

RENTAL POWER SOLUTIONS

ELECTRIC POWER,
TEMPERATURE CONTROL
AND COMPRESSED AIR



Carter Machinery



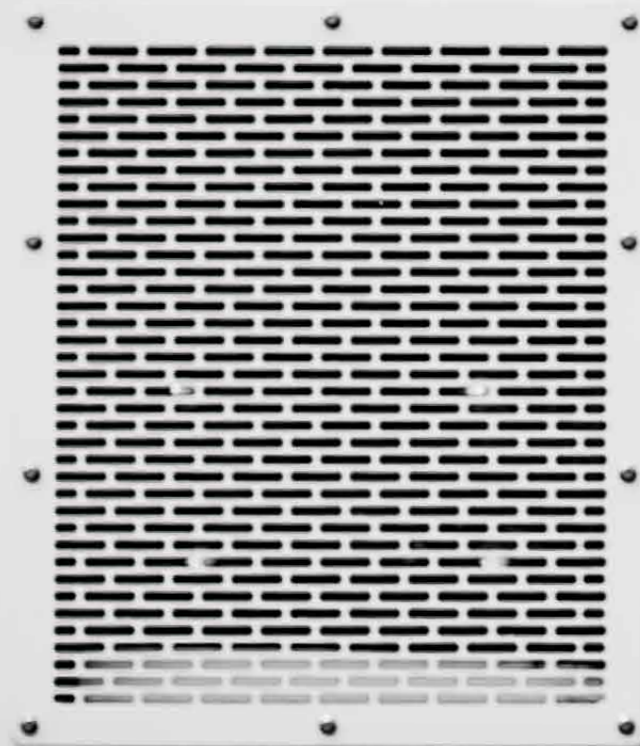
LET'S GET
TO WORK.®



WHY CARTER MACHINERY?

When you rent from Carter Machinery, you get more than equipment. Every rental is backed by a team of professionals with the industry know-how to help you choose the correct fit for your application. Whether you're planning ahead or responding to an outage, make us your first call. With Virginia's largest fleet and an extensive network of facilities, Carter puts productivity and reliability within your reach.

- Largest rental power fleet in Virginia
- On-site and emergency service available 24-hours a day, 365-days a year
- A network of convenient locations





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ELECTRIC POWER

Whether faced with planned or emergency electric power needs, you not only demand reliability – you need availability. With the largest rental fleet of electric power equipment in Virginia, you can rely on Carter to provide quality products when and where you need them.



Carter
Rental Power



228-2210 1



2,000 Kg
(4,400 LBS)



GENERATORS

For electric power solutions tailored to your unique needs, look no further than our extensive fleet of generators. We offer units for every application, with sizes ranging from 20kW to 2,000kW, plus options available for manual or automatic paralleling of multiple units for any capacity. Whatever your specific requirements, our generators are equal to the challenge, providing power when and where you need it most.



SPECS

Power Rating	Frequency	Voltage (V)
20ekW (25 kVA)	60hZ	208-480
30ekW (37.5 kVA)	60hZ	208-480
60ekW (75 kVA)	60hZ	208-480
100ekW (125 kVA)	60hZ	208-480
200ekW (250 kVA)	60hZ	208-480
300ekW (310 kVA)	50 / 60hZ	208-480
350ekW (437.5 kVA)	50 / 60hZ	208-480
375ekW (400 kVA)	50 / 60hZ	208-480
400ekW (500 kVA)	50 / 60hZ	208-480
500ekW (625 kVA)	60hZ	208-480
800ekW (994 kVA)	50 / 60hZ	208-480
1000ekW (1250 kVA)	50 / 60hZ	208-480
1500ekW (1250 kVA)	50 / 60hZ	400-480
2000ekW (2500 kVA)	50 / 60hZ	400-480

LOAD BANKS

For reliable load banks, make Carter your first call. We carry a variety of capacities, voltages, variable power factors, and medium voltage solutions. Whether your need is immediate or part of scheduled maintenance, we have the knowledge to pair you with the right fit for your particular application.



SPECS

Power Capacity	PF	Type	Voltage (V)
100kVA	1.0	Resistive	208-480
400kVA	1.0	Resistive	208-480
1250kVA	1.0	Resistive	208-480
725kVA	0.8	Resistive / Reactive	400-480
1.875MVA	0.8	Resistive / Reactive	400-480
3.3MVA	0.8	Resistive / Reactive	400-480
6.25MVA	0.8	Resistive / Reactive	400-480

POWER DISTRIBUTION

At Carter, we understand that no rental is complete without the cables, electrical panels and breakers needed to bring it all together. We carry 30kVA to 7,000kVA transformers for low and medium voltage, as well as transfer switches that range from 400amp to 4,000amp ratings in outdoor enclosures. Your rental representative will review the details with you, ensuring you have all the components necessary to make your project a success.



SPECS

Type	Description
Circuit Breakers	Up to 4,000amp
Electrical Panels	Up to 6,000amp
Entertainment Boxes	Up to 400amp
MV Power Cables	Up to 15kv
LV Power Cables	2/0 and 4/0
Protective Ramps	High-Capacity / Multi-Tray
Transfer Switches	Up to 4,000amp
Transformers	Up to 7,000kVa

FUEL TANKS

Rental auxiliary tanks from Carter are a safe and simple way to avoid potential shut-downs while saving time and money. Our portable and environmentally safe fuel storage tanks feature a secondary containment, lockable equipment cabinet, 4-way forklift pockets, and lifting/stacking corner brackets for ease of handling.



SPECS

Model	Capacity (gal)	Empty (lbs)	Full (lbs)
05TCG	132	965	1,901
10TCG	264	1,118	2,994
20TCG	528	1,825	5,574
30TCG	792	2,153	7,765
50TCG	1,240	3,576	12,335
TCL100	2,450	6,460	23,810

TEMPERATURE CONTROL

Backed by some of the industry's most highly-trained technicians and support personnel, Carter's rugged temperature control rental fleet delivers superior performance in both industrial process and comfort cooling applications.



CAUTION
HOT SURFACE

Carter

CAT

AIR CONDITIONING

From cooling an event during the summer months to regulating temperatures on the factory floor, we have an expansive fleet of air conditioners ready-for-rent. Available models range from quiet and portable units to self-contained, 80-ton models commonly used in industrial and manufacturing applications.



SPECS

Rating	Capacity	Dimensions	Weight (lbs)	Power Supply
1 Ton	14,000 BTU	26" x 20" x 34"	160	115v / 1ph
1.5 Ton	18,000 BTU	29" x 28" x 41"	230	115v / 1ph
3 Ton	36,000 BTU	30" x 44" x 52"	440	208v or 230v / 1ph
5 Ton*	78,000 BTU	42" x 30" x 70"	650	208v or 230v / 3ph
12 Ton	4,050 CFM	64" x 44" x 67.5"	1,200	230v or 460v / 3ph
20 Ton	10,000 CFM	89" x 37" x 100"	2,700	480v / 3ph
30 Ton*	10,000 CFM	96" x 66" x 102"	5,900	460v / 3ph
60 Ton	14,500 CFM	139" x 96" x 100"	8,400	460v / 3ph
80 Ton*	18,000 CFM	182" x 96" x 109"	10,300	460v / 3ph

*Selected models with on-board heating options

CHILLERS

For wastewater treatment, manufacturing processes and beyond, our air-cooled chillers are a smart temperature control solution. Whether planned or needed in an emergency, your Carter representative can assist you in choosing the best fit for your project.



SPECS

Rating	Min / Max (gpm)	Obtainable Temp	Dimensions	Weight (lbs)
30 Ton	45 / 75	20°F	10' x 4' 6" x 8' 1"	4,300
50 Ton	75 / 250	0°F	11' 2" x 7' x 8' 2"	6,900
100 Ton	127 / 600	0°F	21' x 8' 2" x 9'	13,900
150 Ton	188 / 747	0°F	21' x 8' 2" x 9'	16,400
200 Ton	272 / 747	0°F	30' x 8' 2" x 9'	18,000
250 Ton	272 / 800	20°F	30' x 8' 2" x 9'	22,200
300 Ton	500 / 1,600	20°F	40' x 8' x 8' 9"	40,000
450 Ton	750 / 2,400	20°F	50' x 8' x 8' 9"	63,000
477 Ton	400 / 1,400	20°F	50' x 8' x 13' 6"	32,000
527 Ton	400 / 1,400	0°F	52' x 8' x 13' 6"	35,000

DEHUMIDIFICATION

Whether you're dealing with planned work or emergency restoration, rely on Carter to have the right dehumidifier to quickly and efficiently dry out any environment. Our powerful units will lower and keep moisture levels within manufacturing and site specifications.



SPECS

CFM	Heat (Electric)	Dimensions	Weight (lbs)	Power (V / Ph / Hz / FLA)
1,000	13.5kW	70" x 32" x 38"	525	240 / 1 / 60 / 74
2,500	50kW	8' x 6' 5" x 6'	2,600	480 / 3 / 60 / 90
5,000	99kW	12' 11.5" x 6' 6" x 6'	2,100	480 / 3 / 60 / 140

HEATERS

Regardless of the space you're heating, from a small workplace to an entire warehouse, we have the equipment to get the job done. Direct, indirect, make-up, electric and oil-fired heaters are all available and built to serve your specific heating needs.



SPECS		
Rating	Capacity (btu / cfm)	Type
30kW	102,360 / 1100-2700	Electric
60kW	204,720 / 1100-2700	Electric
75 / 150kW	511,800 / 10,000	Electric
600,000btu	588,000 / 5,500	Indirect
1,200,000btu	1,176,000 / 11,000	Indirect

COMPRESSED AIR

Trust the rental experts at Carter with your compressed air needs. From concrete jobs to industrial work, we have an extensive fleet ready to work in any application.





AFTERCOOLED AND FILTERED AIR

1600H

 SULLAIR



AIR COMPRESSORS

With a variety of sizes and a range of attachments available, Carter is your resource for reliable compressed air products. Our electric and engine-driven compressors offer oil-flooded, instrument quality and oil-free options to meet all your unique applications.



SPECS

CFM	PSI
185	100
375	150
750	150*
1,600	150*

*After Cooled / Filtered



AIR TREATMENT

Depending on your process, air treatment components may be added to compliment your compressor rental for the desired level of air purity. Our aftercoolers and desiccant dryers offer ease-of-use and are skid-mounted for hassle-free transportation to your facility. These machines feature removal of particulate and oil, automatic condensate drains, .01 micron afterfilters and are capable of delivering dew points of up to -100 degrees Fahrenheit.



SPECS

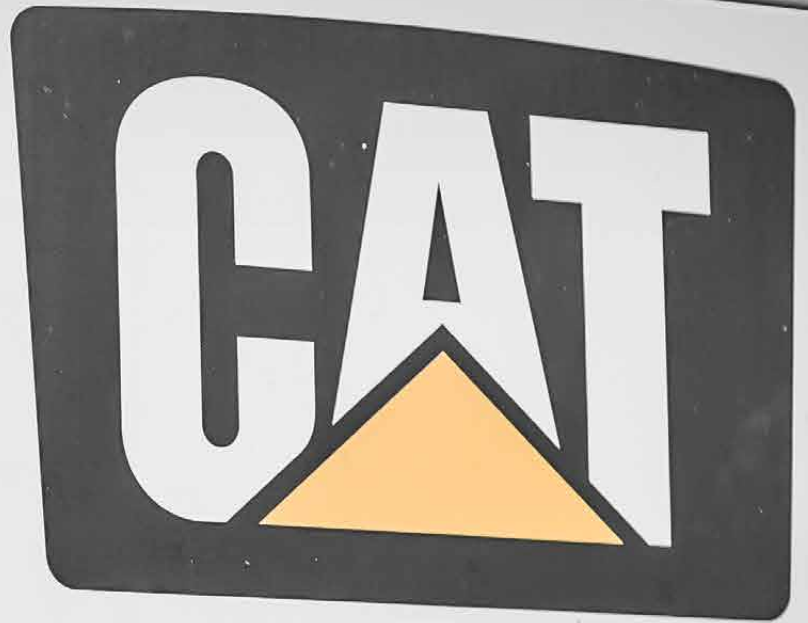
CFM	PSI
185-260	100
260-500	150
500-1,000	150
1,000-1,600	150
1,000-1,600	250
1,300	350
2,800	350

SERVICES



At Carter, we deliver engineered rental solutions. We have professional support services available to make your project a success.

- Local, 24/7 repair and support
- Contingency planning
- Project-specific evaluation and design
- Web-based remote equipment monitoring
- Site installation and commissioning
- Fueling services
- Operator training
- Project management
- Turnkey service



800.835.1166



Carter



CATERPILLAR® GENERATORS

GENERATOR RATING 3 PHASE AMPERES – 80% POWER FACTOR

kVA	kW	208V	240V	380V	480V	4160V
6.3	5	17.5	15.2	9.6	7.6	
9.4	7.5	26.1	22.6	14.3	11.3	
12.5	10	34.7	30.1	19.2	15.1	
18.7	15	52	45	28.8	22.5	
25	20	69.5	60.2	38.2	30.1	3.5
31.3	25	87	75.5	48	37.8	4.4
37.5	30	104	90.3	57.6	45.2	5.2
50	40	139	120	77	60	7
62.5	50	173	151	96	76	8.7
75	60	208	181	115	91	10.5
93.8	75	261	226	143	113	13
100	80	278	240	154	120	13.9
125	100	347	301	192	150	17.5
156	125	433	376	240	188	22
187	150	520	451	288	225	26
219	175	608	527	335	263	31
250	200	694	602	384	301	35
312	250	868	752	480	376	43
375	300	1042	903	576	451	52
438	350	1215	1053	672	527	61
500	400	1390	1203	770	602	69
625	500	1735	1504	960	752	87
750	600	2084	1803	1150	902	104
875	700	2430	2104	1344	1053	121
1000	800	2780	2405	1540	1204	139
1125	900	3126	2709	1730	1354	156
1250	1000	3473	3009	1920	1504	174
1563	1250	4342	3765	2400	1881	218
1875	1500	5210	4515	2880	2258	261
2188	1750		5268	3350	2634	304
2500	2000		6020	3840	3010	348
2812	2250			4320	3387	392
3125	2500			4800	3765	435
3750	3000			5760	4516	522
4375	3500				5269	610
5000	4000				6021	695

ELECTRICAL FORMULAS

TO OBTAIN	SINGLE-PHASE	THREE-PHASE
Kilowatts	$\frac{V \times I \times PF}{1000}$	$\frac{1.732 \times V \times PF \times I}{1000}$
KVA	$\frac{V \times I}{1000}$	$\frac{1.732 \times V \times I}{1000}$
Horsepower required (when generator kW Unknown) (if generator efficiency unknown, use 0.93)	$\frac{kW}{0.716 \times \text{Efficiency (Generator)}}$	$\frac{kW}{0.746 \times \text{Efficiency (Generator)}}$
kW input (when motor hp known) (if motor efficiency unknown, use 0.85 X ph)	$\frac{hp \times 0.746}{\text{Efficiency (Motor)}}$	$\frac{hp \times 0.746}{\text{Efficiency (Motor)}}$
Amperes (when motor hp known)	$\frac{hp \times 0.746}{V \times PF \times \text{Efficiency}}$	$\frac{hp \times 0.746}{1.732 \times V \times PF \times \text{Efficiency}}$
Amperes (when kW known)	$\frac{kW \times 1000}{V \times PF}$	$\frac{kW \times 1000}{1.732 \times V \times PF}$
Amperes (when kVA known)	$\frac{kVA \times 1000}{V}$	$\frac{kVA \times 1000}{1.732 \times V}$

*Alternating Current V = Volts, Voltage I = Amperes, Amperage, Current PF = Power Factor

CONVERSION FORMULAS

The following factors can be used to convert from English to the most common SI Metric values.

UNIT	MULTIPLY THIS ENGLISH VALUE	BY	TO OBTAIN THIS METRIC VALUE
Capacity	Tons Refrigerant Effect (ton)	3.516	Kilowatts (kW)
Power	Kilowatts (kW)	No Change	Kilowatts (kW)
	Horsepower (hp)	0.7457	Kilowatts (kW)
Flow Rate	Gallons/Minute (gpm)	0.0631	Liters/Second (L/s)
Length	Feet (ft)	304.8	Millimeters (mm)
	Inches (in)	25.4	Millimeters (mm)
Weight	Pounds (lb)	0.4536	Kilograms (kg)
Velocity	Feet/Second (fps)	0.3048	Meters/Second (m/s)
Pressure Drop	Feet of Water (ft)	2.090	Kilopascals (kPa)
	Pounds/Sq. Inch (psi)	6.895	Kilopascals (kPa)
Volume	Square Feet (ft ²)	0.09289	Square Meters (m ²)

English – English Conversions

1 ton = 12,000 BTU per hour 1 psi = 2.31 Feet Water Column

Formulas - English

1. Tons = $GPM \times \frac{(T_i - T_o)}{24}$

2. BTU per hour = $CFM \times 1.08 \times (T_i - T_o)$

GPM = Gallons Per Minute to application
T_i = Temperature of water from application
T_o = Temperature of water to application

BTU per hour = British Thermal Units per hour
CFM = Cubic Feet per Minute airflow
T_i = Temperature of air from application
T_o = Temperature of air to application

A NETWORK OF SUPPORT

ABINGDON

18471 Spring Creek Road
Abingdon, VA 24210
276.698.3162

CHESAPEAKE

Electric Power

3404 Business Center Drive
Chesapeake, VA 23323
757.485.4895

Equipment

3420 Business Center Drive
Chesapeake, VA 23323
757.558.6506

FISHERSVILLE

241 Expo Road
Fishersville, VA 22939
540.337.4220

FREDERICKSBURG

50 Commerce Parkway
Fredericksburg, VA 22406
540.371.2844

HARRISONBURG

4463 Early Road
Harrisonburg, VA 22801
540.432.6701

LYNCHBURG

45 Industrial Circle
Lynchburg, VA 24501
434.821.7701

NORTON

310 Kentucky Avenue
Norton, VA 24273
276.679.1010

OAKWOOD

1207 Caterpillar Road
Oakwood, VA 24631
276.498.4586

PRINCETON, WV

325 Clover Dew Dairy Road
Princeton, WV 24739
304.325.5411

RICHMOND

Electric Power

10990 Air Park Road
Ashland, VA 23005
804.752.6070

Equipment

8362 Richfood Road
Mechanicsville, VA 23116
804.730.1810

SALEM

Electric Power

971 Russell Drive
Salem, VA 24153
540.562.5133

Equipment

1330 Lynchburg Turnpike
Salem, VA 24153
540.387.1111

SOUTH HILL

208 Caterpillar Drive
LaCrosse, VA 23950
434.447.3333

WARRENTON

721 Industrial Road
Warrenton, VA 20186
540.349.1100

WILLIAMSBURG

1601 Green Mount Parkway
Williamsburg, VA 23185
757.888.0411

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