

# 3.1 Manufacturer Inspection Certificate

**Delivery address**

PRZEDSIĘBIORSTWO PRODUKCJI SPRĘŻAREK  
"AIRPOL" SPÓŁKA Z OGRANICZONĄ  
ODPOWIEDZIALNOŚCIĄ  
ul. Nieszawska 15C  
61-021 Poznań

**Sales order**

SODK-203408

**Order account**

CDK-001387

**Date**

17-02-2025

**Ref. no.**

Z20250703

|                      |              |                                 |          |
|----------------------|--------------|---------------------------------|----------|
| <b>Main</b> Poland   |              |                                 |          |
| <b>Serial number</b> | DK1229530033 | <b>Classing society</b>         | ,        |
| <b>Line no.</b>      | 1.1          | <b>Headline 1</b>               |          |
| <b>Ext. item no.</b> | ESI0337      | <b>Industrial certification</b> | CE, UKCA |

**Motor specification**

|                                 |                                |                                     |                |
|---------------------------------|--------------------------------|-------------------------------------|----------------|
| <b>Type name</b>                | HMA3 132S2-2                   | <b>Color</b>                        | RAL 9005 / C3L |
| <b>Mounting</b>                 | B3                             | <b>Explosion protection</b>         | No             |
| <b>Efficiency class</b>         | IE3                            | <b>Rain cap</b>                     | No             |
| <b>Poles</b>                    | 2                              | <b>Cooling method</b>               | IC411          |
| <b>Ingress protection class</b> | IP55                           | <b>Thermal protection main</b>      | PTC 3 x 155°C  |
| <b>Thermal insulation class</b> | F                              | <b>Thermal protection secondary</b> | None           |
| <b>Temperature rise</b>         | B                              | <b>Anti-condensation heater</b>     | None           |
| <b>Electrical insulation</b>    | Standard (1350 V @ 0.8 μs)     | <b>Temperature detector (PT100)</b> | No (windings)  |
| <b>Bearing type (DE)</b>        | DGBB / 6308 / C3 / Closed (2Z) | <b>Temperature detector (PT100)</b> | No (bearings)  |
| <b>Bearing type (NDE)</b>       | DGBB / 6308 / C3 / Closed (2Z) | <b>Cable entry (main)</b>           | 2x M25x1.5 N/A |
| <b>IEC vibration class</b>      | A                              | <b>Cable entry (accessory)</b>      | 1x M20x1.5 N/A |

**Electrical data**

|                                        |                    |                    |  |  |  |
|----------------------------------------|--------------------|--------------------|--|--|--|
| <b>Rated power (kW)</b>                | 7.5                | 7.5                |  |  |  |
| <b>Frequency (Hz)</b>                  | 50                 | 60                 |  |  |  |
| <b>Voltage - VD / VY</b>               | 400 / 690          | 480 / 830          |  |  |  |
| <b>Full load current - VD / VY (A)</b> | 13.7 / 7.9         | 11.6 / 6.68        |  |  |  |
| <b>Speed (rpm)</b>                     | 2932               | 3519               |  |  |  |
| <b>Power factor (100%)</b>             | 0.88               | 0.88               |  |  |  |
| <b>Efficiency 50% / 75% / 100%</b>     | 89.1 / 90.3 / 90.1 | 87.8 / 88.9 / 90.2 |  |  |  |
| <b>Ist/In</b>                          | 9.24               | 11                 |  |  |  |
| <b>Full load torque (Nm)</b>           | 24.4               | 20.4               |  |  |  |
| <b>Tst/Tn</b>                          | 2.78               | 3.33               |  |  |  |
| <b>Tmax/Tn</b>                         | 3                  | 3.6                |  |  |  |
| <b>Duty</b>                            | S1                 | S1                 |  |  |  |
| <b>Ambient temp. (°C)</b>              | 40                 | 40                 |  |  |  |
| <b>Rotor inertia</b>                   | 0.017              | 0                  |  |  |  |
| <b>Sound pressure level (dBA)</b>      | 70                 | 75                 |  |  |  |
| <b>Winding resist. (ohm)</b>           | 1.138              | 1.138              |  |  |  |
| <b>Temp. rise winding (K)</b>          | 56.6               | 0                  |  |  |  |
| <b>Temp. rise surface (K)</b>          | 45.5               | 0                  |  |  |  |

Based on the routine(RT) and type test report (TTR). Hoyer confirms that motors fulfills following requirements acc. To Standard IEC60034-1

|                                       |                                                                         |     |
|---------------------------------------|-------------------------------------------------------------------------|-----|
| High voltage dielectric test          | Motor suitable to withstand (1000V + (2xUn)) for 60 seconds             | RT  |
| Insulation resistance measurement     | Cold insulation of stator winding is above 30 Megaohm                   | RT  |
| No load test                          | No load current value is within 10% of the mean value                   | RT  |
| Winding resistance measurement        | Difference between 3-phase resistance value is within 5% of mean values | RT  |
| Over load test(160% for 120 seconds)  | Motor suitable to withstand 1.6x rated torque running for 120 seconds   | TTR |
| Over speed test(120% for 120 seconds) | Motor suitable to withstand 1,2x speed motor running for 120 seconds    | TTR |