



**SIMOTICS SD - 160 L - IM B5 - 4p**

|                  |                 |           |
|------------------|-----------------|-----------|
| 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)                    |       |      |          |       |        |         |      |                 |                                                  |              |                    |                                  |      |                                |                                |                                |       |
| 230                                                 | Δ     | 50   | 15.00    | -/-   | 49.50  | 1465    | 98.0 | 92.1            | 92.7                                             | 92.0         | 0.83               | 0.78                             | 0.67 | 7.9                            | 2.8                            | 3.4                            | IE3   |
| 400                                                 | Y     | 50   | 15.00    | -/-   | 28.50  | 1465    | 98.0 | 92.1            | 92.7                                             | 92.0         | 0.83               | 0.78                             | 0.67 | 7.9                            | 2.8                            | 3.4                            | IE3   |
| 460                                                 | Y     | 60   | 17.30    | -/-   | 28.50  | 1765    | 94.0 | 92.4            | 92.5                                             | 92.0         | 0.83               | 0.79                             | 0.69 | 7.9                            | 2.7                            | 3.3                            | IE2   |
| 460                                                 | Y     | 60   | 15.00    | 20.00 | 25.00  | 1775    | 81.0 | 93.0            | 92.9                                             | 92.1         | 0.81               | 0.75                             | 0.64 | 8.9                            | 3.1                            | 3.8                            | MG1   |
| IM B5 / IM 3001                                     |       |      | FS 160 L |       | CC032A |         | IP55 | UKCA            |                                                  | IEC/EN 60034 |                    | IEC, EN, UL, CSA, NEMA MG1-12-12 |      |                                | kVA Code: M                    |                                |       |
| Environmental conditions : -20 °C - +40 °C / 1000 m |       |      |          |       |        |         |      |                 | Locked rotor time (hot / cold) : 24.6 s   33.3 s |              |                    |                                  |      |                                |                                |                                |       |

|                                                                                        |                                |                                |                                 |                                         |
|----------------------------------------------------------------------------------------|--------------------------------|--------------------------------|---------------------------------|-----------------------------------------|
| Sound level (SPL / SWL) at 50Hz 60Hz                                                   | 58 / 66 dB(A) <sup>2) 3)</sup> | 66 / 74 dB(A) <sup>2) 3)</sup> | Vibration severity grade        | A                                       |
| Moment of inertia                                                                      | 0.0890 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<br>50 60Hz <sup>1)</sup> | 40000 h                        | 32000 h                        | Frame material                  | cast iron                               |
| Regreasing device                                                                      | Without                        |                                | Net weight of the motor (IM B3) | 133 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                                                             | Without                        |                                | 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>                                                        |             |
|  | Document type<br>Technical data sheet |                   |                                      | Document status<br>Released                                                                                  |                             |  |             |
|                                                                                    | Document title<br>1LE1523-1DB42-2FA4  |                   |                                      | Document number<br>TDS-240529-161741                                                                         |                             |                                                                                       |             |
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