

東元半密型**ODP IE3** 優級效率馬達

MODEL : ASHH - -

HIGH EFFICIENCY MOTORS
LOW VOLTAGE SQUIRREL CAGE
FRAME SIZE : 143T ~ 449T&TS



DWG NO.

31057D97101

REV. 04

| | | SPECIFICATION TABLE | MODEL ASHH - - |
|--|------------------------|---|--------------------------|
| | | 3-PHASE INDUCTION MOTORS LOW VOLTAGE SQUIRREL CAGE | |
| ITEM | | STANDARD SPECIFICATION | |
| R A T I N G | Kind of Motors | Squirrel-Cage Induction Motors (SCIM) . | |
| | Design Standards | NEMA MG-1 , MG-13 . | |
| | Voltages | 230/460V (208V De - Rating Operation) . | |
| | Frequency | 60Hz . | |
| | Output Range | 1HP ~ 500HP . | |
| | R.P.M. (Syn.) | 3600 ~ 1200 R.P.M. (2 ~ 6 Poles) . | |
| | Time Duty | Continuous , S.F. 1.15 . | |
| | Frame Size | 143T ~ 449T&TS . | |
| | Protection Enclosure | Open , Drip Proof (IP 22) . | |
| | Cooling Method | Self Ventilated , Interior Cooling (IC 01) . | |
| | Mounting | Horizontal Floor Mounting F-1 (IM 1001) , F-2 Interchangeable . | |
| A P P L I C A T I O N | Power Condition | Voltage : $\pm 10\%$, Frequency : $\pm 5\%$, and $\pm 10\%$ of Combined Voltage and Frequency , But Frequency Variation does not Exceed $\pm 5\%$. | |
| | Environment Conditions | Place : Non - Hazardous . Ambient Temperature : $-15^{\circ}\text{C} \sim 40^{\circ}\text{C}$, Relative Humidity : Less Than 80%RH (Non - Condensation) , Altitude : Less Than 3,300ft . | |
| | Drive Method | 143T~449T For Direct and Belt Drive Application , However For 2 Pole 30HP and Larger (Ts Frame), Direct-Coupling Service Only. | |
| | Direction of Rotation | Bi - Directional . | |
| | Method of Starting | Full Voltage Direct On Line , For 7.5HP & Up Y- Δ Be Available . | |
| P E R F O R M A N C E | Test Procedure | IEEE-112 Method B . | |
| | Temperature Rise | Not to Exceed 90°C for S.F.1.15 by Resistance Method . | |
| | Over Speed | 125% Syn. R.P.M. for 2 Minutes (2 , 4 Poles) , 150% Syn. R.P.M. for 2 Minutes (the Others) . | |
| | Over Torque | 160% Rated Torque for 15 Sec . | |

PERFORMANCE DATA

MODEL
ASHH - -

3-PHASE SQUIRREL CAGE
HIGH EFFICIENCY INDUCTION MOTORS



DP, NEMA, T-FRAME, DESIGN - B or C
CLASS F, 40°C AMBIENT, CONTINUOUS DUTY,
S.F. 1.15 460V 60Hz

TYPICAL PERFORMANCE

(460V)

| HP | FULL LOAD RPM | FRAME SIZE | EFFICIENCY(%) | | | | POWER FACTOR(%) | | | CURRENT | | | TORQUE | | | | ROTOR WK ² lb-ft ² | NEMA CODE LETTER |
|-----|---------------|------------|---------------|------|----------|----------|-----------------|----------|----------|-----------|------------------|------------------|-----------------|-------------------|--------------|-----------------|--|------------------|
| | | | FULL LOAD | | 3/4 LOAD | 1/2 LOAD | FULL LOAD | 3/4 LOAD | 1/2 LOAD | FULL LOAD | 208V USABLE ON-A | LOCKED ROTOR (A) | FULL LOAD lb-ft | LOCKED ROTOR %FLT | PULL UP %FLT | BREAK DOWN %FLT | | |
| | | | NOM. | MIN. | NOM. | NOM. | | | | (A) | | | | | | | | |
| 1 | 3470 | 143T | 84.0 | 81.5 | 84.0 | 82.5 | 79.5 | 72.5 | 59.0 | 1.40 | 3.10 | 15 | 1.51 | 370 | 360 | 395 | 0.05 | N |
| | 1750 | 143T | 85.5 | 82.5 | 85.5 | 84.0 | 78.0 | 70.0 | 56.5 | 1.40 | 3.10 | 15 | 3.00 | 275 | 190 | 300 | 0.09 | N |
| | 1150 | 145T | 82.5 | 80.0 | 82.5 | 80.0 | 65.5 | 56.5 | 43.5 | 1.74 | 3.83 | 15 | 4.57 | 230 | 210 | 310 | 0.12 | N |
| 1.5 | 3500 | 143T | 85.5 | 82.5 | 85.5 | 82.5 | 79.0 | 71.0 | 57.0 | 2.08 | 4.54 | 20 | 2.26 | 360 | 250 | 400 | 0.05 | M |
| | 1740 | 145T | 86.5 | 84.0 | 86.0 | 85.0 | 80.5 | 73.0 | 60.0 | 2.02 | 4.46 | 20 | 4.53 | 250 | 190 | 310 | 0.09 | M |
| | 1170 | 182T | 87.5 | 85.5 | 86.5 | 84.0 | 63.0 | 54.5 | 42.5 | 2.55 | 5.63 | 20 | 6.73 | 230 | 225 | 370 | 0.31 | M |
| 2 | 3490 | 145T | 85.5 | 82.5 | 86.5 | 84.0 | 82.5 | 75.0 | 62.0 | 2.66 | 5.73 | 25 | 3.05 | 320 | 280 | 400 | 0.06 | L |
| | 1735 | 145T | 86.5 | 84.0 | 87.0 | 85.5 | 77.0 | 69.0 | 56.0 | 2.81 | 6.02 | 25 | 6.05 | 250 | 210 | 315 | 0.11 | L |
| | 1165 | 184T | 87.5 | 85.5 | 86.5 | 84.0 | 71.0 | 64.0 | 52.5 | 3.01 | 6.67 | 25 | 9.01 | 165 | 155 | 260 | 0.35 | L |
| 3 | 3480 | 145T | 87.5 | 85.5 | 88.0 | 87.5 | 87.0 | 81.5 | 71.0 | 3.69 | 8.16 | 32 | 4.58 | 360 | 270 | 370 | 0.08 | K |
| | 1755 | 182T | 89.5 | 87.5 | 88.5 | 87.5 | 81.0 | 75.0 | 62.5 | 3.88 | 8.57 | 32 | 8.98 | 220 | 180 | 330 | 0.28 | K |
| | 1175 | 213T | 88.5 | 86.5 | 88.5 | 86.5 | 77.0 | 70.0 | 58.0 | 4.12 | 9.12 | 32 | 13.4 | 185 | 160 | 315 | 0.65 | K |
| 5 | 3465 | 182T | 87.5 | 85.5 | 88.5 | 87.5 | 91.0 | 88.5 | 81.5 | 5.90 | 13.0 | 46 | 7.58 | 220 | 180 | 310 | 0.19 | J |
| | 1750 | 184T | 89.5 | 87.5 | 90.2 | 90.2 | 84.5 | 80.5 | 71.0 | 6.19 | 13.7 | 46 | 15.1 | 195 | 150 | 300 | 0.40 | J |
| | 1160 | 215T | 89.5 | 87.5 | 89.0 | 89.0 | 79.0 | 73.0 | 61.5 | 6.62 | 14.6 | 46 | 22.5 | 165 | 140 | 280 | 0.85 | J |
| 7.5 | 3465 | 184T | 88.5 | 86.5 | 90.2 | 90.2 | 91.5 | 89.0 | 82.5 | 8.65 | 19.2 | 63.5 | 11.4 | 300 | 250 | 310 | 0.25 | H |
| | 1750 | 213T | 91.0 | 89.5 | 91.7 | 91.7 | 86.0 | 83.0 | 74.5 | 8.97 | 19.8 | 63.5 | 22.5 | 210 | 160 | 250 | 0.67 | H |
| | 1170 | 254T | 90.2 | 88.5 | 91.0 | 89.5 | 79.0 | 73.5 | 63.0 | 9.85 | 21.8 | 63.5 | 33.7 | 265 | 240 | 270 | 0.00 | H |
| 10 | 3510 | 213T | 90.2 | 88.5 | 91.0 | 91.0 | 88.0 | 85.5 | 78.5 | 11.8 | 26.1 | 81 | 15.0 | 200 | 180 | 270 | 0.41 | H |
| | 1750 | 215T | 91.7 | 90.2 | 92.4 | 92.4 | 87.0 | 84.0 | 76.5 | 11.7 | 26.0 | 81 | 30.0 | 230 | 175 | 265 | 0.92 | H |
| | 1170 | 256T | 91.0 | 89.5 | 91.7 | 91.7 | 81.0 | 77.0 | 66.0 | 12.7 | 27.9 | 81 | 44.9 | 245 | 185 | 250 | 2.87 | H |
| 15 | 3510 | 215T | 90.2 | 88.5 | 91.0 | 91.0 | 86.0 | 83.0 | 77.0 | 18.1 | 39.4 | 116 | 22.5 | 200 | 170 | 260 | 0.51 | G |
| | 1770 | 254T | 93.0 | 91.7 | 93.0 | 93.0 | 84.5 | 81.5 | 72.5 | 17.9 | 39.5 | 116 | 44.5 | 175 | 130 | 260 | 1.87 | G |
| | 1175 | 284T | 91.7 | 90.2 | 92.4 | 92.4 | 83.0 | 79.0 | 70.0 | 18.5 | 40.8 | 116 | 67.0 | 230 | 175 | 235 | 5.80 | G |
| 20 | 3520 | 254T | 91.0 | 89.5 | 92.4 | 91.7 | 90.5 | 89.5 | 85.0 | 22.8 | 50.3 | 145 | 29.8 | 210 | 170 | 260 | 0.94 | G |
| | 1770 | 256T | 93.0 | 91.7 | 93.0 | 93.0 | 84.0 | 80.0 | 71.0 | 24.0 | 51.5 | 145 | 59.3 | 175 | 130 | 245 | 2.26 | G |
| | 1175 | 286T | 92.4 | 91.0 | 93.0 | 93.0 | 83.5 | 80.5 | 72.0 | 24.3 | 53.7 | 145 | 89.4 | 225 | 175 | 230 | 8.34 | G |
| 25 | 3530 | 256T | 91.7 | 90.2 | 92.4 | 92.4 | 91.5 | 90.0 | 86.0 | 27.9 | 61.4 | 183 | 37.2 | 220 | 160 | 260 | 1.22 | G |
| | 1770 | 284T | 93.6 | 92.4 | 94.1 | 94.1 | 85.5 | 82.0 | 77.0 | 29.3 | 63.6 | 183 | 74.4 | 210 | 165 | 235 | 3.74 | G |
| | 1180 | 324T | 93.0 | 91.7 | 93.6 | 94.1 | 83.0 | 80.5 | 73.0 | 30.3 | 67.1 | 183 | 111 | 210 | 170 | 215 | 9.90 | G |
| 30 | 3540 | 284TS | 92.4 | 91.0 | 93.0 | 93.6 | 90.5 | 89.0 | 86.0 | 33.6 | 74.3 | 218 | 44.5 | 230 | 200 | 250 | 1.60 | G |
| | 1770 | 286T | 94.1 | 93.0 | 94.5 | 94.5 | 87.0 | 84.5 | 77.5 | 34.3 | 75.9 | 218 | 89.0 | 225 | 185 | 245 | 4.43 | G |
| | 1180 | 326T | 93.6 | 92.4 | 94.5 | 94.5 | 83.5 | 81.5 | 74.5 | 35.9 | 79.5 | 218 | 133 | 205 | 170 | 215 | 12.4 | G |
| 40 | 3535 | 286TS | 92.4 | 91.0 | 93.6 | 93.5 | 91.5 | 90.5 | 86.5 | 44.3 | 98.0 | 290 | 59.4 | 210 | 170 | 250 | 2.13 | G |
| | 1775 | 324T | 94.1 | 93.0 | 94.5 | 94.1 | 83.0 | 82.0 | 77.0 | 48.0 | 102 | 290 | 119 | 220 | 165 | 215 | 6.86 | G |
| | 1180 | 364T | 94.1 | 93.0 | 94.5 | 94.1 | 87.0 | 84.0 | 77.0 | 45.7 | 101 | 290 | 178 | 215 | 175 | 235 | 16.6 | G |
| 50 | 3555 | 324TS | 93.0 | 91.7 | 93.6 | 93.6 | 86.0 | 83.0 | 77.0 | 58.5 | 129 | 363 | 73.8 | 170 | 140 | 250 | 2.91 | G |
| | 1775 | 326T | 94.5 | 93.6 | 94.5 | 95.0 | 84.0 | 82.5 | 76.5 | 59.0 | 129 | 363 | 148 | 220 | 175 | 205 | 8.62 | G |
| | 1180 | 365T | 94.1 | 93.0 | 94.5 | 94.1 | 86.0 | 83.0 | 75.0 | 57.8 | 128 | 363 | 222 | 225 | 180 | 235 | 18.6 | G |
| 60 | 3545 | 326TS | 93.6 | 92.4 | 94.1 | 93.6 | 87.0 | 85.0 | 78.5 | 69.0 | 153 | 435 | 88.6 | 180 | 140 | 250 | 3.59 | G |
| | 1780 | 364T | 95.0 | 94.1 | 95.0 | 92.5 | 85.0 | 82.0 | 74.0 | 69.6 | 154 | 435 | 177 | 195 | 170 | 245 | 10.8 | G |
| | 1180 | 404T | 94.5 | 93.6 | 95.0 | 95.4 | 85.5 | 83.5 | 76.5 | 69.5 | 154 | 435 | 267 | 200 | 180 | 225 | 24.9 | G |
| 75 | 3555 | 364TS | 94.1 | 93.0 | 94.5 | 93.6 | 90.5 | 89.0 | 83.0 | 82.5 | 182 | 543 | 111 | 160 | 150 | 250 | 5.87 | G |
| | 1780 | 365T | 95.0 | 94.1 | 95.0 | 95.0 | 86.0 | 84.0 | 77.0 | 86.0 | 190 | 543 | 221 | 180 | 155 | 225 | 11.7 | G |
| | 1180 | 405T | 94.5 | 93.6 | 95.0 | 94.5 | 86.5 | 85.5 | 79.0 | 86.0 | 190 | 543 | 334 | 220 | 200 | 250 | 31.4 | G |
| 100 | 3555 | 365TS | 94.1 | 93.0 | 94.5 | 94.5 | 90.5 | 88.0 | 84.0 | 110 | 243 | 725 | 148 | 150 | 140 | 260 | 7.04 | G |
| | 1780 | 404T | 95.4 | 94.5 | 95.8 | 95.4 | 85.5 | 83.5 | 76.0 | 115 | 254 | 725 | 295 | 210 | 165 | 210 | 20.6 | G |
| | 1181 | 444T | 95.0 | 94.1 | 94.5 | 93.3 | 82.0 | 78.9 | 75.0 | 120 | 265 | 725 | 445 | 140 | 120 | 210 | 45.0 | G |
| 125 | 3560 | 404TS | 94.1 | 93.0 | 94.1 | 94.1 | 90.5 | 87.5 | 83.0 | 137 | 304 | 908 | 184 | 140 | 120 | 250 | 8.38 | G |
| | 1780 | 405T | 95.4 | 94.5 | 95.0 | 94.5 | 84.5 | 82.0 | 74.5 | 145 | 321 | 908 | 369 | 225 | 165 | 205 | 24.1 | G |
| | 1181 | 445T | 95.0 | 94.1 | 94.5 | 93.3 | 82.0 | 79.2 | 75.4 | 150 | 332 | 908 | 556 | 140 | 120 | 210 | 54.8 | G |

PERFORMANCE DATA

3-PHASE SQUIRREL CAGE
HIGH EFFICIENCY INDUCTION MOTORS

MODEL
ASHH - -



DP, NEMA, T-FRAME, DESIGN - B or C
CLASS F, 40°C AMBIENT, CONTINUOUS DUTY,
S.F. 1.15 460V 60Hz

TYPICAL PERFORMANCE

(460V)

| HP | FULL LOAD RPM | FRAME SIZE | EFFICIENCY(%) | | | | POWER FACTOR(%) | | | CURRENT | | | TORQUE | | | | ROTOR WK ² lb-ft ² | NEMA CODE LETTER |
|-----|---------------------|---------------|---------------|------|-------------|-------------|-----------------|-------------|-------------|--------------|------------------------|------------------------|--------------|-----------------|------------|---------------|--|------------------------|
| | | | FULL LOAD | | 3/4 LOAD | 1/2 LOAD | FULL LOAD | 3/4 LOAD | 1/2 LOAD | FULL LOAD | 208V USABLE ON-A | LOCKED ROTOR (A) | FULL LOAD | LOCKED ROTOR | PULL UP | BREAK DOWN | | |
| | | | NOM. | MIN. | NOM. | NOM. | | | | (A) | | (A) | lb-ft | %FLT | %FLT | %FLT | | |
| 150 | 3560 | 405TS | 94.5 | 93.6 | 94.5 | 94.5 | 90.5 | 89.0 | 83.5 | 164 | 363 | 1085 | 221 | 140 | 120 | 250 | 10.0 | G |
| | 1779 | 444T | 95.8 | 95.0 | 95.3 | 94.4 | 86.0 | 83.0 | 78.5 | 170 | — | 1085 | 443 | 135 | 114 | 210 | 39.1 | G |
| | 1181 | 445T | 95.4 | 94.5 | 95.0 | 93.9 | 82.5 | 78.5 | 74.8 | 178 | — | 1085 | 667 | 130 | 109 | 205 | 66.6 | G |
| 200 | 3554 | 444TS | 95.0 | 94.1 | 94.6 | 93.5 | 88.5 | 87.7 | 84.6 | 223 | — | 1450 | 295 | 105 | 97 | 210 | 13.4 | G |
| | 1780 | 445T | 95.8 | 95.0 | 95.4 | 94.5 | 86.5 | 83.0 | 80.0 | 226 | — | 1450 | 590 | 125 | 105 | 205 | 48.1 | G |
| | 1182 | 447T | 95.4 | 94.5 | 95.0 | 94.1 | 83.0 | 80.0 | 76.0 | 236 | — | 1450 | 888 | 130 | 109 | 205 | 101 | G |
| 250 | 3558 | 445TS | 95.0 | 94.1 | 94.6 | 93.5 | 88.5 | 87.7 | 86.9 | 278 | — | 1825 | 369 | 105 | 97 | 210 | 16.3 | G |
| | 1782 | 447T | 95.8 | 95.0 | 95.4 | 94.5 | 87.0 | 83.5 | 80.5 | 281 | — | 1825 | 737 | 125 | 105 | 205 | 58.2 | G |
| | 1184 | 449T | 95.8 | 95.0 | 95.4 | 94.5 | 83.0 | 80.0 | 76.0 | 294 | — | 1825 | 1109 | 110 | 106 | 205 | 126 | G |
| 300 | 3559 | 445TS | 95.4 | 94.5 | 94.5 | 93.4 | 89.0 | 87.3 | 84.3 | 331 | — | 2200 | 443 | 105 | 97 | 205 | 19.1 | G |
| | 1783 | 449T | 95.8 | 95.0 | 95.4 | 94.5 | 87.5 | 84.0 | 81.0 | 335 | — | 2200 | 883 | 125 | 105 | 235 | 180 | G |
| | 1184 | 449T | 95.8 | 95.0 | 95.4 | 94.5 | 83.5 | 80.5 | 76.5 | 351 | — | 2200 | 1330 | 120 | 100 | 220 | 151 | G |
| 350 | 3562 | 447TS | 95.4 | 94.5 | 94.5 | 93.5 | 90.0 | 88.2 | 85.4 | 382 | — | 2550 | 516 | 100 | 92 | 200 | 32.2 | G |
| | 1783 | 449T | 95.8 | 95.0 | 95.5 | 94.6 | 87.5 | 84.0 | 81.0 | 391 | — | 2550 | 1031 | 120 | 100 | 230 | 77.3 | G |
| 400 | 3562 | 449TS | 95.8 | 95.0 | 95.4 | 94.5 | 90.0 | 88.3 | 85.4 | 434 | — | 2900 | 590 | 100 | 92 | 200 | 36.7 | G |
| | 1785 | 449T | 95.8 | 95.0 | 95.5 | 94.6 | 87.7 | 84.3 | 77.5 | 447 | — | 2900 | 1176 | 145 | 125 | 250 | 90.9 | G |
| 450 | 3562 | 449TS | 96.2 | 95.4 | 95.6 | 95.2 | 90.5 | 88.8 | 82.0 | 484 | — | 3250 | 662 | 145 | 125 | 220 | 41.1 | G |
| 500 | 3562 | 449TS | 96.2 | 95.4 | 95.6 | 95.4 | 91.0 | 89.0 | 85.0 | 535 | — | 3625 | 735 | 140 | 120 | 225 | 44.5 | G |

- NOTE :
1. The above are typical values based on test according to ANSI/IEEE standard 112 method B.
 2. Breakdown & locked rotor torques are shown as average expected values.
 3. Efficiency, power factor, speed and torque are the same for other voltages.
Current values vary inversely with voltage.
 4. Tolerance According to NEMA MG1-12 & IEC 34-1.
 5. Data subject to change without notice.

OUTLINE DIMENSIONS SHEET

MODEL

ASHH - -

3-PHASE INDUCTION MOTORS
FRAME SIZE 143T ~ 215T

Open Drip Proof Squirrel - Cage Rotor

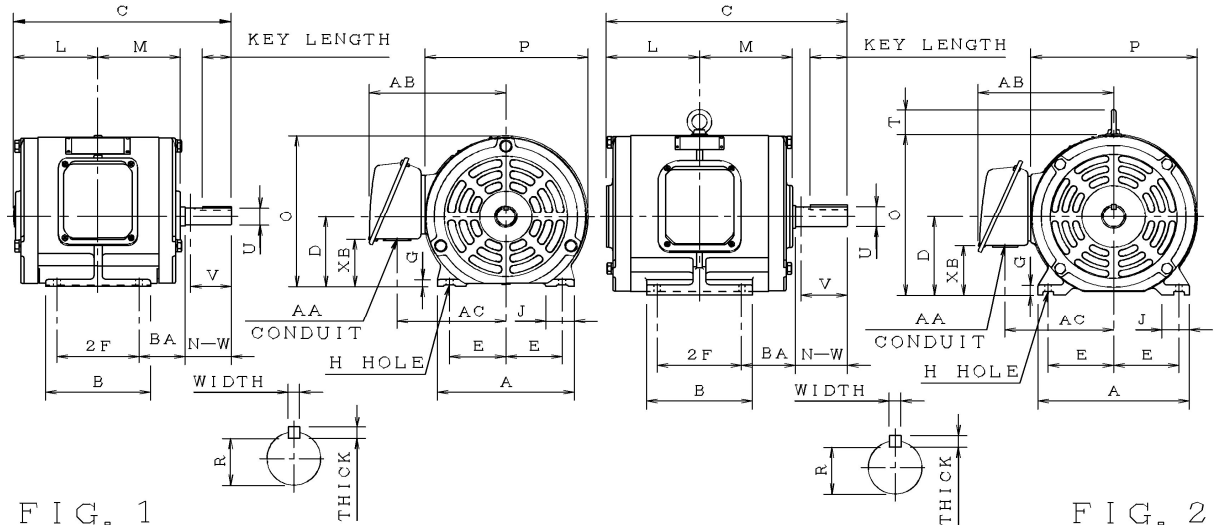


FIG. 1

FIG. 2

Dimension in inches

| Output (HP) | | | FRAME SIZE | FIG. NO. | Mounting | | | | A | B | C | D | G | J | L | M | O | P |
|-------------|----------|-----|------------|----------|----------|------|------|------|------|------|-------|------|------|------|------|------|-------|-------|
| 2P | 4P | 6P | | | E | 2F | H | BA | | | | | | | | | | |
| 1.5 | 1 | — | 143T | 1 | 2.75 | 4.00 | 0.34 | 2.25 | 6.70 | 5.10 | 10.65 | 3.50 | 0.35 | 1.40 | 4.15 | 4.00 | 7.50 | 7.87 |
| 2 3 | 1.5 2 | 1 | 145T | | 2.75 | 5.00 | 0.34 | 2.25 | 6.70 | 5.90 | 11.65 | 3.50 | 0.35 | 1.40 | 4.65 | 4.50 | 7.50 | 7.87 |
| 5 | 3 | 1.5 | 182T | 2 | 3.75 | 4.50 | 0.41 | 2.75 | 8.80 | 5.90 | 12.75 | 4.50 | 0.65 | 1.75 | 5.00 | 4.85 | 9.25 | 9.37 |
| 7.5 | 5 | 2 | 184T | | 3.75 | 5.50 | 0.41 | 2.75 | 8.80 | 6.90 | 13.75 | 4.50 | 0.65 | 1.75 | 5.50 | 5.35 | 9.25 | 9.37 |
| 10 | 7.5 | 3 | 213T | | 4.25 | 5.50 | 0.41 | 3.50 | 9.85 | 6.90 | 15.68 | 5.25 | 0.70 | 1.75 | 6.05 | 6.05 | 10.70 | 10.75 |
| 15 | 10 | 5 | 215T | | 4.25 | 7.00 | 0.41 | 3.50 | 9.85 | 8.35 | 17.18 | 5.25 | 0.70 | 1.75 | 6.80 | 6.80 | 10.70 | 10.75 |

| FRAME SIZE | T | Key | | | Keyseat | Shaft Extension | | | Terminal Housing | | | | Bearings | | APPROX. WEIGHT LBS |
|------------|------|-------|-------|--------|---------|-----------------|-------|------|------------------|------|------|------|-----------|--------------------|--------------------|
| | | WIDTH | THICK | LENGTH | R | N-W | U | V | AA | AB | AC | XB | DRIVE END | OPPOSITE DRIVE END | |
| 143T | — | 0.188 | 0.188 | 1.41 | 0.771 | 2.25 | 0.875 | 2.20 | 1.10 | 6.70 | 5.30 | 2.30 | 6205ZZ | 6205ZZ | 53 |
| 145T | — | 0.188 | 0.188 | 1.41 | 0.771 | 2.25 | 0.875 | 2.20 | 1.10 | 6.70 | 5.30 | 2.30 | 6205ZZ | 6205ZZ | 66 |
| 182T | 1.30 | 0.250 | 0.250 | 1.78 | 0.986 | 2.75 | 1.125 | 2.70 | 1.10 | 7.45 | 6.05 | 3.30 | 6306ZZ | 6306ZZ | 95 |
| 184T | 1.30 | 0.250 | 0.250 | 1.78 | 0.986 | 2.75 | 1.125 | 2.70 | 1.10 | 7.45 | 6.05 | 3.30 | 6306ZZ | 6306ZZ | 106 |
| 213T | 1.65 | 0.312 | 0.312 | 2.41 | 1.201 | 3.38 | 1.375 | 3.30 | 1.38 | 8.80 | 7.10 | 3.35 | 6308ZZ | 6306ZZ | 167 |
| 215T | 1.65 | 0.312 | 0.312 | 2.41 | 1.201 | 3.38 | 1.375 | 3.30 | 1.38 | 8.80 | 7.10 | 3.35 | 6308ZZ | 6306ZZ | 194 |

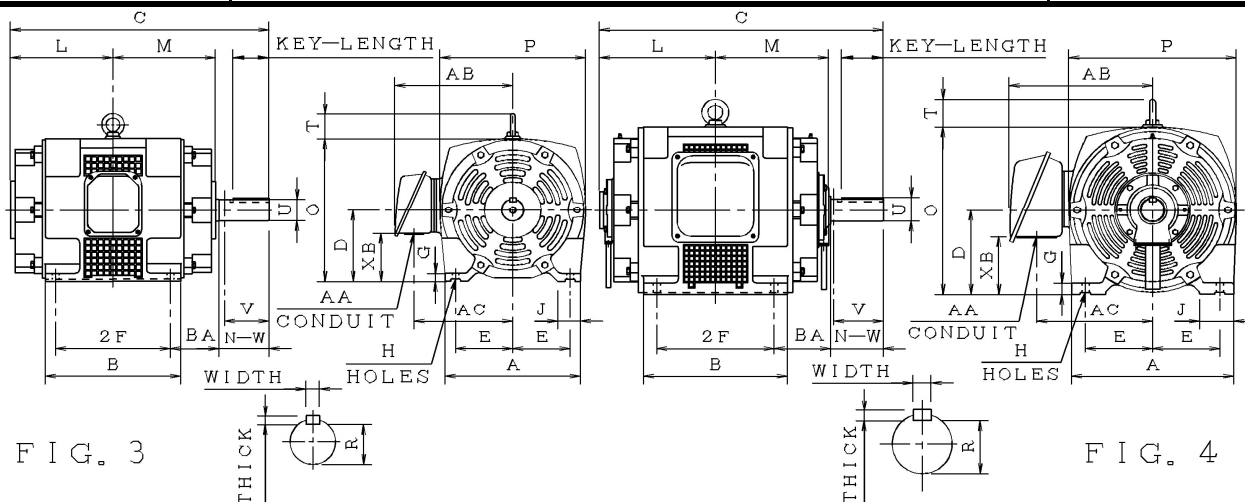
- Note :**
1. Dimension D tolerance : +0.00 inch, -0.03 inch.
 2. Dimension U tolerance : +0.000 inch, -0.0005 inch.
 3. Dimension R tolerance : +0.000 inch, -0.015 inch.
 4. Dimension V is length of straight part of shaft.

OUTLINE DIMENSIONS SHEET

3-PHASE INDUCTION MOTORS
FRAME SIZE 254T ~ 365TS

MODEL

ASHH - -



Dimension in inches

| Output (HP) | | | FRAME SIZE | FIG. NO. | Mounting | | | | A | B | C | D | G | J | L | M | O | P |
|-------------|----|-----|------------|----------|----------|-------|------|-------|-------|-------|-------|------|------|-------|-------|-------|-------|-------|
| 2P | 4P | 6P | | | E | 2F | H | BA | | | | | | | | | | |
| 20 | 15 | 7.5 | 254T | 3 | 5.00 | 8.25 | 0.53 | 4.25 | 11.80 | 9.85 | 20.46 | 6.25 | 0.65 | 1.95 | 8.08 | 8.05 | 12.70 | 12.70 |
| 25 | 20 | 10 | 256T | | 5.00 | 10.00 | 0.53 | 4.25 | 11.80 | 11.80 | 22.19 | 6.25 | 0.65 | 1.95 | 8.95 | 8.95 | 12.70 | 12.70 |
| - | 25 | 15 | 284T | | 5.50 | 9.50 | 0.53 | 4.75 | 14.00 | 11.54 | 22.88 | 7.00 | 0.70 | 2.95 | 8.76 | 8.76 | 14.20 | 14.55 |
| 30 | - | - | 284TS | 4 | 5.50 | 9.50 | 0.53 | 4.75 | 14.00 | 11.54 | 22.62 | 7.00 | 0.70 | 2.95 | 9.85 | 9.30 | 14.20 | 14.55 |
| - | 30 | 20 | 286T | 3 | 5.50 | 11.00 | 0.53 | 4.75 | 14.00 | 13.20 | 24.38 | 7.00 | 0.70 | 2.95 | 9.51 | 9.51 | 14.20 | 14.55 |
| 40 | - | - | 286TS | 4 | 5.50 | 11.00 | 0.53 | 4.75 | 14.00 | 13.20 | 24.11 | 7.00 | 0.70 | 2.95 | 10.60 | 10.05 | 14.20 | 14.55 |
| - | 40 | 25 | 324T | | 6.25 | 10.50 | 0.66 | 5.25 | 15.75 | 12.80 | 26.60 | 8.00 | 1.10 | 3.15 | 10.85 | 10.30 | 16.05 | 16.10 |
| 50 | - | - | 324TS | | 6.25 | 10.50 | 0.66 | 5.25 | 15.75 | 12.80 | 25.10 | 8.00 | 1.10 | 3.15 | 10.85 | 10.30 | 16.05 | 16.10 |
| - | 50 | 30 | 326T | | 6.25 | 12.00 | 0.66 | 5.25 | 15.75 | 14.35 | 28.09 | 8.00 | 1.10 | 3.15 | 11.60 | 11.05 | 16.05 | 16.10 |
| 60 | - | - | 326TS | | 6.25 | 12.00 | 0.66 | 5.25 | 15.75 | 14.35 | 26.60 | 8.00 | 1.10 | 3.15 | 11.60 | 11.05 | 16.05 | 16.10 |
| - | 60 | 40 | 364T | | 7.00 | 11.25 | 0.66 | 5.88 | 16.93 | 14.00 | 28.97 | 9.00 | 1.30 | 3.55 | 11.58 | 11.29 | 17.95 | 17.50 |
| 75 | - | - | 364TS | | 7.00 | 11.25 | 0.66 | 5.88 | 16.93 | 14.00 | 26.84 | 9.00 | 1.30 | 3.55 | 11.58 | 11.29 | 17.95 | 17.50 |
| - | 75 | 50 | 365T | | 7.00 | 12.25 | 0.66 | 5.88 | 16.93 | 14.95 | 29.95 | 9.00 | 1.30 | 3.55 | 12.07 | 11.80 | 17.95 | 17.50 |
| 100 | - | - | 365TS | 7.00 | 12.25 | 0.66 | 5.88 | 16.93 | 14.95 | 27.82 | 9.00 | 1.30 | 3.55 | 12.07 | 11.80 | 17.95 | 17.50 | |

| FRAME SIZE | T | Key | | | Keyseat R | Shaft Extension | | | Terminal Housing | | | | Bearings | | APPROX. WEIGHT LBS |
|------------|------|-------|-------|--------|-----------|-----------------|-------|------|------------------|-------|-------|------|-----------|--------------------|--------------------|
| | | WIDTH | THICK | LENGTH | | N-W | U | V | AA | AB | AC | XB | DRIVE END | OPPOSITE DRIVE END | |
| 254T | 2.00 | 0.375 | 0.375 | 2.91 | 1.416 | 4.00 | 1.625 | 3.90 | 1.38 | 10.28 | 8.58 | 4.20 | 6310ZZ | 6309ZZ | 247 |
| 256T | 2.00 | 0.375 | 0.375 | 2.91 | 1.416 | 4.00 | 1.625 | 3.90 | 1.38 | 10.28 | 8.58 | 4.20 | 6310ZZ | 6309ZZ | 287 |
| 284T | 2.35 | 0.500 | 0.500 | 3.28 | 1.591 | 4.62 | 1.875 | 4.50 | 2.05 | 12.08 | 9.84 | 4.60 | 6311ZZ | 6310ZZ | 357 |
| 284TS | 2.35 | 0.375 | 0.375 | 1.93 | 1.416 | 3.25 | 1.625 | 3.20 | 2.05 | 12.08 | 9.84 | 4.60 | 6212C3 | 6211C3 | 370 |
| 286T | 2.35 | 0.500 | 0.500 | 3.28 | 1.591 | 4.62 | 1.875 | 4.50 | 2.05 | 12.08 | 9.84 | 4.60 | 6311ZZ | 6310ZZ | 397 |
| 286TS | 2.35 | 0.375 | 0.375 | 1.93 | 1.416 | 3.25 | 1.625 | 3.20 | 2.05 | 12.08 | 9.84 | 4.60 | 6212C3 | 6211C3 | 412 |
| 324T | 2.35 | 0.500 | 0.500 | 3.91 | 1.845 | 5.25 | 2.125 | 5.15 | 2.56 | 13.45 | 10.98 | 5.20 | NU213 | 6213 | 520 |
| 324TS | 2.35 | 0.500 | 0.500 | 2.03 | 1.591 | 3.75 | 1.875 | 3.65 | 2.56 | 13.45 | 10.98 | 5.20 | 6213C3 | 6213C3 | 518 |
| 326T | 2.35 | 0.500 | 0.500 | 3.91 | 1.845 | 5.25 | 2.125 | 5.15 | 2.56 | 13.45 | 10.98 | 5.20 | NU213 | 6213 | 595 |
| 326TS | 2.35 | 0.500 | 0.500 | 2.03 | 1.591 | 3.75 | 1.875 | 3.65 | 2.56 | 13.45 | 10.98 | 5.20 | 6213C3 | 6213C3 | 578 |
| 364T | 2.80 | 0.625 | 0.625 | 4.28 | 2.021 | 5.88 | 2.375 | 5.75 | 3.62 | 14.90 | 12.09 | 6.17 | 6314 | 6213 | 699 |
| 364TS | 2.80 | 0.500 | 0.500 | 2.03 | 1.591 | 3.75 | 1.875 | 3.65 | 3.62 | 14.90 | 12.09 | 6.17 | 6313C3 | 6213C3 | 666 |
| 365T | 2.80 | 0.625 | 0.625 | 4.28 | 2.021 | 5.88 | 2.375 | 5.75 | 3.62 | 14.90 | 12.09 | 6.17 | 6314 | 6213 | 772 |
| 365TS | 2.80 | 0.500 | 0.500 | 2.03 | 1.591 | 3.75 | 1.875 | 3.65 | 3.62 | 14.90 | 12.09 | 6.17 | 6313C3 | 6213C3 | 730 |

- Note :**
1. Dimension D tolerance : +0.00 inch, -0.03 inch.
 2. Dimension U tolerance : +0.000 inch, -0.001 inch.
 3. Dimension R tolerance : +0.000 inch, -0.015 inch.
 4. Dimension V is length of straight part of shaft.

OUTLINE DIMENSIONS SHEET

MODEL

ASHH - -

3-PHASE INDUCTION MOTORS
FRAME SIZE 404T ~ 405TS

Open Drip Proof Squirrel - Cage Rotor

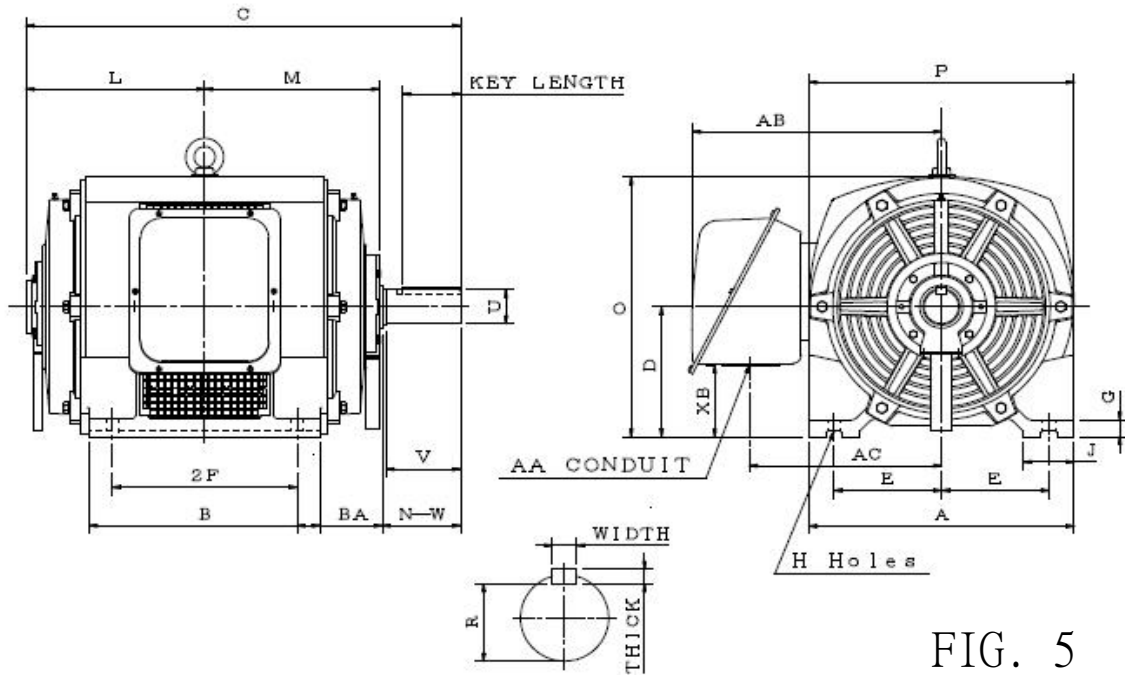


FIG. 5

| Output (HP) | | | FRAME SIZE | FIG. NO. | Mounting | | | | A | B | C | D | G | J | L | M | O | P |
|-------------|-----|----|------------|----------|----------|-------|------|------|-------|-------|-------|-------|------|------|-------|-------|-------|-------|
| 2P | 4P | 6P | | | E | 2F | H | BA | | | | | | | | | | |
| - | 100 | 60 | 404T | 5 | 8.00 | 12.25 | 0.81 | 6.62 | 19.68 | 15.66 | 32.83 | 10.00 | 1.41 | 3.74 | 12.83 | 12.24 | 19.96 | 19.68 |
| 125 | - | - | 404TS | | 8.00 | 12.25 | 0.81 | 6.62 | 19.68 | 15.66 | 29.83 | 10.00 | 1.41 | 3.74 | 12.83 | 12.24 | 19.96 | 19.68 |
| - | 125 | 75 | 405T | | 8.00 | 13.75 | 0.81 | 6.62 | 19.68 | 17.16 | 34.33 | 10.00 | 1.41 | 3.74 | 13.58 | 12.99 | 19.96 | 19.68 |
| 150 | - | - | 405TS | | 8.00 | 13.75 | 0.81 | 6.62 | 19.68 | 17.16 | 31.33 | 10.00 | 1.41 | 3.74 | 13.58 | 12.99 | 19.96 | 19.68 |

| FRAME SIZE | T | Key | | | Keyseat | Shaft Extension | | | Terminal Housing | | | | Bearings | | APPROX. WEIGHT LBS |
|------------|------|-------|-------|--------|---------|-----------------|-------|------|------------------|-------|-------|------|-----------|--------------------|--------------------|
| | | WIDTH | THICK | LENGTH | R | N-W | U | V | AA | AB | AC | XB | DRIVE END | OPPOSITE DRIVE END | |
| 404T | 3.54 | 0.75 | 0.75 | 5.65 | 2.450 | 7.25 | 2.875 | 7.15 | 3.62 | 18.64 | 14.33 | 5.63 | 6317 | 6317 | 948 |
| 404TS | 3.54 | 0.50 | 0.50 | 2.78 | 1.845 | 4.25 | 2.125 | 4.15 | 3.62 | 18.64 | 14.33 | 5.63 | 6313C3 | 6313C3 | 902 |
| 405T | 3.54 | 0.75 | 0.75 | 5.65 | 2.450 | 7.25 | 2.875 | 7.15 | 3.62 | 18.64 | 14.33 | 5.63 | 6317 | 6317 | 1058 |
| 405TS | 3.54 | 0.50 | 0.50 | 2.78 | 1.845 | 4.25 | 2.125 | 4.15 | 3.62 | 18.64 | 14.33 | 5.63 | 6313C3 | 6313C3 | 981 |

- Note :**
1. Dimension D tolerance : +0.00 inch, -0.03 inch.
 2. Dimension U tolerance : +0.000 inch, -0.001 inch.
 3. Dimension R tolerance : +0.000 inch, -0.015 inch.
 4. Dimension V is length of straight part of shaft.
 5. For Direct Flexible Coupling.

OUTLINE DIMENSIONS SHEET

MODEL
ASHH - -

3-PHASE INDUCTION MOTORS
FRAME SIZE 444 ~ 449 T & TS

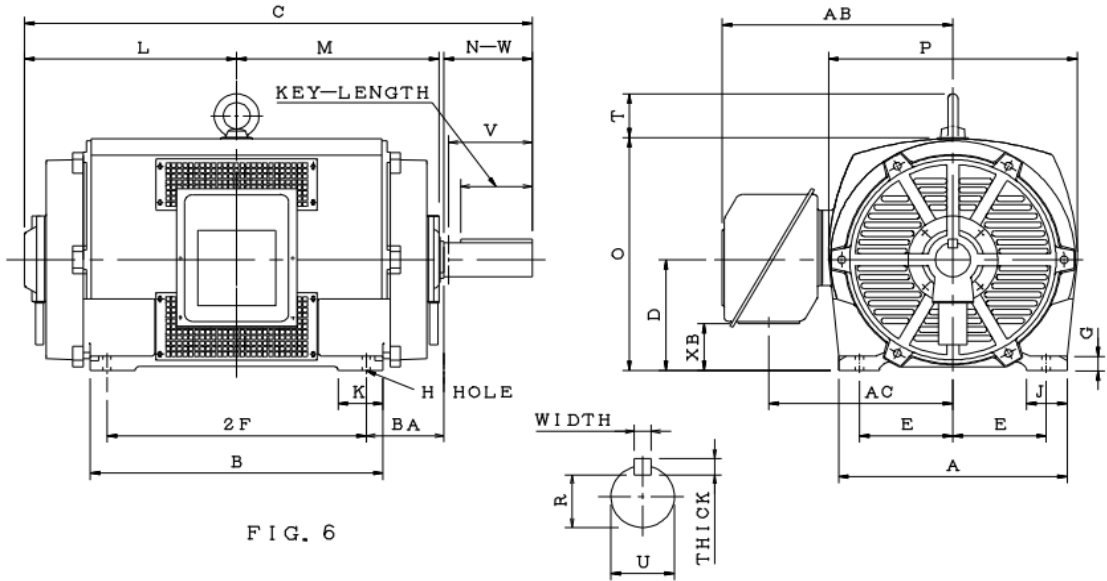


FIG. 6

Dimension in inches

| Output (HP) | | | FRAME SIZE | FIG. NO. | Mounting | | | | A | B | C | D | G | J | K | L | M |
|-----------------|-----------------|---------|------------|----------|----------|-------|-------|------|-------|-------|-------|-------|------|------|------|-------|-------|
| 2P | 4P | 6P | | | E | 2F | H | BA | | | | | | | | | |
| - | 150 | 100 | 444T | 6 | 9.00 | 14.50 | 13/16 | 7.50 | 22.05 | 17.70 | 38.30 | 11.00 | 1.40 | 3.95 | 3.75 | 15.05 | 14.30 |
| 200 | - | - | 444TS | | 9.00 | 14.50 | 13/16 | 7.50 | 22.05 | 17.70 | 34.35 | 11.00 | 1.40 | 3.95 | 3.75 | 14.85 | 14.30 |
| - | 200 | 125,150 | 445T | | 9.00 | 16.50 | 13/16 | 7.50 | 22.05 | 19.70 | 40.30 | 11.00 | 1.40 | 3.95 | 3.75 | 16.05 | 15.25 |
| 250,300 | - | - | 445TS | | 9.00 | 16.50 | 13/16 | 7.50 | 22.05 | 19.70 | 36.35 | 11.00 | 1.40 | 3.95 | 3.75 | 15.85 | 15.25 |
| - | 250 | 200 | 447T | | 9.00 | 20.00 | 13/16 | 7.50 | 22.05 | 23.25 | 43.95 | 11.00 | 1.40 | 3.95 | 4.35 | 17.95 | 17.35 |
| 350 | - | - | 447TS | | 9.00 | 20.00 | 13/16 | 7.50 | 22.05 | 23.25 | 40.20 | 11.00 | 1.40 | 3.95 | 4.35 | 17.95 | 17.15 |
| - | 300,350 .400 | 250,300 | 449T | | 9.00 | 25.00 | 13/16 | 7.50 | 22.05 | 27.95 | 48.95 | 11.00 | 1.40 | 3.95 | 4.35 | 20.45 | 19.85 |
| 400,450 .500 | - | - | 449TS | | 9.00 | 25.00 | 13/16 | 7.50 | 22.05 | 27.95 | 45.20 | 11.00 | 1.40 | 3.95 | 4.35 | 20.45 | 19.65 |

| FRAME SIZE | O | P | T | Key | | | Keyseat | Shaft Extension | | | Terminal Housing | | | Bearings | |
|------------|-------|-------|------|-------|-------|--------|---------|-----------------|-------|------|------------------|-------|------|-----------|--------------------|
| | | | | WIDTH | THICK | LENGTH | R | N-W | U | V | AB | AC | XB | DRIVE END | OPPOSITE DRIVE END |
| 444T | 22.15 | 22.05 | 3.54 | 0.875 | 0.875 | 6.91 | 2.880 | 8.50 | 3.375 | 8.00 | 21.23 | 16.75 | 4.65 | NU318 | 6316 |
| 444TS | 22.15 | 22.05 | 3.54 | 0.625 | 0.625 | 3.03 | 2.021 | 4.75 | 2.375 | 4.50 | 21.23 | 16.75 | 4.65 | 6314C3 | 6314C3 |
| 445T | 22.15 | 22.05 | 3.54 | 0.875 | 0.875 | 6.91 | 2.880 | 8.50 | 3.375 | 8.00 | 21.23 | 16.75 | 4.65 | NU318 | 6316 |
| 445TS | 22.15 | 22.05 | 3.54 | 0.625 | 0.625 | 3.03 | 2.021 | 4.75 | 2.375 | 4.50 | 21.23 | 16.75 | 4.65 | 6314C3 | 6314C3 |
| 447T | 23.15 | 24.00 | 4.35 | 0.875 | 0.875 | 6.91 | 2.880 | 8.50 | 3.375 | 8.00 | 22.25 | 17.70 | 4.65 | NU320 | 6316 |
| 447TS | 23.15 | 24.00 | 4.35 | 0.625 | 0.625 | 3.03 | 2.021 | 4.75 | 2.375 | 4.50 | 22.25 | 17.70 | 4.65 | 6314C3 | 6314C3 |
| 449T | 23.15 | 24.00 | 4.35 | 0.875 | 0.875 | 6.91 | 2.880 | 8.50 | 3.375 | 8.00 | 22.25 | 17.70 | 4.65 | NU320 | 6316 |
| 449TS | 23.15 | 24.00 | 4.35 | 0.625 | 0.625 | 3.03 | 2.021 | 4.75 | 2.375 | 4.50 | 22.25 | 17.70 | 4.65 | 6314C3 | 6314C3 |

- Note :**
1. Dimension D tolerance : +0.00 inch, -0.06 inch.
 2. Dimension U tolerance : +0.000 inch, -0.001 inch.
 3. Dimension R tolerance : +0.000 inch, -0.015 inch.
 4. Dimension V is length of straight part of shaft.
 5. For Direct Flexible Coupling