



**SIMOTICS SD - 280 M - IM B3 - 2p**

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

|         |
|---------|
| Remarks |
|---------|

## Safe Area

| U                                                   | $\Delta / Y$ | f    | P        | P    | I      | n       | M     | $\eta^{3)}$  |                                                  |                        | $\cos\varphi^{3)}$ |      |      | $I_A/I_N$ | $M_A/M_N$ | $M_K/M_N$ | IE-CL |
|-----------------------------------------------------|--------------|------|----------|------|--------|---------|-------|--------------|--------------------------------------------------|------------------------|--------------------|------|------|-----------|-----------|-----------|-------|
| [V]                                                 |              | [Hz] | [kW]     | [hp] | [A]    | [1/min] | [Nm]  | 4/4          | 3/4                                              | 2/4                    | 4/4                | 3/4  | 2/4  | $I_I/I_N$ | $T_I/T_N$ | $T_B/T_N$ |       |
| DOL duty (S1) - 155(F) to 130(B)                    |              |      |          |      |        |         |       |              |                                                  |                        |                    |      |      |           |           |           |       |
| 500                                                 | $\Delta$     | 50   | 90.00    | -/-  | 122.00 | 2978    | 290.0 | 95.8         | 95.9                                             | 95.4                   | 0.89               | 0.87 | 0.80 | 8.4       | 2.7       | 3.5       | IE4   |
|                                                     |              |      |          |      |        |         |       |              |                                                  |                        |                    |      |      |           |           |           |       |
| 575                                                 | $\Delta$     | 60   | 101.00   | -/-  | 118.00 | 3578    | 270.0 | 95.4         | 95.3                                             | 94.6                   | 0.90               | 0.88 | 0.83 | 8.7       | 3.0       | 3.3       | IE4   |
| 575                                                 | $\Delta$     | 60   | 90.00    | -/-  | 106.00 | 3580    | 240.0 | 95.4         | 95.2                                             | 94.2                   | 0.89               | 0.87 | 0.80 | 9.5       | 3.3       | 3.7       | IE4   |
| IM B3 / IM 1001                                     |              |      | FS 280 M |      |        | IP55    | UKCA  | IEC/EN 60034 |                                                  | IEC, DIN, ISO, VDE, EN |                    |      |      |           |           |           |       |
| Environmental conditions : -20 °C - +40 °C / 1000 m |              |      |          |      |        |         |       |              | Locked rotor time (hot / cold) : 26.3 s   41.9 s |                        |                    |      |      |           |           |           |       |

|                                                                                     |                                |                                |                                 |                                                               |
|-------------------------------------------------------------------------------------|--------------------------------|--------------------------------|---------------------------------|---------------------------------------------------------------|
| Sound level (SPL / SWL) at 50Hz 60Hz                                                | 73 / 87 dB(A) <sup>2) 3)</sup> | 81 / 95 dB(A) <sup>2) 3)</sup> | External earthing terminal      | With (standard)                                               |
| Moment of inertia                                                                   | 1.0000 kg m <sup>2</sup>       |                                | Vibration severity grade        | A                                                             |
| Bearing DE   NDE                                                                    | 6315 C3                        | 6315 C3                        | Thermal class                   | F                                                             |
| <b>bearing lifetime</b>                                                             |                                |                                | Duty type                       | S1                                                            |
| L <sub>10mh</sub> F <sub>rad,min</sub> for coupling operation 50 60Hz <sup>1)</sup> | 40000 h                        | 32000 h                        | Direction of rotation           | bidirectional                                                 |
| Relubrication interval/quantity DE   NDE                                            | 25 g   25 g<br>4000 h          |                                | Frame material                  | cast iron                                                     |
| Lubricants                                                                          | Unirex N3                      |                                | Net weight of the motor (IM B3) | 610 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      | 120 mm²             |
| Material of terminal box | cast iron | Cable diameter from ... to ... | 34 mm - 45 mm       |
| Type of terminal box     | TB1 N61   | Cable entry                    | 2xM63x1,5-2xM20x1,5 |
| Contact screw thread     | M10       | Cable gland                    | 4 plugs             |

Notes:

|                                                          |                                           |                                                                  |
|----------------------------------------------------------|-------------------------------------------|------------------------------------------------------------------|
| $I_{Lr}/I_{Ln}$ = locked rotor current / current nominal | 1) L10mh according to DIN ISO 281 10/2010 | 3) Value is valid only for DOL operation with motor design IC411 |
| $M_r/M_{rn}$ = locked rotor torque / torque nominal      | 2) at rated power / at full load          |                                                                  |
| $M_b/M_{bn}$ = 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>                                                        |      |
| DI MC LVM                                                                          |                      | DT Configurator |             |                                                                                                              |               |  |      |
|  | document type        |                 |             | document status                                                                                              |               |  |      |
|                                                                                    | datasheet            |                 |             | released                                                                                                     |               |                                                                                       |      |
|                                                                                    | title                |                 |             | document number                                                                                              |               |                                                                                       |      |
|                                                                                    | 1LE1604-2DA24-0AB4-Z |                 |             |                                                                                                              |               |                                                                                       |      |
|                                                                                    | H01+L19+R52          |                 |             | rev.                                                                                                         | creation date | language                                                                              | Page |
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## Special design

|     |                                                                   |     |                               |
|-----|-------------------------------------------------------------------|-----|-------------------------------|
| H01 | Bolted on mounting feet (instead of cast)                         | R52 | Drilled removable entry plate |
| L19 | Regreasing device with regreasing nipple M10X1 acc.to DIN 71412-A |     |                               |

Notes:

|                                                                                    |                               |                               |             |                                                                                                              |                             |                                |                                                                                       |             |
|------------------------------------------------------------------------------------|-------------------------------|-------------------------------|-------------|--------------------------------------------------------------------------------------------------------------|-----------------------------|--------------------------------|---------------------------------------------------------------------------------------|-------------|
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|  | document type<br>datasheet    |                               |             |                                                                                                              | document status<br>released |                                |  |             |
|                                                                                    | title<br>1LE1604-2DA24-0AB4-Z |                               |             |                                                                                                              | document number             |                                |                                                                                       |             |
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