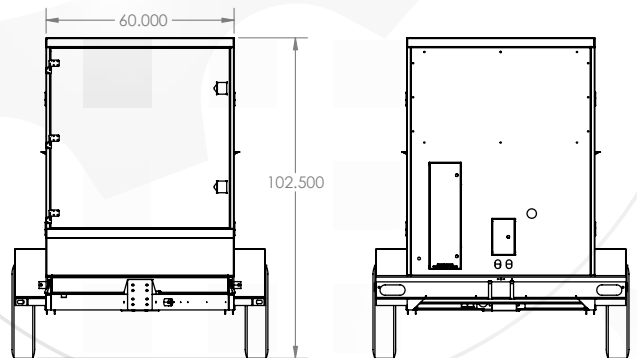
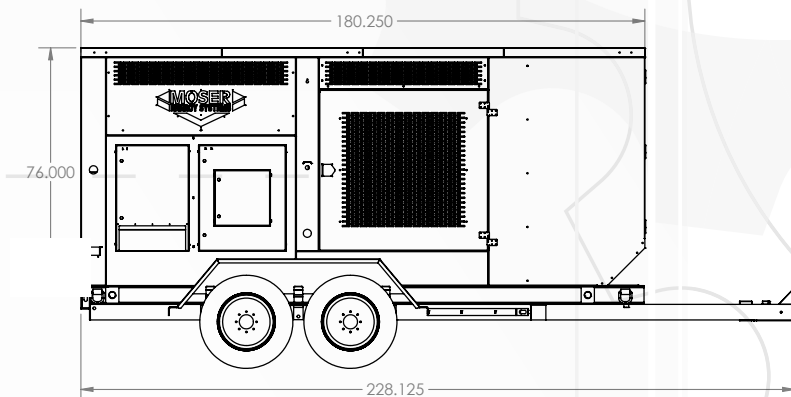




Prime/Continuous Duty Generator Set

DRC70 UNIT SPECS

24/7 PRIME POWER KW (KVA)	70 KW (87 kVA)
ENGINE PRIME RATING HP (KW)	118 HP (88 kVA)
GENERATOR RATING KW (KVA)	128 KW (160 kVA)
MAXIMUM AMP RATING	105
SIZE OF UNIT	14'X6'8.5" - TONGUE IS 4'9"
WEIGHT OF UNIT	Approximately 7,000 lbs.



ELECTRICAL DATA

Insulation System	Class H
Stator Winding	Double Layer Lap
Winding Pitch	Two Thirds
Winding Leads	12
Winding Number	311
Number of Poles	4
IP Rating	IP23
RFI Suppression	BS EN 61000-6-2 & BS EN 61000-6-4, VDE 0875G, VDE 0875N. Refer to factory for others
Waveform Distortion	NO LOAD < 1.5% NON-DISTORTING BALANCED LINEAR LOAD < 5.0%
Short Circuit Ratio	1/Xd
Steady State X/R Ratio	2.25

50 Hz
60 Hz

Telephone Interference	THF < 2%				TIF < 50			
Cooling Air	0.514 m³/sec				0.617 m³/sec			
Voltage Star	380	400	415	440	416	440	460	480
kVA Base rating (Class H) for Reactance Values	140	140	140	N/A	160	167.5	167.5	178.8

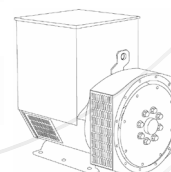
60 Hz

Class - Temp Rise	Cont. F - 105/40 °C				Cont. H - 150/40 °C				Standby - 150/40 °C				Standby - 163/27 °C			
Series Star (V)	416	440	460	480	416	440	460	480	416	440	460	480	416	440	460	480
kVA	140.0	143.8	143.8	160.0	160.0	167.5	167.5	178.8	170.0	175.0	175.0	187.5	175.0	181.3	181.3	193.8
kW	112.0	115.0	115.0	128.0	128.0	134.0	134.0	143.0	136.0	140.0	140.0	150.0	140.0	145.0	145.0	155.0
Efficiency (%)	91.9	92.2	92.5	92.5	91.4	91.7	92.1	92.1	91.2	91.5	91.9	92.0	91.0	91.4	91.8	91.9
kW Input	121.9	124.8	124.4	138.4	140.0	146.1	145.5	155.3	149.1	153.0	152.3	163.0	153.8	158.7	158.0	168.7

EXCITATION AND VOLTAGE REGULATORS

AVR Type	mx321	mx341	
Voltage Regulation	±0.5%	±1%	with 4% Engine Governing
Excitation Type	PMG	PMG	

No Load Excitation Voltage (V)	10
No Load Excitation Current (A)	0.5
Full Load Excitation Voltage (V)	36
Full Load Excitation Current (A)	1.8
Exciter Time Constant (seconds)	0.065s

STAMFORD
UCI274E - Winding 311

Optional voltages and frequencies available.



DSE8610 MKII

SYNCHRONISING & LOAD SHARING AUTO START CONTROL MODULE

- Comprehensive synchronizing & load sharing capabilities.
- Built in governor and AVR control.
- Base load (kW export) control.
- Positive & negative kVAr export control.
- Mains (Utility) decoupling protection.
- 4-Line back-lit LCD text display.
- Multiple display languages.
- Five key menu navigation.
- LCD alarm indication.
- Heated display option available.
- DSENet expansion capability.
- Data logging & trending facility.
- Protections disable feature.
- Front panel configuration with PIN protection.
- Power save mode.
- 3 phase generator sensing and protection.
- Generator current and power monitoring (kW, kvar, kVA, pf).
- kW and kvar overload alarms.
- Reverse power alarms.
- Over current protection.
- Unbalance load protection.
- Breaker control via fascia buttons, one variant.
- Real-time clock.
- Engine run-time scheduler.
- Fuel usage monitor and low fuel level alarms.
- Simultaneous use of all communication ports.
- Remote SCADA monitoring via various DSE software applications.
- MODBUS RTU & TCP support with configurable MODBUS pages for integration into building management systems (BMS).
- Optional Advanced SMS messaging capability. (Additional external modem required.)
- 3 configurable maintenance alarms.
- Power modes for when in parallel with the mains.

Standard Options: Heavy Duty Trailer • Fuel Scrubber • Low-Noise Enclosure • Oil Make-Up • Auto-Switching Propane Kit • Integrated Paralleling Gear.

Available Options: Cold Weather Package • Multiple Voltages at 50 Hz and 60 Hz • Ultra-Low Emissions Package • Engine Block Heater.

GENERAL ENGINE DATA		STD	METRIC	1500	1800
Type		N/A	N/A	In-Line 4 cycle	
Number of cylinders		N/A	N/A	6	
Aspiration		N/A	N/A	Naturally Aspirated	
Bore	in	mm	4.37	111	4.37 111
Stroke	in	mm	5.47	139	5.47 139
Displacement	in^3	L	492	8.1	492 8.1
Compression ratio	N/A		10.5		
RPM Range (Min-Max)		RPM		1500-1800	
Rotation Viewed from Flywheel		N/A		Counter Clockwise	
Firing Order		N/A		1-5-3-6-2-4	
Dry Weight					
Fan to Flywheel	lb	kg	2200	998	2200 998
Rad to Flywheel	lb	kg	2660	1207	2660 1207
Wet Weight					
Fan to Flywheel	lb	kg	2288	1038	2288 1038
Rad to Flywheel	lb	kg	2900	1316	2900 1316

EXHAUST SYSTEM						
Type			Air Cooled Manifold			
Maximum allowable back pressure	in HG	kPa	3	10.146	3	10.146
Standard catalyst back pressure	in HG	kPa	1.5	5.073	1.5	5.073
Exhaust outlet pipe size						
Maximum turbine inlet temperature	F	C	1382	750	1382	750
Exhaust flow at rated power	lb/hr	kg/hr	632	283	790	358
Exhaust flow at rated power @ 1350F	cfm	m^3/min	478.5	13.5	605.7	17.2

AIR INDUCTION SYSTEM						
Maximum allowable intake air restrictions with air cleaner						
Clean	in H2O	kPa	5	20	5	20
Dirty	in H2O	kPa	15	4	15	4
Combustion air required (entire engine)	lb/hr	kg/hr	596	267	745	338
Combustion air required (entire engine)	cfm	m^3/min	763	22	1027	29

ELECTRICAL SYSTEM						
Cold cranking current						
Engine only	CCA		900			
Engine with drive train	CCA		900			
Maximum allowable resistance of starting circuit	Ohms		0.002			
Starting motor power	HP	kW	6.0	4.5	6.0	4.5
Voltage	Volts		24			
Current	Amps		45			
Coil primary resistance	Ohms		0.59Ω ±10%			
Spark plug p/n			IFR7F-4D			
Spark plug gap	Inches	mm	.015" (-0/+ .008") .38mm (-0/+ .2mm)			

COOLING SYSTEM						
Coolant capacity						
Engine only	gal	L	5	19	5	19
Engine with radiator	gal	L	22	83	22	83
Engine coolant flow	gal/min	L/min	53	201	63	238
Heat rejected to cooling water at rated load	btu/min	kcal/sec	3915	16	4990	21
Maximum intake air temperature (IAT)	F	C	155	68	155	68
Heat rejection per CAC	btu/min	kW	N/A	N/A	N/A	N/A