



VERT ENERGY

POWER PRODUCTS: TECHNICAL DATA SHEETS

1

VERT ENERGY GENERATORS





ABOUT THE COMPANY



Southern Africa's leading supplier of Electro-Mechanical Power Generation & Transmission Products

Situated in Southern Africa's economic and industrial hub, Johannesburg, Vert Energy is well placed to service and support the region with the following range of products:

- Electric Motors and Drives
- Power Generation Products
- Portable Power Products
- Service and Support.

Make the decision and experience pure energy today.

WATER PUMPS



AGRICULTURE N

MINING | CONSTRUCTION

3



⊘VERTENERGY **>> YANMAR**





LIGHTING TOWERS





HONDA

NDEX	PAGE	
esidential Generator Range		
VPPHLG8000E 8 kVA 220V & Images	5 - 6	
VPPHLG8000E 8 kVA 400V & Images	7 - 8	
ndustrial Generator Range		
6kVA 220V Capacitor Specification Data & Drawings	9 - 10	
6kVA 220V A.V.R Specification Data & Drawings	11 - 12	
7kVA 22OV A.V.R Specification Data & Drawings	13 - 14	
7kVA 400V A.V.R Specification Data & Drawings	15 - 16	
6kVA 220V 200A Specification Data & Drawings	17 - 18	
ert Engine Specifications		
VPHL460 Specification Data & Drawings	19 - 20	
ISM Alternators		
NSM K100G Specification Data & Drawings	21 - 22	
NSM KR100G Specification Data & Drawings	23 - 24	
NSM C100LH Specification Data & Drawings	25 - 26	
NSM ZR100SC Specification Data & Drawings	27 - 28	
	29 - 30	
NSM WS200AC Specification Data & Drawings		
NSM WS200AC Specification Data & Drawings Spare Parts	31	

Specifications subject to change without prior notice.

E. & E.O.



VERT ENERGY RESIDENTIAL GASOLINE GENERATORS Model: VPP HLG8000E 220





GASOLINE POWERED GENERATOR: OVERVIEW

8 kVA 220 V AVR

Low Fuel Consumption, High Durability, Low Noise

Technical Features	
Frequency:	50 Hz
Rated AC Output:	7.2 kVA / 3000 RPM
Maximum AC Output:	7.4 kVA / 3600 RPM 60 Hz
Power Factor:	1
AC Output Voltage:	220 V
Engine:	VPHL460
Engine Type:	Single-Cylinder, Four-Stroke, Air-Cooled, OHV Petrol Engines
Noise Level LwA Db(A)	97
Displacement:	459 cc
Maximum Output:	11.9 kW/3600 RPM
Fuel Type:	Gasoline
Fuel Tank Capacity:	25 ltr
Continuous Work:	12 hrs
Lubrication Oil:	SAE 5W/30
Lubrication Oil Volume:	1.2 ltr
Starting Systems:	Electric start
Generator Frame:	Steel Frame with Wheels

Packaging, Weights and Dimensions			
Dimensions:	(LXWXH)	815 x 574 x 563 mm	
Dry Weights:	(kg)	98	

5

VERT ENERGY RESIDENTIAL GASOLINE GENERATORS Model: VPP HLG8000E 220





Operational Front View

Engine Facing Right Side View





Back View Alternator Facing Left Side



VERT ENERGY RESIDENTIAL GASOLINE GENERATORS Model: VPP HLG8000E 400





GASOLINE POWERED GENERATOR: OVERVIEW

7 kVA 400 V AVR

Low Fuel Consumption, High Durability, Low Noise

Technical Features	
Frequency:	50 Hz
Rated AC Output:	7.2 kVA / 3000 RPM
Maximum AC Output:	7.5 kVA / 3600 RPM 60 Hz
Power Factor:	0.8
AC Output Voltage:	400V
Engine:	VPHL460
Engine Type:	Single-Cylinder, Four-Stroke, Air-Cooled, OHV Petrol Engines
Noise Level LwA Db(A)	97
Displacement:	459 сс
Maximum Output:	11.9 kW / 3600 RPM
Fuel Type:	Gasoline
Fuel Tank Capacity:	25 ltr
Continuous Work:	12 hrs
Lubrication Oil:	SAE 5W/30
Lubrication Oil Volume:	1.2 ltr
Starting Systems:	Electrical start
Generator Frame:	Steel Frame with Wheels

Packaging, Weights and Dimensions			
Dimensions:	(LXWXH)	815 x 574 x 563 mm	
Weights:	(kg)	98	

VERT ENERGY RESIDENTIAL GASOLINE GENERATORS Model: VPP HLG8000E 400





Operational Front View

Engine Facing Right Side View





Back View Alternator Facing Left Side



VERT ENERGY INDUSTRAL GASOLINE GENERATORS Model: VPPVG P 6000E 220V SF





GASOLINE POWERED GENERATOR: OVERVIEW

6 kVA 220V with Capacitor

Low Fuel Consumption, High Durability, Low Noise

Technical Features	
Frequency:	50 Hz
Rated AC Output:	6 kVA / 3000 RPM
Maximum AC Output:	6 kVA / 3600 RPM 60Hz
Power Factor:	1
AC Output Voltage:	220 V
Alternator:	NSM K100G (Capacitor)
Engine:	VPHL460
Engine Type:	Single-Cylinder, Four-Stroke, Air-Cooled, OHV Petrol Engines
Noise Level @ 7m(dB)	90
Displacement:	459 cc
Maximum Output:	11.9 kW / 3600 RPM
Fuel Type:	Gasoline
Fuel Tank Capacity:	6.5 ltr
Continuous Work:	2 hrs
Lubrication Oil:	SAE 5W/30
Lubrication Oil Volume:	1.2 ltr
Starting Systems:	Recoil Start. Electric Start optional
Generator Frame:	Steel Frame

Packaging, Weights and Dimensions		
Dimensions:	(LXWXH)	815 x 498 x 548 mm
Dry Weights Recoil Start:	(kg)	67
Dry Weights Electric Start:	(kg)	67 (weight excluding battery)

9

VERT ENERGY INDUSTRAL GASOLINE GENERATORS Model: VPPVG P 6000E 220V SF





Operational Front View

Engine Facing Right Side View





Back View

Alternator Facing Left Side

WWW.VERTGROUP.CO.ZA



VERT ENERGY INDUSTRAL GASOLINE GENERATORS Model: VPPVG P 6000E 220V AVR SF





GASOLINE POWERED GENERATOR: OVERVIEW

6 kVA 220V with A.V.R

Low Fuel Consumption, High Durability, Low Noise

Technical Features	
Frequency:	50 Hz
Rated AC Output:	6 kVA / 3000 RPM
Maximum AC Output:	6 kVA / 3600 RPM 60Hz
Power Factor:	1
AC Output Voltage:	220 V
Alternator:	NSM KR100G (A.V.R)
Engine:	VPHL460
Engine Type:	Single-Cylinder, Four-Stroke, Air-Cooled, OHV Petrol Engines
Noise Level @ 7m(dB)	90
Displacement:	459 cc
Maximum Output:	11.9 kW / 3600 RPM
Fuel Type:	Gasoline
Fuel Tank Capacity:	6.5 ltr
Continuous Work:	±2 hrs
Lubrication Oil:	SAE 5W/30
Lubrication Oil Volume:	1.2 ltr
Starting Systems:	Recoil Start. Electric Start Optional
Generator Frame:	Steel Frame

Packaging, Weights and Dimensions			
Dimensions:	(LXWXH)	815 x 498 x 548 mm	
Dry Weights Recoil Start:	(kg)	67	
Dry Weights Electric Start:	(kg)	67 (weight excluding battery)	

11

VERT ENERGY INDUSTRAL GASOLINE GENERATORS Model: VPPVG P 6000E 220V AVR SF





Operational Front View

Engine Facing Right Side View





Back View Alternator Facing Left Side



VERT ENERGY INDUSTRAL GASOLINE GENERATORS Model: VPPVG P 7000M 220V SF





GASOLINE POWERED GENERATOR: OVERVIEW

7 kVA 220V with Capacitor

Low Fuel Consumption, High Durability, Low Noise

Technical Features	
Frequency:	50 Hz
Rated AC Output:	7 kVA / 3000 RPM
Maximum AC Output:	7 kVA / 3600 RPM 60 Hz
Power Factor:	0.8
AC Output Voltage:	220 V
Alternator:	NSM C100LH (Capacitor)
Engine:	VPHL460
Engine Type:	Single-Cylinder, Four-Stroke, Air-Cooled, OHV Petrol Engines
Noise Level @ 7m(dB)	90
Displacement:	459 cc
Maximum Output:	11.9 kW / 3600 RPM
Fuel Type:	Gasoline
Fuel Tank Capacity:	6.5 ltr
Continuous Work:	1 hr 40 min
Lubrication Oil:	SAE 5W/30
Lubrication Oil Volume:	1.2 ltr
Starting Systems:	Recoil Start. Electric Start Optional
Generator Frame:	Steel Frame

Packaging, Weights and Dimensions			
Dimensions:	(LXWXH)	815 x 498 x 548 mm	
Dry Weights Recoil Start:	(kg)	67	
Dry Weights Electric Start:	(kg)	67 (weight excluding battery)	

13

VERT ENERGY INDUSTRAL GASOLINE GENERATORS Model: VPPVG P 7000M 220V SF





Operational Front View

Engine Facing Right Side View





Back View

Alternator Facing Left Side



VERT ENERGY INDUSTRAL GASOLINE GENERATORS Model: VPPVG P 7000M 400V AVR SF





GASOLINE POWERED GENERATOR: OVERVIEW

7 kVA 400V with A.V.R

Low Fuel Consumption, High Durability, Low Noise

Technical Features	
Frequency:	50 Hz
Rated AC Output:	7 kVA / 3000 RPM
Maximum AC Output:	7 kVA / 3600 RPM 60 Hz
Power Factor:	0.8
AC Output Voltage:	400 V
Alternator:	NSM ZR100SC (A.V.R)
Engine:	VPHL460
Engine Type:	Single-Cylinder, Four-Stroke, Air-Cooled, OHV Petrol Engines
Noise Level @ 7m(dB)	90
Displacement:	459 cc
Maximum Output:	11.9 kW / 3600 RPM
Fuel Type:	Gasoline
Fuel Tank Capacity:	6.5 ltr
Continuous Work:	1 hr 40 min
Lubrication Oil:	SAE 5W/30
Lubrication Oil Volume:	1.2 ltr
Starting Systems:	Recoil Start. Electric start Optional
Generator Frame:	Steel Frame

Packaging, Weights and Dimensions		
Dimensions:	(LXWXH)	815 x 498 x 548 mm
Dry Weights Recoil Start:	(kg)	67
Dry Weight Electrical Start:	(kg)	67 (Excluding Battery)

15

VERT ENERGY INDUSTRAL GASOLINE GENERATORS Model: VPPVG P 7000M 400V AVR SF





Operational Front View

Engine Facing Right Side View





Back View Alternator Facing Left Side



VERT ENERGY INDUSTRAL GASOLINE WELDER GENERATORS Model: VPPVGW P 6000E 220V 200A SFW





GASOLINE POWERED WELDER GENERATOR: OVERVIEW

7 kVA 220 V

Low Fuel Consumption, High Durability

Technical Features	
Maximum Rated Current:	200 A
Rated AC Output:	7.2 kVA / 3000 RPM
Power Factor:	1
Welding Voltage:	45 - 60 V
AC Voltage:	220 V
Alternator:	NSM WS200AC
Engine:	VPHL460
Engine Type:	Single-Cylinder, Four-Stroke, Air-Cooled, OHV Petrol Engines
Displacement:	459 cc
Maximum Output:	7 kVA / 3600 RPM
Fuel Type:	Gasoline
Fuel Tank Capacity:	6.5 ltr
Lubrication Oil:	SAE 5W/30
Oil Capacity:	1.2 ltr
Starting Systems:	Recoil Start. Electrical Start Optional
Welder Frame:	Steel Frame with Wheels

Packaging, Weights and Dimensions		
Dimensions:	(LXWXH)	815 x 493 x 726 mm
Handle Length (not included in above measurements):		146 mm
Dry Weights:	(kg)	88

17

VERT ENERGY INDUSTRAL GASOLINE WELDER GENERATORS Model: VPPVGW P 6000E 220V 200A SFW





Operational Front View

Engine Facing Right Side View





Back View Alternator Facing Left Side



VERT ENERGY GASOLINE ENGINES Model: PEVPP VPHL460E GS





GASOLINE ENGINES: OVERVIEW

VPHL460 11.9 kW (16 HP)

Low Fuel, Portable & Environmentally Friendly

Technical Features	
Engine Model:	VPHL460
Engine Type:	Single-cylinder, Four-Stroke, Air-cooled, OHV Gasoline Engine
Bore x Stroke:	92 x 69 mm
Displacement:	459 cc
Maximum Output:	11.9 kW / 3600 RPM
Fuel Consumption:	≤370 (g/kwh)
Ignition System:	Transistorized Magneto Ignition
Spark Plug:	FTTC
Fuel Tank Capacity:	6.5 ltr
Lubrication Oil:	SAE 5W/30
Lubrication Oil Volume:	1.2 ltr
Starting System:	Recoil or Electric Starter
Stop System:	Ignition Primary Circuit Ground
Noise Level:	@7m(dB) 90

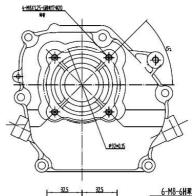
Mounting Configurations

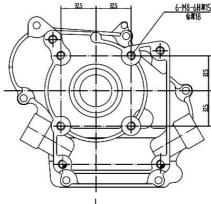
Standard J609B Tapered Shaft

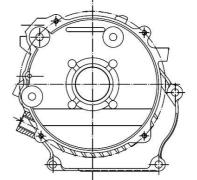
Packaging, Weights and Dimensions		
Dimensions:	(LXWXH)	545 × 505 × 515 mm
Dry Weights Recoil Start:	(kg)	33
Dry Weights Electric Start	(kg)	35

VERT ENERGY GASOLINE ENGINES Model: PEVPP VPHL460E GS

DRAWIING









NSM 2 Pole 6kVA Model: K100G

SINGLE PHASE CAPACITOR

Model: K100G

NSM 2 Pole 6kVA

DRAWINGS

nsm



SINGLE-PHASE ALTERNATORS 2 POLE: OVERVIEW

K100G 6kVA

Brushless, with capacitor

Technical Features	
Power Range (Elec) 50hz:	6 kVA (Prime Rated)
Power Range (Mech) 50hz:	7.3 kW Input Power @ 76% Efficiency (Prime Rated) pF 1.0
Standard Voltages 50hz:	220 V / 240V
Voltages Accuracy:	± 2% (regardless of cosφ)
Insulation Class:	Class "H"
Protection:	IP23
T.H.D:	<6%
Good Starting Capacity:	(lcc >3ln)

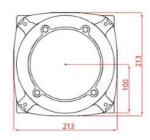
Mounting	Configurations

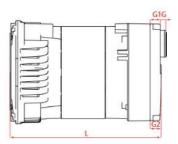
WWW.VERTGROUP.CO.ZA

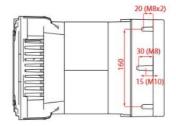
Standard J609B Taper Shaft

Packaging, W	/eights and Dimensions	
Dimensions:	(I X M X H)	

Dimensions:	(LXWXH)	345 x 213 x 213
Weight:	(kg)	25

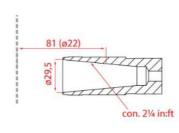


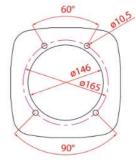




J609b C 22

C 25,4







NSM 2 Pole 6kVA Model: KR100G SINGLE PHASE AVR

Model: KR100G

NSM 2 Pole 6kVA

DRAWINGS

msm



SINGLE-PHASE ALTERNATORS 2 POLE: OVERVIEW

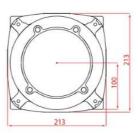
KR100G 6 kVA

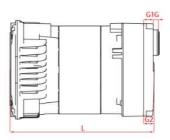
Brush, with Automatic Voltage Regulator

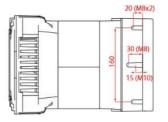
Technical Features	
Power Range (Elec) 50hz:	6 kVA (Prime Rated)
Power Range (Mech) 50hz:	7.8 kW Input Power @ 77% Efficiency (Prime Rated) pF 1.0
Standard Voltages 50hz:	230 V / 240 V
Voltages Accuracy:	+5%, -10% (cosφ = 1)
Insulation Class:	Class "H"
Protection:	IP23
T.H.D:	<6%
Good Starting Capacity:	(lcc >3ln)
Automatic Voltage Regulator:	AVR520

Mounting Configurations		
Standard	J609B Taper Shaft	

Packaging, We	eights and Dimensions			
Dimensions:	Dimensions: (L X W X H) 392 x 213 x 213			
Weight:	(kg)	25		

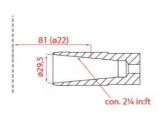


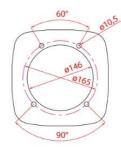




J609b C 22

C 25,4







NSM 2 Pole 7kVA Model: C100LH

SINGLE PHASE CAPACITOR

nsm



SINGLE-PHASE ALTERNATORS 2 POLE: OVERVIEW

C100LH 7kVA

Brushless, with capacitor

Technical Features	
Power Range (Elec) 50hz:	7 kVA (Prime Rated)
Power Range (Mech) 50hz:	9 kW Input Power @ 78% Efficiency (Prime Rated) pF 1.0
Standard Voltages 50hz:	230 V / 240 V
Voltages Accuracy:	+5%, -10% (cosφ = 1)
Insulation Class:	Class "H"
Protection:	IP23
T.H.D:	<6%
Good Starting Capacity:	(lcc >3ln)

Mounting	g Contig	rurations

WWW.VERTGROUP.CO.ZA

J609B Taper Shaft Standard

Packaging, We	eights and Dimensions		
Dimensions:	(LXWXH)	410 x 225 x 280	
Weight:	(kg)	30	

NSM 2 Pole 7kVA Model: C100LH

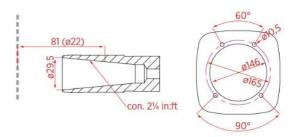
DRAWINGS

-279 (342 opt.) 280 (Std.) 100 225 70 (M8x2) 60 (M8) 45 (M10)

J609b

C 22 C 25,4

C 35





NSM 2 Pole 7kVA

THREE PHASE WITH AVR

Model: ZR100SC





THREE-PHASE ALTERNATORS 2 POLE: OVERVIEW

ZR100SC 7kVA A.V.R

Brushless, with Automatic Voltage Regulator

Technical Features	
Power Range (Elec) 50hz:	7 kVA (Prime Rated)
Power Range (Mech) 50hz:	6.9 kW Input Power @ 81% Efficiency (Prime Rated) pF 0.8
Standard Voltages 50hz:	230 V / 400 V
Voltages Accuracy:	± 6% (cos φ = 0,9)
Insulation Class:	Class "H"
Protection:	IP23
T.H.D:	<6%
Good Starting Capacity:	(lcc >4ln)
Automatic Voltage Regulator:	AVR960D

Mounting Configurations	
Standard	J609B Taper Shaft

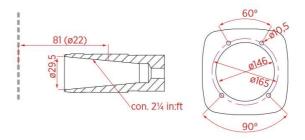
Packaging, We	eights and Dimensions	
Dimensions:	(LXWXH)	345 x 225 x 342
Weights	(kg)	27

NSM 2 Pole 7kVA Model: ZR100SC **DRAWINGS**

-279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279 -279

> **J609b** C 22 C 25,4

C 35





NSM 2 Pole 7kVA

WELDER GENERATOR

Model: WS200AC



nsm

SINGLE-PHASE ALTERNATORS 2 POLE: OVERVIEW

WS200AC 7kVA

Brushless Alternator

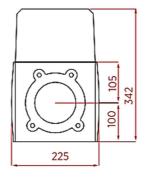
Technical Features	
Power Range (Elec) 50hz:	7 kVA (Prime Rated)
Welding Current > Driving Power:	180A(ø=4mm) > 7.5 kW (10HP)
	200A (ø=4mm) > 9.0 kW
Duty:	180A - 60%, 200A - 35%
Strike Voltages:	45 - 60 V
Insulation Class:	Class "H"
Protection:	IP23
T.H.D:	<6%

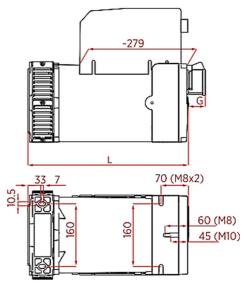
Mounting Configurations	
Standard	J609B Taper Shaft

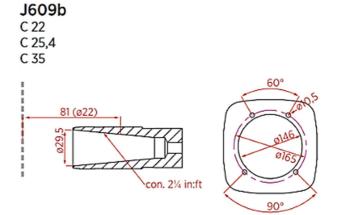
Packaging, We	eights and Dimensions		
Dimensions:	(LXWXH)	410 x 225 x 342	
Weight:	(kg)	44	

NSM 2 Pole 7kVA Model: WS200AC











SPARE PARTS

Full range of Vert Energy spare parts available



31

VERT ENERGY AFRICA

Head Office 11 Voyager Street Linbro Park, Sandton Johannesburg

Contact: info@vertgroup.co.za

Phone: +27 11 453 9669 +27 11 453 4531





