CLARKE®

C13R MODELS

UFAD19 UFAD57
UFAD27 UFAD69
UFAD49 UFAD77

UL/FM - cUL APPROVED RATINGS **BHP**/*kW*

C13R0 MODEL ♦	RATED SPEED 1760		1900		2100	
UFAD19			**318**	*237*	**318**	*237*
UFAD27	**315**	*235*				
UFAD49			**379**	*283*	**379**	*283*
UFAD57	**370**	*276*				
UFAD69			**435**	*324*	**419**	*312*
UFAD77	**434**	*324*				

♦ All Models are available for export

*All Model are EPA Tier 3 Certified

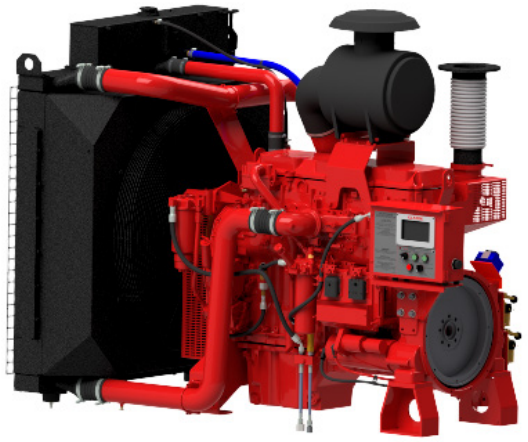

Image shown represents a C13R engine model

ENGINE SPECIFICATIONS	
Number of Cylinders	6
Aspiration	T
Rotation*	CW
Overall Dimensions - in. (mm)	69 (1753) H X 91.8 (2332) L X 56.8 (1443) W
Crankshaft Centerline Height - in. (mm)	17.0 (432)
Weight - lb (kg)	4110 (1864)
Compression Ratio	17.3:1
Displacement - cu. in. (l)	763 (12.5)
Engine Type	4 Stroke Cycle - Inline Construction
Bore & Stroke - in. (mm)	5.1x6.2 (130x157)

Abbreviations: CW – Clockwise T – Turbocharged L – Length W – Width H - Height *Rotation viewed from Radiator / Front of engine

CERTIFIED POWER RATING

- Each engine is factory tested to verify power and performance
- FM-UL power ratings are shown at specific speeds. Clarke engines can be applied at a single rated RPM setting +/- 50 RPM.

ENGINE RATINGS BASELINES

- Engines are to be used for stationary emergency standby fire pump service only. Engines are to be tested in accordance with NFPA 25.
- Engines are rated at standard SAE conditions of 29.61 in. (752.1 mm) 77°F (25°C) inlet air temperature [approximates 300 ft. (91.4 m) above sea level] by the testing laboratory (see SAE Standard J 1349).
- A deduction of 3 percent from engine horsepower rating at standard SAE conditions shall be made for diesel engines for each 1000 ft. (305 m) altitude above 300 ft. (91.4 m)
- A deduction of 1 percent from engine horsepower rating as corrected to standard SAE conditions shall be made for diesel engines for every 10°F (5.6°C) above 77°F (25°C) ambient temperature.

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ENGINE EQUIPMENT

EQUIPMENT	STANDARD	OPTIONAL
Air Cleaner	Disposable, Drip Proof Indoor Service Outdoor Type, Single Stage	Disposable, Drip Proof Indoor Service Outdoor Type, Two Stage
Alarm	Overspeed Alarm & Shutdown, Low Oil Pressure, Low & High Coolant Temperature, Low Raw Water Flow, High Raw Water Temperature, Alternate ECM Warning, Fuel Injection Malfunction, ECM Warning and Failure with Automatic Switching	Alarm Gauge Package: Low Coolant Level, Low Oil Level, Oil Filter Differential Pressure, Fuel Filter Differential Pressure, Air Filter Restriction
Alternator	12V-DC 55 Amps, with V-Belt and Guard	24V-DC 55 Amps, with V-Belt
Coupling	Bare Flywheel	Driveshaft and Guard
Engine Heater	230V-AC, 2500 Watt	
Exhaust Flex Connection	SS Flex. 150# ANSI Flanged Connection. 6 or 8”	SS Flex. 150# ANSI Flanged Connection. 8”
Exhaust Protection	Metal guard on Manifold and Turbocharger	
Flywheel Housing	SAE #1	
Flywheel Power Take Off	14” SAE Industrial Flywheel Connection	
Fuel Connections	Fire Resistent Supply and Return Lines	SS, Braided, cUL Listed, Supply and Return Lines
Fuel Filter	Primary Filter / Water Separator, Secondary Filter with Priming Pump	Duplex Secondary Filter
Fuel Injection System	Unit Injector	
Governor, Speed	Electronic, Dual Electronic Engine Control Modules	
Instrument Panel	NEMA Type 4, Powder Coated Steel Construction Touch Screen Panel with Multimeter to Display and Metric, Tachometer, Hour meter, Water Temperature, Oil Pressure, and Dual Voltmeters, Front Opening, Soft Start for Commissioning	Stainless Steel NEMA Type 4X (IP66) Touch Screen Panel with Digital Tachometer, Hour Meter, Water Temperature, Oil Pressure and Voltmeter Gauges. Front Opening, Soft Start for Commissioning
Junction Box	Integral with Instrument Panel; For DC Wiring Interconnection to Engine Controller	
Lube Oil Cooler	Jacket Water Cooled, Shell and Tube Type	
Lube Oil Filter	Single, Full Flow	Duplex Filter
Lube Oil Pump	Gear Driven, Gear Type	
Manual Start Control	Quad Manual Start Contactors & On Instrument Panel with Control Position Warning Light	
Overspeed Control	Electronic, Factory Set	
Radiator/Fan	Aluminum Bar & Plate, Engine Mounted Blower Fan	
Run - Stop Control	On Instrument Panel with Control Position Warning Light	
Starters	One (1) 12V-DC	One (1) 24V-DC
Throttle Control	Adjustable Speed Control by Increase/Decrease Button, Tamper Proof	
Water Pump	Centrifugal Type, Gear Driven	

Abbreviations: DC – Direct Current, AC – Alternating Current, SAE – Society of Automotive Engineers, NPT(F) – National Pipe Tapered Thread (Female), SS – Stainless Steel

MODEL NOMENCLATURE (11 Digit Models)

C13R0-UFAD77

- C13R – Base Engine
- 0 – 12.5 Liter
- U – Radiator Cooled
- F – Non-Hazardous Environment
- A – UL Listed and FM Approved
- D – Built in USA
- 77 – Rating Code
  - EPA Tier 3 Certified (“C” = EPA Tier 2 Certified, “A” = Non-Emissionized)

Specifications and information contained in this brochure is subject to change without notice.

CLARKE®
100 Progress Place, Cincinnati, OH 45246
United States of America
Tel +1-513-475-3473 Fax +1-513-771-8930

Grange Works, Lomand Rd, Coatbridge, ML5-2NN
United Kingdom
Tel +44-1236-429946 Fax +44-1236-427274

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