



# **VERT ENERGY**

**POWER PRODUCTS: TECHNICAL DATA SHEETS** 

**(1**)

YANMAR GENERATORS

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DESIGNED TO PERFORM. BUILT TO LAST.

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#### 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.

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#### WATER PUMPS



AGRICULTURE

MINING



TRASH PUMPS

#### GENERATORS



RENTAL

3



**VERTENERGY** 







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Specifications subject to change without prior notice. E. & E.O.



### YANMAR POWERED DIESEL GENERATORS Model: VPPYG D 4200E/M 220V SF





#### DIESEL POWERED GENERATOR: OVERVIEW

4.2 kVA 220V with Capacitor

Low Fuel Consumption, High Durability

| Technical Features  |   |
|---------------------|---|
| Frequency:          | 50 Hz   |
| Rated AC Output:    | 3.5 kVA / 3000 RPM                                  |
| Maximum AC Output:  | 4 kVA / 3600 RPM 60 Hz                              |
| Power Factor:       | 1   |
| AC Output Voltage:  | 220 V   |
| Alternator:         | NSM K100E (Capacitor)                               |
| Engine:             | L7ON-DGLT / DEGLT                                   |
| Engine Type:        | Vertical cylinder, 4-cycle air-cooled diesel engine |
| Displacement:       | 320 cc  |
| Maximum Output:     | 4.9 kW / 3600 RPM                                   |
| Fuel Type:          | Diesel  |
| Fuel Tank Capacity: | 13.5 ltr  |
| Continuous Work:    | 13.5 hrs  |
| Oil Tank Capacity:  | 1.1 ltr   |
| Starting Systems:   | Recoil / Electrical Start                           |
| Generator Frame:    | Steel Frame   |

| Packaging, Weig     | ghts and Dir | nensions |                                |
|---------------------|--------------|----------|--------------------------------|
| Dimensions:         | (LXWXI       | 1)       | 720 x 530 x 600 mm             |
| Dry Weights Recoil  | Start:       | (kg)     | 75.3                           |
| Dry Weight Electric | Start:       | (kg)     | 79 (Weights Excluding Battery) |

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### YANMAR POWERED DIESEL GENERATORS Model: VPPYG D 4200E 220V SF





Side View





Back View

Side View Operational View Electrical Panel



### YANMAR POWERED DIESEL GENERATORS Model: VPPYG D 6000E 220V SFW





#### DIESEL POWERED GENERATOR: OVERVIEW

6 kVA 220V with Capacitor

Low Fuel Consumption, High Durability

| Tankainal Fantures  |   |
|---------------------|---|
| Technical Features  |   |
| Frequency:          | 50 Hz   |
| Rated AC Output:    | 5.5 kVA / 3000 RPM                                  |
| Maximum AC Output:  | 6 kVA / 3600 RPM 60 Hz                              |
| Power Factor:       | 1   |
| AC Output Voltage:  | 220 V   |
| Alternator:         | NSM K100G (Capacitor)                               |
| Engine:             | L100N-DEGLT   |
| Engine Type:        | Vertical cylinder, 4-cycle air-cooled diesel engine |
| Displacement:       | 435 cc  |
| Maximum Output:     | 7.4 kW / 3600 RPM                                   |
| Fuel Type:          | Diesel  |
| Fuel Tank Capacity: | 13.5 ltr  |
| Continuous Work:    | 9.5 hrs   |
| Oil Tank Capacity:  | 1.1 ltr   |
| Starting Systems:   | Electric Start                                      |
| Generator Frame:    | Steel Frame with Wheels                             |

| Packaging, Weights and Dimensions                   |         |                                  |  |
|---|---------|----------------------------------|--|
| Dimensions:   | (LXWXH) | 806 x 533 x 732 mm               |  |
| Handle Length (not included in above measurements): |         | 245 mm                           |  |
| Dry Weights:  | (kg)    | 111.9 (weight excluding battery) |  |

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# YANMAR POWERED DIESEL GENERATORS Model: VPPYG D 6000E 220V SFW





Side View

**Back View** 





Side View

Operational View Electrical Panel



### YANMAR POWERED DIESEL GENERATORS Model: VPPYG D 6000E 220V AVR SFW





#### DIESEL POWERED GENERATOR: OVERVIEW

6 kVA 220V with A.V.R

Low Fuel Consumption, High Durability

| Technical Features  |   |
|---------------------|---|
| Frequency:          | 50 Hz   |
| Rated AC Output:    | 5.5 kVA / 3000 RPM                                  |
| Maximum AC Output:  | 6 kVA / 3600 RPM 60 Hz                              |
| Power Factor:       | 1   |
| AC Output Voltage:  | 220 V   |
| Alternator:         | NSM KR100G (A.V.R)                                  |
| Engine:             | L100N-DEGLT   |
| Engine Type:        | Vertical cylinder, 4-cycle air-cooled diesel engine |
| Displacement:       | 435 cc  |
| Maximum Output:     | 7.4 kW / 3600 RPM                                   |
| Fuel Type:          | Diesel  |
| Fuel Tank Capacity: | 13.5 ltr  |
| Continuous Work:    | 9.5 hrs   |
| Oil Tank Capacity:  | 1.1 ltr   |
| Starting Systems:   | Electric Start                                      |
| Generator Frame:    | Steel Frame with Wheels                             |

| Packaging, Weights and Dimensions                   |         |                                  |  |
|---|---------|----------------------------------|--|
| Dimensions:   | (LXWXH) | 810 x 533 x 732 mm               |  |
| Handle Length (not included in above measurements): |         | 245 mm                           |  |
| Dry Weights:  | (kg)    | 112.2 (weight excluding battery) |  |

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### YANMAR POWERED DIESEL GENERATORS Model: VPPYG D 6000E 220V AVR SFW





Side View

**Back View** 





Side View

Operational View Electrical Panel



# YANMAR POWERED DIESEL GENERATORS Model: VPPYG D 6000E 400V AVR SFW





#### DIESEL POWERED GENERATOR: OVERVIEW

6 kVA 400V with A.V.R

Low Fuel Consumption, High Durability

| Technical Features  |   |
|---------------------|---|
| Frequency:          | 50 Hz   |
| Rated AC Output:    | 6.6 kVA / 3000 RPM                                  |
| Maximum AC Output:  | 7.4 kVA / 3600 RPM 60Hz                             |
| Power Factor:       | 0.8   |
| AC Output Voltage:  | 220 V   |
| Alternator:         | NSM ZR100SC (A.V.R)                                 |
| Engine:             | L100N-DEGLT   |
| Engine Type:        | Vertical cylinder, 4-cycle air-cooled diesel engine |
| Displacement:       | 435 cc  |
| Maximum Output:     | 7.4 kW / 3600 RPM                                   |
| Fuel Type:          | Diesel  |
| Fuel Tank Capacity: | 13.5 ltr  |
| *Continuous Work:   | 9.5 hrs   |
| *Oil Tank Capacity: | 1.1 ltr   |
| Starting Systems:   | Electric Start                                      |
| Generator Frame:    | Steel Frame with Wheels                             |

| Packaging, Weights and Dimensions                   |         |                                  |  |
|---|---------|----------------------------------|--|
| Dimensions:   | (LXWXH) | 810 x 533 x 732 mm               |  |
| Handle Length (not included in above measurements): |         | 245 mm                           |  |
| Dry Weights:  | (kg)    | 112.2 (weight excluding battery) |  |

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# YANMAR POWERED DIESEL GENERATORS Model: VPPYG D 6000E 400V AVR SFW





Side View

**Back View** 





Side View

Operational View Electrical Panel



### YANMAR POWERED DIESEL WELDER GENERATORS Model: VPPYGW D 6000E 220V 200A SFW





#### GASOLINE POWERED WELDER GENERATOR: OVERVIEW

6 kVA 220 V 200A Welder Generator

Low Fuel Consumption, High Durability

| Technical Features     |   |
|------------------------|---|
| Maximum Rated Current: | 200 A @ 35% and 180A @ 60% Duty Cycle               |
| Rated AC Output:       | 5.5 kVA / 3000 RPM                                  |
| Power Factor:          | 1   |
| Welding Voltage:       | 45 - 60 V   |
| AC Voltage:            | 220 V   |
| Alternator:            | NSM WS200AC   |
| Engine:                | L100N-DEGLT   |
| Engine Type:           | Vertical cylinder, 4-cycle air-cooled diesel engine |
| Displacement:          | 435 cc  |
| Maximum Output:        | 6 kVA / 3600 RPM                                    |
| Fuel Type:             | Diesel  |
| Fuel Tank Capacity:    | 13.5 ltr  |
| Continuous Work:       | 9.5 hrs   |
| Oil Capacity:          | 1.2 ltr   |
| Starting Systems:      | Electric Start                                      |
| Welder Frame:          | Steel Frame with wheels                             |

| Packaging, Weight                                   | s and Dimensions |                                |
|---|------------------|--------------------------------|
| Dimensions:   | (LXWXH)          | 810 x 532 x 786 mm             |
| Handle Length (not included in above measurements): |                  | 245 mm                         |
| Dry Weights:  | (kg)             | 130 (weight excluding battery) |

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### YANMAR POWERED DIESEL GENERATORS Model: VPPYGW D 6000E 220V 200A SFW





Side View

Back View





Side View

Operational View Electrical Panel



#### YANMAR DIESEL ENGINES Model: L70N-DGLT & L70N-DEGLT





#### Diesel ENGINES: OVERVIEW

L70N 4.9 kW

Small industrial diesel engine

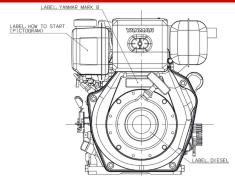
| Technical Features  |   |
|---------------------|---|
| Туре:               | 4-Stroke, Vertical Cylinder, Air-cooled Diesel Engine |
| Starting System:    | Recoil / Electric Start                               |
| Cooling System:     | Forced air-cooling by flywheel fan                    |
| No. of Cylinders:   | 1   |
| Displacement:       | 320 cc  |
| Bore x Stroke:      | 78 x 67 mm  |
| Maximum Output:     | 4.4 kW / 3600 RPM                                     |
| Continuous Output:  | 4.9 kW / 3600 PRM                                     |
| Fuel Tank Capacity: | 13.5 ltr Separately Mounted                           |

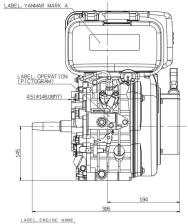
| Mounting Configurations |               |  |
|-------------------------|---------------|--|
| Standard                | Tanered Shaft |  |

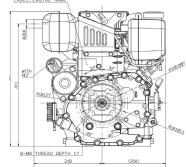
| Packaging, Weights and Dimensions |            |      |                   |
|-----------------------------------|------------|------|-------------------|
| Dimensions:                       | (L X W     | X H) | 378 × 422× 453 mm |
| Dry Weights Reco                  | oil Start: | (kg) | 36                |
| Dry Weight Flectr                 | ic Start:  | (ko) | 41                |

### YANMAR DIESEL ENGINES Model: L70N-DGLT & L70N-DEGLT

DRAWINGS









### YANMAR DIESEL ENGINES Model: L100N-DGLT & L100N-DEGLT





**GASOLINE ENGINES: OVERVIEW** 

L100N 7.4 kW

Small industrial diesel engine

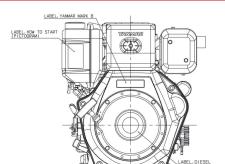
| Technical Features  |   |
|---------------------|---|
| Туре:               | 4-Stroke, Vertical Cylinder, Air-cooled Diesel Engine |
| Starting System:    | Recoil / Electric Start                               |
| Cooling System:     | Forced air-cooling by flywheel fan                    |
| No. of Cylinders:   | 1   |
| Displacement:       | 435 cc  |
| Bore x Stroke:      | 86 x 75 mm  |
| Maximum Output:     | 7.4 kW / 3600 RPM                                     |
| Continuous Output:  | 6.6 kW / 3600 PRM                                     |
| Fuel Tank Capacity: | 13.5 ltr Separately Mounted                           |

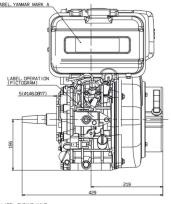
| Mounting Configurations |               |
|-------------------------|---------------|
| Standard                | Tapered Shaft |

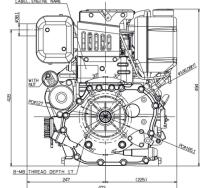
| Packaging, Weights and Dimensions |           |      |                   |
|-----------------------------------|-----------|------|-------------------|
| Dimensions:                       | (L X W    | XH)  | 412 × 473× 494 mm |
| Dry Weights Reco                  | il Start: | (kg) | 48.5              |
| Dry Weight Flectri                | ic Start: | (kø) | 53.5              |

# YANMAR DIESEL ENGINES Model: L100N-DGLG & L100N-DEGLT

**DRAWINGS** 







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NSM 2 Pole 4.2kVA Model: K100E SINGLE PHASE CAPACITOR





SINGLE-PHASE ALTERNATORS 2 POLE: OVERVIEW

K100E 4.2kVA

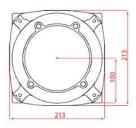
Brushless, with capacitor

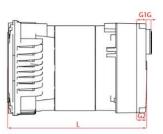
| Technical Features       |   |
|--------------------------|---|
| Power Range (Elec) 50hz: | 4.2 kVA (Prime Rated)                                   |
| Power Range (Mech) 50hz: | 5.8 kW Input Power @ 73% Efficiency (Prime Rated) pF1.0 |
| Standard Voltages 50hz:  | 230 V / 240 V   |
| Voltages Accuracy:       | +5%, -10% (cosφ = 1)                                    |
| Insulation Class:        | Class "H"   |
| Protection:              | IP23  |
| T.H.D:                   | <6%   |
| Good Starting Capacity:  | (lcc >3ln)  |

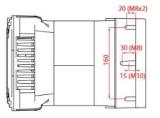
| Mounting Configurations |                   |
|-------------------------|-------------------|
| Standard                | J609B Taper Shaft |

| Packaging, Weights and Dimensions |         |                 |  |
|-----------------------------------|---------|-----------------|--|
| Dimensions:                       | (LXWXH) | 314 x 213 x 213 |  |
| Weight:                           | (kg)    | 20              |  |

NSM 2 Pole 4.2kVA Model: K100E DRAWINGS

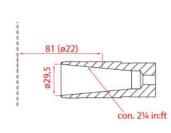


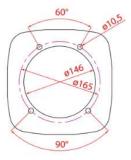




J609b

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NSM 2 Pole 6kVA Model: K100G SINGLE PHASE CAPACITOR

NSM 2 Pole 6kVA Model: K100G **DRAWINGS** 





#### SINGLE-PHASE ALTERNATORS 2 POLE: OVERVIEW

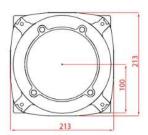
K100G 6kVA

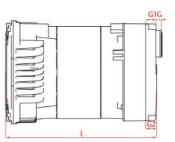
Brushless, with capacitor

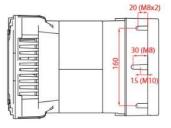
| Technical Features       |  |
|--------------------------|--|
| Power Range (Elec) 50hz: | 6 kVA (Prime Rated)                                      |
| Power Range (Mech) 50hz: | 7.3 kW Input Power @ 76% Efficiency (Prime Rated) pF 1.0 |
| Standard Voltages 50hz:  | 220 V / 240V   |
| Voltages Accuracy: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

| Mounting Configurations |                   |  |
|-------------------------|-------------------|--|
| Standard .              | IGNAR Taner Shaft |  |

| Packaging, We | eights and Dimensions |                 |
|---------------|-----------------------|-----------------|
| Dimensions:   | (LXWXH)               | 345 x 213 x 213 |
| Weight:       | (kø)                  | 25              |

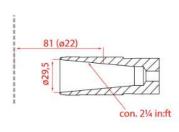


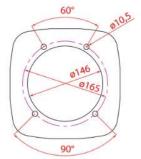




#### J609b

C 22 C 25,4







NSM 2 Pole 6kVA Model: KR100G SINGLE PHASE AVR







#### SINGLE-PHASE ALTERNATORS 2 POLE: OVERVIEW

KR100G 6 kVA

Brush, with Automatic Voltage Regulator

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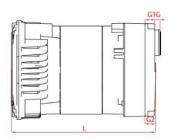
| Technical Features           |  |
|------------------------------|--|
| Power Range (Elec) 50hz:     | 6 kVA (Prime Rated)                                      |
| Power Range (Mech) 50hz:     | 7.8 kW Input Power @ 77% Efficiency (Prime Rated) pF 1.0 |
| Standard Voltages 50hz:      | 230 V / 240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

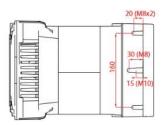
| Mounting Configurations |                   |
|-------------------------|-------------------|
| Standard                | J609B Taper Shaft |

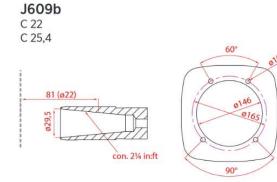
| Packaging, Wo | eights and Dimensions |                 |  |
|---------------|-----------------------|-----------------|--|
| Dimensions:   | (LXWXH)               | 392 x 213 x 213 |  |
| Weight:       | (kg)                  | 25              |  |

### NSM 2 Pole 6kVA Model: KR100G

DRAWINGS









NSM 2 Pole 7kVA Model: ZR100SC THREE PHASE WITH AVR

- Sinstead





#### THREE-PHASE ALTERNATORS 2 POLE: OVERVIEW

ZR100SC 7kVA

Brushless, with Automatic Voltage Regulator

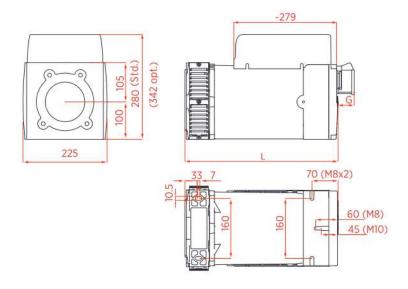
| Technical Features           |  |
|------------------------------|--|
| Power Range (Elec) 50hz:     | 7 kVA (Prime Rated)                                      |
| Power Range (Mech) 50hz:     | 6.9 kW Input Power @ 81% Efficiency (Prime Rated) pF 0.8 |
| Standard Voltages 50hz:      | 230 V / 400 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

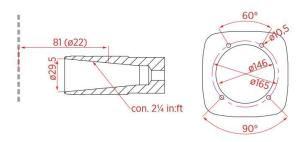


#### J609b

C 22

C 25,4

C 35





NSM 2 Pole 7kVA Model: WS200AC WELDER GENERATOR





#### SINGLE-PHASE ALTERNATORS 2 POLE: OVERVIEW

WS200AC 7kVA

Brushless Alternator

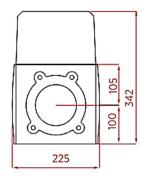
| Technical Features               |  |
|----------------------------------|--|
| Power Range (Elec) 50hz:         | 7 kVA (Prime Rated)                                  |
| Welding Current > Driving Power: | 180A(ø=4mm) > 7.5 kW (10HP)<br>200A (ø-4mm) > 9.0 kW |
| Duty:                            |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

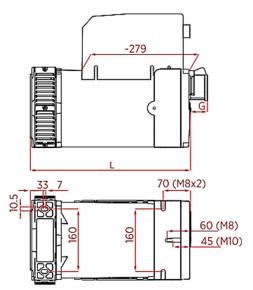
| Mounting Configurations |                   |  |
|-------------------------|-------------------|--|
| Standard                | J609B Taper Shaft |  |

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

### NSM 2 Pole 7kVA Model: WS200AC



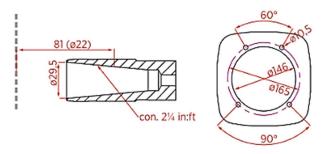




**J609b** C 22

C 25,4

C 35





### SPARE PARTS

Full range of Yanmar spare parts available



#### VERT ENERGY AFRICA

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Contact: info@vertgroup.co.za

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







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