

# DATA SHEET

Premium Efficiency Motor: **IEC2-18-90-FF,**

**60 Hz**

WorldWide Electric Corporation

1 (800) 808-2131

Worldwideelectric.net



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| MOTOR INFORMATION       |                             |
|-------------------------|-----------------------------|
| HP                      | 2                           |
| RPM                     | 1800                        |
| Phase                   | 3                           |
| Frequency               | 60                          |
| Voltage                 | 230/460                     |
| Frame Size              | 90L                         |
| Enclosure               | TEFC                        |
| Degree of Protection    | IP55                        |
| Service Factor          | 1.15                        |
| Poles                   | 4                           |
| Full Load Speed         | 1748                        |
| Insulation Class        | F                           |
| Temp Rise               | 80°C                        |
| NEMA Code Letter        | L                           |
| Duty Cycle              | S1                          |
| Slip                    | 2.87%                       |
| IEC Design              | N                           |
| Moment of Inertia       | 0.0961 lb.ft.^2             |
| Locked Rotor Time (Hot) | 12 seconds                  |
| Sound Pressure Level    | 85 dB(A)                    |
| Number of Starts        | 2 Hot / 3 Cold              |
| Max Ambient Temperature | 40° C                       |
| Max Elevation           | 1000 m.a.s.l (3300 f.a.s.l) |
| Mounting                | B35 - FF Flange with Feet   |
| Rotation                | Bidirectional               |
| Area of Classification  | Safe                        |
| Inverter Rating         | 10:1 CT/20:1 VT             |
| Standard                | IEC 60034 and IEC 60072     |
| Approvals               | UL, CE                      |

| EFFICIENCY/POWER FACTOR |        |       |
|-------------------------|--------|-------|
| LOAD                    | EFF    | P. F. |
| 100%                    | 86.5 % | 0.70  |
| 75%                     | 86.2 % | 0.60  |
| 50%                     | 83.3 % | 0.47  |

| TORQUE       |       |       |
|--------------|-------|-------|
| FULL LOAD    | LRT   | BDT   |
| 9.198 lb.ft. | 359 % | 392 % |

| AMPERAGE INFORMATION |       |       |
|----------------------|-------|-------|
|                      | 230V  | 460V  |
| Full Load Amps       | 6.22  | 3.11  |
| Locked Rotor Amps    | 46.88 | 23.44 |
| No Load Current      | 4.38  | 2.19  |

| BEARING INFORMATION |         |
|---------------------|---------|
| DE Bearing          | 6205 ZZ |
| ODE Bearing         | 6304 ZZ |
| Grease Type         | NS7     |

| ADDITIONAL DATA    |              |
|--------------------|--------------|
| Multi-Mount        | Yes          |
| Shaft Material     | AISI 1040/45 |
| Connection Diagram | 9 Lead Wye   |
| Approximate Weight | 18 kg        |

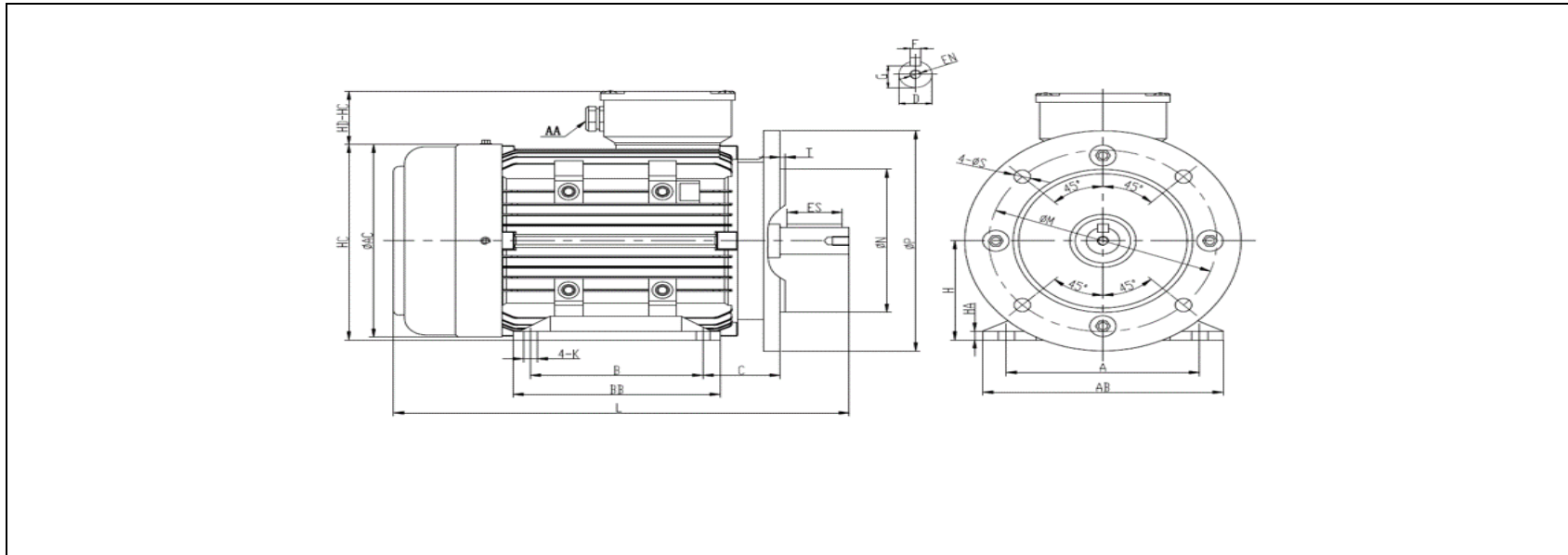
# MOTOR DRAWING

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## DIMENSION - METRIC (mm)

| MOUNTING |     |    |    | AB  | BB  | L   | H  | HA | AC  | HC  |
|----------|-----|----|----|-----|-----|-----|----|----|-----|-----|
| A        | B   | C  | K  |     |     |     |    |    |     |     |
| 140      | 125 | 56 | 10 | 159 | 150 | 386 | 90 | 8  | 175 | 179 |

| SHAFT & KEY |    |    |    |    |         |
|-------------|----|----|----|----|---------|
| F           | ES | G  | E  | D  | EN      |
| 8           | 40 | 20 | 50 | 24 | M8*25mm |

| TERMINAL BOX |       |
|--------------|-------|
| AA           | HD-HC |
| M20          | 49    |

| FLANGE |     |     |     |        |
|--------|-----|-----|-----|--------|
| N      | P   | T   | M   | S      |
| 130    | 200 | 3.5 | 165 | 4*12mm |

# PERFORMANCE CURVES

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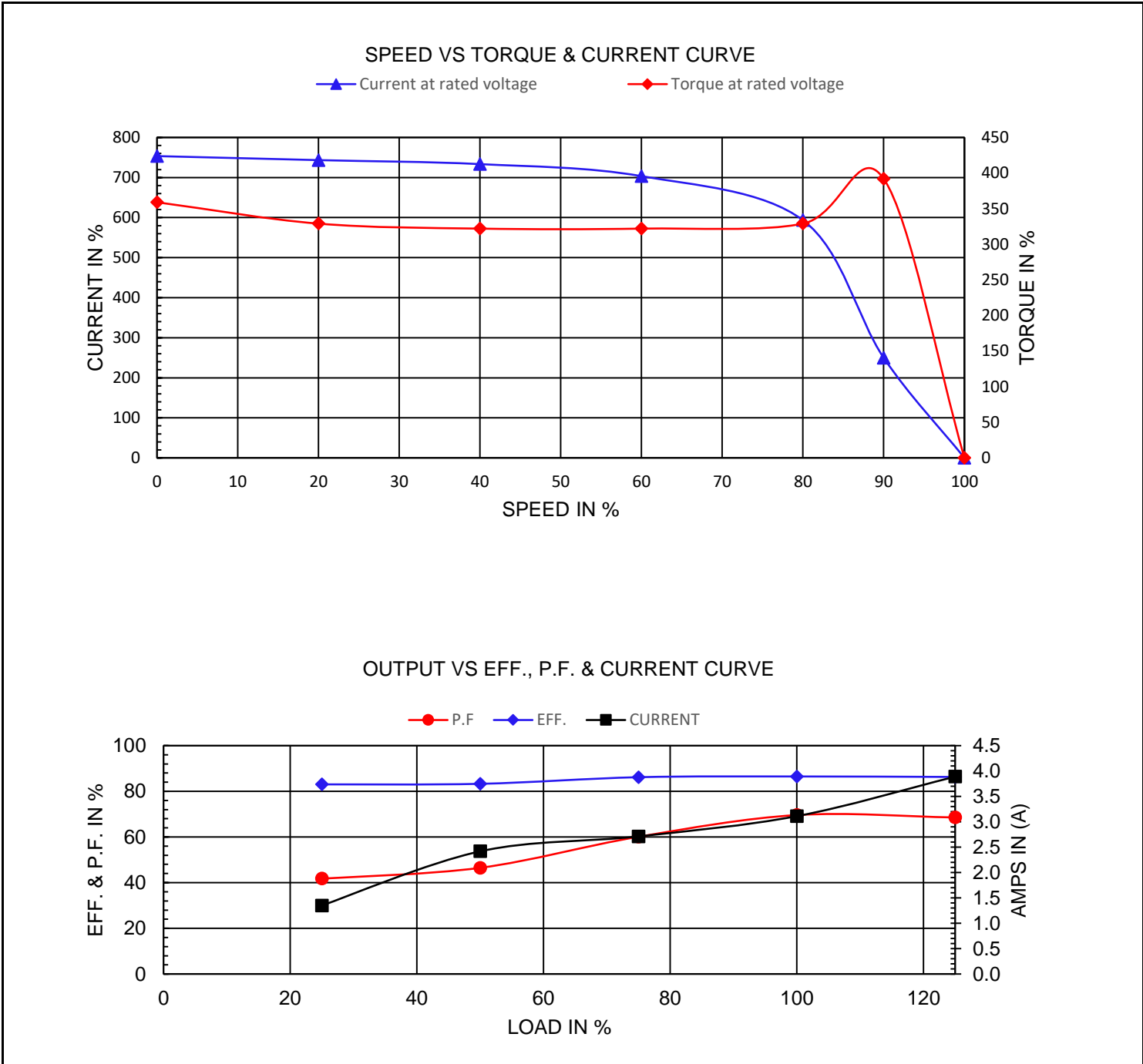


Premium Efficiency Motor:

**IEC2-18-90-FF**

|                                 |           |
|---------------------------------|-----------|
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|                       |                           |  |            |      |                   |
|-----------------------|---------------------------|--|------------|------|-------------------|
| Motor Type            |                           |  |            |      |                   |
| Output Rating (HP)    | 2                         |  | FL Speed   | 1748 |                   |
| Full Load Torque      | 9.198 lb.ft               |  | LRT (%FLT) | 359  | 460 volt FLA 3.11 |
| Rotor Wk <sup>2</sup> | 0.0961 lb-ft <sup>2</sup> |  | BDT (%FLT) | 392  | 230 volt FLA 6.22 |



# NAMEPLATE / WIRING

Premium Efficiency Motor: **IEC2-18-90-FF**

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
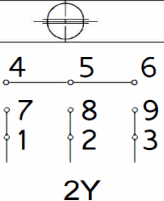
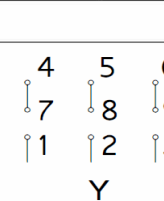
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## SAMPLE NAMEPLATE DATA

|   |    |   |       |                  |         |  |  |                              |            |
|---|----|---|-------|------------------|---------|--|--|------------------------------|------------|
|  |    | <b>3-PHASE<br/>INDUCTION MOTOR</b>  |       |                  |         | ENERGY<br> US<br>E309286 |  | <b>IE3 CE</b><br>IEC 60034-1 |            |
| CC306B  |    |   |       |                  |         |  |  |                              |            |
| TYPE  |    | OUTPUT  | HP    | kW               | INS.F   | FR.  |  | IP55                         | AMB.40°C   |
| V   | Hz | A   | r/min | SF               | IE CODE | $\eta$ 100%  |  | $\eta$ 75%                   | $\eta$ 50% |
|   |    |   |       |                  |         |  |  |                              |            |
|  |    |  |       | Code " " at 60Hz |         | Duty   |  | S1                           |            |
|   |    |   |       | DES              |         | N  |  | DE BRG                       |            |
|   |    |   |       | IC               |         | 411  |  | ODE BRG                      |            |
|   |    |   |       | SN.              |         | Date   |  | Weight kg                    |            |
| WorldWide Electric Corporation  |    |   |       |                  |         |  |  |                              |            |

|         |               |           |        |      |         |             |            |            |     |
|---------|---------------|-----------|--------|------|---------|-------------|------------|------------|-----|
| TYPE    | IEC2-18-90-FF |           | OUTPUT | HP   | 2       | kW          | 1.49       | FRAME      | 90L |
| V       | Hz            | A         | r/min. | SF   | IE CODE | $\eta$ 100% | $\eta$ 75% | $\eta$ 50% |     |
| 190/380 | 50            | 6.95/3.48 | 1432   | 1.00 | IE3     | 85.3        | 85.9       | 84.4       |     |
| 230/460 | 60            | 3.22/3.11 | 1748   | 1.15 | IE3     | 86.5        | 86.2       | 83.3       |     |

|       |   |          |         |         |        |       |
|-------|---|----------|---------|---------|--------|-------|
| Code" | L | "at 60Hz | DE BRG  | 6205 ZZ | Weight | 18 kg |
|       |   |          | ODE BRG | 6304 ZZ |        |       |