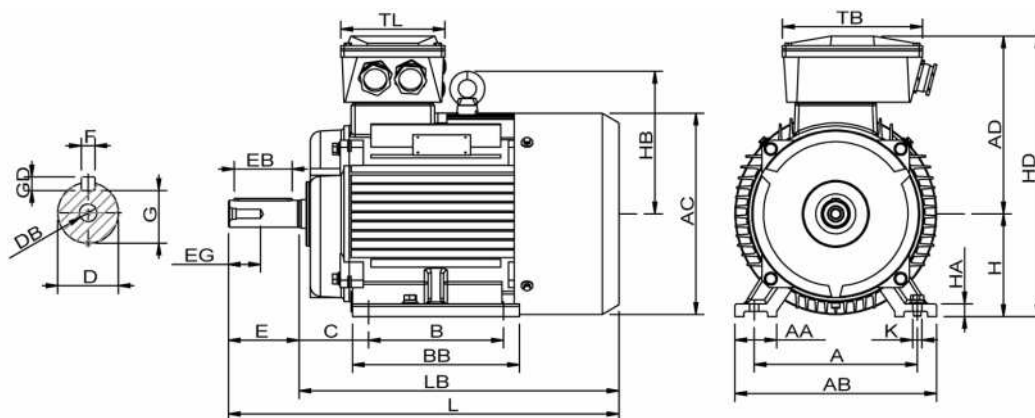


# Data Sheet

Itemnumber....: 3222800109



|          |          |          |          |         |         |          |          |          |
|----------|----------|----------|----------|---------|---------|----------|----------|----------|
| A = 457  | AC = 546 | BB = 485 | DB = M20 | EG = 56 | GD = 11 | HB = 362 | L = 965  | TL = 230 |
| AA = 85  | AD = 403 | C = 190  | E = 140  | F = 18  | H = 280 | HD = 683 | LB = 825 |          |
| AB = 542 | B = 368  | D = 65   | EB = 110 | G = 58  | HA = 35 | K = 24   | TB = 305 |          |

## Version

Type..... HMC2 280S-2  
 Design..... Induction motor  
 Standard series..... IEC 60034  
 Phase / Voltage range..... 3~ / Low

## Electrical design

|                          |                   |
|--------------------------|-------------------|
| Efficiency.....          | IE2               |
| Pole.....                | 2                 |
| Power at 50 Hz (kw)..... | 75,0              |
| Hz.....                  | 60 (60 Hz output) |
| Voltage.....             | 440VD 60 Hz       |
| Winding voltage.....     | 400VD/690VY 50 Hz |
| Power output (kw).....   | 87,5              |
| Duty.....                | S1                |
| Insulation class.....    | F                 |
| Temperature rise.....    | B                 |

## Mechanical design

|                         |                    |
|-------------------------|--------------------|
| Frame size.....         | 280                |
| Mounting.....           | B3                 |
| Rain cap.....           | No                 |
| Protection class.....   | IP55               |
| Cooling method.....     | IC411/TEFC         |
| External grounding..... | Yes                |
| Drain hole.....         | Yes                |
| Frame material.....     | Cast Iron          |
| Material approval.....  | None               |
| Shaft.....              | IEC Standard       |
| Key.....                | Closed key         |
| Balancing.....          | Half key balancing |
| Vibration class.....    | Grade-A            |
| Weight (kg).....        | 525                |

### Environment condition

Ambient temp. min. (°C)... -20  
Ambient temp. max. (°C)... 45  
Altitude (mtr up to)..... 1000

### Bearing

**Bearing**  
DE Bearing.....: 6314/C3  
NDE Bearing.....: 6314/C3  
Fixed bearing.....: DE

Terminal box

|                            |                                |
|----------------------------|--------------------------------|
| <b>Terminal box</b>        |                                |
| Tbox position.....         | Top                            |
| Cable entry direction..... | Right (from DE)                |
| Cable entry                |                                |
| Main.....                  | 2 x M63x1,5<br>Ø37-44mm metal  |
| Accessory.....             | 2 x M20x1,5<br>Metal blindcaps |
| Connection type.....       | Delta (D)                      |
| Terminal board thread..... | 6-M10                          |

Test values

|                                        |       |
|----------------------------------------|-------|
| Rotor inertia (kgm <sup>2</sup> )..... | 0,71  |
| Noise level (dB(A)).....               | 81    |
| No load current (A).....               | 35,5  |
| Winding resist. (ohm).....             | 0,073 |
| Starting time (sec.).....              | 0,38  |
| Temp. rise winding (K).....            | 69    |
| Temp. rise surface (K).....            | 50    |

### Motor protection

```

Thermal protection main.... PTC 3x 155 dgr
Thermal protection second.. None
Space heater..... 1x 230V
Temperature detector..... No
SPM..... No
IR wire..... No
Tropical insulation..... Yes

```

## Explosion protection

According to.....: None

## General

Direction of rotation.....: CW  
Painting.....: RAL 9005 Gloss 10  
Nameplate.....: Multivoltage + VFD  
Special packing.....: No  
Special requirements.....: No

|                               |                |                |                |                |
|-------------------------------|----------------|----------------|----------------|----------------|
| Rated power (kW) . . . . .    | 75,0           | 73,0           | 90,0           | 87,5           |
| Frequency (Hz) . . . . .      | 50             | 50             | 60             | 60             |
| Voltage (V) . . . . .         | 400 690        | 380 660        | 480 830        | 440            |
| Connection . . . . .          | D Y            | D Y            | D Y            | D              |
| Full load current (A) . . . . | 130 74,5       | 132 76,5       | 130 74,5       | 136            |
| Speed (rpm) . . . . .         | 2970           | 2970           | 3550           | 3550           |
| Power factor cos(phi) . . . . | 0,91           | 0,91           | 0,91           | 0,91           |
| Efficiency, 100/75/50 (%) . . | 93,0/93,1/92,2 | 93,0/93,1/92,2 | 93,0/93,1/92,2 | 92,6/92,7/91,8 |
| Ist/In . . . . .              | 7,3            | 6,4            | 7,3            | 6,7            |
| Full load torque (Nm) . . . . | 240            | 234            | 240            | 234            |
| Tst/Tn . . . . .              | 2,3            | 2,1            | 2,3            | 2,0            |
| Tmax /Tn . . . . .            | 3,6            | 3,3            | 3,6            | 3,1            |
| Duty . . . . .                | S1             | S1             | S1             | S1             |
| Ambient temp. (°C) . . . . .  | 40             | 45             | 40             | 45             |