

## DESIGN GUARANTEE OPERATING CONDITIONS - Rated

| Case<br>Section  | 4M9-6         |               | 2M10-8         |                 |
|--|---------------|---------------|----------------|-----------------|
|  | 1             | 2             | 3              | 4               |
| Inlet Pressure, PSIA                                     | 1105<br>15.6  | 2188<br>41.16 | 6158<br>94.0   | 14184<br>212.01 |
| Inlet Temperature, °F                                    | 100           | 95            | 95             | 95              |
| Capacity at Inlet Conditions,<br>CFM                     | 46730         | 16484         | 7132           | 3164            |
| Weight Flow, LB/min                                      | 3254          | 2927          | 2874           | 2924            |
| Type of Gas Handled                                      | CRACKED GAS   |               |                |                 |
| Molecular Weight   | 26.68         | 25.40         | 24.90          | 24.58           |
| Isentropic Exponent, Avg.                                | 1.187         | 1.201         | 1.208          | 1.214           |
| Avg. Compressibility Factor                              | .9945         | .988          | .974           | .9455           |
| Discharge Pressure, PSIA                                 | 3123<br>46.16 | 6193<br>99.10 | 1913<br>244.81 | 3973<br>539.0   |
| Discharge Temperature, °F                                | 234.5         | 216.52        | 224.7          | 234.4           |
| Speed, RPM   | 4839          | 3940          | 3945           | 4265            |
| Total Compressors Guarantee Horsepower,<br>BHP $\pm$ 4 % | 16153         |               |                |                 |

## ALTERNATE OPERATING CONDITIONS - Normal

| Case<br>Section                      | 4M9-6       |       | 2M10-8 |        |
|--------------------------------------|-------------|-------|--------|--------|
|                                      | 1           | 2     | 3      | 4      |
| Inlet Pressure, PSIA                 | 15.6        | 40.95 | 93.48  | 210.67 |
| Inlet Temperature, °F                | 100         | 95    | 95     | 95     |
| Capacity at Inlet Conditions,<br>CFM | 44504       | 15777 | 6832   | 3034   |
| Weight Flow, LB/min.                 | 3099        | 2788  | 2737   | 2785   |
| Type of Gas Handled                  | CRACKED GAS |       |        |        |
| Molecular Weight                     | 26.68       | 25.40 | 24.90  | 24.58  |
| Isentropic Exponent, Avg.            | 1.187       | 1.201 | 1.208  | 1.214  |
| Avg. Compressibility Factor          | .9945       | .988  | .974   | .9455  |
| Discharge Pressure, PSIA             | 45.95       | 28.58 | 243.47 | 539.0  |
| Discharge Temperature, °F            | 233.2       | 215.4 | 224.0  | 233.8  |
| Speed, RPM                           | 4987        |       | 9530   |        |



## GENERAL DATA - ITEM R-1

## SPECIFICATIONS

## WEIGHTS OF MAJOR COMPONENTS (LBS. APPROX.)

| Case                 | 2-1 LP |          | 2-1 AD |         |
|----------------------|--------|----------|--------|---------|
|                      | 4M9-6  |          | 2M10-8 |         |
| Compressor Assembly  | 72,000 | 32616 kg | 18,000 | 8154 kg |
| Upper Half GORMA POL | 32,000 | 14496 kg | 8,557  | 3896 kg |
| Lower Half DORMA POL | 36,102 | 16355 kg | 8,643  | 3915 kg |
| Rotor                | 3,898  | 1768 kg  | 800    | 363 kg  |

## NAMEPLATE DATA

| Case                                     | LP          |  | 4P        |  |
|--|-------------|--|-----------|--|
|  | 4M9-6       |  | 2M10-8    |  |
| Inlet Volume, CFM                        | 46730/16484 |  | 7132/3164 |  |
| Maximum Continuous Speed, RPM            | 5313        |  | 10141     |  |
| Casing Design Pressure:                  |             |  |           |  |
| Inlet, PSIG                              | 200         |  | 700       |  |
| Discharge, PSIG                          | 200         |  | 700       |  |
| Casing Design Temperature, °F            | 450         |  | 450       |  |
| Maximum Operating Temperature, °F        | 380         |  | 380       |  |
| First Critical Speed, RPM                | 2150        |  | 4500      |  |
| Compressor Serial Number                 | 4-6-2770    |  | 2-8-2769  |  |
| Hydrostatic Test, Overall Pressure, PSIG | 300         |  | 1050      |  |