

**GEN SET PACKAGE PERFORMANCE DATA [7RN01238]**

Performance Number: DM4501

|   |                                      |                                    |
|---|--------------------------------------|------------------------------------|
| <b>Sales Model:</b> 3516BDITA                                   | <b>Combustion:</b> DI                | <b>Aspr:</b> TA                    |
| <b>Engine Power:</b><br>1825 W/F EKW 1880 W/O F EKW<br>2,628 HP | <b>Speed:</b> 1,800 RPM              | <b>After Cooler:</b> SCAC          |
| <b>Manifold Type:</b> DRY                                       | <b>Governor Type:</b> ADEM           | <b>After Cooler Temp(F):</b> 140   |
| <b>Turbo Quantity:</b> 4  | <b>Engine App:</b> GP                | <b>Turbo Arrangement:</b> Parallel |
| <b>Hertz:</b> 60  | <b>Application Type:</b> PACKAGE-DIE | <b>Engine Rating:</b> PGS          |
| <b>Rating Type:</b> PRIME                                       | <b>Certification:</b> 2000 EPA       | <b>Strategy:</b>                   |

**General Performance Data**

| GEN W/ F<br>EKW | PERCENT<br>LOAD | ENGINE<br>POWER<br>BHP | ENGINE<br>BMEP PSI | FUEL<br>BSFC<br>LB/ BHP-<br>HR | FUEL<br>RATE<br>GPH | INTAKE<br>MFLD<br>TEMP<br>DEG F | INTAKE<br>MFLD P<br>IN-HG | INTAKE<br>AIR<br>FLOW<br>CFM | EXH<br>MFLD<br>TEMP<br>DEG F | EXH<br>STACK<br>TEMP<br>DEG F | EXH GAS<br>FLOW<br>CFM |
|-----------------|-----------------|------------------------|--------------------|--------------------------------|---------------------|---------------------------------|---------------------------|------------------------------|------------------------------|-------------------------------|------------------------|
| 1,825           | 100             | 2593                   | 270.93             | 0.33                           | 123.13              | 176                             | 73.71                     | 5,812.8                      | 1,107.14                     | 807.8                         | 14,256.54              |
| 1,642.5         | 90              | 2338                   | 244.25             | 0.33                           | 111.61              | 170.96                          | 66.96                     | 5,487.9                      | 1,063.4                      | 782.24                        | 13,172.38              |
| 1,460           | 80              | 2084                   | 217.85             | 0.34                           | 100.81              | 167.54                          | 60.5                      | 5,155.95                     | 1,028.66                     | 763.52                        | 12,187.1               |
| 1,368.8         | 75              | 1958                   | 204.51             | 0.34                           | 95.42               | 165.74                          | 57.09                     | 4,972.31                     | 1,011.74                     | 757.04                        | 11,682.1               |
| 1,277.5         | 70              | 1831                   | 191.31             | 0.34                           | 89.84               | 163.58                          | 52.77                     | 4,735.7                      | 995                          | 753.62                        | 11,117.07              |
| 1,095           | 60              | 1579                   | 165.06             | 0.35                           | 78.62               | 159.44                          | 44.18                     | 4,258.95                     | 961.52                       | 746.96                        | 9,955.21               |
| 912.5           | 50              | 1328                   | 138.66             | 0.35                           | 67.28               | 155.3                           | 35.62                     | 3,782.2                      | 928.22                       | 740.3                         | 8,740.39               |
| 730             | 40              | 1080                   | 112.84             | 0.36                           | 56                  | 151.7                           | 27.33                     | 3,308.99                     | 879.26                       | 721.94                        | 7,497.31               |
| 547.5           | 30              | 830                    | 86.73              | 0.38                           | 44.57               | 148.82                          | 19.16                     | 2,828.71                     | 813.38                       | 689.72                        | 6,240.11               |
| 456.3           | 25              | 704                    | 73.54              | 0.39                           | 38.78               | 147.38                          | 15.13                     | 2,588.57                     | 773.78                       | 668.3                         | 5,604.44               |
| 365             | 20              | 576                    | 60.19              | 0.4                            | 33                  | 146.48                          | 11.82                     | 2,362.55                     | 721.4                        | 633.02                        | 4,968.78               |
| 182.5           | 10              | 320                    | 33.36              | 0.47                           | 21.32               | 145.4                           | 6.37                      | 1,938.78                     | 588.92                       | 535.1                         | 3,690.39               |

**General Performance Data 2**

| GEN<br>W/ F<br>EKW | PERCENT<br>LOAD | ENGINE<br>POWER<br>BHP | COMPRESS<br>OUT<br>PRESS IN-<br>HG | COMPRESS<br>OUT TEMP<br>DEG F |
|--------------------|-----------------|------------------------|------------------------------------|-------------------------------|
| 1,825              | 100             | 2593                   | 73.74                              | 418.82                        |
| 1,642.5            | 90              | 2338                   | 67.07                              | 394.88                        |
| 1,460              | 80              | 2084                   | 60.74                              | 371.66                        |
| 1,368.8            | 75              | 1958                   | 57.36                              | 359.78                        |
| 1,277.5            | 70              | 1831                   | 53.04                              | 345.38                        |
| 1,095              | 60              | 1579                   | 44.45                              | 314.6                         |
| 912.5              | 50              | 1328                   | 35.89                              | 281.12                        |
| 730                | 40              | 1080                   | 27.69                              | 244.76                        |
| 547.5              | 30              | 830                    | 19.69                              | 207.86                        |
| 456.3              | 25              | 704                    | 15.81                              | 189.14                        |
| 365                | 20              | 576                    | 12.53                              | 172.4                         |
| 182.5              | 10              | 320                    | 7.05                               | 141.44                        |

**Engine Heat Rejection Data**

| GEN W/ F<br>EKW | PERCENT<br>LOAD | REJ TO<br>JW<br>BTU/ MN | REJ TO<br>ATMOS<br>BTU/ MN | REJ TO<br>EXHAUST<br>BTU/ MN | EXH RCOV<br>TO 350F<br>BTU/ MN | FROM OIL<br>CLR<br>BTU/ MN | FROM<br>AFT CLR<br>BTU/ MN | WORK<br>ENERGY<br>BTU/ MN | LHV<br>ENERGY<br>BTU/ MN | HHV<br>ENERGY<br>BTU/ MN |
|-----------------|-----------------|-------------------------|----------------------------|------------------------------|--------------------------------|----------------------------|----------------------------|---------------------------|--------------------------|--------------------------|
| 1,825           | 100             | 40,605.1                | 7,677.4                    | 98,441.8                     | 49,533.7                       | 13,193.8                   | 25,193.4                   | 109,986.4                 | 264,672.4                | 281,904.0                |
| 1,642.5         | 90              | 37,761.6                | 7,336.2                    | 89,399.5                     | 43,960.4                       | 11,999.5                   | 21,838.0                   | 99,124.2                  | 239,820.3                | 255,459.5                |
| 1,460           | 80              | 34,975.0                | 6,995.0                    | 80,925.8                     | 39,354.0                       | 10,805.3                   | 18,539.6                   | 88,375.8                  | 215,764.3                | 229,811.2                |
| 1,368.8         | 75              | 33,610.1                | 6,881.3                    | 76,660.6                     | 37,306.6                       | 10,236.6                   | 16,890.4                   | 83,030.0                  | 203,764.8                | 217,072.3                |
| 1,277.5         | 70              | 32,188.3                | 6,710.6                    | 72,452.2                     | 35,202.5                       | 9,667.9                    | 15,298.0                   | 77,684.3                  | 191,765.2                | 204,276.6                |
| 1,095           | 60              | 29,231.1                | 6,426.3                    | 63,978.6                     | 31,107.8                       | 8,416.7                    | 12,170.2                   | 66,935.9                  | 167,823.0                | 178,742.0                |
| 912.5           | 50              | 26,160.1                | 6,085.1                    | 55,505.0                     | 27,070.1                       | 7,222.5                    | 9,212.9                    | 56,301.2                  | 143,880.8                | 153,264.3                |
| 730             | 40              | 22,918.6                | 5,800.7                    | 46,974.5                     | 22,463.6                       | 6,028.2                    | 6,483.2                    | 45,837.1                  | 120,109.2                | 127,957.2                |
| 547.5           | 30              | 19,392.6                | 5,459.5                    | 38,102.8                     | 17,459.1                       | 4,777.1                    | 4,037.8                    | 35,202.5                  | 95,882.6                 | 102,195.2                |
| 456.3           | 25              | 17,515.9                | 5,288.9                    | 33,553.2                     | 14,899.9                       | 4,151.5                    | 2,900.4                    | 29,856.7                  | 83,598.7                 | 89,058.2                 |
| 365             | 20              | 15,582.3                | 5,118.3                    | 28,833.0                     | 11,999.5                       | 3,525.9                    | 1,819.8                    | 24,454.1                  | 71,144.2                 | 75,807.5                 |
| 182.5           | 10              | 11,487.7                | 4,663.3                    | 18,994.5                     | 6,312.6                        | 2,274.8                    | -56.9                      | 13,535.0                  | 45,723.4                 | 48,737.5                 |

**EXHAUST Sound Data: 4.92 FEET**

| GEN W/ F<br>EKW | PERCENT<br>LOAD | OVERALL<br>SOUND<br>DB(A) | OBCF<br>63HZ DB | OBCF<br>125HZ<br>DB | OBCF<br>250HZ<br>DB | OBCF<br>500HZ<br>DB | OBCF<br>1000HZ<br>DB | OBCF<br>2000HZ<br>DB | OBCF<br>4000HZ<br>DB | OBCF<br>8000HZ<br>DB |
|-----------------|-----------------|---------------------------|-----------------|---------------------|---------------------|---------------------|----------------------|----------------------|----------------------|----------------------|
| 1,825           | 100             | 115                       | 106             | 120                 | 116                 | 108                 | 107                  | 108                  | 108                  | 106                  |
| 1,642.5         | 90              | 115                       | 105             | 120                 | 116                 | 108                 | 106                  | 107                  | 107                  | 105                  |
| 1,460           | 80              | 114                       | 104             | 119                 | 115                 | 107                 | 105                  | 106                  | 106                  | 104                  |
| 1,368.8         | 75              | 113                       | 103             | 118                 | 114                 | 106                 | 105                  | 106                  | 106                  | 104                  |
| 1,277.5         | 70              | 113                       | 103             | 118                 | 114                 | 106                 | 104                  | 105                  | 105                  | 103                  |
| 1,095           | 60              | 111                       | 102             | 116                 | 112                 | 104                 | 103                  | 104                  | 104                  | 102                  |
| 912.5           | 50              | 110                       | 101             | 115                 | 111                 | 103                 | 102                  | 103                  | 103                  | 101                  |
| 730             | 40              | 109                       | 99              | 114                 | 110                 | 102                 | 100                  | 102                  | 102                  | 100                  |
| 547.5           | 30              | 108                       | 98              | 113                 | 109                 | 101                 | 99                   | 100                  | 100                  | 98                   |
| 456.3           | 25              | 107                       | 97              | 112                 | 108                 | 100                 | 98                   | 99                   | 99                   | 97                   |
| 365             | 20              | 106                       | 96              | 111                 | 107                 | 99                  | 97                   | 99                   | 98                   | 96                   |
| 182.5           | 10              | 104                       | 94              | 109                 | 105                 | 97                  | 95                   | 96                   | 96                   | 94                   |

**EXHAUST Sound Data: 22.97 FEET**

| GEN W/ F<br>EKW | PERCENT<br>LOAD | OVERALL<br>SOUND<br>DB(A) | OBCF<br>63HZ DB | OBCF<br>125HZ<br>DB | OBCF<br>250HZ<br>DB | OBCF<br>500HZ<br>DB | OBCF<br>1000HZ<br>DB | OBCF<br>2000HZ<br>DB | OBCF<br>4000HZ<br>DB | OBCF<br>8000HZ<br>DB |
|-----------------|-----------------|---------------------------|-----------------|---------------------|---------------------|---------------------|----------------------|----------------------|----------------------|----------------------|
| 1,825           | 100             | 102                       | 94              | 110                 | 104                 | 96                  | 94                   | 95                   | 95                   | 92                   |
| 1,642.5         | 90              | 101                       | 93              | 109                 | 103                 | 95                  | 93                   | 94                   | 94                   | 91                   |
| 1,460           | 80              | 100                       | 92              | 108                 | 102                 | 94                  | 92                   | 93                   | 93                   | 90                   |
| 1,368.8         | 75              | 100                       | 91              | 108                 | 102                 | 93                  | 92                   | 92                   | 92                   | 89                   |
| 1,277.5         | 70              | 99                        | 91              | 107                 | 101                 | 93                  | 91                   | 92                   | 92                   | 89                   |
| 1,095           | 60              | 98                        | 89              | 106                 | 100                 | 92                  | 90                   | 91                   | 91                   | 88                   |
| 912.5           | 50              | 97                        | 88              | 105                 | 99                  | 90                  | 89                   | 90                   | 89                   | 87                   |
| 730             | 40              | 96                        | 87              | 104                 | 98                  | 89                  | 88                   | 88                   | 88                   | 85                   |
| 547.5           | 30              | 94                        | 86              | 102                 | 96                  | 88                  | 86                   | 87                   | 87                   | 84                   |
| 456.3           | 25              | 93                        | 85              | 101                 | 96                  | 87                  | 85                   | 86                   | 86                   | 83                   |
| 365             | 20              | 92                        | 84              | 100                 | 95                  | 86                  | 84                   | 85                   | 85                   | 82                   |
| 182.5           | 10              | 90                        | 82              | 98                  | 92                  | 84                  | 82                   | 83                   | 83                   | 80                   |

**EXHAUST Sound Data: 49.21 FEET**

| GEN W/ F<br>EKW | PERCENT<br>LOAD | OVERALL<br>SOUND<br>DB(A) | OBCF<br>63HZ DB | OBCF<br>125HZ<br>DB | OBCF<br>250HZ<br>DB | OBCF<br>500HZ<br>DB | OBCF<br>1000HZ<br>DB | OBCF<br>2000HZ<br>DB | OBCF<br>4000HZ<br>DB | OBCF<br>8000HZ<br>DB |
|-----------------|-----------------|---------------------------|-----------------|---------------------|---------------------|---------------------|----------------------|----------------------|----------------------|----------------------|
| 1,825           | 100             | 95                        | 87              | 103                 | 98                  | 89                  | 87                   | 88                   | 88                   | 85                   |
| 1,642.5         | 90              | 95                        | 86              | 103                 | 97                  | 88                  | 87                   | 87                   | 87                   | 84                   |
| 1,460           | 80              | 94                        | 85              | 102                 | 96                  | 87                  | 86                   | 86                   | 86                   | 83                   |
| 1,368.8         | 75              | 93                        | 84              | 101                 | 95                  | 87                  | 85                   | 86                   | 86                   | 83                   |
| 1,277.5         | 70              | 93                        | 84              | 101                 | 95                  | 86                  | 85                   | 85                   | 85                   | 82                   |
| 1,095           | 60              | 91                        | 83              | 99                  | 94                  | 85                  | 83                   | 84                   | 84                   | 81                   |
| 912.5           | 50              | 90                        | 82              | 98                  | 92                  | 84                  | 82                   | 83                   | 83                   | 80                   |
| 730             | 40              | 89                        | 80              | 97                  | 91                  | 83                  | 81                   | 82                   | 82                   | 79                   |
| 547.5           | 30              | 88                        | 79              | 96                  | 90                  | 81                  | 80                   | 80                   | 80                   | 77                   |
| 456.3           | 25              | 87                        | 78              | 95                  | 89                  | 80                  | 79                   | 79                   | 79                   | 76                   |
| 365             | 20              | 86                        | 77              | 94                  | 88                  | 79                  | 78                   | 78                   | 78                   | 76                   |
| 182.5           | 10              | 84                        | 75              | 92                  | 86                  | 77                  | 76                   | 76                   | 76                   | 73                   |

**MECHANICAL Sound Data: 3.28 FEET**

| GEN W/ F<br>EKW | PERCENT<br>LOAD | OVERALL<br>SOUND<br>DB(A) | OBCF<br>63HZ DB | OBCF<br>125HZ<br>DB | OBCF<br>250HZ<br>DB | OBCF<br>500HZ<br>DB | OBCF<br>1000HZ<br>DB | OBCF<br>2000HZ<br>DB | OBCF<br>4000HZ<br>DB | OBCF<br>8000HZ<br>DB |
|-----------------|-----------------|---------------------------|-----------------|---------------------|---------------------|---------------------|----------------------|----------------------|----------------------|----------------------|
| 1,825           | 100             | 111                       | 113             | 123                 | 114                 | 105                 | 101                  | 101                  | 99                   | 103                  |
| 1,642.5         | 90              | 111                       | 113             | 123                 | 114                 | 105                 | 101                  | 101                  | 99                   | 103                  |
| 1,460           | 80              | 111                       | 113             | 123                 | 114                 | 105                 | 101                  | 101                  | 99                   | 103                  |
| 1,368.8         | 75              | 111                       | 113             | 123                 | 114                 | 105                 | 101                  | 101                  | 99                   | 103                  |
| 1,277.5         | 70              | 111                       | 113             | 123                 | 114                 | 105                 | 101                  | 101                  | 99                   | 103                  |
| 1,095           | 60              | 111                       | 113             | 123                 | 114                 | 105                 | 101                  | 101                  | 99                   | 103                  |
| 912.5           | 50              | 111                       | 113             | 123                 | 114                 | 105                 | 101                  | 101                  | 99                   | 103                  |
| 730             | 40              | 111                       | 113             | 123                 | 114                 | 105                 | 101                  | 101                  | 99                   | 103                  |
| 547.5           | 30              | 111                       | 113             | 123                 | 114                 | 105                 | 101                  | 101                  | 99                   | 103                  |
| 456.3           | 25              | 111                       | 113             | 123                 | 114                 | 105                 | 101                  | 101                  | 99                   | 103                  |
| 365             | 20              | 111                       | 113             | 123                 | 114                 | 105                 | 101                  | 101                  | 99                   | 103                  |
| 182.5           | 10              | 111                       | 113             | 123                 | 114                 | 105                 | 101                  | 101                  | 99                   | 103                  |

**MECHANICAL Sound Data: 22.97 FEET**

| GEN W/ F<br>EKW | PERCENT<br>LOAD | OVERALL<br>SOUND<br>DB(A) | OBCF<br>63HZ DB | OBCF<br>125HZ<br>DB | OBCF<br>250HZ<br>DB | OBCF<br>500HZ<br>DB | OBCF<br>1000HZ<br>DB | OBCF<br>2000HZ<br>DB | OBCF<br>4000HZ<br>DB | OBCJ<br>8000HZ<br>DB |
|-----------------|-----------------|---------------------------|-----------------|---------------------|---------------------|---------------------|----------------------|----------------------|----------------------|----------------------|
| 1,825           | 100             | 98                        | 100             | 109                 | 100                 | 92                  | 89                   | 90                   | 87                   | 91                   |
| 1,642.5         | 90              | 98                        | 100             | 109                 | 100                 | 92                  | 89                   | 90                   | 87                   | 91                   |
| 1,460           | 80              | 98                        | 100             | 109                 | 100                 | 92                  | 89                   | 90                   | 87                   | 91                   |
| 1,368.8         | 75              | 98                        | 100             | 109                 | 100                 | 92                  | 89                   | 90                   | 87                   | 91                   |
| 1,277.5         | 70              | 98                        | 100             | 109                 | 100                 | 92                  | 89                   | 90                   | 87                   | 91                   |
| 1,095           | 60              | 98                        | 100             | 109                 | 100                 | 92                  | 89                   | 90                   | 87                   | 91                   |
| 912.5           | 50              | 98                        | 100             | 109                 | 100                 | 92                  | 89                   | 90                   | 87                   | 91                   |
| 730             | 40              | 98                        | 100             | 109                 | 100                 | 92                  | 89                   | 90                   | 87                   | 91                   |
| 547.5           | 30              | 98                        | 100             | 109                 | 100                 | 92                  | 89                   | 90                   | 87                   | 91                   |
| 456.3           | 25              | 98                        | 100             | 109                 | 100                 | 92                  | 89                   | 90                   | 87                   | 91                   |
| 365             | 20              | 98                        | 100             | 109                 | 100                 | 92                  | 89                   | 90                   | 87                   | 91                   |
| 182.5           | 10              | 98                        | 100             | 109                 | 100                 | 92                  | 89                   | 90                   | 87                   | 91                   |

**MECHANICAL Sound Data: 49.21 FEET**

| GEN W/ F<br>EKW | PERCENT<br>LOAD | OVERALL<br>SOUND<br>DB(A) | OBCF<br>63HZ DB | OBCF<br>125HZ<br>DB | OBCF<br>250HZ<br>DB | OBCF<br>500HZ<br>DB | OBCF<br>1000HZ<br>DB | OBCF<br>2000HZ<br>DB | OBCF<br>4000HZ<br>DB | OBCF<br>8000HZ<br>DB |
|-----------------|-----------------|---------------------------|-----------------|---------------------|---------------------|---------------------|----------------------|----------------------|----------------------|----------------------|
| 1,825           | 100             | 92                        | 94              | 103                 | 94                  | 86                  | 84                   | 84                   | 82                   | 86                   |
| 1,642.5         | 90              | 92                        | 94              | 103                 | 94                  | 86                  | 84                   | 84                   | 82                   | 86                   |
| 1,460           | 80              | 92                        | 94              | 103                 | 94                  | 86                  | 84                   | 84                   | 82                   | 86                   |
| 1,368.8         | 75              | 92                        | 94              | 103                 | 94                  | 86                  | 84                   | 84                   | 82                   | 86                   |
| 1,277.5         | 70              | 92                        | 94              | 103                 | 94                  | 86                  | 84                   | 84                   | 82                   | 86                   |
| 1,095           | 60              | 92                        | 94              | 103                 | 94                  | 86                  | 84                   | 84                   | 82                   | 86                   |
| 912.5           | 50              | 92                        | 94              | 103                 | 94                  | 86                  | 84                   | 84                   | 82                   | 86                   |
| 730             | 40              | 92                        | 94              | 103                 | 94                  | 86                  | 84                   | 84                   | 82                   | 86                   |
| 547.5           | 30              | 92                        | 94              | 103                 | 94                  | 86                  | 84                   | 84                   | 82                   | 86                   |
| 456.3           | 25              | 92                        | 94              | 103                 | 94                  | 86                  | 84                   | 84                   | 82                   | 86                   |
| 365             | 20              | 92                        | 94              | 103                 | 94                  | 86                  | 84                   | 84                   | 82                   | 86                   |
| 182.5           | 10              | 92                        | 94              | 103                 | 94                  | 86                  | 84                   | 84                   | 82                   | 86                   |

**EMISSIONS DATA**

**Certification:** 2000 EPA

|  |                  |
|--|------------------|
| REFERENCE EXHAUST STACK DIAMETER                   | 8 IN             |
| WET EXHAUST MASS                                   | 26,433.4 LB/HR   |
| WET EXHAUST FLOW (807.80 F STACK TEMP )            | 14,267.14 CFM    |
| WET EXHAUST FLOW RATE ( 32 DEG F AND 29.98 IN HG ) | 5,559.00 STD CFM |
| DRY EXHAUST FLOW RATE ( 32 DEG F AND 29.98 IN HG ) | 5,092.38 STD CFM |
| FUEL FLOW RATE                                     | 123 GAL/HR       |

**RATED SPEED "Not to exceed data"**

| GEN PWR<br>EKW | PERCENT<br>LOAD | ENGINE<br>POWER<br>BHP | TOTAL<br>NOX (AS<br>NO2)<br>LB/ HR | TOTAL<br>CO<br>LB/ HR | TOTAL<br>HC<br>LB/ HR | PART<br>MATTER<br>LB/ HR | OXYGEN<br>IN<br>EXHAUST<br>PERCENT | DRY<br>SMOKE<br>OPACITY<br>PERCENT | BOSCH<br>SMOKE<br>NUMBER |
|----------------|-----------------|------------------------|------------------------------------|-----------------------|-----------------------|--------------------------|------------------------------------|------------------------------------|--------------------------|
| 1,825          | 100             | 2593                   | 52.6900                            | .9700                 | .9700                 | .4800                    | 11.0000                            | 1.4000                             | 1.2800                   |
| 1,368.8        | 75              | 1958                   | 29.3600                            | 1.0900                | .9600                 | .4900                    | 12.0000                            | 1.7000                             | 1.2800                   |
| 912.5          | 50              | 1328                   | 17.6600                            | 1.3700                | .7600                 | .4300                    | 12.7000                            | 2.5000                             | 1.2800                   |
| 456.3          | 25              | 704                    | 9.4800                             | 1.4400                | .5300                 | .3000                    | 14.0000                            | 2.1000                             | 1.2800                   |
| 182.5          | 10              | 320                    | 6.7300                             | 2.0500                | .5200                 | .1800                    | 15.9000                            | 1.5000                             | 1.2800                   |

**RATED SPEED "Nominal Data"**

| GEN PWR<br>EKW | PERCENT<br>LOAD | ENGINE<br>POWER<br>BHP | TOTAL<br>NOX (AS<br>NO2)<br>LB/ HR | TOTAL<br>CO<br>LB/ HR | TOTAL<br>HC<br>LB/ HR | TOTAL<br>CO2<br>LB/ HR | PART<br>MATTER<br>LB/ HR | OXYGEN<br>IN<br>EXHAUST<br>PERCENT | DRY<br>SMOKE<br>OPACITY<br>PERCENT | BOSCH<br>SMOKE<br>NUMBER |
|----------------|-----------------|------------------------|------------------------------------|-----------------------|-----------------------|------------------------|--------------------------|------------------------------------|------------------------------------|--------------------------|
| 1,825          | 100             | 2593                   | 43.9000                            | .5400                 | .7300                 | 2,571                  | .3400                    | 11.0000                            | 1.4000                             | 1.2800                   |
| 1,368.8        | 75              | 1958                   | 24.4700                            | .6000                 | .7300                 | 1,984.3                | .3500                    | 12.0000                            | 1.7000                             | 1.2800                   |
| 912.5          | 50              | 1328                   | 14.7200                            | .7600                 | .5700                 | 1,392.4                | .3100                    | 12.7000                            | 2.5000                             | 1.2800                   |
| 456.3          | 25              | 704                    | 7.9000                             | .8000                 | .4000                 | 803.3                  | .2100                    | 14.0000                            | 2.1000                             | 1.2800                   |
| 182.5          | 10              | 320                    | 5.6100                             | 1.1400                | .3900                 | 428.4                  | .1300                    | 15.9000                            | 1.5000                             | 1.2800                   |

**Altitude Capability Data(Corrected Power Altitude Capability)**

| <b>Ambient Operating Temp.</b> | <b>50 F</b> | <b>68 F</b> | <b>86 F</b> | <b>104 F</b> | <b>122 F</b> | <b>NORMAL</b> |
|--------------------------------|-------------|-------------|-------------|--------------|--------------|---------------|
| <b>A l t i t u d e</b>         |             |             |             |              |              |               |
| 0 F                            | 2,628.4 hp  | 2,628.4 hp  | 2,628.4 hp  | 2,628.4 hp   | 2,628.4 hp   | 2,628.4 hp    |
| 984.25 F                       | 2,628.4 hp  | 2,628.4 hp  | 2,628.4 hp  | 2,628.4 hp   | 2,628.4 hp   | 2,628.4 hp    |
| 1,640.42 F                     | 2,628.4 hp  | 2,628.4 hp  | 2,628.4 hp  | 2,628.4 hp   | 2,628.4 hp   | 2,628.4 hp    |
| 3,280.84 F                     | 2,628.4 hp  | 2,628.4 hp  | 2,628.4 hp  | 2,628.4 hp   | 2,628.4 hp   | 2,628.4 hp    |
| 4,921.26 F                     | 2,628.4 hp  | 2,628.4 hp  | 2,628.4 hp  | 2,593.53 hp  | 2,513.07 hp  | 2,628.4 hp    |
| 6,561.68 F                     | 2,628.4 hp  | 2,604.26 hp | 2,518.44 hp | 2,437.97 hp  | 2,362.88 hp  | 2,628.4 hp    |
| 8,202.1 F                      | 2,534.53 hp | 2,447.36 hp | 2,366.9 hp  | 2,290.46 hp  | 2,220.73 hp  | 2,496.98 hp   |
| 9,842.52 F                     | 2,378.97 hp | 2,297.17 hp | 2,222.07 hp | 2,151 hp     | 2,083.95 hp  | 2,370.92 hp   |
| 10,498.69 F                    | 2,318.62 hp | 2,239.5 hp  | 2,165.75 hp | 2,097.36 hp  | 2,031.65 hp  | 2,322.65 hp   |

**The powers listed above and all the Powers displayed are Corrected Powers**

**Identification Reference and Notes**

|   |          |  |              |
|---|----------|--|--------------|
| <b>Engine Arrangement:</b>                    | 1736942  | <b>Lube Oil Press @ Rated Spd(PSI):</b>      | 55.8         |
| <b>Effective Serial No:</b>                   | 7RN01092 | <b>Piston Speed @ Rated Eng SPD(FT/Min):</b> | 2,173.2      |
| <b>Primary Engine Test Spec:</b>              | 0K2410   | <b>Max Operating Altitude(FT):</b>           | 6,561.7      |
| <b>Performance Parm Ref:</b>                  | TM5739   | <b>PEEC Elect Control Module Ref</b>         |              |
| <b>Performance Data Ref:</b>                  | DM4501   | <b>PEEC Personality Cont Mod Ref</b>         |              |
| <b>Aux Coolant Pump Perf Ref:</b>             | DM1286   |  |              |
| <b>Cooling System Perf Ref:</b>               | DM1299   | <b>Turbocharger Model</b>                    | BTV8501-1.23 |
| <b>Certification Ref:</b>                     | EPA      | <b>Fuel Injector</b>                         | 1008774      |
| <b>Certification Year:</b>                    | 2000     | <b>Timing-Static (DEG):</b>                  | --           |
| <b>Compression Ratio:</b>                     | 14.0     | <b>Timing-Static Advance (DEG):</b>          | --           |
| <b>Combustion System:</b>                     | DI       | <b>Timing-Static (MM):</b>                   | --           |
| <b>Aftercooler Temperature (F):</b>           | 140      | <b>Unit Injector Timing (MM):</b>            | 64.3         |
| <b>Crankcase Blowby Rate(CFH):</b>            | 2,627.4  | <b>Torque Rise (percent)</b>                 | --           |
| <b>Fuel Rate (Rated RPM) No Load(Gal/HR):</b> | 14.5     | <b>Peak Torque Speed RPM</b>                 | --           |
| <b>Lube Oil Press @ Low Idle Spd(PSI):</b>    | 20.0     | <b>Peak Torque (LB/FT):</b>                  | --           |

**Reference** --  
**Number: DM4501**

**Parameters**  
**Reference: TM5739**

GEN SET - PACKAGED - DIESEL  
TOLERANCES:  
AMBIENT AIR CONDITIONS AND FUEL USED WILL AFFECT THESE VALUES.  
EACH OF THE VALUES MAY VARY IN ACCORDANCE WITH THE FOLLOWING  
TOLERANCES.

|                                 |     |     |
|---------------------------------|-----|-----|
| ENGINE POWER                    | +/- | 3%  |
| EXHAUST STACK TEMPERATURE       | +/- | 8%  |
| GENERATOR POWER                 | +/- | 5%  |
| INLET AIR FLOW                  | +/- | 5%  |
| INTAKE MANIFOLD PRESSURE - GAGE | +/- | 10% |
| EXHAUST FLOW                    | +/- | 6%  |
| SPECIFIC FUEL CONSUMPTION       | +/- | 3%  |
| FUEL RATE                       | +/- | 5%  |
| HEAT REJECTION                  | +/- | 5%  |
| HEAT REJECTION EXHAUST ONLY     | +/- | 10% |

CONDITIONS:  
ENGINE PERFORMANCE IS CORRECTED TO INLET AIR STANDARD CONDITIONS  
OF 99 KPA (29.31 IN HG) AND 25 DEG C (77 DEG F).

THESE VALUES CORRESPOND TO THE STANDARD ATMOSPHERIC PRESSURE AND  
TEMPERATURE IN ACCORDANCE WITH SAE J1349. ALSO INCLUDED IS A  
CORRECTION TO STANDARD FUEL GRAVITY OF 35 DEGREES API HAVING A  
LOWER HEATING VALUE OF 42,780 KJ/KG (18,390 BTU/LB) WHEN USED AT  
29 DEG C (84.2 DEG F) WHERE THE DENSITY IS 838.9 G/L (7.002  
LB/GAL).

THE CORRECTED PERFORMANCE VALUES SHOWN FOR CATERPILLAR ENGINES WILL  
APPROXIMATE THE VALUES OBTAINED WHEN THE OBSERVED PERFORMANCE

DATA IS CORRECTED TO SAE J1349, ISO 3046-2 & 8665 & 2288 & 9249 & 1585, EEC 80/1269 AND DIN70020 STANDARD REFERENCE CONDITIONS.

ENGINES ARE EQUIPPED WITH STANDARD ACCESSORIES; LUBE OIL, FUEL PUMP AND JACKET WATER PUMP. THE POWER REQUIRED TO DRIVE AUXILIARIES MUST BE DEDUCTED FROM THE GROSS OUTPUT TO ARRIVE AT THE NET POWER AVAILABLE FOR THE EXTERNAL (FLYWHEEL) LOAD. TYPICAL AUXILIARIES INCLUDE COOLING FANS, AIR COMPRESSORS, AND CHARGING ALTERNATORS.

RATINGS MUST BE REDUCED TO COMPENSATE FOR ALTITUDE AND/OR AMBIENT TEMPERATURE CONDITIONS ACCORDING TO THE APPLICABLE DATA SHOWN ON THE PERFORMANCE DATA SET.

GEN SET - PACKAGED - DIESEL

ALTITUDE:

ALTITUDE CAPABILITY - THE RECOMMENDED REDUCED POWER VALUES FOR SUSTAINED ENGINE OPERATION AT SPECIFIC ALTITUDE LEVELS AND AMBIENT TEMPERATURES.

COLUMN "N" DATA - THE FLYWHEEL POWER OUTPUT AT NORMAL AMBIENT TEMPERATURE.

AMBIENT TEMPERATURE - TO BE MEASURED AT THE AIR CLEANER AIR INLET DURING NORMAL ENGINE OPERATION.

NORMAL TEMPERATURE - THE NORMAL TEMPERATURE AT VARIOUS SPECIFIC ALTITUDE LEVELS IS FOUND ON TM2001.

THE GENERATOR POWER CURVE TABULAR DATA REPRESENTS THE NET ELECTRICAL POWER OUTPUT OF THE GENERATOR.

GENERATOR SET RATINGS

EMERGENCY STANDBY POWER (ESP)

OUTPUT AVAILABLE WITH VARYING LOAD FOR THE DURATION OF AN EMERGENCY OUTAGE. AVERAGE POWER OUTPUT IS 70% OF THE ESP RATING. TYPICAL OPERATION IS 50 HOURS PER YEAR, WITH MAXIMUM EXPECTED USAGE OF 200 HOURS PER YEAR.

STANDBY POWER RATING

OUTPUT AVAILABLE WITH VARYING LOAD FOR THE DURATION OF AN EMERGENCY OUTAGE. AVERAGE POWER OUTPUT IS 70% OF THE STANDBY POWER RATING. TYPICAL OPERATION IS 200 HOURS PER YEAR, WITH MAXIMUM EXPECTED USAGE OF 500 HOURS PER YEAR.

PRIME POWER RATING

OUTPUT AVAILABLE WITH VARYING LOAD FOR AN UNLIMITED TIME. AVERAGE POWER OUTPUT IS 70% OF THE PRIME POWER RATING. TYPICAL PEAK DEMAND IS 100% OF PRIME RATED EKW WITH 10% OVERLOAD CAPABILITY FOR EMERGENCY USE FOR A MAXIMUM OF 1 HOUR IN 12. OVERLOAD OPERATION CANNOT EXCEED 25 HOURS PER YEAR.

CONTINUOUS POWER RATING

OUTPUT AVAILABLE WITH NON-VARYING LOAD FOR AN UNLIMITED TIME. AVERAGE POWER OUTPUT IS 70-100% OF THE CONTINUOUS POWER RATING. TYPICAL PEAK DEMAND IS 100% OF CONTINUOUS RATED EKW FOR 100% OF OPERATING HOURS.