

## Data sheet

**Item no. / Configuration** 01 / 4102280-90.0-040201-S-019994  
**Description** HMC4 280M-2 400/690 V 50 Hz 90 kW

| General data                   |                                               |
|--------------------------------|-----------------------------------------------|
| Standard series                | IEC 60034                                     |
| Type                           | HMC4 280M-2                                   |
| Design                         | 400 VD / 690 VY 50 Hz + 480 VD / 830 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  | M10x1.5                    |
| Electrical insulation  | Standard (1350 V @ 0.8 µs) |
| Tropical insulation    | No                         |
| 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 280             |
| Type of construction      | B35                 |
| Cooling method            | IC411               |
| Protection class          | IP55                |
| Temp. insulation class    | F                   |
| Frame material            | Cast iron           |
| Keyway                    | Closed              |
| Balancing                 | Half key            |
| IEC vibration class       | A                   |
| Weight (kg)               | 622                 |
| Bearing (DE)              | 6314 / C3 / DGBB    |
| Bearing (NDE)             | 6314 / C3 / DGBB    |
| Fixed bearing             | DE                  |
| Moment of inertia (kg×m²) | 0.8818              |
| Painting (color)          | RAL 9005            |
| Corrosion protection      | C3L                 |
| Main terminal box pos.    | DE top              |
| Main cable entries        | Blind cap 2xM63x1.5 |
| Main cable direction      | Right from DE       |
| Main cable material       | Plastic             |
| Aux. cable entries        | Blind cap 2xM20x1.5 |
| Aux. cable direction      | NDE                 |
| Aux. cable material       | Plastic             |

| Winding operation variants |                      |                      |  |  |  |
|----------------------------|----------------------|----------------------|--|--|--|
| Rated power (kW)           | 90                   | 90                   |  |  |  |
| Frequency (Hz)             | 50                   | 60                   |  |  |  |
| Connection                 | D/Y                  | D/Y                  |  |  |  |
| Voltage (V)                | 400 / 690            | 480 / 830            |  |  |  |
| Full load current (A)      | 152 / 88.3           | 127 / 73.9           |  |  |  |
| No load current (A)        | 28.5                 | 28.3                 |  |  |  |
| Speed (rpm)                | 2975                 | 3575                 |  |  |  |
| Power factor 100/75/50 (%) | 0.89 / 0.92 / 0.88   | 0.89 / 0.9 / 0.85    |  |  |  |
| Efficiency 100/75/50 (%)   | 95.8 / 96.21 / 95.88 | 95.4 / 94.92 / 93.69 |  |  |  |
| Efficiency class           | IE4                  | IE4                  |  |  |  |
| Full load torque (Nm)      | 289                  | 240                  |  |  |  |
| Tst/Tn                     | 3.26                 | 3.95                 |  |  |  |
| Tmax/Tn                    | 3.68                 | 4.38                 |  |  |  |
| Ist/In                     | 9.3                  | 10.6                 |  |  |  |
| Temp. rise class           | B                    | B                    |  |  |  |
| Duty                       | S1                   | S1                   |  |  |  |
| Sound pressure level (dBA) | 75                   | 80                   |  |  |  |
| 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.