

# 誘導電動機試験成績表

(TEST REPORT OF INDUCTION MOTOR)



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 |
|------------|-------------------|-------------|--------------|-------------|----------------|
|            | 1.5               | 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) | 定格周波数<br>Rated Frequency (Hz) | 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                   | 1.97             | 174           | 51.0                          | 3.0              | 150              |               |  |                  |               |
| 60                   | 400                   | 1.25             | 140           | 58.2                          | 3.0              | 156              |               |  |                  |               |
| 60                   | 440                   | 1.54             | 176           | 58.2                          | 3.0              | 156              |               |  |                  |               |

## 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                 | 1.90                 | 2980                                  | 74.4                    | 39.0                     | 416                              | 315                                  | 28                               |
|                      |                      | 50                 | 2.10                 | 2960                                  | 83.0                    | 61.1                     |                                  |                                      |                                  |
|                      |                      | 75                 | 2.50                 | 2940                                  | 85.0                    | 75.0                     |                                  |                                      |                                  |
|                      |                      | 100                | 3.10                 | 2910                                  | 84.2                    | 83.1                     |                                  |                                      |                                  |
|                      |                      | 125                | 3.70                 | 2870                                  | 82.5                    | 87.9                     |                                  |                                      |                                  |
| 60                   | 400                  | 25                 | 1.20                 | 3575                                  | 78.4                    | 55.3                     | 366                              | 262                                  | 25                               |
|                      |                      | 50                 | 1.70                 | 3555                                  | 85.3                    | 75.8                     |                                  |                                      |                                  |
|                      |                      | 75                 | 2.20                 | 3530                                  | 86.6                    | 84.8                     |                                  |                                      |                                  |
|                      |                      | 100                | 2.80                 | 3495                                  | 85.5                    | 88.9                     |                                  |                                      |                                  |
|                      |                      | 125                | 3.60                 | 3450                                  | 82.5                    | 90.8                     |                                  |                                      |                                  |
| 60                   | 440                  | 25                 | 1.40                 | 3580                                  | 75.6                    | 45.1                     | 452                              | 326                                  | 28                               |
|                      |                      | 50                 | 1.70                 | 3565                                  | 84.2                    | 66.9                     |                                  |                                      |                                  |
|                      |                      | 75                 | 2.20                 | 3545                                  | 86.4                    | 78.7                     |                                  |                                      |                                  |
|                      |                      | 100                | 2.70                 | 3520                                  | 85.5                    | 84.9                     |                                  |                                      |                                  |
|                      |                      | 125                | 3.30                 | 3485                                  | 84.0                    | 88.4                     |                                  |                                      |                                  |

## 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                   | 77                       | 58                         | 36                   |
| 60                   | 63                       | 48                         | 31                   |
| 60                   | 61                       | 46                         | 30                   |

|  |                               |  |
|--|-------------------------------|--|
| 絶縁抵抗<br>Ins. Resistance<br>By 500V Megger                | 100MΩ<br>以上 Above             | 外被, 構造, 寸法検査<br>Inspection of Appearance<br>Construction & Outline<br>Dimensions |
| 耐電圧試験(1分間)<br>High Potential Test<br>(A.C.60Hz For 1min) | 良 Good<br>V<br>1900<br>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-10 良 Good            | 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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