



**SIMOTICS SD - 160 M - IM B3 - 2p**

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

## Safe Area

-/-

| U                                                                                                                                     | Δ / Y | f    | P        | P    | I     | n       | M    | η <sup>3)</sup> |                                                  |                        | cosφ <sup>3)</sup> |      |      | 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> |       |
| DOL duty (S1) - 155(F) to 130(B)                                                                                                      |       |      |          |      |       |         |      |                 |                                                  |                        |                    |      |      |                                |                                |                                |       |
| 380                                                                                                                                   | Δ     | 50   | 10.55    | -/-  | 19.90 | 2945    | 34.2 | 91.2            | 91.3                                             | 90.3                   | 0.89               | 0.85 | 0.78 | 8.7                            | 2.6                            | 3.6                            | IE3   |
| 660                                                                                                                                   | Y     | 50   | 10.55    | -/-  | 11.40 | 2945    | 34.2 | 91.2            | 91.3                                             | 90.3                   | 0.89               | 0.85 | 0.78 | 8.7                            | 2.6                            | 3.6                            | IE3   |
| 440                                                                                                                                   | Δ     | 60   | 12.09    | -/-  | 19.50 | 3540    | 32.6 | 91.0            | 90.7                                             | 89.0                   | 0.90               | 0.86 | 0.80 | 8.8                            | 2.6                            | 3.6                            | IE3   |
| 440                                                                                                                                   | Δ     | 60   | 11.00    | -/-  | 18.00 | 3555    | 29.5 | 91.0            | 90.4                                             | 88.4                   | 0.88               | 0.85 | 0.77 | 9.5                            | 2.9                            | 4.0                            | IE3   |
| IM B3 / IM 1001                                                                                                                       |       |      | FS 160 M |      |       | IP55    | UKCA | IEC/EN 60034    |                                                  | IEC, DIN, ISO, VDE, EN |                    |      |      |                                |                                | Grade 3                        |       |
| Environmental conditions : -20 °C - +45 °C / 1000 m                                                                                   |       |      |          |      |       |         |      |                 | Locked rotor time (hot / cold) : 21.3 s   29.7 s |                        |                    |      |      |                                |                                |                                |       |
| These values are calculated. The final rating plate data will be calculated when the order is placed                                  |       |      |          |      |       |         |      |                 |                                                  |                        |                    |      |      |                                |                                |                                |       |
| The efficiency values and efficiency class according to EuP directive are valid for standard power ratings under standard conditions. |       |      |          |      |       |         |      |                 |                                                  |                        |                    |      |      |                                |                                |                                |       |

|                                                                                     |                                |                                |                                 |                                         |
|-------------------------------------------------------------------------------------|--------------------------------|--------------------------------|---------------------------------|-----------------------------------------|
| Sound level (SPL / SWL) at 50Hz 60Hz                                                | 77 / 85 dB(A) <sup>2) 3)</sup> | 82 / 90 dB(A) <sup>2) 3)</sup> | Vibration severity grade        | A                                       |
| Moment of inertia                                                                   | 0.0370 kg m²                   |                                | Thermal class                   | F                                       |
| Bearing DE   NDE                                                                    | 6209 2Z C3                     | 6209 2Z C3                     | Duty type                       | S1                                      |
| <b>bearing lifetime</b>                                                             |                                |                                | Direction of rotation           | bidirectional                           |
| L <sub>10mh</sub> F <sub>Rad,min</sub> for coupling operation 50 60Hz <sup>1)</sup> | 40000 h                        | 32000 h                        | Frame material                  | cast iron                               |
| Regreasing device                                                                   | Without                        |                                | Net weight of the motor (IM B3) | 97 kg                                   |
| Grease nipple                                                                       | -/-                            |                                | Coating (paint finish)          | Standard paint finish C2                |
| Type of bearing                                                                     | Locating bearing NDE           |                                | Color, paint shade              | RAL7030                                 |
| Condensate drainage holes                                                           | With (standard)                |                                | Motor protection                | (A) without (Standard)                  |
| External earthing terminal                                                          | With                           |                                | Method of cooling               | IC411 - self ventilated, surface cooled |

|                          |           |                                |               |
|--------------------------|-----------|--------------------------------|---------------|
| Terminal box position    | top       | Max. cross-sectional area      | 16 mm²        |
| Material of terminal box | cast iron | Cable diameter from ... to ... | 19 mm - 28 mm |
| Type of terminal box     | TB1 J01   | Cable entry                    | 2xM40x1,5     |
| Contact screw thread     | M5        | Cable gland                    | 2 plugs       |

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

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|------------------------------------------------------------------------------------|----------------------------------------|-------------------|--------------------------------------|--------------------------------------------------------------------------------------------------------------|-----------------------------|-------------------------------------------------------------------------------------------------------------------------|-------------|
| Responsible department<br>IN LVM                                                   | Technical reference                    | Created by<br>SPC | Approved by<br>Created automatically | Technical data are subject to change! There may be discrepancies between calculated and rating plate values. |                             | <a href="#">Link documents</a><br> |             |
|  | Document type<br>Technical data sheet  |                   |                                      | Document status<br>Released                                                                                  |                             |                                    |             |
|                                                                                    | Document title<br>1LE1503-1DA23-3AA4-Z |                   |                                      | Document number<br>TDS-240406-193347                                                                         |                             |                                                                                                                         |             |
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## Data sheet for three-phase Squirrel-Cage-Motors SIMOTICS



Motor type : 1CV3162A

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## Special design

|     |                                                  |     |                                                                                                |
|-----|--------------------------------------------------|-----|------------------------------------------------------------------------------------------------|
| B02 | Acceptance test certificate 3.1 acc. to EN 10204 | H07 | Stainless steel screws and bolts (outside the motor)                                           |
| D34 | China Energy Efficiency Label                    | N05 | Temperature class 155 (F), utilised to 130 (B), cooling medium temperature 45°C, power reduced |
| H04 | External grounding at housing                    | N30 | Increased air humidity/temperature with 30 to 60 g water per m3 air                            |

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