TECHTOP

# TA SERIES:
## THREE-PHASE ALUMINIUM
# ELECTRIC MOTORS

NEW



### Available Configurations:

- **High Efficiency** IE3 & IE1
- **Motor Rating** 0.18 kW to 22.00 kW (Frame Sizes 63 to 180)

Interactive Brochure

electrahertz
electrical suppliers

B3 FOOT MOUNT ALUMINIUM

Technical Guide

## Electric Motors (Aluminium frame) - IE3 premium efficiency

Introducing the **TA series** new range of aluminium motors. The perfect lightweight partner to our TC cast iron line. Built with flexible multi-mount frames and superior cooling delivering reliable performance from 0.18 kW up to 22.00 kW.

**Key range specifications:**

| | |
|---|---|
| **Efficiency:** | Fully MEPS-compliant in IE3 Premium and IE1 Standard Efficiency options |
| **Housing:** | Aluminium frame reduces overall weight while ensuring optimal heat dissipation |
| **Protection:** | Standard IP55 enclosure ensures protection against dust and water ingress |
| **Performance:** | Class F insulation and S1 duty factor ensure reliability during non-stop operation |
| **VSD Ready:** | Precise control over mechanical processes with full (VSD) compatibility |
| **Compliance:** | Manufactured in strict accordance with **SANS/IEC 60034-2-1** standards |

**General features:**

| | |
|---|---|
| • Protection degree: | **IP55** |
| • Insulation class: | **F** (155°C) |
| • Colour: | RAL 7024 *(graphite grey)* |
| • Housing: | Totally enclosed fan cooled (TEFC) |
| • Mounting: | **Foot mounting (B3)** |
| • Efficiency classes: | **IE1** (Standard Efficiency): ≤ 0.55 kW<br>**IE3** (Premium Efficiency): ≥ 0.75 kW |
| • Voltage (50Hz): | Frames 63–100: **Δ** 220-240V / **Y** 380-415V<br>Frames 112–180: **Δ** 380-415V / **Y** 660-690V |

**Ideal applications:** Perfect for diverse industrial use including packaging material handling fluid pumps blowers power transmission and agricultural machinery.


T1A631-2


T1A712-4


T3A112M1-4


**Removable Feet**
All Techtop motors have **removable** feet

| type | output (kW) | frame size | pole | efficiency | speed RPM | shaft Ø (mm) | weight (kg) | price |
|---|---|---|---|---|---|---|---|---|
| **TA series - Three-phase aluminium electric motors** | | | | | | | | |
| Designed for standard base-mounted installations the B3 configuration features removable feet to allow for versatile top or side terminal box positioning. | | | | | | | | |
| **2-pole** | **Three-phase motors** | | | | | | | |
| **IE1** - standard efficiency | | | | | | | | |
| **T1A631-2** | 0.18 | 63 | 2 | IE1 | 2780 | 11 | 4.0 | **2 205.00** |
| **T1A632-2** | 0.25 | 63 | 2 | IE1 | 2780 | 11 | 4.2 | **2 331.00** |
| **T1A711-2** | 0.37 | 71 | 2 | IE1 | 2830 | 14 | 5.2 | **2 656.50** |
| **T1A712-2** | 0.55 | 71 | 2 | IE1 | 2815 | 14 | 6.0 | **2 835.00** |
| **IE3** - premium efficiency | | | | | | | | |
| **T3A801-2** | 0.75 | 80 | 2 | IE3 | 2890 | 19 | 8.9 | **4 270.00** |
| **T3A802-2** | 1.10 | 80 | 2 | IE3 | 2900 | 19 | 10.6 | **4 600.00** |
| **T3A90S-2** | 1.50 | 90/S | 2 | IE3 | 2900 | 24 | 14.0 | **6 050.00** |
| **T3A90L1-2** | 2.20 | 90/L | 2 | IE3 | 2910 | 24 | 16.3 | **6 740.00** |
| **T3A100L1-2** | 3 | 100/L | 2 | IE3 | 2910 | 28 | 23.7 | **8 360.00** |
| **T3A112M1-2** | 4 | 112/M | 2 | IE3 | 2920 | 28 | 30.1 | **10 400.00** |
| **T3A132S1-2** | 5.50 | 132/S | 2 | IE3 | 2930 | 38 | 43.4 | **15 200.00** |
| **T3A132S2-2** | 7.50 | 132/S | 2 | IE3 | 2930 | 38 | 51.7 | **16 900.00** |
| **T3A160M1-2** | 11 | 160/M | 2 | IE3 | 2960 | 42 | 85.5 | **31 600.00** |
| **T3A160M2-2** | 15 | 160/M | 2 | IE3 | 2960 | 42 | 104.0 | **34 700.00** |
| **T3A160L1-2** | 18.50 | 160/L | 2 | IE3 | 2950 | 42 | 121.0 | **39 000.00** |
| **T3A180M-2** | 22 | 180/M | 2 | IE3 | 2960 | 48 | 130.6 | **49 200.00** |
| **4-pole** | **Three-phase motors** | | | | | | | |
| **IE1** - standard efficiency | | | | | | | | |
| **T1A632-4** | 0.18 | 63 | 4 | IE1 | 1365 | 11 | 4.2 | **2 331.00** |
| **T1A711-4** | 0.25 | 71 | 4 | IE1 | 1395 | 14 | 5.1 | **2 688.00** |
| **T1A712-4** | 0.37 | 71 | 4 | IE1 | 1390 | 14 | 6.0 | **2 908.50** |
| **T1A801-4** | 0.55 | 80 | 4 | IE1 | 1400 | 19 | 8.1 | **3 444.00** |
| **IE3** - premium efficiency | | | | | | | | |
| **T3A802-4** | 0.75 | 80 | 4 | IE3 | 1430 | 19 | 11.7 | **4 790.00** |
| **T3A90S-4** | 1.10 | 90/S | 4 | IE3 | 1440 | 24 | 15.1 | **5 970.00** |
| **T3A90L1-4** | 1.50 | 90/L1 | 4 | IE3 | 1440 | 24 | 18.0 | **6 810.00** |
| **T3A100L1-4** | 2.20 | 100/L | 4 | IE3 | 1450 | 28 | 23.9 | **8 740.00** |
| **T3A100L2-4** | 3 | 100/L | 4 | IE3 | 1450 | 28 | 28.3 | **9 920.00** |
| **T3A112M1-4** | 4 | 112/M1 | 4 | IE3 | 1450 | 28 | 33.9 | **12 000.00** |
| **T3A132S-4** | 5.50 | 132/S | 4 | IE3 | 1460 | 38 | 47.4 | **16 500.00** |
| **T3A132M1-4** | 7.50 | 132/M | 4 | IE3 | 1460 | 38 | 57.4 | **19 000.00** |
| **T3A160M-4** | 11 | 160/M | 4 | IE3 | 1470 | 42 | 89.0 | **31 000.00** |
| **T3A160L1-4** | 15 | 160/L1 | 4 | IE3 | 1470 | 42 | 110.5 | **36 300.00** |
| **T3A180M-4** | 18.50 | 180/M | 4 | IE3 | 1470 | 48 | 130.0 | **46 600.00** |
| **T3A180L-4** | 22 | 180/L | 4 | IE3 | 1470 | 48 | 145.4 | **49 600.00** |



Above ZAR prices do not include VAT. E&OE

B5 FLANGE MOUNT ALUMINIUM

Technical Guide

## Electric Motors (Aluminium frame) - IE3 premium efficiency

The **TA series** delivers robust, precision-aligned B5 flange mounting in a lightweight aluminium frame. Purpose-built for direct drive connections and compact machinery layouts, each unit features superior cooling, multi-mount flexibility, and IE3 efficiency spanning 0.75 kW to 22.00 kW.

IP55

IE3 PREMIUM EFFICIENCY



T3A112M1-4 B5



T1A631-2 B4

| type | output (kW) | frame size | pole | efficiency | speed RPM | shaft Ø (mm) | weight (kg) | price |
|---|---|---|---|---|---|---|---|---|
| **TA series - Three-phase aluminium electric motors** | | | | | | | | |

- **Engineered for direct-drive coupling:** Ideal for flush mounting to gearboxes, pumps, and industrial equipment
- **Multi-mount B35 / B34 versatility:** All B5 & B14 flange motors come standard with detachable aluminium feet at no extra cost. Install directly as B35 / B34, or unbolt the feet in seconds for pure B5 / B14 flange mounting

**2-pole Three-phase motors**

**IE1** - standard efficiency

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **T1A631-2 B5*** | 0.18 | 63 | 2 | IE1 | 2780 | 11 | 3.6 | **2 580.00** |
| **T1A632-2 B5*** | 0.25 | 63 | 2 | IE1 | 2780 | 11 | 4.1 | **2 700.00** |
| **T1A711-2 B5*** | 0.37 | 71 | 2 | IE1 | 2830 | 14 | 5.4 | **3 130.00** |
| **T1A712-2 B5*** | 0.55 | 71 | 2 | IE1 | 2815 | 14 | 6.2 | **3 300.00** |

**IE3** - premium efficiency

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **T3A801-2 B5*** | 0.75 | 80 | 2 | IE3 | 2890 | 19 | 9.1 | **4 980.00** |
| **T3A802-2 B5*** | 1.10 | 80 | 2 | IE3 | 2900 | 19 | 10.8 | **5 310.00** |
| **T3A90S-2 B5*** | 1.50 | 90/S | 2 | IE3 | 2900 | 24 | 14.2 | **6 810.00** |
| **T3A90L1-2 B5*** | 2.20 | 90/L | 2 | IE3 | 2910 | 24 | 16.5 | **7 500.00** |
| **T3A100L1-2 B5*** | 3 | 100/L | 2 | IE3 | 2910 | 28 | 24.0 | **9 480.00** |
| **T3A112M1-2 B5*** | 4 | 112/M | 2 | IE3 | 2920 | 28 | 30.3 | **11 800.00** |
| **T3A132S1-2 B5*** | 5.50 | 132/S | 2 | IE3 | 2930 | 38 | 43.8 | **16 880.00** |
| **T3A132S2-2 B5*** | 7.50 | 132/S | 2 | IE3 | 2930 | 38 | 52.1 | **18 580.00** |
| **T3A160M1-2 B5** | 11 | 160/M | 2 | IE3 | 2960 | 42 | 86.3 | **34 490.00** |
| **T3A160M2-2 B5** | 15 | 160/M | 2 | IE3 | 2960 | 42 | 104.8 | **37 590.00** |
| **T3A160L1-2 B5** | 18.50 | 160/L | 2 | IE3 | 2950 | 42 | 121.4 | **41 890.00** |
| **T3A180M-2 B5** | 22 | 180/M | 2 | IE3 | 2960 | 48 | 130.5 | **52 330.00** |

** For B14 flange replace **B5** with **B4***

**4-pole Three-phase motors**

**IE1** - standard efficiency

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **T1A632-4 B5*** | 0.18 | 63 | 4 | IE1 | 1365 | 11 | 4.5 | **2 700.00** |
| **T1A711-4 B5*** | 0.25 | 71 | 4 | IE1 | 1395 | 14 | 5.2 | **3 160.00** |
| **T1A712-4 B5*** | 0.37 | 71 | 4 | IE1 | 1390 | 14 | 6.1 | **3 380.00** |
| **T1A801-4 B5*** | 0.55 | 80 | 4 | IE1 | 1400 | 19 | 8.3 | **4 160.00** |

**IE3** - premium efficiency

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **T3A802-4 B5*** | 0.75 | 80 | 4 | IE3 | 1430 | 19 | 11.9 | **5 500.00** |
| **T3A90S-4 B5*** | 1.10 | 90/S | 4 | IE3 | 1440 | 24 | 15.3 | **6 730.00** |
| **T3A90L1-4 B5*** | 1.50 | 90/L1 | 4 | IE3 | 1440 | 24 | 18.2 | **7 570.00** |
| **T3A100L1-4 B5*** | 2.20 | 100/L | 4 | IE3 | 1450 | 28 | 24.2 | **9 860.00** |
| **T3A100L2-4 B5*** | 3 | 100/L | 4 | IE3 | 1450 | 28 | 28.6 | **11 040.00** |
| **T3A112M1-4 B5*** | 4 | 112/M1 | 4 | IE3 | 1450 | 28 | 34.1 | **13 400.00** |
| **T3A132S-4 B5*** | 5.50 | 132/S | 4 | IE3 | 1460 | 38 | 47.8 | **18 180.00** |
| **T3A132M1-4 B5*** | 7.50 | 132/M1 | 4 | IE3 | 1460 | 38 | 57.6 | **20 680.00** |
| **T3A160M-4 B5** | 11 | 160/M | 4 | IE3 | 1470 | 42 | 89.8 | **33 890.00** |
| **T3A160L1-4 B5** | 15 | 160/L1 | 4 | IE3 | 1470 | 42 | 110.9 | **39 190.00** |
| **T3A180M-4 B5** | 18.50 | 180/M | 4 | IE3 | 1470 | 48 | 129.9 | **49 730.00** |
| **T3A180L-4 B5** | 22 | 180/L | 4 | IE3 | 1470 | 48 | 145.3 | **52 730.00** |

** For B14 flange replace **B5** with **B4***

Al Aluminium

## UNLOCK TECHTOP MOTORS ADVANTAGE

| WHY CHOOSE ALUMINIUM? | THE TECHTOP ADVANTAGE |
|---|---|
| **Lighter Weight** | Up to 30% lighter than cast iron for easier handling and less equipment stress |
| **Superior Cooling** | Runs cooler to prevent overheating and extend motor life |
| **Rust Resistance** | Naturally corrosion resistant, durable in damp or harsh environments |
| **Multi-Mount Flexibility** | Removable feet allow quick, easy installation in tight spaces |
| **Energy Efficient** | Reliable operation that lowers monthly energy bills |

