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LT Motors

Slip Ring Motors

Cat No: LTM/Cat/01/Dec.2009



AVANTHA
GROUP COMPANY





PERFORMANCE FIGURES OF TEFC SLIPRING MOTORS FOR 45°C / 75°C

| OUTPUT | | P O L E | FRAME SIZE | FL RPM | FLC AMPS. | EFFICIENCY (%) | | | POWER FACTOR | | | OC ROTOR VOLTS | ROTOR CURRENT AMPS | GD. ² KGM. ² | NET WT. kg. |
|--------|-------|------------------|---------------|-----------|--------------|----------------|-------------|-------------|--------------|-------------|-------------|----------------------|--------------------------|---------------------------------------|-------------------|
| kW | HP | | | | | FL | 3/4 LOAD | 1/2 LOAD | FL | 3/4 LOAD | 1/2 LOAD | | | | |
| 3.0 | 4.0 | 8 | NDW160M | 690 | 8.0 | 80.0 | 79.0 | 77.0 | 0.68 | 0.64 | 0.56 | 230 | 8.0 | 0.58 | 141 |
| 3.7 | 5.0 | 8 | NDW160M | 710 | 9.0 | 81.0 | 80.0 | 78.0 | 0.68 | 0.64 | 0.56 | 230 | 10.0 | 0.58 | 141 |
| 5.5 | 7.5 | 6 | NDW160M | 940 | 12.0 | 83.0 | 82.0 | 80.0 | 0.76 | 0.74 | 0.66 | 180 | 18.5 | 0.58 | 141 |
| | | 8 | NDW160L | 710 | 14.0 | 82.0 | 81.0 | 79.0 | 0.68 | 0.64 | 0.56 | 360 | 10.0 | 0.80 | 165 |
| 7.5 | 10.0 | 4 | NDW160M | 1440 | 15.0 | 83.0 | 82.0 | 80.0 | 0.84 | 0.80 | 0.72 | 350 | 13.0 | 0.48 | 141 |
| | | 6 | NDW160L | 940 | 17.0 | 83.0 | 82.0 | 80.0 | 0.76 | 0.72 | 0.64 | 260 | 19.0 | 0.77 | 165 |
| | | 8 | NDW180L | 710 | 18.0 | 84.0 | 83.0 | 81.0 | 0.68 | 0.64 | 0.56 | 350 | 13.0 | 1.58 | 235 |
| 9.3 | 12.5 | 4 | NDW160L | 1440 | 18.0 | 84.0 | 83.0 | 81.0 | 0.84 | 0.80 | 0.72 | 350 | 16.0 | 0.35 | 165 |
| | | 6 | NDW180M | 950 | 18.0 | 86.0 | 85.0 | 83.0 | 0.82 | 0.78 | 0.70 | 230 | 24.0 | 1.33 | 205 |
| | | 8 | NDW200L | 725 | 22.0 | 86.0 | 85.0 | 83.0 | 0.68 | 0.64 | 0.76 | 300 | 19.5 | 2.68 | 313 |
| 11.0 | 15.0 | 4 | NDW160L | 1440 | 22.0 | 84.0 | 83.0 | 81.0 | 0.84 | 0.80 | 0.72 | 350 | 19.0 | 0.35 | 165 |
| | | 6 | NDW180L | 950 | 22.0 | 86.0 | 85.0 | 83.0 | 0.82 | 0.78 | 0.70 | 230 | 28.5 | 1.58 | 235 |
| | | 8 | NDW200L | 725 | 26.0 | 87.0 | 86.0 | 84.0 | 0.68 | 0.64 | 0.56 | 300 | 23.0 | 2.68 | 313 |
| 15.0 | 20.0 | 4 | NDW180L | 1445 | 28.0 | 88.0 | 87.0 | 85.0 | 0.84 | 0.80 | 0.72 | 350 | 27.0 | 1.26 | 235 |
| | | 6 | NDW200L | 970 | 29.0 | 89.0 | 88.0 | 86.0 | 0.82 | 0.78 | 0.70 | 295 | 31.0 | 2.68 | 313 |
| | | 8 | NDW225M | 730 | 34.0 | 87.0 | 86.0 | 84.0 | 0.70 | 0.66 | 0.58 | 350 | 27.0 | 3.06 | 410 |
| 18.5 | 25.0 | 4 | NDW200L | 1470 | 34.0 | 89.0 | 88.0 | 86.0 | 0.84 | 0.80 | 0.72 | 300 | 36.0 | 2.18 | 313 |
| | | 6 | NDW225M | 970 | 35.0 | 89.0 | 88.0 | 86.0 | 0.82 | 0.78 | 0.70 | 310 | 37.0 | 2.87 | 410 |
| | | 8 | NDW225M | 730 | 42.0 | 88.0 | 87.0 | 85.0 | 0.70 | 0.66 | 0.58 | 360 | 32.0 | 3.63 | 410 |
| 22.0 | 30.0 | 4 | NDW200L | 1470 | 40.0 | 89.0 | 88.0 | 86.0 | 0.85 | 0.81 | 0.73 | 390 | 33.0 | 2.34 | 313 |
| | | 6 | NDW225M | 970 | 42.0 | 89.0 | 88.0 | 86.0 | 0.82 | 0.78 | 0.70 | 350 | 40.0 | 3.25 | 410 |
| | | 8 | NDW250M | 730 | 45.0 | 91.0 | 90.0 | 88.0 | 0.74 | 0.70 | 0.62 | 250 | 55.0 | 6.81 | 513 |
| 30.0 | 40.0 | 4 | NDW225M | 1470 | 55.0 | 89.0 | 88.0 | 86.0 | 0.85 | 0.81 | 0.73 | 380 | 47.0 | 2.96 | 410 |
| | | 6 | NDW250M | 975 | 56.0 | 91.0 | 90.0 | 88.0 | 0.82 | 0.78 | 0.70 | 320 | 56.0 | 6.81 | 513 |
| | | 8 | NDW280S | 735 | 62.0 | 91.0 | 90.0 | 88.0 | 0.74 | 0.70 | 0.62 | 440 | 43.0 | 12.89 | 650 |
| 37.0 | 50.0 | 4 | NDW250M | 1475 | 67.0 | 91.0 | 91.0 | 89.0 | 0.85 | 0.81 | 0.73 | 425 | 52.0 | 4.96 | 513 |
| | | 6 | NDW280S | 980 | 67.0 | 91.0 | 90.0 | 88.0 | 0.84 | 0.80 | 0.72 | 410 | 57.0 | 12.89 | 650 |
| | | 8 | NDW280M | 735 | 76.0 | 91.0 | 90.0 | 88.0 | 0.74 | 0.70 | 0.62 | 520 | 45.0 | 15.14 | 720 |
| 45.0 | 60.0 | 4 | NDW250M | 1475 | 82.0 | 90.0 | 89.0 | 87.0 | 0.85 | 0.81 | 0.73 | 445 | 60.0 | 5.70 | 513 |
| | | 6 | NDW280M | 980 | 80.0 | 91.5 | 91.0 | 89.0 | 0.85 | 0.81 | 0.73 | 320 | 87.0 | 15.14 | 720 |
| | | 8 | NDW315S | 735 | 93.0 | 91.0 | 90.0 | 88.0 | 0.74 | 0.70 | 0.62 | 320 | 88.0 | 21.66 | 950 |
| 55.0 | 75.0 | 4 | NDW280S | 1480 | 97.0 | 91.5 | 91.0 | 89.0 | 0.86 | 0.82 | 0.74 | 460 | 73.0 | 10.61 | 650 |
| | | 6 | NDW315S | 980 | 98.0 | 92.0 | 91.0 | 89.0 | 0.85 | 0.81 | 0.73 | 535 | 62.0 | 22.00 | 950 |
| | | 8 | NDW315M | 735 | 112.0 | 91.0 | 90.0 | 88.0 | 0.75 | 0.71 | 0.63 | 320 | 108.0 | 24.16 | 1000 |
| 75.0 | 100.0 | 4 | NDW280M | 1480 | 130.0 | 92.5 | 92.0 | 90.0 | 0.87 | 0.83 | 0.75 | 490 | 92.0 | 12.45 | 720 |
| | | 6 | NDW315M | 980 | 132.0 | 93.0 | 92.0 | 90.0 | 0.85 | 0.81 | 0.73 | 470 | 96.0 | 24.16 | 1000 |
| | | 8 | NDW315LX | 730 | 155.0 | 91.0 | 90.0 | 88.0 | 0.74 | 0.67 | 0.56 | 357 | 128.0 | 28.00 | 1000 |
| 90.0 | 120.0 | 4 | NDW315S | 1480 | 157.0 | 92.5 | 92.0 | 90.0 | 0.86 | 0.82 | 0.74 | 505 | 106.0 | 18.22 | 950 |
| | | 6 | NDW315LX | 985 | 169.0 | 92.5 | 92.0 | 90.0 | 0.84 | 0.80 | 0.70 | 357 | 140.0 | 24.26 | 1220 |
| | | 8 | NDW315LX | 735 | 185.0 | 91.5 | 90.5 | 88.0 | 0.74 | 0.67 | 0.56 | 410 | 133.0 | 33.20 | 1220 |
| 110.0 | 150.0 | 4 | NDW315M | 1485 | 192.0 | 92.5 | 92.0 | 90.0 | 0.86 | 0.82 | 0.74 | 500 | 132.0 | 20.21 | 1000 |
| | | 6 | NDW315LX | 985 | 191.0 | 93.0 | 92.0 | 90.0 | 0.86 | 0.82 | 0.74 | 410 | 160.0 | 28.00 | 1220 |
| | | 8 | NDW355LX | 740 | 224.0 | 92.5 | 92.0 | 90.0 | 0.74 | 0.70 | 0.60 | 410 | 170.0 | 42.60 | 1260 |
| 125.0 | 175.0 | 4 | NDW315LX | 1480 | 217.0 | 93.0 | 92.0 | 90.0 | 0.86 | 0.82 | 0.70 | 345 | 215.0 | 18.90 | 1220 |
| | | 6 | NDW315LX | 985 | 211.0 | 93.8 | 93.0 | 91.0 | 0.88 | 0.84 | 0.70 | 345 | 214.0 | 33.20 | 1220 |
| | | 8 | NDW355LX | 740 | 261.0 | 92.5 | 91.5 | 89.0 | 0.72 | 0.66 | 0.54 | 460 | 170.0 | 47.80 | 1260 |
| 132.0 | 180.0 | 4 | NDW315LX | 1480 | 230.0 | 93.0 | 92.0 | 90.0 | 0.86 | 0.82 | 0.70 | 345 | 227.0 | 18.90 | 1220 |
| | | 6 | NDW315LX | 985 | 222.0 | 94.0 | 93.0 | 91.0 | 0.88 | 0.84 | 0.70 | 345 | 225.0 | 33.20 | 1220 |
| | | 8 | NDW355LX | 740 | 268.0 | 92.5 | 91.5 | 89.0 | 0.74 | 0.68 | 0.56 | 460 | 180.0 | 47.80 | 1260 |
| 150.0 | 200.0 | 4 | NDW315LX | 1480 | 260.0 | 93.5 | 92.5 | 91.0 | 0.86 | 0.82 | 0.70 | 440 | 202.0 | 23.60 | 1220 |
| | | 6 | NDW355LX | 988 | 263.0 | 94.5 | 94.0 | 92.0 | 0.84 | 0.78 | 0.66 | 400 | 235.0 | 38.20 | 1260 |
| | | 8 | NDW355LX | 740 | 292.0 | 93.0 | 92.3 | 90.5 | 0.77 | 0.72 | 0.60 | 530 | 174.0 | 57.20 | 1260 |
| 160.0 | 215.0 | 4 | NDW315LX | 1480 | 277.0 | 93.5 | 92.5 | 91.0 | 0.86 | 0.82 | 0.70 | 440 | 215.0 | 23.60 | 1220 |
| | | 6 | NDW355LX | 988 | 280.0 | 94.5 | 94.0 | 92.0 | 0.84 | 0.78 | 0.66 | 400 | 250.0 | 39.60 | 1260 |
| | | 8 | NDW355LX | 740.0 | 311.0 | 93.0 | 92.3 | 90.5 | 0.77 | 0.72 | 0.60 | 530.0 | 185.0 | 57.2 | 1260 |



PERFORMANCE FIGURES OF TEFC SR MOTORS FOR 45°C / 75°C

| OUTPUT | | P O L E | FRAME SIZE | FL RPM | FLC AMPS. | EFFICIENCY (%) | | | POWER FACTOR | | | OC ROTOR VOLTS | ROTOR CURRENT AMPS | GD. ² KGM. ² | NET WT. kg. |
|--------|-------|------------------|---------------|-----------|--------------|----------------|-------------|-------------|--------------|-------------|-------------|----------------------|--------------------------|---------------------------------------|-------------------|
| kW | HP | | | | | FL | 3/4 LOAD | 1/2 LOAD | FL | 3/4 LOAD | 1/2 LOAD | | | | |
| 180.0 | 240.0 | 4 | NDW355L | 1485.0 | 317.0 | 94.0 | 93.0 | 91.0 | 0.84 | 0.78 | 0.66 | 500.0 | 232.0 | 25.0 | 1220 |
| | | 6 | NDW355LX | 988.0 | 315.0 | 94.7 | 94.0 | 92.0 | 0.84 | 0.78 | 0.66 | 450.0 | 250.0 | 44.5 | 1260 |
| | | 8 | NDW400LX | 743.0 | 357.0 | 93.5 | 92.5 | 90.0 | 0.75 | 0.70 | 0.58 | 450.0 | 246.0 | 87.8 | 3200 |
| 200.0 | 270.0 | 4 | NDW355L | 1485.0 | 351.0 | 94.5 | 93.5 | 91.5 | 0.84 | 0.78 | 0.66 | 540.0 | 239.0 | 26.6 | 1260 |
| | | 6* | NDW355LX | 988.0 | 358.0 | 94.7 | 94.0 | 92.0 | 0.82 | 0.76 | 0.64 | 480.0 | 260.0 | 44.5 | 1260 |
| | | 8 | NDW400LX | 742.0 | 385.0 | 93.8 | 92.8 | 90.5 | 0.77 | 0.72 | 0.60 | 450.0 | 273.0 | 87.8 | 3200 |
| 225.0 | 300.0 | 4 | NDW355L | 1485 | 394.0 | 94.5 | 94.0 | 92.5 | 0.84 | 0.80 | 0.70 | 510 | 275.0 | 29.60 | 1260 |
| | | 6 | NDW400LX | 991 | 397.0 | 93.8 | 93.0 | 91.0 | 0.84 | 0.79 | 0.70 | 440 | 320.0 | 76.60 | 3200 |
| | | 8 | NDW400LX | 742 | 444.0 | 93.8 | 92.8 | 90.5 | 0.75 | 0.68 | 0.56 | 510 | 270.0 | 94.60 | 3200 |
| 250.0 | 335.0 | 4 | NDW355LX | 1485 | 449.0 | 94.5 | 94.0 | 92.5 | 0.82 | 0.76 | 0.65 | 570 | 275.0 | 31.60 | 1260 |
| | | 6 | NDW400LX | 991 | 434.0 | 94.2 | 93.5 | 91.5 | 0.85 | 0.80 | 0.72 | 440 | 355.0 | 76.60 | 3200 |
| 275.0 | 370.0 | 4 | NDW355LX | 1485 | 486.0 | 94.8 | 94.0 | 92.5 | 0.83 | 0.77 | 0.66 | 630 | 275.0 | 35.50 | 1260 |
| | | 6 | NDW400LX | 992 | 479.0 | 94.0 | 93.2 | 91.0 | 0.85 | 0.80 | 0.70 | 475 | 363.0 | 81.80 | 3200 |
| 315.0 | 422.0 | 4 | NDW400LX | 1491 | 549.0 | 95.0 | 94.5 | 93.0 | 0.84 | 0.79 | 0.70 | 580 | 328.0 | 56.40 | 3200 |
| | | 6* | NDW400LX | 993 | 560.0 | 94.3 | 93.5 | 91.5 | 0.83 | 0.78 | 0.70 | 570 | 345.0 | 94.60 | 3200 |
| 350.0 | 470.0 | 4 | NDW400LX | 1491 | 593.0 | 95.5 | 95.0 | 93.5 | 0.86 | 0.81 | 0.71 | 645 | 345.0 | 63.40 | 3200 |

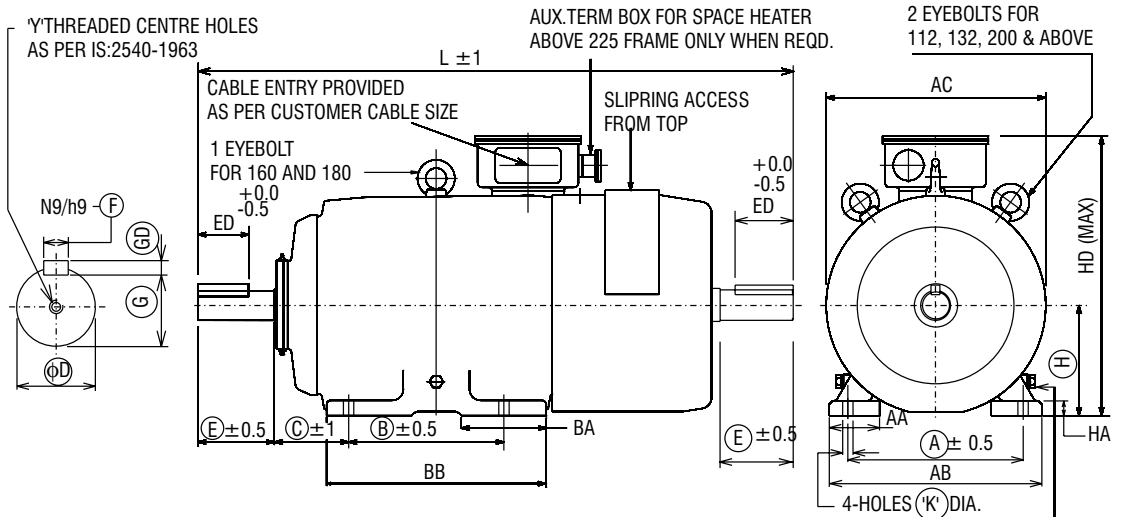
FL = Full Load; FLC = Full Load Current; OC = Open Circuit

NOTE : All performance figures are subject to tolerances as per IS 325 - 1996

* ROTOR WITH CLASS F TEMPERATURE RISE



**OUTLINE DIMENSION DRAWING FOR 3 PHASE SLIP RING TEFC
FOOT MOUNTED TB ON TOP SINGLE/DOUBLE SHAFT INDUCTION MOTORS**



RINGED DIMENSIONS ARE AS PER IS:1231
ALL DIMENSIONS ARE IN mm

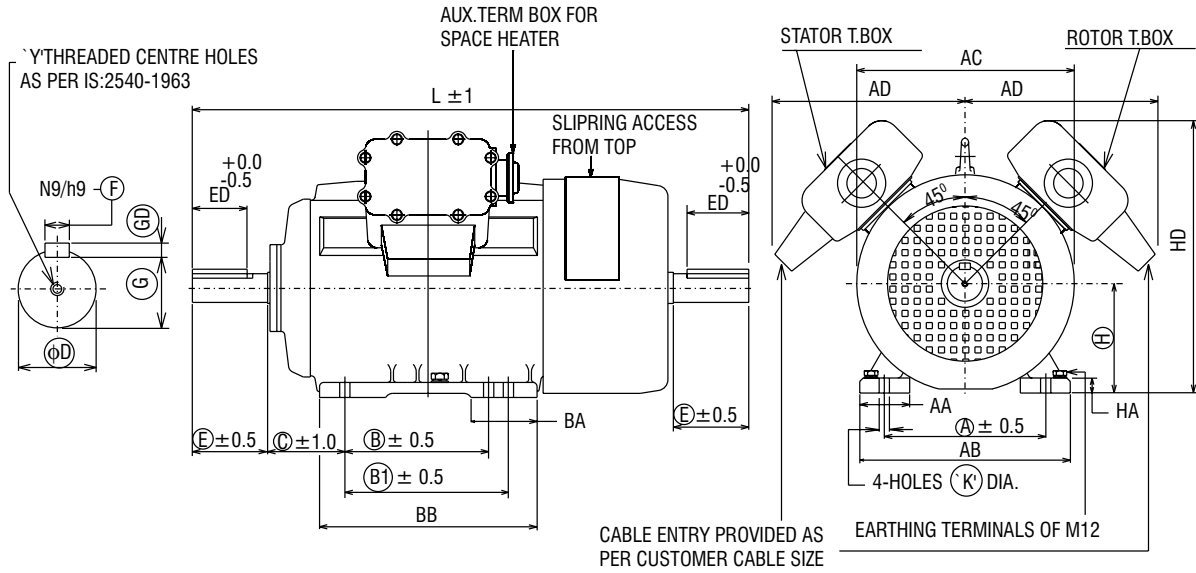
EARTHING TERMINALS OF M6 FOR 112-132 FRAMES
M8 FOR 160-225 FRAMES
M12 FOR 250-355 FRAMES

| Frame | A | B | C | H | AA | AB | BA | BB | K | D | E | ED | F | GD | G | Y | AC | L | HD | HA |
|-------------|-----|-----|-----|---------------|-----|-----|-----|-----|-------------|-------------------|-----|-----|----------------|---------------|-------------|--------|-----|------|-----|----|
| 4 POLE & UP | | | | | | | | | | | | | | | | | | | | |
| NDW112M | 190 | 140 | 70 | 112.0 / 111.5 | 36 | 222 | 50 | 170 | 12.5 / 12.0 | 28.018 / 28.002 | 60 | 44 | 8.00 / 7.964 | 7.00 / 6.91 | 24.0 / 23.8 | M10x22 | 235 | 608 | 322 | 13 |
| DW132S | 216 | 140 | 89 | 132.0 / 131.5 | 48 | 254 | 54 | 178 | 12.5 / 12.0 | 38.018 / 38.002 | 80 | 60 | 10.00 / 9.964 | 8.00 / 7.91 | 33.0 / 32.8 | M12x28 | 320 | 680 | 385 | 16 |
| DW132M | 216 | 178 | 89 | 132.0 / 131.5 | 48 | 254 | 54 | 216 | 12.5 / 12.0 | 38.018 / 38.002 | 80 | 60 | 10.00 / 9.964 | 8.00 / 7.91 | 33.0 / 32.8 | M12x28 | 320 | 720 | 385 | 16 |
| NDW160M | 254 | 210 | 108 | 160.0 / 159.5 | 73 | 308 | 76 | 254 | 15.5 / 15.0 | 42.018 / 42.002 | 110 | 80 | 12.00 / 11.97 | 8.00 / 7.91 | 37.0 / 36.8 | M16x32 | 318 | 904 | 435 | 22 |
| NDW160L | 254 | 254 | 108 | 160.0 / 159.5 | 73 | 308 | 99 | 298 | 15.5 / 15.0 | 42.018 / 42.002 | 110 | 80 | 12.00 / 11.957 | 8.00 / 7.91 | 37.0 / 36.8 | M16x32 | 318 | 948 | 435 | 22 |
| NDW180L | 279 | 279 | 121 | 180.0 / 179.5 | 84 | 348 | 114 | 323 | 15.5 / 15.0 | 48.018 / 48.002 | 110 | 80 | 14.00 / 13.957 | 9.00 / 8.91 | 42.5 / 42.3 | M16x32 | 370 | 1030 | 475 | 22 |
| NDW200L | 318 | 305 | 133 | 200.0 / 199.5 | 66 | 381 | 115 | 356 | 19.5 / 19.0 | 55.030 / 55.011 | 110 | 80 | 16.00 / 15.957 | 10.00 / 9.91 | 49.0 / 48.8 | M20x40 | 428 | 1072 | 545 | 25 |
| NDW225S | 356 | 286 | 149 | 225.0 / 224.5 | 70 | 425 | 102 | 375 | 19.5 / 19.0 | 60.030 / 60.011 | 140 | 110 | 18.00 / 17.957 | 11.00 / 10.91 | 53.0 / 52.8 | M20x40 | 470 | 1227 | 600 | 25 |
| NDW225M | 356 | 311 | 149 | 225.0 / 224.5 | 70 | 425 | 102 | 375 | 19.5 / 19.0 | 60.030 / 60.011 | 140 | 110 | 18.00 / 17.957 | 11.00 / 10.91 | 53.0 / 52.8 | M20x40 | 470 | 1227 | 600 | 25 |
| NDW250S | 406 | 311 | 168 | 250.0 / 249.5 | 80 | 483 | 135 | 419 | 24.5 / 24.0 | 65.030 / 65.011 | 140 | 110 | 18.00 / 17.957 | 11.00 / 10.91 | 58.0 / 57.8 | M20x40 | 500 | 1298 | 730 | 32 |
| NDW250M | 406 | 349 | 168 | 250.0 / 249.5 | 80 | 483 | 135 | 419 | 24.5 / 24.0 | 65.030 / 65.011 | 140 | 110 | 18.00 / 17.957 | 11.00 / 10.91 | 58.0 / 57.8 | M20x40 | 500 | 1298 | 730 | 32 |
| NDW280S | 457 | 368 | 190 | 280.0 / 279.0 | 100 | 538 | 167 | 487 | 24.5 / 24.0 | 75.030 / 75.011 | 140 | 110 | 20.00 / 19.948 | 12.00 / 11.91 | 67.5 / 67.3 | M20x40 | 540 | 1431 | 810 | 35 |
| NDW280M | 457 | 419 | 190 | 280.0 / 279.0 | 100 | 538 | 167 | 487 | 24.5 / 24.0 | 75.030 / 75.011 | 140 | 110 | 20.00 / 19.948 | 12.00 / 11.91 | 67.5 / 67.3 | M20x40 | 536 | 1431 | 810 | 35 |
| NDW315S | 508 | 406 | 216 | 315.0 / 314.0 | 110 | 597 | 164 | 533 | 28.5 / 28.0 | 80.030 / 80.011 | 170 | 140 | 22.00 / 21.948 | 14.00 / 13.91 | 71.0 / 70.8 | M20x40 | 590 | 1595 | 845 | 38 |
| NDW315M | 508 | 457 | 216 | 315.0 / 314.0 | 110 | 597 | 164 | 533 | 28.5 / 28.0 | 80.030 / 80.011 | 170 | 140 | 22.00 / 21.948 | 14.00 / 13.91 | 71.0 / 70.8 | M20x40 | 590 | 1595 | 845 | 38 |
| NDW315LX | 508 | 508 | 216 | 315.0 / 314.0 | 110 | 610 | 235 | 740 | 28.5 / 28.0 | 90.035 / 90.013 | 170 | 140 | 25.00 / 24.948 | 14.00 / 13.91 | 81.0 / 80.8 | M24x50 | 655 | 1750 | 885 | 40 |
| NDW355S | 610 | 500 | 254 | 355.0 / 354.0 | 110 | 710 | 253 | 745 | 28.5 / 28.0 | 100.035 / 100.013 | 210 | 160 | 28.00 / 27.948 | 16.00 / 15.89 | 90.0 / 89.8 | M24x50 | 672 | 1960 | 950 | 40 |
| NDW355M | 610 | 560 | 254 | 355.0 / 354.0 | 110 | 710 | 253 | 745 | 28.5 / 28.0 | 100.035 / 100.013 | 210 | 160 | 28.00 / 27.948 | 16.00 / 15.89 | 90.0 / 89.8 | M24x50 | 672 | 1960 | 950 | 40 |
| NDW355L | 610 | 630 | 254 | 355.0 / 354.0 | 110 | 710 | 253 | 745 | 28.5 / 28.0 | 100.035 / 100.013 | 210 | 160 | 28.00 / 27.948 | 16.00 / 15.89 | 90.0 / 89.8 | M24x50 | 672 | 1960 | 950 | 40 |

Slipring Motors



OUTLINE DIMENSION DRAWING FOR 3 PHASE SLIP RING TEFC FOOT MOUNTED TB ON TOP SINGLE/DOUBLE SHAFT INDUCTION MOTORS (FRAME:NDW355LX)



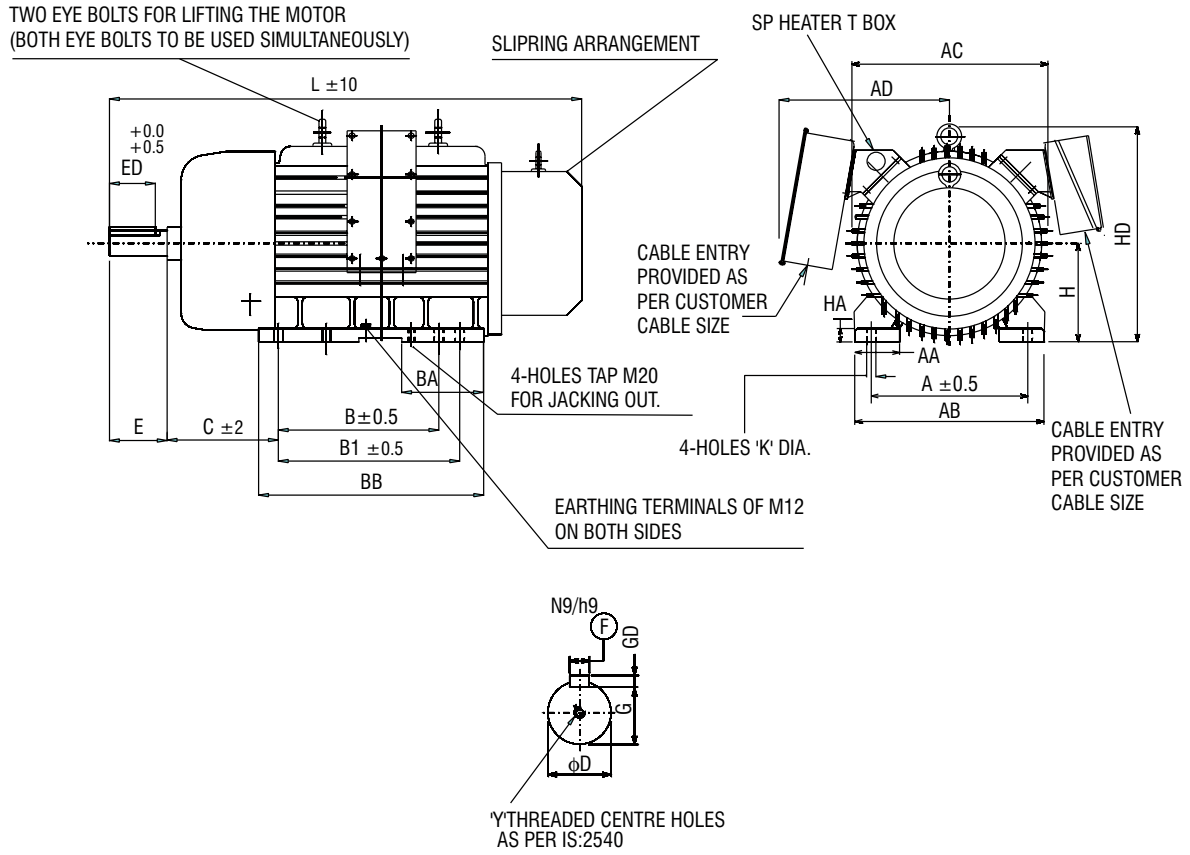
RINGED DIMENSIONS ARE AS PER IS:1231
ALL DIMENSIONS ARE IN mm

| Frame | A | B | C | H | AA | AB | BA | BB | K | D | E | ED | F | GD | G | Y | AD | AC | L | HD | HA |
|-------------|-----|-----|-----|-----------------|-----|-----|-----|-----|---------------|---------------------|-----|-----|------------------|-----------------|---------------|--------|-----|-----|------|-----|----|
| 4 POLE & UP | | | | | | | | | | | | | | | | | | | | | |
| NDW355LX | 610 | 630 | 254 | 355.0/ 354.0 | 110 | 710 | 250 | 850 | 28.5/ 28.0 | 100.035/ 100.013 | 210 | 160 | 28.00/ 27.948 | 16.00/ 15.89 | 90.0/ 89.8 | M24x50 | 720 | 720 | 2045 | 950 | 40 |

Slipring Motors



DIMENSION DRAWING FOR 3 PHASE TEFC SLIPRING FOOT MOUNTED INDUCTION MOTORS (FRAME : ND400 LX)



ALL DIMENSIONS ARE IN mm

| FRAME SIZE | FOOT FIXING | | | | | | | | | | SHAFT AND KEY * | | | | | | | OVERALL | | | | |
|------------|-------------|-----|-----|-----|------------|-----|-----|-----|------|--------------|--------------------|-----|-----|-----------------|----------------|--------------|--------|---------|-----|------|------|----|
| | A | B | B1 | C | H | AA | AB | BA | BB | K | D | E | ED | F | GD | G | Y | AD | AC | L | HD | HA |
| NDW400LX | 686 | 800 | 900 | 450 | 400 399 | 195 | 845 | 400 | 1057 | 35.0 34.5 | 100.035 100.013 | 210 | 160 | 28.00 27.948 | 16.00 15.89 | 90.0 89.8 | M24x50 | 800 | 860 | 2180 | 1060 | 45 |

SPDP Slipping Motors



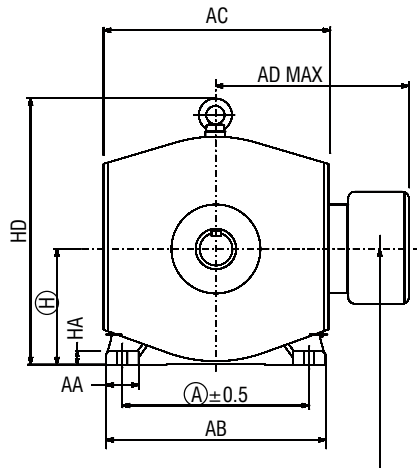
PERFORMANCE FIGURES OF SPDP SLIPPING MOTORS FOR 45°C / 75°C

| OUTPUT | | P O L E | FRAME SIZE | FL RPM | FLC Amp | EFFICIENCY (%) | | | POWER FACTOR | | | OC Rotor Volts | Rotor Curr. Amp | GD. ² kGm ² | POT %FLT | WT. kg. |
|--------|-------|------------------|---------------|-----------|------------|----------------|-------------|-------------|--------------|-------------|-------------|----------------------|-----------------------|--------------------------------------|-------------|------------|
| kW | HP | | | | | FL | 3/4 Load | 1/2 Load | FL | 3/4 Load | 1/2 Load | | | | | |
| 3.7 | 5.0 | 8 | CW160M | 700 | 10 | 78.0 | 77.0 | 75.0 | 0.68 | 0.64 | 0.56 | 230 | 9 | 0.51 | 270 | 130 |
| 5.5 | 7.5 | 6 | CW160M | 935 | 14 | 80.0 | 79.0 | 77.0 | 0.72 | 0.68 | 0.60 | 280 | 13 | 0.51 | 270 | 130 |
| | | 8 | CW160L | 700 | 14 | 80.0 | 79.0 | 77.0 | 0.68 | 0.64 | 0.56 | 235 | 15 | 0.65 | 270 | 150 |
| 7.5 | 10.0 | 4 | CW160M | 1410 | 16 | 82.0 | 81.0 | 79.0 | 0.82 | 0.78 | 0.70 | 375 | 12 | 0.41 | 270 | 130 |
| | | 6 | CW160L | 935 | 17 | 83.0 | 82.0 | 80.0 | 0.72 | 0.68 | 0.60 | 260 | 19 | 0.65 | 270 | 150 |
| | | 8 | CW180M | 705 | 19 | 82.0 | 81.0 | 79.0 | 0.68 | 0.64 | 0.56 | 350 | 13 | 1.14 | 270 | 200 |
| 9.3 | 12.5 | 4 | CW160L | 1420 | 19 | 83.0 | 82.0 | 80.0 | 0.82 | 0.78 | 0.70 | 380 | 16 | 0.53 | 280 | 150 |
| | | 6 | CW180M | 940 | 19 | 83.0 | 82.0 | 80.0 | 0.82 | 0.78 | 0.70 | 300 | 20 | 1.14 | 260 | 200 |
| | | 8 | CW180L | 705 | 24 | 82.0 | 81.0 | 79.0 | 0.68 | 0.64 | 0.56 | 345 | 17 | 1.45 | 270 | 220 |
| 11.0 | 15.0 | 4 | CW160L | 1420 | 22 | 84.0 | 82.0 | 80.0 | 0.82 | 0.78 | 0.70 | 390 | 18 | 0.53 | 280 | 150 |
| | | 6 | CW180M | 940 | 23 | 83.0 | 82.0 | 80.0 | 0.82 | 0.78 | 0.70 | 500 | 14 | 1.14 | 260 | 200 |
| | | 8 | CW180L | 705 | 27 | 82.0 | 81.0 | 79.0 | 0.70 | 0.66 | 0.58 | 345 | 20 | 1.45 | 270 | 220 |
| 15.0 | 20.0 | 4 | CW180M | 1420 | 31 | 83.0 | 82.0 | 80.0 | 0.82 | 0.78 | 0.70 | 390 | 23 | 0.53 | 280 | 150 |
| | | 6 | CW180L | 945 | 31 | 83.0 | 82.0 | 80.0 | 0.82 | 0.78 | 0.70 | 510 | 18 | 1.33 | 260 | 220 |
| | | 8 | CW200M | 720 | 35 | 84.0 | 83.0 | 81.0 | 0.71 | 0.67 | 0.59 | 240 | 40 | 2.20 | 210 | 275 |
| 18.5 | 25.0 | 4 | CW180M | 1420 | 36 | 84.0 | 83.0 | 81.0 | 0.86 | 0.80 | 0.72 | 480 | 23 | 0.91 | 290 | 200 |
| | | 6 | CW200M | 960 | 38 | 86.0 | 85.0 | 83.0 | 0.78 | 0.74 | 0.66 | 515 | 23 | 2.20 | 260 | 275 |
| | | 8 | CW200L | 720 | 43 | 84.0 | 83.0 | 81.0 | 0.72 | 0.68 | 0.60 | 235 | 50 | 2.20 | 220 | 299 |
| 22.0 | 30.0 | 4 | CW180L | 1420 | 42 | 86.0 | 85.0 | 83.0 | 0.84 | 0.80 | 0.72 | 480 | 28 | 1.16 | 300 | 220 |
| | | 6 | CW200L | 965 | 46 | 86.0 | 85.0 | 83.0 | 0.78 | 0.74 | 0.66 | 485 | 28 | 2.30 | 280 | 299 |
| | | 8 | CW225M | 720 | 49 | 86.0 | 85.0 | 83.0 | 0.73 | 0.69 | 0.61 | 235 | 60 | 3.35 | 210 | 380 |
| 30.0 | 40.0 | 4 | CW200M | 1440 | 57 | 87.0 | 86.0 | 84.0 | 0.84 | 0.80 | 0.72 | 470 | 39 | 1.79 | 300 | 275 |
| | | 6 | CW225M | 965 | 60 | 88.0 | 87.0 | 85.0 | 0.78 | 0.74 | 0.66 | 536 | 35 | 3.35 | 260 | 380 |
| | | 8 | CW225M | 720 | 65 | 87.0 | 86.0 | 84.0 | 0.74 | 0.70 | 0.62 | 235 | 80 | 3.35 | 210 | 380 |
| 37.0 | 50.0 | 4 | CW200L | 1440 | 70 | 87.0 | 86.0 | 84.0 | 0.84 | 0.80 | 0.72 | 430 | 52 | 2.11 | 320 | 299 |
| | | 6 | CW225M | 970 | 74 | 89.0 | 88.0 | 86.0 | 0.78 | 0.74 | 0.66 | 536 | 42 | 3.35 | 260 | 390 |
| | | 8 | CW250S | 720 | 79 | 89.0 | 88.0 | 86.0 | 0.74 | 0.70 | 0.62 | 465 | 50 | 5.70 | 240 | 455 |
| 45.0 | 60.0 | 4 | CW225M | 1450 | 82 | 89.0 | 88.0 | 86.0 | 0.85 | 0.81 | 0.73 | 576 | 49 | 2.65 | 320 | 380 |
| | | 6 | CW250S | 970 | 88 | 89.0 | 88.0 | 86.0 | 0.80 | 0.76 | 0.68 | 507 | 53 | 5.70 | 230 | 455 |
| | | 8 | CW250M | 725 | 95 | 89.0 | 88.0 | 86.0 | 0.74 | 0.70 | 0.62 | 480 | 59 | 6.66 | 250 | 525 |
| 55.0 | 75.0 | 4 | CW225M | 1460 | 102 | 89.0 | 88.0 | 86.0 | 0.84 | 0.80 | 0.72 | 576 | 59 | 2.65 | 320 | 380 |
| | | 6 | CW250M | 975 | 104 | 90.0 | 89.0 | 87.0 | 0.82 | 0.78 | 0.70 | 515 | 65 | 6.66 | 250 | 525 |
| | | 8 | CW280S | 730 | 109 | 90.0 | 89.0 | 87.0 | 0.78 | 0.74 | 0.66 | 425 | 79 | 10.65 | 260 | 635 |
| 75.0 | 100.0 | 4 | CW250S | 1460 | 135 | 90.5 | 90.0 | 88.0 | 0.84 | 0.80 | 0.72 | 505 | 88 | 4.77 | 240 | 455 |
| | | 6 | CW280S | 975 | 134 | 91.5 | 91.0 | 89.0 | 0.85 | 0.81 | 0.73 | 300 | 154 | 10.09 | 280 | 635 |
| | | 8 | CW280M | 730 | 149 | 90.0 | 89.0 | 87.0 | 0.78 | 0.74 | 0.66 | 535 | 83 | 13.44 | 260 | 750 |
| 90.0 | 120.0 | 4 | CW250MX | 1460 | 158 | 92.0 | 91.0 | 89.0 | 0.86 | 0.82 | 0.74 | 500 | 110 | 7.15 | 280 | 695 |
| | | 6 | CW280M | 975 | 160 | 92.0 | 91.0 | 89.0 | 0.85 | 0.81 | 0.73 | 360 | 160 | 13.44 | 280 | 750 |
| | | 8 | CW315S | 730 | 180 | 91.5 | 91.0 | 89.0 | 0.76 | 0.72 | 0.64 | 490 | 112 | 19.16 | 250 | 870 |
| 110.0 | 150.0 | 4 | CW280M | 1455 | 198 | 91.0 | 90.0 | 88.5 | 0.85 | 0.80 | 0.70 | 250 | 275 | 9.23 | 280 | 635 |
| | | 6 | CW315S | 973 | 196 | 92.0 | 91.5 | 90.0 | 0.85 | 0.82 | 0.76 | 290 | 250 | 17.50 | 275 | 870 |
| | | 8 | CW315MX | 730 | 218 | 91.0 | 91.0 | 89.0 | 0.77 | 0.73 | 0.65 | 350 | 190 | 21.66 | 250 | 980 |
| 132.0 | 175.0 | 4 | CW280MX | 1460 | 227 | 92.0 | 92.0 | 91.0 | 0.88 | 0.84 | 0.72 | 300 | 275 | 11.07 | 300 | 750 |
| | | 6 | CW315MX | 975 | 234 | 92.5 | 92.0 | 91.0 | 0.85 | 0.82 | 0.76 | 345 | 250 | 20.83 | 275 | 980 |
| | | 8 | CW355L | 740 | 265 | 93.5 | 92.5 | 90.5 | 0.74 | 0.67 | 0.55 | 410 | 200 | 40.30 | 300 | 1200 |
| 160.0 | 215.0 | 4 | CW315M | 1470 | 279 | 94.0 | 93.5 | 92.5 | 0.85 | 0.80 | 0.70 | 420 | 230 | 14.64 | 300 | 870 |
| | | 6 | CW315MX | 980 | 299 | 93.0 | 92.5 | 91.0 | 0.80 | 0.75 | 0.68 | 470 | 225 | 26.66 | 350 | 980 |
| | | 8 | CW355L | 740 | 326 | 93.6 | 92.7 | 91.0 | 0.73 | 0.66 | 0.54 | 490 | 203 | 47.80 | 300 | 1200 |
| 180.0 | 240.0 | 4 | CW315MX | 1470 | 306 | 93.0 | 92.5 | 91.0 | 0.88 | 0.85 | 0.78 | 465 | 206 | 17.43 | 300 | 980 |
| | | 6 | CW355L | 980 | 319 | 93.5 | 92.5 | 91.0 | 0.84 | 0.79 | 0.69 | 380 | 300 | 36.30 | 300 | 1200 |
| | | 8 | CW355L | 740 | 361 | 93.8 | 93.0 | 91.5 | 0.74 | 0.67 | 0.55 | 525 | 213 | 51.00 | 300 | 1200 |
| 200.0 | 270.0 | 4 | CW315MX | 1475 | 342 | 93.5 | 93.0 | 91.0 | 0.87 | 0.84 | 0.76 | 580 | 225 | 20.91 | 350 | 980 |
| | | 6 | CW355L | 975 | 346 | 93.5 | 92.5 | 91.0 | 0.86 | 0.81 | 0.72 | 380 | 330 | 36.30 | 300 | 1200 |
| | | 8 | CW355L | 740 | 411 | 94.0 | 93.5 | 92.0 | 0.72 | 0.65 | 0.52 | 560 | 222 | 53.90 | 275 | 1200 |
| 225.0 | 300.0 | 4 | CW315MX | 1475 | 378 | 94.0 | 93.5 | 92.0 | 0.88 | 0.85 | 0.78 | 580 | 250 | 22.20 | 300 | 980 |
| | | 6 | CW355L | 980 | 396 | 94.0 | 93.0 | 91.0 | 0.84 | 0.79 | 0.69 | 425 | 330 | 38.70 | 300 | 1200 |
| 250.0 | 335.0 | 4 | CW355L | 1480 | 440 | 94.0 | 93.5 | 92.0 | 0.84 | 0.80 | 0.72 | 510 | 305 | 28.00 | 300 | 1200 |
| | | 6 | CW355L | 980 | 440 | 94.0 | 93.0 | 91.0 | 0.84 | 0.80 | 0.70 | 450 | 350 | 40.70 | 300 | 1200 |

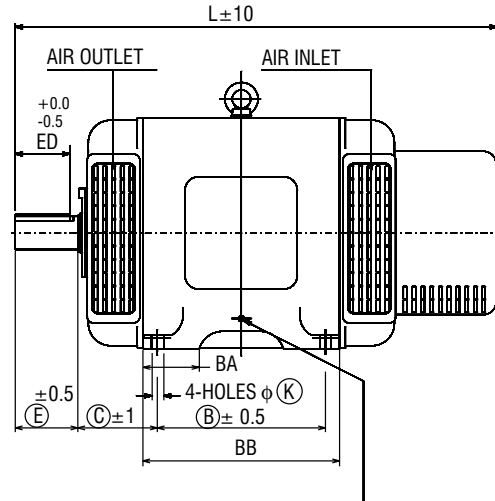
SPDP Slipping Motors



OUTLINE DIMENSION DRAWING FOR 3 PHASE SPDP SLIPRING FOOT MOUNTED INDUCTION MOTORS.

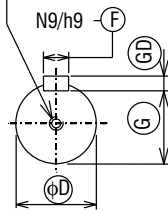


CABLE ENTRY PROVIDED AS PER CUSTOMER CABLE SIZE



EARTHING TERMINALS OF M8 SIZE ON BOTH SIDES

Y-THREADED CENTRE HOLES
AS PER IS:2540-1963



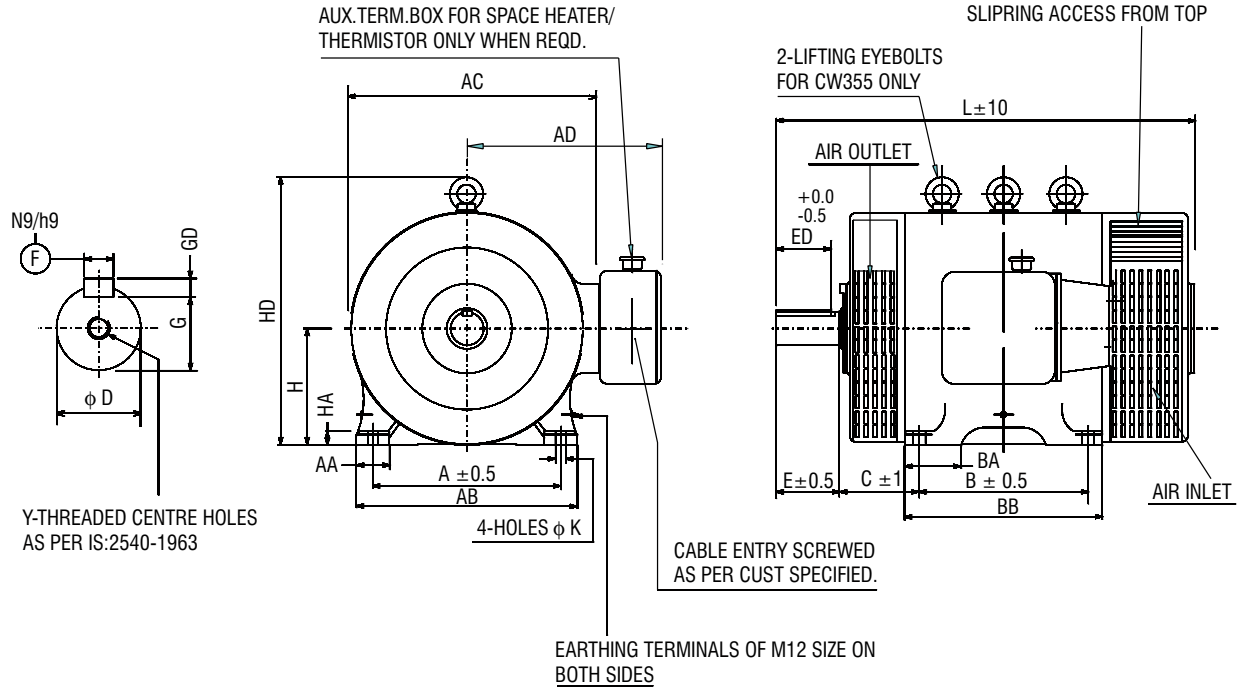
ALL DIMENSIONS ARE IN mm.

| FRAME SIZE | FOOT FIXING | | | | | | | | | | SHAFT & KEY | | | | | | OVERALL | | | | |
|------------|-------------|-----|-----|----------------|----|-----|-----|-----|--------------|------------------|-------------|-----|----------------|----------------|--------------|--------|---------|-----|------|-----|----|
| | A | B | C | H TOL. | AA | AB | BA | BB | K TOL. | D TOL. | E | ED | F TOL. | GD TOL. | G | Y | AD | AC | L | HD | HA |
| CW160M | 254 | 210 | 108 | 160.0 | 54 | 298 | 76 | 254 | 15.5 | 48.018 | 110 | 80 | 14.0 | 9.00 | 42.5 | M16x32 | 290 | 390 | 680 | 395 | 22 |
| CW160L | | 254 | | 159.7 | | | | 298 | 15.0 | 48.002 | | | 13.957 | 8.91 | 42.3 | | | | 724 | | |
| CW180M | 279 | 241 | 121 | 180.0 | 60 | 337 | 95 | 285 | 15.5 | 55.030 | 110 | 80 | 16.0 | 10.00 | 49.0 | M20x40 | 335 | 420 | 802 | 445 | 22 |
| CW180L | | 279 | | 179.7 | | | | 323 | 15.0 | 55.011 | | | 15.957 | 09.91 | 48.8 | | | | 840 | | |
| CW200M | 318 | 267 | 133 | 200.0 | 65 | 381 | 105 | 318 | 19.5 | 60.030 | 140 | 110 | 18.0 | 11.00 | 53.0 | M20x40 | 398 | 460 | 877 | 498 | 25 |
| CW200L | | 305 | | 199.5 | | | | 355 | 19.0 | 60.011 | | | 17.957 | 10.91 | 52.8 | | | | 915 | | |
| CW225M | 356 | 311 | 149 | 225.0 224.5 | 70 | 426 | 125 | 427 | 19.5 19.0 | 65.030 65.011 | 140 | 110 | 18.0 17.957 | 11.00 10.91 | 58.0 57.8 | M20x40 | 398 | 450 | 1000 | 520 | 25 |

SPDP Slipping Motors



OUTLINE DIMENSION DRAWING FOR 3 PHASE SPDP INTERNAL SLIPRING FOOT MOUNTED INDUCTION MOTORS.



| FRAME SIZE | FOOT FIXING | | | | | | | | | SHAFT & KEY | | | | | | | OVERALL | | | | | | | | | | |
|---------------|-------------|-----|-----|-------|----|-----|-------|-------|------|-------------|-----|-----|--------|-------|------|--------|---------|-----|---------|-----|----|--------|--------|--------|-------|------|------|
| | A | B | C | H | AA | AB | BA | BB | K | D | E | ED | F | GD | G | Y | AD | AC | 'L' | HD | HA | | | | | | |
| CW250S | 406 | 311 | 168 | 250 | 80 | 483 | 127 | 381 | 24.5 | 75.030 | 140 | 110 | 20.00 | 12.00 | 67.5 | M20x40 | 428 | 500 | 970 | 605 | 28 | | | | | | |
| CW250M | | 419 | | | | | | 249.5 | | | | | | | | | | | 419 | | | 24.0 | 75.011 | 19.948 | 11.91 | 67.3 | 1005 |
| CW250MX | | 419 | | | | | | 249.5 | | | | | | | | | | | 419 | | | 24.0 | 75.011 | 19.948 | 11.91 | 67.3 | 1110 |
| CW280S | 457 | 368 | 190 | 280.0 | 83 | 540 | 146 | 438 | 24.5 | 80.030 | 170 | 140 | 22.00 | 14.00 | 71.0 | M20x40 | 515 | 560 | 1050 | 663 | 35 | | | | | | |
| CW280M | | 489 | | | | | | 279.0 | | | | | | | | | | | 489 | | | 24.0 | 80.011 | 21.948 | 13.91 | 70.8 | 1121 |
| CW280MX | | 489 | | | | | | 279.0 | | | | | | | | | | | 489 | | | 24.0 | 80.011 | 21.948 | 13.91 | 70.8 | 1225 |
| CW315S | 508 | 406 | 216 | 315.0 | 89 | 597 | 184 | 533 | 28.0 | 90.035 | 170 | 140 | 25.00 | 14.00 | 81.0 | M24x50 | 576 | 630 | 1240 | 734 | 38 | | | | | | |
| CW315M | | 153 | | | | | 314.0 | | | | | | | | | | | | 153 | | | 28.5 | 90.013 | 24.948 | 13.91 | 80.8 | 1370 |
| CW315MX | | 153 | | | | | 314.0 | | | | | | | | | | | | 153 | | | 28.5 | 90.013 | 24.948 | 13.91 | 80.8 | 1370 |
| CW355M | 610 | 560 | 254 | 355 | 89 | 730 | 250 | 860 | 28.5 | 100.035 | 210 | 160 | 28.000 | 16.00 | 90.0 | M24x50 | 600 | 780 | 1670 | 827 | 40 | | | | | | |
| CW355L | | 630 | | 354 | | | | | 28.0 | | | | | | | | | | 100.013 | | | 27.948 | 15.89 | 89.8 | 1670 | | |