

## Data sheet

**Item no. / Configuration** 01 / 3102090-1.50-040101-S-A00652

**Description** HMA3 90S-2 230/400V 50Hz 1.5kW

| General data                   |   |
|--------------------------------|---|
| Standard series                | IEC 60034                                     |
| Type                           | HMA3 90S-2                                    |
| Design                         | 230 VD / 400 VY 50 Hz + 280 VD / 480 VY 60 Hz |
| Direction of rotation          | CW  |
| Installation max. altitude (m) | 1.000   |
| Poles                          | 2   |

| Motor protection       |                            |
|------------------------|----------------------------|
| Winding temp. detector | No                         |
| Temp. detector type    | None                       |
| Bearing detector       | No                         |
| Winding PTC main       | PTC 3 x 155°C              |
| Winding PTC spare      | None                       |
| Space heater           | None                       |
| Terminal board thread  | M4                         |
| Electrical insulation  | Standard (1350 V @ 0.8 µs) |
| Tropical insulation    | No                         |
| SPM                    | N/A                        |
| External grounding     | No                         |
| Drain hole             | Yes                        |
| Rain cap               | No                         |

| Classification            |      |
|---------------------------|------|
| Class society             |      |
| Shaft requirement acc. to | None |
| Ex. code                  | No   |

| Mechanical data                        |                     |
|--|---------------------|
| Frame / Shaft height                   | IEC 90              |
| Type of construction                   | B35                 |
| Cooling method                         | IC411               |
| Protection class                       | IP55                |
| Temp. insulation class                 | F                   |
| Frame material                         | Aluminum            |
| Keyway                                 | Closed              |
| Balancing                              | Half key            |
| IEC vibration class                    | A                   |
| Weight (kg)                            | 15.2                |
| Bearing (DE)                           | 6205 2Z / C3 / DGBB |
| Bearing (NDE)                          | 6205 2Z / C3 / DGBB |
| Fixed bearing                          | DE                  |
| Moment of inertia (kg×m <sup>2</sup> ) | 0.002               |
| Painting (color)                       | RAL 9005            |
| Corrosion protection                   | C3L                 |
| Main terminal box pos.                 | DE top              |
| Main cable entries                     | Blind cap 2xM20x1.5 |
| Main cable direction                   | Right from DE       |
| Main cable material                    | Plastic             |
| Aux. cable entries                     | N/A 0xN/A           |
| Aux. cable direction                   | N/A                 |
| Aux. cable material                    | N/A                 |

| Winding operation variants |                    |                    |  |
|----------------------------|--------------------|--------------------|--|
| Rated power (kW)           | 1.5                | 1.5                |  |
| Frequency (Hz)             | 50                 | 60                 |  |
| Connection                 | D/Y                | D/Y                |  |
| Voltage (V)                | 230 / 400          | 280 / 480          |  |
| Full load current (A)      | 5.4 / 3.1          | 4.53 / 2.64        |  |
| No load current (A)        | 1.63               | 1.63               |  |
| Speed (rpm)                | 2922               | 3506               |  |
| Power factor 100/75/50 (%) | 0.82 / 0.76 / 0.65 | 0.82 / 0.75 / 0.62 |  |
| Efficiency 100/75/50 (%)   | 85.5 / 85.3 / 83.9 | 85.5 / 83.8 / 82.5 |  |
| Efficiency class           | IE3                | IE3                |  |
| Full load torque (Nm)      | 4.9                | 4.09               |  |
| Tst/Tn                     | 2.81               | 3.37               |  |
| Tmax/Tn                    | 3                  | 3.6                |  |
| Ist/In                     | 9.03               | 10.7               |  |
| Temp. rise class           | B                  | B                  |  |
| Duty                       | S1                 | S1                 |  |
| Sound pressure level (dBA) | 62                 | 67                 |  |
| Min. ambient temp. (°C)    | -20°C              | -20°C              |  |
| Max. ambient temp. (°C)    | 40°C               | 40°C               |  |

Data are not binding. Hoyer reserves the right to implement changes without notice. The extent of data are not equivalent to nameplate on the motors.