

HOW TO CHOOSE A GENERATOR



First step in selecting a generator is to understand what level of power usage you will need. Below we've listed the most commonly used products as a reference point. Please note that this chart is a guide line and actual consumption may vary by product and manufacturer brands.

Product Category	Product Description	Running/Rated Power In Watts	Additional Starting Power In Watts	Total Power Required From Generator To Start And Run Product In Watts
Essentials	Light Bulbs Incandecent 40Watt	40	0	40
	Light Bulbs Incandecent 60Watt	60	0	60
	Light Bulbs Incandecent 100Watt	100	0	100
Kitchen	Refrigerator/ Freezer	1000	2000	3000
	Dishwasher	1500	3000	4500
	Microwave Oven 625 Watt	625	0	625
	Microwave Oven 1000 Watt	1000	0	1000
	Coffee Maker 1000 Watt	1000	0	1000
	Kettle - 2200 Watt	2200	0	2200
	Toaster 850 Watt	850	0	850
	Food Processor	400 - 600	0	400 - 600
	Electric Griller 2200 Watt	2200	0	2200
	Laundry	Washing Machine	1200	2400
Tumble Dryer		1500	3000	4500
Iron - 1200 Watt - 1600 Watt		1200 - 1600	0	1200 - 1600
Family Room	LED TV 47"	300 - 500	0	300 - 500
	DVD Player	150	0	150
	DStv	150	0	150
Heating/Cooling	Air-conditioner 9000 BTU	1500	3000	4500
	Air-conditioner 12000 BTU	1800	3600	5400
	Air-conditioner 18000 BTU	2500	5000	7500
	Air-conditioner 24000 BTU	3800	7600	11400
	Fan 20"	200	0	200

Product Category	Product Description	Running/Rated Power In Watts	Additional Starting Power In Watts	Total Power Required From Generator To Start And Run Product In Watts
WORK/ DIY				

Electrical motors that use brushes will have a coefficient of approximately 1.4. This means that the start up power must be multiplied by the coefficient for example a 500 watt power drill will require and additional 700 watts start up power therefore the total required power to operate the drill is 500W + 700W = 1200W.

Product Category	Product Description	Running/Rated Power In Watts	Additional Starting Power In Watts	Total Power Required From Generator To Start And Run Product In Watts
DIY Power Tools	Rotary Drill - 550W	550	770	1320
	Impact Drill - 850W	850	1190	2040
	Multi Sander - 160W	160	224	384
	Orbital Sander - 200W	200	280	480
	Belt Sander - 710W	710	994	1704
	Angle Grinder -850W	850	1190	2040
	Angle Griner - 2200W	2200	3080	5280
	Mitre Saw - 2000W	2000	2800	4800
	Planer - 500W	500	700	1200
	Jigsaw - 620W	620	868	1488

Asynchronous motors (squirrel cage type) will have a coefficient of approximately 2. This means that the start up power must be multiplied by the coefficient for example a 2200 watt air compressor will require and additional 4400 watts start up power therefore the total required power to operate the air compressor is 2200W + 4400W = 6600W.

Product Category	Product Description	Running/Rated Power In Watts	Additional Starting Power In Watts	Total Power Required From Generator To Start And Run Product In Watts
Air Compressors	Air Compressor 200LT - 2200W	2200	4400	6600
	Air Compressor 24LT - 1100W	1100	2200	3300
Office	Computer Monitor	300-500	0	300 - 500
	Copy Machine	1500 - 2000	0	1500 - 2000
	Lazer Printer	800 - 1200	0	800 - 1200

HELPFUL FORMULAS

Wattage = AMPS x Voltage	Ampere = $\frac{\text{Wattage}}{\text{Voltage}}$
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GENERAL GUIDELINE




Please see below a few typical scenarios to serve as a guideline when selecting the appropriate generator for your requirements.

Please note that this chart is a guideline and actual consumption may vary to what is indicated. Please check the manufacturers specifications for accurate measurements.









 1KVA 1000 W SRGE1500D	 +  + 
516W =	

 2.2KVA 2200 W SRGE2500D	 +  +  + 
2060W =	

 2.8KVA 2800 W SRGE3500E	 +  +  + 
2560W =	

 5.5KVA 5500 W SRGE6500D	 +  +  +  + 
4560W =	

 6.5KVA 6500 W SRGE7500D	 +  +  +  +  + 
5560W =	

 7.5KVA 7500 W SRGE8500D	 +  +  +  +  +  + 
5710W =	

SERVICE, MAINTENANCE AND RUNNING TIPS

- Before starting your generator, always ensure that there is sufficient oil and fuel in the machine. Only use SAE30 graded oil and unleaded petrol (for petrol models) and low sulphur diesel (for diesel models).
- Do not use dirty fuel or oil in your generator.
- Always place your generator on a flat surface when pouring in the oil and fuel.
- If you have an electric start generator, check that your battery is fully charged before starting.
- Ensure that the choke is on when starting your generator, once started, switch the choke to the 'off' position.
- Never connect your appliances before starting your generator, always start your generator first, and then connect one appliance at a time.
- Disconnect your appliances before switching off your generator.
- Switch off the fuel tap prior to turning off your generator, to allow the fuel in the carburettor to be used.
- We recommend that your first service should be after 20 running hours and thereafter at 50 hour intervals.
- Always operate your generator in a well ventilated area, as toxic fumes are emitted from your generator.