

## THREE-PHASE-ASYNCHRONOUS-MOTOR AWM 280 S 4 /SPE

IE4OM28S4010

### General data

|                          |                               |
|--------------------------|-------------------------------|
| Type of motor            | 3~                            |
| Type designation         | AWM                           |
| Frame size               | 280                           |
| Mounting                 | B3                            |
| Frame execution          | S                             |
| Frame material           | Grauguß                       |
| Insulationclass          | F/B                           |
| Terminal box location    | top DE                        |
| Terminal box orientation | cable gland to the right side |
| Weight (kg)              | 619                           |
| 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)                                         | 75           |
| Power 1 60Hz (kW)                                         | 75           |
| Frequency (Hz)                                            | 50/60        |
| Voltage 50Hz (V)                                          | 500/865      |
| Voltage 60Hz (V)                                          | 575/995      |
| Voltage/Frequency tolerance (not valid for range voltage) | +/-10%       |
| Connection                                                | Δ/Y          |
| Poles                                                     | 4            |
| Efficiency 100% 50Hz (%)                                  | 96           |
| Efficiency 75% 50Hz (%)                                   | 96,2         |
| Efficiency 50% 50Hz (%)                                   | 93,1         |
| Efficiency 100% 60Hz (%)                                  | 96,2         |
| Power factor                                              | 0,87         |
| Starting current factor                                   | 8            |
| Starting torque factor                                    | 2            |
| Tilting moment factor                                     | 2,3          |
| Rated current 50Hz (A)                                    | 101,79/59,04 |
| Rated current 60Hz (A)                                    | 89,07/51,66  |
| Eff.Cl.50Hz                                               | IE4          |
| Eff.Cl.60Hz                                               | IE4          |

### Mechanical data

|                                     |               |
|-------------------------------------|---------------|
| Torque (Nm)                         | 480,70/400,59 |
| Rotation speed (1/min)              | 1490/1788     |
| Bearing DE                          | 6317.C3       |
| Bearing NDE                         | 6317.C3       |
| Mounting of bearing DE              | fixed bearing |
| Mounting of bearing NDE             | loose bearing |
| Bearing lifetime                    | 20000         |
| allow. Radial load (X/2)            | 7050          |
| allow. Radial load (X0)             | 7790          |
| allow. Radial load (Xmax)           | 6430          |
| allow. Axial load B3,B5,B35,B14,B34 | 4400          |
| allow. Axial load V1,V3,V19,V18     | 3000          |
| Moment of inertia                   | 1,4723        |

### Motor properties

|                                     |             |
|-------------------------------------|-------------|
| Color                               | RAL7030     |
| Paint surface                       | shiny       |
| Protection class                    | IP55        |
| Cable gland size (cable connection) | 2xM63x1,5   |
| Cable gland size (option)           | M20x1,5     |
| Cable gland type                    | Standard    |
| Shaft end                           | 75 x 140    |
| Shaft material                      | C45         |
| Specification NDE                   | Plastic fan |

### Additional operating points

|                                    |         |
|------------------------------------|---------|
| Voltage operating point 2          | 575/995 |
| Power operating point 2 (kW)       | 90      |
| Connection operating point 2       | Δ/Y     |
| Frequency operating point 2        | 60      |
| Efficiency class operating point 2 | IE3     |

### Additional option

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

Dimension drawings  
Three-Phase-Asynchronous-  
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 **ac motore**