

## THREE-PHASE-ASYNCHRONOUS-MOTOR ACM 112 M 4 /PHE

IE3AC11MC450

### General data

|                          |                               |
|--------------------------|-------------------------------|
| Type of motor            | 3~ progressiv                 |
| Type designation         | ACM                           |
| Frame size               | 112                           |
| Mounting                 | B3                            |
| Frame execution          | M                             |
| Frame material           | Grauguß                       |
| Insulationclass          | F/B                           |
| Terminal box location    | top DE                        |
| Terminal box orientation | cable gland to the right side |
| Weight (kg)              | 55                            |
| 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)                                         | 5.5        |
| Power 1 60Hz (kW)                                         | 5.5        |
| Frequency (Hz)                                            | 50/60      |
| Voltage 50Hz (V)                                          | 400/690    |
| Voltage 60Hz (V)                                          | 460/795    |
| Voltage/Frequency tolerance (not valid for range voltage) | +/-10%     |
| Connection                                                | Δ/Y        |
| Poles                                                     | 4          |
| Efficiency 100% 50Hz (%)                                  | 89,6       |
| Efficiency 75% 50Hz (%)                                   | 89,6       |
| Efficiency 50% 50Hz (%)                                   | 87,8       |
| Efficiency 100% 60Hz (%)                                  | 91,7       |
| Power factor                                              | 0,8        |
| Starting current factor                                   | 7,7        |
| Starting torque factor                                    | 2          |
| Tilting moment factor                                     | 2,3        |
| Rated current 50Hz (A)                                    | 11,07/6,42 |
| Rated current 60Hz (A)                                    | 9,41/5,46  |
| Eff.Cl.50Hz                                               | IE3        |
| Eff.Cl.60Hz                                               | IE3        |

### Mechanical data

|                                     |               |
|-------------------------------------|---------------|
| Torque (Nm)                         | 36,22/30,19   |
| Rotation speed (1/min)              | 1450/1740     |
| Bearing DE                          | 6306.ZZ.C3    |
| Bearing NDE                         | 6306.ZZ.C3    |
| Mounting of bearing DE              | loose bearing |
| Mounting of bearing NDE             | loose bearing |
| Bearing lifetime                    | 20000         |
| allow. Radial load (X/2)            | 1100          |
| allow. Radial load (X0)             | 1225          |
| allow. Radial load (Xmax)           | 975           |
| allow. Axial load B3,B5,B35,B14,B34 | 950           |
| allow. Axial load V1,V3,V19,V18     | 905           |
| Moment of inertia                   | 0,011         |

### Motor properties

|                                     |                        |
|-------------------------------------|------------------------|
| Color                               | RAL7030                |
| Paint surface                       | shiny                  |
| Protection class                    | IP55                   |
| Cable gland size (cable connection) | 1xM32x1,5 1xblind plug |
| Cable gland size (option)           | M16x1,5                |
| Cable gland type                    | Standard               |
| Shaft end                           | 28 x 60                |
| Shaft material                      | C45                    |
| Specification NDE                   | Plastic fan            |

### Additional operating points

|                                    |         |
|------------------------------------|---------|
| Voltage operating point 2          | 460/795 |
| Power operating point 2 (kW)       | 6.6     |
| Connection operating point 2       | Δ/Y     |
| Frequency operating point 2        | 60      |
| Efficiency class operating point 2 | IE2     |

### Additional option

|                    |           |
|--------------------|-----------|
| Protection winding | PTC 150°C |
|--------------------|-----------|