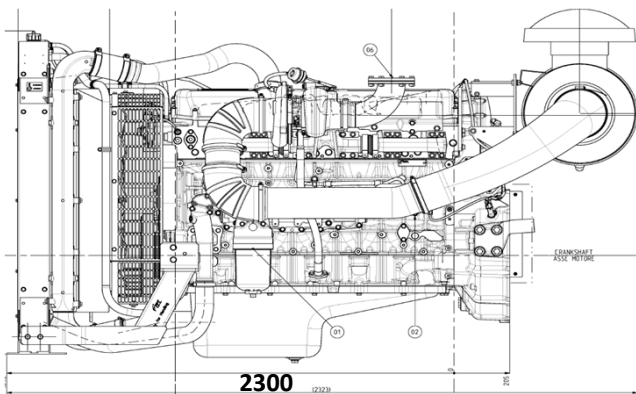
		1500 rpm	1800 rpm
Voltage (negative to ground)	V	24	
Starter motor			
make		DENSO	
power	kW	5,5	
pull current	Amp	12	
hold current	Amp	12	
break away current +20°C	Amp	1260	
cranking current +20°C	Amp		
Number of teeth on starter motor		10	
Number of teeth on flywheel		155	
Starting batteries			
recommended capacity	Ah 2x	185	
discharge current	Amp	1200	
(EN 50342)			
Alternator			
voltage	V	28	
charge	Amp	90	

9/ COLD STARTING

		1500 rpm	1800 rpm
Without air preheating	°C	-	
With air preheating	°C	-	

10/ EMISSION GASEOUS AND PARTICLES

		1500 rpm	1800 rpm
No _x	Oxides of nitrogen	gr/kWh	-
HC	Hydrocarbons	gr/kWh	-
No _x +HC		gr/kWh	-
CO	Carbon monoxide	gr/kWh	-
PT	Particles	gr/kWh	-



Date of update February 2016
Specifications subject to change without notice
Illustrations may include optional equipment.