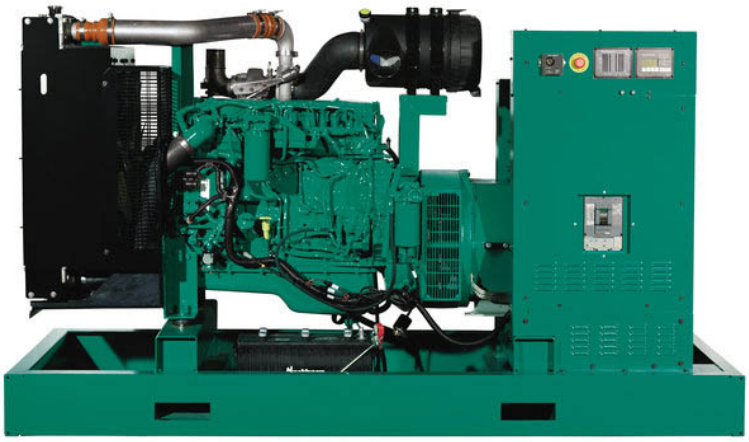
موتور دیزل : Cummins	ژنراتور : Stamford

Standby		Prime		
KVA	KW	KVA	KW	
138	110	125	100	دیزل ژنراتور



موتور دیزل		
Manufacturer	Cummins	تولید کننده
Type	6BTA5.9-G2	تیپ
Number of cylinders	6	تعداد سیلندر ها
Cylinder arrangement	Vertical in-line	آرایش سیلندر ها
Displacement , Liters	5.9	جا به جایی
Bore × Stroke , mm	102 x 120	قطر سیلندر × کورس پیستون
Compression Ratio	16.5 : 1	نسبت تراکم
Aspiration	Turbocharged	سیستم تنفس
Gross engine power, kWb	100	قدرت ناخالص موتور
Combustion air flow, L/sec	135	جریان هوای احتراق
Exhaust gas temp.(after turbo) , °C	481	دمای گاز خروجی از اگزوز
Mean Piston Speed , m/s	6.0	میانگین سرعت پیستون

ژنراتور

Manufacturer	Stamford	تولید کننده
Type	UCI274D	تیپ
Standby power at rated voltage ,KVA	138	توان standby در ولتاژ نامی
Efficiency, %	90.9	راندمان
Power factor	0.8	ضریب قدرت
Phase	3	فاز
Frequency, Hz	50	فرکانس
Speed, Rpm	1500	سرعت
Voltage, V	380	ولتاژ
Stator windings	Double layer concentric	سیم پیچ استاتور
Voltage Regulation, %	± % 1.0	تنظیم ولتاژ
Over speed, Rpm	2250	حداکثر سرعت مجاز
Short circuit ratio	1/Xd	جریان اتصال کوتاه
Insulation class	H	کلاس عایق
Protection class	IP23	کلاس حفاظتی
Cooling air volume,m^3 / sec	0.514	دبی هوای خنک کننده

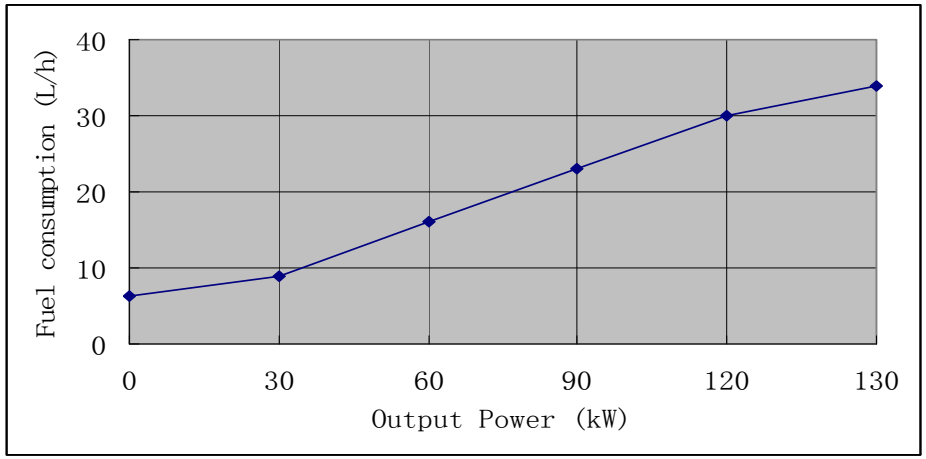
	ENGINE DATASHEET—for G-drive	ENGINE MODEL 6BTAA5.9-G2		FREFORMANCE CURVE FR 9266-03
		ENGINE FAMILY D40	CPL 8541	2005/12

Displacement	5.9 L	Air intake way	Air-air after-cooled, turbo-charged		
Cylinder bore	102 mm	Cylinder quantity	6	kW(BHP)	@RPM
Stroke	120 mm			120(161)	1500
Fuel system	PB pump _ GAC governor / BYC ASIMCO			Speed-droop	5%

Engine testing with fuel system, water pump and oil pump, without air compressor, alternator, fan, other options and driving accessory.
Testing condition： air intake resistance 250 mmHg, exhaust back pressure 50 mmHg.

Engine Speed-RPM	Standby Power		Base Output Power		Continuous Power	
	kW	HP	kW	HP	kW	HP
1500	130	174	120	161	96	129

Output Power			Fuel consumption	
%	kW	HP	g/kW.h	L/h
Standby Power				
100	130	174	215	34
Base Output Power				
100	120	161	208	30
75	90	121	212	23
50	60	80	219	16
25	30	40	245	9
Continuous Power				
N/A	96	129	206	24



	ENGINE DATASHEET—for G-drive	ENGINE MODEL 6BTAA5.9-G2		FREFORMANCE CURVE FR 9266-03
		ENGINE FAMILY D40	CPL 8541	2005/12

Typical engine data		
Net weight	kg	411
Rotate part instantaneous inertia _ without flywheel	kg.m2	0.25
Distance between gravity center and rear surface of cylinder block	mm	544
Distance between gravity center and center line above of crankshaft	mm	155
Engine installation		
Static bent torque permitted—rear surface of cylinder block	N.m	1356
Static bent torque permitted—front surface of cylinder block	N.m	435
Static bent torque permitted—flank surface of cylinder block	N.m	365
Exhaust system		
Max. back pressure	mmHg	76
Diameter of exhaust pipe recommended	mm	75
Air intake system		
Max. air intake resistance		
Dirty filter	mmH2O	635
Normal air cleaner and clean filter	mmH2O	254
Heavy duty cleaner and clean filter	mmH2O	381
Diameter of intake pipe recommended	mm	100
Lubrication system		
Normal oil pressure range		

Low idle	kPa	207
Rated speed	kPa	345
Max. oil temperature permitted in oil pan	℃	121
Oil pan capacity (Max _ Min)	L	14.2_12.3
Lubrication system Min. capacity (oil pan + oil filter)	L	16.4
Usage inclining degree permitted (any direction)	°	40

Fuel system

Fuel injection pump model	PB pump _ GAC governor / BYC ASIMCO	
Max. fuel input resistance of transfer pump	mmHg	102
Max. overflow fuel resistance at overflow pipe of injector	mmHg	254
Total fuel overflow amount	L/h	30

Cooling system

Coolant capacity-engine only	L	9.9
Max. coolant cycling resistance exterior engine	kPa	28
Thermostat adjusting temperature (range)	℃	82_95
Min. opening pressure of radiator cap	kPa	69
Max. coolant temperature permitted _ Standby Power/Base output Power	℃	104/100

Electric system

Starter	12V	24V
Battery charging system	63A	40A
Max. starting circuit resistance	0.00075Ω	0.002Ω
Min. battery capacity_ -12℃ (CCA：Cold Cranking Ampere)	800CCA	400CCA

Technical data _ under standard fuel delivery rate FR 9266-03	**Base output Power**	**Standby Power**
Engine speed _ RPM	1500	1500
Output Power _ kW	120	130

Torque _ Nm	764	828
Low idle _ RPM	750-850	750-850
Friction energy output _ kW	12.7	12.7
Piston speed _ m/s	6.0	6.0
Engine coolant flow _ L/sec	2.0	2.0
Air intake flow _ L/sec	135	145
Exhaust flow _ L/sec	293	324
Exhaust temperature _ ℃	481	495
Environment energy output _ kW	N/A	N/A
Coolant energy output _ kW	45	50
Fuel energy output _ kW	N/A	N/A

All data’s error within ±5%.

Excuse for none notice anymore in case of data changed

UCI274D

WINDING 311

CONTROL SYSTEM	SEPARATELY EXCITED BY P.M.G.			
A.V.R.	MX321	MX341		
VOLTAGE REGULATION	± 0.5 %	± 1.0 %	With 4% ENGINE GOVERNING	
SUSTAINED SHORT CIRCUIT	REFER TO SHORT CIRCUIT DECREMENT CURVES (page 7)			

CONTROL SYSTEM	SELF EXCITED			
A.V.R.	SX460	SX440	SX421	
VOLTAGE REGULATION	± 1.5 %	± 1.0 %	± 0.5 %	With 4% ENGINE GOVERNING
SUSTAINED SHORT CIRCUIT	SERIES 4 CONTROL DOES NOT SUSTAIN A SHORT CIRCUIT CURRENT			

INSULATION SYSTEM	CLASS H							
PROTECTION	IP23							
RATED POWER FACTOR	0.8							
STATOR WINDING	DOUBLE LAYER CONCENTRIC							
WINDING PITCH	TWO THIRDS							
WINDING LEADS	12							
STATOR WDG. RESISTANCE	0.038 Ohms PER PHASE AT 22°C SERIES STAR CONNECTED							
ROTOR WDG. RESISTANCE	1.26 Ohms at 22°C							
EXCITER STATOR RESISTANCE	20 Ohms at 22°C							
EXCITER ROTOR RESISTANCE	0.091 Ohms PER PHASE AT 22°C							
R.F.I. SUPPRESSION	BS EN 61000-6-2 & BS EN 61000-6-4,VDE 0875G, VDE 0875N. refer to factory for others							
WAVEFORM DISTORTION	NO LOAD < 1.5% NON-DISTORTING BALANCED LINEAR LOAD < 5.0%							
MAXIMUM OVERSPEED	2250 Rev/Min							
BEARING DRIVE END	BALL. 6315-2RS (ISO)							
BEARING NON-DRIVE END	BALL. 6310-2RS (ISO)							
	1 BEARING				2 BEARING			
WEIGHT COMP. GENERATOR	431 kg				450 kg			
WEIGHT WOUND STATOR	141 kg				141 kg			
WEIGHT WOUND ROTOR	149.37 kg				138.41 kg			
WR² INERTIA	1.1962 kgm^2				1.1455 kgm^2			
SHIPPING WEIGHTS in a crate	458 kg				476 kg			
PACKING CRATE SIZE	105 x 67 x 103(cm)				105 x 67 x 103(cm)			
	50 Hz				60 Hz			
TELEPHONE INTERFERENCE	THF<2%				TIF<50			
COOLING AIR	0.514 m³/sec 1090 cfm				0.617 m³/sec 1308 cfm			
VOLTAGE SERIES STAR	380/220	400/231	415/240	440/254	416/240	440/254	460/266	480/277
VOLTAGE PARALLEL STAR	190/110	200/115	208/120	220/127	208/120	220/127	230/133	240/138
VOLTAGE SERIES DELTA	220/110	230/115	240/120	254/127	240/120	254/127	266/133	277/138
kVA BASE RATING FOR REACTANCE VALUES	114	120	114	n/a	131.3	137.5	137.5	146.3
Xd DIR. AXIS SYNCHRONOUS	2.17	2.06	1.82	-	2.52	2.36	2.16	2.11
X'd DIR. AXIS TRANSIENT	0.18	0.18	0.16	-	0.21	0.20	0.18	0.17
X"d DIR. AXIS SUBTRANSIENT	0.12	0.11	0.10	-	0.15	0.14	0.13	0.12
Xq QUAD. AXIS REACTANCE	1.39	1.32	1.17	-	1.49	1.39	1.28	1.25
X"q QUAD. AXIS SUBTRANSIENT	0.16	0.16	0.14	-	0.21	0.20	0.18	0.17
X_L LEAKAGE REACTANCE	0.07	0.06	0.06	-	0.07	0.07	0.06	0.06
X_2 NEGATIVE SEQUENCE	0.14	0.13	0.12	-	0.17	0.16	0.15	0.14
X_0 ZERO SEQUENCE	0.09	0.08	0.07	-	0.10	0.09	0.09	0.08
REACTANCES ARE SATURATED	VALUES ARE PER UNIT AT RATING AND VOLTAGE INDICATED							
T'd TRANSIENT TIME CONST.	0.031 s							
T"d SUB-TRANSTIME CONST.	0.01 s							
T'do O.C. FIELD TIME CONST.	0.85 s							
Ta ARMATURE TIME CONST.	0.0073 s							
SHORT CIRCUIT RATIO	1/Xd							

UCI274D

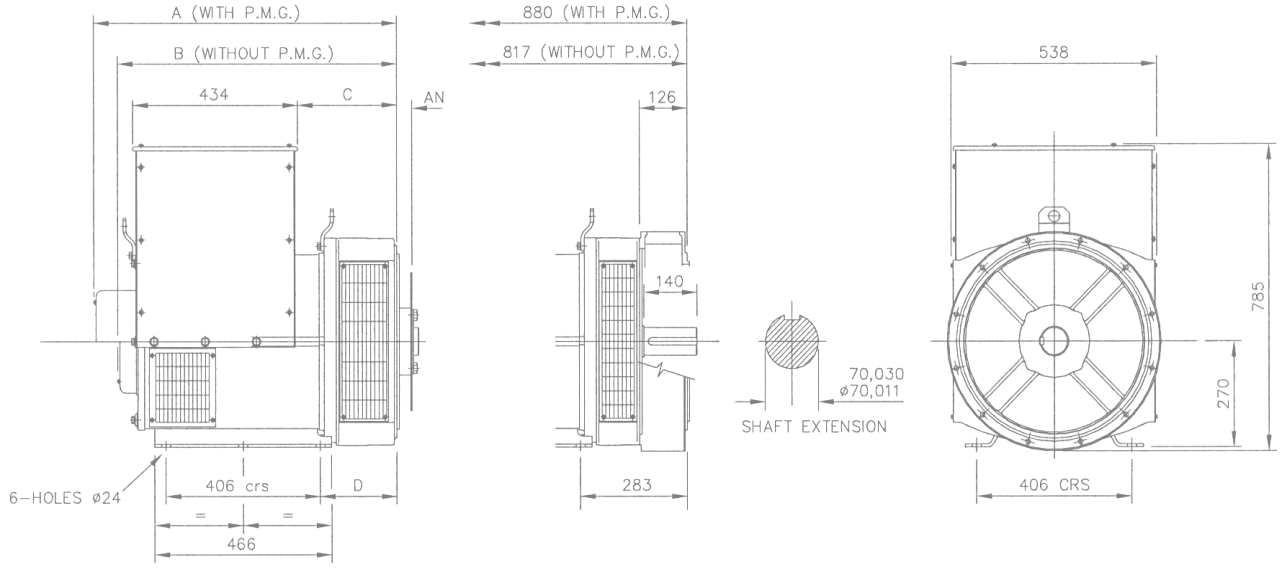
Winding 311 / 0.8 Power Factor

RATINGS

	Class - Temp Rise	Cont. F - 105/40°C				Cont. H - 125/40°C				Standby - 150/40°C				Standby - 163/27°C			
50 Hz	Series Star (V)	380	400	415	440	380	400	415	440	380	400	415	440	380	400	415	440
	Parallel Star (V)	190	200	208	220	190	200	208	220	190	200	208	220	190	200	208	220
	Series Delta (V)	220	230	240	254	220	230	240	254	220	230	240	254	220	230	240	254
	kVA	100.0	100.0	100.0	n/a	114.0	120.0	114.0	n/a	121.0	127.0	121.0	n/a	125.0	130.0	125.0	n/a
	kW	80.0	80.0	80.0	n/a	91.2	96.0	91.2	n/a	96.8	101.6	96.8	n/a	100.0	104.0	100.0	n/a
	Efficiency (%)	90.9	91.3	91.5	n/a	90.3	90.6	91.1	n/a	90.0	90.3	90.8	n/a	89.8	90.2	90.7	n/a
	kW Input	88.0	87.6	87.4	n/a	101.0	106.0	100.1	n/a	107.6	112.5	106.6	n/a	111.4	115.3	110.3	n/a

60 Hz	Series Star (V)	416	440	460	480	416	440	460	480	416	440	460	480	416	440	460	480
	Parallel Star (V)	208	220	230	240	208	220	230	240	208	220	230	240	208	220	230	240
	Series Delta (V)	240	254	266	277	240	254	266	277	240	254	266	277	240	254	266	277
	kVA	120.0	125.0	125.0	131.3	131.3	137.5	137.5	146.3	137.5	145.0	145.0	156.3	142.5	150.0	150.0	158.8
	kW	96.0	100.0	100.0	105.0	105.0	110.0	110.0	117.0	110.0	116.0	116.0	125.0	114.0	120.0	120.0	127.0
	Efficiency (%)	90.9	91.2	91.5	91.6	90.5	90.8	91.2	91.3	90.2	90.6	91.0	91.0	90.1	90.4	90.8	91.0
	kW Input	105.6	109.6	109.3	114.7	116.1	121.1	120.6	128.2	122.0	128.0	127.5	137.4	126.5	132.7	132.2	139.6

DIMENSIONS



SINGLE BEARING ADAPTORS				
ADAPTOR	A	B	C	D
SAE 1	813,3	750,3	274,3	216,3
SAE 2	799	736	260	202
SAE 3	799	736	260	202

COUPLING DISCS	
DISC	AN
SAE 10	53,98
SAE 11,5	39,68
SAE 14	25,40