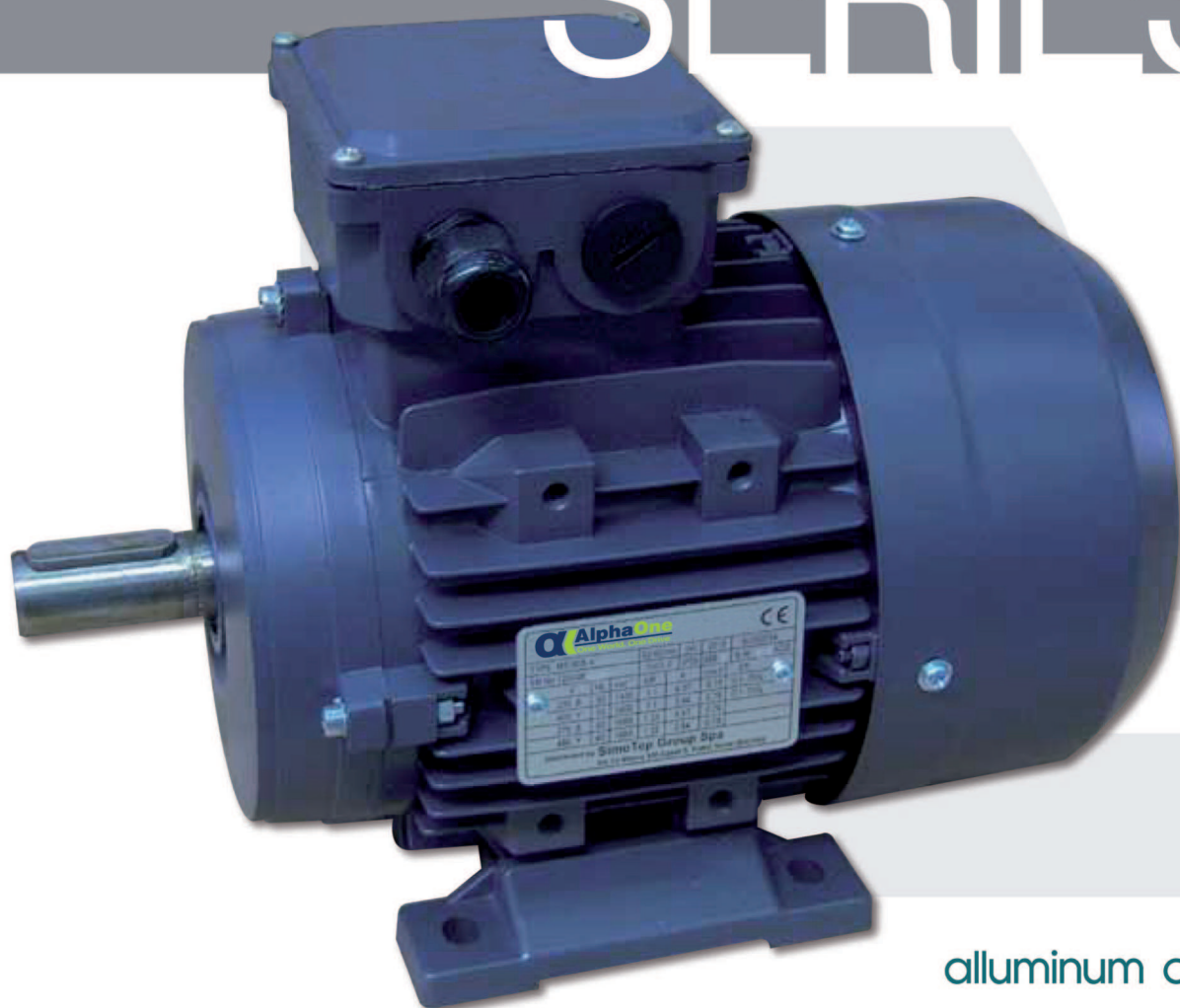


electrical and mechanical data

MS SERIES



aluminum casing

28. MS SERIES - Three-Phase Asynchronous single speed motors

Electrical data (50Hz) Efficiency IE1 - 6 poles

| Frame size | Power (KW) | Current (A) | | | Current (A) | | | Current (A) | | | rpm. (r/min) | Eff. (%) | Power factor (Cosφ) | Cs/ Cn | Cmax/ Cn | Cn (Nm) | Is/In | dB(A) | Weight (Kg) |
|------------|------------|-------------|------|------|-------------|------|------|-------------|------|------|--------------|----------|---------------------|--------|----------|---------|-------|-------|-------------|
| | | 220V | 380V | 660V | 230V | 400V | 690V | 240V | 415V | 720V | | | | | | | | | |

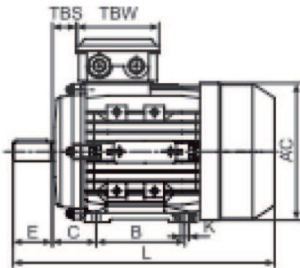
| | | | | | | | | | | | | | | | | | | | |
|------------|------|------|------|------|------|------|------|------|------|------|-----|------|------|-----|-----|--------|-----|----|-------|
| MS 631-6 | 0.09 | 0.92 | 0.53 | 0.31 | 0.88 | 0.51 | 0.29 | 0.85 | 0.49 | 0.28 | 840 | 42 | 0.61 | 2 | 2 | 0.98 | 3.5 | 50 | 4.20 |
| MS 632-6 | 0.12 | 1.13 | 0.65 | 0.38 | 1.08 | 0.62 | 0.36 | 1.03 | 0.60 | 0.34 | 850 | 45 | 0.62 | 2 | 2 | 1,18 | 3.5 | 50 | 4.50 |
| MS 711-6 | 0.18 | 1.28 | 0.74 | 0.43 | 1.22 | 0.70 | 0.41 | 1.17 | 0.68 | 0.39 | 880 | 56 | 0.66 | 1.6 | 1.7 | 1,93 | 4 | 52 | 5.60 |
| MS 712-6 | 0.25 | 1.59 | 0.92 | 0.53 | 1.51 | 0.87 | 0.50 | 1.46 | 0.84 | 0.49 | 900 | 59 | 0.7 | 2.1 | 2.2 | 2,36 | 4 | 52 | 6.00 |
| MS 713-6 | 0.37 | 2.31 | 1.34 | 0.77 | 2.2 | 1.27 | 0.73 | 2.11 | 1.22 | 0.70 | 890 | 61 | 0.69 | 2 | 2.1 | 3,93 | 4 | 54 | 6.80 |
| MS 801-6 | 0.37 | 2.24 | 1.30 | 0.75 | 2.13 | 1.23 | 0.71 | 2.05 | 1.19 | 0.68 | 900 | 62 | 0.7 | 1.9 | 1.9 | 3,90 | 4 | 56 | 8.10 |
| MS 802-6 | 0.55 | 2.99 | 1.73 | 1.00 | 2.85 | 1.65 | 0.95 | 2.74 | 1.59 | 0.91 | 900 | 67 | 0.72 | 2 | 2.3 | 5,84 | 4 | 56 | 9.60 |
| MS 803-6 | 0.75 | 4.02 | 2.33 | 1.34 | 3.83 | 2.21 | 1.28 | 3.69 | 2.13 | 1.23 | 900 | 68 | 0.72 | 2 | 2.3 | 7,88 | 4 | 58 | 10.00 |
| MS 90S-6 | 0.75 | 3.96 | 2.29 | 1.32 | 3.77 | 2.18 | 1.26 | 3.63 | 2.10 | 1.21 | 920 | 69 | 0.72 | 2.2 | 2.2 | 7,83 | 5.5 | 59 | 11.30 |
| MS 90L1-6 | 1.1 | 5.49 | 3.18 | 1.83 | 5.23 | 3.02 | 1.74 | 5.03 | 2.91 | 1.68 | 925 | 72 | 0.73 | 2.2 | 2.2 | 11,54 | 5.5 | 59 | 14.40 |
| MS 90L2-6 | 1.5 | 7.09 | 4.11 | 2.36 | 6.76 | 3.90 | 2.25 | 6.50 | 3.76 | 2.17 | 925 | 74 | 0.75 | 2.2 | 2.2 | 15,64 | 5.5 | 60 | 15.50 |
| MS 100L1-6 | 1.5 | 7.00 | 4.05 | 2.33 | 6.67 | 3.85 | 2.22 | 6.42 | 3.71 | 2.14 | 945 | 74 | 0.76 | 2.2 | 2.2 | 15,62 | 6 | 61 | 18.80 |
| MS 100L2-6 | 2.2 | 9.87 | 5.71 | 3.29 | 9.40 | 5.43 | 3.13 | 9.04 | 5.23 | 3.01 | 950 | 77 | 0.76 | 2.2 | 2.2 | 22,31 | 6 | 63 | 19.80 |
| MS 112M-6 | 2.2 | 9.7 | 5.64 | 3.25 | 9.28 | 5.36 | 3.09 | 8.93 | 5.16 | 2.98 | 955 | 78 | 0.76 | 2.2 | 2.2 | 22,34 | 6 | 64 | 25.00 |
| MS 112L-6 | 3 | 12.9 | 7.49 | 4.31 | 12.3 | 7.12 | 4.11 | 11.9 | 6.86 | 3.95 | 950 | 79 | 0.77 | 2.2 | 2.2 | 30,21 | 6 | 64 | 30.00 |
| MS 132S-6 | 3 | 13.1 | 7.59 | 4.37 | 12.5 | 7.21 | 4.16 | 12.0 | 6.95 | 4.01 | 960 | 79 | 0.76 | 2 | 2 | 30,18 | 6.5 | 64 | 35.00 |
| MS 132M1-6 | 4 | 17.2 | 9.93 | 5.72 | 16.4 | 9.44 | 5.45 | 15.7 | 9.10 | 5.24 | 960 | 80.5 | 0.76 | 2 | 2 | 40,21 | 6.5 | 68 | 47.60 |
| MS 132M2-6 | 5.5 | 22.6 | 13.1 | 7.53 | 21.5 | 12.4 | 7.17 | 20.7 | 12.0 | 6.9 | 960 | 83 | 0.77 | 2 | 2 | 55,32 | 6.5 | 68 | 50.70 |
| MS 132L-6 | 7.5 | 30.1 | 17.4 | 10.0 | 28.7 | 16.5 | 9.55 | 27.6 | 15.9 | 9.2 | 960 | 85 | 0.77 | 2 | 2 | 74,60 | 6.5 | 68 | 47.60 |
| MS 160M-6 | 7.5 | 28.6 | 16.6 | 9.5 | 27.3 | 15.7 | 9.08 | 26.2 | 15.2 | 8.7 | 960 | 86 | 0.8 | 2 | 2.2 | 74,58 | 6.5 | 68 | 70.0 |
| MS 160L-6 | 11 | 41.8 | 24.2 | 13.9 | 39.8 | 23.0 | 13.3 | 38.3 | 22.1 | 12.8 | 960 | 87.5 | 0.79 | 2 | 2.2 | 109,43 | 6.5 | 73 | 87.0 |
| MS 180L-6 | 15 | 54.6 | 31.6 | 18.2 | 52.2 | 30.0 | 17.3 | 50.1 | 28.9 | 16.7 | 970 | 89 | 0.81 | 2 | 2.2 | 147,73 | 6.5 | 79 | 122.0 |
| MS 200L1-6 | 18.5 | 66.6 | 38.6 | 22.2 | 63.7 | 36.6 | 21.1 | 61.0 | 35.3 | 20.3 | 975 | 90 | 0.81 | 2 | 2.2 | 181,23 | 6.5 | 82 | 136.0 |
| MS 200L2-6 | 22 | 77.3 | 44.7 | 25.8 | 73.9 | 42.5 | 24.5 | 70.8 | 41.0 | 23.6 | 975 | 90 | 0.83 | 2 | 2.2 | 215,21 | 6.5 | 82 | 152.0 |

Electrical data (50Hz) Efficiency IE2 - 6 poles

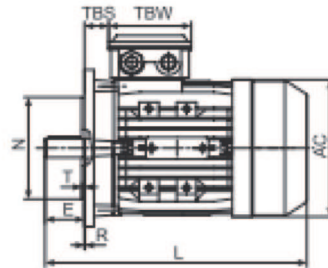
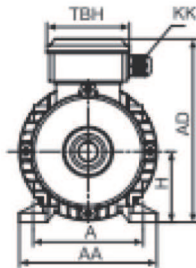
| Frame size | Power (KW) | Eff. (%) | Current In(A) 400V | Power factor (Cosφ) | rpm (rpm/min) | Cn (Nm) | Cs/Cn | Is/In |
|--------------------|------------|----------|-----------------------|------------------------|---------------|------------|-------|-------|
| MS2 90S-6 | 0.75 | 76.0 | 2.01 | 0.71 | 925 | 7,75 | 3.1 | 4.7 |
| MS2 90L-6 | 1.1 | 78.1 | 2.82 | 0.72 | 930 | 11,43 | 3.2 | 5 |
| MS2 100L-6 | 1.5 | 80.0 | 3.71 | 0.73 | 940 | 15,09 | 3.1 | 5.9 |
| MS2 112M-6 | 2.2 | 81.8 | 5.17 | 0.75 | 945 | 22,13 | 2.6 | 5.5 |
| MS2 132S-6 | 3 | 83.3 | 6.84 | 0.76 | 960 | 30,32 | 2.2 | 5.7 |
| MS2 132M1-6 | 4 | 84.6 | 8.86 | 0.77 | 960 | 41,25 | 2.4 | 6.2 |
| MS2 132M2-6 | 5.5 | 86 | 12.0 | 0.77 | 960 | 54,86 | 2.6 | 6.7 |
| MS2 160M-6 | 7.5 | 87.5 | 16.1 | 0.77 | 970 | 74,69 | 2 | 5.6 |
| MS2 160L-6 | 11 | 89.0 | 22.9 | 0.78 | 970 | 108,92 | 2 | 5.8 |
| MS2 180L-6 | 15 | 90.1 | 28.9 | 0.83 | 975 | 147,77 | 1.9 | 7.5 |
| MS2 200L1-6 | 18.5 | 90.4 | 35.6 | 0.83 | 975 | 180,32 | 2.2 | 6.3 |
| MS2 200L2-6 | 22 | 90.9 | 41.6 | 0.84 | 975 | 214,53 | 2.3 | 06.02 |

30. MS SERIES - Overall & Installation dimension

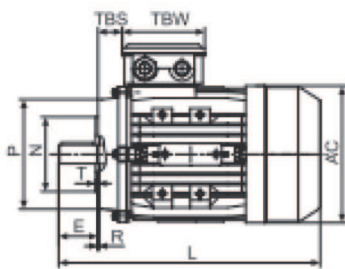
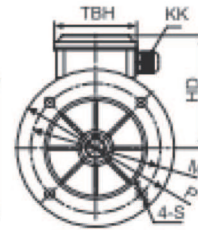
Measures in mm



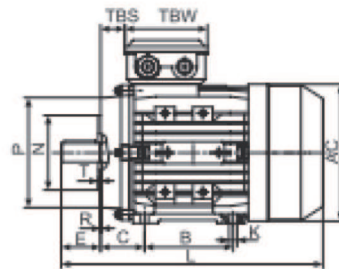
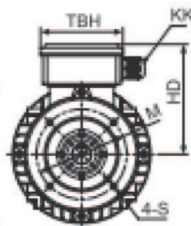
IM B3



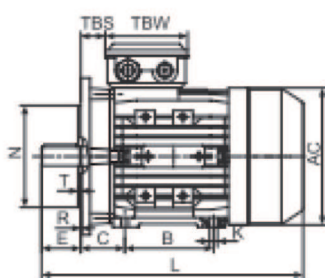
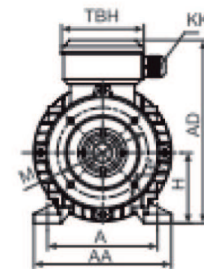
IM B5



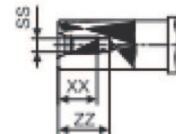
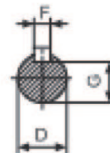
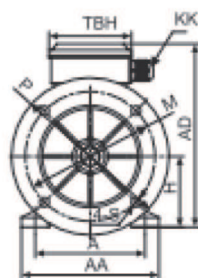
IM B14



IM B34



IM B35



AlphaOne
One World. One Drive

| Frame size | B3 | | | | | Shaft | | | | | | | General | | | | | | | | |
|------------|-----|-----|---------|-----|---------|-------|-----|----|------|-----|----|----|---------|-----|-----|------|---------|-----------|-----|-----|-----|
| | H | A | B | C | K | D | E | F | G | SS | XX | ZZ | AA | AD | HD | AC | L | KK | TBS | TBW | TBH |
| 56 | 56 | 90 | 71 | 36 | 5.8X8.8 | Ø9 | 20 | 3 | 7.2 | M3 | 9 | 12 | 110 | 156 | 100 | Ø117 | 196 | 1-M16X1.5 | 14 | 88 | 88 |
| 63 | 63 | 100 | 80 | 40 | 7X10 | Ø11 | 23 | 4 | 8.5 | M4 | 10 | 14 | 120 | 171 | 108 | Ø130 | 220 | 1-M16X1.5 | 14 | 94 | 94 |
| 71 | 71 | 112 | 90 | 45 | 7X10 | Ø14 | 30 | 5 | 11 | M5 | 12 | 17 | 132 | 186 | 115 | Ø147 | 241 | 1-M20X1.5 | 20 | 94 | 94 |
| 80 | 80 | 125 | 100 | 50 | 10X13 | Ø19 | 40 | 6 | 15.5 | M6 | 16 | 21 | 160 | 213 | 133 | Ø163 | 290 | 1-M20X1.5 | 27 | 105 | 105 |
| 90S | 90 | 140 | 100 | 56 | 10X13 | Ø24 | 50 | 8 | 20 | M8 | 19 | 25 | 175 | 229 | 139 | Ø183 | 312 | 1-M20X1.5 | 30 | 105 | 105 |
| 90L1/L2 | 90 | 140 | 125 | 56 | 10X13 | Ø24 | 50 | 8 | 20 | M8 | 19 | 25 | 175 | 229 | 139 | Ø183 | 337/367 | 1-M20X1.5 | 30 | 105 | 105 |
| 100 | 100 | 160 | 140 | 63 | 12X15 | Ø28 | 60 | 8 | 24 | M10 | 22 | 30 | 198 | 252 | 152 | Ø205 | 369 | 2-M20X1.5 | 26 | 105 | 105 |
| 112 | 112 | 190 | 140 | 70 | 12X15 | Ø28 | 60 | 8 | 24 | M10 | 22 | 30 | 220 | 279 | 167 | Ø229 | 395 | 2-M25X1.5 | 32 | 112 | 112 |
| 132S | 132 | 216 | 140 | 89 | 12X15 | Ø38 | 80 | 10 | 33 | M12 | 28 | 37 | 252 | 318 | 186 | Ø265 | 437 | 2-M25X1.5 | 38 | 112 | 112 |
| 132ML | 132 | 216 | 178 | 89 | 12X15 | Ø38 | 80 | 10 | 33 | M12 | 28 | 37 | 252 | 318 | 186 | Ø265 | 475/501 | 2-M25X1.5 | 38 | 112 | 112 |
| 160ML | 160 | 254 | 210/254 | 108 | 15X19 | Ø42 | 110 | 12 | 37 | M16 | 36 | 45 | 290 | 384 | 224 | Ø325 | 640 | 2-M32X1.5 | 64 | 143 | 143 |
| 180ML | 180 | 279 | 241/279 | 121 | 15X25 | Ø48 | 110 | 14 | 42.5 | M16 | 36 | 45 | 340 | 440 | 260 | Ø368 | 730 | 2-M32X1.5 | 73 | 190 | 190 |
| 200L | 200 | 318 | 305 | 133 | 19X29 | Ø55 | 110 | 16 | 49 | M20 | 42 | 53 | 390 | 460 | 260 | Ø368 | 745 | 2-M40X1.5 | 85 | 190 | 190 |

| Frame size | B5 | | | | | | B5R | | | | | | B14 | | | | | | B14R | | | | | |
|------------|------|------|------|-----|-----|---|------|------|------|-----|-----|---|------|------|------|-----|-----|---|------|------|------|-----|-----|---|
| | M | N | P | T | S | R | M | N | P | T | S | R | N | M | P | T | S | R | N | M | P | T | S | R |
| 56 | Ø100 | Ø80 | Ø120 | 3.0 | Ø7 | 0 | | | | | | | Ø50 | Ø65 | Ø80 | 2.5 | M5 | 0 | | | | | | |
| 63 | Ø115 | Ø95 | Ø140 | 3.0 | Ø10 | 0 | | | | | | | Ø60 | Ø75 | Ø90 | 2.5 | M5 | 0 | Ø80 | Ø100 | Ø120 | 3.0 | M6 | 0 |
| 71 | Ø130 | Ø110 | Ø160 | 3.5 | Ø10 | 0 | Ø115 | Ø95 | Ø140 | 3.5 | Ø10 | 0 | Ø70 | Ø85 | Ø105 | 2.5 | M6 | 0 | Ø95 | Ø115 | Ø140 | 3.0 | M8 | 0 |
| 80 | Ø165 | Ø130 | Ø200 | 3.5 | Ø12 | 0 | Ø130 | Ø110 | Ø160 | 3.5 | Ø10 | 0 | Ø80 | Ø100 | Ø120 | 3.0 | M6 | 0 | Ø110 | Ø130 | Ø160 | 3.5 | M8 | 0 |
| 90S | Ø165 | Ø130 | Ø200 | 3.5 | Ø12 | 0 | Ø130 | Ø110 | Ø160 | 3.5 | Ø10 | 0 | Ø95 | Ø115 | Ø140 | 3.0 | M8 | 0 | Ø110 | Ø130 | Ø160 | 3.5 | M8 | 0 |
| 90L1/L2 | Ø165 | Ø130 | Ø200 | 3.5 | Ø12 | 0 | Ø130 | Ø110 | Ø160 | 3.5 | Ø10 | 0 | Ø95 | Ø115 | Ø140 | 3.0 | M8 | 0 | Ø110 | Ø130 | Ø160 | 3.5 | M8 | 0 |
| 100 | Ø215 | Ø180 | Ø250 | 4.0 | Ø15 | 0 | Ø165 | Ø130 | Ø200 | 4.0 | Ø12 | 0 | Ø110 | Ø130 | Ø160 | 3.5 | M8 | 0 | Ø130 | Ø165 | Ø200 | 3.5 | M10 | 0 |
| 112 | Ø215 | Ø180 | Ø250 | 4.0 | Ø15 | 0 | Ø165 | Ø130 | Ø200 | 4.0 | Ø12 | 0 | Ø110 | Ø130 | Ø160 | 3.5 | M8 | 0 | Ø130 | Ø165 | Ø200 | 3.5 | M10 | 0 |
| 132S | Ø265 | Ø230 | Ø300 | 4.0 | Ø15 | 0 | Ø215 | Ø180 | Ø250 | 4.0 | Ø15 | 0 | Ø130 | Ø165 | Ø200 | 4.0 | M10 | 0 | Ø180 | Ø215 | Ø250 | 4.0 | M12 | 0 |
| 132ML | Ø265 | Ø230 | Ø300 | 4.0 | Ø15 | 0 | Ø215 | Ø180 | Ø250 | 4.0 | Ø15 | 0 | Ø130 | Ø165 | Ø200 | 4.0 | M10 | 0 | Ø180 | Ø215 | Ø250 | 4.0 | M12 | 0 |
| 160M/L | Ø300 | Ø250 | Ø350 | 5.0 | Ø19 | 0 | | | | | | | Ø180 | Ø215 | Ø250 | 4.0 | M12 | 0 | | | | | | |
| 180M/L | Ø300 | Ø250 | Ø350 | 5.0 | Ø19 | 0 | | | | | | | | | | | | | | | | | | |
| 200L | Ø350 | Ø300 | Ø400 | 5.0 | Ø19 | 0 | | | | | | | | | | | | | | | | | | |

