



## AC INDUCTION MOTORS WITH GEARBOX | 120 - 380 V 6 - 120 W

### AI SERIES

We offer a broad range of high quality AC induction motors in standard and customized configurations. Our customer-centric approach makes us the ideal supplier for your project, especially to instrument and apparatus builders. In addition, we offer immediate delivery, thanks to always having a high number of motors in stock.

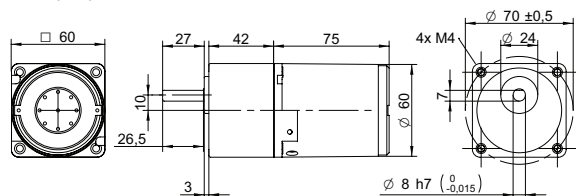
#### Customizations include:

- ✓ Customized harness
- ✓ Winding configuration
- ✓ Shaft configuration
- ✓ And more...

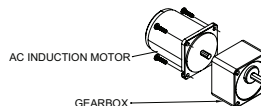
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| AI-025W | 120 to 380 | 1   3         | 50   60      | 80            | 25      | <a href="#">9</a>  |
| AI-040W | 120 to 380 | 1   3         | 50   60      | 90            | 40      | <a href="#">13</a> |
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| AI-120W | 120 to 380 | 1   3         | 50   60      | 90            | 120     | <a href="#">25</a> |

## DRAWING (mm)



AC induction motor and gearbox also sold separately.



## PHOTO



## MODEL NO. DESIGNATION

AI-006W - Voltage - Phase - Connection

Example: AI-006W-230-SC S = Single phase C = Cable

ACCESSORIES<sup>1</sup>

C = customizations are offered on demand even for smaller quantities. Typical customizations are indicated with a green dot at column end. Please contact us for any customization request.

## GEAR MOTOR DATA

|                                |     | 3    | 3.6  | 5    | 6    | 7.5  | 9    | 10   | 12.5 | 15   | 18   | 20   | 25   | 30   | 36  | 40  | 50  | 60  | 75  | 90  | 100 | 120              | 150              | 180              | 200              | C |
|--------------------------------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|------------------|------------------|------------------|------------------|---|
| Gear ratio                     |     | 3    | 3.6  | 5    | 6    | 7.5  | 9    | 10   | 12.5 | 15   | 18   | 20   | 25   | 30   | 36  | 40  | 50  | 60  | 75  | 90  | 100 | 120              | 150              | 180              | 200              |   |
| Nominal torque                 | Nm  | 0.10 | 0.12 | 0.16 | 0.19 | 0.24 | 0.29 | 0.32 | 0.41 | 0.49 | 0.58 | 0.58 | 0.73 | 0.88 | 1.1 | 1.2 | 1.5 | 1.6 | 2.0 | 2.4 | 2.6 | 3.0 <sup>2</sup> | 3.0 <sup>2</sup> | 3.0 <sup>2</sup> | 3.0 <sup>2</sup> |   |
| Nominal speed                  | rpm | 480  | 400  | 290  | 240  | 190  | 160  | 150  | 120  | 97   | 81   | 73   | 58   | 48   | 40  | 36  | 29  | 24  | 19  | 16  | 15  | 12               | 9.7              | 8.1              | 7.3              |   |
| Nominal power                  | W   | 4.9  | 4.9  | 4.9  | 4.9  | 4.9  | 4.9  | 4.9  | 4.9  | 4.9  | 4.9  | 4.4  | 4.4  | 4.4  | 4.4 | 4.4 | 4.4 | 4.0 | 4.0 | 4.0 | 4.0 | 3.8              | 3.0              | 2.5              | 2.3              |   |
| Gearb. nom. torq. <sup>3</sup> | Nm  | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3                | 3                | 3                | 3                |   |
| Gearbox efficiency             | %   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 73   | 73   | 73   | 73  | 73  | 73  | 66  | 66  | 66  | 66  | 66               | 66               | 66               | 66               |   |
| Radial load <sup>4</sup>       | N   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 180  | 180  | 180  | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180              | 180              | 180              | 180              |   |
| Direction of rot.              |     | CW   | CW   | CW   | CW   | CW   | CW   | CW   | CW   | CW   | CW   | CCW  | CCW  | CCW  | CCW | CCW | CCW | CW  | CW  | CW  | CW  | CW               | CW               | CW               | CW               |   |
| Weight                         | kg  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2              | 1.2              | 1.2              | 1.2              |   |

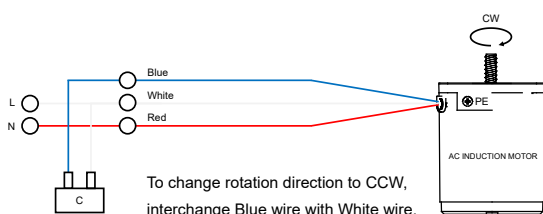
## OTHER GEAR MOTOR DATA

|                        |    |           |
|------------------------|----|-----------|
| Service life           | h  | 10000     |
| Performance tolerances |    | ± 15      |
| Operating temperature  | °C | -10 to 40 |
| IP rating              |    | IP20      |
| Manufacturing standard |    | ISO 9001  |
| CE label   UL label    |    | Yes   No  |

## GEARBOX DATA

|                     |   |              |
|---------------------|---|--------------|
| Shaft axial load    | N | 30           |
| Bearing type        |   | Ball bearing |
| Shaft material      |   | 40 Cr steel  |
| Housing material    |   | Aluminum     |
| Material gear stage |   | 40 Cr steel  |

## WIRING DIAGRAM AC INDUCTION MOTOR



## AC INDUCTION MOTOR DATA

|                                |     |       |
|--------------------------------|-----|-------|
| Nominal voltage                | V   | 230   |
| No. of phases                  |     | 1     |
| Frequency                      | Hz  | 50    |
| No. of poles                   |     | 4     |
| Nominal speed                  | rpm | 1450  |
| Nominal torque                 | mNm | 40    |
| Nominal current                | A   | 0.14  |
| Nominal power                  | W   | 6     |
| Stall torque                   | mNm | 50    |
| Insulation class               |     | B     |
| Motor cable                    |     | AWG20 |
| Motor cable length             | mm  | 300   |
| Capacitor included in delivery | μF  | 0.8   |
| Insulation resistance          | MΩ  | 100   |
| Dielectric strength            | kV  | 1.5   |
| Max. winding temperature       | °C  | 80    |
| Weight                         | kg  | 0.75  |

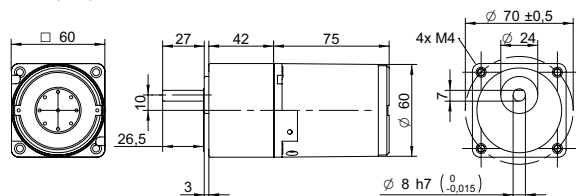
GEAR MOTOR RANGE AI-SERIES<sup>5</sup>

|                 |    |                        |
|-----------------|----|------------------------|
| Nominal voltage | V  | See separate datasheet |
| Nominal power   | W  | See separate datasheet |
| Dimension       | mm | See separate datasheet |

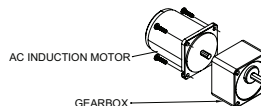
## NOTES

- See page 29 of this catalog.
- Gear motor torque limited by gearbox.
- Gearbox nominal torque.
- 20 mm from shaft.
- Visit [www.transmotec.com](http://www.transmotec.com) to view datasheets.

## DRAWING (mm)



AC induction motor and gearbox also sold separately.



## PHOTO



## MODEL NO. DESIGNATION

AI-006W - Voltage - Phase - Connection

Example: AI-006W-400-TC T = Three phase C = Cable

## ACCESSORIES¹



● C = customizations are offered on demand even for smaller quantities. Typical customizations are indicated with a green dot at column end. Please contact us for any customization request.

## GEAR MOTOR DATA

|                                |     | 3    | 3.6  | 5    | 6    | 7.5  | 9    | 10   | 12.5 | 15   | 18   | 20   | 25   | 30  | 36  | 40  | 50  | 60  | 75  | 90  | 100  | 120  | 150  | 180  | 200  | C |
|--------------------------------|-----|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|---|
| Gear ratio                     |     | 3    | 3.6  | 5    | 6    | 7.5  | 9    | 10   | 12.5 | 15   | 18   | 20   | 25   | 30  | 36  | 40  | 50  | 60  | 75  | 90  | 100  | 120  | 150  | 180  | 200  |   |
| Nominal torque                 | Nm  | 0.12 | 0.14 | 0.19 | 0.23 | 0.29 | 0.35 | 0.39 | 0.49 | 0.58 | 0.70 | 0.70 | 0.88 | 1.1 | 1.3 | 1.4 | 1.8 | 1.9 | 2.4 | 2.9 | 3.0² | 3.0² | 3.0² | 3.0² | 3.0² | ● |
| Nominal speed                  | rpm | 400  | 330  | 240  | 200  | 160  | 130  | 120  | 96   | 80   | 67   | 60   | 48   | 40  | 33  | 30  | 24  | 20  | 16  | 13  | 12   | 10   | 8    | 6.7  | 6    |   |
| Nominal power                  | W   | 4.9  | 4.9  | 4.9  | 4.9  | 4.9  | 4.9  | 4.9  | 4.9  | 4.9  | 4.9  | 4.4  | 4.4  | 4.4 | 4.4 | 4.4 | 4.4 | 4.0 | 4.0 | 4.0 | 3.8  | 3.1  | 2.5  | 2.1  | 1.9  |   |
| Gearb. nom. torq. <sup>3</sup> | Nm  | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3    | 3    | 3    | 3    | 3    |   |
| Gearbox efficiency             | %   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 73   | 73   | 73  | 73  | 73  | 73  | 66  | 66  | 66  | 66   | 66   | 66   | 66   | 66   |   |
| Radial load <sup>4</sup>       | N   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 180  | 180  | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180  | 180  | 180  | 180  | 180  |   |
| Direction of rot.              |     | CW   | CW   | CW   | CW   | CW   | CW   | CW   | CW   | CW   | CW   | CCW  | CCW  | CCW | CCW | CCW | CCW | CW  | CW  | CW  | CW   | CW   | CW   | CW   | CW   |   |
| Weight                         | kg  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  |   |

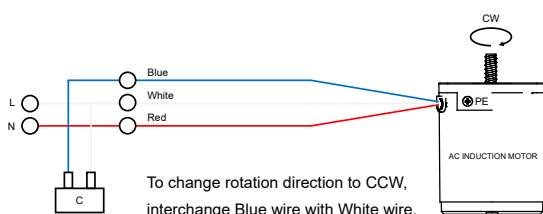
## OTHER GEAR MOTOR DATA

|                        |    |           |
|------------------------|----|-----------|
| Service life           | h  | 10000     |
| Performance tolerances |    | ± 15      |
| Operating temperature  | °C | -10 to 40 |
| IP rating              |    | IP20      |
| Manufacturing standard |    | ISO 9001  |
| CE label   UL label    |    | Yes   No  |

## GEARBOX DATA

|                     |   |              |
|---------------------|---|--------------|
| Shaft axial load    | N | 30           |
| Bearing type        |   | Ball bearing |
| Shaft material      |   | 40 Cr steel  |
| Housing material    |   | Aluminum     |
| Material gear stage |   | 40 Cr steel  |

## WIRING DIAGRAM AC INDUCTION MOTOR



## AC INDUCTION MOTOR DATA

|                                |     |       |
|--------------------------------|-----|-------|
| Nominal voltage                | V   | 380   |
| No. of phases                  |     | 3     |
| Frequency                      | Hz  | 50    |
| No. of poles                   |     | 4     |
| Nominal speed                  | rpm | 1200  |
| Nominal torque                 | mNm | 48    |
| Nominal current                | A   | 0.04  |
| Nominal power                  | W   | 6     |
| Stall torque                   | mNm | 85    |
| Insulation class               |     | B     |
| Motor cable                    |     | AWG20 |
| Motor cable length             | mm  | 300   |
| Capacitor included in delivery | μF  | -     |
| Insulation resistance          | MΩ  | 100   |
| Dielectric strength            | kV  | 1.5   |
| Max. winding temperature       | °C  | 80    |
| Weight                         | kg  | 0.75  |

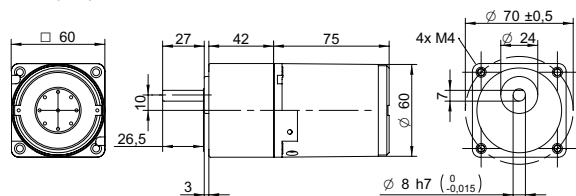
GEAR MOTOR RANGE AI-SERIES<sup>5</sup>

|                 |    |                        |
|-----------------|----|------------------------|
| Nominal voltage | V  | See separate datasheet |
| Nominal power   | W  | See separate datasheet |
| Dimension       | mm | See separate datasheet |

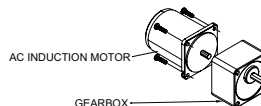
## NOTES

1. See page 29 of this catalog.
2. Gear motor torque limited by gearbox.
3. Gearbox nominal torque.
4. 20 mm from shaft.
5. Visit [www.transmotec.com](http://www.transmotec.com) to view datasheets.

## DRAWING (mm)



AC induction motor and gearbox also sold separately.



## PHOTO



## MODEL NO. DESIGNATION

AI-006W - Voltage - Phase - Connection

Example: AI-006W-120-SC S = Single phase C = Cable

## ACCESSORIES¹



● C = customizations are offered on demand even for smaller quantities. Typical customizations are indicated with a green dot at column end. Please contact us for any customization request.

## GEAR MOTOR DATA

|                                |     | 3    | 3.6  | 5    | 6    | 7.5  | 9    | 10   | 12.5 | 15   | 18   | 20   | 25   | 30   | 36  | 40  | 50  | 60  | 75  | 90  | 100 | 120  | 150  | 180  | 200  | C |
|--------------------------------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|---|
| Gear ratio                     |     | 3    | 3.6  | 5    | 6    | 7.5  | 9    | 10   | 12.5 | 15   | 18   | 20   | 25   | 30   | 36  | 40  | 50  | 60  | 75  | 90  | 100 | 120  | 150  | 180  | 200  | ● |
| Nominal torque                 | Nm  | 0.10 | 0.12 | 0.16 | 0.19 | 0.24 | 0.29 | 0.32 | 0.41 | 0.49 | 0.58 | 0.58 | 0.73 | 0.88 | 1.1 | 1.2 | 1.5 | 1.6 | 2.0 | 2.4 | 2.6 | 3.0² | 3.0² | 3.0² | 3.0² | ● |
| Nominal speed                  | rpm | 480  | 400  | 290  | 240  | 190  | 160  | 150  | 120  | 97   | 81   | 73   | 58   | 48   | 40  | 36  | 29  | 24  | 19  | 16  | 15  | 12   | 9.7  | 8.1  | 7.3  |   |
| Nominal power                  | W   | 4.9  | 4.9  | 4.9  | 4.9  | 4.9  | 4.9  | 4.9  | 4.9  | 4.9  | 4.9  | 4.4  | 4.4  | 4.4  | 4.4 | 4.4 | 4.4 | 4.0 | 4.0 | 4.0 | 4.0 | 3.8  | 3.0  | 2.5  | 2.3  |   |
| Gearb. nom. torq. <sup>3</sup> | Nm  | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3    | 3    | 3    | 3    |   |
| Gearbox efficiency             | %   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 73   | 73   | 73   | 73  | 73  | 73  | 66  | 66  | 66  | 66  | 66   | 66   | 66   | 66   |   |
| Radial load <sup>4</sup>       | N   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 180  | 180  | 180  | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180  | 180  | 180  | 180  |   |
| Direction of rot.              |     | CW   | CW   | CW   | CW   | CW   | CW   | CW   | CW   | CW   | CW   | CCW  | CCW  | CCW  | CCW | CCW | CCW | CW  | CW  | CW  | CW  | CW   | CW   | CW   | CW   |   |
| Weight                         | kg  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2  | 1.2  | 1.2  | 1.2  |   |

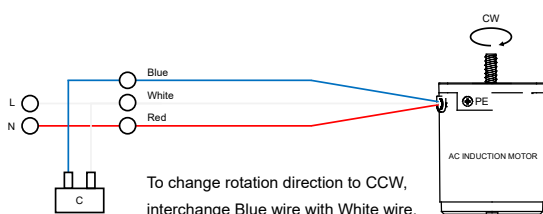
## OTHER GEAR MOTOR DATA

|                        |    |           |
|------------------------|----|-----------|
| Service life           | h  | 10000     |
| Performance tolerances |    | ± 15      |
| Operating temperature  | °C | -10 to 40 |
| IP rating              |    | IP20      |
| Manufacturing standard |    | ISO 9001  |
| CE label   UL label    |    | No   No   |

## GEARBOX DATA

|                     |   |              |
|---------------------|---|--------------|
| Shaft axial load    | N | 30           |
| Bearing type        |   | Ball bearing |
| Shaft material      |   | 40 Cr steel  |
| Housing material    |   | Aluminum     |
| Material gear stage |   | 40 Cr steel  |

## WIRING DIAGRAM AC INDUCTION MOTOR



## AC INDUCTION MOTOR DATA

|                                |     |       |
|--------------------------------|-----|-------|
| Nominal voltage                | V   | 120   |
| No. of phases                  |     | 1     |
| Frequency                      | Hz  | 60    |
| No. of poles                   |     | 4     |
| Nominal speed                  | rpm | 1450  |
| Nominal torque                 | mNm | 40    |
| Nominal current                | A   | 0.18  |
| Nominal power                  | W   | 6     |
| Stall torque                   | mNm | 40    |
| Insulation class               |     | B     |
| Motor cable                    |     | AWG20 |
| Motor cable length             | mm  | 300   |
| Capacitor included in delivery | μF  | 2     |
| Insulation resistance          | MΩ  | 100   |
| Dielectric strength            | kV  | 1.5   |
| Max. winding temperature       | °C  | 80    |
| Weight                         | kg  | 0.75  |

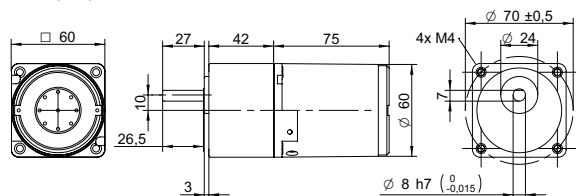
GEAR MOTOR RANGE AI-SERIES<sup>5</sup>

|                 |    |                        |
|-----------------|----|------------------------|
| Nominal voltage | V  | See separate datasheet |
| Nominal power   | W  | See separate datasheet |
| Dimension       | mm | See separate datasheet |

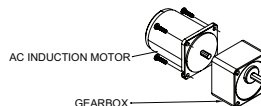
## NOTES

1. See page 29 of this catalog.
2. Gear motor torque limited by gearbox.
3. Gearbox nominal torque.
4. 20 mm from shaft.
5. Visit [www.transmotec.com](http://www.transmotec.com) to view datasheets.

## DRAWING (mm)



AC induction motor and gearbox also sold separately.



## PHOTO



## MODEL NO. DESIGNATION

AI-006W - Voltage - Phase - Connection

Example: AI-006W-208-TC T = Three phase C = Cable

## ACCESSORIES¹



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## GEAR MOTOR DATA

|                                |     | 3    | 3.6  | 5    | 6    | 7.5  | 9    | 10   | 12.5 | 15   | 18   | 20   | 25   | 30   | 36  | 40  | 50  | 60  | 75  | 90  | 100 | 120  | 150  | 180  | 200  | C |
|--------------------------------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|---|
| Gear ratio                     |     | 3    | 3.6  | 5    | 6    | 7.5  | 9    | 10   | 12.5 | 15   | 18   | 20   | 25   | 30   | 36  | 40  | 50  | 60  | 75  | 90  | 100 | 120  | 150  | 180  | 200  |   |
| Nominal torque                 | Nm  | 0.10 | 0.12 | 0.16 | 0.19 | 0.24 | 0.29 | 0.32 | 0.41 | 0.49 | 0.58 | 0.58 | 0.73 | 0.88 | 1.1 | 1.2 | 1.5 | 1.6 | 2.0 | 2.4 | 2.6 | 3.0² | 3.0² | 3.0² | 3.0² | ● |
| Nominal speed                  | rpm | 480  | 400  | 290  | 240  | 190  | 160  | 150  | 120  | 97   | 81   | 73   | 58   | 48   | 40  | 36  | 29  | 24  | 19  | 16  | 15  | 12   | 9.7  | 8.1  | 7.3  |   |
| Nominal power                  | W   | 4.9  | 4.9  | 4.9  | 4.9  | 4.9  | 4.9  | 4.9  | 4.9  | 4.9  | 4.9  | 4.4  | 4.4  | 4.4  | 4.4 | 4.4 | 4.4 | 4.0 | 4.0 | 4.0 | 4.0 | 3.8  | 3.0  | 2.5  | 2.3  |   |
| Gearb. nom. torq. <sup>3</sup> | Nm  | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3    | 3    | 3    | 3    |   |
| Gearbox efficiency             | %   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 73   | 73   | 73   | 73  | 73  | 73  | 66  | 66  | 66  | 66  | 66   | 66   | 66   | 66   |   |
| Radial load <sup>4</sup>       | N   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 180  | 180  | 180  | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180  | 180  | 180  | 180  |   |
| Direction of rot.              |     | CW   | CW   | CW   | CW   | CW   | CW   | CW   | CW   | CW   | CW   | CCW  | CCW  | CCW  | CCW | CCW | CCW | CW  | CW  | CW  | CW  | CW   | CW   | CW   | CW   |   |
| Weight                         | kg  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2  | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2  | 1.2  | 1.2  | 1.2  |   |

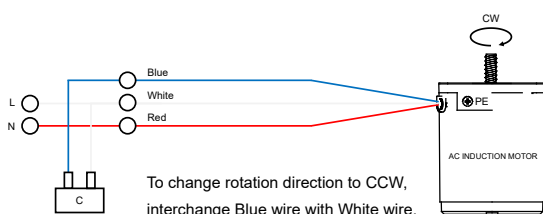
## OTHER GEAR MOTOR DATA

|                        |    |           |
|------------------------|----|-----------|
| Service life           | h  | 10000     |
| Performance tolerances |    | ± 15      |
| Operating temperature  | °C | -10 to 40 |
| IP rating              |    | IP20      |
| Manufacturing standard |    | ISO 9001  |
| CE label   UL label    |    | No   No   |

## GEARBOX DATA

|                     |   |              |
|---------------------|---|--------------|
| Shaft axial load    | N | 30           |
| Bearing type        |   | Ball bearing |
| Shaft material      |   | 40 Cr steel  |
| Housing material    |   | Aluminum     |
| Material gear stage |   | 40 Cr steel  |

## WIRING DIAGRAM AC INDUCTION MOTOR



## AC INDUCTION MOTOR DATA

|                                |     |       |
|--------------------------------|-----|-------|
| Nominal voltage                | V   | 220   |
| No. of phases                  |     | 3     |
| Frequency                      | Hz  | 60    |
| No. of poles                   |     | 4     |
| Nominal speed                  | rpm | 1450  |
| Nominal torque                 | mNm | 40    |
| Nominal current                | A   | 0.07  |
| Nominal power                  | W   | 6     |
| Stall torque                   | mNm | 70    |
| Insulation class               |     | B     |
| Motor cable                    |     | AWG20 |
| Motor cable length             | mm  | 300   |
| Capacitor included in delivery | μF  | -     |
| Insulation resistance          | MΩ  | 100   |
| Dielectric strength            | kV  | 1.5   |
| Max. winding temperature       | °C  | 80    |
| Weight                         | kg  | 0.75  |

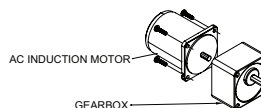
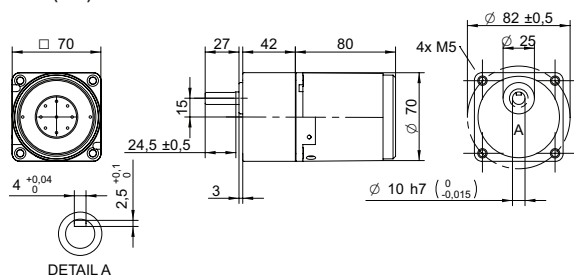
GEAR MOTOR RANGE AI-SERIES<sup>5</sup>

|                 |    |                        |
|-----------------|----|------------------------|
| Nominal voltage | V  | See separate datasheet |
| Nominal power   | W  | See separate datasheet |
| Dimension       | mm | See separate datasheet |

## NOTES

1. See page 29 of this catalog.
2. Gear motor torque limited by gearbox.
3. Gearbox nominal torque.
4. 20 mm from shaft.
5. Visit [www.transmotec.com](http://www.transmotec.com) to view datasheets.

## DRAWING (mm)



## PHOTO



AC induction motor and gearbox also sold separately.

## MODEL NO. DESIGNATION

AI-015W - Voltage - Phase - Connection  
 Example: AI-015W-230-SC S = Single phase C = Cable

## ACCESSORIES¹



● C = customizations are offered on demand even for smaller quantities. Typical customizations are indicated with a green dot at column end. Please contact us for any customization request.

## GEAR MOTOR DATA

|                    |     | 3    | 3.6  | 5    | 6    | 7.5  | 9    | 10  | 12.5 | 15  | 18  | 20  | 25  | 30  | 36  | 40  | 50  | 60   | 75   | 90   | 100  | 120  | 150  | 180  | 200  | 250  | 300  | 500  | 600  | 750  | C    |
|--------------------|-----|------|------|------|------|------|------|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Gear ratio         |     | 3    | 3.6  | 5    | 6    | 7.5  | 9    | 10  | 12.5 | 15  | 18  | 20  | 25  | 30  | 36  | 40  | 50  | 60   | 75   | 90   | 100  | 120  | 150  | 180  | 200  | 250  | 300  | 500  | 600  | 750  | ●    |
| Nominal torque     | Nm  | 0.30 | 0.36 | 0.51 | 0.61 | 0.76 | 0.91 | 1.0 | 1.3  | 1.5 | 1.8 | 1.8 | 2.3 | 2.7 | 3.3 | 3.7 | 4.6 | 5.0² | 5.0² | 5.0² | 5.0² | 5.0² | 5.0² | 5.0² | 5.0² | 5.0² | 5.0² | 5.0² | 5.0² | 5.0² | 5.0² |
| Nominal speed      | rpm | 400  | 330  | 240  | 200  | 160  | 130  | 120 | 96   | 80  | 67  | 60  | 48  | 40  | 33  | 30  | 24  | 20   | 16   | 13   | 12   | 10   | 8    | 6.7  | 6    | 4.8  | 4    | 2.4  | 2    | 1.6  |      |
| Nominal power      | W   | 13   | 13   | 13   | 13   | 13   | 13   | 13  | 13   | 13  | 13  | 11  | 11  | 11  | 11  | 11  | 11  | 10   | 8    | 7    | 6    | 5    | 4    | 3    | 3    | 2.5  | 2.1  | 1.3  | 1.0  | 0.84 |      |
| Gearb. nom. torq.³ | Nm  | 5    | 5    | 5    | 5    | 5    | 5    | 5   | 5    | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    |      |
| Gearbox efficiency | %   | 81   | 81   | 81   | 81   | 81   | 81   | 81  | 81   | 81  | 81  | 73  | 73  | 73  | 73  | 73  | 73  | 66   | 66   | 66   | 66   | 66   | 66   | 66   | 66   | 59   | 59   | 59   | 59   | 59   |      |
| Radial load⁴       | N   | 120  | 120  | 120  | 120  | 120  | 120  | 120 | 120  | 120 | 120 | 250 | 250 | 250 | 250 | 250 | 250 | 250  | 250  | 250  | 250  | 250  | 250  | 250  | 250  | 250  | 250  | 250  | 250  | 250  |      |
| Direction of rot.  |     | CW   | CW   | CW   | CW   | CW   | CW   | CW  | CW   | CW  | CW  | CCW | CCW | CCW | CCW | CCW | CCW | CW   | CW   | CW   | CW   | CW   | CW   | CW   | CW   | CCW  | CCW  | CCW  | CCW  | CCW  |      |
| Weight             | kg  | 1.6  | 1.6  | 1.6  | 1.6  | 1.6  | 1.6  | 1.6 | 1.6  | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6  | 1.6  | 1.6  | 1.6  | 1.6  | 1.6  | 1.6  | 1.6  | 1.6  | 1.6  | 1.6  | 1.6  | 1.6  |      |

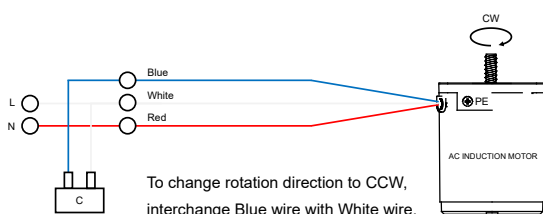
## OTHER GEAR MOTOR DATA

|                        |    |           |   |
|------------------------|----|-----------|---|
| Service life           | h  | 10000     | C |
| Performance tolerances |    | ± 15      |   |
| Operating temperature  | °C | -10 to 40 |   |
| IP rating              |    | IP20      |   |
| Manufacturing standard |    | ISO 9001  |   |
| CE label   UL label    |    | Yes   No  |   |

## GEARBOX DATA

|                     |   |              |   |
|---------------------|---|--------------|---|
| Shaft axial load    | N | 40           | C |
| Bearing type        |   | Ball bearing |   |
| Shaft material      |   | 40 Cr steel  |   |
| Housing material    |   | Aluminum     |   |
| Material gear stage |   | 40 Cr steel  |   |

## WIRING DIAGRAM AC INDUCTION MOTOR



## AC INDUCTION MOTOR DATA

|                                |     |       |   |
|--------------------------------|-----|-------|---|
| Nominal voltage                | V   | 230   | C |
| No. of phases                  |     | 1     |   |
| Frequency                      | Hz  | 50    |   |
| No. of poles                   |     | 4     |   |
| Nominal speed                  | rpm | 1200  |   |
| Nominal torque                 | mNm | 125   |   |
| Nominal current                | A   | 0.2   |   |
| Nominal power                  | W   | 15    |   |
| Stall torque                   | mNm | 90    |   |
| Insulation class               |     | B     |   |
| Motor cable                    |     | AWG20 |   |
| Motor cable length             | mm  | 300   |   |
| Capacitor included in delivery | μF  | 1.2   |   |
| Insulation resistance          | MΩ  | 100   |   |
| Dielectric strength            | kV  | 1.5   |   |
| Max. winding temperature       | °C  | 80    |   |
| Weight                         | kg  | 1     |   |

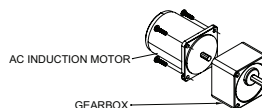
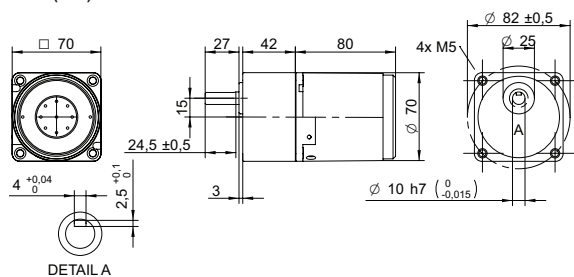
## GEAR MOTOR RANGE AI-SERIES⁹

|                 |    |                        |
|-----------------|----|------------------------|
| Nominal voltage | V  | See separate datasheet |
| Nominal power   | W  | See separate datasheet |
| Dimension       | mm | See separate datasheet |

## NOTES

1. See page 29 of this catalog.
2. Gear motor torque limited by gearbox.
3. Gearbox nominal torque.
4. 20 mm from shaft.
5. Visit [www.transmotec.com](http://www.transmotec.com) to view datasheets.

## DRAWING (mm)



## PHOTO



AC induction motor and gearbox also sold separately.

## MODEL NO. DESIGNATION

AI-015W - Voltage - Phase - Connection  
 Example: AI-015W-400-TC T = Three phase C = Cable

ACCESSORIES<sup>1</sup>

C = customizations are offered on demand even for smaller quantities. Typical customizations are indicated with a green dot at column end. Please contact us for any customization request.

## GEAR MOTOR DATA

|                                |     | 3    | 3.6  | 5    | 6    | 7.5  | 9    | 10  | 12.5 | 15  | 18  | 20  | 25  | 30  | 36  | 40  | 50  | 60               | 75               | 90               | 100              | 120              | 150              | 180              | 200              | 250              | 300              | 500              | 600              | 750              | C |
|--------------------------------|-----|------|------|------|------|------|------|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|---|
| Gear ratio                     |     | 3    | 3.6  | 5    | 6    | 7.5  | 9    | 10  | 12.5 | 15  | 18  | 20  | 25  | 30  | 36  | 40  | 50  | 60               | 75               | 90               | 100              | 120              | 150              | 180              | 200              | 250              | 300              | 500              | 600              | 750              |   |
| Nominal torque                 | Nm  | 0.30 | 0.36 | 0.51 | 0.61 | 0.76 | 0.91 | 1.0 | 1.3  | 1.5 | 1.8 | 1.8 | 2.3 | 2.7 | 3.3 | 3.7 | 4.6 | 5.0 <sup>2</sup> | 5.0 <sup>2</sup> | 5.0 <sup>2</sup> | 5.0 <sup>2</sup> | 5.0 <sup>2</sup> | 5.0 <sup>2</sup> | 5.0 <sup>2</sup> | 5.0 <sup>2</sup> | 5.0 <sup>2</sup> | 5.0 <sup>2</sup> | 5.0 <sup>2</sup> | 5.0 <sup>2</sup> | 5.0 <sup>2</sup> |   |
| Nominal speed                  | rpm | 400  | 330  | 240  | 200  | 160  | 130  | 120 | 96   | 80  | 67  | 60  | 48  | 40  | 33  | 30  | 24  | 20               | 16               | 13               | 12               | 10               | 8                | 6.7              | 6                | 4.8              | 4                | 2.4              | 2                | 1.6              |   |
| Nominal power                  | W   | 13   | 13   | 13   | 13   | 13   | 13   | 13  | 13   | 13  | 13  | 11  | 11  | 11  | 11  | 11  | 11  | 10               | 8                | 7                | 6                | 5                | 4                | 3                | 3                | 2.5              | 2.1              | 1.3              | 1.0              | 0.84             |   |
| Gearb. nom. torq. <sup>3</sup> | Nm  | 5    | 5    | 5    | 5    | 5    | 5    | 5   | 5    | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5                | 5                | 5                | 5                | 5                | 5                | 5                | 5                | 5                | 5                | 5                | 5                | 5                |   |
| Gearbox efficiency             | %   | 81   | 81   | 81   | 81   | 81   | 81   | 81  | 81   | 81  | 81  | 73  | 73  | 73  | 73  | 73  | 73  | 66               | 66               | 66               | 66               | 66               | 66               | 66               | 66               | 59               | 59               | 59               | 59               | 59               |   |
| Radial load <sup>4</sup>       | N   | 120  | 120  | 120  | 120  | 120  | 120  | 120 | 120  | 120 | 120 | 250 | 250 | 250 | 250 | 250 | 250 | 250              | 250              | 250              | 250              | 250              | 250              | 250              | 250              | 250              | 250              | 250              | 250              | 250              |   |
| Direction of rot.              |     | CW   | CW   | CW   | CW   | CW   | CW   | CW  | CW   | CW  | CW  | CCW | CCW | CCW | CCW | CCW | CCW | CW               | CW               | CW               | CW               | CW               | CW               | CW               | CW               | CCW              | CCW              | CCW              | CCW              | CCW              |   |
| Weight                         | kg  | 1.6  | 1.6  | 1.6  | 1.6  | 1.6  | 1.6  | 1.6 | 1.6  | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6              | 1.6              | 1.6              | 1.6              | 1.6              | 1.6              | 1.6              | 1.6              | 1.6              | 1.6              | 1.6              | 1.6              | 1.6              |   |

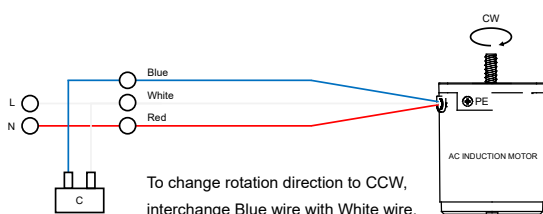
## OTHER GEAR MOTOR DATA

|                        |    |           |
|------------------------|----|-----------|
| Service life           | h  | 10000     |
| Performance tolerances |    | ± 15      |
| Operating temperature  | °C | -10 to 40 |
| IP rating              |    | IP20      |
| Manufacturing standard |    | ISO 9001  |
| CE label   UL label    |    | Yes   No  |

## GEARBOX DATA

|                     |   |              |
|---------------------|---|--------------|
| Shaft axial load    | N | 40           |
| Bearing type        |   | Ball bearing |
| Shaft material      |   | 40 Cr steel  |
| Housing material    |   | Aluminum     |
| Material gear stage |   | 40 Cr steel  |

## WIRING DIAGRAM AC INDUCTION MOTOR



## AC INDUCTION MOTOR DATA

|                                |     |       |
|--------------------------------|-----|-------|
| Nominal voltage                | V   | 380   |
| No. of phases                  |     | 3     |
| Frequency                      | Hz  | 50    |
| No. of poles                   |     | 4     |
| Nominal speed                  | rpm | 1200  |
| Nominal torque                 | mNm | 125   |
| Nominal current                | A   | 0.08  |
| Nominal power                  | W   | 15    |
| Stall torque                   | mNm | 220   |
| Insulation class               |     | B     |
| Motor cable                    |     | AWG20 |
| Motor cable length             | mm  | 300   |
| Capacitor included in delivery | μF  | -     |
| Insulation resistance          | MΩ  | 100   |
| Dielectric strength            | kV  | 1.5   |
| Max. winding temperature       | °C  | 80    |
| Weight                         | kg  | 1     |

GEAR MOTOR RANGE AI-SERIES<sup>8</sup>

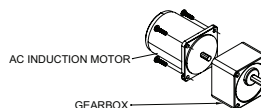
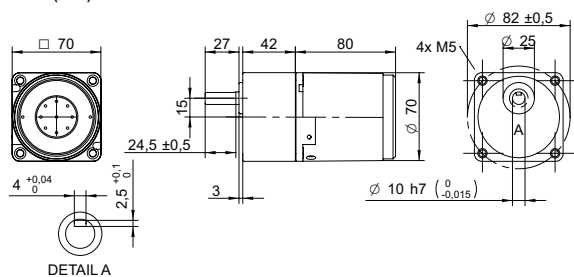
|                 |    |                        |
|-----------------|----|------------------------|
| Nominal voltage | V  | See separate datasheet |
| Nominal power   | W  | See separate datasheet |
| Dimension       | mm | See separate datasheet |

## NOTES

1. See page 29 of this catalog.
2. Gear motor torque limited by gearbox.
3. Gearbox nominal torque.
4. 20 mm from shaft.
5. Visit [www.transmotec.com](http://www.transmotec.com) to view datasheets.



## DRAWING (mm)



## PHOTO



AC induction motor and gearbox also sold separately.

## MODEL NO. DESIGNATION

AI-015W - Voltage - Phase - Connection  
 Example: AI-015W-120-SC S = Single phase C = Cable

ACCESSORIES<sup>1</sup>

C = customizations are offered on demand even for smaller quantities. Typical customizations are indicated with a green dot at column end. Please contact us for any customization request.

## GEAR MOTOR DATA

|                                |     | 3    | 3.6  | 5    | 6    | 7.5  | 9    | 10   | 12.5 | 15  | 18  | 20  | 25  | 30  | 36  | 40  | 50  | 60  | 75               | 90               | 100              | 120              | 150              | 180              | 200              | 250              | 300              | 500              | 600              | 750              | C |
|--------------------------------|-----|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|---|
| Gear ratio                     |     | 3    | 3.6  | 5    | 6    | 7.5  | 9    | 10   | 12.5 | 15  | 18  | 20  | 25  | 30  | 36  | 40  | 50  | 60  | 75               | 90               | 100              | 120              | 150              | 180              | 200              | 250              | 300              | 500              | 600              | 750              |   |
| Nominal torque                 | Nm  | 0.26 | 0.31 | 0.43 | 0.51 | 0.64 | 0.77 | 0.85 | 1.1  | 1.3 | 1.5 | 1.5 | 1.9 | 2.3 | 2.8 | 3.1 | 3.8 | 4.2 | 5.0 <sup>2</sup> | 5.0 <sup>2</sup> | 5.0 <sup>2</sup> | 5.0 <sup>2</sup> | 5.0 <sup>2</sup> | 5.0 <sup>2</sup> | 5.0 <sup>2</sup> | 5.0 <sup>2</sup> | 5.0 <sup>2</sup> | 5.0 <sup>2</sup> | 5.0 <sup>2</sup> | 5.0 <sup>2</sup> |   |
| Nominal speed                  | rpm | 480  | 400  | 290  | 240  | 190  | 160  | 150  | 120  | 97  | 81  | 73  | 58  | 48  | 40  | 36  | 29  | 24  | 19               | 16               | 15               | 12               | 10               | 8.1              | 7.3              | 5.8              | 4.8              | 2.9              | 2.4              | 1.9              |   |
| Nominal power                  | W   | 13   | 13   | 13   | 13   | 13   | 13   | 13   | 13   | 13  | 13  | 12  | 12  | 12  | 12  | 12  | 12  | 11  | 10               | 8                | 8                | 6                | 5                | 4                | 4                | 3.0              | 2.5              | 1.5              | 1.3              | 1.0              |   |
| Gearb. nom. torq. <sup>3</sup> | Nm  | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5                | 5                | 5                | 5                | 5                | 5                | 5                | 5                | 5                | 5                | 5                | 5                |   |
| Gearbox efficiency             | %   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81  | 81  | 73  | 73  | 73  | 73  | 73  | 73  | 66  | 66               | 66               | 66               | 66               | 66               | 66               | 66               | 59               | 59               | 59               | 59               | 59               |   |
| Radial load <sup>4</sup>       | N   | 120  | 120  | 120  | 120  | 120  | 120  | 120  | 120  | 120 | 120 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250              | 250              | 250              | 250              | 250              | 250              | 250              | 250              | 250              | 250              | 250              | 250              |   |
| Direction of rot.              |     | CW   | CW   | CW   | CW   | CW   | CW   | CW   | CW   | CW  | CW  | CCW | CCW | CCW | CCW | CCW | CCW | CW  | CW               | CW               | CW               | CW               | CW               | CW               | CW               | CCW              | CCW              | CCW              | CCW              | CCW              |   |
| Weight                         | kg  | 1.6  | 1.6  | 1.6  | 1.6  | 1.6  | 1.6  | 1.6  | 1.6  | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6              | 1.6              | 1.6              | 1.6              | 1.6              | 1.6              | 1.6              | 1.6              | 1.6              | 1.6              | 1.6              | 1.6              |   |

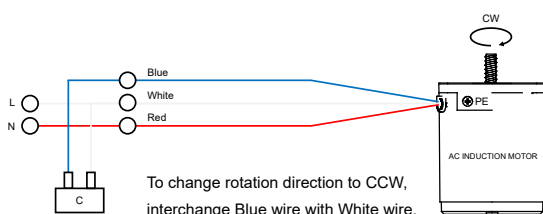
## OTHER GEAR MOTOR DATA

|                        |    |           |
|------------------------|----|-----------|
| Service life           | h  | 10000     |
| Performance tolerances |    | ± 15      |
| Operating temperature  | °C | -10 to 40 |
| IP rating              |    | IP20      |
| Manufacturing standard |    | ISO 9001  |
| CE label   UL label    |    | No   No   |

## GEARBOX DATA

|                     |   |              |
|---------------------|---|--------------|
| Shaft axial load    | N | 40           |
| Bearing type        |   | Ball bearing |
| Shaft material      |   | 40 Cr steel  |
| Housing material    |   | Aluminum     |
| Material gear stage |   | 40 Cr steel  |

## WIRING DIAGRAM AC INDUCTION MOTOR



## AC INDUCTION MOTOR DATA

|                                |     |       |
|--------------------------------|-----|-------|
| Nominal voltage                | V   | 120   |
| No. of phases                  |     | 1     |
| Frequency                      | Hz  | 60    |
| No. of poles                   |     | 4     |
| Nominal speed                  | rpm | 1450  |
| Nominal torque                 | mNm | 105   |
| Nominal current                | A   | 0.32  |
| Nominal power                  | W   | 15    |
| Stall torque                   | mNm | 65    |
| Insulation class               |     | B     |
| Motor cable                    |     | AWG20 |
| Motor cable length             | mm  | 300   |
| Capacitor included in delivery | μF  | 5     |
| Insulation resistance          | MΩ  | 100   |
| Dielectric strength            | kV  | 1.5   |
| Max. winding temperature       | °C  | 80    |
| Weight                         | kg  | 1     |

GEAR MOTOR RANGE AI-SERIES<sup>8</sup>

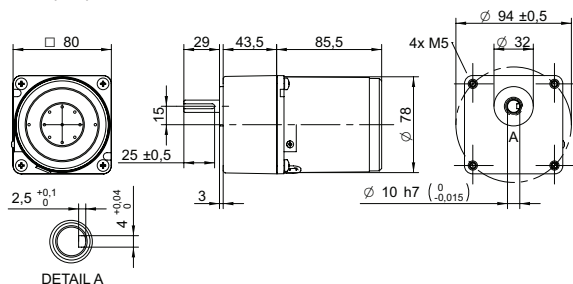
|                 |    |                        |
|-----------------|----|------------------------|
| Nominal voltage | V  | See separate datasheet |
| Nominal power   | W  | See separate datasheet |
| Dimension       | mm | See separate datasheet |

## NOTES

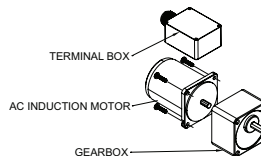
1. See page 29 of this catalog.
2. Gear motor torque limited by gearbox.
3. Gearbox nominal torque.
4. 20 mm from shaft.
5. Visit [www.transmotec.com](http://www.transmotec.com) to view datasheets.



## DRAWING (mm)



AC induction motor and gearbox also sold separately.



## PHOTO



## MODEL NO. DESIGNATION

|                         |   |         |   |                  |                               |            |
|-------------------------|---|---------|---|------------------|-------------------------------|------------|
| AI-025W                 | - | Voltage | - | Phase            | -                             | Connection |
| Example: AI-025W-230-SC |   |         |   |                  |                               |            |
|                         |   |         |   | S = Single phase | C = Cable<br>B = Terminal box |            |

## ACCESSORIES¹



● C = customizations are offered on demand even for smaller quantities. Typical customizations are indicated with a green dot at column end. Please contact us for any customization request.

## GEAR MOTOR DATA

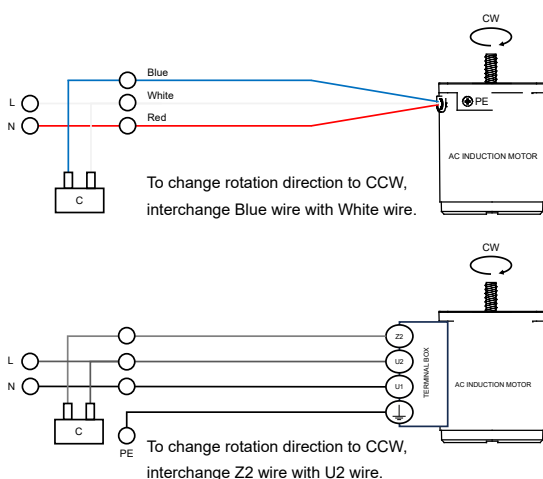
|                                |     | 3    | 3.6  | 5    | 6    | 7.5 | 9   | 10  | 12.5 | 15  | 18  | 20  | 25  | 30  | 36  | 40  | 50  | 60  | 75   | 90   | 100  | 120  | 150  | 180  | 200  | 250  | 300  | 500  | 600  | 750  | C |
|--------------------------------|-----|------|------|------|------|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|---|
| Gear ratio                     |     |      |      |      |      |     |     |     |      |     |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |   |
| Nominal torque                 | Nm  | 0.49 | 0.58 | 0.81 | 0.97 | 1.2 | 1.5 | 1.6 | 2.0  | 2.4 | 2.9 | 2.9 | 3.7 | 4.4 | 5.3 | 5.8 | 7.3 | 7.9 | 8.0² | 8.0² | 8.0² | 8.0² | 8.0² | 8.0² | 8.0² | 8.0² | 8.0² | 8.0² | 8.0² | 8.0² | ● |
| Nominal speed                  | rpm | 420  | 350  | 250  | 210  | 170 | 140 | 130 | 100  | 83  | 69  | 63  | 50  | 42  | 35  | 31  | 25  | 21  | 17   | 14   | 13   | 10   | 8.3  | 6.9  | 6.3  | 5    | 4.2  | 2.5  | 2.1  | 1.7  |   |
| Nominal power                  | W   | 21   | 21   | 21   | 21   | 21  | 21  | 21  | 21   | 21  | 19  | 19  | 19  | 19  | 19  | 19  | 19  | 17  | 14   | 12   | 10   | 8.7  | 7.0  | 5.8  | 5.2  | 4.2  | 3.5  | 2.1  | 1.7  | 1.4  |   |
| Gearb. nom. torq. <sup>3</sup> | Nm  | 8    | 8    | 8    | 8    | 8   | 8   | 8   | 8    | 8   | 8   | 8   | 8   | 8   | 8   | 8   | 8   | 8   | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    |   |
| Gearbox efficiency             | %   | 81   | 81   | 81   | 81   | 81  | 81  | 81  | 81   | 81  | 73  | 73  | 73  | 73  | 73  | 73  | 73  | 66  | 66   | 66   | 66   | 66   | 66   | 66   | 66   | 59   | 59   | 59   | 59   | 59   |   |
| Radial load <sup>4</sup>       | N   | 150  | 150  | 150  | 150  | 150 | 150 | 150 | 150  | 150 | 150 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300  | 300  | 300  | 300  | 300  | 300  | 300  | 300  | 300  | 300  | 300  | 300  |   |
| Direction of rot.              |     | CW   | CW   | CW   | CW   | CW  | CW  | CW  | CW   | CW  | CW  | CCW | CCW | CCW | CCW | CCW | CCW | CW  | CW   | CW   | CW   | CW   | CW   | CW   | CW   | CCW  | CCW  | CCW  | CCW  | CCW  |   |
| Weight                         | kg  | 2.4  | 2.4  | 2.4  | 2.4  | 2.4 | 2.4 | 2.4 | 2.4  | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4  | 2.4  | 2.4  | 2.4  | 2.4  | 2.4  | 2.4  | 2.4  | 2.4  | 2.4  | 2.4  | 2.4  |   |

## OTHER GEAR MOTOR DATA

|                        |    |             |   |
|------------------------|----|-------------|---|
| Service life           | h  | 10000       | C |
| Performance tolerances |    | ± 15        |   |
| Operating temperature  | °C | -10 to 40   |   |
| IP rating <sup>5</sup> |    | IP20   IP54 |   |
| Manufacturing standard |    | ISO 9001    |   |
| CE label   UL label    |    | Yes   No    |   |

## GEARBOX DATA

|                     |   |              |   |
|---------------------|---|--------------|---|
| Shaft axial load    | N | 50           | C |
| Bearing type        |   | Ball bearing |   |
| Shaft material      |   | 40 Cr steel  |   |
| Housing material    |   | Aluminum     |   |
| Material gear stage |   | 40 Cr steel  |   |

WIRING DIAGRAM AC INDUCTION MOTOR<sup>6</sup>

## AC INDUCTION MOTOR DATA

|                                |     |       |   |
|--------------------------------|-----|-------|---|
| Nominal voltage                | V   | 230   | C |
| No. of phases                  |     | 1     |   |
| Frequency                      | Hz  | 50    |   |
| No. of poles                   |     | 4     |   |
| Nominal speed                  | rpm | 1250  |   |
| Nominal torque                 | mNm | 200   |   |
| Nominal current                | A   | 0.23  |   |
| Nominal power                  | W   | 25    |   |
| Stall torque                   | mNm | 120   |   |
| Insulation class               |     | B     |   |
| Motor cable                    |     | AWG20 |   |
| Motor cable length             | mm  | 300   |   |
| Capacitor included in delivery | μF  | 1.8   |   |
| Insulation resistance          | MΩ  | 100   |   |
| Dielectric strength            | kV  | 1.5   |   |
| Max. winding temperature       | °C  | 80    |   |
| Weight                         | kg  | 1.6   |   |

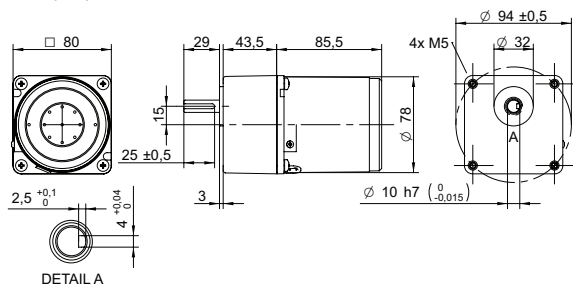
GEAR MOTOR RANGE AI-SERIES<sup>7</sup>

|                 |    |                        |
|-----------------|----|------------------------|
| Nominal voltage | V  | See separate datasheet |
| Nominal power   | W  | See separate datasheet |
| Dimension       | mm | See separate datasheet |

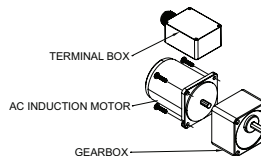
## NOTES

- See page 29 of this catalog.
- Gear motor torque limited by gearbox.
- Gearbox nominal torque.
- 20 mm from shaft.
- IP20 without terminal box, IP54 with terminal box.
- Cables/wires for connecting terminal box not included with AC induction motor.
- Visit [www.transmotec.com](http://www.transmotec.com) to view datasheets.

## DRAWING (mm)



AC induction motor and gearbox also sold separately.



## PHOTO



## MODEL NO. DESIGNATION

|                         |   |         |   |                 |                               |            |
|-------------------------|---|---------|---|-----------------|-------------------------------|------------|
| AI-025W                 | - | Voltage | - | Phase           | -                             | Connection |
| Example: AI-025W-400-TC |   |         |   |                 |                               |            |
|                         |   |         |   | T = Three phase | C = Cable<br>B = Terminal box |            |

## ACCESSORIES¹



● C = customizations are offered on demand even for smaller quantities. Typical customizations are indicated with a green dot at column end. Please contact us for any customization request.

## GEAR MOTOR DATA

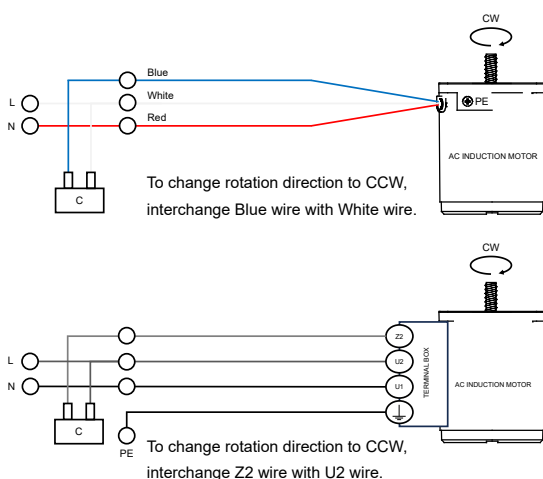
|                                |     | 3    | 3.6  | 5    | 6    | 7.5 | 9   | 10  | 12.5 | 15  | 18  | 20  | 25  | 30  | 36  | 40  | 50  | 60  | 75   | 90   | 100  | 120  | 150  | 180  | 200  | 250  | 300  | 500  | 600  | 750  | C    |
|--------------------------------|-----|------|------|------|------|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Gear ratio                     |     | 3    | 3.6  | 5    | 6    | 7.5 | 9   | 10  | 12.5 | 15  | 18  | 20  | 25  | 30  | 36  | 40  | 50  | 60  | 75   | 90   | 100  | 120  | 150  | 180  | 200  | 250  | 300  | 500  | 600  | 750  | ●    |
| Nominal torque                 | Nm  | 0.49 | 0.58 | 0.81 | 0.97 | 1.2 | 1.5 | 1.6 | 2.0  | 2.4 | 2.9 | 2.9 | 3.7 | 4.4 | 5.3 | 5.8 | 7.3 | 7.9 | 8.0² | 8.0² | 8.0² | 8.0² | 8.0² | 8.0² | 8.0² | 8.0² | 8.0² | 8.0² | 8.0² | 8.0² | 8.0² |
| Nominal speed                  | rpm | 420  | 350  | 250  | 210  | 170 | 140 | 130 | 100  | 83  | 69  | 63  | 50  | 42  | 35  | 31  | 25  | 21  | 17   | 14   | 13   | 10   | 8.3  | 6.9  | 6.3  | 5    | 4.2  | 2.5  | 2.1  | 1.7  |      |
| Nominal power                  | W   | 21   | 21   | 21   | 21   | 21  | 21  | 21  | 21   | 21  | 19  | 19  | 19  | 19  | 19  | 19  | 19  | 17  | 14   | 12   | 10   | 8.7  | 7.0  | 5.8  | 5.2  | 4.2  | 3.5  | 2.1  | 1.7  | 1.4  |      |
| Gearb. nom. torq. <sup>3</sup> | Nm  | 8    | 8    | 8    | 8    | 8   | 8   | 8   | 8    | 8   | 8   | 8   | 8   | 8   | 8   | 8   | 8   | 8   | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    |      |
| Gearbox efficiency             | %   | 81   | 81   | 81   | 81   | 81  | 81  | 81  | 81   | 81  | 73  | 73  | 73  | 73  | 73  | 73  | 73  | 66  | 66   | 66   | 66   | 66   | 66   | 66   | 66   | 59   | 59   | 59   | 59   | 59   |      |
| Radial load <sup>4</sup>       | N   | 150  | 150  | 150  | 150  | 150 | 150 | 150 | 150  | 150 | 150 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300  | 300  | 300  | 300  | 300  | 300  | 300  | 300  | 300  | 300  | 300  | 300  |      |
| Direction of rot.              |     | CW   | CW   | CW   | CW   | CW  | CW  | CW  | CW   | CW  | CW  | CCW | CCW | CCW | CCW | CCW | CCW | CW  | CW   | CW   | CW   | CW   | CW   | CW   | CW   | CCW  | CCW  | CCW  | CCW  | CCW  |      |
| Weight                         | kg  | 2.4  | 2.4  | 2.4  | 2.4  | 2.4 | 2.4 | 2.4 | 2.4  | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4  | 2.4  | 2.4  | 2.4  | 2.4  | 2.4  | 2.4  | 2.4  | 2.4  | 2.4  | 2.4  | 2.4  |      |

## OTHER GEAR MOTOR DATA

|                        |    |             |   |
|------------------------|----|-------------|---|
| Service life           | h  | 10000       | C |
| Performance tolerances |    | ± 15        |   |
| Operating temperature  | °C | -10 to 40   |   |
| IP rating <sup>5</sup> |    | IP20   IP54 |   |
| Manufacturing standard |    | ISO 9001    |   |
| CE label   UL label    |    | Yes   No    |   |

## GEARBOX DATA

|                     |   |              |   |
|---------------------|---|--------------|---|
| Shaft axial load    | N | 50           | C |
| Bearing type        |   | Ball bearing |   |
| Shaft material      |   | 40 Cr steel  |   |
| Housing material    |   | Aluminum     |   |
| Material gear stage |   | 40 Cr steel  |   |

WIRING DIAGRAM AC INDUCTION MOTOR<sup>6</sup>

## AC INDUCTION MOTOR DATA

|                                |     |       |   |
|--------------------------------|-----|-------|---|
| Nominal voltage                | V   | 380   | C |
| No. of phases                  |     | 3     |   |
| Frequency                      | Hz  | 50    |   |
| No. of poles                   |     | 4     |   |
| Nominal speed                  | rpm | 1250  |   |
| Nominal torque                 | mNm | 200   |   |
| Nominal current                | A   | 0.11  |   |
| Nominal power                  | W   | 25    |   |
| Stall torque                   | mNm | 350   |   |
| Insulation class               |     | B     |   |
| Motor cable                    |     | AWG20 |   |
| Motor cable length             | mm  | 300   |   |
| Capacitor included in delivery | μF  | -     |   |
| Insulation resistance          | MΩ  | 100   |   |
| Dielectric strength            | kV  | 1.5   |   |
| Max. winding temperature       | °C  | 80    |   |
| Weight                         | kg  | 1.6   |   |

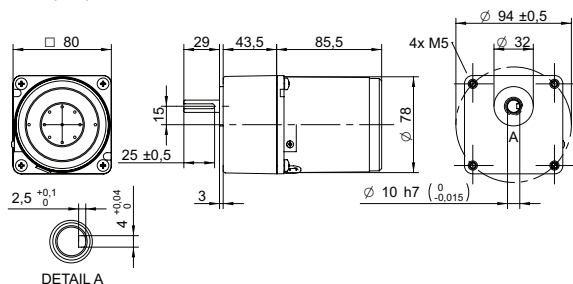
GEAR MOTOR RANGE AI-SERIES<sup>7</sup>

|                 |    |                        |
|-----------------|----|------------------------|
| Nominal voltage | V  | See separate datasheet |
| Nominal power   | W  | See separate datasheet |
| Dimension       | mm | See separate datasheet |

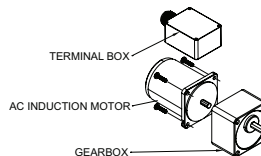
## NOTES

- See page 29 of this catalog.
- Gear motor torque limited by gearbox.
- Gearbox nominal torque.
- 20 mm from shaft.
- IP20 without terminal box, IP54 with terminal box.
- Cables/wires for connecting terminal box not included with AC induction motor.
- Visit [www.transmotec.com](http://www.transmotec.com) to view datasheets.

## DRAWING (mm)



AC induction motor and gearbox also sold separately.



## PHOTO



## MODEL NO. DESIGNATION

AI-025W - Voltage - Phase - Connection

Example: AI-025W-120-SC S = Single phase C = Cable B = Terminal box

## ACCESSORIES¹



● C = customizations are offered on demand even for smaller quantities. Typical customizations are indicated with a green dot at column end. Please contact us for any customization request.

## GEAR MOTOR DATA

|                    |     | 3    | 3.6  | 5    | 6    | 7.5 | 9   | 10  | 12.5 | 15  | 18  | 20  | 25  | 30  | 36  | 40  | 50  | 60  | 75   | 90   | 100  | 120  | 150  | 180  | 200  | 250  | 300  | 500  | 600  | 750  | C    |
|--------------------|-----|------|------|------|------|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Gear ratio         |     | 3    | 3.6  | 5    | 6    | 7.5 | 9   | 10  | 12.5 | 15  | 18  | 20  | 25  | 30  | 36  | 40  | 50  | 60  | 75   | 90   | 100  | 120  | 150  | 180  | 200  | 250  | 300  | 500  | 600  | 750  | ●    |
| Nominal torque     | Nm  | 0.40 | 0.48 | 0.67 | 0.80 | 1.0 | 1.2 | 1.3 | 1.7  | 2.0 | 2.4 | 2.4 | 3.0 | 3.6 | 4.3 | 4.8 | 6.0 | 6.5 | 8.0² | 8.0² | 8.0² | 8.0² | 8.0² | 8.0² | 8.0² | 8.0² | 8.0² | 8.0² | 8.0² | 8.0² | 8.0² |
| Nominal speed      | rpm | 520  | 430  | 310  | 260  | 210 | 170 | 160 | 120  | 100 | 86  | 78  | 62  | 52  | 43  | 39  | 31  | 26  | 21   | 17   | 16   | 13   | 10   | 8.6  | 7.8  | 6.2  | 5.2  | 3.1  | 2.6  | 2.1  |      |
| Nominal power      | W   | 22   | 22   | 22   | 22   | 22  | 22  | 22  | 22   | 22  | 22  | 20  | 20  | 20  | 20  | 20  | 20  | 18  | 17   | 14   | 13   | 11   | 8.7  | 7.2  | 6.5  | 5.2  | 4.3  | 2.6  | 2.2  | 1.7  |      |
| Gearb. nom. torq.³ | Nm  | 8    | 8    | 8    | 8    | 8   | 8   | 8   | 8    | 8   | 8   | 8   | 8   | 8   | 8   | 8   | 8   | 8   | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    |      |
| Gearbox efficiency | %   | 81   | 81   | 81   | 81   | 81  | 81  | 81  | 81   | 81  | 81  | 73  | 73  | 73  | 73  | 73  | 73  | 66  | 66   | 66   | 66   | 66   | 66   | 66   | 66   | 59   | 59   | 59   | 59   | 59   |      |
| Radial load⁴       | N   | 150  | 150  | 150  | 150  | 150 | 150 | 150 | 150  | 150 | 150 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300  | 300  | 300  | 300  | 300  | 300  | 300  | 300  | 300  | 300  | 300  | 300  |      |
| Direction of rot.  |     | CW   | CW   | CW   | CW   | CW  | CW  | CW  | CW   | CW  | CW  | CCW | CCW | CCW | CCW | CCW | CCW | CW  | CW   | CW   | CW   | CW   | CW   | CW   | CW   | CCW  | CCW  | CCW  | CCW  | CCW  |      |
| Weight             | kg  | 2.4  | 2.4  | 2.4  | 2.4  | 2.4 | 2.4 | 2.4 | 2.4  | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4  | 2.4  | 2.4  | 2.4  | 2.4  | 2.4  | 2.4  | 2.4  | 2.4  | 2.4  | 2.4  | 2.4  |      |

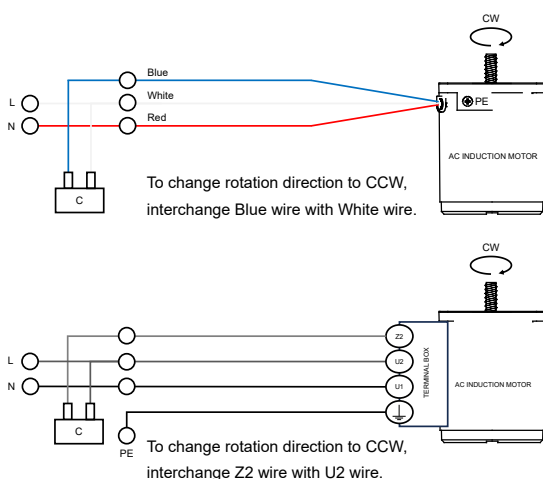
## OTHER GEAR MOTOR DATA

|                        |    |             |   |
|------------------------|----|-------------|---|
| Service life           | h  | 10000       | C |
| Performance tolerances |    | ± 15        |   |
| Operating temperature  | °C | -10 to 40   |   |
| IP rating⁵             |    | IP20   IP54 |   |
| Manufacturing standard |    | ISO 9001    |   |
| CE label   UL label    |    | No   No     |   |

## GEARBOX DATA

|                     |   |              |   |
|---------------------|---|--------------|---|
| Shaft axial load    | N | 50           | C |
| Bearing type        |   | Ball bearing |   |
| Shaft material      |   | 40 Cr steel  |   |
| Housing material    |   | Aluminum     |   |
| Material gear stage |   | 40 Cr steel  |   |

## WIRING DIAGRAM AC INDUCTION MOTOR⁶



## AC INDUCTION MOTOR DATA

|                                |     |       |   |
|--------------------------------|-----|-------|---|
| Nominal voltage                | V   | 120   | C |
| No. of phases                  |     | 1     |   |
| Frequency                      | Hz  | 60    |   |
| No. of poles                   |     | 4     |   |
| Nominal speed                  | rpm | 1550  |   |
| Nominal torque                 | mNm | 165   |   |
| Nominal current                | A   | 0.5   |   |
| Nominal power                  | W   | 25    |   |
| Stall torque                   | mNm | 120   |   |
| Insulation class               |     | B     |   |
| Motor cable                    |     | AWG20 |   |
| Motor cable length             | mm  | 300   |   |
| Capacitor included in delivery | μF  | 7     |   |
| Insulation resistance          | MΩ  | 100   |   |
| Dielectric strength            | kV  | 1.5   |   |
| Max. winding temperature       | °C  | 80    |   |
| Weight                         | kg  | 1.6   |   |

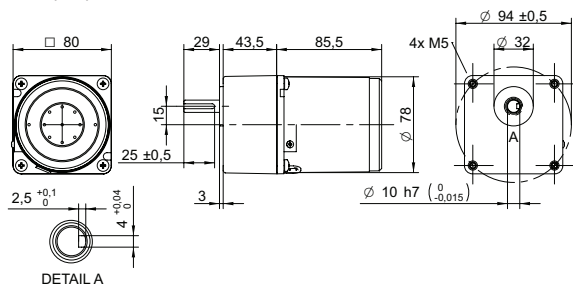
## GEAR MOTOR RANGE AI-SERIES⁷

|                 |    |                        |
|-----------------|----|------------------------|
| Nominal voltage | V  | See separate datasheet |
| Nominal power   | W  | See separate datasheet |
| Dimension       | mm | See separate datasheet |

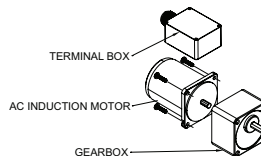
## NOTES

1. See page 29 of this catalog.
2. Gear motor torque limited by gearbox.
3. Gearbox nominal torque.
4. 20 mm from shaft.
5. IP20 without terminal box, IP54 with terminal box.
6. Cables/wires for connecting terminal box not included with AC induction motor.
7. Visit [www.transmotec.com](http://www.transmotec.com) to view datasheets.

## DRAWING (mm)



AC induction motor and gearbox also sold separately.



## PHOTO



## MODEL NO. DESIGNATION

|                         |   |         |   |                 |                               |            |
|-------------------------|---|---------|---|-----------------|-------------------------------|------------|
| AI-025W                 | - | Voltage | - | Phase           | -                             | Connection |
| Example: AI-025W-208-TC |   |         |   |                 |                               |            |
|                         |   |         |   | T = Three phase | C = Cable<br>B = Terminal box |            |

## ACCESSORIES¹



● C = customizations are offered on demand even for smaller quantities. Typical customizations are indicated with a green dot at column end. Please contact us for any customization request.

## GEAR MOTOR DATA

|                    |     | 3    | 3.6  | 5    | 6    | 7.5 | 9   | 10  | 12.5 | 15  | 18  | 20  | 25  | 30  | 36  | 40  | 50  | 60  | 75   | 90   | 100  | 120  | 150  | 180  | 200  | 250  | 300  | 500  | 600  | 750  | C    |
|--------------------|-----|------|------|------|------|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Gear ratio         |     | 3    | 3.6  | 5    | 6    | 7.5 | 9   | 10  | 12.5 | 15  | 18  | 20  | 25  | 30  | 36  | 40  | 50  | 60  | 75   | 90   | 100  | 120  | 150  | 180  | 200  | 250  | 300  | 500  | 600  | 750  | ●    |
| Nominal torque     | Nm  | 0.40 | 0.48 | 0.67 | 0.80 | 1.0 | 1.2 | 1.3 | 1.7  | 2.0 | 2.4 | 2.4 | 3.0 | 3.6 | 4.3 | 4.8 | 6.0 | 6.5 | 8.0² | 8.0² | 8.0² | 8.0² | 8.0² | 8.0² | 8.0² | 8.0² | 8.0² | 8.0² | 8.0² | 8.0² | 8.0² |
| Nominal speed      | rpm | 520  | 430  | 310  | 260  | 210 | 170 | 160 | 120  | 100 | 86  | 78  | 62  | 52  | 43  | 39  | 31  | 26  | 21   | 17   | 16   | 13   | 10   | 8.6  | 7.8  | 6.2  | 5.2  | 3.1  | 2.6  | 2.1  |      |
| Nominal power      | W   | 22   | 22   | 22   | 22   | 22  | 22  | 22  | 22   | 22  | 22  | 20  | 20  | 20  | 20  | 20  | 20  | 18  | 17   | 14   | 13   | 11   | 8.7  | 7.2  | 6.5  | 5.2  | 4.3  | 2.6  | 2.2  | 1.7  |      |
| Gearb. nom. torq.³ | Nm  | 8    | 8    | 8    | 8    | 8   | 8   | 8   | 8    | 8   | 8   | 8   | 8   | 8   | 8   | 8   | 8   | 8   | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    |      |
| Gearbox efficiency | %   | 81   | 81   | 81   | 81   | 81  | 81  | 81  | 81   | 81  | 81  | 73  | 73  | 73  | 73  | 73  | 73  | 66  | 66   | 66   | 66   | 66   | 66   | 66   | 66   | 59   | 59   | 59   | 59   | 59   |      |
| Radial load⁴       | N   | 150  | 150  | 150  | 150  | 150 | 150 | 150 | 150  | 150 | 150 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300  | 300  | 300  | 300  | 300  | 300  | 300  | 300  | 300  | 300  | 300  | 300  |      |
| Direction of rot.  |     | CW   | CW   | CW   | CW   | CW  | CW  | CW  | CW   | CW  | CW  | CCW | CCW | CCW | CCW | CCW | CCW | CW  | CW   | CW   | CW   | CW   | CW   | CW   | CW   | CCW  | CCW  | CCW  | CCW  | CCW  |      |
| Weight             | kg  | 2.4  | 2.4  | 2.4  | 2.4  | 2.4 | 2.4 | 2.4 | 2.4  | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4  | 2.4  | 2.4  | 2.4  | 2.4  | 2.4  | 2.4  | 2.4  | 2.4  | 2.4  | 2.4  | 2.4  |      |

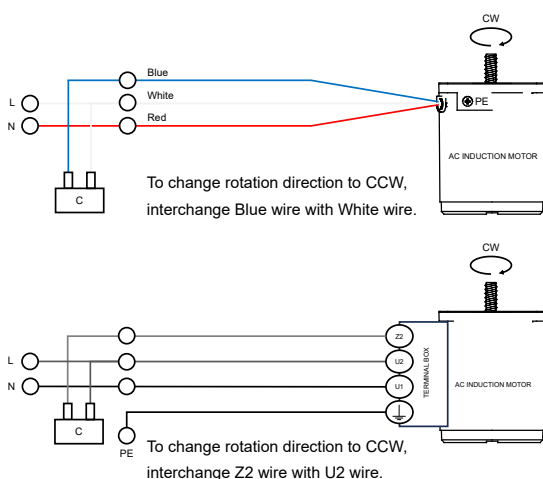
## OTHER GEAR MOTOR DATA

|                        |    |             |   |
|------------------------|----|-------------|---|
| Service life           | h  | 10000       | C |
| Performance tolerances |    | ± 15        |   |
| Operating temperature  | °C | -10 to 40   |   |
| IP rating⁵             |    | IP20   IP54 |   |
| Manufacturing standard |    | ISO 9001    |   |
| CE label   UL label    |    | No   No     |   |

## GEARBOX DATA

|                     |   |              |   |
|---------------------|---|--------------|---|
| Shaft axial load    | N | 50           | C |
| Bearing type        |   | Ball bearing |   |
| Shaft material      |   | 40 Cr steel  |   |
| Housing material    |   | Aluminum     |   |
| Material gear stage |   | 40 Cr steel  |   |

## WIRING DIAGRAM AC INDUCTION MOTOR⁶



## AC INDUCTION MOTOR DATA

|                                |     |       |   |
|--------------------------------|-----|-------|---|
| Nominal voltage                | V   | 220   | C |
| No. of phases                  |     | 3     |   |
| Frequency                      | Hz  | 60    |   |
| No. of poles                   |     | 4     |   |
| Nominal speed                  | rpm | 1550  |   |
| Nominal torque                 | mNm | 165   |   |
| Nominal current                | A   | 0.17  |   |
| Nominal power                  | W   | 25    |   |
| Stall torque                   | mNm | 250   |   |
| Insulation class               |     | B     |   |
| Motor cable                    |     | AWG20 |   |
| Motor cable length             | mm  | 300   |   |
| Capacitor included in delivery | μF  | -     |   |
| Insulation resistance          | MΩ  | 100   |   |
| Dielectric strength            | kV  | 1.5   |   |
| Max. winding temperature       | °C  | 80    |   |
| Weight                         | kg  | 1.6   |   |

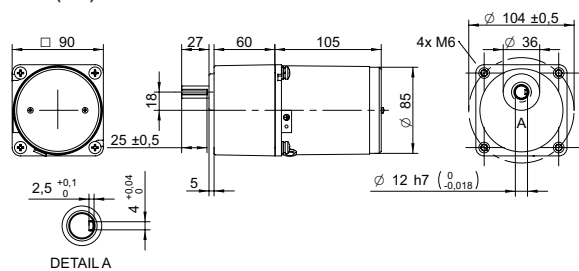
## GEAR MOTOR RANGE AI-SERIES⁷

|                 |    |                        |
|-----------------|----|------------------------|
| Nominal voltage | V  | See separate datasheet |
| Nominal power   | W  | See separate datasheet |
| Dimension       | mm | See separate datasheet |

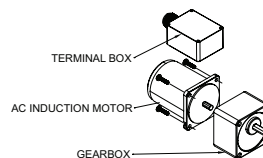
## NOTES

- See page 29 of this catalog.
- Gear motor torque limited by gearbox.
- Gearbox nominal torque.
- 20 mm from shaft.
- IP20 without terminal box, IP54 with terminal box.
- Cables/wires for connecting terminal box not included with AC induction motor.
- Visit [www.transmotec.com](http://www.transmotec.com) to view datasheets.

## DRAWING (mm)



AC induction motor and gearbox also sold separately.



## PHOTO



## MODEL NO. DESIGNATION

|                         |   |         |   |                  |                               |            |
|-------------------------|---|---------|---|------------------|-------------------------------|------------|
| AI-040W                 | - | Voltage | - | Phase            | -                             | Connection |
| Example: AI-040W-230-SC |   |         |   |                  |                               |            |
|                         |   |         |   | S = Single phase | C = Cable<br>B = Terminal box |            |

## ACCESSORIES¹



● C = customizations are offered on demand even for smaller quantities. Typical customizations are indicated with a green dot at column end. Please contact us for any customization request.

## GEAR MOTOR DATA

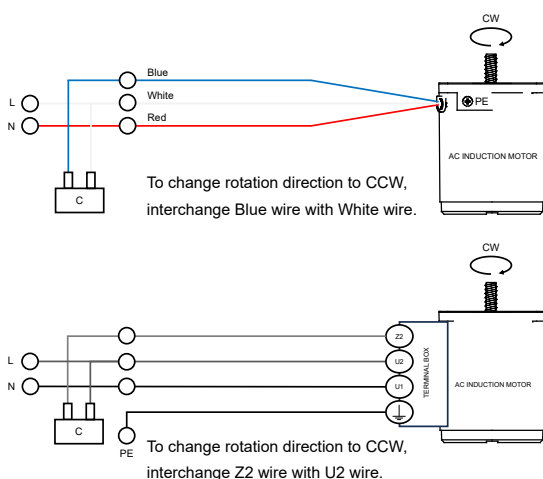
| Gear ratio                     |     | 3    | 3.6  | 5   | 6   | 7.5 | 9   | 10  | 12.5 | 15  | 18  | 20  | 25  | 30  | 36  | 40  | 50              | 60              | 75              | 90              | 100             | 120             | 150             | 180             | 200             | 250             | 300             | 500             | 600             | 750             |  |
|--------------------------------|-----|------|------|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--|
| Nominal torque                 | Nm  | 0.77 | 0.92 | 1.3 | 1.5 | 1.9 | 2.3 | 2.6 | 3.2  | 3.8 | 4.6 | 4.6 | 5.7 | 6.9 | 8.3 | 9.2 | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> |  |
| Nominal speed                  | rpm | 420  | 350  | 250 | 210 | 170 | 140 | 130 | 100  | 83  | 69  | 63  | 50  | 42  | 35  | 31  | 25              | 21              | 17              | 14              | 13              | 10              | 8.3             | 6.9             | 6.3             | 5               | 4.2             | 2.5             | 2.1             | 1.7             |  |
| Nominal power                  | W   | 33   | 33   | 33  | 33  | 33  | 33  | 33  | 33   | 33  | 33  | 30  | 30  | 30  | 30  | 30  | 26              | 22              | 17              | 15              | 13              | 11              | 8.7             | 7.3             | 6.5             | 5.2             | 4.4             | 2.6             | 2.2             | 1.7             |  |
| Gearb. nom. torq. <sup>3</sup> | Nm  | 10   | 10   | 10  | 10  | 10  | 10  | 10  | 10   | 10  | 10  | 10  | 10  | 10  | 10  | 10  | 10              | 10              | 10              | 10              | 10              | 10              | 10              | 10              | 10              | 10              | 10              | 10              | 10              | 10              |  |
| Gearbox efficiency             | %   | 81   | 81   | 81  | 81  | 81  | 81  | 81  | 81   | 81  | 81  | 73  | 73  | 73  | 73  | 73  | 73              | 66              | 66              | 66              | 66              | 66              | 66              | 66              | 66              | 59              | 59              | 59              | 59              | 59              |  |
| Radial load <sup>4</sup>       | N   | 350  | 350  | 350 | 350 | 350 | 350 | 350 | 350  | 350 | 350 | 450 | 450 | 450 | 450 | 450 | 450             | 450             | 450             | 450             | 450             | 450             | 450             | 450             | 450             | 450             | 450             | 450             | 450             | 450             |  |
| Direction of rot.              |     | CW   | CW   | CW  | CW  | CW  | CW  | CW  | CW   | CW  | CW  | CCW | CCW | CCW | CCW | CW  | CW              | CW              | CW              | CW              | CW              | CW              | CW              | CW              | CW              | CW              | CCW             | CCW             | CCW             | CCW             |  |
| Weight                         | kg  | 3.8  | 3.8  | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8  | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8             | 3.8             | 3.8             | 3.8             | 3.8             | 3.8             | 3.8             | 3.8             | 3.8             | 3.8             | 3.8             | 3.8             | 3.8             | 3.8             |  |

## OTHER GEAR MOTOR DATA

|                        |    |             |
|------------------------|----|-------------|
| Service life           | h  | 10000       |
| Performance tolerances |    | ± 15        |
| Operating temperature  | °C | -10 to 40   |
| IP rating <sup>5</sup> |    | IP20   IP54 |
| Manufacturing standard |    | ISO 9001    |
| CE label   UL label    |    | Yes   No    |

## GEARBOX DATA

|                     |   |              |
|---------------------|---|--------------|
| Shaft axial load    | N | 100          |
| Bearing type        |   | Ball bearing |
| Shaft material      |   | 40 Cr steel  |
| Housing material    |   | Aluminum     |
| Material gear stage |   | 40 Cr steel  |

WIRING DIAGRAM AC INDUCTION MOTOR<sup>6</sup>

## AC INDUCTION MOTOR DATA

|                                |     |       |
|--------------------------------|-----|-------|
| Nominal voltage                | V   | 230   |
| No. of phases                  |     | 1     |
| Frequency                      | Hz  | 50    |
| No. of poles                   |     | 4     |
| Nominal speed                  | rpm | 1250  |
| Nominal torque                 | mNm | 315   |
| Nominal current                | A   | 0.4   |
| Nominal power                  | W   | 40    |
| Stall torque                   | mNm | 220   |
| Insulation class               |     | B     |
| Motor cable                    |     | AWG20 |
| Motor cable length             | mm  | 300   |
| Capacitor included in delivery | μF  | 2.5   |
| Insulation resistance          | MΩ  | 100   |
| Dielectric strength            | kV  | 1.5   |
| Max. winding temperature       | °C  | 80    |
| Weight                         | kg  | 2.4   |

GEAR MOTOR RANGE AI-SERIES<sup>7</sup>

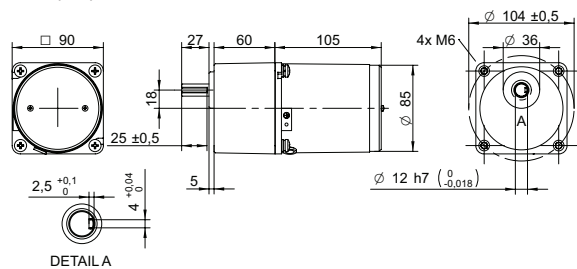
|                 |    |                        |
|-----------------|----|------------------------|
| Nominal voltage | V  | See separate datasheet |
| Nominal power   | W  | See separate datasheet |
| Dimension       | mm | See separate datasheet |

## NOTES

- See page 29 of this catalog.
- Gear motor torque limited by gearbox.
- Gearbox nominal torque.
- 20 mm from shaft.
- IP20 without terminal box, IP54 with terminal box.
- Cables/wires for connecting terminal box not included with AC induction motor.
- Visit [www.transmotec.com](http://www.transmotec.com) to view datasheets.



## DRAWING (mm)

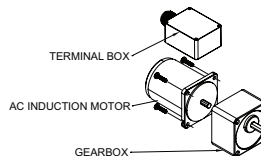


AC induction motor and gearbox also sold separately.

## MODEL NO. DESIGNATION

|                         |   |         |   |                 |                               |            |
|-------------------------|---|---------|---|-----------------|-------------------------------|------------|
| AI-040W                 | - | Voltage | - | Phase           | -                             | Connection |
| Example: AI-040W-400-TC |   |         |   |                 |                               |            |
|                         |   |         |   | T = Three phase | C = Cable<br>B = Terminal box |            |

## PHOTO



## ACCESSORIES¹



● C = customizations are offered on demand even for smaller quantities. Typical customizations are indicated with a green dot at column end. Please contact us for any customization request.

## GEAR MOTOR DATA

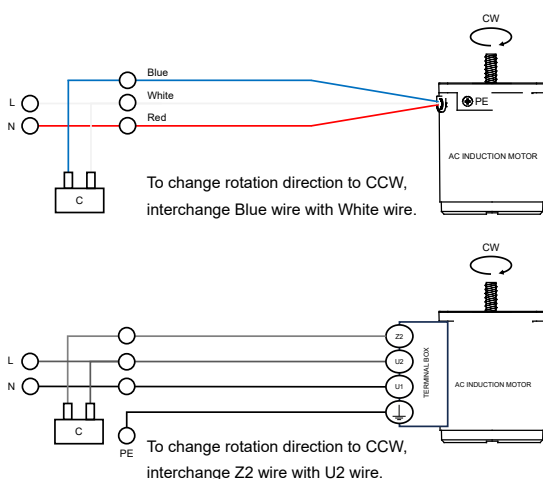
|                                |     | 3    | 3.6  | 5   | 6   | 7.5 | 9   | 10  | 12.5 | 15  | 18  | 20  | 25  | 30  | 36  | 40  | 50  | 60  | 75  | 90  | 100 | 120 | 150 | 180 | 200 | 250 | 300 | 500 | 600 | 750 | C |
|--------------------------------|-----|------|------|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|
| Gear ratio                     |     |      |      |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |   |
| Nominal torque                 | Nm  | 0.77 | 0.92 | 1.3 | 1.5 | 1.9 | 2.3 | 2.6 | 3.2  | 3.8 | 4.6 | 4.6 | 5.7 | 6.9 | 8.3 | 9.2 | 10² | 10² | 10² | 10² | 10² | 10² | 10² | 10² | 10² | 10² | 10² | 10² | 10² | 10² | ● |
| Nominal speed                  | rpm | 420  | 350  | 250 | 210 | 170 | 140 | 130 | 100  | 83  | 69  | 63  | 50  | 42  | 35  | 31  | 25  | 21  | 17  | 14  | 13  | 10  | 8.3 | 6.9 | 6.3 | 5   | 4.2 | 2.5 | 2.1 | 1.7 |   |
| Nominal power                  | W   | 33   | 33   | 33  | 33  | 33  | 33  | 33  | 33   | 33  | 33  | 30  | 30  | 30  | 30  | 30  | 26  | 22  | 17  | 15  | 13  | 11  | 8.7 | 7.3 | 6.5 | 5.2 | 4.4 | 2.6 | 2.2 | 1.7 |   |
| Gearb. nom. torq. <sup>3</sup> | Nm  | 10   | 10   | 10  | 10  | 10  | 10  | 10  | 10   | 10  | 10  | 10  | 10  | 10  | 10  | 10  | 10  | 10  | 10  | 10  | 10  | 10  | 10  | 10  | 10  | 10  | 10  | 10  | 10  | 10  |   |
| Gearbox efficiency             | %   | 81   | 81   | 81  | 81  | 81  | 81  | 81  | 81   | 81  | 81  | 73  | 73  | 73  | 73  | 73  | 73  | 66  | 66  | 66  | 66  | 66  | 66  | 66  | 66  | 59  | 59  | 59  | 59  | 59  |   |
| Radial load <sup>4</sup>       | N   | 350  | 350  | 350 | 350 | 350 | 350 | 350 | 350  | 350 | 350 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 |   |
| Direction of rot.              |     | CW   | CW   | CW  | CW  | CW  | CW  | CW  | CW   | CW  | CW  | CCW | CCW | CCW | CCW | CW  | CW  | CW  | CW  | CW  | CW  | CW  | CW  | CW  | CW  | CCW | CCW | CCW | CCW | CCW |   |
| Weight                         | kg  | 3.8  | 3.8  | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8  | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 |   |

## OTHER GEAR MOTOR DATA

|                        |    |             |
|------------------------|----|-------------|
| Service life           | h  | 10000       |
| Performance tolerances |    | ± 15        |
| Operating temperature  | °C | -10 to 40   |
| IP rating <sup>5</sup> |    | IP20   IP54 |
| Manufacturing standard |    | ISO 9001    |
| CE label   UL label    |    | Yes   No    |

## GEARBOX DATA

|                     |   |              |
|---------------------|---|--------------|
| Shaft axial load    | N | 100          |
| Bearing type        |   | Ball bearing |
| Shaft material      |   | 40 Cr steel  |
| Housing material    |   | Aluminum     |
| Material gear stage |   | 40 Cr steel  |

WIRING DIAGRAM AC INDUCTION MOTOR<sup>6</sup>

## AC INDUCTION MOTOR DATA

|                                |     |       |
|--------------------------------|-----|-------|
| Nominal voltage                | V   | 380   |
| No. of phases                  |     | 3     |
| Frequency                      | Hz  | 50    |
| No. of poles                   |     | 4     |
| Nominal speed                  | rpm | 1250  |
| Nominal torque                 | mNm | 315   |
| Nominal current                | A   | 0.17  |
| Nominal power                  | W   | 40    |
| Stall torque                   | mNm | 800   |
| Insulation class               |     | B     |
| Motor cable                    |     | AWG20 |
| Motor cable length             | mm  | 300   |
| Capacitor included in delivery | μF  | -     |
| Insulation resistance          | MΩ  | 100   |
| Dielectric strength            | kV  | 1.5   |
| Max. winding temperature       | °C  | 80    |
| Weight                         | kg  | 2.4   |

GEAR MOTOR RANGE AI-SERIES<sup>7</sup>

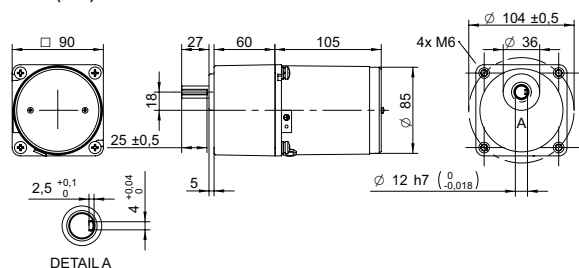
|                 |    |                        |
|-----------------|----|------------------------|
| Nominal voltage | V  | See separate datasheet |
| Nominal power   | W  | See separate datasheet |
| Dimension       | mm | See separate datasheet |

## NOTES

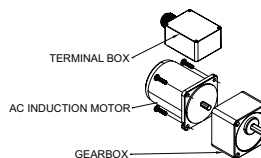
1. See page 29 of this catalog.
2. Gear motor torque limited by gearbox.
3. Gearbox nominal torque.
4. 20 mm from shaft.
5. IP20 without terminal box, IP54 with terminal box.
6. Cables/wires for connecting terminal box not included with AC induction motor.
7. Visit [www.transmotec.com](http://www.transmotec.com) to view datasheets.



## DRAWING (mm)



AC induction motor and gearbox also sold separately.



## PHOTO



## MODEL NO. DESIGNATION

|                         |   |         |   |                  |                               |            |
|-------------------------|---|---------|---|------------------|-------------------------------|------------|
| AI-040W                 | - | Voltage | - | Phase            | -                             | Connection |
| Example: AI-040W-120-SC |   |         |   |                  |                               |            |
|                         |   |         |   | S = Single phase | C = Cable<br>B = Terminal box |            |

## ACCESSORIES¹



● C = customizations are offered on demand even for smaller quantities. Typical customizations are indicated with a green dot at column end. Please contact us for any customization request.

## GEAR MOTOR DATA

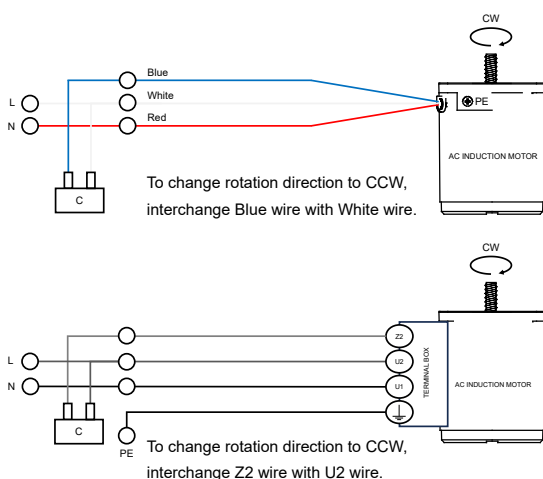
|                                |     | 3    | 3.6  | 5   | 6   | 7.5 | 9   | 10  | 12.5 | 15  | 18  | 20  | 25  | 30  | 36  | 40  | 50  | 60  | 75  | 90  | 100 | 120 | 150 | 180 | 200 | 250 | 300 | 500 | 600 | 750 |     |
|--------------------------------|-----|------|------|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gear ratio                     |     | 3    | 3.6  | 5   | 6   | 7.5 | 9   | 10  | 12.5 | 15  | 18  | 20  | 25  | 30  | 36  | 40  | 50  | 60  | 75  | 90  | 100 | 120 | 150 | 180 | 200 | 250 | 300 | 500 | 600 | 750 | ●   |
| Nominal torque                 | Nm  | 0.63 | 0.76 | 1.1 | 1.3 | 1.6 | 1.9 | 2.1 | 2.6  | 3.2 | 3.8 | 3.8 | 4.7 | 5.7 | 6.8 | 7.6 | 9.5 | 10² | 10² | 10² | 10² | 10² | 10² | 10² | 10² | 10² | 10² | 10² | 10² | 10² | 10² |
| Nominal speed                  | rpm | 520  | 430  | 310 | 260 | 210 | 170 | 160 | 120  | 100 | 86  | 78  | 62  | 52  | 43  | 39  | 31  | 26  | 21  | 17  | 16  | 13  | 10  | 8.6 | 7.8 | 6.2 | 5.2 | 3.1 | 2.6 | 2.1 |     |
| Nominal power                  | W   | 34   | 34   | 34  | 34  | 34  | 34  | 34  | 34   | 34  | 34  | 31  | 31  | 31  | 31  | 31  | 31  | 27  | 22  | 18  | 16  | 14  | 11  | 9.0 | 8.1 | 6.5 | 5.4 | 3.2 | 2.7 | 2.2 |     |
| Gearb. nom. torq. <sup>3</sup> | Nm  | 10   | 10   | 10  | 10  | 10  | 10  | 10  | 10   | 10  | 10  | 10  | 10  | 10  | 10  | 10  | 10  | 10  | 10  | 10  | 10  | 10  | 10  | 10  | 10  | 10  | 10  | 10  | 10  | 10  |     |
| Gearbox efficiency             | %   | 81   | 81   | 81  | 81  | 81  | 81  | 81  | 81   | 81  | 81  | 73  | 73  | 73  | 73  | 73  | 73  | 66  | 66  | 66  | 66  | 66  | 66  | 66  | 66  | 59  | 59  | 59  | 59  | 59  |     |
| Radial load <sup>4</sup>       | N   | 350  | 350  | 350 | 350 | 350 | 350 | 350 | 350  | 350 | 350 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 |     |
| Direction of rot.              |     | CW   | CW   | CW  | CW  | CW  | CW  | CW  | CW   | CW  | CW  | CCW | CCW | CCW | CCW | CW  | CW  | CW  | CW  | CW  | CW  | CW  | CW  | CW  | CW  | CW  | CCW | CCW | CCW | CCW |     |
| Weight                         | kg  | 3.8  | 3.8  | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8  | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 |     |

## OTHER GEAR MOTOR DATA

|                        |    |             |
|------------------------|----|-------------|
| Service life           | h  | 10000       |
| Performance tolerances |    | ± 15        |
| Operating temperature  | °C | -10 to 40   |
| IP rating <sup>5</sup> |    | IP20   IP54 |
| Manufacturing standard |    | ISO 9001    |
| CE label   UL label    |    | No   No     |

## GEARBOX DATA

|                     |   |              |
|---------------------|---|--------------|
| Shaft axial load    | N | 100          |
| Bearing type        |   | Ball bearing |
| Shaft material      |   | 40 Cr steel  |
| Housing material    |   | Aluminum     |
| Material gear stage |   | 40 Cr steel  |

WIRING DIAGRAM AC INDUCTION MOTOR<sup>6</sup>

## AC INDUCTION MOTOR DATA

|                                |     |       |
|--------------------------------|-----|-------|
| Nominal voltage                | V   | 120   |
| No. of phases                  |     | 1     |
| Frequency                      | Hz  | 60    |
| No. of poles                   |     | 4     |
| Nominal speed                  | rpm | 1550  |
| Nominal torque                 | mNm | 260   |
| Nominal current                | A   | 0.6   |
| Nominal power                  | W   | 40    |
| Stall torque                   | mNm | 200   |
| Insulation class               |     | B     |
| Motor cable                    |     | AWG20 |
| Motor cable length             | mm  | 300   |
| Capacitor included in delivery | μF  | 8     |
| Insulation resistance          | MΩ  | 100   |
| Dielectric strength            | kV  | 1.5   |
| Max. winding temperature       | °C  | 80    |
| Weight                         | kg  | 2.4   |

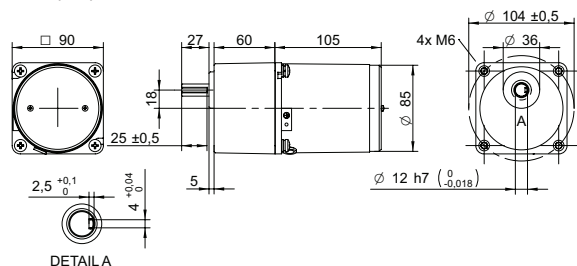
GEAR MOTOR RANGE AI-SERIES<sup>7</sup>

|                 |    |                        |
|-----------------|----|------------------------|
| Nominal voltage | V  | See separate datasheet |
| Nominal power   | W  | See separate datasheet |
| Dimension       | mm | See separate datasheet |

## NOTES

1. See page 29 of this catalog.
2. Gear motor torque limited by gearbox.
3. Gearbox nominal torque.
4. 20 mm from shaft.
5. IP20 without terminal box, IP54 with terminal box.
6. Cables/wires for connecting terminal box not included with AC induction motor.
7. Visit [www.transmotec.com](http://www.transmotec.com) to view datasheets.

## DRAWING (mm)

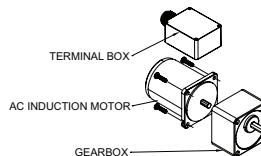


AC induction motor and gearbox also sold separately.

## MODEL NO. DESIGNATION

|                         |   |         |   |       |   |                                                  |
|-------------------------|---|---------|---|-------|---|--------------------------------------------------|
| AI-040W                 | - | Voltage | - | Phase | - | Connection                                       |
| Example: AI-040W-208-TC |   |         |   |       |   | T = Three phase<br>C = Cable<br>B = Terminal box |

## PHOTO



## ACCESSORIES¹



● C = customizations are offered on demand even for smaller quantities. Typical customizations are indicated with a green dot at column end. Please contact us for any customization request.

## GEAR MOTOR DATA

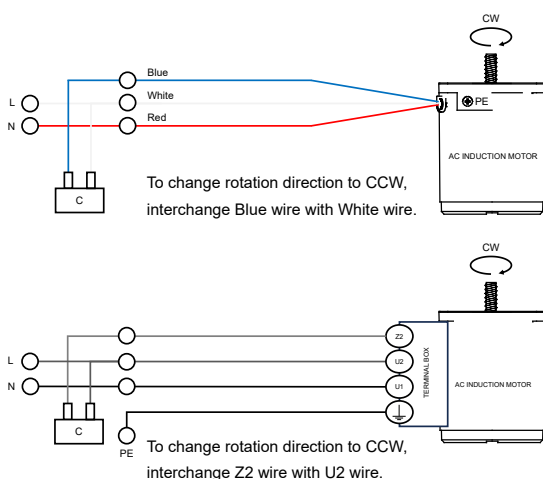
| Gear ratio                     |     | 3    | 3.6  | 5   | 6   | 7.5 | 9   | 10  | 12.5 | 15  | 18  | 20  | 25  | 30  | 36  | 40  | 50  | 60  | 75              | 90              | 100             | 120             | 150             | 180             | 200             | 250             | 300             | 500             | 600             | 750             |  |
|--------------------------------|-----|------|------|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--|
| Nominal torque                 | Nm  | 0.61 | 0.73 | 1.0 | 1.2 | 1.5 | 1.8 | 2.0 | 2.5  | 3.0 | 3.6 | 3.7 | 4.6 | 5.5 | 6.6 | 7.3 | 9.1 | 9.9 | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> |  |
| Nominal speed                  | rpm | 520  | 430  | 310 | 260 | 210 | 170 | 160 | 120  | 100 | 86  | 78  | 62  | 52  | 43  | 39  | 31  | 26  | 21              | 17              | 16              | 13              | 10              | 8.6             | 7.8             | 6.2             | 5.2             | 3.1             | 2.6             | 2.1             |  |
| Nominal power                  | W   | 33   | 33   | 33  | 33  | 33  | 33  | 33  | 33   | 33  | 33  | 30  | 30  | 30  | 30  | 30  | 30  | 27  | 22              | 18              | 16              | 14              | 11              | 9.0             | 8.1             | 6.5             | 5.4             | 3.2             | 2.7             | 2.2             |  |
| Gearb. nom. torq. <sup>3</sup> | Nm  | 10   | 10   | 10  | 10  | 10  | 10  | 10  | 10   | 10  | 10  | 10  | 10  | 10  | 10  | 10  | 10  | 10  | 10              | 10              | 10              | 10              | 10              | 10              | 10              | 10              | 10              | 10              | 10              | 10              |  |
| Gearbox efficiency             | %   | 81   | 81   | 81  | 81  | 81  | 81  | 81  | 81   | 81  | 81  | 73  | 73  | 73  | 73  | 73  | 73  | 66  | 66              | 66              | 66              | 66              | 66              | 66              | 66              | 59              | 59              | 59              | 59              | 59              |  |
| Radial load <sup>4</sup>       | N   | 350  | 350  | 350 | 350 | 350 | 350 | 350 | 350  | 350 | 350 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450             | 450             | 450             | 450             | 450             | 450             | 450             | 450             | 450             | 450             | 450             | 450             |  |
| Direction of rot.              |     | CW   | CW   | CW  | CW  | CW  | CW  | CW  | CW   | CW  | CW  | CCW | CCW | CCW | CCW | CW  | CW  | CW  | CW              | CW              | CW              | CW              | CW              | CW              | CW              | CW              | CCW             | CCW             | CCW             | CCW             |  |
| Weight                         | kg  | 3.8  | 3.8  | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8  | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8             | 3.8             | 3.8             | 3.8             | 3.8             | 3.8             | 3.8             | 3.8             | 3.8             | 3.8             | 3.8             | 3.8             |  |

## OTHER GEAR MOTOR DATA

|                        |    |             |
|------------------------|----|-------------|
| Service life           | h  | 10000       |
| Performance tolerances |    | ± 15        |
| Operating temperature  | °C | -10 to 40   |
| IP rating <sup>5</sup> |    | IP20   IP54 |
| Manufacturing standard |    | ISO 9001    |
| CE label   UL label    |    | No   No     |

## GEARBOX DATA

|                     |   |              |
|---------------------|---|--------------|
| Shaft axial load    | N | 100          |
| Bearing type        |   | Ball bearing |
| Shaft material      |   | 40 Cr steel  |
| Housing material    |   | Aluminum     |
| Material gear stage |   | 40 Cr steel  |

WIRING DIAGRAM AC INDUCTION MOTOR<sup>6</sup>

## AC INDUCTION MOTOR DATA

|                                |     |       |
|--------------------------------|-----|-------|
| Nominal voltage                | V   | 220   |
| No. of phases                  |     | 3     |
| Frequency                      | Hz  | 60    |
| No. of poles                   |     | 4     |
| Nominal speed                  | rpm | 1550  |
| Nominal torque                 | mNm | 250   |
| Nominal current                | A   | 0.25  |
| Nominal power                  | W   | 40    |
| Stall torque                   | mNm | 660   |
| Insulation class               |     | B     |
| Motor cable                    |     | AWG20 |
| Motor cable length             | mm  | 300   |
| Capacitor included in delivery | μF  | -     |
| Insulation resistance          | MΩ  | 100   |
| Dielectric strength            | kV  | 1.5   |
| Max. winding temperature       | °C  | 80    |
| Weight                         | kg  | 2.4   |

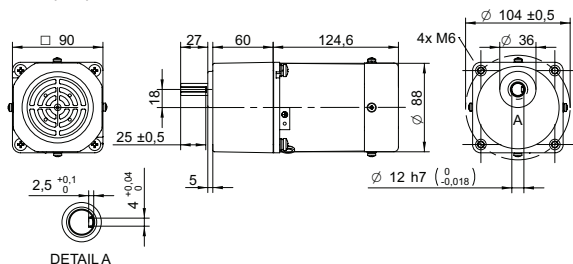
GEAR MOTOR RANGE AI-SERIES<sup>7</sup>

|                 |    |                        |
|-----------------|----|------------------------|
| Nominal voltage | V  | See separate datasheet |
| Nominal power   | W  | See separate datasheet |
| Dimension       | mm | See separate datasheet |

## NOTES

1. See page 29 of this catalog.
2. Gear motor torque limited by gearbox.
3. Gearbox nominal torque.
4. 20 mm from shaft.
5. IP20 without terminal box, IP54 with terminal box.
6. Cables/wires for connecting terminal box not included with AC induction motor.
7. Visit [www.transmotec.com](http://www.transmotec.com) to view datasheets.

## DRAWING (mm)

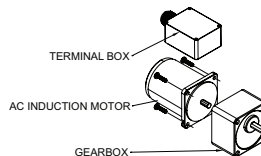


AC induction motor and gearbox also sold separately.

## MODEL NO. DESIGNATION

|                         |   |         |   |                  |                               |            |
|-------------------------|---|---------|---|------------------|-------------------------------|------------|
| AI-060W                 | - | Voltage | - | Phase            | -                             | Connection |
| Example: AI-060W-230-SC |   |         |   |                  |                               |            |
|                         |   |         |   | S = Single phase | C = Cable<br>B = Terminal box |            |

## PHOTO

ACCESSORIES<sup>1</sup>

● C = customizations are offered on demand even for smaller quantities. Typical customizations are indicated with a green dot at column end. Please contact us for any customization request.

## GEAR MOTOR DATA

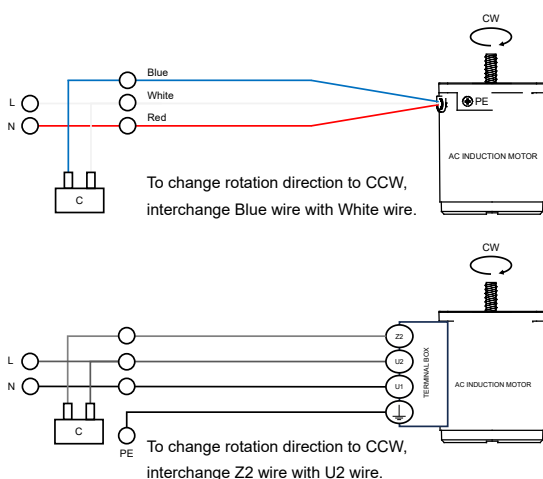
| Gear ratio     |    | 3   | 3.6 | 5   | 6   | 7.5 | 9   | 10  | 12.5 | 15  | 18  | 20  | 25  | 30              | 36              | 40              | 50              | 60              | 75              | 90              | 100             | 120             | 150             | 180             | 200             | 250             | 300             | 500             | 600             | 750             |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                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              |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |   |
|----------------|----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------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| Nominal torque | Nm | 1.1 | 1.4 | 1.9 | 2.3 | 2.9 | 3.4 | 3.8 | 4.8  | 5.7 | 6.9 | 6.9 | 8.6 | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 1 |

## OTHER GEAR MOTOR DATA

|                        |    |             |   |
|------------------------|----|-------------|---|
| Service life           | h  | 10000       | C |
| Performance tolerances |    | ± 15        |   |
| Operating temperature  | °C | -10 to 40   |   |
| IP rating <sup>5</sup> |    | IP20   IP54 |   |
| Manufacturing standard |    | ISO 9001    |   |
| CE label   UL label    |    | Yes   No    |   |

## GEARBOX DATA

|                     |   |              |   |
|---------------------|---|--------------|---|
| Shaft axial load    | N | 100          | C |
| Bearing type        |   | Ball bearing |   |
| Shaft material      |   | 40 Cr steel  |   |
| Housing material    |   | Aluminum     |   |
| Material gear stage |   | 40 Cr steel  |   |

WIRING DIAGRAM AC INDUCTION MOTOR<sup>6</sup>

## AC INDUCTION MOTOR DATA

|                                |     |       |   |
|--------------------------------|-----|-------|---|
| Nominal voltage                | V   | 230   | C |
| No. of phases                  |     | 1     |   |
| Frequency                      | Hz  | 50    |   |
| No. of poles                   |     | 4     |   |
| Nominal speed                  | rpm | 1250  |   |
| Nominal torque                 | mNm | 470   |   |
| Nominal current                | A   | 0.55  |   |
| Nominal power                  | W   | 60    |   |
| Stall torque                   | mNm | 340   |   |
| Insulation class               |     | B     |   |
| Motor cable                    |     | AWG18 |   |
| Motor cable length             | mm  | 300   |   |
| Capacitor included in delivery | μF  | 4     |   |
| Insulation resistance          | MΩ  | 100   |   |
| Dielectric strength            | kV  | 1.5   |   |
| Max. winding temperature       | °C  | 80    |   |
| Weight                         | kg  | 2.7   |   |

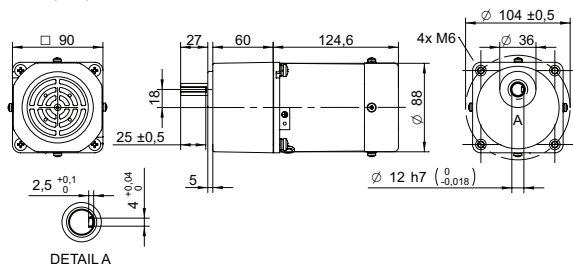
GEAR MOTOR RANGE AI-SERIES<sup>7</sup>

|                 |    |                        |
|-----------------|----|------------------------|
| Nominal voltage | V  | See separate datasheet |
| Nominal power   | W  | See separate datasheet |
| Dimension       | mm | See separate datasheet |

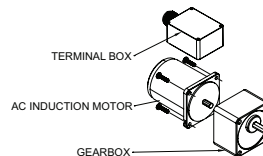
## NOTES

1. See page 29 of this catalog.
2. Gear motor torque limited by gearbox.
3. Gearbox nominal torque.
4. 20 mm from shaft.
5. IP20 without terminal box, IP54 with terminal box.
6. Cables/wires for connecting terminal box not included with AC induction motor.
7. Visit [www.transmotec.com](http://www.transmotec.com) to view datasheets.

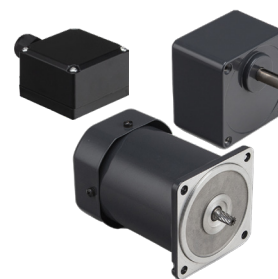
## DRAWING (mm)



AC induction motor and gearbox also sold separately.



## PHOTO



## MODEL NO. DESIGNATION

AI-060W - Voltage - Phase - Connection

Example: AI-060W-400-TC T = Three phase C = Cable B = Terminal box

ACCESSORIES<sup>1</sup>

C = customizations are offered on demand even for smaller quantities. Typical customizations are indicated with a green dot at column end. Please contact us for any customization request.

## GEAR MOTOR DATA

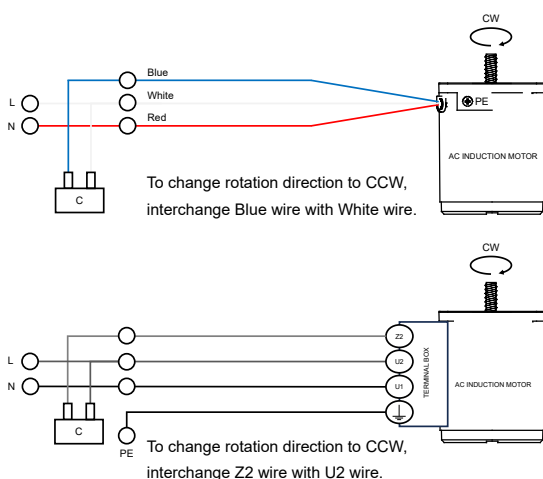
| Gear ratio                     |     | 3   | 3.6 | 5   | 6   | 7.5 | 9   | 10  | 12.5 | 15  | 18  | 20  | 25  | 30              | 36              | 40              | 50              | 60              | 75              | 90              | 100             | 120             | 150             | 180             | 200             | 250             | 300             | 500             | 600             | 750             |                 |  |
|--------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--|
| Nominal torque                 | Nm  | 1.1 | 1.4 | 1.9 | 2.3 | 2.9 | 3.4 | 3.8 | 4.8  | 5.7 | 6.9 | 6.9 | 8.6 | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> |  |
| Nominal speed                  | rpm | 420 | 350 | 250 | 210 | 170 | 140 | 130 | 100  | 83  | 69  | 63  | 50  | 42              | 35              | 31              | 25              | 21              | 17              | 14              | 13              | 10              | 8.3             | 6.9             | 6.3             | 5               | 4.2             | 2.5             | 2.1             | 1.7             |                 |  |
| Nominal power                  | W   | 50  | 50  | 50  | 50  | 50  | 50  | 50  | 50   | 50  | 50  | 45  | 45  | 44              | 36              | 33              | 26              | 22              | 17              | 15              | 13              | 11              | 8.7             | 7.3             | 6.5             | 6.5             | 5.4             | 3.2             | 2.7             | 2.2             |                 |  |
| Gearb. nom. torq. <sup>3</sup> | Nm  | 10  | 10  | 10  | 10  | 10  | 10  | 10  | 10   | 10  | 10  | 10  | 10  | 10              | 10              | 10              | 10              | 10              | 10              | 10              | 10              | 10              | 10              | 10              | 10              | 10              | 10              | 10              | 10              | 10              |                 |  |
| Gearbox efficiency             | %   | 81  | 81  | 81  | 81  | 81  | 81  | 81  | 81   | 81  | 81  | 73  | 73  | 73              | 73              | 73              | 73              | 66              | 66              | 66              | 66              | 66              | 66              | 66              | 66              | 59              | 59              | 59              | 59              | 59              |                 |  |
| Radial load <sup>4</sup>       | N   | 350 | 350 | 350 | 350 | 350 | 350 | 350 | 350  | 350 | 350 | 450 | 450 | 450             | 450             | 450             | 450             | 450             | 450             | 450             | 450             | 450             | 450             | 450             | 450             | 450             | 450             | 450             | 450             | 450             |                 |  |
| Direction of rot.              |     | CW  | CW  | CW  | CW  | CW  | CW  | CW  | CW   | CW  | CW  | CCW | CCW | CCW             | CCW             | CW              | CW              | CW              | CW              | CW              | CW              | CW              | CW              | CW              | CW              | CW              | CCW             | CCW             | CCW             | CCW             | CCW             |  |
| Weight                         | kg  | 4.1 | 4.1 | 4.1 | 4.1 | 4.1 | 4.1 | 4.1 | 4.1  | 4.1 | 4.1 | 4.1 | 4.1 | 4.1             | 4.1             | 4.1             | 4.1             | 4.1             | 4.1             | 4.1             | 4.1             | 4.1             | 4.1             | 4.1             | 4.1             | 4.1             | 4.1             | 4.1             | 4.1             | 4.1             | 4.1             |  |

## OTHER GEAR MOTOR DATA

|                        |    |             |
|------------------------|----|-------------|
| Service life           | h  | 10000       |
| Performance tolerances |    | ± 15        |
| Operating temperature  | °C | -10 to 40   |
| IP rating <sup>5</sup> |    | IP20   IP54 |
| Manufacturing standard |    | ISO 9001    |
| CE label   UL label    |    | Yes   No    |

## GEARBOX DATA

|                     |   |              |
|---------------------|---|--------------|
| Shaft axial load    | N | 100          |
| Bearing type        |   | Ball bearing |
| Shaft material      |   | 40 Cr steel  |
| Housing material    |   | Aluminum     |
| Material gear stage |   | 40 Cr steel  |

WIRING DIAGRAM AC INDUCTION MOTOR<sup>6</sup>

## AC INDUCTION MOTOR DATA

|                                |     |       |
|--------------------------------|-----|-------|
| Nominal voltage                | V   | 380   |
| No. of phases                  |     | 3     |
| Frequency                      | Hz  | 50    |
| No. of poles                   |     | 4     |
| Nominal speed                  | rpm | 1250  |
| Nominal torque                 | mNm | 470   |
| Nominal current                | A   | 0.26  |
| Nominal power                  | W   | 60    |
| Stall torque                   | mNm | 1000  |
| Insulation class               |     | B     |
| Motor cable                    |     | AWG18 |
| Motor cable length             | mm  | 300   |
| Capacitor included in delivery | μF  | -     |
| Insulation resistance          | MΩ  | 100   |
| Dielectric strength            | kV  | 1.5   |
| Max. winding temperature       | °C  | 80    |
| Weight                         | kg  | 2.7   |

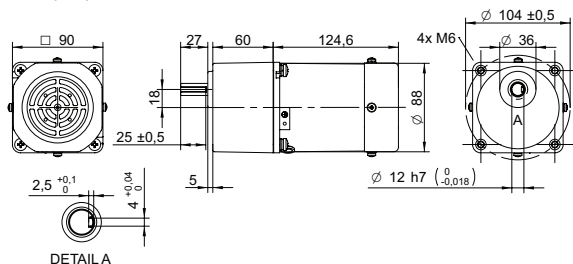
GEAR MOTOR RANGE AI-SERIES<sup>7</sup>

|                 |    |                        |
|-----------------|----|------------------------|
| Nominal voltage | V  | See separate datasheet |
| Nominal power   | W  | See separate datasheet |
| Dimension       | mm | See separate datasheet |

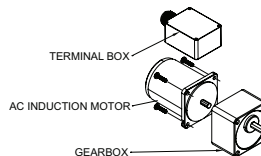
## NOTES

- See page 29 of this catalog.
- Gear motor torque limited by gearbox.
- Gearbox nominal torque.
- 20 mm from shaft.
- IP20 without terminal box, IP54 with terminal box.
- Cables/wires for connecting terminal box not included with AC induction motor.
- Visit [www.transmotec.com](http://www.transmotec.com) to view datasheets.

## DRAWING (mm)



AC induction motor and gearbox also sold separately.



## PHOTO



## MODEL NO. DESIGNATION

|                         |   |         |   |                  |                               |            |
|-------------------------|---|---------|---|------------------|-------------------------------|------------|
| AI-060W                 | - | Voltage | - | Phase            | -                             | Connection |
| Example: AI-060W-120-SC |   |         |   |                  |                               |            |
|                         |   |         |   | S = Single phase | C = Cable<br>B = Terminal box |            |

ACCESSORIES<sup>1</sup>

C = customizations are offered on demand even for smaller quantities. Typical customizations are indicated with a green dot at column end. Please contact us for any customization request.

## GEAR MOTOR DATA

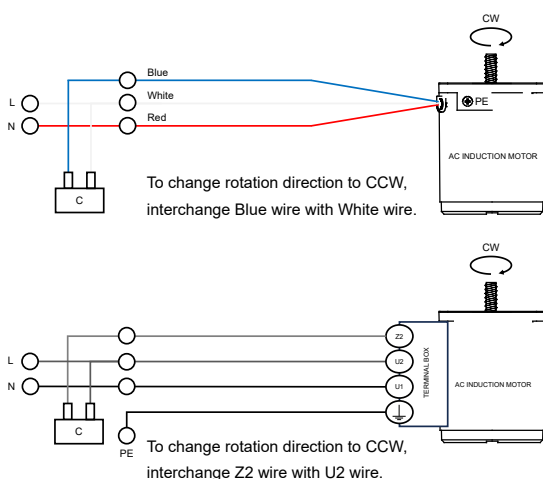
|                                |     | 3    | 3.6 | 5   | 6   | 7.5 | 9   | 10  | 12.5 | 15  | 18  | 20  | 25  | 30  | 36              | 40              | 50              | 60              | 75              | 90              | 100             | 120             | 150             | 180             | 200             | 250             | 300             | 500             | 600             | 750             | C |
|--------------------------------|-----|------|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|---|
| Gear ratio                     |     | 3    | 3.6 | 5   | 6   | 7.5 | 9   | 10  | 12.5 | 15  | 18  | 20  | 25  | 30  | 36              | 40              | 50              | 60              | 75              | 90              | 100             | 120             | 150             | 180             | 200             | 250             | 300             | 500             | 600             | 750             |   |
| Nominal torque                 | Nm  | 0.92 | 1.1 | 1.5 | 1.8 | 2.3 | 2.8 | 3.1 | 3.8  | 4.6 | 5.5 | 5.5 | 6.9 | 8.3 | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> |   |
| Nominal speed                  | rpm | 520  | 430 | 310 | 260 | 210 | 170 | 160 | 120  | 100 | 86  | 78  | 62  | 52  | 43              | 39              | 31              | 26              | 21              | 17              | 16              | 13              | 10              | 8,6             | 7,8             | 6,2             | 5,2             | 3,1             | 2,6             | 2,1             |   |
| Nominal power                  | W   | 50   | 50  | 50  | 50  | 50  | 50  | 50  | 50   | 50  | 50  | 45  | 45  | 45  | 45              | 41              | 32              | 27              | 22              | 18              | 16              | 14              | 11              | 9,0             | 8,1             | 6,5             | 5,4             | 3,2             | 2,7             | 2,2             |   |
| Gearb. nom. torq. <sup>3</sup> | Nm  | 10   | 10  | 10  | 10  | 10  | 10  | 10  | 10   | 10  | 10  | 10  | 10  | 10  | 10              | 10              | 10              | 10              | 10              | 10              | 10              | 10              | 10              | 10              | 10              | 10              | 10              | 10              | 10              | 10              |   |
| Gearbox efficiency             | %   | 81   | 81  | 81  | 81  | 81  | 81  | 81  | 81   | 81  | 81  | 73  | 73  | 73  | 73              | 73              | 73              | 66              | 66              | 66              | 66              | 66              | 66              | 66              | 66              | 59              | 59              | 59              | 59              | 59              |   |
| Radial load <sup>4</sup>       | N   | 350  | 350 | 350 | 350 | 350 | 350 | 350 | 350  | 350 | 350 | 450 | 450 | 450 | 450             | 450             | 450             | 450             | 450             | 450             | 450             | 450             | 450             | 450             | 450             | 450             | 450             | 450             | 450             | 450             |   |
| Direction of rot.              |     | CW   | CW  | CW  | CW  | CW  | CW  | CW  | CW   | CW  | CW  | CCW | CCW | CCW | CCW             | CW              | CW              | CW              | CW              | CW              | CW              | CW              | CW              | CW              | CW              | CW              | CCW             | CCW             | CCW             | CCW             |   |
| Weight                         | kg  | 4.1  | 4.1 | 4.1 | 4.1 | 4.1 | 4.1 | 4.1 | 4.1  | 4.1 | 4.1 | 4.1 | 4.1 | 4.1 | 4.1             | 4.1             | 4.1             | 4.1             | 4.1             | 4.1             | 4.1             | 4.1             | 4.1             | 4.1             | 4.1             | 4.1             | 4.1             | 4.1             | 4.1             | 4.1             |   |

## OTHER GEAR MOTOR DATA

|                        |    |             |
|------------------------|----|-------------|
| Service life           | h  | 10000       |
| Performance tolerances |    | ± 15        |
| Operating temperature  | °C | -10 to 40   |
| IP rating <sup>5</sup> |    | IP20   IP54 |
| Manufacturing standard |    | ISO 9001    |
| CE label   UL label    |    | No   No     |

## GEARBOX DATA

|                     |   |              |
|---------------------|---|--------------|
| Shaft axial load    | N | 100          |
| Bearing type        |   | Ball bearing |
| Shaft material      |   | 40 Cr steel  |
| Housing material    |   | Aluminum     |
| Material gear stage |   | 40 Cr steel  |

WIRING DIAGRAM AC INDUCTION MOTOR<sup>6</sup>

## AC INDUCTION MOTOR DATA

|                                |     |       |
|--------------------------------|-----|-------|
| Nominal voltage                | V   | 120   |
| No. of phases                  |     | 1     |
| Frequency                      | Hz  | 60    |
| No. of poles                   |     | 4     |
| Nominal speed                  | rpm | 1550  |
| Nominal torque                 | mNm | 380   |
| Nominal current                | A   | 0.85  |
| Nominal power                  | W   | 60    |
| Stall torque                   | mNm | 300   |
| Insulation class               |     | B     |
| Motor cable                    |     | AWG18 |
| Motor cable length             | mm  | 300   |
| Capacitor included in delivery | μF  | 12    |
| Insulation resistance          | MΩ  | 100   |
| Dielectric strength            | kV  | 1.5   |
| Max. winding temperature       | °C  | 80    |
| Weight                         | kg  | 2.7   |

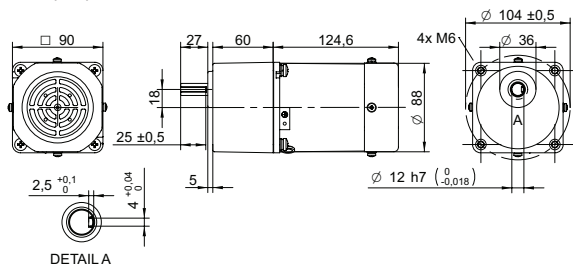
GEAR MOTOR RANGE AI-SERIES<sup>7</sup>

|                 |    |                        |
|-----------------|----|------------------------|
| Nominal voltage | V  | See separate datasheet |
| Nominal power   | W  | See separate datasheet |
| Dimension       | mm | See separate datasheet |

## NOTES

1. See page 29 of this catalog.
2. Gear motor torque limited by gearbox.
3. Gearbox nominal torque.
4. 20 mm from shaft.
5. IP20 without terminal box, IP54 with terminal box.
6. Cables/wires for connecting terminal box not included with AC induction motor.
7. Visit [www.transmotec.com](http://www.transmotec.com) to view datasheets.

## DRAWING (mm)

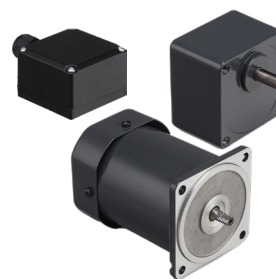
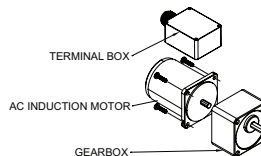


AC induction motor and gearbox also sold separately.

## MODEL NO. DESIGNATION

|                         |   |         |   |                 |                               |            |
|-------------------------|---|---------|---|-----------------|-------------------------------|------------|
| AI-060W                 | - | Voltage | - | Phase           | -                             | Connection |
| Example: AI-060W-208-TC |   |         |   |                 |                               |            |
|                         |   |         |   | T = Three phase | C = Cable<br>B = Terminal box |            |

## PHOTO



## ACCESSORIES¹



¹ C = customizations are offered on demand even for smaller quantities. Typical customizations are indicated with a green dot at column end. Please contact us for any customization request.

## GEAR MOTOR DATA

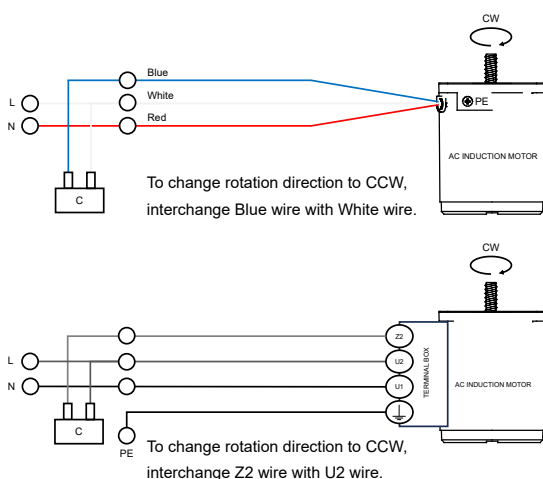
|                                |     | 3    | 3.6 | 5   | 6   | 7.5 | 9   | 10  | 12.5 | 15  | 18  | 20  | 25  | 30  | 36              | 40              | 50              | 60              | 75              | 90              | 100             | 120             | 150             | 180             | 200             | 250             | 300             | 500             | 600             | 750             | C |
|--------------------------------|-----|------|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|---|
| Gear ratio                     |     | 3    | 3.6 | 5   | 6   | 7.5 | 9   | 10  | 12.5 | 15  | 18  | 20  | 25  | 30  | 36              | 40              | 50              | 60              | 75              | 90              | 100             | 120             | 150             | 180             | 200             | 250             | 300             | 500             | 600             | 750             |   |
| Nominal torque                 | Nm  | 0.92 | 1.1 | 1.5 | 1.8 | 2.3 | 2.8 | 3.1 | 3.8  | 4.6 | 5.5 | 5.5 | 6.9 | 8.3 | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> | 10 <sup>2</sup> |   |
| Nominal speed                  | rpm | 520  | 430 | 310 | 260 | 210 | 170 | 160 | 120  | 100 | 86  | 78  | 62  | 52  | 43              | 39              | 31              | 26              | 21              | 17              | 16              | 13              | 10              | 8,6             | 7,8             | 6,2             | 5,2             | 3,1             | 2,6             | 2,1             |   |
| Nominal power                  | W   | 50   | 50  | 50  | 50  | 50  | 50  | 50  | 50   | 50  | 50  | 45  | 45  | 45  | 45              | 41              | 32              | 27              | 22              | 18              | 16              | 14              | 11              | 9,0             | 8,1             | 6,5             | 5,4             | 3,2             | 2,7             | 2,2             |   |
| Gearb. nom. torq. <sup>3</sup> | Nm  | 10   | 10  | 10  | 10  | 10  | 10  | 10  | 10   | 10  | 10  | 10  | 10  | 10  | 10              | 10              | 10              | 10              | 10              | 10              | 10              | 10              | 10              | 10              | 10              | 10              | 10              | 10              | 10              | 10              |   |
| Gearbox efficiency             | %   | 81   | 81  | 81  | 81  | 81  | 81  | 81  | 81   | 81  | 81  | 73  | 73  | 73  | 73              | 73              | 73              | 66              | 66              | 66              | 66              | 66              | 66              | 66              | 66              | 59              | 59              | 59              | 59              | 59              |   |
| Radial load <sup>4</sup>       | N   | 350  | 350 | 350 | 350 | 350 | 350 | 350 | 350  | 350 | 350 | 450 | 450 | 450 | 450             | 450             | 450             | 450             | 450             | 450             | 450             | 450             | 450             | 450             | 450             | 450             | 450             | 450             | 450             | 450             |   |
| Direction of rot.              |     | CW   | CW  | CW  | CW  | CW  | CW  | CW  | CW   | CW  | CW  | CCW | CCW | CCW | CCW             | CW              | CW              | CW              | CW              | CW              | CW              | CW              | CW              | CW              | CW              | CW              | CCW             | CCW             | CCW             | CCW             |   |
| Weight                         | kg  | 4.1  | 4.1 | 4.1 | 4.1 | 4.1 | 4.1 | 4.1 | 4.1  | 4.1 | 4.1 | 4.1 | 4.1 | 4.1 | 4.1             | 4.1             | 4.1             | 4.1             | 4.1             | 4.1             | 4.1             | 4.1             | 4.1             | 4.1             | 4.1             | 4.1             | 4.1             | 4.1             | 4.1             | 4.1             |   |

## OTHER GEAR MOTOR DATA

|                        |    |             |
|------------------------|----|-------------|
| Service life           | h  | 10000       |
| Performance tolerances |    | ± 15        |
| Operating temperature  | °C | -10 to 40   |
| IP rating <sup>5</sup> |    | IP20   IP54 |
| Manufacturing standard |    | ISO 9001    |
| CE label   UL label    |    | No   No     |

## GEARBOX DATA

|                     |   |              |
|---------------------|---|--------------|
| Shaft axial load    | N | 100          |
| Bearing type        |   | Ball bearing |
| Shaft material      |   | 40 Cr steel  |
| Housing material    |   | Aluminum     |
| Material gear stage |   | 40 Cr steel  |

WIRING DIAGRAM AC INDUCTION MOTOR<sup>6</sup>

## AC INDUCTION MOTOR DATA

|                                |     |       |
|--------------------------------|-----|-------|
| Nominal voltage                | V   | 220   |
| No. of phases                  |     | 3     |
| Frequency                      | Hz  | 60    |
| No. of poles                   |     | 4     |
| Nominal speed                  | rpm | 1550  |
| Nominal torque                 | mNm | 380   |
| Nominal current                | A   | 0.4   |
| Nominal power                  | W   | 60    |
| Stall torque                   | mNm | 800   |
| Insulation class               |     | B     |
| Motor cable                    |     | AWG18 |
| Motor cable length             | mm  | 300   |
| Capacitor included in delivery | μF  | -     |
| Insulation resistance          | MΩ  | 100   |
| Dielectric strength            | kV  | 1.5   |
| Max. winding temperature       | °C  | 80    |
| Weight                         | kg  | 2.7   |

GEAR MOTOR RANGE AI-SERIES<sup>7</sup>

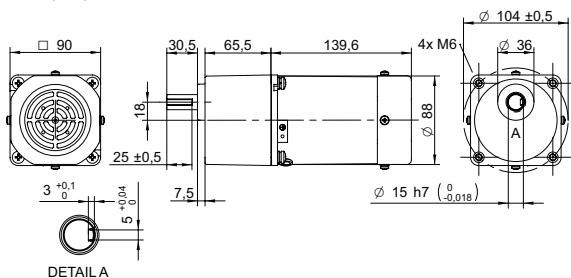
|                 |    |                        |
|-----------------|----|------------------------|
| Nominal voltage | V  | See separate datasheet |
| Nominal power   | W  | See separate datasheet |
| Dimension       | mm | See separate datasheet |

## NOTES

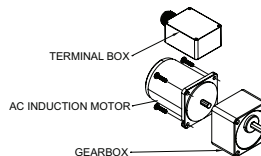
1. See page 29 of this catalog.
2. Gear motor torque limited by gearbox.
3. Gearbox nominal torque.
4. 20 mm from shaft.
5. IP20 without terminal box, IP54 with terminal box.
6. Cables/wires for connecting terminal box not included with AC induction motor.
7. Visit [www.transmotec.com](http://www.transmotec.com) to view datasheets.



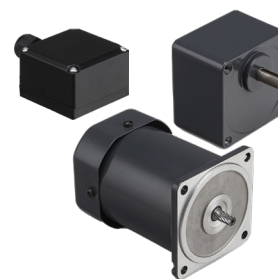
## DRAWING (mm)



AC induction motor and gearbox also sold separately.



## PHOTO



## MODEL NO. DESIGNATION

|                         |   |         |   |                  |                               |            |
|-------------------------|---|---------|---|------------------|-------------------------------|------------|
| AI-090W                 | - | Voltage | - | Phase            | -                             | Connection |
| Example: AI-090W-230-SC |   |         |   |                  |                               |            |
|                         |   |         |   | S = Single phase | C = Cable<br>B = Terminal box |            |

## ACCESSORIES¹



● C = customizations are offered on demand even for smaller quantities. Typical customizations are indicated with a green dot at column end. Please contact us for any customization request.

## GEAR MOTOR DATA

|                    |     | 3   | 3.6 | 5   | 6   | 7.5 | 9   | 10  | 12.5 | 15  | 18  | 20  | 25  | 30  | 36  | 40  | 50  | 60  | 75  | 90  | 100 | 120 | 150 | 180 | 200 | C |
|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|
| Gear ratio         |     | 3   | 3.6 | 5   | 6   | 7.5 | 9   | 10  | 12.5 | 15  | 18  | 20  | 25  | 30  | 36  | 40  | 50  | 60  | 75  | 90  | 100 | 120 | 150 | 180 | 200 | ● |
| Nominal torque     | Nm  | 1.7 | 2.0 | 2.8 | 3.4 | 4.3 | 5.1 | 5.7 | 7.1  | 8.5 | 10  | 10  | 13  | 15  | 18  | 20² | 20² | 20² | 20² | 20² | 20² | 20² | 20² | 20² | 20² | ● |
| Nominal speed      | rpm | 420 | 350 | 250 | 210 | 170 | 140 | 130 | 100  | 83  | 69  | 63  | 50  | 42  | 35  | 31  | 25  | 21  | 17  | 14  | 13  | 10  | 8,3 | 6,9 | 6,3 |   |
| Nominal power      | W   | 74  | 74  | 74  | 74  | 74  | 74  | 74  | 74   | 74  | 74  | 67  | 67  | 67  | 67  | 65  | 52  | 44  | 35  | 29  | 26  | 22  | 17  | 15  | 13  |   |
| Gearb. nom. torq.³ | Nm  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20   | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  |   |
| Gearbox efficiency | %   | 81  | 81  | 81  | 81  | 81  | 81  | 81  | 81   | 81  | 81  | 73  | 73  | 73  | 73  | 73  | 73  | 66  | 66  | 66  | 66  | 66  | 66  | 66  | 66  |   |
| Radial load⁴       | N   | 500 | 500 | 500 | 500 | 500 | 500 | 600 | 600  | 600 | 600 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 |   |
| Direction of rot.  |     | CW  | CW  | CW  | CW  | CW  | CW  | CCW | CCW  | CCW | CCW | CW  | CW  | CW  | CW  | CW  | CW  | CW  | CW  | CCW | CCW | CCW | CCW | CCW | CCW |   |
| Weight             | kg  | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7  | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 |   |

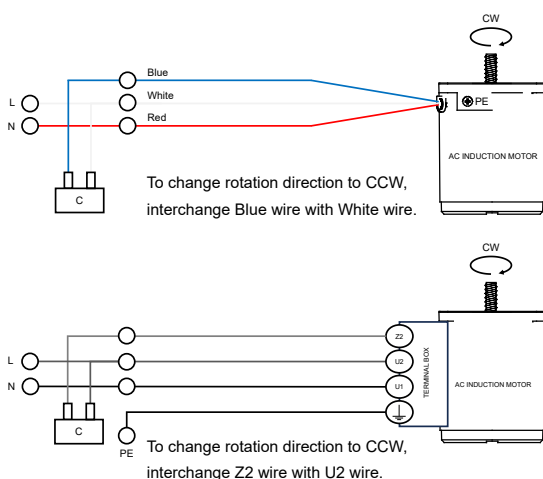
## OTHER GEAR MOTOR DATA

|                        |    |             |
|------------------------|----|-------------|
| Service life           | h  | 10000       |
| Performance tolerances |    | ± 15        |
| Operating temperature  | °C | -10 to 40   |
| IP rating⁵             |    | IP20   IP54 |
| Manufacturing standard |    | ISO 9001    |
| CE label   UL label    |    | Yes   No    |

## GEARBOX DATA

|                     |   |              |
|---------------------|---|--------------|
| Shaft axial load    | N | 150          |
| Bearing type        |   | Ball bearing |
| Shaft material      |   | 40 Cr steel  |
| Housing material    |   | Aluminum     |
| Material gear stage |   | 40 Cr steel  |

## WIRING DIAGRAM AC INDUCTION MOTOR⁶



## AC INDUCTION MOTOR DATA

|                                |     |       |
|--------------------------------|-----|-------|
| Nominal voltage                | V   | 230   |
| No. of phases                  |     | 1     |
| Frequency                      | Hz  | 50    |
| No. of poles                   |     | 4     |
| Nominal speed                  | rpm | 1250  |
| Nominal torque                 | mNm | 700   |
| Nominal current                | A   | 0.7   |
| Nominal power                  | W   | 90    |
| Stall torque                   | mNm | 450   |
| Insulation class               |     | B     |
| Motor cable                    |     | AWG18 |
| Motor cable length             | mm  | 300   |
| Capacitor included in delivery | μF  | 5     |
| Insulation resistance          | MΩ  | 100   |
| Dielectric strength            | kV  | 1.5   |
| Max. winding temperature       | °C  | 80    |
| Weight                         | kg  | 3.2   |

## GEAR MOTOR RANGE AI-SERIES⁷

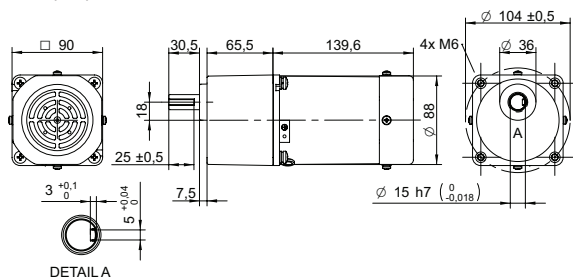
|                 |    |                        |
|-----------------|----|------------------------|
| Nominal voltage | V  | See separate datasheet |
| Nominal power   | W  | See separate datasheet |
| Dimension       | mm | See separate datasheet |

## NOTES

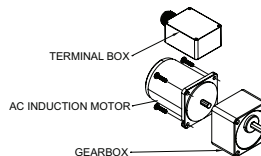
1. See page 29 of this catalog.
2. Gear motor torque limited by gearbox.
3. Gearbox nominal torque.
4. 20 mm from shaft.
5. IP20 without terminal box, IP54 with terminal box.
6. Cables/wires for connecting terminal box not included with AC induction motor.
7. Visit [www.transmotec.com](http://www.transmotec.com) to view datasheets.



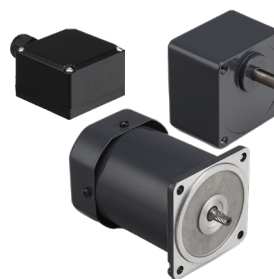
## DRAWING (mm)



AC induction motor and gearbox also sold separately.



## PHOTO



## MODEL NO. DESIGNATION

|                         |   |         |   |                 |                               |            |
|-------------------------|---|---------|---|-----------------|-------------------------------|------------|
| AI-090W                 | - | Voltage | - | Phase           | -                             | Connection |
| Example: AI-090W-400-TC |   |         |   |                 |                               |            |
|                         |   |         |   | T = Three phase | C = Cable<br>B = Terminal box |            |

## ACCESSORIES¹



● C = customizations are offered on demand even for smaller quantities. Typical customizations are indicated with a green dot at column end. Please contact us for any customization request.

## GEAR MOTOR DATA

|                    |     | 3   | 3.6 | 5   | 6   | 7.5 | 9   | 10  | 12.5 | 15  | 18  | 20  | 25  | 30  | 36  | 40  | 50  | 60  | 75  | 90  | 100 | 120 | 150 | 180 | 200 | C   |
|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gear ratio         |     | 3   | 3.6 | 5   | 6   | 7.5 | 9   | 10  | 12.5 | 15  | 18  | 20  | 25  | 30  | 36  | 40  | 50  | 60  | 75  | 90  | 100 | 120 | 150 | 180 | 200 | ●   |
| Nominal torque     | Nm  | 1.7 | 2.0 | 2.8 | 3.4 | 4.3 | 5.1 | 5.7 | 7.1  | 8.5 | 10  | 10  | 13  | 15  | 18  | 20² | 20² | 20² | 20² | 20² | 20² | 20² | 20² | 20² | 20² | 20² |
| Nominal speed      | rpm | 420 | 350 | 250 | 210 | 170 | 140 | 130 | 100  | 83  | 69  | 63  | 50  | 42  | 35  | 31  | 25  | 21  | 17  | 14  | 13  | 10  | 8.3 | 6.9 | 6.3 |     |
| Nominal power      | W   | 74  | 74  | 74  | 74  | 74  | 74  | 74  | 74   | 74  | 74  | 67  | 67  | 67  | 67  | 65  | 52  | 44  | 35  | 29  | 26  | 22  | 17  | 15  | 13  |     |
| Gearb. nom. torq.³ | Nm  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20   | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  |     |
| Gearbox efficiency | %   | 81  | 81  | 81  | 81  | 81  | 81  | 81  | 81   | 81  | 81  | 73  | 73  | 73  | 73  | 73  | 73  | 66  | 66  | 66  | 66  | 66  | 66  | 66  | 66  |     |
| Radial load⁴       | N   | 500 | 500 | 500 | 500 | 500 | 500 | 600 | 600  | 600 | 600 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 |     |
| Direction of rot.  |     | CW  | CW  | CW  | CW  | CW  | CW  | CCW | CCW  | CCW | CCW | CW  | CW  | CW  | CW  | CW  | CW  | CW  | CW  | CCW | CCW | CCW | CCW | CCW | CCW |     |
| Weight             | kg  | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7  | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 |     |

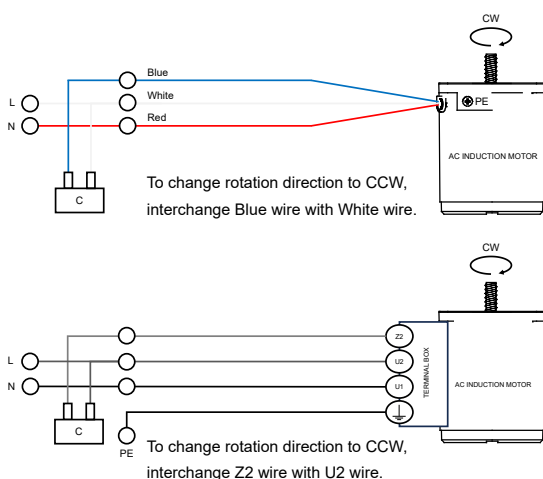
## OTHER GEAR MOTOR DATA

|                        |    |             |
|------------------------|----|-------------|
| Service life           | h  | 10000       |
| Performance tolerances |    | ± 15        |
| Operating temperature  | °C | -10 to 40   |
| IP rating⁵             |    | IP20   IP54 |
| Manufacturing standard |    | ISO 9001    |
| CE label   UL label    |    | Yes   No    |

## GEARBOX DATA

|                     |   |              |
|---------------------|---|--------------|
| Shaft axial load    | N | 150          |
| Bearing type        |   | Ball bearing |
| Shaft material      |   | 40 Cr steel  |
| Housing material    |   | Aluminum     |
| Material gear stage |   | 40 Cr steel  |

## WIRING DIAGRAM AC INDUCTION MOTOR⁶



## AC INDUCTION MOTOR DATA

|                                |     |       |
|--------------------------------|-----|-------|
| Nominal voltage                | V   | 380   |
| No. of phases                  |     | 3     |
| Frequency                      | Hz  | 50    |
| No. of poles                   |     | 4     |
| Nominal speed                  | rpm | 1250  |
| Nominal torque                 | mNm | 700   |
| Nominal current                | A   | 0.35  |
| Nominal power                  | W   | 90    |
| Stall torque                   | mNm | 1400  |
| Insulation class               |     | B     |
| Motor cable                    |     | AWG18 |
| Motor cable length             | mm  | 300   |
| Capacitor included in delivery | μF  | -     |
| Insulation resistance          | MΩ  | 100   |
| Dielectric strength            | kV  | 1.5   |
| Max. winding temperature       | °C  | 80    |
| Weight                         | kg  | 3.2   |

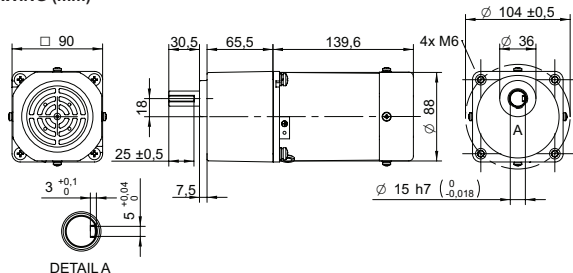
## GEAR MOTOR RANGE AI-SERIES⁷

|                 |    |                        |
|-----------------|----|------------------------|
| Nominal voltage | V  | See separate datasheet |
| Nominal power   | W  | See separate datasheet |
| Dimension       | mm | See separate datasheet |

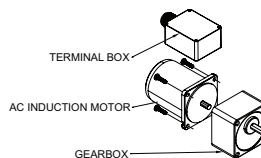
## NOTES

1. See page 29 of this catalog.
2. Gear motor torque limited by gearbox.
3. Gearbox nominal torque.
4. 20 mm from shaft.
5. IP20 without terminal box, IP54 with terminal box.
6. Cables/wires for connecting terminal box not included with AC induction motor.
7. Visit [www.transmotec.com](http://www.transmotec.com) to view datasheets.

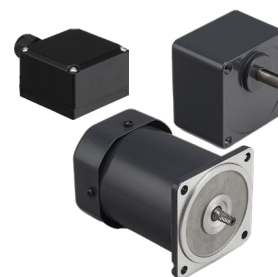
## DRAWING (mm)



AC induction motor and gearbox also sold separately.



## PHOTO



## MODEL NO. DESIGNATION

|                         |   |         |   |                  |                               |            |
|-------------------------|---|---------|---|------------------|-------------------------------|------------|
| AI-090W                 | - | Voltage | - | Phase            | -                             | Connection |
| Example: AI-090W-120-SC |   |         |   |                  |                               |            |
|                         |   |         |   | S = Single phase | C = Cable<br>B = Terminal box |            |

## ACCESSORIES¹



● C = customizations are offered on demand even for smaller quantities. Typical customizations are indicated with a green dot at column end. Please contact us for any customization request.

## GEAR MOTOR DATA

|                    |     | 3   | 3.6 | 5   | 6   | 7.5 | 9   | 10  | 12.5 | 15  | 18  | 20  | 25  | 30  | 36  | 40  | 50  | 60  | 75  | 90  | 100 | 120 | 150 | 180 | 200 | C   |
|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gear ratio         |     | 3   | 3.6 | 5   | 6   | 7.5 | 9   | 10  | 12.5 | 15  | 18  | 20  | 25  | 30  | 36  | 40  | 50  | 60  | 75  | 90  | 100 | 120 | 150 | 180 | 200 | ●   |
| Nominal torque     | Nm  | 1.4 | 1.7 | 2.3 | 2.8 | 3.5 | 4.2 | 4.6 | 5.8  | 6.9 | 8.3 | 8.3 | 10  | 12  | 15  | 17  | 20² | 20² | 20² | 20² | 20² | 20² | 20² | 20² | 20² | 20² |
| Nominal speed      | rpm | 520 | 430 | 310 | 260 | 210 | 170 | 160 | 120  | 100 | 86  | 78  | 62  | 52  | 43  | 39  | 31  | 26  | 21  | 17  | 16  | 13  | 10  | 8,6 | 7,8 |     |
| Nominal power      | W   | 75  | 75  | 75  | 75  | 75  | 75  | 75  | 75   | 75  | 75  | 68  | 68  | 68  | 68  | 68  | 65  | 54  | 43  | 36  | 32  | 27  | 22  | 18  | 16  |     |
| Gearb. nom. torq.³ | Nm  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20   | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  |     |
| Gearbox efficiency | %   | 81  | 81  | 81  | 81  | 81  | 81  | 81  | 81   | 81  | 81  | 73  | 73  | 73  | 73  | 73  | 73  | 66  | 66  | 66  | 66  | 66  | 66  | 66  | 66  |     |
| Radial load⁴       | N   | 500 | 500 | 500 | 500 | 500 | 500 | 600 | 600  | 600 | 600 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 |     |
| Direction of rot.  |     | CW  | CW  | CW  | CW  | CW  | CW  | CCW | CCW  | CCW | CCW | CW  | CW  | CW  | CW  | CW  | CW  | CW  | CW  | CCW | CCW | CCW | CCW | CCW | CCW |     |
| Weight             | kg  | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7  | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 |     |

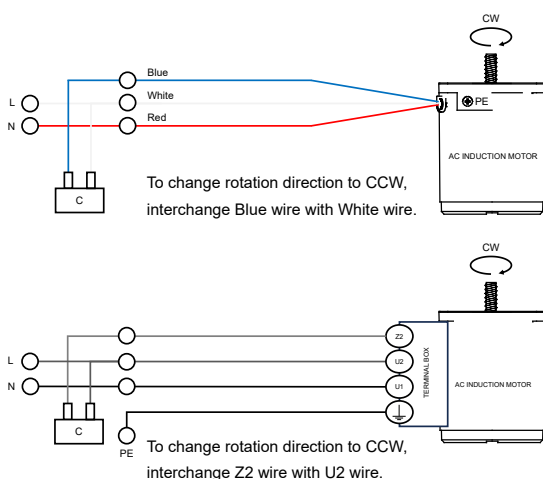
## OTHER GEAR MOTOR DATA

|                        |    |             |
|------------------------|----|-------------|
| Service life           | h  | 10000       |
| Performance tolerances |    | ± 15        |
| Operating temperature  | °C | -10 to 40   |
| IP rating⁵             |    | IP20   IP54 |
| Manufacturing standard |    | ISO 9001    |
| CE label   UL label    |    | No   No     |

## GEARBOX DATA

|                     |   |              |
|---------------------|---|--------------|
| Shaft axial load    | N | 150          |
| Bearing type        |   | Ball bearing |
| Shaft material      |   | 40 Cr steel  |
| Housing material    |   | Aluminum     |
| Material gear stage |   | 40 Cr steel  |

## WIRING DIAGRAM AC INDUCTION MOTOR⁶



## AC INDUCTION MOTOR DATA

|                                |     |       |
|--------------------------------|-----|-------|
| Nominal voltage                | V   | 120   |
| No. of phases                  |     | 1     |
| Frequency                      | Hz  | 60    |
| No. of poles                   |     | 4     |
| Nominal speed                  | rpm | 1550  |
| Nominal torque                 | mNm | 570   |
| Nominal current                | A   | 1.5   |
| Nominal power                  | W   | 90    |
| Stall torque                   | mNm | 500   |
| Insulation class               |     | B     |
| Motor cable                    |     | AWG18 |
| Motor cable length             | mm  | 300   |
| Capacitor included in delivery | μF  | 20    |
| Insulation resistance          | MΩ  | 100   |
| Dielectric strength            | kV  | 1.5   |
| Max. winding temperature       | °C  | 80    |
| Weight                         | kg  | 3.2   |

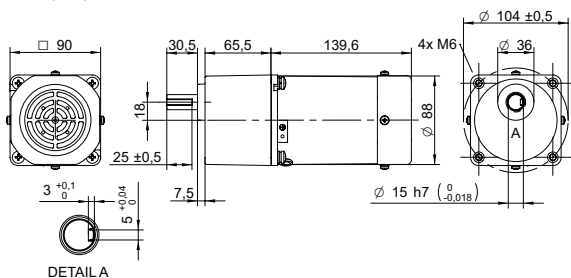
## GEAR MOTOR RANGE AI-SERIES⁷

|                 |    |                        |
|-----------------|----|------------------------|
| Nominal voltage | V  | See separate datasheet |
| Nominal power   | W  | See separate datasheet |
| Dimension       | mm | See separate datasheet |

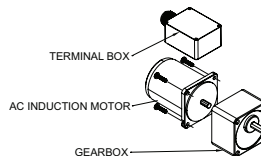
## NOTES

1. See page 29 of this catalog.
2. Gear motor torque limited by gearbox.
3. Gearbox nominal torque.
4. 20 mm from shaft.
5. IP20 without terminal box, IP54 with terminal box.
6. Cables/wires for connecting terminal box not included with AC induction motor.
7. Visit [www.transmotec.com](http://www.transmotec.com) to view datasheets.

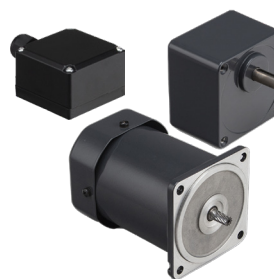
## DRAWING (mm)



AC induction motor and gearbox also sold separately.



## PHOTO



## MODEL NO. DESIGNATION

|                         |   |         |   |                 |                               |            |
|-------------------------|---|---------|---|-----------------|-------------------------------|------------|
| AI-090W                 | - | Voltage | - | Phase           | -                             | Connection |
| Example: AI-090W-208-TC |   |         |   |                 |                               |            |
|                         |   |         |   | T = Three phase | C = Cable<br>B = Terminal box |            |

## ACCESSORIES¹



● C = customizations are offered on demand even for smaller quantities. Typical customizations are indicated with a green dot at column end. Please contact us for any customization request.

## GEAR MOTOR DATA

|                    |     | 3   | 3.6 | 5   | 6   | 7.5 | 9   | 10  | 12.5 | 15  | 18  | 20  | 25  | 30  | 36  | 40  | 50  | 60  | 75  | 90  | 100 | 120 | 150 | 180 | 200 | C   |
|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gear ratio         |     | 3   | 3.6 | 5   | 6   | 7.5 | 9   | 10  | 12.5 | 15  | 18  | 20  | 25  | 30  | 36  | 40  | 50  | 60  | 75  | 90  | 100 | 120 | 150 | 180 | 200 | ●   |
| Nominal torque     | Nm  | 1.4 | 1.7 | 2.3 | 2.8 | 3.5 | 4.2 | 4.6 | 5.8  | 6.9 | 8.3 | 8.3 | 10  | 12  | 15  | 17  | 20² | 20² | 20² | 20² | 20² | 20² | 20² | 20² | 20² | 20² |
| Nominal speed      | rpm | 520 | 430 | 310 | 260 | 210 | 170 | 160 | 120  | 100 | 86  | 78  | 62  | 52  | 43  | 39  | 31  | 26  | 21  | 17  | 16  | 13  | 10  | 8,6 | 7,8 |     |
| Nominal power      | W   | 75  | 75  | 75  | 75  | 75  | 75  | 75  | 75   | 75  | 75  | 68  | 68  | 68  | 68  | 68  | 65  | 54  | 43  | 36  | 32  | 27  | 22  | 18  | 16  |     |
| Gearb. nom. torq.³ | Nm  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20   | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  |     |
| Gearbox efficiency | %   | 81  | 81  | 81  | 81  | 81  | 81  | 81  | 81   | 81  | 81  | 73  | 73  | 73  | 73  | 73  | 73  | 66  | 66  | 66  | 66  | 66  | 66  | 66  | 66  |     |
| Radial load⁴       | N   | 500 | 500 | 500 | 500 | 500 | 500 | 600 | 600  | 600 | 600 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 |     |
| Direction of rot.  |     | CW  | CW  | CW  | CW  | CW  | CW  | CCW | CCW  | CCW | CCW | CW  | CW  | CW  | CW  | CW  | CW  | CW  | CW  | CCW | CCW | CCW | CCW | CCW | CCW |     |
| Weight             | kg  | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7  | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 |     |

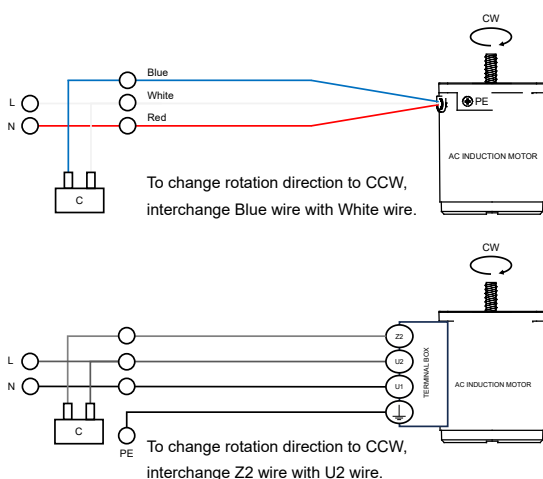
## OTHER GEAR MOTOR DATA

|                        |    |             |
|------------------------|----|-------------|
| Service life           | h  | 10000       |
| Performance tolerances |    | ± 15        |
| Operating temperature  | °C | -10 to 40   |
| IP rating⁵             |    | IP20   IP54 |
| Manufacturing standard |    | ISO 9001    |
| CE label   UL label    |    | No   No     |

## GEARBOX DATA

|                     |   |              |
|---------------------|---|--------------|
| Shaft axial load    | N | 150          |
| Bearing type        |   | Ball bearing |
| Shaft material      |   | 40 Cr steel  |
| Housing material    |   | Aluminum     |
| Material gear stage |   | 40 Cr steel  |

## WIRING DIAGRAM AC INDUCTION MOTOR⁶



## AC INDUCTION MOTOR DATA

|                                |     |       |
|--------------------------------|-----|-------|
| Nominal voltage                | V   | 220   |
| No. of phases                  |     | 3     |
| Frequency                      | Hz  | 60    |
| No. of poles                   |     | 4     |
| Nominal speed                  | rpm | 1550  |
| Nominal torque                 | mNm | 570   |
| Nominal current                | A   | 0.55  |
| Nominal power                  | W   | 90    |
| Stall torque                   | mNm | 1100  |
| Insulation class               |     | B     |
| Motor cable                    |     | AWG18 |
| Motor cable length             | mm  | 300   |
| Capacitor included in delivery | μF  | -     |
| Insulation resistance          | MΩ  | 100   |
| Dielectric strength            | kV  | 1.5   |
| Max. winding temperature       | °C  | 80    |
| Weight                         | kg  | 3.2   |

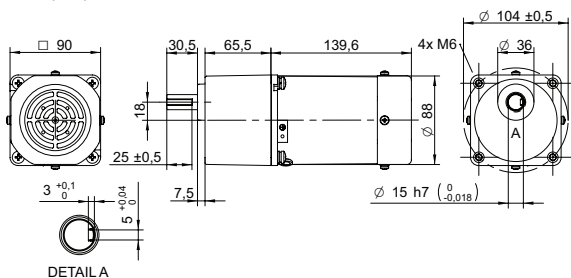
## GEAR MOTOR RANGE AI-SERIES⁷

|                 |    |                        |
|-----------------|----|------------------------|
| Nominal voltage | V  | See separate datasheet |
| Nominal power   | W  | See separate datasheet |
| Dimension       | mm | See separate datasheet |

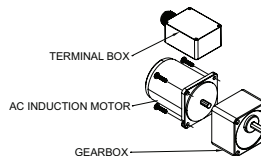
## NOTES

1. See page 29 of this catalog.
2. Gear motor torque limited by gearbox.
3. Gearbox nominal torque.
4. 20 mm from shaft.
5. IP20 without terminal box, IP54 with terminal box.
6. Cables/wires for connecting terminal box not included with AC induction motor.
7. Visit [www.transmotec.com](http://www.transmotec.com) to view datasheets.

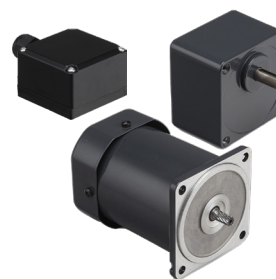
## DRAWING (mm)



AC induction motor and gearbox also sold separately.



## PHOTO



## MODEL NO. DESIGNATION

|                         |   |         |   |                  |                               |            |
|-------------------------|---|---------|---|------------------|-------------------------------|------------|
| AI-120W                 | - | Voltage | - | Phase            | -                             | Connection |
| Example: AI-120W-230-SC |   |         |   |                  |                               |            |
|                         |   |         |   | S = Single phase | C = Cable<br>B = Terminal box |            |

## ACCESSORIES¹



● C = customizations are offered on demand even for smaller quantities. Typical customizations are indicated with a green dot at column end. Please contact us for any customization request.

## GEAR MOTOR DATA

|                    |     | 3   | 3.6 | 5   | 6   | 7.5 | 9   | 10  | 12.5 | 15  | 18  | 20  | 25  | 30  | 36  | 40  | 50  | 60  | 75  | 90  | 100 | 120 | 150 | 180 | 200 |     |
|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gear ratio         |     | 3   | 3.6 | 5   | 6   | 7.5 | 9   | 10  | 12.5 | 15  | 18  | 20  | 25  | 30  | 36  | 40  | 50  | 60  | 75  | 90  | 100 | 120 | 150 | 180 | 200 | ●   |
| Nominal torque     | Nm  | 2.3 | 2.7 | 3.8 | 4.5 | 5.6 | 6.8 | 7.5 | 9.4  | 11  | 14  | 14  | 17  | 20² | 20² | 20² | 20² | 20² | 20² | 20² | 20² | 20² | 20² | 20² | 20² | 20² |
| Nominal speed      | rpm | 420 | 350 | 250 | 210 | 170 | 140 | 130 | 100  | 83  | 69  | 63  | 50  | 42  | 35  | 31  | 25  | 21  | 17  | 14  | 13  | 10  | 8.3 | 6.9 | 6.3 |     |
| Nominal power      | W   | 99  | 99  | 99  | 99  | 99  | 99  | 99  | 99   | 99  | 99  | 89  | 89  | 89  | 73  | 65  | 52  | 44  | 35  | 29  | 26  | 22  | 17  | 15  | 13  |     |
| Gearb. nom. torq.³ | Nm  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20   | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  |     |
| Gearbox efficiency | %   | 81  | 81  | 81  | 81  | 81  | 81  | 81  | 81   | 81  | 81  | 73  | 73  | 73  | 73  | 73  | 73  | 66  | 66  | 66  | 66  | 66  | 66  | 66  | 66  |     |
| Radial load⁴       | N   | 500 | 500 | 500 | 500 | 500 | 500 | 600 | 600  | 600 | 600 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 |     |
| Direction of rot.  |     | CW  | CW  | CW  | CW  | CW  | CW  | CCW | CCW  | CCW | CCW | CW  | CW  | CW  | CW  | CW  | CW  | CW  | CW  | CCW | CCW | CCW | CCW | CCW | CCW |     |
| Weight             | kg  | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9  | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 |     |

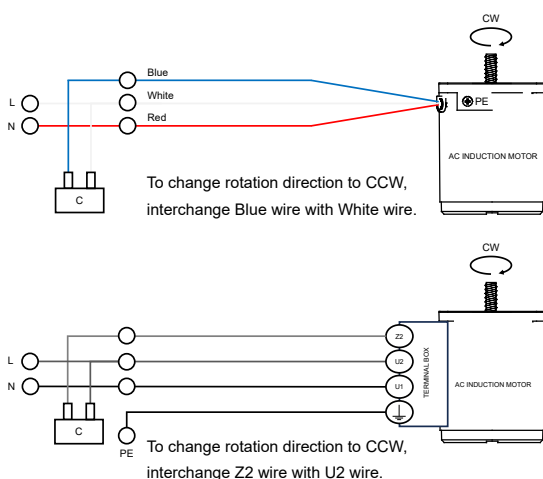
## OTHER GEAR MOTOR DATA

|                        |    |             |
|------------------------|----|-------------|
| Service life           | h  | 10000       |
| Performance tolerances |    | ± 15        |
| Operating temperature  | °C | -10 to 40   |
| IP rating⁵             |    | IP20   IP54 |
| Manufacturing standard |    | ISO 9001    |
| CE label   UL label    |    | Yes   No    |

## GEARBOX DATA

|                     |   |              |
|---------------------|---|--------------|
| Shaft axial load    | N | 150          |
| Bearing type        |   | Ball bearing |
| Shaft material      |   | 40 Cr steel  |
| Housing material    |   | Aluminum     |
| Material gear stage |   | 40 Cr steel  |

## WIRING DIAGRAM AC INDUCTION MOTOR⁶



## AC INDUCTION MOTOR DATA

|                                |     |       |
|--------------------------------|-----|-------|
| Nominal voltage                | V   | 230   |
| No. of phases                  |     | 1     |
| Frequency                      | Hz  | 50    |
| No. of poles                   |     | 4     |
| Nominal speed                  | rpm | 1250  |
| Nominal torque                 | mNm | 930   |
| Nominal current                | A   | 0.95  |
| Nominal power                  | W   | 120   |
| Stall torque                   | mNm | 650   |
| Insulation class               |     | B     |
| Motor cable                    |     | AWG18 |
| Motor cable length             | mm  | 300   |
| Capacitor included in delivery | μF  | 7     |
| Insulation resistance          | MΩ  | 100   |
| Dielectric strength            | kV  | 1.5   |
| Max. winding temperature       | °C  | 80    |
| Weight                         | kg  | 3.4   |

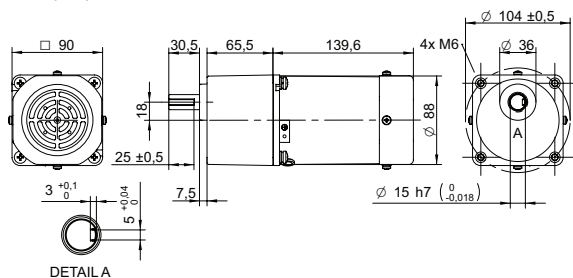
## GEAR MOTOR RANGE AI-SERIES⁷

|                 |    |                        |
|-----------------|----|------------------------|
| Nominal voltage | V  | See separate datasheet |
| Nominal power   | W  | See separate datasheet |
| Dimension       | mm | See separate datasheet |

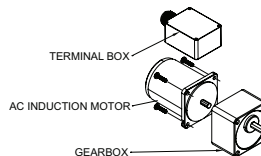
## NOTES

1. See page 29 of this catalog.
2. Gear motor torque limited by gearbox.
3. Gearbox nominal torque.
4. 20 mm from shaft.
5. IP20 without terminal box, IP54 with terminal box.
6. Cables/wires for connecting terminal box not included with AC induction motor.
7. Visit [www.transmotec.com](http://www.transmotec.com) to view datasheets.

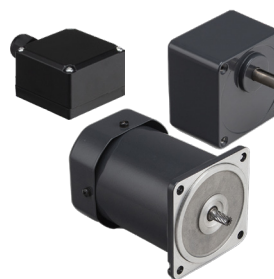
## DRAWING (mm)



AC induction motor and gearbox also sold separately.



## PHOTO



## MODEL NO. DESIGNATION

|                         |   |         |   |                 |                               |            |
|-------------------------|---|---------|---|-----------------|-------------------------------|------------|
| AI-120W                 | - | Voltage | - | Phase           | -                             | Connection |
| Example: AI-120W-400-TC |   |         |   |                 |                               |            |
|                         |   |         |   | T = Three phase | C = Cable<br>B = Terminal box |            |

## ACCESSORIES¹



● C = customizations are offered on demand even for smaller quantities. Typical customizations are indicated with a green dot at column end. Please contact us for any customization request.

## GEAR MOTOR DATA

|                    |     | 3   | 3.6 | 5   | 6   | 7.5 | 9   | 10  | 12.5 | 15  | 18  | 20  | 25  | 30  | 36  | 40  | 50  | 60  | 75  | 90  | 100 | 120 | 150 | 180 | 200 | C |
|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|
| Gear ratio         |     | 3   | 3.6 | 5   | 6   | 7.5 | 9   | 10  | 12.5 | 15  | 18  | 20  | 25  | 30  | 36  | 40  | 50  | 60  | 75  | 90  | 100 | 120 | 150 | 180 | 200 | ● |
| Nominal torque     | Nm  | 2.3 | 2.7 | 3.8 | 4.5 | 5.6 | 6.8 | 7.5 | 9.4  | 11  | 14  | 14  | 17  | 20² | 20² | 20² | 20² | 20² | 20² | 20² | 20² | 20² | 20² | 20² | 20² | ● |
| Nominal speed      | rpm | 420 | 350 | 250 | 210 | 170 | 140 | 130 | 100  | 83  | 69  | 63  | 50  | 42  | 35  | 31  | 25  | 21  | 17  | 14  | 13  | 10  | 8,3 | 6,9 | 6,3 |   |
| Nominal power      | W   | 99  | 99  | 99  | 99  | 99  | 99  | 99  | 99   | 99  | 99  | 89  | 89  | 87  | 73  | 65  | 52  | 44  | 35  | 29  | 26  | 22  | 17  | 15  | 13  |   |
| Gearb. nom. torq.³ | Nm  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20   | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  |   |
| Gearbox efficiency | %   | 81  | 81  | 81  | 81  | 81  | 81  | 81  | 81   | 81  | 81  | 73  | 73  | 73  | 73  | 73  | 73  | 66  | 66  | 66  | 66  | 66  | 66  | 66  | 66  |   |
| Radial load⁴       | N   | 500 | 500 | 500 | 500 | 500 | 500 | 600 | 600  | 600 | 600 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 |   |
| Direction of rot.  |     | CW  | CW  | CW  | CW  | CW  | CW  | CCW | CCW  | CCW | CCW | CW  | CW  | CW  | CW  | CW  | CW  | CW  | CW  | CCW | CCW | CCW | CCW | CCW | CCW |   |
| Weight             | kg  | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9  | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 |   |

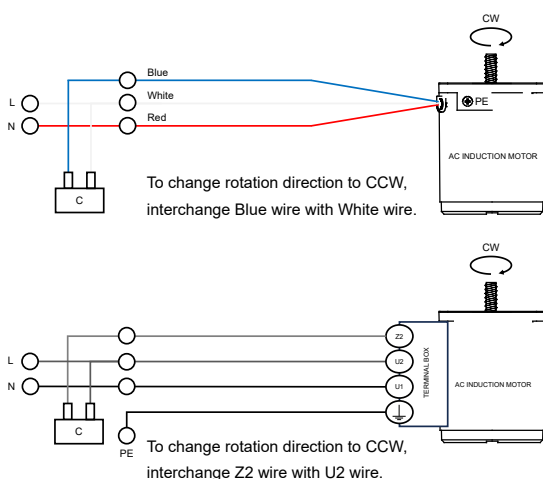
## OTHER GEAR MOTOR DATA

|                        |    |             |
|------------------------|----|-------------|
| Service life           | h  | 10000       |
| Performance tolerances |    | ± 15        |
| Operating temperature  | °C | -10 to 40   |
| IP rating⁵             |    | IP20   IP54 |
| Manufacturing standard |    | ISO 9001    |
| CE label   UL label    |    | Yes   No    |

## GEARBOX DATA

|                     |   |              |
|---------------------|---|--------------|
| Shaft axial load    | N | 150          |
| Bearing type        |   | Ball bearing |
| Shaft material      |   | 40 Cr steel  |
| Housing material    |   | Aluminum     |
| Material gear stage |   | 40 Cr steel  |

## WIRING DIAGRAM AC INDUCTION MOTOR⁶



## AC INDUCTION MOTOR DATA

|                                |     |       |
|--------------------------------|-----|-------|
| Nominal voltage                | V   | 380   |
| No. of phases                  |     | 3     |
| Frequency                      | Hz  | 50    |
| No. of poles                   |     | 4     |
| Nominal speed                  | rpm | 1250  |
| Nominal torque                 | mNm | 930   |
| Nominal current                | A   | 0.4   |
| Nominal power                  | W   | 120   |
| Stall torque                   | mNm | 1900  |
| Insulation class               |     | B     |
| Motor cable                    |     | AWG18 |
| Motor cable length             | mm  | 300   |
| Capacitor included in delivery | μF  | -     |
| Insulation resistance          | MΩ  | 100   |
| Dielectric strength            | kV  | 1.5   |
| Max. winding temperature       | °C  | 80    |
| Weight                         | kg  | 3.4   |

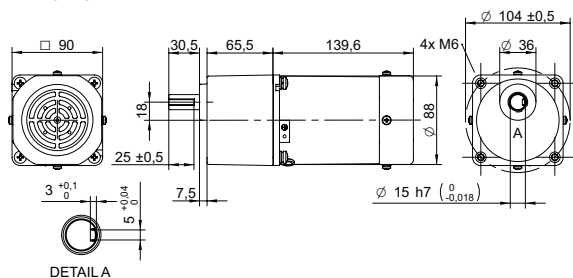
## GEAR MOTOR RANGE AI-SERIES⁷

|                 |    |                        |
|-----------------|----|------------------------|
| Nominal voltage | V  | See separate datasheet |
| Nominal power   | W  | See separate datasheet |
| Dimension       | mm | See separate datasheet |

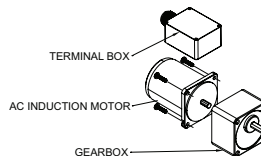
## NOTES

1. See page 29 of this catalog.
2. Gear motor torque limited by gearbox.
3. Gearbox nominal torque.
4. 20 mm from shaft.
5. IP20 without terminal box, IP54 with terminal box.
6. Cables/wires for connecting terminal box not included with AC induction motor.
7. Visit [www.transmotec.com](http://www.transmotec.com) to view datasheets.

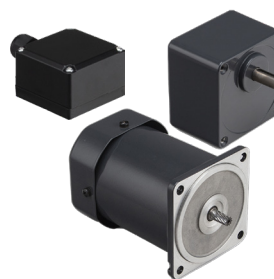
## DRAWING (mm)



AC induction motor and gearbox also sold separately.



## PHOTO



## MODEL NO. DESIGNATION

|                         |   |         |   |                  |                               |            |
|-------------------------|---|---------|---|------------------|-------------------------------|------------|
| AI-120W                 | - | Voltage | - | Phase            | -                             | Connection |
| Example: AI-120W-120-SC |   |         |   |                  |                               |            |
|                         |   |         |   | S = Single phase | C = Cable<br>B = Terminal box |            |

## ACCESSORIES¹



● C = customizations are offered on demand even for smaller quantities. Typical customizations are indicated with a green dot at column end. Please contact us for any customization request.

## GEAR MOTOR DATA

|                    |     | 3   | 3.6 | 5   | 6   | 7.5 | 9   | 10  | 12.5 | 15  | 18  | 20  | 25  | 30  | 36  | 40  | 50  | 60  | 75  | 90  | 100 | 120 | 150 | 180 | 200 | C   |
|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gear ratio         |     | 3   | 3.6 | 5   | 6   | 7.5 | 9   | 10  | 12.5 | 15  | 18  | 20  | 25  | 30  | 36  | 40  | 50  | 60  | 75  | 90  | 100 | 120 | 150 | 180 | 200 | ●   |
| Nominal torque     | Nm  | 1.8 | 2.2 | 3.0 | 3.6 | 4.6 | 5.5 | 6.1 | 7.6  | 9.1 | 11  | 11  | 14  | 16  | 20² | 20² | 20² | 20² | 20² | 20² | 20² | 20² | 20² | 20² | 20² | 20² |
| Nominal speed      | rpm | 520 | 430 | 310 | 260 | 210 | 170 | 160 | 120  | 100 | 86  | 78  | 62  | 52  | 43  | 39  | 31  | 26  | 21  | 17  | 16  | 13  | 10  | 8,6 | 7,8 |     |
| Nominal power      | W   | 99  | 99  | 99  | 99  | 99  | 99  | 99  | 99   | 99  | 99  | 89  | 89  | 89  | 90  | 81  | 65  | 54  | 43  | 36  | 32  | 27  | 22  | 18  | 16  |     |
| Gearb. nom. torq.³ | Nm  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20   | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  |     |
| Gearbox efficiency | %   | 81  | 81  | 81  | 81  | 81  | 81  | 81  | 81   | 81  | 81  | 73  | 73  | 73  | 73  | 73  | 73  | 66  | 66  | 66  | 66  | 66  | 66  | 66  | 66  |     |
| Radial load⁴       | N   | 500 | 500 | 500 | 500 | 500 | 500 | 600 | 600  | 600 | 600 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 |     |
| Direction of rot.  |     | CW  | CW  | CW  | CW  | CW  | CW  | CCW | CCW  | CCW | CCW | CW  | CW  | CW  | CW  | CW  | CW  | CW  | CW  | CCW | CCW | CCW | CCW | CCW | CCW |     |
| Weight             | kg  | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9  | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 |     |

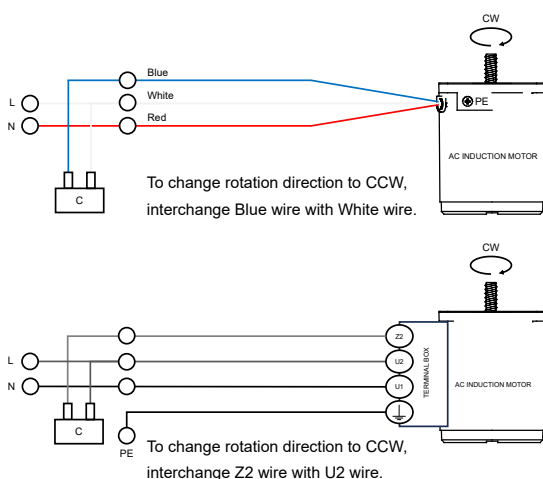
## OTHER GEAR MOTOR DATA

|                        |    |             |
|------------------------|----|-------------|
| Service life           | h  | 10000       |
| Performance tolerances |    | ± 15        |
| Operating temperature  | °C | -10 to 40   |
| IP rating⁵             |    | IP20   IP54 |
| Manufacturing standard |    | ISO 9001    |
| CE label   UL label    |    | No   No     |

## GEARBOX DATA

|                     |   |              |
|---------------------|---|--------------|
| Shaft axial load    | N | 150          |
| Bearing type        |   | Ball bearing |
| Shaft material      |   | 40 Cr steel  |
| Housing material    |   | Aluminum     |
| Material gear stage |   | 40 Cr steel  |

## WIRING DIAGRAM AC INDUCTION MOTOR⁶



## AC INDUCTION MOTOR DATA

|                                |     |       |
|--------------------------------|-----|-------|
| Nominal voltage                | V   | 120   |
| No. of phases                  |     | 1     |
| Frequency                      | Hz  | 60    |
| No. of poles                   |     | 4     |
| Nominal speed                  | rpm | 1550  |
| Nominal torque                 | mNm | 750   |
| Nominal current                | A   | 1.8   |
| Nominal power                  | W   | 120   |
| Stall torque                   | mNm | 600   |
| Insulation class               |     | B     |
| Motor cable                    |     | AWG18 |
| Motor cable length             | mm  | 300   |
| Capacitor included in delivery | μF  | 25    |
| Insulation resistance          | MΩ  | 100   |
| Dielectric strength            | kV  | 1.5   |
| Max. winding temperature       | °C  | 80    |
| Weight                         | kg  | 3.4   |

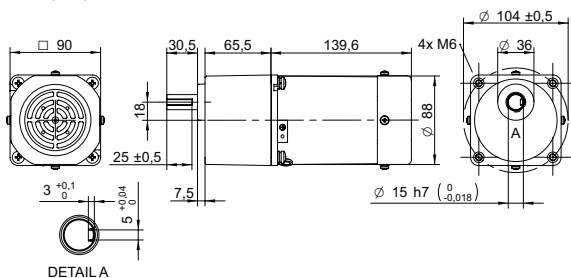
## GEAR MOTOR RANGE AI-SERIES⁷

|                 |    |                        |
|-----------------|----|------------------------|
| Nominal voltage | V  | See separate datasheet |
| Nominal power   | W  | See separate datasheet |
| Dimension       | mm | See separate datasheet |

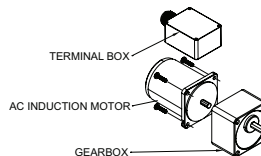
## NOTES

1. See page 29 of this catalog.
2. Gear motor torque limited by gearbox.
3. Gearbox nominal torque.
4. 20 mm from shaft.
5. IP20 without terminal box, IP54 with terminal box.
6. Cables/wires for connecting terminal box not included with AC induction motor.
7. Visit [www.transmotec.com](http://www.transmotec.com) to view datasheets.

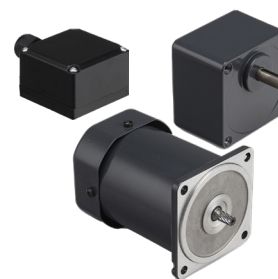
## DRAWING (mm)



AC induction motor and gearbox also sold separately.



## PHOTO



## MODEL NO. DESIGNATION

|                         |   |         |   |                 |                               |            |
|-------------------------|---|---------|---|-----------------|-------------------------------|------------|
| AI-120W                 | - | Voltage | - | Phase           | -                             | Connection |
| Example: AI-120W-120-TC |   |         |   |                 |                               |            |
|                         |   |         |   | T = Three phase | C = Cable<br>B = Terminal box |            |

## ACCESSORIES¹



● C = customizations are offered on demand even for smaller quantities. Typical customizations are indicated with a green dot at column end. Please contact us for any customization request.

## GEAR MOTOR DATA

|                    |     | 3   | 3.6 | 5   | 6   | 7.5 | 9   | 10  | 12.5 | 15  | 18  | 20  | 25  | 30  | 36  | 40  | 50  | 60  | 75  | 90  | 100 | 120 | 150 | 180 | 200 | C |
|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|
| Gear ratio         |     | 3   | 3.6 | 5   | 6   | 7.5 | 9   | 10  | 12.5 | 15  | 18  | 20  | 25  | 30  | 36  | 40  | 50  | 60  | 75  | 90  | 100 | 120 | 150 | 180 | 200 | ● |
| Nominal torque     | Nm  | 1.8 | 2.2 | 3.0 | 3.6 | 4.6 | 5.5 | 6.1 | 7.6  | 9.1 | 11  | 11  | 14  | 16  | 20² | 20² | 20² | 20² | 20² | 20² | 20² | 20² | 20² | 20² | 20² | ● |
| Nominal speed      | rpm | 520 | 430 | 310 | 260 | 210 | 170 | 160 | 120  | 100 | 86  | 78  | 62  | 52  | 43  | 39  | 31  | 26  | 21  | 17  | 16  | 13  | 10  | 8,6 | 7,8 |   |
| Nominal power      | W   | 99  | 99  | 99  | 99  | 99  | 99  | 99  | 99   | 99  | 99  | 89  | 89  | 89  | 90  | 81  | 65  | 54  | 43  | 36  | 32  | 27  | 22  | 18  | 16  |   |
| Gearb. nom. torq.³ | Nm  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20   | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  |   |
| Gearbox efficiency | %   | 81  | 81  | 81  | 81  | 81  | 81  | 81  | 81   | 81  | 81  | 73  | 73  | 73  | 73  | 73  | 73  | 66  | 66  | 66  | 66  | 66  | 66  | 66  | 66  |   |
| Radial load⁴       | N   | 500 | 500 | 500 | 500 | 500 | 500 | 600 | 600  | 600 | 600 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 | 700 |   |
| Direction of rot.  |     | CW  | CW  | CW  | CW  | CW  | CW  | CCW | CCW  | CCW | CCW | CW  | CW  | CW  | CW  | CW  | CW  | CW  | CW  | CCW | CCW | CCW | CCW | CCW | CCW |   |
| Weight             | kg  | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9  | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 |   |

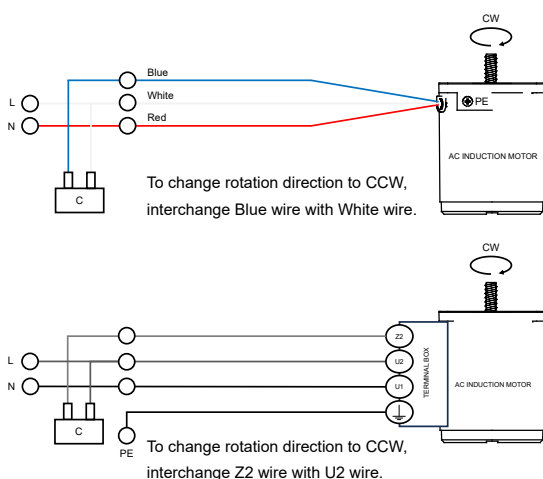
## OTHER GEAR MOTOR DATA

|                        |    |             |
|------------------------|----|-------------|
| Service life           | h  | 10000       |
| Performance tolerances |    | ± 15        |
| Operating temperature  | °C | -10 to 40   |
| IP rating⁵             |    | IP20   IP54 |
| Manufacturing standard |    | ISO 9001    |
| CE label   UL label    |    | No   No     |

## GEARBOX DATA

|                     |   |              |
|---------------------|---|--------------|
| Shaft axial load    | N | 150          |
| Bearing type        |   | Ball bearing |
| Shaft material      |   | 40 Cr steel  |
| Housing material    |   | Aluminum     |
| Material gear stage |   | 40 Cr steel  |

## WIRING DIAGRAM AC INDUCTION MOTOR⁶



## AC INDUCTION MOTOR DATA

|                                |     |       |
|--------------------------------|-----|-------|
| Nominal voltage                | V   | 220   |
| No. of phases                  |     | 3     |
| Frequency                      | Hz  | 60    |
| No. of poles                   |     | 4     |
| Nominal speed                  | rpm | 1550  |
| Nominal torque                 | mNm | 750   |
| Nominal current                | A   | 0.6   |
| Nominal power                  | W   | 120   |
| Stall torque                   | mNm | 1600  |
| Insulation class               |     | B     |
| Motor cable                    |     | AWG18 |
| Motor cable length             | mm  | 300   |
| Capacitor included in delivery | μF  | -     |
| Insulation resistance          | MΩ  | 100   |
| Dielectric strength            | kV  | 1.5   |
| Max. winding temperature       | °C  | 80    |
| Weight                         | kg  | 3.4   |

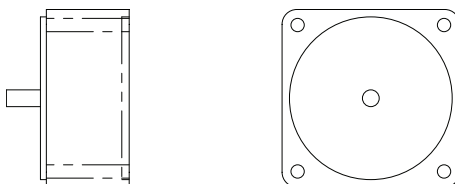
## GEAR MOTOR RANGE AI-SERIES⁷

|                 |    |                        |
|-----------------|----|------------------------|
| Nominal voltage | V  | See separate datasheet |
| Nominal power   | W  | See separate datasheet |
| Dimension       | mm | See separate datasheet |

## NOTES

1. See page 29 of this catalog.
2. Gear motor torque limited by gearbox.
3. Gearbox nominal torque.
4. 20 mm from shaft.
5. IP20 without terminal box, IP54 with terminal box.
6. Cables/wires for connecting terminal box not included with AC induction motor.
7. Visit [www.transmotec.com](http://www.transmotec.com) to view datasheets.

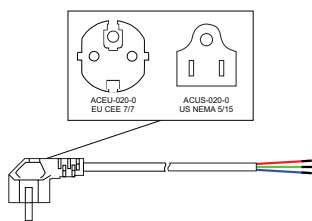


DECIMAL GEARBOX<sup>1</sup>

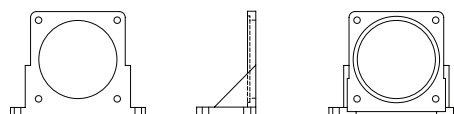
## DECIMAL GEARBOX DATA

|                        |                                                                                                                        |           |           |                   |                   |
|------------------------|------------------------------------------------------------------------------------------------------------------------|-----------|-----------|-------------------|-------------------|
| Model designation      | S60A-Y010                                                                                                              | S70A-Y010 | S80A-Y010 | S90A-Y010         | S90B-Y010         |
| Gear ratio             | 10:1                                                                                                                   | 10:1      | 10:1      | 10:1              | 10:1              |
| Gearbox nominal torque | Nm                                                                                                                     | 3         | 5         | 8                 | 10                |
| Description            | Connected between AC motor and existing gearbox to decrease the speed further than the gear ratio listed in the table. |           |           |                   |                   |
| Compatible models      | AI-006W                                                                                                                | AI-015W   | AI-025W   | AI-040W   AI-060W | AI-090W   AI-120W |

## POWER CABLE



## MOUNTING BRACKET



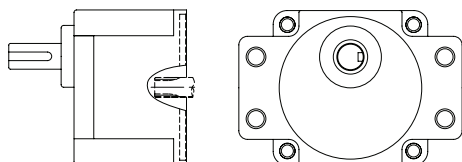
## POWER CABLE DATA

|                   |                           |
|-------------------|---------------------------|
| Model designation | ACEU-020-0   ACUS-020-0   |
| Standard          | EU CEE 7/7   US NEMA 5/15 |
| Cable length      | m   ft                    |
| Compatible models | All                       |

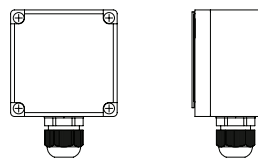
## MOUNTING BRACKET DATA

|                   |         |                                       |
|-------------------|---------|---------------------------------------|
| Model designation | AMB-080 | AMB-090                               |
| Dimensions        | mm      | 80X80                                 |
| Compatible models | AI-025W | AI-040W   AI-060W   AI-090W   AI-120W |

## GEARBOX FLANGE MOUNTING



## TERMINAL BOX



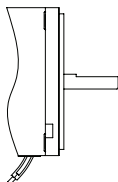
## GEARBOX FLANGE MOUNTING DATA

|                   |                                  |
|-------------------|----------------------------------|
| Model designation | Contact us for more information. |
| Compatible models | AI-090W   AI-120W                |

## TERMINAL BOX DATA

|                   |                                                         |
|-------------------|---------------------------------------------------------|
| Model designation | See model no. designation to order correct part number. |
| Compatible models | AI-025W   AI-040W   AI-060W   AI-090W   AI-120W         |

## OUTPUT SHAFT D-CUT



## NOTES

1. Visit [www.transmotec.com](http://www.transmotec.com) to view datasheets.

## OUTPUT SHAFT D-CUT DATA

|                   |                                  |
|-------------------|----------------------------------|
| Model designation | Contact us for more information. |
| Compatible models | All                              |