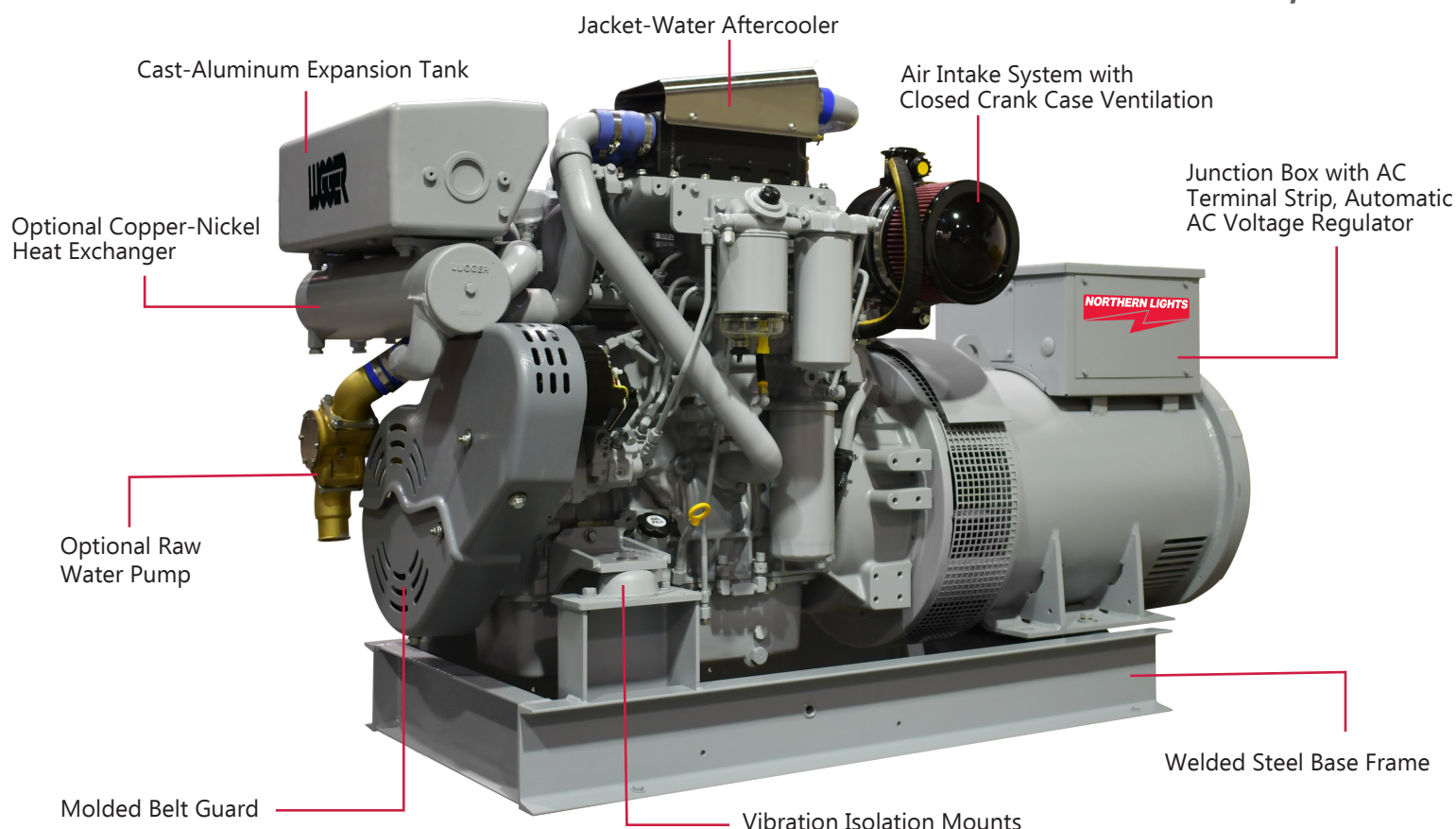




**C4105A1**  
126 KW, 60 Hz

**C4105A2**  
145 KW, 60 Hz



## FEATURES AND BENEFITS POWERED BY LUGGER

- Designed for smallest possible footprint without sacrificing serviceability
- Minimal belts and hoses for longer life
- Reliable cast-iron, gear driven freshwater and silicon bronze raw water pump
- Keel-Cooled standard

### ENGINE BLOCK

- Four cylinder, four cycle, in-line, liquid cooled, overhead valve marine diesels with replaceable wet liners
- Forged crankshaft
- Individual cylinder heads for ease of service
- Mass balancer improves vibration levels
- Heavy duty, plate-type oil cooler
- Ladder frame on lower block easily handles higher power levels
- Shaker pistons with oil gallery for improved cooling and performance

### WORLD CLASS FEATURES

- Belt guard for operator safety
- Cast-iron thermostat housing for long life
- Configured for isochronous or droop speed control with integral electronic governor control supplied by ECU
- Auxiliary winding generator - PMG not required but optionally available
- Operator and parts manuals
- Optional wet or dry exhaust
- Optional oil plumbing to frame for ease of access
- Optional drip pan

**Northern Lights, Inc.**  
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	C4105A1	C4105A2
	126 KW, 60 Hz	145 KW, 60 Hz
<b>Dimensions and Weight</b> Do not use for installation. Contact Factory for installation drawings and info.		
Length - in (mm)	71.02 (1804)	71.02 (1804)
Width - in (mm)	34.3 (871)	34.3 (871)
Height - in (mm)	44.8 (1138)	44.8 (1138)
Weight - lbs (kg)	2762.7 (1119.4)	2762.7 (1119.4)
<b>Generator Data</b>		
Voltage Regulation	+/-0.5%	+/-0.5%
Frequency Control	Isochronous / Droop	Isochronous / Droop
Phase and Power Factor - Standard	Three ph. 0.8	Three ph. 0.8
Phase and Power Factor - Optional (Contact Factory for Details)	Single ph. 1.0	Single ph. 1.0
Generator Full Load Temperature Rise	125° / 40° Rise (H)	125° / 40° Rise (H)
<b>Lugger Diesel Engine Data</b>		
Inline Cylinders / Aspiration / Operating Cycle	I-4 / Turbo-Aftercooled / 4 - Stroke	I-4 / Turbo-Aftercooled / 4 - Stroke
Displacement - cid (ltr)	293 (4.8)	293 (4.8)
Bore / Stroke - in (mm)	4.13 / 5.39 (105 / 137)	4.13 / 5.39 (105 / 137)
<b>Cooling System (Keel-Cooling Standard, Heat Exchanger Optional)</b>		
Heat Rejection to Jacket Water - BTU min	C/F	C/F
Freshwater Pump Capacity - gpm (lpm)	55 (210)	55 (210)
KC Approx. Cooling Capacity - gal (ltr)	8.2 (31)	8.2 (31)
HE Approx. Cooling Capacity - gal (ltr)	9.77 (37)	9.77 (37)
Raw Water Pump Capacity - gpm (lpm)	47 (177)	47 (177)
Max Raw Water Pump Suction Head Lift - in (mm)	39 (1000)	39 (1000)
Raw Water Pump Inlet Hose ID - in (mm)	2 (51)	2 (51)
Min. Raw Water inlet / Discharge Thru-Hull - in (mm)	2 (51)	2 (51)
<b>DC Electrical (12V Standard, 24V Optional)</b>		
DC Starting Voltage - Standard (Optional)	12 (24)	12 (24)
Min Battery Capacity - amp hr / 12V CCA (24V CCA)	90 (C/F)	90 (C/F)
Battery Size - CCA 12VDC (24 VDC)	750 (C/F)	750 (C/F)
Starter Rolling Amps @ 0°C - 12VDC (24VDC)	C/F	C/F
12 Volt Battery Cable Size Up to 5 ft (1.5m) - mm <sup>2</sup> (gage)	50 (1/0)	50 (1/0)
<b>Air</b>		
Air Consumption - m <sup>3</sup> / m (cfm)	10.5 (371)	11.7 (415)
Approx. Heat Radiated to Air - BTU / min	2160.48	2423.96
Generator Cooling Air Flow 1&3Ø - m <sup>3</sup> /m (cfm)	84 (2966)	84 (2966)
Exhaust Gas Volume - kg / hr (lb / min)	760 (27.9)	848 (31.2)
Exhaust Gas Temp - C° (F°)	427° (801°)	437° (819°)
Max. Exhaust Back Pressure - in H <sup>2</sup> O (mm H <sup>2</sup> O)	30 (762)	30 (762)
Wet Exhaust Elbow OD - in (mm)	5 (127)	5 (127)
Dry Exhaust Elbow - in (mm)	4 (102)	4 (102)
<b>Fuel</b>		
Fuel Injection Pump Type and Control	Electronic (HPCR)	Electronic (HPCR)
Min. Suction Line Size - in (mm)	0.375 (9.525)	0.375 (9.525)
Min. Return Line Size - in (mm)	0.375 (9.525)	0.375 (9.525)
Max. Fuel Transfer Pump Suction Lift - ft (m)	3.28 (1)	3.28 (1)
Max. Fuel Flow to Transfer Pump at - gph	C/F	C/F
Approx. Fuel Rate at Full Load - gph (lph)	10.9 (41.3)	11.25 (42.6)
<b>Max Engine Operating Angle (Front/Rear)</b>		
Continuous	5°	5°
Intermittent (2 minutes)	12° / 10°	12° / 10°

C/F: Consult factory