



**SIMOTICS SD - 225 M - IM B5 - 4p**

|                  |                 |           |
|------------------|-----------------|-----------|
| Client order no. | Item-No.        | Offer no. |
| Order no.        | Consignment no. | Project   |

Remarks

## Safe Area

-/-

| U                                                   | Δ / Y | f    | P        | P    | I     | n       | M     | $\eta^{3)}$  |                                                  |                        | $\cos\varphi^{3)}$ |      |      | I <sub>A</sub> /I <sub>N</sub> | M <sub>A</sub> /M <sub>N</sub> | M <sub>K</sub> /M <sub>N</sub> | IE-CL |
|-----------------------------------------------------|-------|------|----------|------|-------|---------|-------|--------------|--------------------------------------------------|------------------------|--------------------|------|------|--------------------------------|--------------------------------|--------------------------------|-------|
| [V]                                                 |       | [Hz] | [kW]     | [hp] | [A]   | [1/min] | [Nm]  | 4/4          | 3/4                                              | 2/4                    | 4/4                | 3/4  | 2/4  | I <sub>I</sub> /I <sub>N</sub> | T <sub>I</sub> /T <sub>N</sub> | T <sub>B</sub> /T <sub>N</sub> |       |
| <b>DOL duty (S1) - 155(F) to 130(B)</b>             |       |      |          |      |       |         |       |              |                                                  |                        |                    |      |      |                                |                                |                                |       |
| 400                                                 | Δ     | 50   | 45.00    | -/-  | 80.00 | 1478    | 290.0 | 94.2         | 94.9                                             | 95.0                   | 0.86               | 0.83 | 0.75 | 6.6                            | 2.6                            | 2.6                            | IE3   |
| 690                                                 | Y     | 50   | 45.00    | -/-  | 46.50 | 1478    | 290.0 | 94.2         | 94.9                                             | 95.0                   | 0.86               | 0.83 | 0.75 | 6.6                            | 2.6                            | 2.6                            | IE3   |
| 460                                                 | Δ     | 60   | 52.00    | -/-  | 81.00 | 1778    | 280.0 | 94.1         | 94.7                                             | 94.8                   | 0.86               | 0.84 | 0.77 | 6.8                            | 2.6                            | 2.6                            | IE2   |
| 460                                                 | Δ     | 60   | 45.00    | -/-  | 70.00 | 1782    | 240.0 | 95.0         | 95.3                                             | 95.1                   | 0.85               | 0.81 | 0.73 | 7.7                            | 3.0                            | 3.0                            | IE3   |
| IM B5 / IM 3001                                     |       |      | FS 225 M |      |       | IP55    | UKCA  | IEC/EN 60034 |                                                  | IEC, DIN, ISO, VDE, EN |                    |      |      |                                |                                |                                |       |
| Environmental conditions : -20 °C - +40 °C / 1000 m |       |      |          |      |       |         |       |              | Locked rotor time (hot / cold) : 33.7 s   53.2 s |                        |                    |      |      |                                |                                |                                |       |

|                                                                             |                                |                                |                                 |                                                               |
|-----------------------------------------------------------------------------|--------------------------------|--------------------------------|---------------------------------|---------------------------------------------------------------|
| Sound level (SPL / SWL) at 50Hz 60Hz                                        | 65 / 78 dB(A) <sup>2) 3)</sup> | 68 / 82 dB(A) <sup>2) 3)</sup> | External earthing terminal      | With (standard)                                               |
| Moment of inertia                                                           | 0.5200 kg m²                   |                                | Vibration severity grade        | A                                                             |
| Bearing DE   NDE                                                            | 6313 C3                        | 6313 C3                        | Thermal class                   | F                                                             |
| <b>bearing lifetime</b>                                                     |                                |                                | Duty type                       | S1                                                            |
| L10mth F <sub>red min</sub> for coupling operation<br>50 60Hz <sup>1)</sup> | 40000 h                        | 32000 h                        | Direction of rotation           | bidirectional                                                 |
| Relubrication interval/quantity DE  <br>NDE                                 | 20 g   20 g<br>8000 h          |                                | Frame material                  | cast iron                                                     |
| Lubricants                                                                  | Unirex N3                      |                                | Net weight of the motor (IM B3) | 340 kg                                                        |
| Regreasing device                                                           | With regreasing nipple         |                                | Coating (paint finish)          | Special paint finish C3                                       |
| Grease nipple                                                               | M10x1 DIN 71412 A              |                                | Color, paint shade              | RAL7030                                                       |
| Type of bearing                                                             | Locating bearing NDE           |                                | Motor protection                | (B) 3 PTC thermistors - for tripping (standard) (2 terminals) |
| Condensate drainage holes                                                   | With (standard)                |                                | Method of cooling               | IC411 - self ventilated, surface cooled                       |

|                          |           |                                |                     |
|--------------------------|-----------|--------------------------------|---------------------|
| Terminal box position    | top       | Max. cross-sectional area      | 35 mm²              |
| Material of terminal box | cast iron | Cable diameter from ... to ... | 27 mm - 35 mm       |
| Type of terminal box     | TB1 L61   | Cable entry                    | 2xM50x1,5-2xM20x1,5 |
| Contact screw thread     | M8        | Cable gland                    | 4 plugs             |

## Notes:

|                                                    |                                                 |                                                                  |
|----------------------------------------------------|-------------------------------------------------|------------------------------------------------------------------|
| $I_L/I_N$ = locked rotor current / current nominal | 1) $L_{10min}$ according to DIN ISO 281 10/2010 | 3) Value is valid only for DOL operation with motor design IC411 |
| $M_L/M_N$ = locked rotor torque / torque nominal   | 2) at rated power / at full load                |                                                                  |
| $M_b/M_N$ = break down torque / nominal torque     |                                                 |                                                                  |

|                                                                                    |                      |            |             |                                                                                                              |               |                                                                                       |      |
|------------------------------------------------------------------------------------|----------------------|------------|-------------|--------------------------------------------------------------------------------------------------------------|---------------|---------------------------------------------------------------------------------------|------|
| responsible dep.                                                                   | technical reference  | created by | approved by | Technical data are subject to change! There may be discrepancies between calculated and rating plate values. |               | <a href="#">Link documents</a>                                                        |      |
| IN LVM                                                                             |                      | SPC        |             |                                                                                                              |               |  |      |
|  | document type        |            |             | document status                                                                                              |               |  |      |
|                                                                                    | datasheet            |            |             | released                                                                                                     |               |                                                                                       |      |
|                                                                                    | title                |            |             | document number                                                                                              |               |                                                                                       |      |
|                                                                                    | 1LE1603-2BB23-4FB4-Z |            |             |                                                                                                              |               |                                                                                       |      |
|                                                                                    | F01+F17+L19+R52      |            |             | rev.                                                                                                         | creation date | language                                                                              | Page |
| © INNOMOTICS 2024                                                                  |                      |            |             | 953                                                                                                          | 2024-02-23    | en                                                                                    | 1/2  |



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## Special design

|     |                               |     |                                                                   |
|-----|-------------------------------|-----|-------------------------------------------------------------------|
| F01 | Mounting of holding brake     | L19 | Regreasing device with regreasing nipple M10X1 acc.to DIN 71412-A |
| F17 | Brake supply voltage 180 V DC | R52 | Drilled removable entry plate                                     |

**Additional information:**

## Brake:

|              |           |                    |                  |
|--------------|-----------|--------------------|------------------|
| Description: | BFK458-25 | Current:           | A                |
| Voltage:     | DC 180 V  | Moment of inertia: | kgm <sup>2</sup> |

## Notes:

|                            |                               |                   |             |                                                                                                              |                             |                                                                                       |             |
|----------------------------|-------------------------------|-------------------|-------------|--------------------------------------------------------------------------------------------------------------|-----------------------------|---------------------------------------------------------------------------------------|-------------|
| responsible dep.<br>IN LVM | technical reference           | created by<br>SPC | approved by | Technical data are subject to change! There may be discrepancies between calculated and rating plate values. |                             | <a href="#">Link documents</a>                                                        |             |
| SIEMENS                    | document type<br>datasheet    |                   |             | document status<br>released                                                                                  |                             |  |             |
|                            | title<br>1LE1603-2BB23-4FB4-Z |                   |             | document number                                                                                              |                             |                                                                                       |             |
| © INNOMOTICS 2024          | F01+F17+L19+R52               |                   |             | rev.<br>953                                                                                                  | creation date<br>2024-02-23 | language<br>en                                                                        | Page<br>2/2 |