# CLARKE

C18HO MODELSUFAD12UFAD42UFA78UFAD18UFAD30UFAD78UFAD22UFAD48UFAD70UFAD10UFAD40UFAC18UFAD32UFAD58UFAC10UFAD58UFAD50UFAC28UFAD68UFAC80UFAC80

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

C18H0	C18H0 RATED SPEED								
MODEL	1470		1760		1900		2100		EMISSIONS
<b>◆</b>									
UFAD12*	450	335							EPA Tier 3 Certified
UFAD18			460	343					EPA Tier 3 Certified
UFAD22*	475	354							EPA Tier 3 Certified
UFAD10					488	364	488	364	EPA Tier 3 Certified
UFAD32*	491	366							EPA Tier 3 Certified
UFAD28			510	380					EPA Tier 3 Certified
UFAD20					525	392	525	392	EPA Tier 3 Certified
UFAD38			542	404					EPA Tier 3 Certified
UFAD42	570	425							EPA Tier 3 Certified
UFAD30					575	429	575	429	EPA Tier 3 Certified
UFAD48			600	447					EPA Tier 3 Certified
UFAD40					600	447	600	447	EPA Tier 3 Certified
UFAD58			650	485					EPA Tier 3 Certified
UFAD50					650	485	650	485	EPA Tier 3 Certified
UFAD68			687	512					EPA Tier 3 Certified
UFAA78	700	522							Non-Emissionized
UFAD78			700	522					EPA Tier 3 Certified
UFAD70					700	522	700	522	EPA Tier 3 Certified
UFAC18			755	563					EPA Tier 2 Certified
UFAC10					755	563	755	563	EPA Tier 2 Certified
UFAC28			800	596.5					EPA Tier 2 Certified
UFAC20					800	596.5	800	596.5	EPA Tier 2 Certified



All Models are available for export

\*Utilizes a single turbo base engine.

ENGINE SPECIFICATIONS					
Number of Cylinders	6				
Aspiration	TRWA				
Rotation*	CW				
Overall Dimensions - in. (mm)	66.1(1678) H X 79.6(2022) L X 45.2(1147) W				
Crankshaft Centerline Height - in. (mm)	17.0 (432)				
Weight - Ib (kg)	4100 (1860)				
Compression Ratio	16.3:1				
Displacement - cu. in. (I)	1104 (18.1)				
Engine Type	4 Stroke Cycle - Inline Construction				

Abbreviations: TRWA - Turbocharged and Raw Water Aftercooled CW - Clockwise \*Rotation viewed from Heat Exchanger / Front of engine

#### **CERTIFIED POWER RATING**

• Each engine is factory tested to verify power and performance



#### **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.

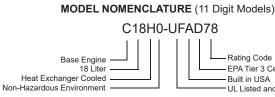
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C18HO MODELS UFAD12 UFAD42 UFAA78 UFAD18 UFAD30 UFAD78 UFAD22 UFAD48 UFAD70 UFAD10 UFAD40 UFAC18 UFAD32 UFAD58 UFAC10 UFAD58 UFAC20

### ENGINE EQUIPMENT

EQUIPMENT	STANDARD	OPTIONAL
Air Cleaner with Air Differential Gauge	Direct Mounted, Washable, Indoor Service with Drip Shield	Disposable, Drip Proof, Indoor Service Outdoor Type, Single or 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	Low Coolant Level, Low Oil Level, Oil Filter Differenetial Pressure, Fuel Filter Differential Pressure, Air Filter Restriction
Alternator	24V-DC, 50 Amps with V-Belt and Guard	
Coupling	Bare Flywheel	Driveshaft and Guard
Crankcase Ventilation		Crankcase Breather
Engine Heater	230V-AC, 3500 Watt	
Exhaust Flex Connection	SS Flex. 150# ANSI Flanged Connection. 8"	SS Flex. 150# ANSI Flanged Connection. 10"
Exhaust Protection	Metal Guard on Manifold and Turbocharges	
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 with Priming Pump, Secondary Filter	
Fuel Injection System	Unit Injector	
Governor, Speed	Electronic, Dual Electronic Engine Control Modules	
Heat Exchanger	Shell and Tube Type, 60 PSI (4 Bar), NPT (F) Connections - Sea Water Compatible	
Instrument Panel	NEMA Type 2, Powder Coated Steel Construction, Multimeter to Display English and Metric, Tachometer, Hour meter, Water Temperature, Oil Pressure, and Dual Voltmeters, Front Opening, Soft Start for Commissioning	316 Stainless Steel NEMA 4X/IP66
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	Full Flow, Dual Element	
Lube Oil Pump	Gear Driven, Gear Type	
Manual Start Control	Dual Manual Start Contactors & On Instrument Panel with Control Position Warning Light	
Overspeed Control	Electronic, Factory Set	
Raw Water Cooling Loop w/ Alarms	Galvanized	Seawater, All 316 SS, High Pressure
Raw Water Solenoid Operation	Automatic from Fire Pump Controller and from Engine Instrument Panel (for Horizontal Fire Pump Applications)	
Run - Stop Control	On Instrument Panel with Control Position Warning Light	
Starters	One (1) 24V-DC	
Throttle Control	Adjustable Speed Control by Increase/Decrease Button, Tamper Proof Adjustable Speed Control	
Water Pump	Centrifugal Type, Gear Driven	

Abbreviations: DC - Direct Current, AC - Alternating Current, SAE - Society of Automotive Engineers, BSP(F) - British Standard Pipe Thread (Female), SS - Stainless Steel



-Rating Code EPA Tier 3 Certified ("C" = EPA Tier 2 Certified, "A" = Non-Emissionized) -Built in USA -UL Listed and FM Approved

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



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

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