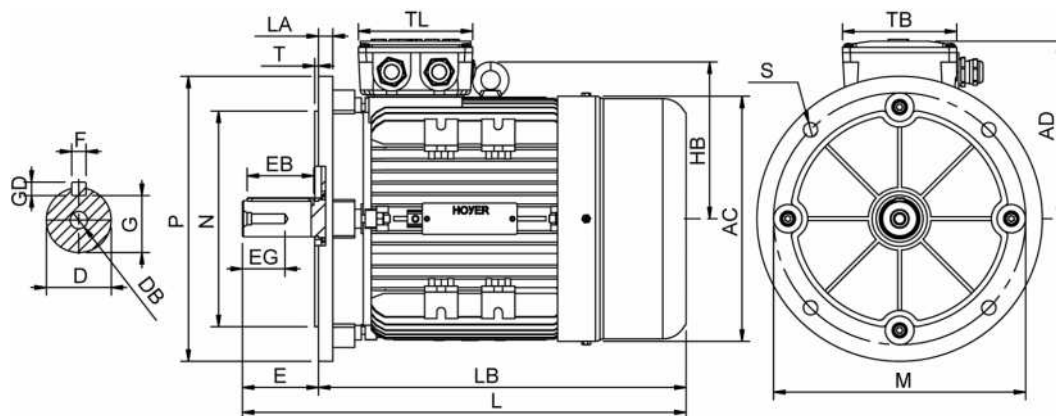


# Data Sheet

Itemnumber..... 3240901209



|          |         |         |         |          |           |          |
|----------|---------|---------|---------|----------|-----------|----------|
| AC = 175 | DB = M8 | EG = 24 | GD = 7  | LA = 10  | N = 130   | T = 3,50 |
| AD = 132 | E = 50  | F = 8   | H = 90  | LB = 312 | P = 200   | TB = 100 |
| D = 24   | EB = 40 | G = 20  | L = 362 | M = 165  | S = 4-Ø12 | TL = 100 |

## Version

Type..... HMA2 90L-4  
Design..... Induction motor  
Standard series..... IEC 60034  
Phase / Voltage range..... 3~ / Low

## Electrical design

Efficiency..... IE2  
Pole..... 4  
Power at 50 Hz (kW)..... 1,50  
Hz..... 60 (60 Hz output)  
Voltage..... 440VY 60 Hz  
Winding voltage..... 230VD/400VY 50 Hz  
Power output (kW)..... 1,74  
Duty..... S1  
Insulation class..... F  
Temperature rise..... B

## Mechanical design

Frame size..... 90  
Mounting..... B5  
Rain cap..... No  
Protection class..... IP55  
Cooling method..... IC411/TEFC  
External grounding..... Yes  
Drain hole..... Yes  
Frame material..... Aluminium  
Material approval..... None  
Shaft..... IEC Standard  
Key..... Closed key  
Balancing..... Half key balancing  
Vibration class..... Grade-A

## Bearing

DE Bearing..... 6205-ZZ/C3  
NDE Bearing..... 6205-ZZ/C3  
Fixed bearing..... DE

## Terminal box

Tbox position..... Top  
Cable entry direction..... Right (from DE)  
Cable entry  
Main..... 1 x M20x1,5  
Ø8-13mm metal  
Accessory..... 1 x M20x1,5  
Metal blindcap  
Connection type..... Star (Y)  
Terminal board thread..... 6-M4

## Test values

Rotor inertia (kgm<sup>2</sup>)..... 0,0041  
Noise level (dB(A))..... 58  
No load current (A)..... 1,70  
Winding resist. (ohm)..... 2,64  
Starting time (sec.)..... 0,00  
Temp. rise winding (K)..... 67  
Temp. rise surface (K)..... 59

## Motor protection

Thermal protection main..... PTC 3x 155 dgr  
Thermal protection second.. None  
Space heater..... None  
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)          | 1,50           | 1,46           | 1,80           | 1,74           |
| Frequency (Hz)            | 50             | 50             | 60             | 60             |
| Voltage (V)               | 230 400        | 220 380        | 280 480        | 440            |
| Connection                | D Y            | D Y            | D Y            | Y              |
| Full load current (A)     | 5,65 3,25      | 5,85 3,35      | 5,65 3,25      | 3,35           |
| Speed (rpm)               | 1440           | 1440           | 1730           | 1730           |
| Power factor cos(phi)     | 0,81           | 0,82           | 0,81           | 0,81           |
| Efficiency, 100/75/50 (%) | 82,9/83,8/82,8 | 82,9/83,8/82,8 | 82,9/83,8/82,8 | 81,7/82,7/81,6 |
| Ist/In                    | 7,95           | 7,00           | 7,95           | 7,35           |
| Full load torque (Nm)     | 9,95           | 9,65           | 9,95           | 9,65           |
| Tst/Tn                    | 2,50           | 2,32           | 2,50           | 2,16           |
| Tmax/Tn                   | 3,10           | 2,90           | 3,10           | 2,70           |
| Duty                      | S1             | S1             | S1             | S1             |
| Ambient temp. (°C)        | 40             | 45             | 40             | 45             |