

OLYMPIC REGION CLEAN AIR AGENCY


2940 Limited Lane NW - Olympia, Washington 98502 - 360-539-7610 – Fax 360-491-6308

FORM 1- NOTICE OF CONSTRUCTION

TO CONSTRUCT - INSTALL - ESTABLISH OR MODIFY AN AIR CONTAMINANT SOURCE

Form 1 Instructions:

1. Please complete all the fields below. **This NOC application is considered incomplete until signed.**
2. If the application contains any confidential business information, please complete a Request of Confidentiality of Records (www.orcaa.org/forms).
3. Duty to Correction Application: An applicant has the duty to supplement or correct an application. Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application must, upon becoming aware of such failure or incorrect submittal, promptly submit supplementary factors or corrected information.

Business Name: Taylor Shellfish Company		For ORCAA use only	
Mailing Address: 130 SE Lynch Rd, Shelton, WA 98584		File No: 298	County No: 31
Physical Address of Project or New Source: 701 Broadspit Rd, Quilcene, WA 98376		Source No: 2368	Application No: 23NOC1591
Billing Address: 130 SE Lynch Rd, Shelton, WA 98584		Date Received: Received MAR 20 2023 ORCAA	
Project or Equipment to be installed/established: Kohler emergency generator powered by a Detroit Diesel engine rated at 685bhp			
Anticipated startup date: <u>6</u> / <u>1</u> / <u>23</u> Is facility currently registered with ORCAA? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			
This project must meet the requirements of the State Environmental Policy Act (SEPA) before ORCAA can issue final approval. Indicate the SEPA compliance option: <input type="checkbox"/> SEPA was satisfied by _____ (government agency) on ____/____/____ (date) - Include a copy of the SEPA determination <input type="checkbox"/> SEPA threshold determination by _____ (government agency) is pending - Include a copy of the environmental checklist <input checked="" type="checkbox"/> ORCAA is the only government agency requiring a permit - Include ORCAA Environmental Checklist <input type="checkbox"/> This project is exempt from SEPA per _____ (WAC citation).			
Name of Owner of Business: Bill Taylor		Agency Use Only	
Title: Principle			
Email: BillT@TaylorShellfish.com	Phone: 360-426-6178		
Authorized Representative for Application (if different than owner): Erin Ewald			
Title: Dir. of Regulatory Affairs			
Email: ErinE@TaylorShellfish.com	Phone: 360-432-3348		
I hereby certify that the information contained in this application is, to the best of my knowledge, complete and correct.			
Signature of Owner or Authorized Representative: (sign in Blue Ink)			
		Date: 3/15/2023	
IMPORTANT: Do not send via email or other electronic means. ORCAA must receive Original, hardcopy, signed application and payment prior to processing application.			

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FORM 1D- Contact Information

Business Name Taylor Shellfish	FOR ORCAA USE
Physical Site Address (Street address, city, state, zip) 701 Broadspit Rd, Quilcene, WA 98376	FILE # 298
	CTY # 31
	SRC # 2368
Previous Business Name (if applicable)	Date Received Received MAR 20 2023 ORCAA

Contact Information

Inspection Contact	
Name David Pederson	Title Hatchery Manager
Phone 360-765-3566	Email DavidP@TaylorShellfish.com
Billing Contact	
Name Hillary White	Title Accounts Payable
Phone 360-432-5962	Email HillaryW@TaylorShellfish.com
Emission Inventory Contact	
Name David Pederson	Title Hatchery Manager
Phone 360-765-3566	Email DavidP@TaylorShellfish.com
Complaint Contact	
Name Erin Ewald	Title Dir. of Regulatory Affairs
Phone 360-432-3348	Email ErinE@TaylorShellfish.com
Permit Contact	
Name Erin Ewald	Title Dir. of Regulatory Affairs
Phone 360-432-3348	Email ErinE@TaylorShellfish.com

The **inspection contact** is the on-site person responsible for the everyday operation of the site and is available for inspections.

The **billing contact** is the person invoices are sent.

The **emission inventory contact** is the person requests for emissions information and material use information are sent.

The **complaint contact** is the person who receives and responds to complaints received on-site and who is contacted regarding complaints ORCAA receives.

The **permit contact** is the person responsible for filling out permit applications and receiving approval from ORCAA.



For information purposes only



Quilcene Hatchery
701 Broadspit Rd, Quilcene
Jefferson County Parcel 701201004



**OLYMPIC REGION CLEAN AIR AGENCY (ORCAA)**

2940 Limited Lane NW, Olympia, WA 98502

Engineering Division (360) 539-7610

Website: orcaa.org fax (360) 491-6308

Form 18

Internal Combustion Engines

NOC # <u>1591</u>	Date <u>3-20-2023</u>	File # <u>298</u>
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Form 18 is to be completed for all internal combustion engines except turbines. (For turbines, submit Form 17). Submit one form for each engine. If this is a new engine or a modification to an existing engine, your application must also include Form 5 and an analysis of toxic air pollutant emissions in accordance with Chapter 173-460 of the Washington Administrative Code. Completion of Form 5 requires determining daily and annual toxic air pollutant emissions based on the maximum potential to emit of the engine. Additional forms and all ORCAA regulations and rules are available on the Agency's web site. Contact ORCAA's Engineering Division at the above telephone number if you need assistance completing this form. Please include the engine manufacturer's equipment specification sheet or brochure if one is available.

1. SUMMARY ☒ New Engine ☐ Engine Modification ☐ New/Additional Fuel ☐ Other:Company Name Taylor United, Inc County No.* _____

Source Description _____ Source No.* _____

Initial Date of Operation Installed, but not yet connected - est. 6/2023 (Not required for modification of an existing permitted source) *(If unknown leave blank)Operating Schedule Typical hrs/day _____ Days/week _____ Weeks/yr 2-3 wk/yr Maximum hrs/day 1-10 hr/day**2. ENGINE INFORMATION** ☐ Check here if applying for approval of portable equipment.
(See ORCAA Regulation 6.1.1 for portable equipment requirements)Engine Type: (Check one) ☒ 4 Stroke ☐ 2 Stroke Compression Ignition (Diesel) or ☐ 4 Stroke ☐ 2 Stroke Spark IgnitionEngine Manufacturer Kohler/Detroit Diesel Model 400REOZDD Model Year 2010EPA/CARB Engine Family Name ADDXL14.0VLD Engine Serial No. 2282808 / 06R1036599Engine Displacement 855 (cu in) Maximum rated output (bhp) 685 Typical load as % of bhp rating _____Is this an emergency/standby engine? ☒ Yes ☐ No

(Complete and check all that apply)

Certification: ☒ EPA Certified ☐ CARB Certified☐ None (If None is checked, please indicate below the items applicable to this engine.)☐ Naturally aspirated ☐ Supercharged ☐ Turbocharged ☐ Inter-cooled ☐ After-cooled
☐ Timing retard $\geq 4^\circ$ ☐ Lean-burn ☐ Rich-burnPrimary Use: ☒ Electrical generation ☐ Cogeneration ☐ Pump driver ☐ Fire pump driver☐ Compressor driver ☐ Tub grinder driver ☐ Other: _____**3. CONTROL DEVICE INFORMATION** Complete this section only if the engine exhausts to an add-on control device.☐ Check here if the engine has more than one add-on control device and repeat this section for each. Include manufacturer's technical specification sheet or brochure for each control device.Control device number # _____ (If unknown leave blank) ☐ New ☐ ExistingDevice type: ☐ Diesel catalyzed particulate filter ☐ Oxidation catalyst ☐ Selective catalytic reduction (SCR)☐ Non-selective catalytic reduction (NSCR or 3-way catalyst) ☐ Other: _____Make, Model, and Rated Capacity DDI EUM EGR TAA

Control device control efficiencies at typical operation (Use the basis codes listed below. If unknown leave blank)

Control Efficiency/Emission Factor Basis Codes: (Submit supporting documentation if available)

(1) Source testing or other measurement by plant

(8) Guess

(2) Source testing or measurement by ORCAA

(9) EPA/CARB Certification

(3) Specification from vendor

(4) Material balance by plant using knowledge of process

(5) Material balance by ORCAA

(6) EPA Document AP-42 Emission Factors

(7) Taken from literature other than AP-42

Continued on reverse side

Pollutant Name	Wt % Reduction	Basis Code
Particulates		
Organics		
Nitrogen Oxides		
Sulfur Dioxide		
Carbon Monoxide		
Others - <input type="checkbox"/> Check here and attach a separate list of pollutants. Include the basis code and the control efficiency.		

4. EMISSION POINT/STACK INFORMATION ☐ Check here if the engine has more than one stack or has a continuous pollutant emission monitor and repeat this section for each.Emission point number # _____ (If unknown leave blank) ☐ New ☐ Existing

Stack outlet height from ground level (ft) _____

Diameter of stack outlet (inches) _____ or Outlet cross-section area (square inches) _____

Direction of outlet (check one) ☐ Horizontal ☐ Vertical End of outlet (check one) ☐ Open/hinged flap ☐ Rain cap

Exhaust rate at typical operation (acfm) _____ Exhaust temperature at typical operation (°F) _____

5. AIR TOXIC ASSESSMENT INFORMATION.Distance from engine to the property line of the nearest residence (ft) 2,000 or (check if) ☐ Greater than one mileDistance from engine to the property line of the nearest school¹ (ft) 11,700 or (check if) ☐ Greater than 1000 ftDescribe the nearest non-residential, non-school site (check one) ☒ Industrial ☐ Commercial ☐ Hospital
☐ Day care center ☒ Other Timber AirportDistance from engine to the property line of the nearest non-residential, non-school site (ft) _____ or ☒ Greater than one mile

1. K-12 and more than twelve children only.

Area is primarily timber & conservation lands**6. FUEL DATA** Complete the table below for each fuel burned. If you are using a fuel other than those listed in the fuel table, attach a **fuel analysis** indicating the higher heating value, sulfur content, and nitrogen content. Please clearly indicate the measurement unit that corresponds to the information you are submitting. ☐ Check here if you are using more than two fuels, and attach a copy of this page listing the additional fuels.

Primary Fuel					Secondary Fuel				
Fuel ¹	Name	#	Units	Control Factor	Fuel ¹	Name	#	Units	Control Factor
Diesel	# 2 Diesel	31.9	gal/hr or SCF/hr		NA				
Maximum Fuel Use Rate ²					Maximum Fuel Use Rate ²				
Annual Fuel Usage ³	est. 2000		gal/yr or therm/yr or SCF/yr		Annual Fuel Usage ³				
Typical Heat Content ⁴			BTU/gal or BTU/SCF		Typical Heat Content ⁴				
Sulfur Content ⁴			wt% liquids or ppmv gases		Sulfur Content ⁴				
Emission Factors (Optional)					Emission Factors (Optional)				
Pollutant Name	Emission Factor	Units ⁵	Basis Code ⁶	Control Factor (✓) ⁷	Pollutant Name	Emission Factor	Units ⁵	Basis Code ⁶	Control Factor (✓) ⁷
Particulates				<input type="checkbox"/>	Particulates				<input type="checkbox"/>
Organics				<input type="checkbox"/>	Organics				<input type="checkbox"/>
Nitrogen Oxides				<input type="checkbox"/>	Nitrogen Oxides				<input type="checkbox"/>
Carbon Monoxide				<input type="checkbox"/>	Carbon Monoxide				<input type="checkbox"/>
Others – <input type="checkbox"/> Check here and attach a separate list under each fuel used.					Others – <input type="checkbox"/> Check here and attach a separate list under each fuel used.				

- Fuel Table:** Diesel Bio Diesel B100 Bio Diesel B20 Blend Gasoline
Natural Gas Landfill Gas Digester Gas Liquid Petroleum Gas (LPG)
- Maximum fuel use rate units: gallon/hr for liquid fuels and SCF/hr for gaseous fuels. (SCF = Standard Cubic Foot)
- The annual fuel usage is the actual or projected engine fuel consumption over a rolling 12-month time period. Annual usage units: gallons for liquid fuel, therms for natural gas, and SCF for other gaseous fuels. (therm = 100,000 BTUs, BTU = British Thermal Unit)
- If you are using diesel, natural gas, or gasoline, you may skip this entry. Heat content units: BTU/gallon for liquid fuels, BTU/SCF for gaseous fuels. Sulfur content units: weight % for liquid fuels, ppmv for gaseous fuels. (ppmv = parts per million by volume)
- Emission factors may be reported as gram/brakehp-hr, or as lb per gallon, or as lb per therm, or as lb per SCF.
- See the Control Efficiency/Emission Factor Basis Code table under Section 3 on page 1 of this form.
- Place a check in this column if the emission factor applies to emissions after an add-on control device.

7. CERTIFICATION I hereby certify that all information contained herein is true and correct. (Please sign and date this form)Erin Ewald
Name of person certifying (print)Dir. Regulatory Affairs
Title of person certifying[Signature]
Signature of person certifying3/15/2023
Date

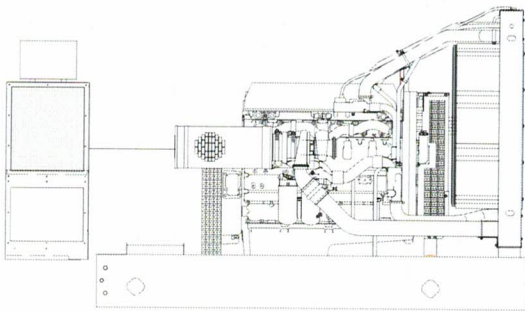
Phone Number:

Email:



Ratings Range

60 Hz			
Standby:	kW	350-425	
	kVA	438-531	
Prime:	kW	325-385	
	kVA	406-481	



Generator Set Ratings

Alternator	Voltage	Ph	Hz	150°C	130°C	125°C	105°C
				Rise Standby Rating kW/kVA	Rise Standby Rating kW/kVA	Rise Prime Rating kW/kVA	Rise Prime Rating kW/kVA
4M4019	120/208	3	60	360/450	350/438	350/438	325/406
	127/220	3	60	375/469	360/450	360/450	335/419
	139/240	3	60	415/519	375/469	375/469	350/438
	240/416	3	60	360/450	350/438	350/438	325/406
	277/480	3	60	415/519	375/469	375/469	350/438
4M4021	120/208	3	60	395/494	370/463	365/456	345/431
	127/220	3	60	410/513	390/488	375/469	360/450
	139/240	3	60	420/525	405/506	380/475	380/475
	240/416	3	60	395/494	370/463	365/456	345/431
	277/480	3	60	420/525	405/506	380/475	380/475
5M4024	120/208	3	60	415/519	415/519	375/469	375/469
	127/220	3	60	415/519	415/519	375/469	375/469
	139/240	3	60	420/525	420/525	380/475	380/475
	220/380	3	60	400/500	400/500	365/456	365/456
	240/416	3	60	415/519	415/519	375/469	375/469
5M4027	277/480	3	60	420/525	420/525	380/475	380/475
	120/208	3	60	420/525	420/525	380/475	380/475
	127/220	3	60	420/525	420/525	380/475	380/475
	139/240	3	60	420/525	420/525	380/475	380/475
	220/380	3	60	405/506	405/506	370/463	370/463
5M4160	240/416	3	60	420/525	420/525	380/475	380/475
	277/480	3	60	420/525	420/525	380/475	380/475
	220/380	3	60	420/525	420/525	380/475	380/475
	220/380	3	60	420/525	420/525	380/475	380/475
	347/600	3	60	420/525	400/500	380/475	375/469
5M4272	347/600	3	60	425/531	425/531	385/481	385/481

Standard Features

- Kohler Co. provides one-source responsibility for the generating system and accessories.
- The generator set and its components are prototype-tested, factory-built, and production-tested.
- The 60 Hz generator set offers a UL 2200 listing.
- The generator set complies with ISO 8528-5, Class G3, requirements for transient performance.
- The generator set accepts rated load in one step.
- The 60 Hz generator set meets NFPA 110, Level 1, when equipped with the necessary accessories and installed per NFPA standards.
- The 60 Hz generator set engine is certified by the Environmental Protection Agency (EPA) to conform to Tier 3 nonroad emissions regulations.
- A one-year limited warranty covers all systems and components. Two-, five-, and ten-year extended warranties are also available.
- Alternator features:
 - The pilot-excited, permanent-magnet (PM) alternator provides superior short-circuit capability.
 - The brushless, rotating-field alternator has broadrange reconnectability.
- Other features:
 - Controllers are available for all applications. See controller features inside.
 - The low coolant level shutdown prevents overheating (standard on radiator models only).
 - Integral vibration isolation eliminates the need for under-unit vibration spring isolators.
 - An electronic, isochronous governor delivers precise frequency regulation.
 - Electronic engine controls manage the engine.

RATINGS: All three-phase units are rated at 0.8 power factor. **Standby Ratings:** Standby ratings apply to installations served by a reliable utility source. The standby rating is applicable to varying loads for the duration of a power outage. There is no overload capability for this rating. Ratings are in accordance with ISO-3046/1, BS 5514, AS 2789, and DIN 6271. **Prime Power Ratings:** Prime power ratings apply to installations where utility power is unavailable or unreliable. At varying load, the number of generator set operating hours is unlimited. A 10% overload capacity is available for one hour in twelve. Ratings are in accordance with ISO-8528/1, overload power in accordance with ISO-3046/1, BS 5514, AS 2789, and DIN 6271. For limited running time and base load ratings, consult the factory. Obtain the technical information bulletin (TIB-101) on ratings guidelines for the complete ratings definitions. The generator set manufacturer reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever. **GENERAL GUIDELINES FOR DERATION:** **Altitude:** Derate 1.5% per 305 m (1000 ft.) elevation above 183 m (600 ft.) up to a maximum elevation of 3660 m (12000 ft.). **Temperature:** Derate 1.0% per 5.5°C (10°F) temperature above 25°C (77°F). For radiator cooling system capacity, derate 1.4°C (2.5°F) per 305 m (1000 ft.) elevation above 183 m (600 ft.).

Alternator Specifications

Specifications	Alternator
Type	4-Pole, Rotating Field
Exciter type	Brushless, Permanent-Magnet, Pilot Exciter
Leads: quantity, type	10/12, Reconnectable
Voltage regulator	Solid State, Volts/Hz
Insulation:	NEMA MG1
Material	Class H, Synthetic, Nonhygroscopic
Temperature rise	130°C, 150°C Standby
Bearing: quantity, type	1, Sealed
Coupling	Flexible Disc
Amortisseur windings	Full
Rotor balancing	125%
Voltage regulation, no-load to full-load (with 0.5% drift due to temp. variation)	3-Phase Sensing, $\pm 0.25\%$
One-step load acceptance	100% of Rating
Unbalanced load capability	100% of Rated Standby Current
Peak motor starting kVA:	(35% dip for voltages below)
480 V 4M4019 (12 lead)	1325
480 V 4M4021 (12 lead)	1350
480 V 5M4024 (10 lead)	1350
480 V 5M4027 (12 lead)	1550
380 V 5M4160 (4 lead)	1175
380 V 5M4162 (4 lead)	2100
600 V 4M4266 (4 lead)	1300
600 V 5M4272 (4 lead)	1750

- NEMA MG1, IEEE, and ANSI standards compliance for temperature rise and motor starting.
- Sustained short-circuit current of up to 300% of the rated current for up to 10 seconds.
- Sustained short-circuit current enabling downstream circuit breakers to trip without collapsing the alternator field.
- Self-ventilated and dripproof construction.
- Superior voltage waveform from two-thirds pitch windings and skewed stator.
- Digital solid-state, volts-per-hertz voltage regulator with $\pm 0.25\%$ no-load to full-load regulation.
- Brushless alternator with brushless pilot exciter for excellent load response.

Application Data

Engine

Engine Specifications	
Manufacturer	Detroit Diesel
Engine: model, type	S60, 4-Cycle Turbocharged, Charge Air-Cooled
Cylinder arrangement	6, Inline
Displacement, L (cu. in.)	14.0 (855)
Bore and stroke, mm (in.)	133 x 168 (5.24 x 6.61)
Compression ratio	16.0:1
Piston speed, m/min. (ft./min.)	604 (1980)
Main bearings: quantity, type	7, Precision Half-Shell
Rated rpm	1800
Max. power at rated rpm, kWm (BHP)	474 (635)
Cylinder head material	Cast Iron
Crankshaft material	Forged Steel
Valve material:	
Intake	Iron-Based Seat
Exhaust	Nickel-Based Seat
Governor: type, make/model	DDEC Electronic Control
Frequency regulation, no-load to full-load	Isochronous
Frequency regulation, steady state	$\pm 0.25\%$
Frequency	Fixed
Air cleaner type, all models	Dry

Exhaust

Exhaust System	
Exhaust flow at rated kW, m ³ /min. (cfm)	101.2 (3575)
Exhaust temperature at rated kW, dry exhaust, °C (°F)	552 (1025)
Maximum allowable back pressure, kPa (in. Hg)	10.2 (3.0)
Engine exhaust outlet size, mm (in.)	See ADV Drawing

Engine Electrical

Engine Electrical System		
Battery charging alternator:		
Ground (negative/positive)		Negative
Volts (DC)		24
Ampere rating		40
Starter motor rated voltage (DC)		24
Battery, recommended cold cranking amps (CCA):		
Qty., CCA rating each		Two, 950
Battery voltage (DC)		12

Fuel

Fuel System		
Fuel supply line, min. ID, mm (in.)		13 (0.50)
Fuel return line, min. ID, mm (in.)		8 (0.31)
Max. lift, engine-driven fuel pump, m (ft.)		2.1 (6.8)
Max. fuel flow, Lph (gph)		335 (88.5)
Fuel prime pump		N/A
Fuel filter: quantity, type		2, Primary/Secondary
Recommended fuel		#2 Diesel

Lubrication

Lubricating System		
Type		Full Pressure
Oil pan capacity, L (qt.)		30 (32)
Oil pan capacity with filter, L (qt.)		36 (38)
Oil filter: quantity, type		2, Cartridge
Oil cooler		Water-Cooled

Application Data

Cooling

Radiator System	
Ambient temperature, °C (°F)	40 (104)
Engine jacket water capacity, L (gal.)	22.7 (6.0)
Radiator system capacity, including engine, L (gal.)	45.4 (12)
Engine jacket water flow, Lpm (gpm)	363 (96)
Heat rejected to cooling water at rated kW, dry exhaust, kW (Btu/min.)	154 (8750)
Heat rejected to air charge cooler at rated kW, dry exhaust, kW (Btu/min.)	110 (6235)
Water pump type	Centrifugal
Fan diameter, including blades, mm (in.)	965 (38)
Fan, kWm (HP)	22 (30)
Max. restriction of cooling air, intake and discharge side of radiator, kPa (in. H ₂ O)	0.125 (0.5)

High Ambient Radiator System	
Ambient temperature, °C (°F)	50 (122)
Engine jacket water capacity, L (gal.)	22.7 (6.0)
Radiator system capacity, including engine, L (gal.)	94.6 (25)
Engine jacket water flow, Lpm (gpm)	363 (96)
Heat rejected to cooling water at rated kW, dry exhaust, kW (Btu/min.)	154 (8750)
Heat rejected to air charge cooler at rated kW, dry exhaust, kW (Btu/min.)	110 (6235)
Water pump type	Centrifugal
Fan diameter, including blades, mm (in.)	1118 (44)
Fan, kWm (HP)	25 (33)
Max. restriction of cooling air, intake and discharge side of radiator, kPa (in. H ₂ O)	0.125 (0.5)

Operation Requirements

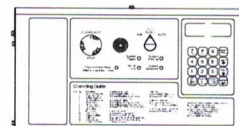
Air Requirements	
Radiator-cooled cooling air, m ³ /min. (scfm)*	561 (19800)
High ambient radiator-cooled cooling air, m ³ /min. (scfm)*	708 (25000)
Combustion air, m ³ /min. (cfm)	37 (1290)
Heat rejected to ambient air:	
Engine, kW (Btu/min.)	102 (5800)
Alternator, kW (Btu/min.)	33 (1877)

* Air density = 1.20 kg/m³ (0.075 lbm/ft³)

Fuel Consumption

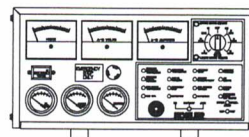
Diesel, Lph (gph) at % load	Standby Rating
100%	120.8 (31.9)
75%	93.5 (24.7)
50%	62.8 (16.6)
25%	33.3 (8.8)
Diesel, Lph (gph) at % load	Prime Rating
100%	107.9 (28.5)
75%	81.0 (21.4)
50%	54.9 (14.5)
25%	29.1 (7.7)

Controllers



Decision-Maker® 550 Controller

Audiovisual annunciation with NFPA 110 Level 1 capability. Programmable microprocessor logic and digital display features. Alternator safeguard circuit protection. 12- or 24-volt engine electrical system capability. Remote start, remote annunciation, and remote communication options. Refer to G6-46 for additional controller features and accessories.



Decision-Maker® 3+, 16-Light Controller

Audiovisual annunciation with NFPA 110 Level 1 capability. Microprocessor logic, AC meters, and engine gauge features. 12- or 24-volt engine electrical system capability. Remote start, prime power, and remote annunciation options. Refer to G6-30 for additional controller features and accessories.

Standard Features

- Alternator Protection (standard with 550 controller)
- Battery Rack and Cables
- Electronic, Isochronous Governor
- Oil Drain Extension

Available Accessories

Enclosed Unit

- ☐ Sound Enclosure
- ☐ Weather Enclosure
- ☐ Weather Housing

Open Unit

- ☐ Exhaust Silencer, Hospital (kit: PA-354905)
- ☐ Exhaust Silencer, Critical (kit: PA-354880)
- ☐ Flexible Exhaust Connector, Stainless Steel

Cooling System

- ☐ Block Heater
- ☐ High Ambient Radiator
- ☐ Radiator Duct Flange

Fuel System

- ☐ Flexible Fuel Lines
- ☐ Fuel Pressure Gauge
- ☐ Fuel/Water Separator with Prime Feature
- ☐ Hand Primer Pump
- ☐ Subbase Fuel Tanks
- ☐ Subbase Fuel Tank with Day Tank

Electrical System

- ☐ Battery
- ☐ Battery Charger, Equalize/Float Type
- ☐ Battery Heater

Engine and Alternator

- ☐ Air Cleaner, Heavy Duty
- ☐ Air Cleaner Restriction Indicator
- ☐ Alternator Strip Heater
- ☐ Bus Bar Kits
- ☐ Crankcase Emission Canister
- ☐ Line Circuit Breaker (NEMA1 enclosure)
- ☐ Line Circuit Breaker with Shunt Trip (NEMA1 enclosure)
- ☐ Optional Alternators
- ☐ Rated Power Factor Testing
- ☐ Safeguard Breaker (not available with 550 controller)
- ☐ Skid End Caps

Paralleling System

- ☐ Reactive Droop Compensator
- ☐ Voltage Regulator Relocation Kit

Maintenance and Literature

- ☐ General Maintenance Literature Kit
- ☐ Maintenance Kit (includes air, oil, and fuel filters)
- ☐ NFPA 110 Literature
- ☐ Overhaul Literature Kit
- ☐ Production Literature Kit

Controller

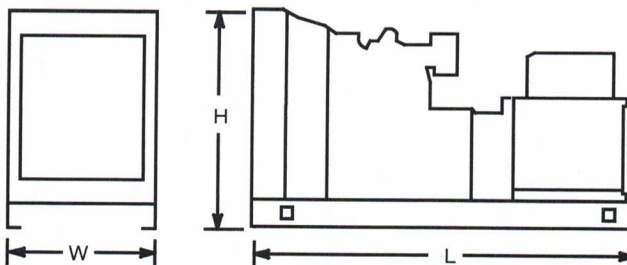
- ☐ Common Failure Relay Kit
- ☐ Communications Products and PC Software (550 controller only)
- ☐ Customer Connection Kit
- ☐ Dry Contact Kit (isolated alarm)
- ☐ Engine Prealarm Sender Kit
- ☐ Remote Annunciator Panel
- ☐ Remote Audiovisual Alarm Panel
- ☐ Remote Emergency Stop Kit
- ☐ Remote Mounting Cable
- ☐ Run Relay Kit

Miscellaneous Accessories

- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____

Dimensions and Weights

Overall Size, L x W x H, mm (in.): 3680 x 1325 x 2008
 (144.9 x 52.2 x 79.0)
 Weight (radiator model), wet, kg (lb.): 40°C radiator 3266 (7200)
 50°C radiator 3629 (8000)



NOTE: This drawing is provided for reference only and should not be used for planning installation. Contact your local distributor for more detailed information.

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