

# STADCO "CD" MOBILE GENERATOR SYSTEM



## SALES SPECIFICATIONS-1800 RPM DIESEL GENSETS

Applications: Prime Power, Industrial, Mobile Equipment, Motor Vehicles, Critical APU's.

GENSET RATINGS - 60HZ (3)			CD10	CD15	CD20	CD30	CD40T4	CD65
Spec. No.			CD1013	CD1513	CD2011	CD3011	CD40T412	CD6515
Sales Drawing No.			13029	13035	12916	12917	13012	13052
3 P H A S E	12-Leads, 3-Phase, 0.8 PF <b>240/480V Unit Output Rating</b>	Intermittent	10.0 KW	15.0 KW	20.0 KW	30.0 KW	38.0 KW	65.0 KW
		Continuous	9.0 KW	13.0 KW	17.0 KW	27.0 KW	35.0 KW	60.0 KW
	Std. Unit Max. Rated Current: (1) Amps @ 240VAC, 3-ph, 0.8 PF.		30.1	45.1	60.1	90.2	119.2	195.4
	<b>A.C. Alternator Max. Capacity (2)</b> 240V., 3-ph., 0.8PF WYE Connection	Amps @ 240V	30.1	45.1	75.1	105.2	132.3	225.5
		KW/KVA @ 125°C Rise	10.0	15.0	25.0	35.0	44.0	75.0
		% Efficiency	81.1	82.4	85.4	87.7	88.0	91.2
	12-Leads, 3-Ph, 0.8PF <b>208V Unit Output Rating</b>	Intermittent	10.0 KW	15.0 KW	20.0 KW	29.0 KW	38.0 KW	65.0 KW
		Continuous	9.0 KW	13.0 KW	17.0 KW	25.0 KW	35.0 KW	60.0 KW
1 P H A S E	4-Leads, 1-Phase, 1.0 PF <b>240V Unit Output Rating</b>	Intermittent	10.0 KW	14.5 KW	20.0 KW	29.0 KW	38.0 KW	-
		Continuous	9.0 KW	13.0 KW	17.0 KW	25.0 KW	35.0 KW	-
	Std. Unit Max. Rated Current: (1) Amps @ 240VAC, 1.0 PF.		41.6	60.4	83.3	120.8	158.3	-
	<b>A.C. Alternator Max. Capacity (2)</b> 240V., 1-ph., 1.0PF Series/Parallel Connection	Amps @ 240V	41.6	62.5	104.1	145.8	175	-
		KW/KVA @ 125°C Rise	10.0	15.0	25.0	35.0	42.0	-
		% Efficiency	74.0	80.0	83.5	85.8	86.9	-

- (1) - **Unit Output Rating** refers to the rating of the engine/generator combination.
- (2) - **A.C. Alternator Max Capacity** refers to the manufacturers rating of the alternator.
- (3) - Derate factor may be required to meet NFPA 1917.

### Available Connections - 60Hz.

#### 1-Phase

-SD240 = 240/120VAC

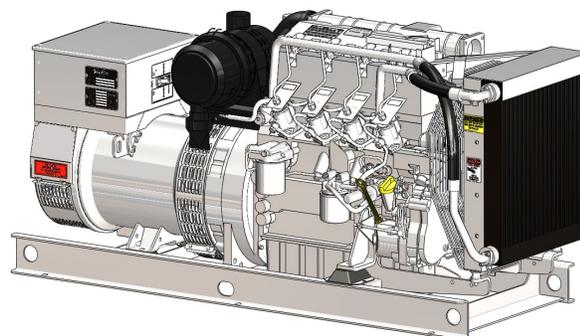
#### 3-Phase

-T240 = 240VAC

-T480 = 480VAC

-T208 = 208VAC

For compartment applications with space limitations, inquire about our Stadco Cellpac™ super-compact compartment generator systems.



***Packaged  
AC Power  
Systems  
1800 RPM***

**10-65KW**

***Made in the USA***

<b>GENSET DATA</b>		<b>CD10</b>	<b>CD15</b>	<b>CD20</b>	<b>CD30</b>	<b>CD40T4</b>	<b>CD65</b>
<b>Engine Specifications</b>							
Diesel Engine with basic components.	Make	Mitsubishi	Mitsubishi	Deutz	Deutz	Deutz	Deutz
	Cylinders	3	4	3	4	4-turbo	4-turbo
	Liters / CID	1.32 / 81	1.75 / 107	2.33 / 142	3.11 / 190	3.62 / 221	4.04 / 246.5
	HP @ 1800 RPM SAE J1349	18.9	24.7	32.0	47.2	63.4	73.0
Battery Charging Alternator	Volts DC / Amps	12V / 50A	12V / 50A	14V / 55A	14V / 55A	14V / 55A	14V / 95A
Fuel Consumption	100% Cont. Load GPH	1.0	1.5	1.5	2.2	3.3	4.6
	50% Load GPH	0.5	0.8	0.8	1.1	1.7	2.3
Recommended Diesel Fuel ASTM D975-96		2D Red					
		2D Clear					
Lube oil change Interval (Typical)		250 hrs.	250 hrs.	500 hrs.	500 hrs.	500 hrs.	500 hrs.
Typical Cold Starting Capability w/ 15W-40 Lube Oil	12V Starting aid & uprated Battery. (Optional)	-15°C (5°F)	-15°C (5°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-19°C (-2°F)
EPA Emissions Certification		Tier 4i	Tier 3				
Speed Droop (typical)		3-5%	3-5%	5-7%	5-7%	5-7%	5-7%
<b>Unit Specifications</b>							
Recommended Battery Size 12V. (CCA)	Normal	550	550	600	600	600	800
	Uprated	700	700	750	750	750	1200
Recommended 12V Battery type; BCI#		24F	24F	24F	24F	24F	31
Average Sound Level (4)	dB(A) @ 1 Meters	80	82	88.5	88.5	91.5	86.3
	dB(A) @ 7 Meters	65	67	74.5	74.5	77.5	72.3
Unit Size Refer to Stadco Sales Drawings for more details	Length	40.3"	45.2"	51.8"	59.4"	62.2"	74.5"
	Width	18.7"	18.7"	23.5"	23.5"	23.8"	28.5"
	Height	26.9"	26.9"	28.0"	28.2"	28.8"	40.2"
Approx. Unit Dry Weight (Lbs)		605	690	950	1120	1165	1928

4) Sound level is based on engine manufacturer's specs without exhaust noise.

<b>STANDARD EQUIPMENT</b>		<b>CD10</b>	<b>CD15</b>	<b>CD20</b>	<b>CD30</b>	<b>CD40T4</b>	<b>CD65</b>
<b>Engine - Diesel</b>							
Cooling System	Aluminum Heat Exchanger	•	•	•	•	•	•
	Pusher Fan	•	•	•	•	•	•
Coolant Reservoir		•	•	dipstick	dipstick	dipstick	•
Air Cleaner, Dry Type, Medium duty		•	•	•	•	•	•
Oil Filler, Oil & Fuel Filters - Service side accessible		•	•	•	•	•	•
Cold Start Preheat System 12V. DC		•	•	Optional	Optional	•	•
Fuel Transfer Pump	Mechanical			•	•	•	•
	Electric	•	•				
Guards: Fan & V-belt		•	•	•	•	•	•
Exhaust Muffler - Mounted				•	•		
Exhaust Muffler kit w/ 8ft. SS Flex tubing - Loose		•	•	Optional	Optional	•	•
Side Oil filler & Oil Drain Hose Kit		•	•	•	•	•	•
12V. Run/Stop Solenoid		•	•	•	•	•	•
Governor - Mechanical for Gen-Duty 5%		•	•	•	•		
Governor - Electronic for Gen-Duty 5%						•	•
12V Starting System w/ Battery Charging Alt.		50A	50A	55A	55A	55A	95A

<b>STANDARD EQUIPMENT (cont'd)</b>		<b>CD10</b>	<b>CD15</b>	<b>CD20</b>	<b>CD30</b>	<b>CD40T4</b>	<b>CD65</b>
<b>AC Alternator. 4-Pole 1800 RPM</b>							
Brushless Alternator, Direct Coupled, 1-Bearing		•	•	•	•	•	•
Winding Insulation 40°C Ambient	Class H	•	•	•	•	•	•
Voltage Regulation - Electronic +/- 1% w/ UFRO		•	•	•	•	•	•
High Motor Starting Capacity		•	•	•	•	•	•
<b>12VDC All-Digital Control System #1790</b>							
Push button Start & Stop		•	•	•	•	•	•
Display Protection for: Oil press, Engine Temp, Overspeed, Overcrank, Starter Lockout, Battery Volts, AC Volts & Freq., Hour Meter and Fault Messaging.		•	•	•	•	•	•
Digital Engine Controller & 10ft. Cord		•	•	•	•	•	•
Remote Control Capable		•	•	•	•	•	•
<b>AC Control System</b>							
Main Load Circuit Breaker w/ load terminals		•	•	•	•	•	•
<b>Miscellaneous</b>							
Skid Base w/ vibration Isolators		•	•	•	•	•	•
Routine Service points on service side		•	•	•	•	•	•
Placards & Nameplates		•	•	•	•	•	•
Operators/Parts/Installation Manuals		•	•	•	•	•	•
Finish: Signal Gray exterior enamel		•	•	•	•	•	•
Factory Load tested & QA inspection.		•	•	•	•	•	•
EPA Emissions Compliance (See Specifications)		•	•	•	•	•	•

### **STANDARD EQUIPMENT - DESCRIPTIONS**

#### **#1790, Digital Control/Protection system, wall enclosure for remote mounting.**

Provides engine & generator protection with warning & shutdown via LCD Screen messaging for: Low oil pressure, High engine temperature, Over-crank, Over-speed, High/Low battery voltage, AC Volts & Frequency. System features an engine controller w/ auto-crank that automatically preheats and cranks engine for a preset period of time. In Auto mode the control system allows for multiple remote stations for convenient in-cab or pump panel starting when generator is inaccessible. The system will also shutdown or prevent genset startup when shore power is detected (control signal must be supplied by installer).

Control system includes: Hourmeter, toggle power switch, 12VDC circuit breaker, 12VDC alternator light & 10 ft. control cord with weather-tight connectors. Factory wired & tested. 8X8X4 NEMA12 Enclosure w/ hinged cover. Fully wired shipped loose. (See Control System Flier S160)

Also available with flat panel, open back; See Flier #S160

**MOUNTING BASE:** Formed channel rail skid bases provide rigid trussing to accommodate varied mounting configurations. Equipped with captive type "floating" rubber vibration isolation mounts.

**DEUTZ ENGINES:** All Deutz engines offered are 2011 Series engines, (except CD65). These engines are liquid cooled using lube oil as the cooling medium. Hot oil is circulated through a heat exchanger that is cooled with air flow provided by the belt driven cooling fan. Anti freeze is eliminated. This design is extremely successful in industrial and construction markets and is a very high volume seller in the USA. Reliability, easy starting in all kinds of weather and fuel economy are its most appreciated characteristics. CD65 Model features Deutz 2012 Liquid Cooled Diesel Engines.

**MITSUBISHI ENGINES:** All Mitsubishi diesel engines offered are liquid cooled multi-cylinder engines and are the smoothest and quietest diesel engines available. They are among the world's best mini-diesels. Mitsubishi diesels are well known for their reliability and fault free operation.

**AC GENERATOR:** Industrial quality 4-Pole brushless alternator provides important benefits: **A.)** Brushless - Eliminates brush wear and maintenance. **B.)** Low Radio Interference (RFI) factors. **C.)** 4-Pole design provides twice the amount of copper winding. Provides almost double the motor starting power when compared with 2-Pole alternators.

The standard electronic automatic voltage regulator provides close voltage regulation at all engine speeds and loads,

## STANDARD EQUIPMENT

**AC/DC ELECTRICAL & COMPONENTS:** All AC/DC components, including the standard main load circuit breaker are mounted into metal generator enclosure cabinet. AC load cables connect to load terminals of the circuit breaker.

**EXHAUST SYSTEM:** Exhaust manifold/muffler is insulated with heat insulation wrap. Exhaust kit with muffler is supplied loose for engines without manifold muffler.

**AIR CLEANER:** Canister type air cleaner provides a high degree of engine intake noise silencing.

**TESTING & QUALITY ASSURANCE:** Each genset is individually factory load tested to confirm function and performance. Vital functions and results are documented. All engine adjustments are checked after test run.

**SERVICE STATEMENT:** Stadco stocks a comprehensive amount of routine maintenance and repair parts at our own facility. Typically we provide same day shipment to anywhere in the USA when requested.

## GENERAL:

**OPTIONAL EQUIPMENT:** Choose accessories from Optional Accessories List on price sheet.

### **PERFORMANCE RATING:**

- a. All Stadco generator sets are individually load tested and certified by Stadco to deliver advertised performance under climatic operating conditions specified by SAEJ1349 standards.
- b. **POWER RATING:** Conforms to SAEJ1349 climatic conditions of 80°F(27°C) ambient temp, 500ft. altitude, 50% relative humidity. Operation at higher temp and/or higher altitude may require de-rating of unit output. Refer to Stadco chart #S67.
- c. **NOTE: When sizing a generator for job application, all resistance loads such as lights and heaters are considered Continuous loads.**

**COOLING AIR SUPPLY:** Observe air flow directions and clearances as shown on Stadco sales drawings.

**WARRANTY STATEMENT:** Stadco Generator Systems are covered by a limited warranty policy for a term of (24) consecutive months or (2000) hours of service, whichever occurs first. See Warranty Statement D25 for full details.

**INTENDED APPLICATIONS:** Robust generators suitable for compartment or free standing applications. Prime power, Industrial Power, Mobile equipment, Motor vehicles and Critical duty APU's. Please observe installation instructions from Stadco Operators manual, otherwise all Stadco warranty provisions are null and void. Weather protection is highly recommended for units that will be used or stored outdoors.

**STANDARDS:** Gensets quoted herein meet the following standards:

- Electrical Instrumentation: UL listed. Wiring & electrical systems: NEMA Code
- NFPA 1901 (may require panel #1222 or #1223)
- NFPA 1917 (See power derate)
- A.C. Alternator: NEMA MGI-22 and ISO 9001
- Engine: EPA certification for applicable exhaust emissions and ISO 9001.

**SAFETY NOTICES:** To prevent possible accidents, which may result from the use of any generator set or system, it is important that correct procedures are followed. Installation, maintenance and operation procedures specified by STADCO and the engine manufacturer must be followed in conjunction with engineering and safety information specified. Grounding equipment, guards and other suitable safety equipment or procedures that may either be desirable or specified in safety codes should be provided to assure safe operation in the prevailing conditions.

**THESE DEVICES MAY NOT BE INCLUDED WITH THE PRODUCT, AND ARE NOT THE RESPONSIBILITY OF STADCO. INSTALLER IS RESPONSIBLE FOR PROVIDING SAFETY ITEMS TO SATISFY PREVAILING SAFETY CODES.**

**DO NOT** install STADCO generator units into installations where personnel will be confined with the operating unit; unless a separate compartment is provided for the unit.

**PRODUCT SUPPORT:** Single source responsibility: Stauffer Diesel Inc / Stadco is the single source, full-service supplier for Stadco generator systems. **We design it - We build it - We support it.** Purpose built with diesel engines for which we can supply complete product support.

Stadco reserves the right to change product specifications at any time without incurring obligation. These specifications supersede all previous publications.