

## THREE-PHASE-ASYNCHRONOUS-MOTOR AOA 160 L 4 /PHE

IE3OG16L4005

### General data

|                          |                               |
|--------------------------|-------------------------------|
| Type of motor            | 3~                            |
| Type designation         | AOA                           |
| Frame size               | 160                           |
| Mounting                 | B3                            |
| Frame execution          | L                             |
| Frame material           | Aluminium                     |
| Insulationclass          | F/B                           |
| Terminal box location    | top DE                        |
| Terminal box orientation | cable gland to the right side |
| Weight (kg)              | 111                           |
| Rotation Direction       | right /left                   |
| Vibration level          | A                             |
| Balancing method         | half key                      |
| cooling type             | IC411                         |
| Executed acc. to         | IEC 60034-1                   |
| noise level              | IEC 60034-9                   |

### Influential factors

|                          |               |
|--------------------------|---------------|
| Duty                     | S1            |
| Ambient temperature (°C) | -20 up to +40 |
| Height of location (m)   | 1000          |

### Electrical specification

|                                                           |             |
|-----------------------------------------------------------|-------------|
| Power 1 50Hz (kW)                                         | 15          |
| Power 1 60Hz (kW)                                         | 15          |
| Frequency (Hz)                                            | 50/60       |
| Voltage 50Hz (V)                                          | 400/690     |
| Voltage 60Hz (V)                                          | 460/-       |
| Voltage/Frequency tolerance (not valid for range voltage) | +/-10%      |
| Connection                                                | Δ/Y         |
| Poles                                                     | 4           |
| Efficiency 100% 50Hz (%)                                  | 92,1        |
| Efficiency 75% 50Hz (%)                                   | 92,7        |
| Efficiency 50% 50Hz (%)                                   | 92,4        |
| Efficiency 100% 60Hz (%)                                  | 93          |
| Efficiency 75% 60Hz (%)                                   | 93,6        |
| Efficiency 50% 60Hz (%)                                   | 93,3        |
| Power factor                                              | 0,80        |
| Starting current factor                                   | 6,5         |
| Starting torque factor                                    | 2,6         |
| Tilting moment factor                                     | 2,8         |
| Rated current 50Hz (A)                                    | 29,40/17,00 |
| Rated current 60Hz (A)                                    | 25,30/0,00  |
| Eff.Cl.50Hz                                               | IE3         |

### Electrical specification

|             |     |
|-------------|-----|
| Eff.Cl.60Hz | IE3 |
|-------------|-----|

### Mechanical data

|                           |               |
|---------------------------|---------------|
| Torque (Nm)               | 97,70/81,17   |
| Rotation speed (1/min)    | 1470/1765     |
| Bearing DE                | 6309.ZZ.C3    |
| Bearing NDE               | 6209.ZZ.C3    |
| Mounting of bearing DE    | loose bearing |
| Mounting of bearing NDE   | fixed bearing |
| Bearing lifetime          | 20000         |
| allow. Radial load (X0)   | 3750          |
| allow. Radial load (Xmax) | 3000          |
| Moment of inertia         | 0,0986        |

### Motor properties

|                                     |             |
|-------------------------------------|-------------|
| Color                               | RAL7030     |
| Paint surface                       | shiny       |
| Protection class                    | IP55        |
| Cable gland size (cable connection) | 2xM40x1,5   |
| Cable gland size (option)           | M20x1,5     |
| Cable gland type                    | Standard    |
| Shaft end                           | 42 x 110    |
| Shaft material                      | C45         |
| Specification NDE                   | Plastic fan |

### Additional option

|                                        |           |
|----------------------------------------|-----------|
| Protection winding                     | PTC 150°C |
| Condensate draining hole               | ✓         |
| Condensate draining hole sealing screw | ✓         |