

# DETAILS ON THE FOUR MAIN PROPULSION DIESEL

## ENGINES FOR THE MV KALEETAN

### GM MODEL 16-567E-5 DIESEL ENGINE

Built By

ELECTRO-MOTIVE DIVISION

General Motors Corp.

La Grange, Illinois

Type of engine	2 cycle
Approximate weight	36,000 lbs.
Number of cylinders	16
Bore, inches	8.5
Stroke, inches	10.0
Total displacement, cu. in.	9072
Compression ratio	14-1/2:1
Crankshaft main journal diameter	7.5
Crankshaft pin journal diameter	6.5
Number of main bearings	10
Number of exhaust valves per cylinder	4
Type of scavenging	Uniflow
Method of scavenging	Turbo Blower
Type of lubrication	Pressure
Type of injection system	G.M. Unit Injectors

#### SPECIFIC

#### 800 RPM

Eng. BHP-to Gen. & Gen. Blower; full load continuous	2240
Eng. BHP-at Overload Rating, 2 hrs. in any 24 hr. period	2440
Operating Speed Range	400-800
Piston Speed, ft/min	1333
BMEP, lbs. sq. in.	122
* Air Intake Volume, CFM based on 90°F; 29.5" Hg atmos. press.	6600
* Exhaust Gas Volume, CFM based on 90°F intake	14450
Exhaust Back Pressure-Muffler & Piping total, "H <sub>2</sub> O	5
Exhaust Temperature, based on 90°F, + 25 or - 25	735
Air Intake Pressure Loss (intake filter & piping) "H <sub>2</sub> O	6
Lube Oil Pump Capacity, GPM	164
Piston Cooling Oil Pump, GPM	82
Fuel Oil Pump Capacity, GPM	4
Fuel Oil Pump Suction Lift, ft.	12
Fresh Water Pump Capacity, GPM @ 35 psi (2 pumps)	660
Fresh Water contained in engine, gal.	125
Raw Water Pump, capacity, GPM @ 39 psi	500
Raw Water Maximum Temperature	85
Starting Motor Air Working Pressure, psi	150
Starting Air Capacity, cu.ft. rec'd. - (6 starts per eng.) free air	165
Heat Rejection to Engine Room Spaces, Engine & Accessories, BTU/min/hr.	10
Fuel consumption, #BHP/hr., 4/4 load (typical)	.372

\* Flow data to be corrected for temperature, differing from 90°F.