

WPG550F8

DIESEL GENERATING SET

GENERATING SET RATINGS

50Hz – 1500rpm @ 0.8p.f.

oltage	PRP		ESP	
V	kVA	kWe	kVA	kWe
415/240	500	400	550	440
400/230	500	400	550	440
380/220	500	400	550	440

PRODUCT FEATURES

Engine

- Cast iron frame style body structure
- One-piece forged crankshaft
- Split-cap forged steel connecting rods
- Separate cast iron cylinder heads with 4 valves
- Replaceable dry cylinder liners
- Aluminum alloy pistons with oil cooling gallery

Cooling system

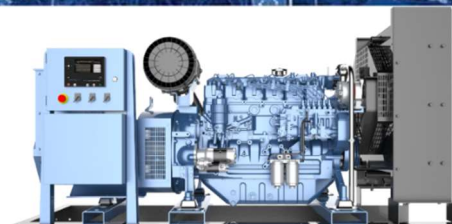
- Radiator and hoses supplied separately
- Thermostatically-controlled system with belt driven coolant pump and pusher fan

Fuel system

- High pressure Common Rail injection system
- Duplex fine filter and water separation filter assembly with transparent cup for better efficiency

Lubrication system

- Flat bottom large capacity oil pan
- Spin-on full-flow lube oil filter



Electrical system

- 24 Vdc electric starter motor and battery charging alternator
- LOP + HWT sensors

Air intake and exhaust system

- Mid-position and below inlet turbocharger optimized for genset application
- Special rear mounted air filter with restriction indicator
- Exhaust manifold shield for heat isolating

Alternator

- Brushless, 4 Pole, IP23 drip-proof revolving field design
- Class H insulation and Class H temperature rise
- Low reactance with 2/3 pitch windings on the stator
- Direct-coupled by flexible disc
- Sustained overcurrent >300% in 10 sec
- Direct drive centrifugal blower fan cooling

Control module

- Deepsea control module is ideal for a wide control range to manage, monitor, and diagnose quickly and easily.
- Display status message Provide protection Auto shutdown at fault detection

GENERATING SET SPECIFICATIONS

Brand	WEICHA
Model	WPG550F8
Governor and regulation class	In accordance to ISO 8528-5 Class G2 performance
Phase number and connection	3 phase, 4 wires, Y-type
Cooling method	Closed looped water-cooled
Starting method	DC 24V Electric starter
Steady-state voltage deviation	$\leq \pm 1\%$
Steady-state frequency band	$\leq 1\%$

ENGINE

Brand	BAUDOUIN
Model	6M21G550/5
Gross Power	kWm ESP - 490 / PRP - 450
Cylinder / Type / Aspiration	6 / In-line / Turbocharged and Aftercooled
Bore x Stroke	mm 127 x 165
Displacement	L 12.54
Compression ratio	15.2:1
Brake Mean Effective Pressure	kPa ESP – 3126
Governor	Electronic

EXHAUST SYSTEM

Exhaust Gas temperature after the turbocharger	°C	580
Exhaust Gas flow	m ³ /min	ESP – 114.8/ PRP – 102.3
Max. Exhaust back pressure	mBar	120

COOLING SYSTEM

Type of Coolant	Liquid (water + 50% antifreeze)
Total Cooling System Capacity (with Radiator)	L 62
Max coolant temperature – shutdown	°C 105
Cooling Fan Airflow	m ³ /min 474

LUBRICATION SYSTEM

Operating Temperature range before Engine	°C	78 -105
Oil fuel consumption ratio based on engine fuel consumption data	g/kW.hr	$\leq 0.2\%$
Total system capacity (including filters)	L	38
Type of oil filter		Spin-on full flow filter

FUEL SYSTEM

Type of fuel filter		Spin-on fuel filter
Min. internal diameter of the supply pipe	mm	14
Min. internal diameter of the return pipe	mm	14
Max. fuel return restriction	Bar	0.5
Max. fuel inlet temperature	°C	50
Fuel supply flow	L/hr	400
Fuel Consumption (Tolerance +3%)		
Rating	gr/kWh	L/hr
100%ESP	211	123.1
100%PRP	204.3	109.5
75% PRP	187.3	75.3
50% PRP	190.5	51
25% PRP	207.5	27.8

ALTERNATOR

Brand	WEICHAI
Model	WHA-500-4/0.4
Rated Current	722A
Coupling / No. of Bearing	Direct / Single
Winding Pitch	2/3
Type of Excitation	Self-excitation
Cooling type	Air
Voltage regulation method	AVR
Insurance	Class H
Temperature rise	Class H
Protection Grade	IP23
Efficiency at 0.8p.f.@100% load	94.4%

CONTROL MODULE

The Deepsea controller, model DSE7320 MKII is an is an Auto Mains Failure Control Module

- LCD alarm indication, multilingual interface
- Fully configurable via PC using USB, RS232, RS485 and ethernet communication.
- Collects and shows 3-phase voltage, current, power parameter and frequency of generator or mains.
- Over current protection
- Modules can be integrated into building management systems (BMS) using MODBUS RTU & TCP
- Hours counter provides accurate information for monitoring and maintenance period
- PLC editor allows user configurable functions to meet user specific application requirements



Ratings definitions

Emergency Standby Power (ESP):

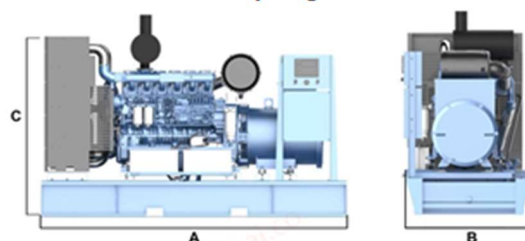
Emergency Standby Power is the maximum power available for a varying load for the duration of a main power network failure. The average load factor over 24 hours of operation should not exceed 70% of the engine's ESP power rating.

Typical operational hours of the engine are 200 hours per year, with a maximum usage of 500 hours per year. This includes an annual maximum of 25 hours per year at the ESP power rating. No overload capability is allowed. The engine is not to be used for sustained utility paralleling applications.

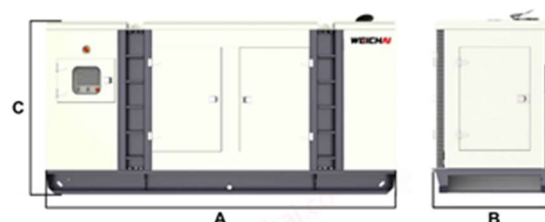
Prime power (PRP):

Prime Power is the maximum power available for unlimited hours of usage in a variable load application. The average load factor should not exceed 70% of the engine's PRP power rating during any 24 hour period. An overload capability of 10% is available; however, this is limited to 1 hour within every 12 hour period.

Open genset



Silence genset



This outline drawing is to provide representative configuration details for Model series only. See respective model data sheet for specific model outline drawing number.

Do not use for installation design

Dimension and Weight

Structure	Model	Dim "A" mm	Dim "B" mm	Dim "C" mm	Dry wt.* kg	Fuel tank L
Open	WPG550F8	3200	1396	2024	3280	450
Enclosure	WPG550F8	4500	1480	2400	4000	1000

* Note: Weights represent a set with standard features. See outline drawings for weights of other configurations.

Codes and standards

ISO 9001	This generator set is designed and manufactured in facilities certified to ISO 9001.	ISO 8528	This generator set has been designed to comply with ISO 8528 regulation.
ISO14001	This generator set is designed and manufactured in facilities certified to environment management system ISO 14001.	CE	The CE marking is only valid when equipment is used in a fixed installation application. Material compliance declaration is available upon request.
ISO45001	This generator set is designed and manufactured in facilities certified to OHSMS management system ISO 45001	TLC	This generator set has been certified according to YD/T502-2020 standard

Specifications are subject to change without notice.

For more information contact your local Weichai distributor or visit www.weichai.com

Contact information:

Weichai Vietnam CO., Ltd

Hanoi Office: R1703, 17fl, Charm Vit Tower, 117 Tran Duy Hung, Cau Giay Dist, Hanoi

HCM Office: R702, Dai Minh Convention Tower, 77 Hoang Van Thai, Tan Phu Ward, Dist. 7, Ho Chi Minh City

Hotline: 1800 6323

	Model : 6M21G550/5	Date : 01/06/21
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Ratings

RPM	Gross Engine Output				Net Engine Output			
	PRP		ESP		PRP		ESP	
	kWm	BHP	kWm	BHP	kWm	BHP	kWm	BHP
1500	450	604	490	657	436	585	476	638

1 kWm = 1,34102 BHP

Basic data

Engine model	6M21G550/5
N° of Cylinders / Valves	6 / 24
Cylinders arrangement	In line
Bore x Stroke (mm)	127 x 165
Displacement (L)	12.54
Thermodynamic Cycle	Diesel 4 stroke
Mean Piston Speed (m/s)	8.25
BMEP @ ESP (Bar)	31.26
Cooling System	Liquid (water + 50% antifreeze)
Injection System	Direct
Fuel System	High Pressure Common Rail
Aspiration	Turbocharged and Aftercooled
Compression ratio	15.2 : 1
Flywheel housing	SAE 1
Flywheel	14"
N° of teeth on flywheel ring gear	136
Inertia of flywheel (kg•m ²)	2.32
Inertia of crankshaft (kg•m ²)	0.574
Emission standard	N/A
Overall Dimensions with radiator (Length x Width x Height) (mm)	2032 x 1232 x 1490
Engine dry weight without radiator and without radiator pipes (kg)	1000
Engine dry weight with radiator and radiator pipes (kg)	1190
Engine wet weight with radiator (includes oil, coolant) (kg)	1286,6

DPK-TDS-EN-6M21-0027-21-06-01 Moteurs Baudouin reserve the right to modify these specifications, without notice. Document not contractual.

	Model : 6M21G550/5	Date : 01/06/21
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Air intake system

Air intake temperature rise (°C)	≤ 15
Air intake restriction clean filter (mBar)	≤ 35
Air intake restriction dirty filter (mBar)	≤ 70
Recommended air flow @ PRP (m³/min)	33
Recommended air flow @ ESP (m³/min)	34,8
Min. diameter of intake pipe (mm)	100

Aftercooling system

Aftercooler system type	Air to Air
Max. intake temperature @ 25°C ambient temperature (°C)	55
Max. difference between intake temperature and ambient temperature (°C)	30
Max. intake pressure drop of aftercooler (mBar)	120

Lubrication system

Oil capacity Low / High (L)	29 / 34
Oil pressure in normal condition idle speed (Bar)	1.3 - 2.5
Oil pressure in normal condition at 1500 Rpm @ PRP (Bar)	3.5 - 5.5
Lowest oil pressure alarm (shutdown) (Bar)	1
Max. oil temperature (°C)	105
Oil flow at 1500 Rpm (L/min)	≥ 180
Oil fuel consumption ratio based on engine fuel consumption data	≤ 0.2 %
Total system capacity (including filters) (L)	38

Heat balance test data (with ambient temperature 30 °C)

Total heat dissipation @ ESP (kJ/s)	770.4
- Heat Rejection to Jacket Water @ ESP (kJ/s)	187.8
- Heat Rejection to AfterCooler @ ESP (kJ/s)	134.1
- Radiated Heat to Ambient @ ESP (kJ/s)	62.1
- Heat Rejected to Exhaust @ ESP (kJ/s)	386.4

Exhaust system

Max. exhaust back pressure (mBar)	120
Max. exhaust temperature before turbocharger (°C)	740
Max. exhaust temperature after turbocharger (°C)	580
Exhaust flow @ PRP (m³/min)	102.3
Exhaust flow @ ESP (m³/min)	114.8
Min. diameter of exhaust pipe (mm)	100
Max. bending moment of exhaust gas exit flange (Nm)	19

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Cooling system with standard radiator version 2021

System designed for ambient temperature up to (°C) ¹	55
Radiator type	Mechanical
Fan type	Belt driven pusher
Min. inside diameter of coolant outlet pipe (mm)	75
Coolant capacity of radiator and pipes (L)	37
Coolant alarm (shutdown) temperature (°C)	105
Thermostat opening temperature / full open temperature (°C)	76 / 88
Max. additional restriction for external cooling circuit (Bar)	0.23
Coolant capacity of the engine (L)	25
Cooling fan airflow (m³/min)	474
Fan absorbed power (kW)	12
Additional restriction (for reference) - Duct allowance (Pa)	75

Fuel system

Governor	ECU
Governor steady state speed stability at constant load (ISO 8528-5 Class G3) ²	≤ +/- 0.5 %
Max. restriction at fuel inlet (Bar)	0.5
Max. pressure at fuel inlet (Bar)	1.3
Max. fuel return restriction (Bar)	0.5
Max. fuel inlet temperature (°C)	50
Fuel supply flow (L/hr)	400
Min. internal diameter of inlet pipe (mm)	14
Min. internal diameter of return pipe (mm)	14

Electrical system

Electrical system voltage (negative to ground) (Vdc)	24
Starter power (kW)	8.5
Battery charger current (A)	70
Battery charger absorbed power (kW)	1.96
Max. electric resistance of starting circuit (Ω)	0.002
Min. sectional area of wire (mm²)	70
Min. cold start temperature without auxiliary starting device (°C) ³	- 10
Min. cold start temperature with auxiliary starting device (°C) ³	- 30

¹ The indicated value is based on the AOT value of 50°C for an engine tested at 100% of the ESP Power, reflecting temperature in an open condition, without an enclosure or container, without any airflow obstruction in the front of the radiator, without air recirculation, with free exhaust gas exit and with the engine thermostatic valve in its full open condition, without a closing plate present. The reference air restriction is equal to 50Pa. For the equivalent ATB (Air-to-Boil) performance in a customer or project basis, please consult Baudouin Application Engineering.

² This refers only to the frequency response of the engine and should not be confused with the performance class of the Generator Set, which is subject to additional contributing factors such as alternator selection and control settings.

³ Engines used in emergency standby application or applications that require immediate start under load, they must be equipped with coolant heaters. Baudouin recommend heaters installation to be executed by providing constant coolant circulation across all the engine components. Two heaters are required for V-type engines, one per each side.

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Noise

Diesel engine noise (Acoustic power level) (dB(A))	113.6
Noise - upper side (dB(A))	96.9
Noise - right side (view from flywheel) (dB(A))	97.3
Noise - left side (view from flywheel) (dB(A))	99.1
Noise – front (radiator) side (dB(A))	97.8
Noise – rear (flywheel) side (dB(A))	94.5

Notes :

- Noise test made at 100% of the ESP power, at 1 mt. distance, on engine without radiator, without cooling fan and without silencer.
- Noise test refers to GB/T 1859 norm : “Reciprocating internal combustion engines. Measurement of emitted airborne noise. Engineering method and survey method”.

Fuel consumption

Rating	gr/kWh	L/hr
100% ESP	211	123.1
100% PRP	204.3	109.5
75% PRP	187.3	75.3
50% PRP	190.5	51
25% PRP	207.5	27.8
Fuel consumption tolerance + 3 %		

Ratings definitions

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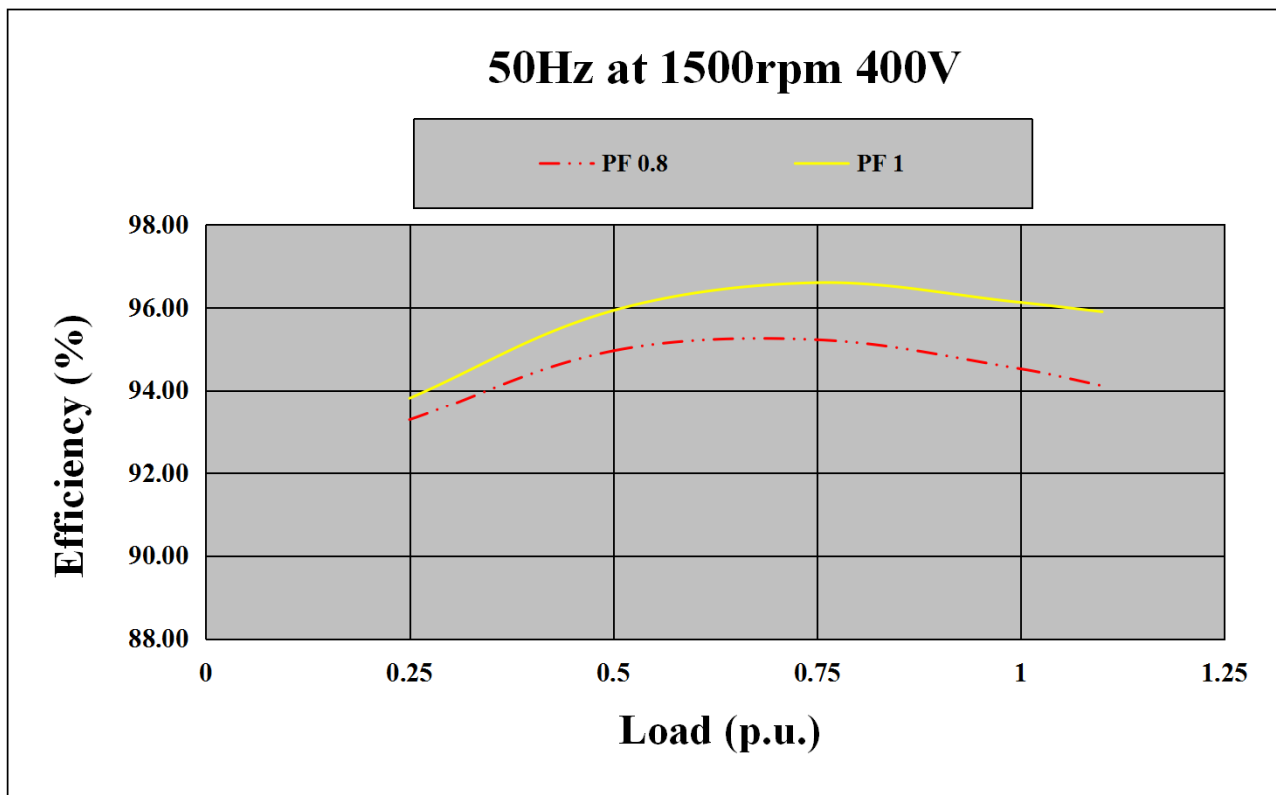
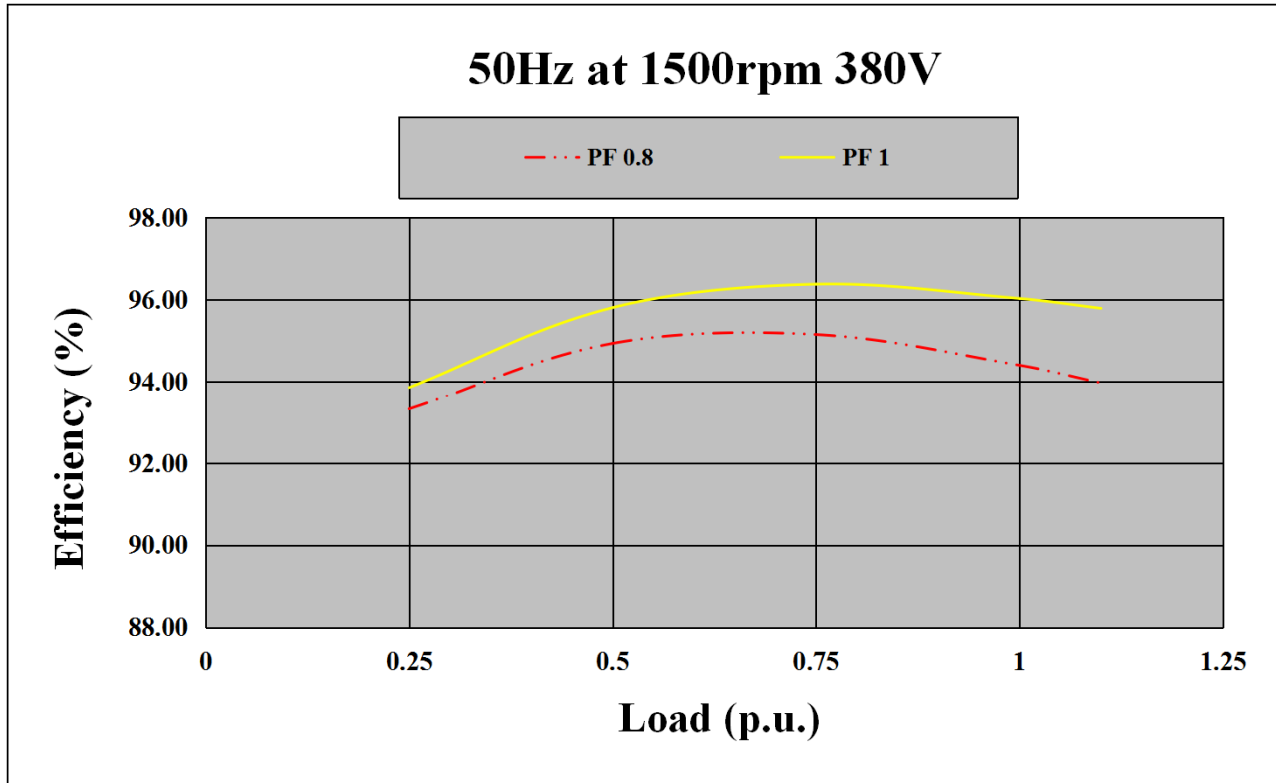
- All ratings are based on operating conditions under ISO 8528-1, ISO 3046, DIN6271. Performance tolerance of $\pm 5\%$.
- Test conditions : 100 kPa, 25°C air inlet temperature, relative humidity of 30%, with fuel density 0.84 kg/L. Derating may be required for conditions outside these; please contact the factory for details.
- Power output curves are based on the engine operating with fuel system, water pump and lubricating oil pump; not included are battery charging alternator, fan and optional equipment.

WHA-500-4/0.4

Frequency	Hz	50			60				
Rated capacity (kVA)	S	500	500	500	505	550	590	610	630
Rated power (kW)	P	400	400	400	404	440	472	488	504
Voltage (V)	U	380	400	415	380	416	440	460	480
Short-circuit ratio	Kcc	0.3	0.36	0.418	0.227	0.276	0.276	0.304	0.343
Reactance									
Direct axis synchronous reactance	Xd	4.057	3.661	3.401	4.917	4.284	4.284	4.053	3.844
Direct axis transient reactance saturated	X'd	0.141	0.127	0.118	0.17	0.149	0.149	0.14	0.133
Direct axis subtransient reactance saturated	X''d	0.127	0.115	0.107	0.154	0.135	0.135	0.127	0.121
Quadrature axis synchronous reactance	Xq	1.8	1.624	1.509	2.181	1.901	1.901	1.798	1.706
Quadrature axis subtransient reactance	X''q	0.187	0.169	0.157	0.227	0.198	0.198	0.187	0.177
Negative sequence reactance saturated	X2	0.16	0.14	0.13	0.19	0.17	0.17	0.16	0.15
Zero sequence reactance unsaturated	X0	0.048	0.044	0.04	0.058	0.051	0.051	0.048	0.046
Time constant									
Open circuit time constant	T'd0	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45
Short-circuit transient time constant	T'd	0.085	0.085	0.085	0.085	0.085	0.085	0.085	0.085
Subtransient time constant	T''d	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Armature time constant	Ta	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
No load losses	W	3949	4183	4366	5009	5391	5664	5904	6155
Heat dissipation at full load at Class H	W	23760	23191	22882	25696	26333	27277	27489	27807
Efficiency									
PF=0.8 Efficiency of 25% load	%	93.31	93.28	93.22	92.84	92.97	93.01	93.03	93.02
50% load	%	94.93	94.95	94.95	94.61	94.78	94.86	94.92	94.95
75% load	%	95.14	95.22	95.25	94.82	95.06	95.20	95.29	95.35
100% load	%	94.39	94.52	94.59	94.02	94.35	94.54	94.67	94.77
110% load	%	93.96	94.11	94.19	93.56	93.93	94.14	94.29	94.41
PF=1 Efficiency of 25% load	%	93.85	93.81	93.76	93.34	93.44	93.48	93.49	93.49
50% load	%	95.80	95.92	95.82	95.46	95.59	95.65	95.69	95.71
75% load	%	96.37	96.59	96.46	96.06	96.23	96.32	96.38	96.43
100% load	%	96.02	96.12	96.17	95.68	95.91	96.04	96.13	96.21
110% load	%	95.78	95.89	95.96	95.42	95.68	95.83	95.93	96.02
No load excitation current	io(A)	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Full load excitation current	ic(A)	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
Full load excitation voltage	uc(V)	62	62	62	62	62	62	62	62
Recovery time	Tr	1 s							
Waveform : TIF		<50							
Waveform : THD		No load <3% Non-Distorting Balanced Linear Load <5%							
Waveform : THF		<2%							
Winding pitch		2/3							
Steady state voltage regulation		+/- 1%							
A.V.R. model		EVC600							
Duty		Continuous							
Number of poles		4							
Class of insulation		H							
Altitude		≤1000m							
Rated power factor		0.8							
Excitation		Brushless							
Stator winding		6ends							
Rotor		With damping cage							
Overload	%	110% rated load for 1 hour							
Stator winding resistance (20°C)	ohm	0.00623							
Rotor winding resistance (20°C)	ohm	0.7858							
Exciter Stator resistance (20°C)	ohm	10.2							
Exciter Rotor resistance (20°C)	ohm	0.0506							
Cooling air requirement	m3/min	54.8			65.8				
Method of cooling		IC 01							
Ambient temperature		40°C							
Sense of rotation		Clockwise-DE							
Type of construction		1 Bearing or 2 Bearings							
Degree of protection / enclosure		IP21 or IP23							
Maximum overspeed		2250 rpm 2minutes							

THREE-PHASE SYNCHRONOUS GENERATOR

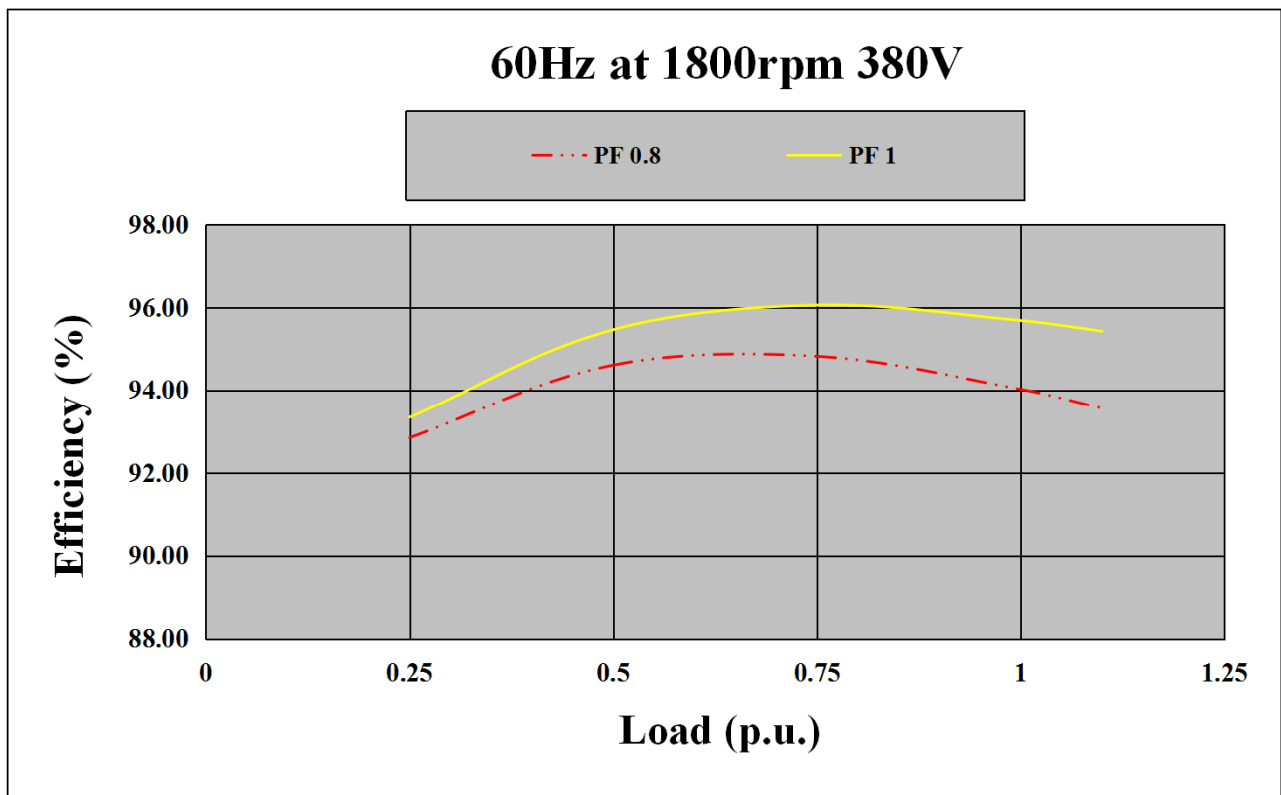
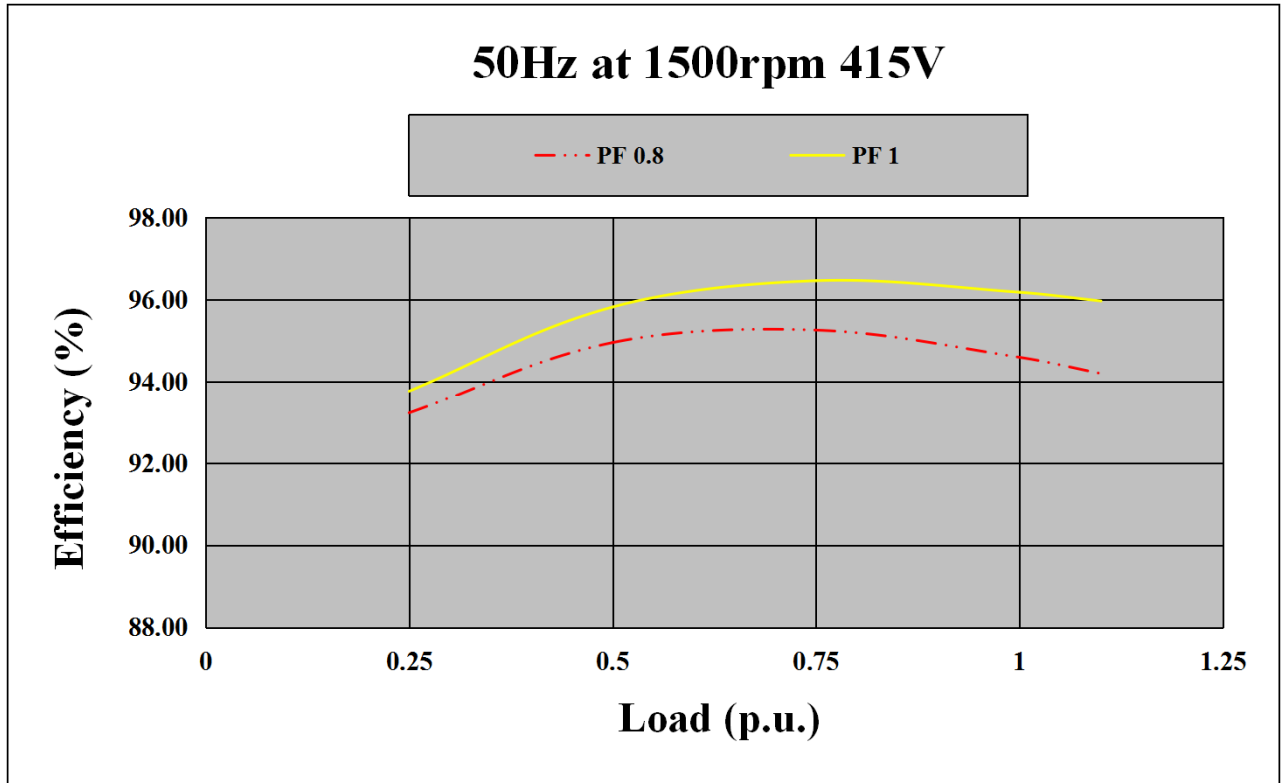
THREE PHASE EFFICIENCY CURVES



Data and Technical Specification are subject to change in order to update or improve the products, without prior notice

THREE-PHASE SYNCHRONOUS GENERATOR

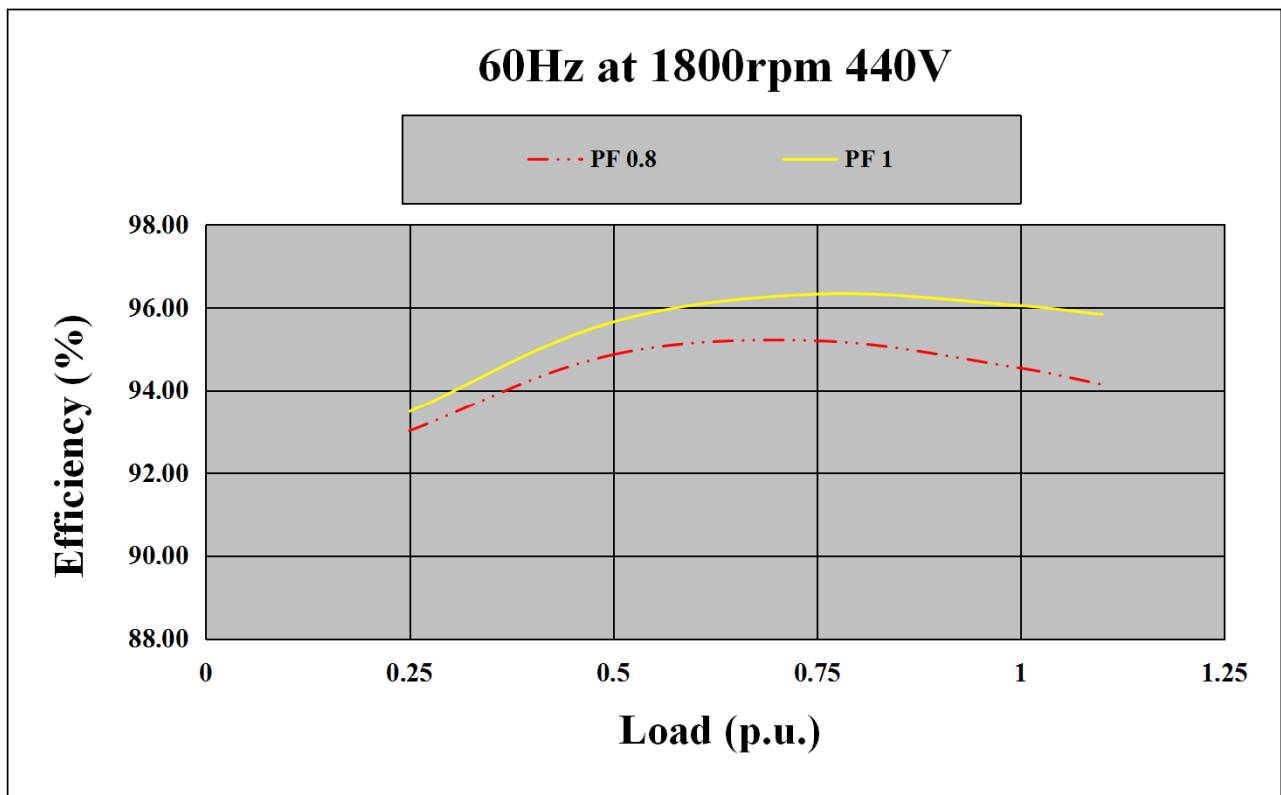
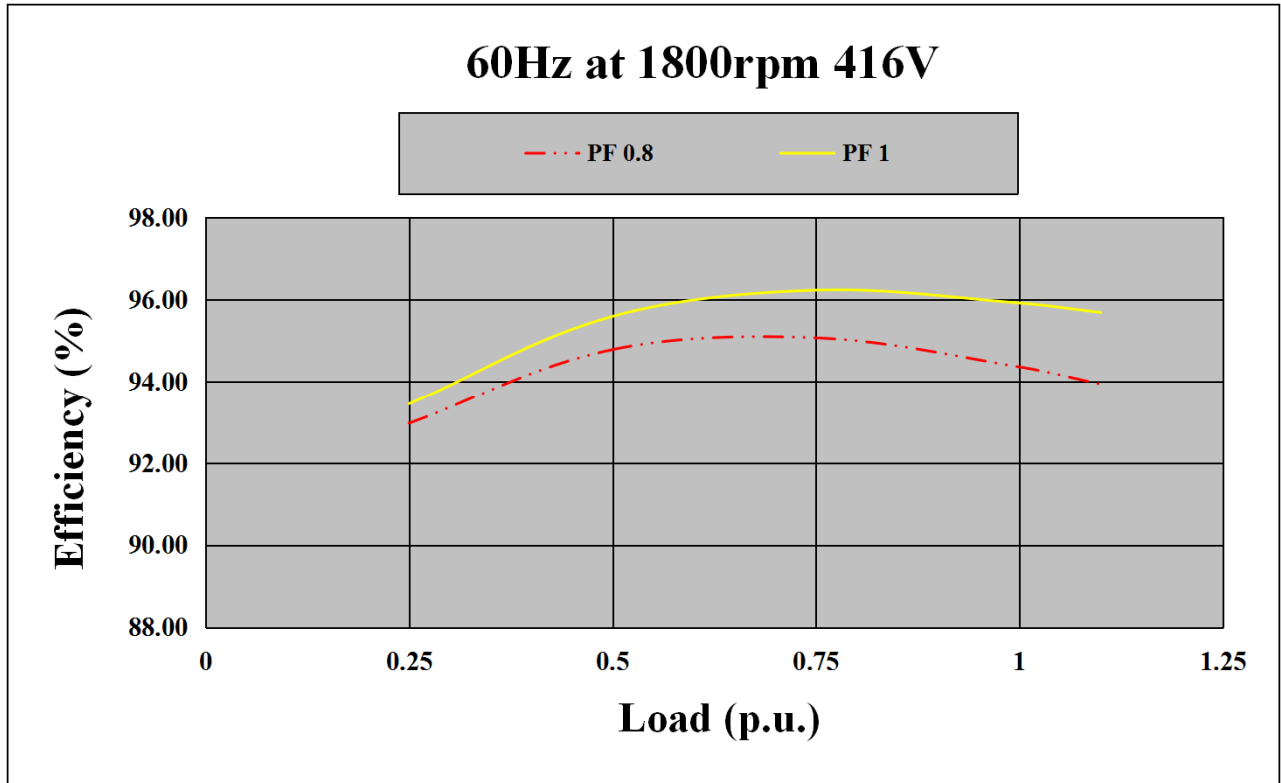
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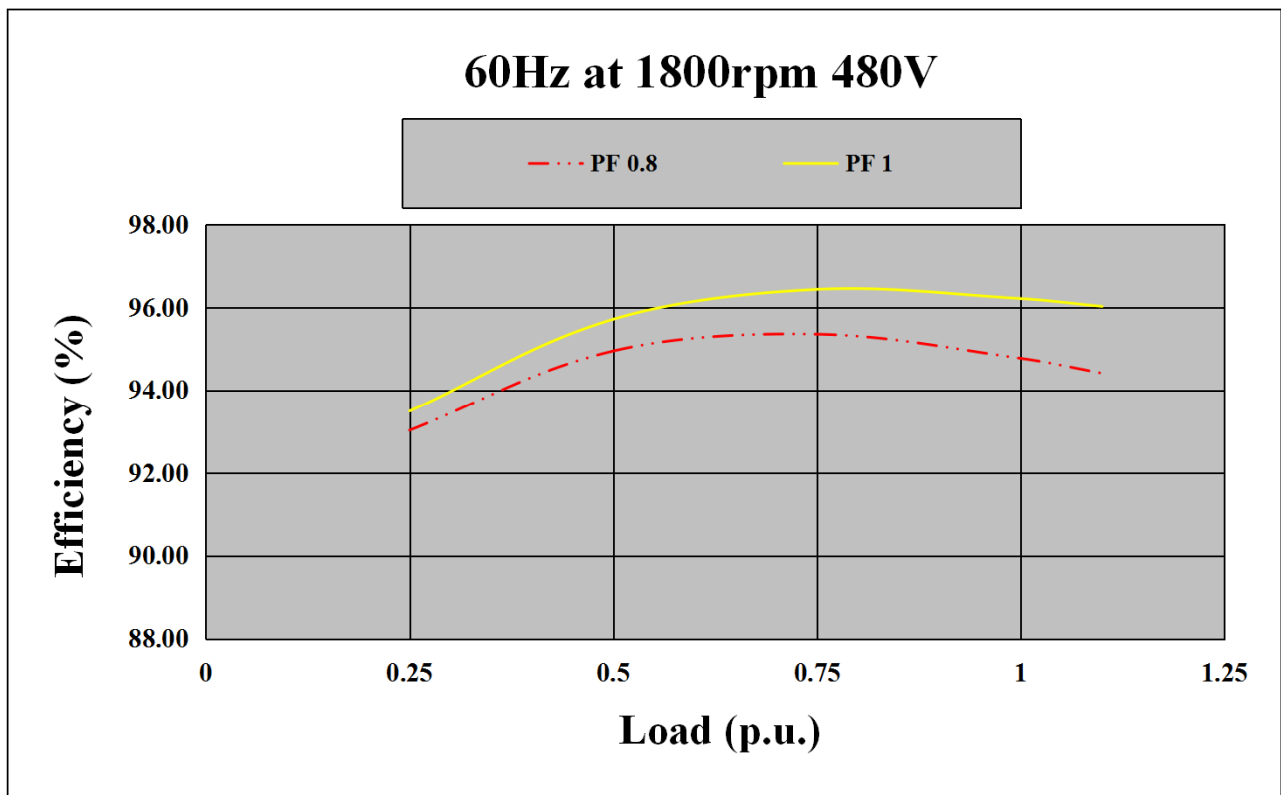
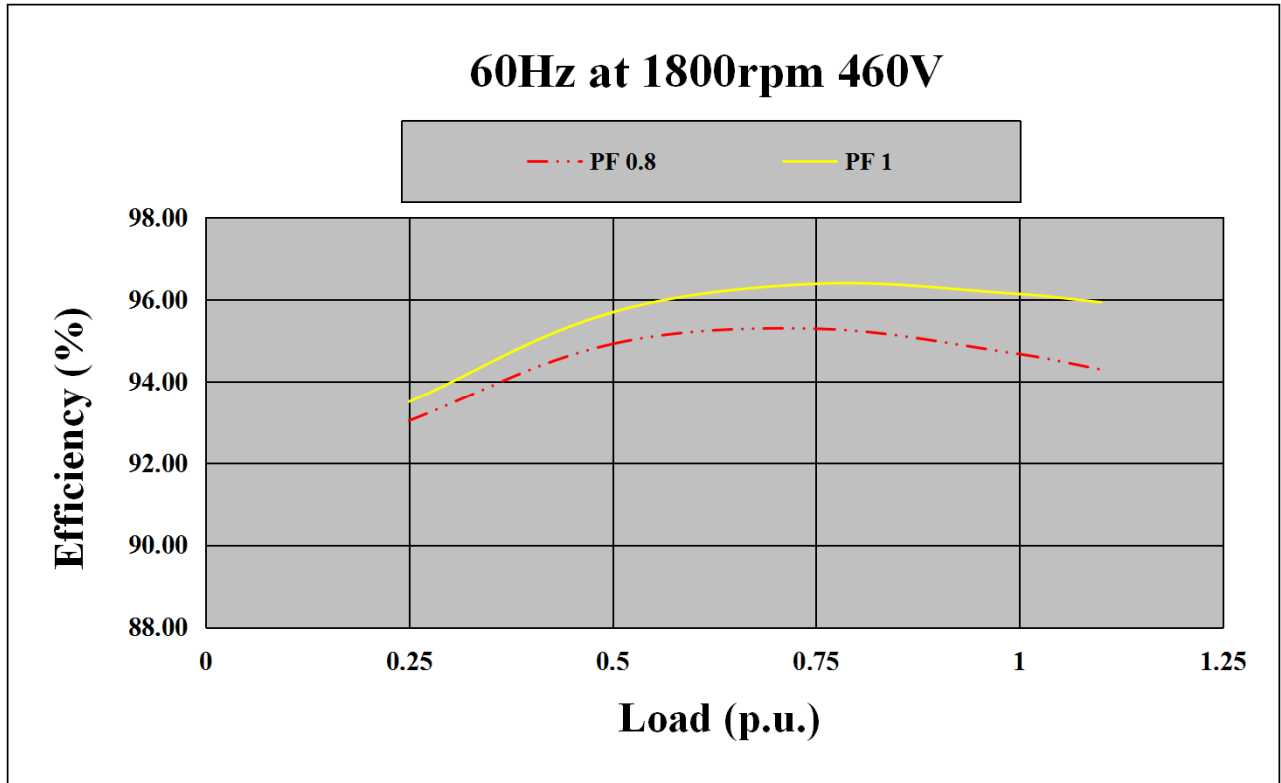
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THREE-PHASE SYNCHRONOUS GENERATOR

THREE PHASE EFFICIENCY CURVES

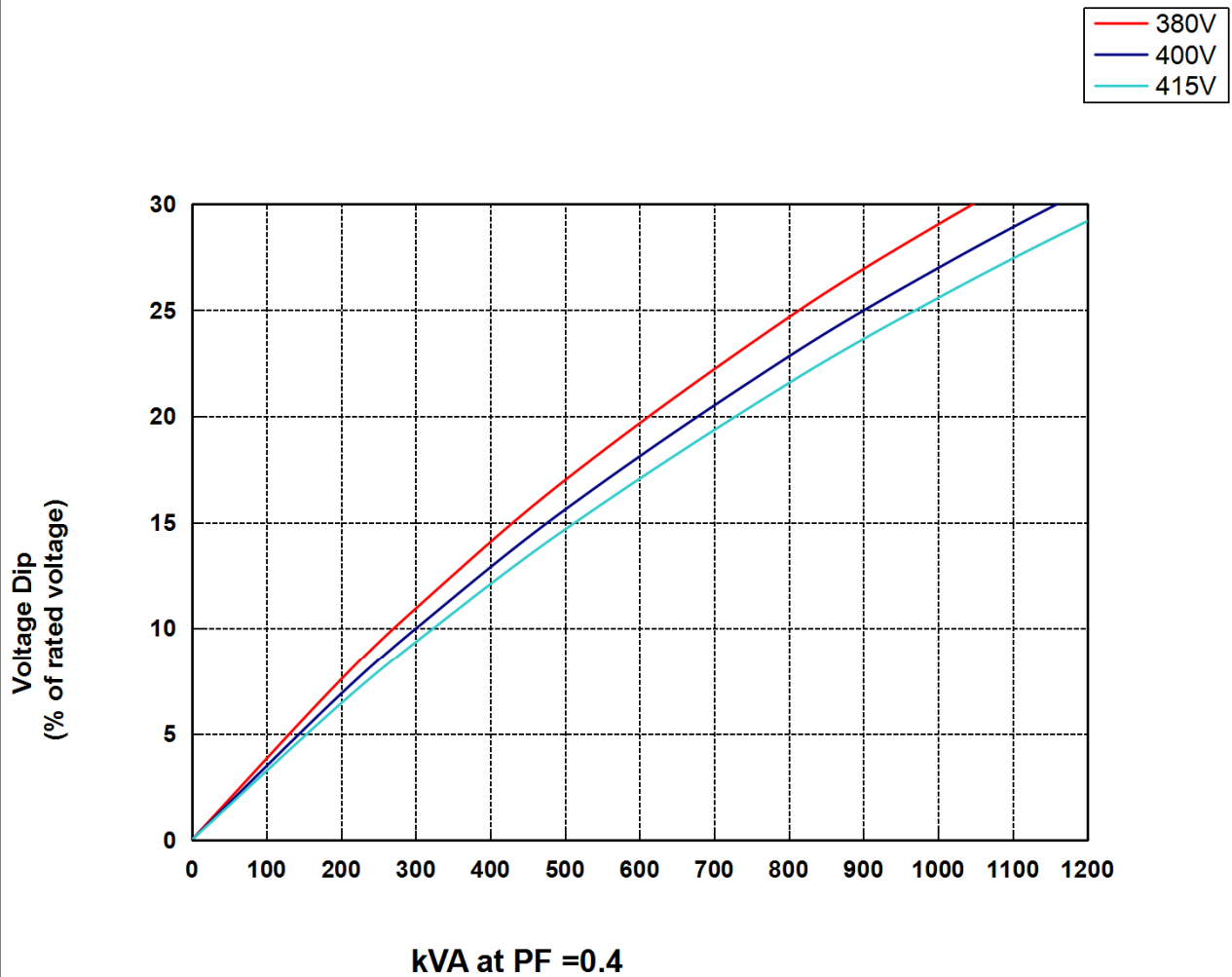


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THREE PHASE SYNCHRONROUS GENERATOR

WHA-500-4/0.4

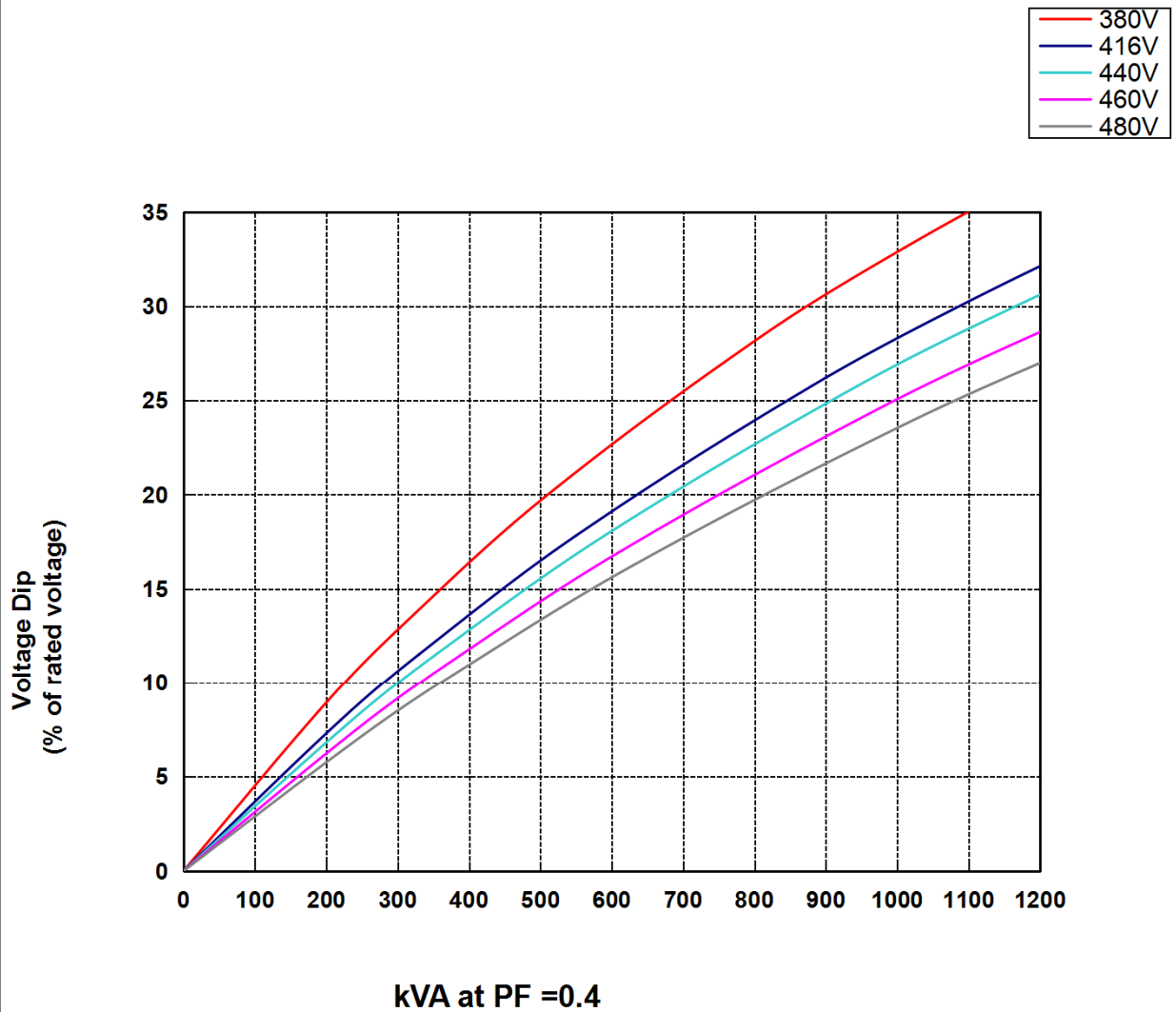
MOTOR STARTING CURVES (50Hz)



THREE PHASE SYNCHRONROUS GENERATOR

WHA-500-4/0.4

MOTOR STARTING CURVES (60Hz)



DSE7310/20 MKII

AUTO START & AUTO MAINS FAILURE CONTROL MODULES

FEATURES



The DSE7310 MKII is an Auto Start Control Module and the DSE7320 MKII is an Auto Mains (Utility) Failure Control Module suitable for a wide variety of single, diesel or gas, gen-set applications.

Monitoring an extensive number of engine parameters, the modules will display warnings, shutdown and engine status information on the back-lit LCD screen, illuminated LEDs, remote PC and via SMS text alerts (with external modem).

The DSE7320 MKII will also monitor the mains (utility) supply. The modules include USB, RS232 and RS485 ports as well as dedicated DSENet® terminals for system expansion.

Both modules are compatible with electronic (CAN) and non-electronic (magnetic pick-up/alternator sensing) engines and offer an extensive number of flexible inputs, outputs and extensive engine protections so the system can be easily adapted to meet the most demanding industry requirements.

The extensive list of features includes enhanced event and performance monitoring, remote communications & PLC functionality. Dual mutual standby is now available on both the DSE7310 MKII & DSE7320 MKII using RS232 or RS485 communications. This provides for a simpler and more convenient installation with more advanced features such as true engine hours balancing.

The modules can be easily configured using the DSE Configuration Suite PC software. Selected front panel editing is also available.

ENVIRONMENTAL TESTING STANDARDS

ELECTRO-MAGNETIC COMPATIBILITY

BS EN 61000-6-2
EMC Generic Immunity Standard for the Industrial Environment
BS EN 61000-6-4
EMC Generic Emission Standard for the Industrial Environment

ELECTRICAL SAFETY

BS EN 60950
Safety of Information Technology Equipment, including Electrical Business Equipment

TEMPERATURE

BS EN 60068-2-1
Ab/Ae Cold Test -30 °C
BS EN 60068-2-2
Bb/Be Dry Heat +70 °C

VIBRATION

BS EN 60068-2-6
Ten sweeps in each of three major axes
5 Hz to 8 Hz at +/-7.5 mm,
8 Hz to 500 Hz at 2 gn

HUMIDITY

BS EN 60068-2-30
Db Damp Heat Cyclic 20/55 °C at 95% RH 48 Hours
BS EN 60068-2-78
Cab Damp Heat Static 40 °C at 93% RH 48 Hours

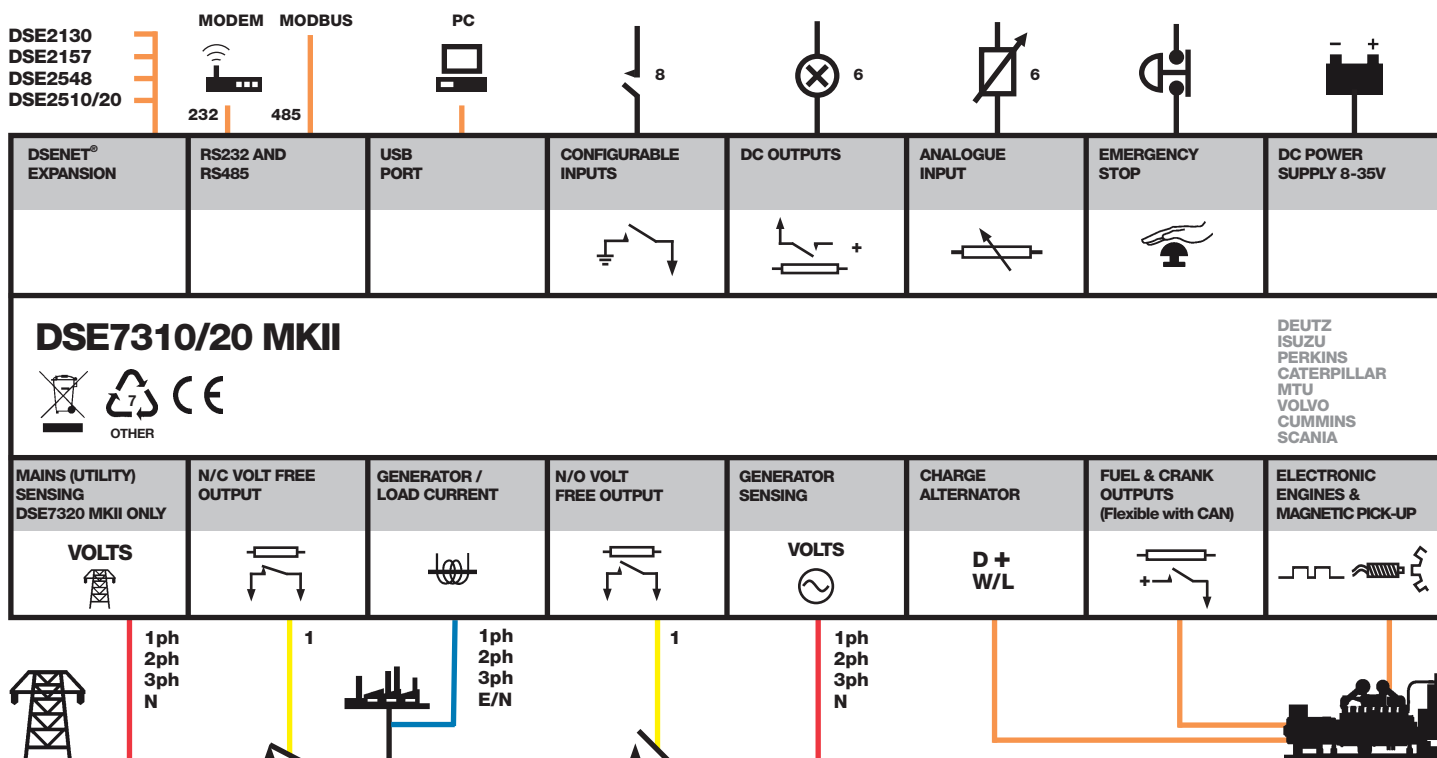
SHOCK

BS EN 60068-2-27
Three shocks in each of three major axes
15 gn in 11 ms

DEGREES OF PROTECTION PROVIDED BY ENCLOSURES

BS EN 60529
IP65 - Front of module when installed into the control panel with the supplied sealing gasket.

COMPREHENSIVE FEATURE LIST TO SUIT A WIDE VARIETY OF GEN-SET APPLICATIONS



DSE7310/20 MKII

AUTO START & AUTO MAINS FAILURE CONTROL MODULES

FEATURES



DSE7320 MKII

DSE7310 MKII



KEY FEATURES

- 4-Line back-lit LCD text display
- Multiple Display Languages
- Five key menu navigation
- LCD alarm indication
- Heated display option available
- Customisable power-up text and images
- DSENet expansion compatibility
- Data logging facility
- Internal PLC editor
- Protections disable feature
- Fully configurable via PC using USB, RS232 & RS485 communication
- Front panel configuration with PIN protection
- Power save mode
- 3 phase generator sensing and protection
- 3 phase mains (utility) sensing and protection (DSE7320 MKII only)
- Automatic load transfer control (DSE7320 MKII only)
- Generator current and power monitoring (kW, kvar, kVA, pf)
- Mains current and power monitoring (kW, kvar, kVA, pf) (DSE7320 MKII only)
- kW and kvar overload and reverse power alarms
- Over current protection
- Unbalanced load protection
- Independent earth fault protection
- Breaker control via fascia buttons
- Fuel and start outputs configurable when using CAN
- 6 configurable DC outputs
- 2 configurable volt-free relay outputs
- 6 configurable analogue/digital inputs
- Support for 0 V to 10 V & 4 mA to 20 mA sensors
- 8 configurable digital inputs
- Configurable 5 stage dummy load and load shedding outputs
- CAN, MPU and alternator frequency speed sensing in one variant
- Real time clock
- Manual and automatic fuel pump control
- Engine pre-heat and post-heat functions
- Engine run-time scheduler
- Engine idle control for starting & stopping
- Fuel usage monitor and low fuel level alarms
- Simultaneous use of RS232 and RS485 communication ports
- True dual mutual standby using RS232 or RS485 for accurate engine hours balancing.
- MODBUS RTU support with configurable MODBUS pages.
- Advanced SMS messaging (additional external modem required)
- Start & stop capability via SMS messaging

- 3 configurable maintenance alarms
- Compatible with a wide range of CAN engines, including tier 4 engine support
- Uses DSE Configuration Suite PC Software for simplified configuration
- Licence-free PC software
- IP65 rating (with supplied gasket) offers increased resistance to water ingress
- Modules can be integrated into building management systems (BMS) using MODBUS RTU

KEY BENEFITS

- Automatically transfers between mains (utility) and generator (DSE7320 MKII only) for convenience.
- Hours counter provides accurate information for monitoring and maintenance periods
- User-friendly set-up and button layout for ease of use
- Multiple parameters are monitored & displayed simultaneously for full visibility
- The module can be configured to suit a wide range of applications for user flexibility
- PLC editor allows user configurable functions to meet user specific application requirements.

RELATED MATERIALS

TITLE

DSE7310 MKII & DSE7320 MKII Installation Instructions
DSE7310 MKII & DSE7320 MKII Operator Manual
DSE7310 MKII & DSE7320 MKII Configuration Suite PC Manual

PART NO'S

053-181
057-253
057-243

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SPECIFICATION

DC SUPPLY

CONTINUOUS VOLTAGE RATING

8 V to 35 V Continuous
5 V for upto 1 minute

CRANKING DROPOUTS

Able to survive 0 V for 100 ms, providing supply was at least 10 V before dropout and supply recovers to 5 V. This is achieved without the need for internal batteries. LEDs and backlight will not be maintained during cranking.

MAXIMUM OPERATING CURRENT

510 mA at 12 V, 240 mA at 24 V

MAXIMUM STANDBY CURRENT

330 mA at 12 V, 160 mA at 24 V

CHARGE FAIL/EXCITATION RANGE

0 V to 35 V

GENERATOR & MAINS (UTILITY)

VOLTAGE RANGE

15 V to 415 V AC (Ph to N)
26 V to 719 V AC (Ph to Ph)

FREQUENCY RANGE

3.5 Hz to 75 Hz

MAGNETIC PICKUP

VOLTAGE RANGE

+/- 0.5 V to 70 V

FREQUENCY RANGE

10,000 Hz (max)

INPUTS

DIGITAL INPUTS A TO H

Negative switching

ANALOGUE INPUTS A & F

Configurable as:
Negative switching digital input
0 V to 10 V sensor
4 mA to 20 mA sensor
Resistive sensor

ANALOGUE INPUTS B, C, D & E

Configurable as:
Negative switching digital input
Resistive sensor

OUTPUTS

OUTPUT A & B (FUEL & START)

15 A DC at supply voltage

OUTPUTS C & D

8 A AC at 250 V AC (Volt-free)

AUXILIARY OUTPUTS E, F, G, H, I & J

2 A DC at supply voltage

DIMENSIONS

OVERALL

245 mm x 184 mm x 51 mm
9.6" x 7.2" x 2.0"

PANEL CUT-OUT

220 mm x 160 mm
8.7" x 6.3"

MAXIMUM PANEL THICKNESS

8 mm
0.3"

STORAGE TEMPERATURE RANGE

-40°C to +85°C
-40 °F to +185 °F

OPERATING TEMPERATURE RANGE

-30°C to +70°C
-22 °F to +158 °F

HEATED DISPLAY VARIANT

-40 °C to +70 °C
-40 °F to +158 °F