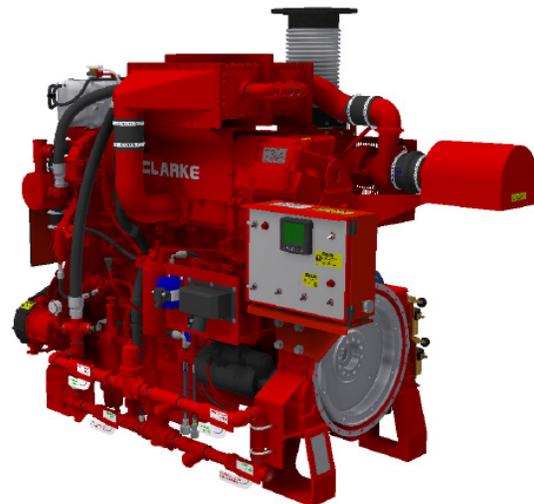




UL/FM - cUL APPROVED RATINGS BHP/kW

C18H0 MODEL	RATED SPEED								EMISSIONS
	1470		1760		1900		2100		
UFAD12-D	450	335	460	343	488	364	488	364	EPA Tier 3 Certified
FMAD12-S*	450	335	460	343	488	364	488	364	EPA Tier 3 Certified
FMAD12-DS*	450	335	460	343	488	364	488	364	EPA Tier 3 Certified
UFAD22-D	475	354	510	380	525	392	525	392	EPA Tier 3 Certified
FMAD22-S*	475	354	510	380	525	392	525	392	EPA Tier 3 Certified
FMAD22-DS*	475	354	510	380	525	392	525	392	EPA Tier 3 Certified
UFAD32-D	491	366	542	404	556	414	556	414	EPA Tier 3 Certified
FMAD32-S*	491	366	542	404	556	414	556	414	EPA Tier 3 Certified
FMAD32-DS*	491	366	542	404	556	414	556	414	EPA Tier 3 Certified
UFAD42-D	570	425	614	458	618	460	618	460	EPA Tier 3 Certified
FMAD42-S*	570	425	614	458	618	460	618	460	EPA Tier 3 Certified
FMAD42-DS*	570	425	614	458	618	460	618	460	EPA Tier 3 Certified



◆ All Models are available for export and suitable for installations in the US and US territories.

* -S Suction and -DS Discharge & Suction PLD Engine Models are Factory Mutual (FM) Only

Note 1: PLD-D Use the Clarke PLD-D Calculator on www.clarkefire.com to verify if the Clarke PLD-D will work in your specific application. To order a PLD-D engine, you must submit the PLD-D discharge pressure set point and a copy of the PLD-D calculator results. Discharge (-D) set point pressure can be factory set between 100-350 psi.

Note 2: PLD-S Use the Clarke PLD-D Calculator on www.clarkefire.com to verify the flow requirements for the PLD-S to reach the pressure suction set point, enabling the PLD-S engine to adjust speed and maintain suction pressure. To order a PLD-S engine, you must submit a copy of the PLD-S calculator results. Suction (-S) set point pressure can be factory set between 8-30 psi.

Note 3: PLD-DS Engine orders with both Discharge (-D) and Suction (-S) control must include a copy of both the PLD-D and PLD-S calculator results.

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 - lb (kg)	4100 (1860)
Compression Ratio	16.3:1
Displacement - cu. in. (l)	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.

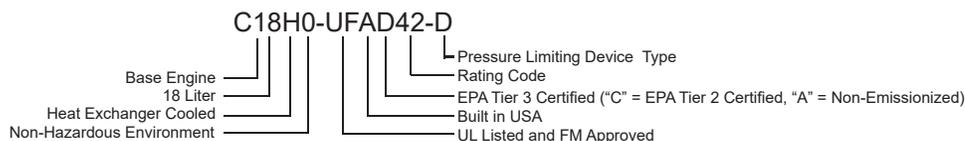


ENGINE EQUIPMENT

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 Differential 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 Resistant 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

MODEL NOMENCLATURE (11 Digit Models)



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



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