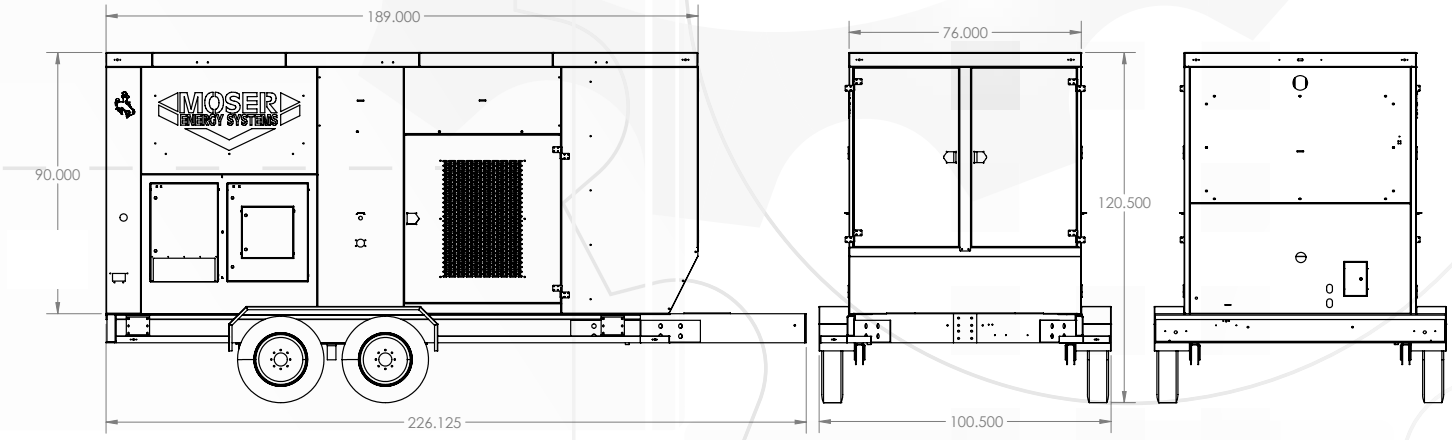
MOSER ENERGY SYSTEMS

DRC250

Prime/Continuous Duty Generator Set

DRC250 UNIT SPECS

24/7 PRIME POWER KW (KVA)	250 kW (312 KVA)
ENGINE PRIME RATING HP (KW)	390 HP (291 kW)
GENERATOR RATING KW (KVA)	284 kW (355 kVA)
MAXIMUM AMP RATING	376
SIZE OF UNIT	14' 11"X 8'1" - TONGUE IS 4'9"
WEIGHT OF UNIT	Approximately 14,000 lbs.



DRC250

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	12.29

	50 Hz				60 Hz			
Telephone Interference	THF < 2%				TIF < 50			
Cooling Air	0.83 m^3/sec				0.99 m^3/sec			
Voltage Star	380	400	415	440	416	440	460	480
kVA Base rating (Class H) for Reactance Values	300	310	310	290	344	370	375	390

60 Hz

Class - Temp Rise	Standby - 163/27 °C				Standby - 150/40 °C				Cont. H - 125/40 °C				Cont. F - 105/40 °C			
Series Star (V)	416	440	460	480	416	440	460	480	416	440	460	480	416	440	460	480
kVA	375	410	415	430	365	400	400	415	344	370	375	390	315	340	345	355
kW	300	328	332	344	292	320	320	332	275	296	300	312	252	272	276	284
Efficiency (%)	92.4	92.2	92.5	92.6	92.5	92.4	92.7	92.8	92.8	92.9	93.1	93.1	98.2	93.2	93.4	93.5
kW Input	325	356	359	372	316	346	345	358	296	319	322	335	270	292	295	304

EXCITATION AND VOLTAGE REGULATORS

AVR Type	as440	mx341	mx321	
Voltage Regulation	±1%	±1%	±0.5%	with 4% Engine Governing
Excitation Type	Self-Excited	PMG	PMG	

No Load Excitation Voltage (V)	12 - 9
No Load Excitation Current (A)	0.7 - 0.5
Full Load Excitation Voltage (V)	41 - 39
Full Load Excitation Current (A)	2.3 - 2.2
Exciter Time Constant (seconds)	0.105

STAMFORD

S4L1D-D41 Wdg.311

Optional voltages and frequencies available.

DRC250

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.*

DRC250

GENERAL ENGINE DATA	STD	METRIC	1500		1800	
Type	N/A	N/A	V-type 4 cycle			
Number of cylinders	N/A	N/A	8			
Aspiration	N/A	N/A	Turbo Charged Air Cooled			
Bore	in	mm	5.04	128	5.04	128
Stroke	in	mm	5.59	142	5.59	142
Displacement	in^3	L	892	14.6	892	14.6
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		1-5-7-2-6-3-4-8-1			
Dry Weight						
Fan to Flywheel	lb	kg	3150	1429	3150	1429
Rad to Flywheel	lb	kg	4450	2018	4450	2018
Wet Weight						
Fan to Flywheel	lb	kg	3291	1475	3291	1475
Rad to Flywheel	lb	kg	4757	2155	4757	2155

EXHAUST SYSTEM						
Type			Watered Cooled Manifold			
Maximum allowable back pressure	in HG	kPa	3	10.2	3	10.2
Standard catalyst back pressure	in HG	kPa	1.5	5.1	1.5	5.1
Exhaust outlet pipe size						
Maximum turbine inlet temperature	F	C	1382	750	1382	750
Exhaust flow at rated power	lb/hr	kg/hr	2302	1044	2782	1301
Exhaust flow at rated power @ 1350F	cfm	m^3/min	1727.3	48.9	1895	53.6

AIR INDUCTION SYSTEM						
Maximum allowable intake air restrictions with air cleaner						
Clean	in H20	kPa	5	1.24	5	1.24
Dirty	in H20	kPa	15	3.74	15	3.74
Combustion air required (entire engine)	lb/hr	kg/hr	2172	985	2625	1227
Combustion air required (entire engine)	cfm	m^3/min	490	14	687	19

ELECTRICAL SYSTEM						
Cold cranking current						
Engine only	CCA		1000			
Engine with drive train	CCA		1000			
Maximum allowable resistance of starting circuit	Ohms		0.002			
Starting motor power	HP	kW	9.4	7.0	9.4	7.0
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						
Cooling capacity						
Engine only	gal	L	9.5	43.2	9.5	43.2
Engine with radiator	gal	L	28	127	28	127
Engine coolant flow	gal/min	L/min	151	570	180	680
Heat rejected to cooling water at rated load	btu/min	kcal/sec	14233	59.8	16189	68
Maximum intake air temperature (IAT)	F	C	140	60	140	60
Heat rejection per CAC	btu/min	kW	TBD		2669	46.9