

# Data sheet

**Item no. / Configuration** 01 / 2104100-3.00-030101-S-A00502  
**Description** HMA2 100L2-4 230/400 V 50 Hz 3,0 kW

| General data                   |                                               |
|--------------------------------|-----------------------------------------------|
| Standard series                | IEC 60034                                     |
| Type                           | HMA2 100L2-4                                  |
| Design                         | 230 VD / 400 VY 50 Hz + 280 VD / 480 VY 60 Hz |
| Direction of rotation          | CW                                            |
| Installation max. altitude (m) | 1.000                                         |
| Poles                          | 4                                             |

| 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    | Yes                        |
| SPM                    | N/A                        |
| External grounding     | Yes                        |
| Drain hole             | Yes                        |
| Rain cap               | No                         |

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

| Mechanical data                        |                                |
|----------------------------------------|--------------------------------|
| Frame / Shaft height                   | IEC 100                        |
| Type of construction                   | B14                            |
| Cooling method                         | IC411                          |
| Protection class                       | IP55                           |
| Temp. insulation class                 | F                              |
| Frame material                         | Aluminum                       |
| Keyway                                 | Closed                         |
| Balancing                              | Half key                       |
| IEC vibration class                    | A                              |
| Weight (kg)                            | 28                             |
| Bearing (DE)                           | 6206 2Z / C3 / DGBB            |
| Bearing (NDE)                          | 6206 2Z / C3 / DGBB            |
| Fixed bearing                          | DE                             |
| Moment of inertia (kg×m <sup>2</sup> ) | 0.0095                         |
| Painting (color)                       | RAL 9005                       |
| Corrosion protection                   | C3L                            |
| Main terminal box pos.                 | DE top                         |
| Main cable entries                     | Cable gland 1xM20x1.5 Ø6-12 mm |
| Main cable direction                   | Right from DE                  |
| Main cable material                    | Nickel plated brass            |
| Aux. cable entries                     | Blind cap 1xM20x1.5            |
| Aux. cable direction                   | Right from DE                  |
| Aux. cable material                    | Nickel plated brass            |

| Winding operation variants |                    |                    |                    |  |  |  |
|----------------------------|--------------------|--------------------|--------------------|--|--|--|
| Rated power (kW)           | 3.0                | 2.91               | 3.49               |  |  |  |
| Frequency (Hz)             | 50                 | 50                 | 60                 |  |  |  |
| Connection                 | D/Y                | D/Y                | D/Y                |  |  |  |
| Voltage (V)                | 230 / 400          | 220 / 380          | / 440              |  |  |  |
| Full load current (A)      | 10.9 / 6.3         | 11.9 / 6.88        | / 6.68             |  |  |  |
| No load current (A)        | 2.83               | 3.30               | 3.67               |  |  |  |
| Speed (rpm)                | 1449               | 1449               | 1739               |  |  |  |
| Power factor 100/75/50 (%) | 0.84 / /           | 0.85 / /           | 0.84 / /           |  |  |  |
| Efficiency 100/75/50 (%)   | 85.9 / 86.4 / 85.2 | 85.9 / 86.4 / 85.2 | 85.9 / 86.4 / 85.2 |  |  |  |
| Efficiency class           | IE2                | IE2                | IE1                |  |  |  |
| Full load torque (Nm)      | 19.8               | 19.2               | 19.2               |  |  |  |
| Tst/Tn                     | 2.92               | 2.68               | 2.91               |  |  |  |
| Tmax/Tn                    | 3.3                | 3.03               | 3.3                |  |  |  |
| Ist/In                     | 8.03               | 7.12               | 8.27               |  |  |  |
| Temp. rise class           | B                  | B                  | B                  |  |  |  |
| Duty                       | S1                 | S1                 | S1                 |  |  |  |
| Sound pressure level (dBA) | 62                 | 62                 | 67                 |  |  |  |
| Min. ambient temp. (°C)    | -20°C              | -20°C              | -20°C              |  |  |  |
| Max. ambient temp. (°C)    | 40°C               | 45°C               | 45°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.