



SUNBELT
RENTALS®

PUMP & POWER
SERVICES

VOL 14 2014-2015
INDUSTRIAL
CLIMATE
CONTROL
CATALOG

AIR COMPRESSORS

TEMPERATURE CONTROL

DEHUMIDIFICATION

DUST COLLECTORS

GENERATORS & POWER
DISTRIBUTION

HIGH STATIC BLOWERS



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INDEX BY PRODUCT CATEGORY

Sunbelt Rentals' Industrial Climate Control team is designed to meet the unique needs of specialty contractors and certain markets such as surface preparation and coating, blasting, temporary humidity and condensation control, and construction drying. Housed within our Pump & Power Services specialty division, the Industrial Climate Control team is equipped with state of the art equipment like Hybrid Cooling Units and the Sunbelt Air Monitoring System, and staffed with seasoned professionals prepared to develop a comprehensive solution for even the most challenging project. Whether your project involves vessel coatings or temperature control, turn to the experts at Sunbelt Rentals for help in managing quality, production, profitability and rental costs. Call 800-736-2504 for 24/7 service and support. 1-Hour Emergency Response GUARANTEED.

Air Conditioners	4-6	Dust Collectors	21
Industrial Air Conditioners		Generators	22-26
Portable Air Cooled Chiller Packages		Diesel Generators, Industrial	
Portable Air Handling Units		Diesel Generators, Towable	
Air Compressors (Large)	7-11	Reference Data, Generators	
Diesel Air Compressors, Standard		Generator Accessories	27-33
Diesel Air Compressors, High-Pressure		Auxiliary Fuel Tanks	
Diesel Air Compressors, Instrument-Quality		Cable Ramps	
Electric Air Compressors		Cam-Lock Connectors	
Reference Data, Compressed Air		Diesel Generators, Industrial	
Air Compressor Accessories	12-16	Diesel Generators, Towable	
Aftercooler/Dryer/Filter Packages		Distribution Panels	
Aftercooler/Filter Packages		Extension Cables	
Aftercooler/Separators		Fuseable Disconnect Switches	
Air Hose		Heaters	34
Air Manifolds		Industrial Heaters	
Custom Filter Packages		Inline Heaters	
Desiccant Dryer Packages		High Static Blowers	35
Membrane Dryer/Aftercoolers		High Static Blowers	
Refrigerated Dryer Packages		Inline Electric Blowers	
Safety Whipchecks			
Dehumidifiers	17-20		
Desiccant Dehumidifiers,			
Dehumidification, Reference Data			
Hybrid Cooling Units			
Sunbelt Air Monitoring System (SAMS)			

Check out the full range of equipment offered by Sunbelt Rentals using our online catalog:

sunbeltrentals.com

SAFETY

It is important that you wear all the manufacturer's recommended safety equipment, review all safe operation manuals and decals and observe all safety precautions when utilizing tools and operating equipment. Operator/User assumes all responsibility for the use, care and inspection of PPE (Personal Protective Equipment).

Note: The equipment listed in this catalog reflects the most current models and specifications available at the time of print. Equipment may vary at Sunbelt Rentals locations but with no compromise in performance or reliability.



PUMP & POWER
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Available 24/7

Location Directory

36

Application For Credit & Rental Agreement 37-38

AIR CONDITIONERS

INDUSTRIAL AIR CONDITIONERS



INDUSTRIAL AIR CONDITIONERS provide the cooling power for large area cooling and dehumidifying. Applications include warehouse facilities, aerospace and aviation, industrial plant shutdowns and maintenance, emergency backup cooling and large scale spot cooling. All models include an electrical disconnect switch and utilize 20" flexible duct for supply and return air.

- Multiple compressor units for flexibility and reliability
- 25-ton and 40-ton models are heating/cooling/dehumidifying units with built-in electric heaters and a humidistat
- 20" flexible duct is available in 25' lengths (Cat-Class 150-0115)
- Rugged, weatherproof designs for outdoor installations



MobileCool Classic 60
5-ton



Combined Refrigeration SACP40A-HS
40-ton Industrial Air Conditioner



MobileCool MOB-250
25-ton Industrial Air Conditioner

Make	Model	Mounting	Capacity	Max Airflow	Cooling Area*	Cool Air Duct Dia/Max Length	Warm Air Duct** Dia/Max Length	Voltage	Amp Rating	Weight	Cat-Class
MobileCool	MOB-60HP ¹	NA	5 tons	1,950 CFM	1,000/2,000 sq. ft.	2 x 12"/50'	N/A	230V, 1ø	47.0	725 lbs.	107-0140
AirPac	PAC60	NA	5 tons	3,100 CFM	1,000/2,000 sq. ft.	16"/100'	16"/50'	208/230V, 1ø	59.0	750 lbs.	107-0140
MovinCool	Classic 60	NA	5 tons	1,580 CFM	1,000/2,000 sq. ft.	12"/60'	N/A	460V, 3ø	10.5	463 lbs.	107-0140
MovinCool	Office Pro 60	NA	5 tons	1,940 CFM	1,000/2,000 sq. ft.	N/A	16"/100'	230V, 1ø	33.0	625 lbs.	107-0140
MobileCool	MOB-100	Skid/Trailer	10 tons	4,000 CFM	2,000/4,000 sq. ft.	20"/50'	20"/50'	460V, 3ø	31	1,350 lbs.	107-0210
AirPac	PAC120	Skid	10 tons	6,000 CFM	2,000/4,000 sq. ft.	20"/50'	20"/50'	460V, 3ø	32	1,300 lbs.	107-0210
MobileCool	MOB-250 ²	Skid	25 tons	10,000 CFM	5,000/10,000 sq. ft.	2 x 20"/50'	2 x 20"/50'	460V, 3ø	57	3,200 lbs.	107-0230
SmartSystems	SACP40A-HS	NA	40 tons	6,400 CFM	8,000/16,000 sq. ft.	2 x 20"	2 x 20"	460V, 3ø	67.6	4,620 lbs.	107-0245
SmartSystems	SACP80A-HS	NA	80 tons	17,000 CFM	16,000/32,000 sq. ft.	2 x 20"	4 x 20"	460V, 3ø	143	7,500 lbs.	107-0285

*Cooling area is based upon an uninsulated/insulated enclosed area. **Optional warm air flange is required when using warm air discharge duct.

¹MOB-series models are combination heating/cooling/dehumidifying units with 12" supply and (2) 12" return ducts—weatherproof for outdoor placement.

²Combination cooling/heating/dehumidifying units with built-in electric heaters: 72 kW heater (25-ton models); 108 kW heater (40-ton model).

AIR HANDLERS AND CHILLERS

PORTABLE AIR HANDLING UNITS



AIR CONDITIONING

AIR HANDLING UNITS are designed and constructed for ease of operation and mobility as well as the rigors of everyday use. Our units are mounted on a structural tubular steel frame that incorporates tube slots for forklift handling. Our units also include a certified structural lifting/stacking protective cage for optional overhead positioning with an onsite crane for hard to reach site setup locations. The units are ready for operation with minimal setup of two (2) 4" hose connections and (4) Cam-Lock power cables.

- Hot dip galvanized structural lifting/stacking skid and integrated tie-downs
- Chilled water temperature and pressure indication (Inlet & Outlet)
- Integrated control panel with cam-lock power connections, circuit breaker, magnetic starter, potentiometer for VFD control, OFF/ Auto two position switch, Power On indicator light and Phase Incorrect indicator light



50 Ton Portable Air Handling Unit



120 Ton Portable Air Handling Unit

Type	Make	Model	Capacity	CFM	Duct Size	# of Supply Ducts	# of Return Ducts	Voltage	Dimensions	Weight	Cat-Class
50 Ton AHU	CAP	PAHH-50TC	50 Ton	6250	20"	2	4	460 v	100"L X 83"W X 59"H	3250 lbs	107-1050
120 Ton AHU	CAP	PAHH-120TC	120 Ton	15,000	20"	4	6	460 v	144"L X 101"W X 64"H	4350 lbs	107-1120

AIR HANDLERS AND CHILLERS

PORTABLE AIR COOLED CHILLER PACKAGES



AIR CONDITIONING

PORTABLE AIR COOLED CHILLER PACKAGES offer flexible temporary fluid cooling solutions using equipment that has been designed and engineered to be self contained systems for Commercial and Industrial air conditioning and process cooling applications. These packages have also been designed and constructed for ease of operation and mobility, as well as the rigors of everyday use. Our package is mounted on a structural tubular steel frame that incorporates tube slots for forklift handling. Our package also includes a certified structural lifting/stacking protective cage for optional overhead positioning with an onsite crane for hard to reach site setup locations.

- Freeze protection to -20F with 3/4" foam insulated evaporator & protective aluminum jacketing, chilled water barrel heaters, external thermostat control for heaters and refrigerant isolation valves (discharge valve)
- Dual circuit machine for staging and efficiency
- UL/cUL listed to US and Canadian safety standard
- ASHRAE 90.1 compliance
- ARI Standard 550/590
- ANSI/NFPA Standard 70
- Phase monitor and phase fail indicator light
- Master On/Off switch
- Integrated main power wiring with Cam-Lock electrical connections and associated wiring
- Single point 460V/3PH/60HZ power application power connection for Chiller/Pump package
- Temperature and pressure gauges (Inlet & Outlet)



150 Ton Portable Air Cooled Chiller Package



200 Ton Portable Air Cooled Chiller Package



Type	Make	Model	Capacity	Pump Size	Connections (inlet & Outlet)	Voltage	Dimensions	Weight	Cat-Class
70 Ton Chiller	CAP	PCHH-70TD	70 Ton	200gpm	4" Dixon Quick Connect	460V	177"L x 100"W x 102"H	7,950 lbs	107-1270
100 Ton Chiller	CAP	PCHH-100TD	100Ton	300gpm	4" Dixon Quick Connect	460V	205"L x 100"W x 102"H	9,250 lbs	107-1300
150 Ton Chiller	CAP	PCHH-150TD	150Ton	500gpm	6" Flanged	460V	255"L x 100"W x 102"H	12,250 lbs	107-1350
200 Ton Chiller	CAP	PCHH-200TD	200Ton	600gpm	6" Flanged	460V	292"L x 100"W x 102"H	18,500 lbs	107-1520

AIR COMPRESSORS

DIESEL STANDARD, HIGH-PRESSURE



STANDARD DIESEL (LUBRICATED AIR END) AIR COMPRESSORS are ideal for meeting emergency and supplemental air requirements at industrial plants and commercial facilities where critical air quality is not required. They are also well-suited for construction applications such as powering large portable drills and multiple smaller air tools. Feature efficient rotary screw compressor units coupled with continuous duty-rated diesel engines for sustained, dependable operation.

- Quiet, dependable operation (less than 76 dBA at 7 meters)
- Automatic safety shutdown protection
- High-speed running gear allows towing at highway speeds
- Auxiliary fuel tanks are available for extended operation without refueling (see page 27)
- Both standard and high-pressure models are available

HIGH-PRESSURE AIR COMPRESSOR APPLICATIONS

- Catalytic regeneration (gasoline and refined oils)
- Soot blowing (utilities with coal fired furnaces)
- Drilling (down-the-hole for rock and oil drilling)
- PET (bottle blowing—used with a booster)
- Nitrogen membrane separation



Doosan HP750WCU
750 CFM Standard Air Compressor, 150 PSI



Doosan XHP1170
1,070 CFM High-pressure Air Compressor, 350 PSI

Make	Model	CFM	Rated Pressure	Pressure Range	HP	Onboard Fuel Cap	Consump Full Load	Run Time Full Load	Overall Dimensions	Weight	Cat-Class
Doosan	XP375	375	125 PSI	80-150 PSI	123	60 gal.	6.3 GPH	11 hrs.	13'L x 78"W x 68"H	4,418 lbs.	001-0010
Sullivan-Palatek	D375P	375	100 PSI	70-125 PSI	140	40 gal.	6.0 GPH	7 hrs.	12'L x 56"W x 80"H	3,395 lbs.	001-0030
Doosan	HP375	375	150 PSI	80-175 PSI	123	60 gal.	6.3 GPH	11 hrs.	13'L x 78"W x 68"H	4,418 lbs.	001-0030
Sullivan-Palatek	D375PH	375	150 PSI	70-170 PSI	140	40 gal.	6.0 GPH	7 hrs.	12'L x 56"W x 80"H	3,395 lbs.	001-0050
Doosan	P600WIR ¹	600	100 PSI	80-125 PSI	170	73 gal.	8.5 GPH	9 hrs.	15'L x 78"W x 76"H	5,133 lbs.	001-0050
Doosan	HP750WCU ¹	750	150 PSI	80-150 PSI	275	100 gal.	12.9 GPH	8 hrs.	16'L x 86"W x 89"H	7,590 lbs.	001-0060
Doosan	HP750WJD	750	150 PSI	80-150 PSI	275	100 gal.	11.4 GPH	9 hrs.	16'L x 86"W x 89"H	7,890 lbs.	001-0060
Sullivan-Palatek	D750PH	750	150 PSI	70-150 PSI	275	100 gal.	12.7 GPH	8 hrs.	16'L x 80"W x 89"H	9,000 lbs.	001-0090
Doosan	XP825WCU ¹	825	125 PSI	80-125 PSI	275	100 gal.	12.9 GPH	8 hrs.	16'L x 86"W x 89"H	7,590 lbs.	001-0100
Doosan	HP915WCU ²	900	150 PSI	80-150 PSI	300	110 gal.	14.5 GPH	8 hrs.	18'L x 79"W x 93"H	10,250 lbs.	001-0110
Sullivan-Palatek	D900PH	900	150 PSI	70-150 PSI	305	100 gal.	14.0 GPH	7 hrs.	16'L x 80"W x 89"H	9,000 lbs.	001-0110
Doosan	XHP1070 ²	1,070	350 PSI	150-375 PSI	475	230 gal.	20.9 GPH	11 hrs.	24'L x 90"W x 100"H	15,950 lbs.	001-0130
Sullivan-Palatek	D1150PVH	1,100	350 PSI	200-350 PSI	540	200 gal.	25.0 GPH	8 hrs.	20'L x 90"W x 94"H	19,000 lbs.	001-0130
Doosan	XHP1170 ²	1,170	350 PSI	150-375 PSI	540	230 gal.	20.9 GPH	11 hrs.	24'L x 90"W x 100"H	16,700 lbs.	001-0150
Sullivan-Palatek	D1600PH	1,600	150 PSI	70-150 PSI	535	200 gal.	24.0 GPH	8 hrs.	20'L x 90"W x 94"H	19,000 lbs.	001-0210

¹Fuel capacities and run times are based on units with Tier 2 certified engines—specs may vary for units with other engines.

²Fuel capacities and run times are based on units with Tier 3 certified engines—specs may vary for units with other engines.

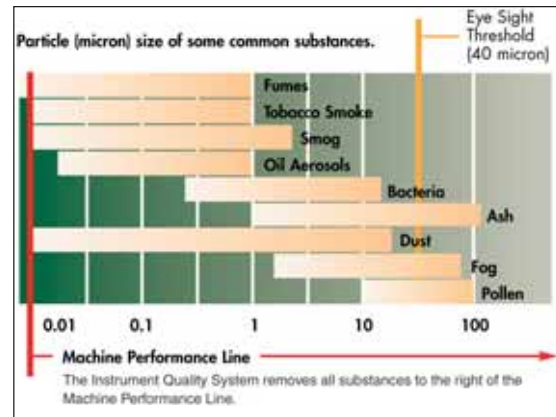
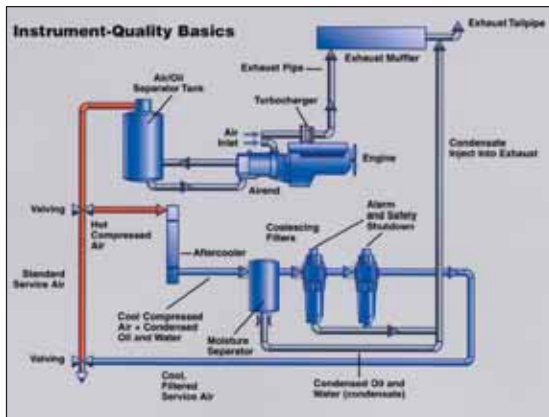
AIR COMPRESSORS

INSTRUMENT-QUALITY



INSTRUMENT-QUALITY (I-Q) AIR COMPRESSORS provide extremely clean, high-quality compressed air on a cost-effective basis for a wide range of industrial and construction applications. This is achieved by combining a rotary screw air compressor with an aftercooler, a moisture separator, dual coalescing filters and a condensate burn-off system in an efficient, self-contained package.

- All models exceed the ISA-S7.0.01-1996 Quality Standard for Instrument Air: Particulate size is less than 0.01 micron; Oil and water aerosol removal down to 0.01 PPM
- Integral aftercooler discharges compressed air at 15° approach temperature to ambient
- Simple valving also allows the versatility of running units in standard mode for non I-Q applications
- Desiccant dryers are available for special applications requiring a lower dew point to eliminate condensation of water vapor in downstream air lines and equipment
- High-speed running gear allows towing units behind a truck at highway speeds
- Auxiliary fuel tanks are available for extended operation without refueling (see page 27)



Doosan HP1600WCU
1,600 CFM, 150 PSI
Instrument Quality Air Compressor

Make	Model	CFM	Rated Pressure	Pressure Range	HP	Onboard Fuel Cap*	Consump Full Load	Run Time Full Load*	Tier	Overall Dimensions	Weight	Cat-Class
Doosan	375IQ	425 375	100 PSI 150 PSI	80-125 PSI 80-175 PSI	130	60 gal.	6.1 GPH	9.84 hrs.	4i	1521"L x 78"W x 68"H	4535 lbs.	001-0065
Doosan	750IQ	750	150 PSI	80-175 PSI	270	102 gal.	11 GPH	9.27 hrs.	4i	2041"L x 91"W 79"H	9500 lbs.	001-0095
Doosan	915IQ	915	150 PSI	80-175 PSI	300	110 gal.	14.5 GPH	7.59 hrs.	3 Flex	2151"L x 79"W x 88"H	10250 lbs.	001-0116
Doosan	HP1600WCU IQ	1,600	150 PSI	80-150 PSI	560	230 gal.	22.0 GPH	10 hrs.	3 Flex	24'L x 90"W x 101"H	18,300 lbs.	001-0220
Sullivan	D375DF375	375	150 PSI	70-150 PSI	140	40 gal.	6 GPH	6 hrs.	3 Flex	145"L x 55"W x 80"H	3,400 lbs.	001-0065
Sullivan	DF750PHCU IQ	750	150 PSI	80-150 PSI	305	150 gal.	14 GPH	10 hrs.	3 Flex	17.9"L x 77"W x 88"H	9000 lbs.	001-0095
Sullivan	DF900PH3CU IQ	900	150 PSI	80-150 PSI	305	150 gal.	16 GPH	8 hrs.	3 Flex	17.9"L x 77"W x 88"H	9000 lbs.	001-0115
Sullivan	DF1600PHCU IQ	1600	150 PSI	80-150 PSI	535	200 gal.	24 GPH	8 hrs.	Tier 3	22.9"L x 92.5"W x 100"H	19000 lbs.	001-0220
Sullivan	DF1150PVHCU IQ	1150	350 PSI	250-350 PSI	535	200 gal.	24 GPH	8 hrs.	3 Flex	22.9"L x 92.5"W x 100"H	19000 lbs.	001-0150

*Fuel capacities and run times are based on units with Tier 3 certified engines—specs may vary for units with other engines.

AIR COMPRESSORS

ELECTRIC



ELECTRIC AIR COMPRESSORS deliver outstanding, trouble-free performance in a wide range of industrial and commercial applications. They feature quiet operation and easy, low-cost maintenance. Models ranging from 50 HP to 400 HP are available.

- Weather-resistant, sound-attenuated enclosures—units operate indoors or outdoors
- Units operate on 460V 3-phase power
- Operate in ambient temperatures from -10° to 115°F
- Dryer and filter packages are available to meet special requirements (see pages 12-15)
- Cam Lock Cable Connectors
- Complete fluid containment skid with drains
- Spin on type lube filters mounted strategically for ease of maintenance



Sullivan-Palatek compressors feature easy operation with analog instrumentation.



Sullivan-Palatek 100UD
125 HP Electric Air Compressor



Sullivan-Palatek 50UD
50 HP Electric Air Compressor

Make	Model	HP	CFM	Rated Pressure	Amp Rating	Starting Amp Requirement	Outlet	Overall Dimensions	Weight	Cat-Class
Sullivan-Palatek	50UD*	50	200	150 PSI	58	280	1.25"	87"L x 35"W x 51"H	2,700 lbs.	001-0420
Sullivan-Palatek	100UD*	125	440	150 PSI	112	300	2"	92"L x 45"W x 78"H	3,960 lbs.	001-0425
Sullivan-Palatek	250UD*	250	900	150 PSI	287	690	3"	111"L x 71"W x 92"H	7,900 lbs.	001-0431
Sullivan-Palatek	350UD*	300	1,100	150 PSI	361	850	3"	135"L x 79"W x 88"H	10,000 lbs.	001-0432
Sullivan-Palatek	400UD*	400	1,490	150 PSI	448	1050	3"	135"L x 79"W x 88"H	10,500 lbs.	001-0438

*Units operate on a 460V 3-phase power

AIR COMPRESSORS

COMPRESSED AIR BASICS

AIR TYPES

Standard Compressed Air (Oil-Flooded)

- Hot (Heat of compression is approximately 110°F over ambient)
- Wet (Humidity in ambient air is sent downstream)
- Oily (Oil-flooded compressors will pass oil downstream)

Instrument-Quality (IQ) Compressed Air

- Oil-flooded air with after-treatment
- After-cooled (15–25° of ambient)
- Filtered (.01 micron and .01 PPM remaining oil content)
- Cleanest compressed air available

Oil-Free Compressed Air

- No oil utilized in the compression cycle
- After-cooled (25° of ambient)
- Minimal filtration (filtered to 25 microns)
- Expensive—not cost effective

GLOSSARY

Ambient Air—the air surrounding you.

Aftercoolers—heat exchanger that cools discharged air from the compressor (provides the most effective means of removing moisture from compressed air; approximately 70% of water is removed).

Air-Cooled Compressors—atmospheric air is circulated around to cool the unit and/or the compressed air.

Air End—compression chamber where air is compressed.

Approach Temperature—temperature above ambient.

Boosters—increase air pressure (usually four times inlet PSI).

Boss Hose Fitting—threaded fitting to connect hose from compressor or extend the length of hose used to flow gases.

Chicago Fitting—(crows foot) 1/4 turn fitting that can connect hose to the compressor or extend the length of hose used to flow gases.

CFM—cubic feet per minute.

Centrifugal Compressors—compression of air/gas through turning impellers.

Condensate—liquid discharged from compressor and/or air treatment equipment.

Dew Point—temperature that moisture changes from vapor to liquid.

Dew Point Suppression—temperature below ambient.

Dynamic-Type Compressors—air or gas is compressed by rotating vanes or impellers.

Filters—devices that separate and/or remove undesired liquids and particulates from compressed air.

High-Pressure Air—compressed air above 150 PSI.

Instrument-Quality (IQ) Air—treated compressed air from an oil-flooded compressor (after-cooled, filtered).

Low-Pressure Air—compressed air 150 PSI or lower.

Multicasting Compressors—one motor can run two or more compression chambers.

Multistage Compressor—compressor with two or more stages.

Microns—measurement used to define particulates in the air stream (one micron equals one millionth of a meter, about one-eighth the thickness of one human hair).

Oil-Flooded Air—compressed air produced by a lubricated air end.

Oil-Free Air—compressed air produced by a dry air end.

Oil Separator—device used in an oil-flooded system to recycle oil back to the air end.

OSHA Valve—valve used to depressurize a system when pressure drop is noticed.

PSI—pounds per square inch, unit for pressure of compressed air.

Particulates—any solid material, such as dirt, rust, weld fines, pollen, etc., in the air stream.

PPM—parts per million, measurement of the oil present in compressed air.

Receivers—tanks used to store compressed air and help dampen discharge line pulsations.

Reciprocating Compressor—a piston in a cylinder producing compression.

SCFM—standard cubic feet per minute.

Standard Air—air at a temperature of 68°F, 14.70 PSI atmospheric pressure and relative humidity of 36% (per ASME). In the gas industry, temperature is 60°F.

Standard Compressed Air—untreated compressed air from an oil-flooded system (not after-cooled or filtered).

Rotary Compressors—compression is produced by the positive action of rotating elements.

Two-Stage Compressors—two-compression chambers (initial to intermediate) with one air discharge.

Whipcheck—safety cable used to restrain air hoses if an end breaks.

RULES OF THUMB

1. For every 20° that compressed air drops in temperature, half of the water vapor will change to liquid.
2. A 1,000 CFM air compressor can produce 55 gallons of water in 24 hours of straight run time.
3. 1,800 CFM at 100 PSI is approximately the maximum amount of air that can pass through a 3-inch hose.
4. For electric air compressors, multiplying the horsepower times four will give you the approximate CFM.
5. As the pressure increases, the CFM decreases. Conversely, as the pressure decreases, the CFM increases.
6. All electric air compressors have built-in aftercoolers.

QUESTIONS TO ASK

1. What are the CFM and PSI requirements?
2. What type of compressor is needed?
 - a. Diesel (standard, I-Q or oil-free)
 - b. Electric
3. What quality of air is required?
 - a. Particulates (what micron?)
 - b. Moisture (dew point)
 - c. Oil content (PPM)
4. What is the application?
5. What type and size air connections will we pipe to?
 - a. Pipe thread
 - b. Flange
 - c. Boss
 - d. Chicago (crows feet), etc.
6. What type and size connections do we need on the compressor? (match hose fittings with compressors)
 - a. Mpt, fpt
 - b. Boss
 - c. Chicago (crows feet)
 - d. Flange, etc.
7. What is the distance from the compressor to the process connection? (How many hose lengths and whipchecks will be needed?)
8. Do you need low ambient (below 35°F) protection?
9. How much room do you have to place the equipment? (Compare to the overall dimensions of the selected equipment.)
10. Is after treatment (after-cooler separators, dryers or filters) needed?

AIR COMPRESSORS

COMPRESSED AIR BASICS

AIR TREATMENT PACKAGES

Aftercooler/Separators (air or electric driven)

- Reduce compressed air temperature (10-20° approach)
- Remove 70% of the water
- 450 to 3,500 CFM capacity (high pressure available)

Aftercooler/Filter Packages (air driven)

- Reduce compressed air temperature (10-15° approach)
- Remove 80% of the water
- Filter particulates to .01 micro
- Remaining oil content = .01 PPM
- 450 to 1,600 CFM capacity (high pressure available)
- Makes a standard air compressor an IQ compressor

Membrane Dryer/Aftercoolers (air driven)

- Reduce compressed air temperature (10° approach)
- Reduce dew point to 60° suppression
- Filter particulates to .01 micron
- Remaining oil content = .01 PPM
- 185 to 500 CFM capacity

Refrigerated Dryer Packages (230/460V 3-phase electric)

- Remove moisture content to 38° dew point
- Max inlet temperature 120°F
- 150 to 20,000 CFM capacity

Desiccant Dryer Packages (115V)

- Remove moisture content -40° or -100° dew point
- Filter particulates to .01 micron
- Remaining oil content = .01 PPM
- Max inlet temperature 120°F
- 45 to 5,400 CFM capacity (high pressure available)

Aftercooler/Dryer/Filter Packages (115V or 12/24V dc)

- Remove moisture content -40° or -100° point
- Filter particulates to .01 micron
- Remaining oil content .01 PPM
- 260 to 1,550 CFM capacity (high pressure available)
- Connect to a standard air compressor

Custom Filter Packages: Per customer request (ISO)

- Particulate removal (micron)
- Oil removal (PPM), Oil vapor removal (PPM)
- Separator/filters, Air line filters
- Combinations of any of the above filters
- Max temperature 120°F
- High pressure available

ISO 8573.1 QUALITY CLASSES

Quality Classes	Solids (max particle size in microns)	Moisture Dew Point		Oil Liquid & Gas	
		°C	°F	mg/m3	PPM w/w
0		Exceeds Class 1			
1	0.1	-70	-94	0.01	0.008
2	1	-40	-40	0.1	0.08
3	5	-20	-4	1	0.8
4	15	3	38	5	4
5	40	7	45	>5	>4
6	-	10	50	-	-

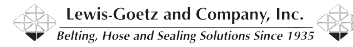


TYPICAL COMPRESSED AIR APPLICATIONS

Applications	Compressed Air Type			
	Filtered & Dried	Instrument-Quality	Standard	High-Pressure
Chemical Plants	Preferred			
Critical Instrument Air	Preferred			
Electronics	Preferred			
Food and Drug (packaging)	Preferred			
Metalworking Plants	Preferred	Good		
Paper Mills	Preferred	Good		
Pharmaceuticals	Preferred	Good		
Refineries	Preferred			
Snowmaking	Preferred	Good		
Textiles	Preferred	Good		
General Industrial/Manufacturing		Preferred	Good	
Instrument Air	Preferred	Preferred		
Shipyards		Preferred	Good	
Painting & Blasting		Preferred		
Demolition Tools			Preferred	
General Construction			Preferred	
Catalytic Regeneration (gasoline and refined oils)				Preferred
Drilling (down-the-hole rock and oil)				Preferred
Nitrogen Membrane Separation				Preferred
PET (bottle blowing)				Preferred
Soot Blowing (Utilities with coal fired furnaces)				Preferred

AIR COMPRESSOR ACCESSORIES

AIR HOSE, AIR MANIFOLDS



AIR HOSE

To complete your compressed air installation, Sunbelt Rentals offers a wide selection of air hose and accessory items including connectors and fittings, safety whipchecks, OSHA valves, inline water separators, inline oilers, pressure regulators, blow pipes and receiver tanks.

Air Hose	
Description	Cat-Class
3/8" x 25' Air Hose	150-0019
3/8" x 50' Air Hose	150-0020
3/4" x 50' Air Hose	150-0025
1" x 50' Air Hose	150-0030
1-1/2" x 50' Air Hose	150-0032
2" x 25' Air Hose	150-0035
2" x 50' Air Hose	150-0040
3" x 25' Air Hose	150-0045
3" x 50' Air Hose	150-0050
Bull Hose Spud Connector	150-0055
Air Hose Whip Check	150-0060
Air Hose OSHA Valve	150-0065
Inline Water Separator	150-0070
Y Air Hose Fitting	150-0075
Inline Oiler	150-0080
Air Pressure Regulator	150-0085
Blow Pipe	150-0090
660 gal. Air Receiver Tank	150-0053



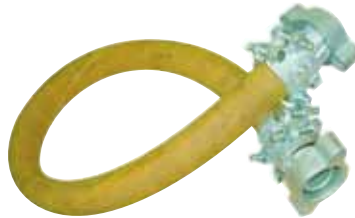
3/8" Air Hose



3/4" Air Hose



2" Air Hose



3" Air Hose with Boss Fittings

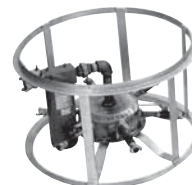


Air Hose Whip Check

AIR MANIFOLDS provide multiple 3/4" air outlets with ball valve controls from a larger (1-1/2" or 2") air inlet. Both tank-type and cage-type air manifolds are offered, both types with a 200 PSI pressure rating. (Cat-Class 150-0095)

Note: Other types and sizes of air manifolds are available.

Inside Diameter	Free CFM	Pressure Loss in Air Hose (per 50' length)						
		Line Pressure (PSI)						
		60	80	100	120	150	200	300
3/4"	60	3.1	2.4	2.0				
	80	5.3	4.2	3.5	2.9	2.4	1.8	1.2
	100	8.1	6.4	5.2	4.5	3.6	2.8	1.9
	120		9.0	7.4	6.3	5.1	3.9	2.7
	140		12.0	9.9	8.4	6.9	5.3	3.6
	160			12.7	10.8	8.9	6.8	4.6
	180				13.6	11.1	8.5	5.8
1"	200				16.6	13.5	10.4	7.1
	220					16.2	12.4	8.4
	120	2.7	2.1					
	150	4.1	3.2	2.7	2.3			
	180	5.8	4.6	3.8	3.2	2.6	2.0	1.3
	210	7.7	6.1	4.0	4.3	3.5	2.7	1.8
	240		7.9	6.5	5.5	4.5	3.4	2.3
1 1/2"	270		9.8	8.1	6.9	5.6	4.3	2.9
	300		12.0	9.9	8.4	6.9	5.3	3.6
	330			11.8	10.0	8.2	6.3	4.3
	360			13.9	11.9	9.7	7.4	5.0
	390				13.8	11.3	8.7	5.9
	420				15.9	13.0	10.0	6.8
	450					14.8	11.4	7.7
2"	600	1.9						
	800	3.2	2.5	2.1				
	1,000	5.0	3.9	3.2	2.7	2.2	1.7	1.1
	1,200	7.0	5.5	4.5	3.8	3.1	2.4	1.6
	1,400	9.3	7.4	6.1	5.2	4.2	3.2	2.2
	1,600		9.6	7.9	6.7	5.5	4.2	2.8
	1,800		12.1	9.9	8.4	6.9	5.3	3.6
2 1/2"	2,000			12.2	10.4	8.5	6.5	4.4
	2,200			14.6	12.5	10.2	7.8	5.3
	2,400				14.7	12.0	9.2	6.3
	2,600					14.1	10.8	7.3
	2,800					16.2	12.4	8.5
	2,000	2.5	2.0					
	2,500	3.9	3.0	2.5	2.1			
3"	3,000	5.5	4.4	3.6	3.1	2.5	1.9	1.3
	3,500	7.5	5.9	4.9	4.1	3.4	2.6	1.7
	4,000	9.8	7.6	6.3	5.3	4.4	3.3	2.3
	4,500		9.6	7.9	6.7	5.5	4.2	2.8
	5,000		11.7	9.6	8.2	6.7	5.1	3.5
	5,500			11.5	9.8	8.0	6.1	4.2
	6,000			13.6	11.5	9.4	7.2	4.9
3 1/2"	6,500				13.5	11.0	8.4	5.7
	7,000				15.6	12.7	9.8	6.6
	7,500					14.5	11.1	7.6



Cage-Type Air Manifold w/Water Filter
(6) ball valve controlled outlets and a 1-1/2" air inlet
Texas Pneumatic TX-1AMF-WF



Tank-Type Air Manifold
(8) ball valve controlled outlets
2" air inlet with 4-prong coupler on one end and flow-through plug on the other end allows using multiple units in tandem. Texas Pneumatic TX-2AMF

AIR COMPRESSOR ACCESSORIES

AFTERCOOLER/SEPARATORS, AFTERCOOLER/FILTERS

Sullivan
Palatek

AFTERCOOLER/SEPARATORS

Reduce compressed air temperatures to within 5°F to 20°F of ambient temperature

Features

- Makes air safe, usable and capable of further filtering and drying
- Eliminates up to 70% of water
- Maximum working pressures to 400 PSIG are available

Choice of

- Electric Drive Fans: include automatic interconnect for 3-phase units—determines if incoming power is 230V or 460V and automatically matches the supply voltage
- Air-driven Fans: include air motor, regulator, lubricator and relief valve



Capacity Selection Chart: Max SCFM @ 5, 10, 15 and 20°F approach temperature to ambient

Inlet Temperature °F	150				200				250			
	5	10	15	20	5	10	15	20	5	10	15	20
Approach Temperature °F												
AACE-1600 & AACA-1600	790	1,440	1,950	2,260	710	1,290	1,720	1,950	660	1,200	1,600	1,860
AACE-2500 & AACA-2500	1,220	2,220	3,000	3,470	1,090	1,980	2,680	3,100	1,035	1,880	2,500	2,870
AACA-3000	1,450	2,650	3,580	4,120	1,295	2,360	3,200	3,710	1,243	2,260	3,000	3,450

Above capacities are based on 80 to 125 PSIG operating pressures. Maximum pressure drop, less than 3 PSI.

Specifications: Electric Drive

Model	Motor	Voltage TEFC	Phase HP	Full Load Amps 110/230V	In/Out Connections	Dimensions			Weight
						H	W	D	
AACE-450	1/2	110/1/60	1	9	2" NPT	66"	36"	60"	400 lbs.
AACE-1000	2	110/1/60	1	18	3" NPT	66"	48"	72"	500 lbs.
AACE-1600	1.5	110/1/60	1	18	3" NPT	66"	48"	72"	650 lbs.
AACE-2500	7.5	230 or 460/3/60	1	22/11	4" NPT	62"	48"	80"	900 lbs.
AACE-3000	10	230 or 460/3/60	1	28/14	4" NPT	62"	60"	80"	1,000 lbs.

Specifications: Air-Driven

Model	Air Motor Usage	In/Out Connections	Dimensions			Weight
			H	W	D	
AACA-450	10 SCFM	2" NPT	46"	48"	60"	400 lbs.
AACA-1000	20 SCFM	2" NPT	46"	48"	60"	600 lbs.
AACA-1600	70 SCFM	3" NPT	73"	48"	72"	800 lbs.
AACA-2500	80 SCFM	4" NPT	66"	48"	90"	1,000 lbs.
AACA-3000	120 SCFM	4" NPT	73"	60"	108"	1,200 lbs.
AACA-3500	120 SCFM	4" NPT	73"	60"	108"	1,400 lbs.

AFTERCOOLER/FILTERS

Obtain oil-free air with lubricated (oil-flooded) compressors

Packages Include

- **Aftercooler with air-driven fan motor**—reduces air temperature leaving the compressor to within 10° to 15°F of ambient temperature. Eliminates 80% of water
- **Separator/filter**—removes bulk liquids. Prefilters the air for finer filtration. Large in depth bed eliminates heavy particulate loads
- **Ultra-high efficiency coalescing oil removal filter**—removes fine oil droplets (aerosols) and solid particles 0.01 microns and larger. Oil content after filtration: 0.001 PPM W/W

Features

- Skid-mounted—pre-piped with in/out connections
- No power required—includes automatic condensate drains
- Gauges on filters indicate need for element replacement

Applications

- Construction, bridge repair, sandblasting and painting
- Manufacturing, refineries, shipyards, paper and chemical



Specifications

Model	Capacity (SCFM)	Dimensions			Weight
		H	W	D	
AFCS450	450	53"	46"	36"	675 lbs.
AFCS750	750	68"	48"	60"	675 lbs.
AFCS1000	1,000	73"	48"	72"	950 lbs.
AFCS1600	1,600	73"	48"	72"	1,000 lbs.

AIR COMPRESSOR ACCESSORIES

MEMBRANE DRYER/AFTERCOOLERS, AFTERCOOLER/DRYER/FILTERS

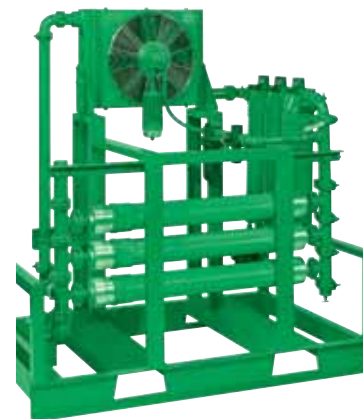
Sullivan
Palatek

MEMBRANE DRYER/AFTERCOOLERS

Reduce compressed air temperatures and remove liquids and water vapor

Packages Include

- **Aftercooler**—rated for 10°F approach from ambient temperature. Includes air-driven fan motor, regulator, lubricator and muffler/separator
- **Filtration**—1st: Separator/prefilter to remove liquids to 3 microns
2nd: Two-stage prefilter to remove liquid water and oil to 1 micron
3rd: High-efficiency oil removal to remove solids and aerosols to 0.01 micron
Filters are oversized and staged to increase particulate loading capacity
Drains on prefilter housings are float type
- **Membrane Dryer**—utilizes membrane gas separation technology. Compressed air flows through a bundle of tube-shaped membranes. Compressed air is used to sweep the water vapor out of the dryer. Dry air then exits the tube bundle for use downstream. There are no power requirements, no moving parts and no consumables, such as deliquescent tablets, to replace
- **Frame and Construction**—steel channel construction with forklift slots. Includes 2" NPT Male in and out compressed air connections



Specifications

Model	Inlet Conditions	Outlet Dew Point	Flow (SCFM)	Max Inlet Pressure	Max Inlet Temp	Utilities Needed	Dimensions			In/Out Connections	Weight
							H	W	D		
RAM185	30°F Ambient & below 50°F Ambient	-30°F Dew Point -5°F Dew Point	185 to 260	300 PSIG	350°F	20 SCFM	50"	36"	70"	2" NPT Male	450 lbs.
RAM260	70°F Ambient	15°F Dew Point	260 to 370			25 SCFM	50"	36"	70"		500 lbs.
RAM375	90°F Ambient 100°F Ambient	35°F Dew Point 50°F Dew Point	370 to 500			30 SCFM	50"	36"	70"		550 lbs.

AFTERCOOLER/DRYER/FILTERS

A complete air treatment system in one package (CFM air loss 15–20%)

Packages Include

- **Aftercooler with air-driven fan motor**—lowers temperature of air leaving the compressor to within 7.5°F of ambient temperature and eliminates 80% of water
- **Prefilter 1: Separator/filter**—removes bulk liquids and prefilters the air
- **Prefilter 2: Ultra-high efficiency coalescing type oil removal filter**—removes fine oil droplets (aerosols) and solid particles 0.01 microns and larger
Oil content after filtration = 0.001 PPM w/w
- **Pressure-swing (heatless) regenerative desiccant dryer**—produces extra dry air (-40°F or -100°F pressure dew point). Efficient design minimizes purge air requirements.
- **Afterfilter**—1 micron particulate filter removes desiccant fines
In-depth media allows long element life

Features

- Mounted on sled-type skid with lifting lugs and forklift channels
Units are pre-piped with convenient in/out connections
- Dryer runs on 12V DC (allows powering with portable air compressor)—115V AC optional
- Includes automatic condensate drains.
Gauges on filters indicate the need for element replacement
- Dryer control panel includes alarms and built-in diagnostic capabilities



Applications

- **Industrial**—spray painting, powder coating, blow molding, pneumatic instrumentation, nitrogen generation, process air
- **Construction** (with portable compressors)—bridge repair, sandblasting, painting, pipeline dehydration

Specifications

Model	Capacity (SCFM) @ 100 PSIG	Max Working Pressure	Dimensions			Weight
			H	W	D	
RDH260GAC	185–260	250 PSI	82"	50"	69"	1,500 lbs.
RDH450GAC	260–500	250 PSI	82"	50"	69"	2,200 lbs.
RDH930GAC	500–1,000	150 PSI	80"	75"	71"	3,800 lbs.
RDH1550AC	1,000–1,600	150 PSI	97"	73"	81"	6,000 lbs.
RDH1550GAC	1,000–1,600	250 PSI	87"	78"	83"	6,000 lbs.

AIR COMPRESSOR ACCESSORIES

DESICCANT DRYERS



DESICCANT DRYERS

For dew points of **-40°F** and **-100°F** (CFM air loss 15–20%)

Features

- Mounted particulate and oil removal prefilters complete with automatic condensate drains and a one micron afterfilter—no field installation of filters is required
- Heavy-duty frame with lifting lugs and forklift channels for easy handling
- NEMA 4, 115/1/60 electric—suitable for outdoor operation (all pneumatic units are also available)
- Units can be field adjusted for **-40°F** or **-100°F** pressure dew point
- Full instrumentation package provides ready indication of system malfunction
- High-pressure models (350 PSI) are available

Operating Conditions

- Maximum inlet compressed air temperature: 120°F
- Minimum/maximum ambient temperature: 35/120°F standard (-10/120°F with low ambient package installed)



Note: Transport desiccant dryers on air-ride trucks only.

Specifications

Standard Models	Flow (SCFM)*			Max Working Pressure	In/Out Connections	Dimensions			Weight
	Inlet	Outlet				H	W	D	
		@ -40°F PDP	@ -100°F PDP						
RDH115	115	98	97	150 PSI	1" NPT	90"	40"	34"	650 lbs.
RDH165	165	141	140	150 PSI	1-1/2" NPT	90"	40"	34"	825 lbs.
RDH260	260	223	220	150 PSI	2" NPT	90"	42"	47"	1,350 lbs.
RDH370	370	317	312	150 PSI	2" NPT	90"	42"	60"	1,650 lbs.
RDH450	450	385	380	150 PSI	2" NPT	92"	42"	60"	1,800 lbs.
RDH590	590	505	498	150 PSI	2" NPT	95"	50"	70"	2,860 lbs.
RDH750	750	642	634	150 PSI	2-1/2" NPT	97"	58"	72"	3,450 lbs.
RDH930	930	796	786	150 PSI	2-1/2" NPT	105"	58"	72"	3,800 lbs.
RDH930G	930	796	786	150 PSI	2-1/2" NPT	80"	76"	73"	3,500 lbs.
RDH1130	1,130	967	955	150 PSI	3" NPT	105"	58"	72"	4,300 lbs.
RDH1350	1,350	1,156	1,141	150 PSI	3" NPT	109"	58"	72"	4,700 lbs.
RDH1550	1,550	1,327	1,309	150 PSI	3" Boss	100"	78"	96"	5,000 lbs.
RDH1550G	1,550	1,327	1,309	250 PSI	3" Boss	79"	78"	83"	5,500 lbs.
RDH2100	2,100	1,797	1,774	150 PSI	3" Boss	80"	80"	73"	6,900 lbs.
RDH2100G	2,100	1,797	1,774	150 PSI	3" Boss	80"	80"	73"	5,750 lbs.
RDH3000	3,000	2,567	2,534	150 PSI	3" Boss	121"	86"	133"	12,100 lbs.
RDH3000G	3,000	2,567	2,534	150 PSI	2 x 3" Boss	81"	91"	115"	9,200 lbs.
RDH4100	4,100	3,465	3,445	150 PSI	6" FLG	105"	91"	115"	14,000 lbs.
RDH5400	5,400	4,620	4,561	150 PSI	6" FLG	123"	96"	122"	16,000 lbs.
RDH5400G	5,400	4,620	4,561	150 PSI	4 x 3" Boss	81"	91"	153"	14,800 lbs.
High-Pressure Models (350 PSIG)									
RDHHP495	900	828	818	365 PSI	3" NPT	94"	78"	96"	3,800 lbs.
RDHHP715	1,300	1,196	1,186	365 PSI	3" NPT	96"	78"	96"	4,000 lbs.
RDHHP1550G	2,800	2,576	2,550	365 PSI	3" Boss	79"	78"	83"	6,200 lbs.
RDHHP5200G	9,300	8,530	8,400	365 PSI	4 x 3" Boss	81"	91"	153"	19,000 lbs.

*Flow shown is based on inlet compressed air at 100 PSI and 100°F.



Sunbelt Rentals also offers air hose and accessory items including connectors and fittings, safety whipchecks, OSHA valves, inline water separators, inline oilers, pressure regulators, blow pipes and receiver tanks (see page 12)

AIR COMPRESSORS & ACCESSORIES

AIR COMPRESSOR ACCESSORIES

REFRIGERATED DRYERS, CUSTOM FILTERS



REFRIGERATED DRYERS

For dew points from 38°F and 50°F

Features

- Highly efficient, rugged heat exchangers—designed to resist fouling and maintain low pressure drop
- Highly reliable separators and automatic drains ensure condensate is separated from the air system
- Refrigeration system designed for maximum reliability—accumulators, filters and strainers, dryers and a desuperheating system prevent compressor slugging and overheating—keeps dryer operating in a range of conditions



Note: Choice of 230V or 460V 3-phase models is available.

Operating Conditions (Min/max ambient temperatures)

- Air-cooled models—35/110°F standard (-10/110°F with low ambient package installed)
- Maximum inlet air temp 120°F
- Watercooled models—35/130°F standard (-10/130°F with low ambient package installed)

Specifications

Standard Models*	Flow (scfm)**	Max Working Pressure	Inlet/Outlet Connections	Dimensions			Weight
				H	W	D	
RRD150AC	150	200 PSI	2" NPT	42"	38"	42"	500 lbs.
RRD300AC	300	200 PSI	2" NPT	42"	38"	42"	600 lbs.
RRD400AC	400	200 PSI	3" NPT	42"	38"	42"	700 lbs.
RRD500AC	500	200 PSI	3" NPT	69"	40"	46"	950 lbs.
RRD700AC	700	200 PSI	3" NPT	69"	40"	46"	1,100 lbs.
RRD800AC	800	200 PSI	3" NPT	80"	40"	46"	1,300 lbs.
RRD1000AC	1,000	200 PSI	3" NPT	80"	40"	46"	1,465 lbs.
RRD1200AC	1,200	200 PSI	4" FLG	72"	54"	56"	1,500 lbs.
RRD1600AC	1,600	200 PSI	6" FLG	89"	50"	52"	2,200 lbs.
RRD2000AC	2,000	200 PSI	6" FLG	89"	50"	52"	2,400 lbs.
RRD2300AC	2,300	200 PSI	6" FLG	89"	50"	52"	2,800 lbs.
RH33AC	3,000	175 PSI	6" FLG	110"	54"	113"	4,400 lbs.
RH44AC	4,000	175 PSI	6" FLG	110"	54"	113"	4,900 lbs.
RH55AC	5,000	175 PSI	8" FLG	112"	60"	128"	5,200 lbs.
RH66AC	6,000	175 PSI	8" FLG	112"	60"	128"	5,800 lbs.
RH77AC	8,000	175 PSI	10" FLG	123"	60"	128"	6,200 lbs.
RH88AC	10,000	175 PSI	10" FLG	120"	90"	174"	10,500 lbs.
RH1010WC	15,000	175 PSI	12" FLG	128"	81"	160"	14,200 lbs.
RH1111WC	20,000	175 PSI	14" FLG	128"	96"	180"	20,300 lbs.
High-Pressure Models***							
HPRD-1	250	700 PSI	3" NPT	61"	38"	38"	900 lbs.
HPRD-2	550	700 PSI	3" NPT	61"	38"	38"	900 lbs.
HPRD-4	1,200	700 PSI	4" FLG	76"	50"	50"	1,509 lbs.

*AC designates air-cooled; WC designates water-cooled.

**Flow shown is based on inlet compressed air at 100 PSIG and 100°F, operating in an ambient temperature of 100°F.

***Flow (scfm) @ 700 PSIG

CUSTOM FILTER PACKAGES

Compressed air as clean as you need it—we offer custom filter packages tailored to meet your specific requirements. Examples include coalescing type oil removal filters, oil vapor removal filters, separator/filters, air line filters and any combination of these filters. Each filter package includes automatic drains and filter change indicators.



For more information about compressed air solutions, contact a Sunbelt Rentals Pump & Power location at 800-736-2504.



DEHUMIDIFIERS

LARGE DESICCANT DEHUMIDIFIERS

Sunbelt Rentals Pump & Power Services locations offer large capacity desiccant dehumidifiers ideal for water damage restoration applications, condensate and humidity control in manufacturing, and corrosion and humidity control for industrial coating and lining applications, as well as moisture mitigation in construction projects. By utilizing advanced desiccant technology to provide a low dew-point airstream and absorbing moisture vapor in the air, Sunbelt's desiccant dehumidifiers lower moisture levels in both the ambient indoor air and moisture content in building materials. This reduces the premature degradation of building materials and lowers the risk of microbial growth due to high moisture levels within a structure. Desiccant dehumidifiers are the most efficient option for humidity control, are suitable for use in nearly all environmental conditions, and can be operated as a stand-alone strategy or as a component of a more complex environmental control system with other air treatment components such as air conditioners, heaters and HEPA filtration units.



Above: Four 5,000 CFM Electric Desiccant Dehumidifiers in operation at a construction project in CA.

Above Right: Four 5,000 CFM Electric Desiccant Dehumidifiers utilizing extensive ducting operating on a new construction.

Above Right: Technician checking performance on a 5,000 CFM desiccant dehumidifier using a digital thermo hygrometer.



DEHUMIDIFIERS

LARGE DESICCANT DEHUMIDIFIER APPLICATIONS

Water Damage Restoration—Provide a low-dew point air stream to quickly pull moisture from building materials that have come in contact with water due to storms, floods, fires and piping failures. Quickly dry out wet buildings and structures to prevent growth of mold and fungus.

New Construction Dehumidification—Speed drying and curing of construction materials; also helps prevent odors and mold contamination.

Humidity Control in Buildings—Use alone or with other air-treatment components, such as air conditioners, heaters and HEPA filters.

Industrial Preparation and Surface Coatings—Prevent condensation inside tanks prior to painting or industrial coating to ensure proper bonding.

Industrial Condensation Prevention—Eliminate condensation in industrial and manufacturing processes to ensure high quality.

Power Plant & Marine Lay-up—Prevent corrosion in utility and industrial piping idled for long periods by lowering the ambient dew point.



Pharmaceutical
Food Supplement



Maritime
Power Plant



Surface Preparation
Protective Coating Application



Food Production
Cold Storage

DEHUMIDIFIERS

LARGE DESICCANT DEHUMIDIFIERS

LARGE DESICCANT DEHUMIDIFIERS utilize a solid desiccant rotor that is slowly rotated by a drive motor. As the rotor turns, this produces very dry discharge air with extremely low relative humidity, which is ducted to the area being treated to facilitate drying or other moisture control applications. Many advanced features are included to provide precision control and maximum operating efficiency. Electric, gas and propane reactivation types are available. All models require electric power to energize the controllers and blower motors.

- 600 CFM models come in two options. Single phase 230 Volt comes in a portable unit that will run off a spider box and is ideal for residential or construction applications. 460 Volt / 3 Phase unit comes mounted in a lifting cage with fork pockets and is built for industrial projects.
- 1000/2000 cfm combination unit is 460 Volt / 3 Phase and has an option for either 1,000 or 2,000 cfm. This allows you to run the unit at a lower setting, decreasing energy use and cost. Unit is mounted in a lifting cage with fork pockets and casters.
- 5,000 cfm Tri-Fuel models can utilize electric, natural gas or propane gas for the reactivation energy, allowing you to choose the most efficient energy method. Unit electrical operation is 460 Volt / 3 Phase with single point hookup for either natural gas or propane. Unit comes in a lifting cage with fork-pockets and is less than 48" wide allowing for units to be shipped side-by-side.
- 15,000 cfm Tri-Fuel units utilize the same technologies found in our 5,000 cfm units. Ideal for outside use, the units are mounted on a galvanized steel skid, surrounded by a lifting cage. Units require 460 Volt / 3 Phase and can utilize natural gas or propane.

Note: Ducting is available in 25' lengths.



2,000 CFM Gas Desiccant Dehumidifiers



5,000 CFM Electric Desiccant Dehumidifier



15,000 CFM Electric Desiccant Dehumidifier

Performance Specifications (Gas = Natural Gas or Propane)

Model	Type Reactivation	Air Volume	Static Pressure	Moisture Removal			Overall Dimensions*	Weight	Cat-Class
				80°F / 60% RH	55°F / 80% RH	40°F / 80% RH			
GC-150	Electric	150	2"	5.75-11.5 gal./day	N/A	N/A	24"L x 22"W x 38.5"H	170 lbs.	105-0001
MS-600	Electric	600	0.5"	23 gal./day	18 gal./day	N/A	32"L x 26"W x 43"H	140 lbs.	105-0005
MS1000	Electric	1,000	2"	58 gal./day	43 gal./day	29 gal./day	81"L x 29"W x 40"H	525 lbs.	105-0010
MS2000	Electric	2,000	2"	143 gal./day	120 gal./day	71 gal./day	92"L x 29"W x 50"H	800 lbs.	105-0110
MS2400/1000	Electric	1000-2400 Hi (2000)	2"	158 gal./day	121 gal./day	72gal./day	92"L x 35"W x 63"H	1,100 lbs.	105-0050
		Low (1000)	2"	79 gal./day	69 gal./day	36gal./day	92"L x 35"W x 63"H	1,100 lbs.	105-0050
MS2000G	Gas	2,000	2"	143 gal./day	120 gal./day	71 gal./day	92"L x 29"W x 50"H	800 lbs.	105-0120
MS5000	Electric	5,000	5"	392 gal./day	331 gal./day	216 gal./day	170"L x 49"W x 79"H	4,800 lbs.	105-0410
MS5000TRI	Tri-Fuel	5,000-6,000	5"	392 gal./day	331 gal./day	216 gal./day	170"L x 49"W x 79"H	5,000 lbs.	105-0420
MS10000TRI	Tri-Fuel	10,000-12,000	5"	866 gal./day	754 gal./day	458 gal./day	193"L x 96"W x 72"H	8,000 lbs.	105-0440
MS15000	Electric	15,000	5"	1,221 gal./day	1,022 gal./day	697 gal./day	211"L x 88"W x 104"H	8,800 lbs.	105-0810
MS15000TRI	Tri-Fuel	15,000-17,000	5"	1,221 gal./day	1,022 gal./day	697 gal./day	211"L x 88"W x 104"H	13,500 lbs.	105-0820

*Dimensions of individual units may vary from the above specs—check with your Sunbelt Rentals location to confirm dimensions.

Air ducts—600 CFM: (4) 10" ducts; 1,000 CFM: (6) 10" ducts; 2,000 CFM: (2) 20" & (2) 10" ducts; 5,000 CFM: (2) 20" ducts; 15,000 CFM: (6) 20" ducts

DEHUMIDIFIERS

LARGE DESICCANT DEHUMIDIFIERS, HYBRID COOLING UNITS SUNBELT AIR MONITORING SYSTEM (SAMS)



Electric/Fuel Requirements (Gas = Natural Gas or Propane)

Model	Type Reactivation	Electric Load (Electric Reactivation) 230V, 1ø	Electric Load (Electric Reactivation) 460V, 3ø	Electric Load (Gas Reactivation) 460V, 3ø	Fuel Consumption (Natural Gas) Max Usage	Fuel Consumption (Propane) Max Usage
GC-150	Electric	N/A	5A/3 kW ¹	N/A	N/A	N/A
MS-600	Electric	24A/20 kW ¹	18A/20 kW ¹	N/A	N/A	N/A
MS1000	Electric	80A/56 kW ¹	28A/36 kW ¹	N/A	N/A	N/A
MS2000	Electric	N/A	56A/56 kW ¹	N/A	N/A	N/A
MS2400/1000	Electric (2400)	N/A	60A/56 kW ¹	N/A	N/A	N/A
	Electric (1000)	N/A	30A/36 kW ¹	N/A	N/A	N/A
MS2000G	Gas	N/A	N/A	15A/20 kW ¹	120 cu. ft./hr.	.975 gal./hr.
MS5000	Electric	N/A	138A/120 kW ¹	N/A	N/A	N/A
MS5000TRI	Tri-Fuel	N/A	138A/120 kW ¹	13A/20 kW ¹	400 cu. ft./hr.	4.4 gal./hr.
MS10000TRI	Tri-Fuel	N/A	292A/250 kW ¹	26A/20 kW ¹	718 cu. ft./hr.	7.6 gal./hr.
MS15000	Electric	N/A	335A/300 kW ¹	N/A	N/A	N/A
MS15000TRI	Tri-Fuel	N/A	335A/300 kW ¹	44A/56 kW ¹	1,200 cu. ft./hr.	12.7 gal./hr.

¹Recommended generator size for portable operation

HYBRID COOLING UNITS are designed to provide practical moisture control in hot and humid environments. The Sunbelt HCU units bring makeup air into a space by using a cooling coil to control temperature while a desiccant rotor wheel controls ambient humidity.

The Sunbelt HCU units are very energy efficient, reducing the overall cost of operation by lowering the amount of power and fuel necessary for operation. The HCU design combines practical cooling and desiccant dehumidification technologies into one energy efficient package. The Sunbelt HCU units are often utilized in construction drying projects, protective coating application projects, and in seasonal applications within the power generation, manufacturing and entertainment industries.



- 4,000-6,000 CFM
- Humidity or temperature demand control
- High energy efficiency
- Variable frequency drive for capacity control
- Digital control with optional remote monitoring
- Optimizes refrigeration-based A/C and desiccant-based dehumidification performance

Model	Dimensions	Weight	Full Load Amps (FLA)	HP	Airflow	Cat-Class
HCUb-6000	126"L x 84W" x 57"H	5200 lbs.	78 at 460V, 3ø	5, 7.5	4000-6000 SCFM	105-0430

SUNBELT AIR MONITORING SYSTEM (SAMS) offers a wireless solution for monitoring job site conditions. Originally designed to meet stringent military specifications for tank lining, SAMS successfully monitors the conditions of nearly any critical dehumidification project and is the only logging system able to continuously collect conditions in the event power and/or internet connectivity is lost.

- Perfect for use on industrial coating and painting projects and construction sites
- Invaluable project documentation of job site conditions
- Optional sensors available to measure air pressure differential, CO₂ and other gases, and porous materials such as wood, concrete and plaster



Sunbelt Air Monitoring System (SAMS)

DEHUMIDIFIERS

DEHUMIDIFIERS/REMEDICATION EQUIPMENT

DEHUMIDIFICATION BASICS

GLOSSARY

Actual Vapor Pressure—the partial pressure exerted by the water vapor present in a parcel, measured in millibars. Water in a gaseous state (i.e. water vapor) exerts a pressure just like the atmospheric air.

Dehumidification—the process of removing moisture from the air or other materials.

Desiccant—a substance such as calcium oxide or silica gel that is used as a drying agent.

Dew Point—the temperature air must be cooled to in order for saturation to occur, producing water in the form of dew or condensation.

Dry Bulb Temperature—the actual air temp.

Evaporation—the change of liquid water into water vapor. Moisture evaporates due to differential vapor pressure—the larger the vapor pressure differential, the faster the drying.

Humidistat—an instrument that indicates or controls the relative humidity of the air.

Hygrometer—an instrument that measures atmospheric humidity.

Relative Humidity—the ratio of the amount of water vapor in the air at a specific temperature to the maximum capacity of the air at that temperature. Relative humidity is expressed as a percentage: divide the actual vapor pressure by the saturation vapor pressure and then convert to a percent.

Saturation of Air—the condition under which the amount of water vapor in the air is the maximum possible at the existing temperature and pressure. Condensation or sublimation will begin if the temperature falls or water vapor is added to the air.

Saturation Vapor Pressure—the maximum partial pressure that water vapor molecules would exert if the air were saturated with vapor at a given temperature. Saturation vapor pressure is directly proportional to the temperature.

Wet Bulb Temperature—the lowest temperature that can be obtained by evaporating water into the air at constant pressure. Wet bulb temperatures can be used along with the dry bulb temperature to calculate dew point or relative humidity.

CALCULATING REQUIREMENTS

WATER DAMAGE RESTORATION

Normally two to five air changes per hour (ACH) are recommended for water damage restoration applications.

1. Calculate the volume of the structure in cubic feet (L x W x H).
2. Calculate the SCFM for one air change (volume ÷ 60).
3. Calculate the dehumidification capacity required (SCFM x ACH).

Example: A multi-story building measuring 100'L x 50'W x 50'H has received water damage due to flooding. Provide dehumidification capacity for three air changes per hour (ACH).

1. Volume = 100 x 50 x 50 = 250,000 cu. ft.
2. SCFM = 250,000 ÷ 60 = 4,167 SCFM
3. Dehumidification capacity = 4,167 SCFM x 3 ACH = 12,501 SCFM

This capacity could be provided using three 5,000-CFM dehumidifiers or one 15,000-CFM dehumidifier.

INDUSTRIAL CONDENSATION PREVENTION

Use desiccant dehumidifiers in combination with air conditioning units. Size dehumidifier flow for approximately one-half the air conditioner flow. Use 400 SCFM per ton of A/C capacity. If large amounts of outside air (above 10% of total flow) are required, use an air conditioner to pre-cool the dehumidifier inlet.

Example: Provide temporary dehumidification for a commercial building with a rooftop 20-ton air conditioner.

$$\text{Dehumidification capacity} = 400 \text{ SCFM} \times 20 \text{ tons} \div 2 = 4,000 \text{ SCFM}$$

INDUSTRIAL PREPARATION AND SURFACE COATINGS

Temporary dehumidification inside tanks being prepared for painting or industrial coating eliminates the potential for condensation.

Procedure: Purge the tank with 100% dehumidified air. Return air is not used due to the heavy dirt loading, usually 2 to 4 ACH is sufficient.

Example: Provide temporary dehumidification for a 100' diameter tank 30' high. The tank has (3) 3' diameter manholes and (8) 1' diameter vents.

Sizing Method #1 (Volume)

1. Calculate the volume of the tank in cu. ft. (3.14 x Radius² x H).
 2. Calculate the SCFM for one air change (volume ÷ 60).
 3. Calculate the dehumidification capacity required (SCFM x ACH).
- Dehumidification capacity = 235,500 cu. ft. ÷ 60 = 3,925 SCFM @ 1 ACH
This computes to 7,850 SCFM @ 2 ACH or 15,700 SCFM @ 4 ACH.

Sizing Method #2: (Leakage)

1. Calculate the leakage in square feet from manholes and vents.
 2. Calculate the dehumidification capacity required (Leakage x 250 FPM).
- Leakage = 21.13 sq. ft. (manholes) + 9.42 sq. ft. (Vents) = 30.60 sq. ft. total
Dehumidification capacity = 30.60 sq. ft. x 250 FPM = 7,650 SCFM

Note: The above calculations are for estimating purposes only. The actual dehumidification requirements for specific applications may vary.

DUST COLLECTORS

DUST COLLECTORS



DUST COLLECTORS are available in 40 HP and 60 HP models. Both are skid-mounted and offer an initial MERV 12 efficiency rating. The units are easy to operate and have both forklift pockets and crane lift points, making them easy to transport.

- In-line air flow between plenum and fan ensures the highest efficiency
- Extremely low air to cloth ratio provides more filter area for high dust conditions
- Unique filter baffle system enhances pulse jet cleaning and extends filter life
- Top loading filters offer superior cleaning and can be changed by a single operator with less risk of hazardous spills
- Hydraulically driven augers for low maintenance and dependable operation
- Greater job site versatility with conveniently located air inlets on three sides
- Solid state, programmable timer board for reverse air pulse filter cleaning system
- Heavy duty construction



DUST COLLECTORS



En Tech Industries 12DC
12,000 CFM

Make	Model	Mounting	Motor	Fan	Filter	Dimensions	Weight	Cat-Class
EnTech Industries	12DC	Skid	40 HP 130/460 3ø TEFC	Non-overloading spark resistant capable of 12,000 CFM @ 12" Wc	4,680 sq. ft. of filter area for an air to cloth ratio of 2.56:1	192"L x 72"W x 102"H (in transport)	7,500 lbs	061-2220
EnTech Industries	20DC	Skid	60 HP 230/460 3ø TEFC	Non-overloading spark resistant capable of 20,000 CFM @ 12" Wc.	7,020 sq. ft. of filter area for an air to cloth ratio of 2.85:1	266"L x 72"W x 112"H (in transport)	9,000 lbs.	061-2380

GENERATORS

TOWABLE DIESEL GENERATORS



TOWABLE DIESEL GENERATORS provide ideal power solutions for temporary, standby and emergency power requirements ranging from 20 kW to 640 kW. Tandem-axle trailers allow easy towing at highway speeds. All models feature quiet operation (69 dBA or lower at full load) and onboard fuel capacity for 24-hour minimum run times. Multiple voltages are easily configured, with simultaneous single and 3-phase power output.

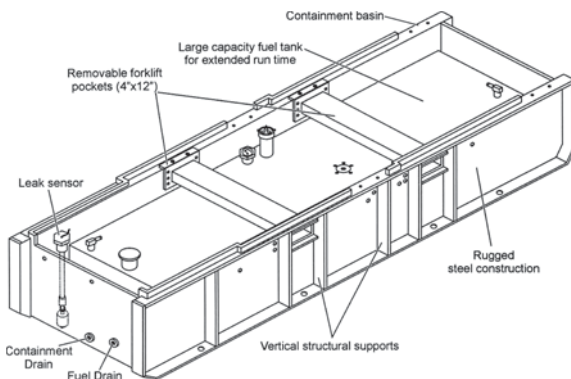
- Excellent voltage regulation: $\pm 1.5\%$ from no load to full load
- Simultaneous single and 3-phase power output
- Complete analog instrumentation, with an easy-to-read, illuminated instrument panel
- Silenced, weather-resistant steel housings
- Tandem-axle trailers equipped with surge brakes, designed for easy towing at highway speeds (except 640 kW)
- Large fuel tanks provide extended run times at full load
- Auxiliary fuel tanks are available for longer run times without refueling (see page 27)
- Environmental package with complete fluid containment is available for most models (see illustration below)
- Ultra-Silent generators are available in 20 kW, 36 kW, 56 kW, and 100 kW models (see illustration below)



MQ Power 100 kW Towable Generator
Temporary power for food vendors during a street fair



MQ Power 640 kW Towable Generator
Emergency power on a hurricane restoration project



Environmental Package
Available for all models except the 640 kW. Features an integrated environmental skid that provides complete fluid containment to protect the environment



Ultra-Silent Generators
Available in 20 kW, 36 kW, 56 kW and 100 kW models. They feature a patented airflow design and sound attenuation yielding a decibel rating of 62 dBA (or lower) at 23 feet

Make	Prime Rating	Engine	Onboard Fuel Cap	Consump Full Load	Run Time Full Load	Overall Dimensions	Operating Weight	Hertz	120V	240V	208V	480V	Cat-Class
MQ Power	20 kW	Isuzu 31 HP	42 gal.	1.6 GPH	27 hrs.	110"L x 57"W x 77"H	2,517 lbs.	60	☑	☑	☑	☑	009-0030
MQ Power	36 kW	Isuzu 55 HP	79 gal.	3.0 GPH	26 hrs.	143"L x 65"W x 84"H	4,342 lbs.	60	☑	☑	☑	☑	009-0040
MQ Power	56 kW	Isuzu 90 HP	103 gal.	4.5 GPH	23 hrs.	174"L x 73"W x 99"H	6,061 lbs.	60	☑	☑	☑	☑	009-0070
MQ Power	100 kW	Isuzu 152 HP	169 gal.	7.3 GPH	23 hrs.	184"L x 80"W x 97"H	8,849 lbs.	60	☑	☑	☑	☑	009-0100
MQ Power	120 kW	John Deere 180 HP	269 gal.	9.0 GPH	30 hrs.	202"L x 83"W x 89"H	9,784 lbs.	60	☑	☑	☑	☑	009-0105
MQ Power	150 kW	John Deere 286 HP	310 gal.	11.4 GPH	30 hrs.	204"L x 87"W x 93"H	11,438 lbs.	60	☑	☑	☑	☑	009-0120
MQ Power	175 kW	John Deere 286 HP	350 gal.	13.6 GPH	26 hrs.	209"L x 88"W x 94"H	12,850 lbs.	60	☑	☑	☑	☑	009-0130
MQ Power	240 kW	Komatsu 347 HP	329 gal.	16.7 GPH	20 hrs.	227"L x 95"W x 103"H	17,412 lbs.	60	☑	☑	☑	☑	009-0170
MQ Power	320 kW ¹	Volvo 468 HP	479 gal.	20.6 GPH	23 hrs.	241"L x 94"W x 115"H	19,719 lbs.	60	☑	☑	☑	☑	009-0210
MQ Power	640 kW ²	Komatsu 1,008 HP	129 gal.	41.3 GPH	3 hrs.	217"L x 77"W x 99"H	25,961 lbs.	60	☑	☑	☑	☑	009-0330

¹320 kW models are also available with Isuzu and Komatsu diesel engines.

²640 kW specifications reflect skid-mounted units.

Note: Above specifications reflect the most recent designs—specifications may vary for specific units rented.

GENERATORS

INDUSTRIAL DIESEL GENERATORS



INDUSTRIAL DIESEL GENERATORS provide efficient, continuous-duty solutions for temporary, standby and emergency power requirements up to 1,500 kW. To meet larger capacity requirements, all units are parallelable. Generators are enclosed in a self-contained, 20' or 40' ISO container, mounted on a tandem-axle trailer chassis for over-the-road transport. All models feature sound attenuation, with noise levels rated at 69 dBA or lower at full operating load.

- Paralleling system allows combining multiple units
- Programmable engine starting and shutdown, accommodates auto-dialers for remote operation and control
- Isolated, interior control room provides security and weather protection
- Triple-stage engine oil filtration system includes a refined 2-micron filter, an oil centrifuge system and an oil level regulating system, allowing up to 1,000 hours continuous operation
- Walk-through engine compartment provides access to all major components
- Large fuel tanks provide over 24 hours run time at full load Auxiliary fuel tanks are also available (see page 27)
- Ladder and platform provide convenient access for refueling



Left: Generators include a digital control panel located in an isolated control room for security and weather protection. Right: Walk-through engine compartment provides convenient access to all major components. Includes a 24V DC battery lighting system



Cummins 500 and 1,000 kW Industrial Generators
Power provided for an outdoor event



Two parallelled MQ Power 500 kW Generator
Emergency power for disaster relief

Make	Standby Rating	Prime Rating	Engine	Onboard Fuel Cap	Consump Full Load	Run Time Full Load	Overall Dimensions	Operating Weight	Hertz	208V	480V	Cat-Class
MQ Power	315 kW	350 kW	Volvo 533 HP	800 gal.	22.9 GPH	35 hrs.	24'L x 8'W x 12' 8"H	25,000 lbs.	60	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	009-0230
Cummins	455 kW	500 kW	Cummins 755 HP	849 gal.	34.4 GPH	25 hrs.	20'L x 8'W x 12' 6"H	27,940 lbs.	60	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	009-0310
MQ Power	450 kW	500 kW	Volvo 796 HP	800 gal.	37.7 GPH	21 hrs.	24'L x 8'W x 12' 8"H	26,920 lbs.	60	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	009-0310
MQ Power	730 kW	750 kW	Cummins 1,340 HP	1,000 gal.	60.0 GPH	17 hrs.	40'L x 8'W x 12' 8"H	44,500 lbs.	60	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	009-0340
Cummins	725 kW	800 kW	Cummins 1,220 HP	1,614 gal.	53.0 GPH	30 hrs.	30'L x 8'W x 12' 6"H	44,951 lbs.	60	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	009-0340
Cummins	900 kW	1,000 kW	Cummins 1,490 HP	1,614 gal.	72.2 GPH	22 hrs.	30'L x 8'W x 12' 6"H	48,059 lbs.	60	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	009-0350
MQ Power	900 kW	1,000 kW	Cummins 1,380 HP	1,000 gal.	69.3 GPH	14 hrs.	40'L x 8'W x 12' 8"H	45,200 lbs.	60	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	009-0350
Cummins	1,350 kW	1,500 kW	Cummins 2,220 HP	1,631 gal.	104.0 GPH	16 hrs.	48'L x 8'W x 12'6"H	71,960 lbs.	60	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	009-0370
MQ Power	1,250 kW	1,500 kW	Cummins 2,220 HP	1,000 gal.	88.0 GPH	11 hrs.	40'L x 8'W x 12' 8"H	53,220 lbs.	60	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	009-0370
Kohler	2,000kW	1820kW	Detroit	1,000 gal.	127.0 GPH	7.2 hrs.	45'L X 8'W X 13.5'H	76,380 lbs.	60	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	009-0390

Note: Some MQ Power units may be powered by Detroit Diesel engines. Note: 120V & 240V available with a transformer.

GENERATORS & ACCESSORIES

GENERATORS

POWER GENERATION BASICS

GLOSSARY

Alternating Current (AC)—a current which reverses in regularly recurring intervals of time, has alternative positive and negative values and occurs a specified number of times per second (see frequency).

Ampere (Amp)—the unit of electric current flow. One ampere will flow when one volt is applied across a resistance of one ohm.

Capacitance—the property of a circuit or body that permits it to store an electrical charge equal to the accumulated charge divided by the voltage. Expressed in farads.

Circuit—a complete or partial path over which electric current may flow.

Circuit Breaker—a mechanical switching device capable of making, carrying and breaking currents under normal conditions. Also capable of making, carrying for a specific time and automatically breaking currents under specified abnormal circuit conditions, such as a short circuit. Circuit breakers have an ampere trip rating for normal overload protection and a maximum magnetic ampere interrupting capacity (AIC) for short circuit protection.

Commercial Power—the term applied to power furnished by an electric power utility.

Conductor—a wire, cable or bus bar designed for the passage of electrical current.

Contact—an electro-mechanical device that is operated by an electric coil and allows automatic or remote operation to repeatedly establish or interrupt an electrical power circuit.

Contacts—devices for making and breaking electrical circuits, which are a part of all electrical switching devices.

Current (I)—the amount of electricity flowing in a circuit, measured in amperes.

Cycle—a given length of time (see alternating current). In the U.S. most electric current is 60 cycle (60 Hz).

Delta Connection—a common three-phase connection shaped schematically like the Greek delta (Δ). The end of one phase is connected to the beginning of the next phase, or vice versa.

Dielectric—insulating material, such as air or glass, that has a high resistance to the conductance of electric current; a non-conductor.

Direct Current (DC)—an electric current flowing in one direction.

Distribution Panel—a device that provides multiple power outlets from a 208V 3-phase or 240V single-phase power source for operating power tools, work lights and other equipment.

Efficiency Factor (EFF)—the ratio of output power to input power in an electric motor.

Electric Utilities—all enterprises engaged in the production and/or distribution of electricity for use by the public.

Electromotive Force (E)—the force or electric pressure that causes or tends to cause a current to flow in a circuit, equivalent to the potential difference between the terminals and commonly measured in volts.

Emergency (Stand-by) Power—an independent reserve source of electric power, upon failure or outage of the normal power source, provides stand-by electric power.

Frequency—the number of complete cycles of an alternating voltage or current per unit of time, usually expressed in cycles per second or Hertz (Hz).

Full Load Current (Amps)—the greatest current that a motor or other device is designed to carry under specific conditions: when rated voltage is applied at rated frequency with rated horsepower. Any additional current is an overload.

Fuse—an over-current protective device that consists of a conductor that melts and breaks when current exceeds rated value beyond a predetermined time.

Fuseable Disconnect Switch—a switching device that provides a safe way to distribute power for operating electrical equipment.

Generator—a machine that converts mechanical energy into electrical energy or power.

Generator Receptacle—a contact device installed for the connection of a plug and flexible cord to supply emergency power from a portable generator or other alternate source of power. Receptacles are rated in voltage, amps, number of wires and by enclosure type.

Ground—a connection, either intentional or accidental, between an electric circuit and the earth or some conducting body serving in place of the earth.

Ground Fault Circuit Interrupter (GFCI)—a receptacle with a built in circuit that will detect leakage current to ground on the load side of the device. When the GFCI detects leakage current to ground, it will interrupt power to the load side of the device, preventing a hazardous ground fault condition. GFCI receptacles must conform to UL Standard 943 Class A requirements and their use is required by the National Electric Code NFPA-70 in a variety of indoor and outdoor locations.

Grounded Neutral—the common neutral conductor of an electrical system, which is intentionally connected to ground to provide

a current carrying path for the line to neutral load devices.

Grounding Conductor—the conductor that is used to establish a ground and that connects equipment, a device, a wiring system or another conductor (usually the neutral conductor) with the grounding electrode.

Hertz (Hz)—a unit of frequency equal to one cycle per second.

Horsepower (HP)—the amount of energy required to lift 33,000 lbs., one foot, in one minute. The electrical equivalent of one horsepower is 745.6 watts.

Impedance—a characteristic of an electric circuit that determines its hindrance to the flow of electricity. The unit of measure is the same as resistance (ohms).

Inductance—the property of an electric circuit that causes it to store energy in the form of a magnetic field and because of which a varying current in a circuit induces an electromotive force (voltage) in that or a neighboring circuit.

Kilowatt (kW)—a unit of measure of electrical power, equal to 1000 watts. Used where larger units of electrical power are measured.

Kilovolt-Amperes (kVA)—a rating of apparent power before being used, such as the rating of a transformer.

Manual Transfer Switch—a switch designed to disconnect the load from one power source and reconnect it to another source, while at no time allowing both sources to be connected to the load simultaneously.

Megohm—a unit of resistance equal to one million ohms.

NEC—the National Electrical Code, which is the standard of the National Board of Fire Underwriters for electric wiring and apparatus, as recommended by the National Fire Protection Association.

NEMA—National Electrical Manufacturers Association, a non-profit trade association supported by the manufacturers of electrical apparatus and supplies. NEMA promulgates standards to facilitate understanding between the manufacturers and users of electrical products.

Neutral—the point common to all phases of a polyphase circuit, a conductor to that point, or the return conductor in a single phase circuit. The neutral in most systems is grounded at or near the point of service entrance only and becomes the grounded neutral.

Ohm—unit of electrical resistance. One volt will cause a current of one ampere to flow through a resistance of one ohm.

GENERATORS

POWER GENERATION BASICS

GLOSSARY

Ohm's Law—the rate of the flow of the current is equal to the electromotive force divided by the resistance. The three basic Ohm's law formulas are:

$$\text{Amperes} = \text{Volts} \div \text{Ohms}$$

$$\text{Ohms} = \text{Volts} \div \text{Amperes}$$

$$\text{Volts} = \text{Amperes} \times \text{Ohms}$$

Overload Protection—the effect of a device operated on excessive current, but not necessarily on short circuit, to cause and maintain the interruption of current flow to the device being governed.

Parallel Circuit—an electrical circuit that has more than one path through which electrons may flow.

Pin and Sleeve—a receptacle with cylindrical sleeve-type contacts.

Power Factor (PF)—the ratio of the true power to the volt-amperes in an alternating current circuit. Power factor is expressed in a percent of unity either lagging for inductive loads or leading for capacitive loads.

Reactance—the component of impedance that does not dissipate energy. Inductive reactance stores magnetic energy and hinders the flow of alternating current.

Relay—an electric device that is designed to interpret input conditions in a prescribed manner and, after specified conditions are met, to respond and cause contact operation or similar abrupt changes in associated electric control circuits.

Resistance (R)—the non-reactive opposition that a device or material offers to the flow of direct or alternating current. Usually measured in ohms. The larger the resistance, the lower the current for a given source (driving) voltage.

Resistive Load Bank—a device that provides temporary electrical loads for field testing power sources such as generators and uninterruptible power supplies.

Series Circuit—an electrical circuit with only one path through which electrons may flow.

Single-Phase Circuit—a circuit that differs in phase by 180°. Single-phase circuits have two conductors, one of which may be a neutral, or three conductors, one of which is neutral.

Stand-by Power—see Emergency Power.

Star Connection—a three-phase connection, so called because, schematically, the joint of the "Y" points looks like a star. (Same as a "Y" or "Wye" connection.)

Starting Amps—the maximum current drawn by a motor during the starting period.

Step-Down Transformer—a transformer that provides one or more electrical outlets at reduced voltage and current from the main power source.

Surge Arrestor—a protective device for limiting surge voltages on equipment by discharging or bypassing surge current; it prevents continued flow of current to ground and is capable of repeating these functions as specified.

Switch—a device for making, breaking or changing connections in a circuit.

Terminal Block—an insulating base equipped with terminals for connecting wires.

Three-Phase Circuit—a combination of circuits energized by alternating electromotive sources that differ in phase by one third of a cycle, that is, 120°. A three-phase circuit may be three wire or four wire with the fourth wire being connected to the neutral point of the circuit that may be grounded.

Transformer—a static electric device consisting of a single winding, or two or more coupled windings, used to transfer power by electromagnetic induction between circuits at the same frequency, usually with changed values of voltage and current.

Underwriters Laboratories (UL)—an independent, non-profit U.S. organization that tests products for safety.

Volt—a unit of measure of electric potential and electromotive force, equal to the difference of electric potential between two points on a conducting wire carrying a constant current of one ampere when the power dissipated between the points is one watt.

Voltage—electromotive force, or difference in electric potential, expressed in volts.

Watt—a unit of measure of electrical power, equal to the power used when one volt causes one ampere to flow in a circuit.

Wye Connection—see Star Connection.

KVA/KW AMPERAGE CHART											80% Power Factor			
kVA	kW	208V	220V	240V	380V	400V	440V	450V	480V	600V	2400V	3300V	4160V	
6.3	5	17.5	16.5	15.2	9.6	9.1	8.3	8.1	7.6	6.1				
9.4	7.5	26.1	24.7	22.6	14.3	13.6	12.3	12	11.3	9.1				
12.5	10	34.7	33	30.1	19.2	18.2	16.6	16.2	15.1	12				
18.7	15	52	49.5	45	28.8	27.3	24.9	24.4	22.5	18				
25	20	69.5	66	60.2	38.4	36.4	33.2	32.4	30.1	24	6	4.4	3.5	
31.3	25	87	82.5	75.5	48	45.5	41.5	40.5	37.8	30	7.5	5.5	4.4	
37.5	30	104	99	90.3	57.6	54.6	49.8	48.7	45.2	36	9.1	6.6	5.2	
45	36	125	118	108	68	65	59	57	54	43	11	8	6	
50	40	139	132	120	77	73	66.5	65	60	48	12.1	8.8	7	
62.5	50	173	165	152	96	91	83	81	76	61	15.1	10.9	8.7	
70	56	194	183	168	106	101	91	90	84	67	17	12	9	
75	60	208	198	181	115	109	99.6	97.5	91	72	18.1	13.1	10.5	
93.8	75	261	247	226	143	136	123	120	113	90	22.6	16.4	13	
100	80	278	264	240	154	146	133	130	120	96	24.1	17.6	13.9	
125	100	347	330	301	192	182	166	162	150	120	30	21.8	17.5	
156	125	433	413	375	240	228	208	204	188	150	38	27.3	22	
187	150	520	495	450	288	273	249	244	225	180	45	33	26	
219	175	608	577	527	335	318	289	283	264	211	53	38	31	
250	200	694	660	601	384	364	332	324	301	241	60	44	35	
312	250	866	825	751	480	455	415	405	376	300	75	55	43	
375	300	1040	990	903	576	546	498	487	451	361	90	66	52	
400	320	1112	1051	962	685	658	605	594	548	435	96	70	55	
438	350	1220	1155	1053	722	697	645	634	588	475	105	77	61	
500	400	1390	1320	1203	770	730	665	650	602	481	120	88	69	
625	500	1735	1650	1504	960	910	830	810	752	602	150	109	87	
750	600	2080	1980	1803	1150	1090	996	975	902	721	180	131	104	
800	640	2223	2102	1924	1217	1156	1051	1027	962	771	192	140	111	
875	700	2430	2310	2104	1344	1274	1162	1136	1052	842	210	153	121	
1000	800	2780	2640	2405	1540	1460	1330	1300	1203	962	241	176	139	
1125	900	3120	2970	2709	1730	1640	1495	1460	1354	1082	271	197	156	
1250	1000	3470	3300	3009	1920	1820	1660	1620	1504	1202	301	218	174	
1563	1250	4350	4130	3765	2400	2280	2080	2040	1885	1503	376	273	218	
1875	1500	5205	4950	4520	2880	2730	2490	2440	2260	1805	452	327	261	
2188	1750	6079	5747	5280	3350	3180	2890	2830	2640	2106	528	380	304	
2500	2000	6947	6568	6020	3840	3640	3320	3240	3015	2405	602	436	348	
2812	2250	7816	7389	6780	4320	4095	3735	3645	3400	2710	678	491	392	
3130	2500	8684	8210	7520	4800	4560	4160	4080	3765	3005	752	546	435	
3750	3000	10421	9852	9040	5760	5460	4980	4880	4525	3610	904	654	522	
4375	3500	12158	11495	10550	6700	6360	5780	5660	5285	4220	1055	760	610	
5000	4000	13895	13137	12040	7680	7280	6640	6480	6035	4810	1204	872	695	

GENERATORS & ACCESSORIES

GENERATORS

POWER GENERATION BASICS

Several basic electrical formulas, which are listed below, are related to Ohm's law. (See definition on previous page.)

Variables used in these formulas are as follows:

- I = Intensity of current = Amperes
- E = Electromotive Force = Volts
- R = Resistance = Ohms
- P = Power = Watts

Current (Ampere) Formulas

$$I = \sqrt{\frac{P}{R}} = \sqrt{\frac{\text{Watts}}{\text{Ohms}}} \quad I = \frac{P}{E} = \frac{\text{Watts}}{\text{Volts}} \quad I = \frac{E}{R} = \frac{\text{Volts}}{\text{Ohms}}$$

Voltage Formulas

$$E = \sqrt{P \times R} = \sqrt{\text{Watts} \times \text{Ohms}} \quad E = \frac{P}{I} = \frac{\text{Watts}}{\text{Amps}}$$

$$E = R \times I = \text{Ohms} \times \text{Amps}$$

Power (Watt) Formulas

$$P = E \times I = \text{Volts} \times \text{Amps} \quad P = \frac{E^2}{R} = \frac{\text{Volts}^2}{\text{Ohms}}$$

$$P = R \times I^2 = \text{Ohms} \times \text{Amps}^2$$

Resistance (Ohms) Formulas

$$R = \frac{E}{I} = \frac{\text{Volts}}{\text{Amps}} \quad R = \frac{E^2}{P} = \frac{\text{Volts}^2}{\text{Watts}} \quad R = \frac{P}{I^2} = \frac{\text{Watts}}{\text{Amps}^2}$$

Listed below are several additional electrical formulas, which are useful for calculating amperes, horsepower, kilowatts and kVA for both single-phase and three-phase alternating current when other values are known. Additional variables used in these formulas are as follows:

HP = Horsepower

EFF = Efficiency Factor (use 0.9 unless otherwise indicated)

PF = Power Factor (use 0.8 unless otherwise indicated)

ALTERNATING CURRENT (AC)

To Find:	Single-Phase	Three-Phase
Amperes, when motor HP is known	$\frac{HP \times 746}{E \times \text{EFF} \times \text{PF}}$	$\frac{HP \times 746}{E \times \text{EFF} \times \text{PF} \times 1.73}$
Amperes, when kW is known	$\frac{kW \times 1,000}{E \times \text{PF}}$	$\frac{kW \times 1,000}{E \times \text{PF} \times 1.73}$
Amperes, when kVA is known	$\frac{kVA \times 1,000}{E}$	$\frac{kVA \times 1,000}{E \times 1.73}$
Kilowatts (kW)	$\frac{E \times I \times \text{PF}}{1,000}$	$\frac{E \times I \times \text{PF} \times 1.73}{1,000}$
kW Input, when motor HP is known	$\frac{HP \times 0.746}{\text{EFF}}$	$\frac{HP \times 0.746}{\text{EFF}}$
Kilovolt-Amperes (kVA)	$\frac{E \times I}{1,000}$	$\frac{E \times I \times 1.73}{1,000}$
Horsepower (HP)	$\frac{E \times I \times \text{EFF} \times \text{PF}}{746}$	$\frac{E \times I \times \text{EFF} \times 1.73}{746}$

FULL-LOAD CURRENT IN AMPERES—ALTERNATING CURRENT (AC) MOTORS

HP	Single-Phase		Three-Phase Induction Type				Three-Phase Synchronous		
	115V	230V	208V	230V	460V	575V	230V	460V	575V
1/6	4.4	2.2							
1/4	5.8	2.9							
1/3	7.2	3.6							
1/2	9.8	4.9	2.4	2.2	1.1	0.9			
3/4	13.8	6.9	3.5	3.2	1.6	1.3			
1	16.0	8.0	4.6	4.2	2.1	1.7			
1-1/2	20.0	10.0	6.6	6.0	3.0	2.4			
2	24.0	12.0	7.5	6.8	3.4	2.7			
3	34.0	17.0	10.6	9.6	4.8	3.9			
5	56.0	28.0	16.7	15.2	7.6	6.1			
7-1/2	80.0	40.0	24.2	22.0	11.0	9.0			
10	100.0	50.0	30.8	28.0	14.0	11.0			
15			46.2	42.0	21.0	17.0			
20			59.4	54.0	27.0	22.0			
25			74.8	68.0	34.0	27.0	53.0	26.0	21.0
30			88.0	80.0	40.0	32.0	63.0	32.0	26.0
40			114.0	104.0	52.0	41.0	83.0	41.0	33.0
50			143.0	130.0	65.0	52.0	104.0	52.0	42.0
60			169.0	154.0	77.0	62.0	123.0	61.0	49.0
75			211.0	192.0	96.0	77.0	155.0	78.0	62.0
100			273.0	248.0	124.0	99.0	202.0	101.0	81.0
125			343.0	312.0	156.0	125.0	253.0	126.0	101.0
150			396.0	360.0	180.0	144.0	302.0	151.0	121.0
200			528.0	480.0	240.0	192.0	400.0	201.0	161.0
250					302.0	242.0			
300					361.0	289.0			
350					414.0	336.0			
400					477.0	382.0			
450					515.0	412.0			
500					590.0	472.0			

The chart at the left is useful for finding the full-load current in amperes for common types of electric motors with various horsepower and voltage ratings. To calculate the kW required to run a motor based on these values, use the following formulas:

Single-Phase

$$kW = \frac{\text{Volts} \times \text{Amps} \times \text{PF}^*}{1,000}$$

Three-Phase

$$kW = \frac{\text{Volts} \times \text{Amps} \times \text{PF}^* \times 1.73}{1,000}$$

*Use 0.8 power factor unless otherwise indicated.

Note: As a general rule, to estimate the kW necessary to start a motor, multiply the running kW x 2.5.

GENERATOR ACCESSORIES

REMOTE MONITORING SYSTEMS, AUXILIARY FUEL TANKS



REMOTE MONITORING SYSTEMS are ideal for tracking the status and performance of generators and other equipment utilized in critical applications. Systems available range from simple auto-dialers, which dial multiple phone numbers when the equipment shuts down or starts up, to sophisticated, web-based tracking systems that monitor multiple functions on a continuous basis. Typical functions monitored include:

- Machine status—whether or not the unit is running
- Engine hours—monitors usage and helps schedule preventive maintenance
- Location (Global Positioning)—for dispatch purposes and theft protection
- Remote management—ability to monitor single or multi-unit status, including monitoring multiple machine functions and controlling start-up and shutdown of units without a machine operator present
- GeoFencing—notification when equipment leaves a designated area



ENVIRONMENTAL AUXILIARY FUEL TANKS provide extended run times for all types of diesel-driven equipment. Several sizes are available, each featuring an environment-friendly design and rugged, steel construction that provides excellent spill control and complete fluid containment.



Three paralleled 1,500 kW generators providing emergency power at a military hospital

- 275, 500, 1,000 and 2,300 gallon tanks available
- Double wall construction (except 275 gallon tank), with UL listed interior tanks and exterior rupture basins
- Southwest Research Fire Code rated
- Galvanized steel frames provide protection from accidental damage and also allow stacking of tanks
- Forklift pockets and 4-point lifting eyes for easy loading
- Fuel gauge with lockable fill and overflow shutoff valve
- Quick-connect hoses and fittings allow fast, easy hookup



Two paralleled 1,500 kW generators and two 2,300 gallon auxiliary fuel tanks providing temporary power at a medical research facility

- Each tank accommodates two supply and two return lines
- Forklift pockets and 4-point lifting eyes for easy loading
- Fuel gauge with lockable fill and overflow shutoff valve

Capacity	Dimensions	Dry Weight	Cat-Class
275 gal.	56"L x 44"W x 55"H	1,431 lbs.	110-0110
500 gal.	84"L x 48"W x 80"H	3,750 lbs.	110-0210
1,000 gal.	102"L x 66"W x 80"H	4,850 lbs.	110-0310
2,300 gal.	144"L x 96"W x 84"H	8,100 lbs.	110-0410

¹275 gallon tank does not include double-wall construction or UL and Southwest Research ratings. Accommodates only one supply and one return line.

GENERATOR ACCESSORIES

PORTABLE DISTRIBUTION PANELS



PORTABLE DISTRIBUTION PANELS provide multiple power outlets from a 208V 3-phase or 240V single-phase power source for operating power tools, work lights and other equipment. Several types of panels that accommodate various voltage and outlet requirements are available, plus a wide selection of pigtail adapters, extension cables, spider boxes and other accessory items. (see pages 32–33)

- NEMA 4X polycarbonate enclosures
- Input: 208V 3-phase or 240V single-phase
- Output: Multiple 208V 3-phase, 208V single-phase, 250V single-phase and 120V single-phase outlets
- Power on light and main circuit breaker
- Most models include 2-wheel mounting for portability



100A
Quad Box Feeder Panel



100A
Duplex Panel w/GFCI



200A
Quad Box Feeder Panel



200A
Spider Box Feeder Panel



400A
Spider Box Feeder Panel



400A
Pin & Sleeve Splitter Panel

Description	Power Input	Power Outlets	GFCI	Weight	Cat-Class
50A Duplex panel	50A, 240V 1ø	(12) 20A, 120V 1ø	yes	56 lbs.	006-0100
100A Quad Box Feeder Panel	100A, 208V 3ø	(4) 20A, 208V 3ø; (1) 20A, 120V 1ø; (1) 50A, 250V 1ø	no	65 lbs.	006-0120
100A Duplex Panel	100A, 208V 3ø	(12) 20A, 120V 1ø	yes	65 lbs.	006-0130
200A Quad Box Feeder Panel	200A, 208V 3ø	(10) 20A, 208V 3ø	no	130 lbs.	006-0200
200A Spider Box Feeder Panel	200A, 208V 3ø	(6) 50A, 250V 1ø	no	65 lbs.	006-0390
400A Spider Box Feeder Panel	400A, 208V 3ø	(10) 50A, 250V 1ø	no	130 lbs.	006-0400
400A Pin & Sleeve Splitter Panel	400A, 208V 3ø	(4) 100A, 208V 3ø	no	145 lbs.	006-0410

GENERATOR ACCESSORIES

WEATHERPROOF DISTRIBUTION PANELS



WEATHERPROOF DISTRIBUTION PANELS provide multiple power outlets from a 208V 3-phase power source. They are ideal for powering outdoor special events such as concerts, sporting events, conventions and motion picture production.

- Heavy-duty, molded rubber enclosures provide excellent shock, impact, corrosion and weather resistance
- Lightweight designs for easy handling
- Panels are stackable for easy transportation and storage



DB100NP-AFF-S3
100A Quad Feeder Boxes



DBS100DP-A4GFI
100A GFCI Duplex Panel



DB200NP-A6S-S3
200A Spider Box Feeder Panel



DB200NP-FFF-S3
200A Quad Feeder Box



DB400A-F202000
400A 3-phase Splitter Box



DB50NQ-BBB-S3
50A Spider Box
Input: 50A, 125/250V
Output: (6) 20A 125V duplex
16 lbs. (Cat-Class 006-0001)



Spider Box Cables
50' length, 38 lbs.
(Cat-Class 150-0800)
100' length, 75 lbs.
(Cat-Class 150-0805)



20A Quad Box Strings w/GFCI
40' length w/10' spacing, 17 lbs.
(Cat-Class 155-0010)
60' length w/20' spacing, 31 lbs.
(Cat-Class 155-0020)
80' length w/30' spacing, 45 lbs.
(Cat-Class 155-0030)



20A Quad Extension Cables
50' length, 25 lbs.
(Cat-Class 155-0040)
100' length, 45 lbs.
(Cat-Class 155-0045)

Make	Model	Description	Power Input	Power Outlets	Dimensions	Weight	Cat-Class
Lex Products	DB100NP-AFF-S3	100A Quad Feeder Box	100A 3ø 120/208V 5 wire male cam	(5) NEMA L21-20 20A 4P5W 3ø 120/208V locking receptacles	11"L x 11"W x 13"H	32 lbs.	006-0120
Lex Products	DBS100DP-A4GFI	100A GFCI Duplex Panel	100A 3ø 120/208V 5 wire male cam	(12) NEMA 5-20 20A 2P3W 125V GFCI duplex receptacles	11"L x 11"W x 13"H	33 lbs.	006-0130
Lex Products	DB200NP-FFF-S3	200A Quad Feeder Box	200A 3ø 120/208V 5 wire male cam	(10) NEMA L21-20 20A 4P5W 3ø 120/208V locking receptacles	15"L x 18"W x 22"H	75 lbs.	006-0200
Lex Products	DB200A-X016369	200A Spider Box Feeder Panel	200A 3ø 120/208V 5 wire male cam	(8) 50A 125/250V "California-style" locking receptacles	15"L x 15"W x 19"H	60 lbs.	006-0390
Lex Products	DB400A-F202000	400A 3-phase Splitter Box	400A 3ø 120/208V 5 wire male cam	(4) 100A 3ø 120/208V 5 wire female cam; (2) NEMA 5-20 20A 2P3W 125V GFCI duplex	15"L x 18"W x 22"H	75 lbs.	006-0410

GENERATORS & ACCESSORIES

GENERATOR ACCESSORIES

MULTI-PANELS, FUSEABLE DISCONNECTS, LOAD BANKS



I-LINE MULTI-PANELS provide extra versatility by adapting to any voltage up to 600V. Applications include distribution panels, portable air handling and temperature control equipment and electric pumps. Circuit breakers can be added or removed as required for multiple electric loads from a single power source.

- Input: 5-wire sets of cam-type receptacles with snap back protective covers
Accommodate any voltage up to 600V
- Output: Hardwire via I-Line circuit breakers, which are added or removed as required

Notes:

1. Circuit breakers are rented separately from multi-panels.
2. Please advise circuit breaker ratings needed, including amperage and number of phases, when placing order.



1,200A
I-Line Multi-Panel

Capacity	Power Input	Power Outlets	Weight	Cat-Class
200A	up to 600V, 3ø	(1) 5-wire set of cam-type receptacles	75 lbs.	006-0470
600A	up to 600V, 3ø	(1) 5-wire set of cam-type receptacles	100 lbs.	006-0490
1,200A	up to 600V, 3ø	(1) 5-wire set of cam-type receptacles	300 lbs.	006-0500

FUSEABLE DISCONNECT SWITCHES provide a safe way to distribute power for operating motors, office trailers and equipment for special events.

- Power Input: up to 600V, 3-phase
- Power Outlets: 5-wire set of cam-type receptacles
- Utilize buss-type fuses



200A Fuseable
Disconnect Switch

Capacity	Power Input	Power Outlets	Weight	Cat-Class
200A	up to 600V, 3ø	(1) 5-wire set of cam-type receptacles	100 lbs.	006-0700
400A	up to 600V, 3ø	(1) 5-wire set of cam-type receptacles	300 lbs.	006-0705

GENERATOR ACCESSORIES

MILL PANELS, STEP-DOWN TRANSFORMERS, TRANSFER SWITCHES



MILL PANELS are ideal for providing multiple 120V outlets from a 480V or 575V 3-phase power source for turn-arounds, plant maintenance, and shutdowns. 10 kVA and 30 kVA step-down transformer type mill panels are available, plus a 225kVA model that is ideal for multi-operator welding applications.

- NEMA 4X polycarbonate enclosures
- Include primary safety switch and power-on light



30 kVA Mill Panel



225 kVA Mill Panel

Capacity	Power Input	Power Output	Power Outlets	Weight	Cat-Class
10 kVA	480/575V, 3ø	208Y/120V, 41.7 amps	(6) 20A 120V GFCI, (2) 30A 240V	175 lbs.	006-0300
30 kVA	600/480V, 3ø	208Y/120V, 83.4 amps	(9) 20A 120V GFCI, (4) 50A 125/250V twist-lock	450 lbs.	006-0310
225 kVA	480/575V, 3ø	480/575V, 3ø	(8) 50A 480/575V, 3ø welder receptacles	221 lbs.	006-0320

STEP-DOWN TRANSFORMERS provide multiple 208V 3-phase power connections from a 480V 3-phase power source, making them ideal for powering portable distribution panels. Several sizes of step-down transformers from 30 kVA to 225 kVA are available, plus a 2,500 kVA step-up transformer.

- Input: 480V 3-phase
- Output: Multiple 208V 3-phase connections using 5-wire sets of cam-type output receptacles (except 2,500 kVA model)



225 kVA Step-Down Transformer

HOW TO CALCULATE KVA REQUIREMENTS FOR 3-PHASE TRANSFORMERS

To calculate the kVA for 3-phase transformers:

1. Determine the required voltage and amperage.
2. Plug these values into the following formula:

$$\frac{\text{Volts} \times \text{Amps} \times 1.732}{1,000} = \text{kVA}$$

Capacity	Power Input	Power Output	Power Outlets	Weight	Cat-Class
30 kVA	36A, 480V 3ø	83A, 208V 3ø	(1) 5-wire set of cam-type receptacles	465 lbs.	006-0800
45 kVA	54A, 480V 3ø	124A, 208V 3ø	(1) 5-wire set of cam-type receptacles	580 lbs.	006-0810
75 kVA	113A, 480V 3ø	208A, 208V 3ø	(1) 5-wire set of cam-type receptacles	1,000 lbs.	006-0815
150 kVA	181A, 480V 3ø	417A, 208V 3ø	(2) 5-wire sets of cam-type receptacles	1,250 lbs.	006-0830
225 kVA	271A, 480V 3ø	625A, 208V 3ø	(4) 5-wire sets of cam-type receptacles	1,425 lbs.	006-0840
2,500 kVA	480Y/277Y	4,160V/13,200V	Multiple series voltage taps	13,600 lbs.	006-0890

DOUBLE THROW TRANSFER SWITCHES provide an economical means of transferring electrical loads between two power sources, such as a utility and an emergency or standby generator.

- Input: 480V 3-phase, 5-wire cam-type receptacles
- Output: 480V 3-phase, 5-wire cam-type receptacles

Notes:

1. Both manual and automatic transfer switches are available for the capacities listed.
2. Dual voltage and low voltage types are also available.

Capacity	Cat-Class
100A	006-0752
200A	006-0758
400A	006-0720
600A	006-0725
800A	006-0768
1,200A	006-0730



600A Double Throw Transfer Switch

GENERATOR ACCESSORIES

POWER CABLE



PIGTAIL ADAPTERS



2/5 Pin & Sleeve

4/0 Cam-Lock

Appleton Plug

Used to connect the power source to a distribution panel

Pigtail Adapters					
Connector Type	Cable	Length	Capacity	Weight	Cat-Class
Cam-Lock FM	2/0	10'	600V/200A	8 lbs.	155-0090
Cam-Lock M	2/0	10'	600V/200A	8 lbs.	155-0095
Cam-Lock FM	4/0	10'	600V/400A	11 lbs.	155-0125
Cam-Lock M	4/0	10'	600V/400A	11 lbs.	155-0130
Twist-Lock M	2/5	10'	600V/100A	20 lbs.	155-0155
Twist-Lock FM	2/5	10'	600V/100A	20 lbs.	155-0160
Pin & Sleeve M	2/5	10'	600V/100A	20 lbs.	155-0175
Pin & Sleeve FM	2/5	10'	600V/100A	20 lbs.	155-0180
Twist-Lock FM	6/4	10'	600V/60A	6 lbs.	155-0205
Twist-Lock M	6/4	10'	600V/60A	6 lbs.	155-0210
Quad String FM	10/5	10'	600V/25A	5 lbs.	155-0050
Quad String M	10/5	10'	600V/25A	5 lbs.	155-0055
Appleton Plug	2/4	10'	600V/100A	20 lbs.	155-0243

CAM-LOCK CABLES

Single-conductor cables, each equipped with one male and one female Cam-Type connector. Used for supplying power to 200A and 400A distribution panels.



Cam-Lock Cables				
Cable	Length	Capacity	Weight	Cat-Class
2/0	50'	600V/200A	38 lbs.	155-0065
2/0	100'	600V/200A	75 lbs.	155-0070
4/0	50'	600V/400A	55 lbs.	155-0100
4/0	100'	600V/400A	108 lbs.	155-0105

PIN & SLEEVE CABLES

Five-conductor cables, each equipped with one male and one female Pin & Sleeve connector. Used for supplying power to 100A distribution panels.



Pin & Sleeve Cables				
Cable	Length	Capacity	Weight	Cat-Class
2/5	25'	600V/100A, 3ø	68 lbs.	155-0165
2/5	50'	600V/100A, 3ø	140 lbs.	155-0170

BANDED 5 WIRE CABLES

Highly Flexible Cam Type Extension with (5) #2 AWG SC (Entertainment) conductors banded every 2' with heavy-duty sealant type heat shrink for durability and rated to 600V/220A.



QUAD EXTENSION CABLES

Five-conductor cables, each equipped with one 120/208V twist-lock plug and connector. Used for supplying power to Quad Box Strings and Three Gang Boxes.



Quad Extension Cables				
Cable	Length	Capacity	Weight	Cat-Class
10/5	50'	20A/208Y, 3ø	26 lbs.	155-0040
10/5	100'	20A/208Y, 3ø	45 lbs.	155-0045

SPIDER BOX CABLES

Four-conductor cables, equipped with California plugs. Used for supplying 50A 250V single-phase power to Spider Boxes.



Spider Box Cables				
Cable	Length	Capacity	Weight	Cat-Class
6/4	25'	600V/50A	16 lbs.	155-0795
6/4	50'	600V/50A	37 lbs.	155-0800
6/4	100'	600V/50A	57 lbs.	155-0805

BARE CABLE

Bare cable is rented by the foot in the cable size required.



Bare Cable			
Cable	Capacity	Weight (per foot)	Cat-Class (per foot)
2/0	600V/200A	0.73 lbs.	155-0056
4/0	600V/400A	1.05 lbs.	155-0098
250 MCM	5kV/315A	1.13 lbs.	155-0132
535 MCM	2kV/720A	2.22 lbs.	155-0134
600 MCM	5kV/525A	2.42 lbs.	155-0141
800 MCM	5kV/525A	2.94 lbs.	155-0143
2/5	600V/100A	2.00 lbs.	155-0144
6/4	600V/60A	0.60 lbs.	155-0193
10/5	600V/25A	0.50 lbs.	155-0213
10/3	600V/25A	0.28 lbs.	155-0223

GENERATORS & ACCESSORIES

HEATERS

SPECIALTY HEATERS



INDUSTRIAL HEATERS are available in indirect-fired, flameless and hydronic surface models. Ranging in size from 500,000 to 4.2 million BTUs per hour, all of the units are completely self-contained and add a new versatility to the Pump & Power Services fleet.

- Clean, safe, reliable air flow
- Capable of ducting long distances with minimal loss of air pressure or outlet temperature
- Flameless heaters offer green technology, resulting in less waste and reduced operating expenses
- Most units offer temperature rise capabilities up to 180 degrees F
- Rugged, heavy duty steel construction



MAC Flameless Heater



MAC Indirect-Fired Heater

Make	Model	Max BTU	Airflow	Fuel Type	Fuel Tank	Fuel Consumption	Overall Dimensions	Weight	Cat-Class
MAC	550F	550,000	3500 CFM	#2 Diesel	125 gal.	3 GPH	178"L x 72"W x 80"H	3,800 lbs.	010-1650
MAC	750F	750,000	2650 CFM	#2 Diesel	107 gal.	3.55 GPH	178"L x 72"W x 80"H	4,300 lbs.	010-1850
MAC	800G	800,000	3900 CFM	#2 Diesel	175 gal.	5.7 GPH	178"L x 72"W x 88"H	4,620 lbs.	010-0263
MAC	1.2G	1,200,000	6500 CFM	#2 Diesel	270 gal.	30 GPH	252"L x 98"W x 97"H	7,000 lbs	010-0273
MAC	4.2ES	4,200,000	21000 CFM	#2 Diesel	130 gal.	30 GPH	288"L x 101"W x 120"H	14,000 lbs.	010-0290

INLINE HEATERS are available in 30 kW, 60 kW and 150 kW models. Both the 30 kW and 60 kW models have two stages of heat, while the 150 kW unit offers four stages of heat. All units offer a built-in thermostat to control the heat stages for desired operation. Durable steel cabinets make the heaters ideal for rental, and numerous safety features make them a great fit for temporary heating applications.



United Cool Air 60 kW
Inline Heater

Make	Model	Capacity	Amps	Voltage	Overall Dimensions	Weight	Cat-Class
United Cool Air	PIH150	150 kW	189	460 V 3ø	42"L x 34"W x 45"H	820 lbs	010-1075
United Cool Air	PIH60	60 kW	75.3	460 V 3ø	53"L x 34"W x 45"H	520 lbs.	010-1050
United Cool Air	PIH1530	30 kW	37.7	460 V 3ø	65"L x 34"W x 45"H	410 lbs.	010-1000

HIGH STATIC BLOWERS

HIGH STATIC BLOWERS & INLINE ELECTRIC BLOWERS



HIGH STATIC BLOWERS move low to medium volumes of air at high static pressures. Skid-mounted, the fans in our High Static Blowers are rated at 14,000 CFM at 14" Wc., giving you the capacity you need to get the job done. Typical applications include material conveying, product drying, scrubber exhaust, combustion air and more.



EnTech Industries VNT1401 & VNT1202 High Static Blowers

Make	Model	Mounting	Motor	Fan	Dimensions	Weight	Cat-Class
EnTech Industries	VNT1401 & VNT1402	Skid	50 HP 460V 3Ø TEFC	BI-270 DFC spark resistant capable of 14,000 CFM @ 14" Wc.	64"L x 67"W x 60"H	2,415 lbs	036-0650

INLINE ELECTRIC BLOWERS are designed especially for ducted applications up to 20" with up to 5" External Static Pressure. Mounted on casters, our Inline Electric Blowers offer a horizontal cabinet and are capable of producing 5,000 CFM.



United Cool Air PILB5G4 Inline Electric Blower

Make	Model	Mounting	Power Requirements	Blower Capacity	Motor	Motor FLA	Motor Speed	Dimensions	Weight	Cat-Class
United Cool Air	PILB5G4	Skid	460V/3Ø/60	5,000 CFM	10 HP 460V 3Ø	11.5 Amps	3,525 RPM	52"L x 38"W x 51.5"H	582 lbs	010-1090

HIGH STATIC BLOWERS

PUMP & POWER LOCATION DIRECTORY

ALABAMA

Alabama Pump & Power (PC-95)
4132 Trax Drive
Birmingham, AL 35207
Phone: 205-251-2563
Fax: 205-251-2503

Mobile Pump & Power (PC-107)
3465 Hurricane Bay Drive
Theodore, AL 36582
Phone: 251-443-7248
Fax: 251-443-7338

ARIZONA

Phoenix Pump & Power **OPENING SOON**
Phone: 800-736-2504

CALIFORNIA

Los Angeles Pump & Power (PC-388)
14861 Artesia Boulevard
La Mirada, CA 90638
Phone: 714-923-1890
Fax: 714-923-1891

Northern California Pump & Power (PC-577)
2800 Goodrick Avenue
Richmond, CA 94801
Phone: 510-621-0015
Fax: 510-621-0016

San Diego Pump & Power (PC-146)
3860 Sherman Street
San Diego, CA 92110
Phone: 619-574-1908
Fax: 619-298-9732

COLORADO

Denver Pump & Power (PC-580)
13109 US Highway 85N
Littleton, CO 80125
Phone: 720-887-7473
Fax: 720-887-6035

FLORIDA

Central Florida Pump & Power (PC-48)
7520 US Highway 301 N.
Tampa, FL 33637
Phone: 813-247-4800
Fax: 813-247-5988

North Florida Pump & Power (PC-53)
11000 Blasius Road
Jacksonville, FL 32226
Phone: 904-696-9000
Fax: 904-696-9051

South Florida Pump & Power (PC-91)
3701 NW 120th Avenue
Coral Springs, FL 33065
Phone: 954-577-9429
Fax: 954-703-3260

GEORGIA

Atlanta Pump & Power (PC-30)
1540 Iris Drive SW
Conyers, GA 30094
Phone: 678-342-9869
Fax: 678-342-9871

ILLINOIS

Chicago Pump & Power (PC-313)
23322 S. Frontage Road West
Channahon, IL 60410
Phone: 815-521-9895
Fax: 815-521-9896

St. Louis Pump & Power (PC-371)
1081 Geil Drive
Granite City, IL 62040
Phone: 618-219-3224
Fax: 618-931-1731

INDIANA

Indianapolis Pump & Power (PC-387)
11220 Allisonville Road
Fishers, IN 46038
Phone: 317-572-1180
Fax: 317-572-1181

KENTUCKY

Cincinnati Pump & Power (PC-190)
10060 Toebben Drive
Independence, KY 41051
Phone: 859-283-5544
Fax: 859-283-9263

LOUISIANA

Baton Rouge Pump & Power (PC-572)
300 Wooddale Boulevard
Baton Rouge, LA 70806
Phone: 225-610-1293
Fax: 225-610-1299

MARYLAND

Maryland Pump & Power (PC-163)
9180 Bursa Road
Laurel, MD 20723
Phone: 301-470-2595
Fax: 301-470-9926

MASSACHUSETTS

Hyde Park Pump & Power (PC-784)
149 Providence Street
Hyde Park, MA 02136
Phone: 877-658-1968

New England Pump & Power (PC-571)
800 Hartford Turnpike OFC
Shrewsbury, MA 01545
Phone: 508-925-1630
Fax: 508-719-0046

MISSOURI

St. Louis Pump & Power (PC-371)
1081 Geil Drive
Granite City, IL 62040
Phone: 618-219-3224
Fax: 618-931-4392

NEW JERSEY

New Jersey Pump & Power (PC-172)
3090 Rt. 73 North
Maple Shade, NJ 08052
Phone: 856-779-2772
Fax: 856-779-8571

NEW YORK

New York Pump & Power (PC-104)
40 Charlotte Avenue
Hicksville, NY 11802
Phone: 516-937-1500
Fax: 516-937-1516

NORTH CAROLINA

Charlotte Pump & Power (PC-22)
7205 Statesville Road
Charlotte, NC 28269
Phone: 704-335-0204
Fax: 704-335-0722

Raleigh Pump & Power (PC-93)
2820 Superior Drive
Wake Forest, NC 27587
Phone: 919-570-7050
Fax: 919-570-0479

NORTH DAKOTA

Minot Pump & Power **OPENING SOON**
Phone: 800-736-2504

OHIO

Carroll Pump & Power (PC-793)
4045 Coonpath Road
Carroll, OH 43112
Phone: 740-756-7270
Fax: 740-756-7247

Cincinnati Pump & Power (PC-190)
10060 Toebben Drive
Independence, KY 41051
Phone: 859-283-5544
Fax: 859-283-9263

NE Ohio Pump & Power (PC-579)
5162 Akron Cleveland Road
Peninsula, OH 44264
Phone: 330-650-1874
Fax: 330-650-0608

OREGON

Portland Pump & Power (PC-576)
7610 NE Killingsworth Street
Portland, OR 97218
Phone: 503-256-0091
Fax: 503-256-9247

SOUTH CAROLINA

Coastal Pump & Power (PC-23)
3430 Ashley Phosphate Road
Charleston, SC 29418
Phone: 843-971-6450
Fax: 843-308-9195

TENNESSEE

Nashville Pump & Power (PC-127)
1327 Foster Avenue
Nashville, TN 37210
Phone: 615-259-2080
Fax: 615-259-9950

Memphis Pump & Power (PC-261)
4517 S Mendenhall Rd
Memphis, TN 38141
Phone: 901-333-2690
Fax: 901-333-2691

TEXAS

Dallas/Ft. Worth Pump & Power (PC-184)
711 N. Beach Street
Fort Worth, TX 76111
Phone: 817-759-0413
Fax: 817-834-0524

Houston Pump & Power (PC-147)
330 Richey Street
Pasadena, TX 77506
Phone: 713-672-7895
Fax: 713-672-7853

San Antonio Pump & Power (PC-578)
16825 IH 35 North
Selma, TX 78154
Phone: 210-662-7743
Fax: 210-662-7932

UTAH

Salt Lake City Pump & Power (PC-581)
48 N. 1330 West
Orem, UT 84057
Phone: 801-224-7342
Fax: 801-224-7345

VIRGINIA

Northern Virginia Pump & Power (PC-790)
8250 Chatsworth Drive
Manassas, VA 20109
Phone: 703-334-4070
Fax: 703-334-4071

VA Beach Pump & Power (PC-173)
4750 Baxter Road
Virginia Beach, VA 23462
Phone: 757-499-1338
Fax: 757-499-1533

WASHINGTON

Seattle Pump & Power (PC-348)
2257 Lincoln Avenue
Tacoma, WA 98421
Phone: 253-922-6995
Fax: 253-922-6973



**SUNBELT
RENTALS**

Account No. _____ PC # _____ Rep # _____

APPLICATION FOR CREDIT & RENTAL AGREEMENT
Confidential Credit Information

Phone: 800-508-4756 Fax: 888-886-7820 E-mail: sunbeltcredit@sunbeltrentals.com

sunbeltrentals.com

You can also apply online—go to: www.sunbeltrentals.com/credit

In order to process your request, this agreement must be signed. Please attach a company credit profile if available.

AC 4/12c

Customer Name (Individual or Company) _____	Physical Address _____
(d/b/a) Trade Name _____	Mailing Address _____
Phone Number _____ Fax Number _____	City, State, Zip _____

BUSINESS INFORMATION Corporation LLC Partnership Proprietorship Length of Time in Business _____
(If less than 2 years, please provide INDIVIDUAL PERSONAL GUARANTY information below and sign guaranty on reverse side.)

Previous Business Name _____ D & B# _____

Have you ever filed bankruptcy? _____ Federal Tax ID# _____ State entity formed _____

Bonding Agent Name and Address _____

If Partnership or LLC, list partners/members _____
(Please attach a list if additional space is needed.)

SIGNATORY INFORMATION (Authorized Agent)

Name _____ (Please Print) Title / Relationship to Customer _____

Address _____

City _____ State _____ Zip _____

Phone Number _____ Social Security Number _____

Email Address _____

BANKING INFORMATION

Bank Name _____

Contact Name _____ Phone _____

Address _____

City _____ State _____ Zip _____

Checking Account Number _____ Loan Account Number _____

ACCOUNTING INFORMATION

Purchase Order Number Required? Insurance Co. _____

Job #s Required Insurance Contact Person _____

Tax Exempt? Insurance Co. Phone No. _____

If checked, attach proper forms. Certificate of Insurance being forwarded
Insurance Certificate required prior to rental.

Interested in online access to Account Information?

Accounts Payable (A/P) Contact _____ A/P E-Mail Address _____ A/P Phone Number _____ A/P Fax Number _____

TRADE REFERENCES	City, State	Phone Number

Rental Companies Previously Used? United RSC/Prime Hertz Other _____

APPLICATION FOR CREDIT & RENTAL AGREEMENT
Confidential Credit Information

TERMS & AGREEMENT *(Must be signed for account processing)*

The undersigned ("Customer") in consideration of Sunbelt Rentals, Inc. or any of its subsidiaries and affiliated entities, successors or assigns ("Sunbelt") extending commercial credit based upon the information furnished herein, warrants and agrees that by executing this Agreement: (a) all purchases/rentals made by Customer from Sunbelt are subject to the terms and conditions contained herein; (b) Customer has received, read, understands and accepts all of the terms and conditions of Sunbelt's rental contract, which are on the reverse side of each and every rental contract, found at www.sunbeltrentals.com/About/pdf/SunbeltContract5_27_09.pdf and available in writing, upon request, including the release, indemnification and insurance provisions in sections 8 and 9 ("Rental Contract"); (c) the Rental Contract terms are deemed incorporated into and made a part of this Agreement and each and every rental/sale of equipment and/or provision of labor furnished to Customer, whether or not Customer executes each Rental Contract; and (d) any terms in the Customer's acceptance, purchase order or other documentation that are inconsistent with or in addition to this Agreement (except such additional terms which are required by law) shall be void and of no effect (any use or reference to Customer's purchase order or purchase order number in any Rental Contract is for Customer's convenience only). Sunbelt shall deliver equipment in consideration for Customer's agreement to be bound by the Rental Contract. Customer also confirms that they and/or the persons or companies who will have access to the equipment purchased and/or rented are not listed on the Specially Designated Nationals ("SDN") List maintained by the Office of Foreign Assets Control, nor any other denied persons list maintained by a U.S. government agency, and agrees to notify Sunbelt should they become listed in the future. Refer to www.treas.gov/offices/enforcement/ofac/ for information regarding the SDN list and to www.bis.doc.gov for information on other denied parties lists and other U.S. export restrictions.

In making this Agreement upon which Sunbelt will rely to extend commercial credit, I/We agree to Sunbelt's terms of payment as follows: NET DUE UPON RECEIPT on all accounts and service charges of 1.5% per month on all invoices/contracts not paid when due or the maximum rate permitted by law, whichever is less. Any disputed invoices must be brought to the attention of the Sunbelt within fifteen (15) days of the receipt or the invoices/contracts are deemed correct and undisputed. At Sunbelt's discretion, any account with a delinquent balance may be placed on a cash basis, deposits may be required and the rental equipment picked up without notice. If collection of amounts due requires the assistance of a collection agency or attorneys, suit is brought hereon, or it is enforced through any judicial proceeding whatsoever, I/We agree (a) that Sunbelt reserves the right to bring legal action in whatever jurisdiction Sunbelt deems necessary, whose laws, at the option of Sunbelt, shall govern this Agreement, and (b) to pay all costs and expenses of collection, including but not limited to, reasonable attorney's fees, not exceeding a sum equal to fifteen percent (15%) of the outstanding balance owing, plus all other reasonable expenses incurred by Sunbelt in exercising any of Sunbelt's rights and remedies.

The individual executing this Agreement below warrants that (i) s/he is authorized to do so; (ii) the information contained in this Agreement is a true and correct statement of the financial condition of Customer; and (iii) a photo or facsimile copy of this Agreement shall be valid as the original. If any part of this Agreement is held unenforceable, the remainder of this Agreement shall not be affected thereby. Customer waives the right to a jury trial of any or all claims or disputes which may arise from this Agreement. **I/We authorize Sunbelt to make whatever credit inquiries it deems necessary in connection with this Agreement.** Bank and trade reference(s) can accept this authorization to disclose to Sunbelt and/or their respective designees (and any assignee or potential assignee thereof), Customer information normally released to a prospective creditor including: length of time account has been active, average monthly balances, how the account has been handled, and details of any lending relationship. I/We authorize Sunbelt to contact our insurance company and authorize the insurance company to issue insurance certificate(s) when Sunbelt's calls from time to time showing the insurance required in the Rental Contract to be maintained by Customer.

Print Customer Name: _____

Print Authorized Officer's Name: _____

Authorized Officer's Signature: _____

Print Authorized Officer's Title: _____

Date: _____

INDIVIDUAL PERSONAL GUARANTY

The undersigned guarantor(s), for and in consideration of Sunbelt extending credit at my/our request to the Customer named above, in which I/we have a financial interest, jointly, severally and unconditionally personally guarantee prompt payment and performance of any obligations Customer to Sunbelt whether now existing or hereinafter made, and further agree to bind myself/ourselves to pay on demand any sum which is due by Customer to Sunbelt whenever Customer fails to pay the same. It is understood that this guaranty shall be absolute, continuing and irrevocable for such indebtedness of Customer. I/We expressly waive presentment, demand, protest, my/our homestead exemption as to this debt, notice of protest, dishonor, diligence, maturity, default or nonpayment, acceptance of this guaranty, extending of any guaranteed indebtedness already or hereafter contracted for by Customer, any modifications or renewals of any credit agreement evidencing the indebtedness hereby guaranteed and all setoffs and counterclaims.

If collection of amounts due requires the assistance of a collection agency or attorneys, suit is brought hereon, or it is enforced through any judicial proceeding whatsoever, I/We agree (a) that Sunbelt reserves the right to bring legal action in whatever jurisdiction Sunbelt deems necessary, whose laws, at the option of Sunbelt, shall govern this Agreement, and (b) to pay all costs and expenses of collection, including reasonable attorney's fees not exceeding a sum equal to fifteen percent (15%) of the outstanding balance owing, plus all other reasonable expenses incurred by Sunbelt in exercising any of Sunbelt's rights and remedies.

The Undersigned recognizes the obligation of the Applicant and the undersigned and agrees to hold the portion of all payments received by Applicant which include payment to Applicant for the rent and/or purchase of equipment and supplies furnished by Sunbelt pursuant to this agreement to be held in a separate trust account for payment to Sunbelt. The undersigned agrees to act as fiduciary for payment to Sunbelt and agrees that Applicant shall not use said payments for any other purpose, in exchange for the Applicant's ability to rent and/or purchase equipment and supplies on a credit account. The undersigned agrees that any failure to hold payments in trust for Sunbelt shall create a debt which is not dischargeable in bankruptcy and which shall be an exception to discharge pursuant to the terms of 11 USC 523 (a)(4) and (6). The undersigned represent that (i) the information contained in this Agreement is a true and correct statement of the financial condition of Customer; and (ii) a photo or facsimile copy of this Agreement shall be valid as the original. If any part of this Agreement is held unenforceable, the remainder of this Agreement shall not be affected thereby. The undersigned hereby waives the right to a jury trial of any or all claims or disputes which may arise from this Agreement. Sunbelt shall not be required to exhaust all remedies against Customer prior to exercising its rights against Guarantor(s). **I/We authorize Sunbelt to make whatever credit inquiries it deems necessary in connection with this Agreement.** Bank and trade reference(s) can accept this authorization to disclose to Sunbelt and/or their respective designees (and any assignee or potential assignee thereof), Guarantor(s) information normally released to a prospective creditor including: length of time account has been active, average monthly balances, how the account has been handled, and details of any lending relationship

Guarantor's Signature: _____

Guarantor's Signature: _____

Print Guarantor's Name: _____

Print Guarantor's Name: _____

Address: _____

Address: _____

SSN: _____

SSN: _____

Witness Signature: _____

Witness Signature: _____

Print Witness Name: _____

Print Witness Name: _____

Date: _____

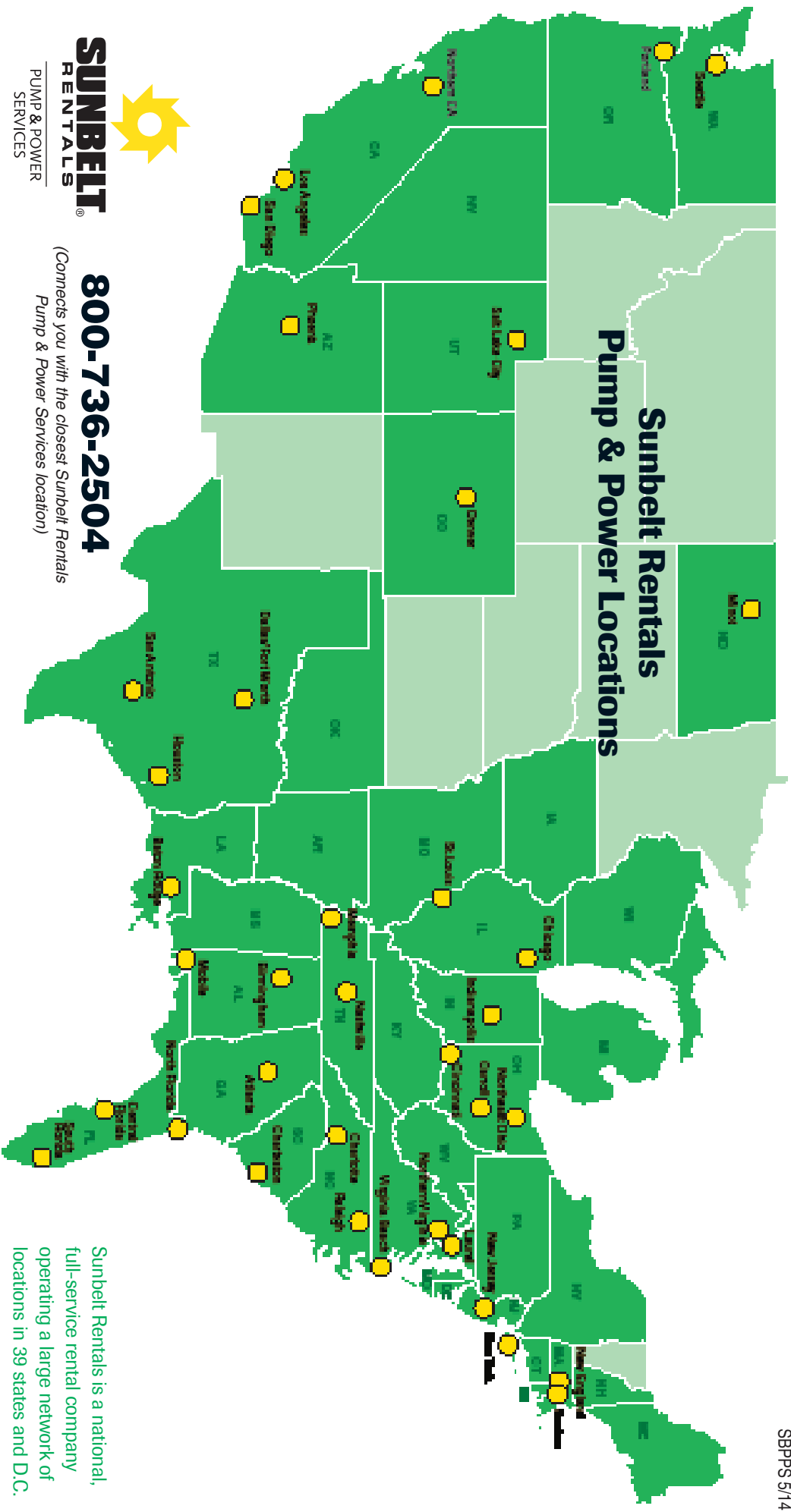
Date: _____

In order to process your request, this agreement must be signed. Please attach a company credit profile if available.

Fax to your nearest Sunbelt Rentals Location —or— 888-886-7820

Mail: Sunbelt Rentals • PO Box 410968 • Charlotte, NC 28241 • 800-508-4756

Sunbelt Rentals Pump & Power Locations



SUNBELT
RENTALS
PUMP & POWER
SERVICES

800-736-2504

*(Connects you with the closest Sunbelt Rentals
Pump & Power Services location)*

Sunbelt Rentals is a national,
full-service rental company
operating a large network of
locations in 39 states and D.C.

Alabama	205-251-2563	Hyde Park, MA	877-658-1968	Northeast Ohio	330-650-1874
Atlanta, GA	678-342-9869	Indianapolis, IN	317-572-1180	Northern Virginia	703-334-4070
Baton Rouge, LA	225-610-1293	Los Angeles, CA	714-923-1890	Phoenix, AZ	800-736-2504
Carroll, OH	740-756-7270	Maryland	301-470-2595	Portland, OR	503-256-0091
Central Florida	813-247-4800	Memphis, TN	901-333-2690	Raleigh, NC	919-570-7050
Charleston, SC	843-971-6450	Mobile, AL	251-443-7248	Salt Lake City, UT	801-224-7342
Charlotte, NC	704-335-0204	Nashville, TN	615-259-2080	San Antonio, TX	210-662-7743
Chicago, IL	815-521-9895	New England	508-925-1630	San Diego, CA	619-574-1908
Cincinnati, OH	859-283-5544	New Jersey	856-779-2772	St. Louis, MO	618-219-3224
Dallas/Fort Worth, TX	817-759-0413	New York	516-937-1500	Seattle, WA	253-922-6995
Denver, CO	720-887-7473	North Florida	904-696-9000	South Florida	954-577-9429
Houston, TX	713-672-7895	Northern California	510-621-0015	Virginia Beach, VA	757-499-1338