

Technical data

DC16 093A, 447-496 kW / 501-567 kVA (engine ref. 02-51)

Emission compliance	Fuel injection system
Fuel optimized	PDE

	1500 rpm (50 Hz)		1800 rpm (60 Hz)		Unit
	PRP	ESP	PRP	ESP	
Gross power	451	496	447	492	kW
	514	567	501	553	kVA
Gross torque	2871	3158	2371	2610	Nm
Fuel consumption					
full load 99.81 L/hour	189	191	199	199	g/kWh
3/4 load 75.25 L/hour	190	190	202	200	g/kWh
1/2 load 52.02 L/hour	197	195	211	208	g/kWh
Heat rejection					
to coolant	139	156	158	174	kW
to exhaust gas	288	329	304	341	kW
to charge air	102	107	115	118	kW
to surrounding air	41	45	42	47	kW
Air consumption	40	41	45	46	kg/min
Air temperature					
upstream of charge air cooler	194	199	193	196	°C
downstream of charge air cooler	44	45	45	45	°C
Pressure in intake manifold	2.2	2.3	2.1	2.1	bar
Pressure drop in charge air cooler	0.1	0.1	0.1	0.1	bar
Exhaust flow	41	43	47	47	kg/min
Exhaust temperature	413	452	392	427	°C
Step load performance					
(According to class G2. See section 2 for more information.)	71	65	98	89	%
	322	322	438	438	kW

Cooling performance

 Cooling package 1.5 m², fan Ø965, ratio 1:0.9

	1500 rpm (50 Hz)						1800 rpm (60 Hz)					
	PRP			ESP			PRP			ESP		
Air-on temp* (°C)	62	67	70	60	64	68	68	70	75	64	68	70
Airflow (kg/s)	7	10	17	7	10	17	16	19	20	16	19	20
Restriction (Pa)	350	250	100	350	250	100	260	150	100	260	150	100
Fan power losses (kW)	13						21					