

# 誘導電動機試験成績表

(TEST REPORT OF INDUCTION MOTOR)

御参考用  
**Nidec**  
All for dreams

ニデックテクノモータ株式会社  
NIDEC TECHNO MOTOR CORPORATION

製作番号  
Our Order No

製造番号  
Serial No.

機械番号  
Item No

台数  
No. of Sets

|            |                   |             |              |             |                |
|------------|-------------------|-------------|--------------|-------------|----------------|
| 形式<br>Type | 出力<br>Output (kW) | 極数<br>Poles | 定格<br>Rating | 相数<br>Phase | 耐熱クラス<br>TH.CL |
|            | 7.5               | 2           | S1           | 3           | 155(F)         |

## 特性試験 Characteristics Test

| 周波数<br>Freq.<br>(Hz) | 無負荷試験<br>No Load Test |                  |               | 拘束試験 Locked-Rotor Test |                  |               |                     | 巻線抵抗(端子間)<br>Resistance Between<br>Lines at 115 °C (Ω) |               |       |
|----------------------|-----------------------|------------------|---------------|------------------------|------------------|---------------|---------------------|--|---------------|-------|
|                      | 電圧<br>Voltage(V)      | 電流<br>Current(A) | 損失<br>Loss(W) | 電圧<br>Voltage(V)       | 電流<br>Current(A) | 損失<br>Loss(W) | 1/2周波数<br>Freq.(Hz) | 電圧<br>Voltage(V)                                       | 損失<br>Loss(W) |       |
| 50                   | 400                   | 6.45             | 454           | 70.8                   | 15.0             | 738           |                     |  |               | 0.949 |
| 60                   | 400                   | 3.96             | 406           | 81.8                   | 15.0             | 810           |                     |  |               |       |
| 60                   | 440                   | 4.85             | 472           | 81.8                   | 15.0             | 810           |                     |  |               |       |

## 負荷特性

### Load Characteristics

| 周波数<br>Freq.<br>(Hz) | 電圧<br>Voltage<br>(V) | 負荷率<br>Load<br>(%) | 電流<br>Current<br>(A) | 回転速度<br>Speed<br>(min <sup>-1</sup> ) | 効率<br>Efficiency<br>(%) | 力率<br>Power<br>Factor(%) | 最大トルク<br>Break-down<br>Torque(%) | 最小始動トルク<br>Locked-Rotor<br>Torque(%) | 最大始動電流<br>Starting<br>Current(A) |
|----------------------|----------------------|--------------------|----------------------|---------------------------------------|-------------------------|--------------------------|----------------------------------|--------------------------------------|----------------------------------|
| 50                   | 400                  | 25                 | 7.20                 | 2985                                  | 84.2                    | 44.4                     | 378                              | 280                                  | 119                              |
|                      |                      | 50                 | 9.10                 | 2970                                  | 89.7                    | 66.3                     |                                  |                                      |                                  |
|                      |                      | 75                 | 11.5                 | 2955                                  | 90.9                    | 77.2                     |                                  |                                      |                                  |
|                      |                      | 100                | 14.4                 | 2935                                  | 90.1                    | 82.7                     |                                  |                                      |                                  |
|                      |                      | 125                | 17.6                 | 2910                                  | 89.3                    | 85.5                     |                                  |                                      |                                  |
| 60                   | 400                  | 25                 | 5.10                 | 3585                                  | 84.8                    | 61.9                     | 307                              | 227                                  | 97                               |
|                      |                      | 50                 | 7.50                 | 3570                                  | 90.0                    | 79.3                     |                                  |                                      |                                  |
|                      |                      | 75                 | 10.4                 | 3550                                  | 91.1                    | 85.4                     |                                  |                                      |                                  |
|                      |                      | 100                | 13.6                 | 3525                                  | 90.2                    | 87.5                     |                                  |                                      |                                  |
|                      |                      | 125                | 17.2                 | 3490                                  | 89.2                    | 87.9                     |                                  |                                      |                                  |
| 60                   | 440                  | 25                 | 5.70                 | 3585                                  | 83.2                    | 52.0                     | 383                              | 287                                  | 110                              |
|                      |                      | 50                 | 7.60                 | 3575                                  | 89.5                    | 72.4                     |                                  |                                      |                                  |
|                      |                      | 75                 | 9.9                  | 3560                                  | 91.1                    | 81.3                     |                                  |                                      |                                  |
|                      |                      | 100                | 12.6                 | 3540                                  | 90.2                    | 85.3                     |                                  |                                      |                                  |
|                      |                      | 125                | 14.3                 | 3515                                  | 90.5                    | 87.0                     |                                  |                                      |                                  |

## 温度試験 Temperature Test (上昇値 Rise)

| 周波数<br>Freq.<br>(Hz) | 抵抗法<br>Resistance Method | 温度計法<br>Thermometer Method |                      |
|----------------------|--------------------------|----------------------------|----------------------|
|                      | 固定子巻線温度<br>Windings(K)   | 外被温度<br>Frame(K)           | 軸受温度<br>Bearings (K) |
| 50                   | 65                       | 36                         | 39                   |
| 60                   | 57                       | 31                         | 36                   |
| 60                   | 49                       | 31                         | 36                   |

|  |                             |
|--|-----------------------------|
| 絶縁抵抗<br>Ins. Resistance<br>By 500V Megger                | 100MΩ<br>以上 Above<br>良 Good |
| 耐電圧試験(1分間)<br>High Potential Test<br>(A.C.60Hz For 1min) | V<br>1900<br>良 Good         |

|  |        |
|--|--------|
| 外被, 構造, 寸法検査<br>Inspection of Appearance<br>Construction & Outline<br>Dimensions | 良 Good |
|--|--------|

|                           |                           |                        |                          |
|---------------------------|---------------------------|------------------------|--------------------------|
| ブレーキトルク<br>Braking Torque | ブレーキ電流<br>Braking Current | 振動試験<br>Vibration Test | 騒音試験dB (A)<br>Noise Test |
| (%)                       | (A)                       | V-                     | 良 Good                   |

## 防爆構造検査 Inspection of Explosion-proof Construction

|   |                            |                               |                                    |  |                           |
|---|----------------------------|-------------------------------|------------------------------------|--|---------------------------|
| 防爆構造<br>Type of Explosion<br>Protection | 爆発等級<br>Explosion<br>Class | 発火度<br>Ignition Temp<br>Group | 拘束電流(A)<br>Locked-Rotor<br>Current | 許容拘束時間(Sec)<br>Permissible<br>Locking Time | 危険場所<br>Hazardous<br>Area |
|---|----------------------------|-------------------------------|------------------------------------|--|---------------------------|

注記 Notes:

試験日

Date of Test :

承認

Approved By :

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