



**M4105A5**

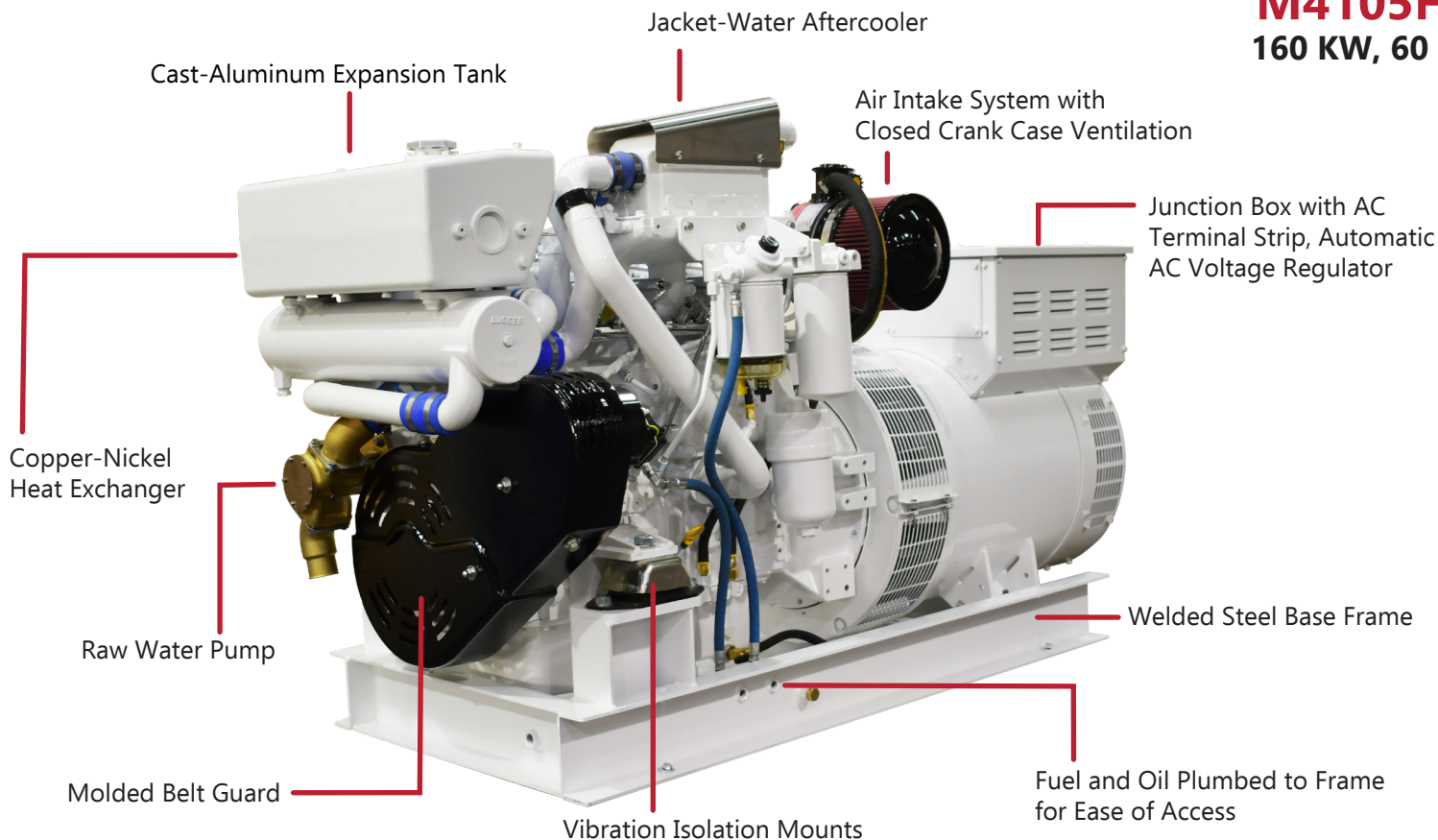
126 KW, 60 Hz

**M4105A6**

145 KW, 60 Hz

**M4105H1**

160 KW, 60 Hz



## FEATURES & BENEFITS

### Powered by Luger

- Designed for the 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

#### **ENGINE BLOCK**

- Four cylinder, four cycle, inline, 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
- 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
- 300% short circuit protection via auxiliary winding generator-PMG not required but optionally available
- Welded steel base frame
- Sparkling white two-part polyurethane paint
- Operator and parts manual

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	<b>M4105A5</b>	<b>M4105A6</b>	<b>M4105H1</b>
	126 KW, 60 Hz	145 KW, 60 Hz	160 KW, 60 Hz
<b>Dimensions and Weight</b>			
Length - in (mm)	73.9 (1878)	73.9 (1878)	73.9 (1878)
Width - in (mm)	37.6 (955)	37.6 (955)	37.6 (955)
Height - in (mm)	43.2 (1096)	43.2 (1096)	43.2 (1096)
Weight - lbs (kg)	2636 (1195)	2901 (1316)	3148 (1428)
<b>Dimensions and Weight with Optional Sound Enclosure</b>			
Length - in (mm)	75.4 (1916)	75.4 (1916)	75.4 (1916)
Width - in (mm)	42.0 (1067)	42.0 (1067)	42.0 (1067)
Height - in (mm)	45.0 (1143)	45.0 (1143)	45.0 (1143)
Weight - lbs (kg)	3507 (1591)	3774 (1712)	4021 (1824)
<b>Generator Data</b>			
Voltage Regulation	+/-0.5%	+/-0.5%	+/-0.5%
Frequency Control	Isochronous/Droop	Isochronous/Droop	Isochronous/Droop
Phase and Power Factor - Standard	Three phase 0.8	Three phase 0.8	Three phase 0.8
Generator Full Load Temp. Rise at 45°C Ambient	110°	110°	110°
<b>Lugger Diesel Engine Data</b>			
Inline Cylinder / Aspiration	I-4/Turbo-Aftercooled	I-4/Turbo-Aftercooled	I-4/Turbo-Aftercooled
Displacement - in <sup>3</sup> (ltr)	293 (4.8)	293 (4.8)	293 (4.8)
Bore / Stroke - in (mm)	4.13/5.39 (105/137)	4.13/5.39 (105/137)	4.13/5.39 (105/137)
<b>Cooling System (Heat Exchanger Standard, Keel-Cooling Optional)</b>			
Heat Rejection to Jacket-Water - BTU min	C/F	C/F	C/F
Freshwater Pump Capacity - gpm (lpm)	55 (210)	55 (210)	55 (210)
Heat Exchanger Approx. Cooling Capacity - gal (ltr)	9.7 (37)	9.7 (37)	9.7 (37)
Engine Only Approx. Cooling Capacity - gal (ltr)	8.2 (31)	8.2 (31)	8.2 (31)
Raw Water Pump Capacity - gpm (lpm)	47 (177)	47 (177)	47 (177)
Max. Raw Water Pump Suction Head Lift - in (mm)	39 (1000)	39 (1000)	39 (1000)
Raw Water Pump Inlet Hose ID - in (mm)	2 (51)	2 (51)	2 (51)
Min. Raw Water Inlet/ Discharge Thru-Hull - in (mm)	2 (51)	2 (51)	2 (51)
<b>DC Electrical</b>			
DC Starting Voltage - Standard (Optional)	12 (24)	12 (24)	12 (24)
Min. Battery Capacity - amp hr	90	90	90
Min. Battery Size - CCA	750	750	750
Starter Rolling Amps at 0°C - 12V (24V)	420 (225)	420 (225)	420 (225)
12 Volt Battery Cable Size Up to 5ft (1.5m) - mm <sup>2</sup>	50	50	50
<b>Air</b>			
Air Consumption - m <sup>3</sup> /m (cfm)	6.4 (226)	7.4 (260)	7.6 (267)
Approx. Heat Radiated to Air; Engine & Generator - BTU/min	1844	2069	2338
Generator Cooling Air Flow 1&3Ø - m <sup>3</sup> /m (cfm)	18 (635)	20.4 (720)	34.8 (1228)
Exhaust Gas Volume - kg/hr (lbs/min)	734 (27)	870 (32)	942 (34.6)
Exhaust Gas Temp. - C°(F°)	480° (896°)	459° (858.2°)	469° (876.2°)
Max. Exhaust Back Pressure - in H <sup>2</sup> O (mm H <sup>2</sup> O)	30 (762)	30 (762)	30 (762)
Wet Exhaust Elbow OD - in (mm)	5 (127)	5 (127)	5 (127)
Dry Exhaust Elbow - in (mm)	4 (102)	4 (102)	4 (102)
<b>Fuel</b>			
Fuel Injection Pump Type and Control	Electronic (HPCR)	Electronic (HPCR)	Electronic (HPCR)
Min. Suction Line Size - in (mm)	0.375 (10)	0.375 (10)	0.375 (10)
Min. Return Line Size - in (mm)	0.375 (10)	0.375 (10)	0.375 (10)
Max. Fuel Transfer Pump Suction Lift - ft (m)	3.28 (1)	3.28 (1)	3.28 (1)
Max. Fuel Flow to Transfer Pump - gph	C/F	C/F	C/F
Max. Fuel Return Line - psi	5	5	5
Approx. Fuel Rate at Full Load - gph (lph)	11.9 (45.05)	13.62 (51.56)	14.9 (56.4)
<b>Max Engine Operating Angle</b>			
Continuous - Fore/Aft	10°	10°	10°
Continuous - Side to Side	22.5°	22.5°	22.5°

C/F : Consult Factory