

Marine Gen Set Engine Performance

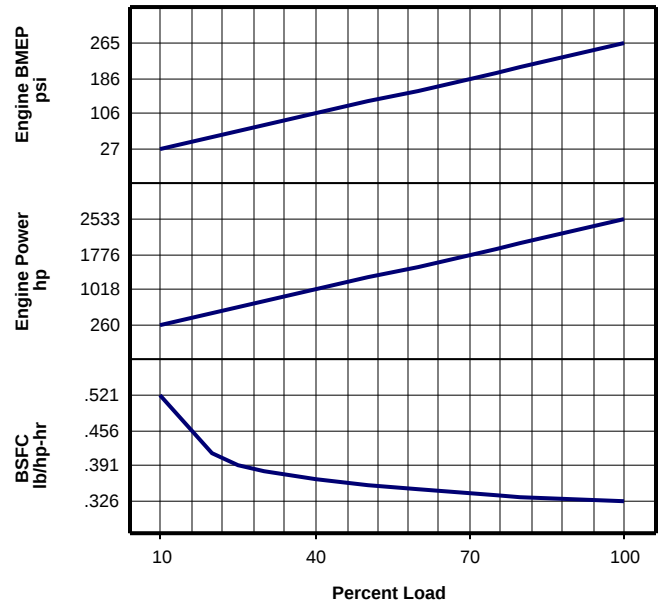
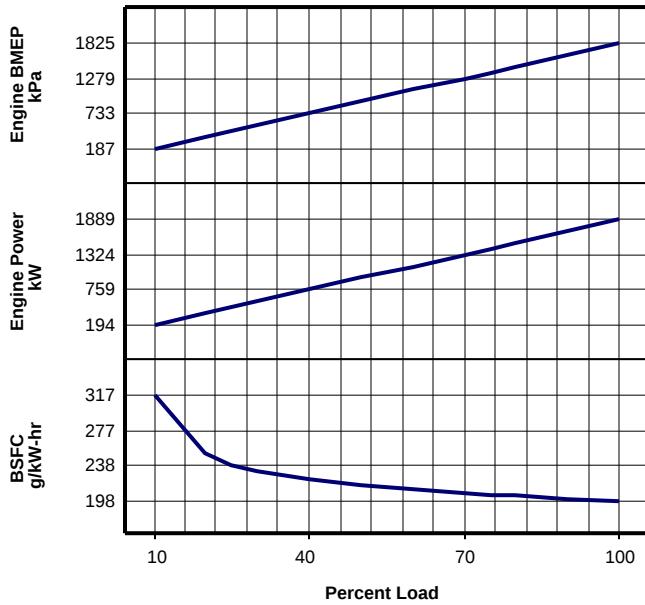
3516B DITA

1825 ekW/60 Hz/1800 RPM

PRIME RATING - DM6954-02



EPA T1-IMO CERTIFIED - Aftercooler Temperature 30°C (86°F)



Gen Power ekW	Percent Load	Engine Power kW	Engine BMEP kPa	BSFC g/kW-hr	Fuel Rate L/hr
1825	100	1889.2	1825	198	445.7
1643	90	1699.0	1641	200	405.7
1460	80	1509.8	1459	203	365.9
1369	75	1415.5	1368	205	346.1
1278	70	1321.1	1276	207	325.8
1095	60	1133.1	1095	211	284.9
913	50	945.6	914	216	243.4
730	40	761.2	735	222	201.0
548	30	574.5	555	231	158.2
456	25	480.3	464	238	136.5
365	20	385.4	372	251	115.3
183	10	193.9	187	317	73.3

Gen Power ekW	Percent Load	Engine Power hp	Engine BMEP psi	BSFC lb/hp-hr	Fuel Rate gph
1825	100	2533.5	265	.325	117.7
1643	90	2278.4	238	.329	107.2
1460	80	2024.7	212	.334	96.7
1369	75	1898.2	198	.337	91.4
1278	70	1771.6	185	.340	86.1
1095	60	1519.5	159	.347	75.3
913	50	1268.1	133	.355	64.3
730	40	1020.8	107	.364	53.1
548	30	770.4	80	.380	41.8
456	25	644.1	67	.392	36.1
365	20	516.8	54	.413	30.5
183	10	260.0	27	.521	19.4

Gen Power ekW	Intake Manifold Temp °C	Intake Manifold Pressure kPa	Intake Air Flow m³/min	Exh Manifold Temp °C	Exh Stk Temp °C	Exh Gas Flow m³/min
1825	43.7	192.10	152.3	577.1	464.7	391.0
1643	41.9	168.10	140.3	569.1	464.6	360.9
1460	40.4	144.20	128.4	561.1	467.2	331.0
1369	39.7	132.10	122.3	557.1	469.6	315.9
1278	39.0	119.10	115.2	552.8	473.2	298.8
1095	37.7	93.20	100.9	543.1	480.3	264.2
913	36.6	67.40	86.6	531.6	487.2	228.9
730	35.9	44.50	74.0	505.1	476.3	193.5
548	35.3	23.70	62.7	463.9	449.1	157.7
456	35.1	14.10	57.4	437.7	429.2	139.7
365	34.9	6.30	53.3	402.9	398.5	123.9
183	34.6	6.00	47.0	315.6	315.8	94.9

Gen Power ekW	Intake Manifold Temp °F	Intake Manifold Pressure in-hg	Intake Air Flow cfm	Exh Manifold Temp °F	Exh Stk Temp °F	Exh Gas Flow cfm
1825	110.7	56.89	5378.4	1070.8	868.5	13808.1
1643	107.4	49.78	4954.7	1056.4	868.3	12745.1
1460	104.7	42.70	4534.4	1042.0	873.0	11689.2
1369	103.5	39.12	4319.0	1034.8	877.3	11155.9
1278	102.2	35.27	4068.3	1027.0	883.8	10552.0
1095	99.9	27.60	3563.3	1009.6	896.5	9330.1
913	97.9	19.96	3058.3	988.9	909.0	8083.5
730	96.6	13.18	2613.3	941.2	889.3	6833.4
548	95.5	7.02	2214.2	867.0	840.4	5569.1
456	95.2	4.18	2027.1	819.9	804.6	4933.5
365	94.8	1.87	1882.3	757.2	749.3	4375.5
183	94.3	1.78	1659.8	600.1	600.4	3351.4

Heat Rejection Data

Gen Power ekW	Percent Load	Rej to JW kW	Rej to Atmos kW	Rej to Exh kW	From Oil Clr kW
1825	100	661	127.0	1711	222.0
1643	90	616	125.0	1577	202.0
1460	80	572	123.0	1444	182.0
1369	75	550	122.0	1377	173.0
1278	70	526	121.0	1307	162.0
1095	60	478	118.0	1162	142.0
913	50	426	116.0	1008	121.0
730	40	371	109.0	836	100.0
548	30	311	102.0	661	79.0
456	25	280	97.0	573	68.0
365	20	247	93.0	488	57.0
183	10	178	82.0	322	37.0

Heat Rejection Data

Gen Power ekW	Percent Load	Rej to JW Btu/min	Rej to Atmos Btu/min	Rej to Exh Btu/min	From Oil Clr Btu/min
1825	100	37591	7222.5	97304	12625.1
1643	90	35032	7108.7	89684	11487.7
1460	80	32530	6995.0	82120	10350.3
1369	75	31278	6938.1	78310	9838.5
1278	70	29914	6881.3	74329	9212.9
1095	60	27184	6710.6	66083	8075.5
913	50	24227	6596.9	57325	6881.3
730	40	21099	6198.8	47543	5687.0
548	30	17687	5800.7	37591	4492.7
456	25	15924	5516.4	32586	3867.2
365	20	14047	5288.9	27753	3241.6
183	10	10123	4663.3	18312	2104.2