

## **MOTOR DATA SHEET**

Motor type: **Sh450H12Es** 

Series: **ABOVE 8-POLES** 



04-12-2025

| ELECTRICAL PARAMETERS |        |    |     |     |      |     |     |      |      |      |      |        |             |       |       |               |         |
|-----------------------|--------|----|-----|-----|------|-----|-----|------|------|------|------|--------|-------------|-------|-------|---------------|---------|
| U                     | CONN.  | f  | F   | •   | Duty | 1   | n   | Т    | TL/T | TB/T | IL/I | Effici | ency at loa | d [%] | Power | r factor at l | oad [-] |
| V                     | -      | Hz | kW  | HP  | -    | Α   | rpm | Nm   | -    | -    | -    | 2/4    | 3/4         | 4/4   | 2/4   | 3/4           | 4/4     |
| 400                   | Δ or Y | 50 | 355 | 480 | S1   | 707 | 494 | 6863 | 0.9  | 2.4  | 5.6  | 93.4   | 94.1        | 94.1  | 0.58  | 0.71          | 0.77    |

| GENERAL DATA               |               |                                      |                    |  |  |  |
|----------------------------|---------------|--------------------------------------|--------------------|--|--|--|
| Efficiency class           | -             | Sound pressure level [dB]            | 74                 |  |  |  |
| Frame size                 | 450           | Sound power level [dB]               | -                  |  |  |  |
| Number of poles            | 12            | Terminal box position                | top/ * side        |  |  |  |
| Starting method            | direct or VSD | Possibility of terminal box rotation | yes                |  |  |  |
| Insulation class           | F             | Bearing on D-side                    | 6324 C3            |  |  |  |
| Frequency converter supply | yes           | Bearing on ND-side                   | NU222 /* 7322 BTVP |  |  |  |
| Mounting arrangement       | IMB3/B35/V1*  | Bearings regreasing                  | yes                |  |  |  |
| Cooling method             | IC411         | Housing - material                   | cast iron          |  |  |  |
| Weight (IMB3) [kg]         | 4330          | Feet - material                      | cast iron          |  |  |  |
| Moment of inertia [kgm2]   | 41.7          | Bearing shields - material           | cast iron          |  |  |  |
| Direction of rotation      | CW/CCW        | Painting                             | RAL5010            |  |  |  |
| Degree of protection       | IP55          | Climatic execution                   | N                  |  |  |  |

| ENVIRONMENTAL CONDITIONS |           |                              |            |  |  |  |  |
|--------------------------|-----------|------------------------------|------------|--|--|--|--|
| Ambient temperature [°C] | up to +40 | Altitude above sea level [m] | up to 1000 |  |  |  |  |
| Relative humidity [%]    | up to 95  |                              |            |  |  |  |  |

| ACCESSORY                      |                         |                                 |                          |  |  |  |
|--------------------------------|-------------------------|---------------------------------|--------------------------|--|--|--|
| Number of terminals or cables  | 3                       | Temperature sensors in bearings | 2 x Pt100 (1 pc/bearing) |  |  |  |
| Cable glands/inlets            | 3                       | Winding heaters                 | on demand                |  |  |  |
| Temperature sensors in winding | 6 x Pt100 (2pcs./phase) | Optional accessories            | on demand                |  |  |  |

| STANDARDS   |  |  |  |  |  |
|-------------|--|--|--|--|--|
| IEC 60034-1 |  |  |  |  |  |

| CERTIFICATES |  |  |  |  |  |
|--------------|--|--|--|--|--|
| on demand    |  |  |  |  |  |

