



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

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

Remarks

## 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> |       |
| 400             | Δ     | 50   | 75.00    | -/-  | 134.00 | 2978    | 240.0 | 93.8            | 93.6 | 92.4         | 0.86               | 0.82                   | 0.74 | 7.2                            | 2.5                            | 3.2                            | IE2   |
| 690             | Y     | 50   | 75.00    | -/-  | 78.00  | 2978    | 240.0 | 93.8            | 93.6 | 92.4         | 0.86               | 0.82                   | 0.74 | 7.2                            | 2.5                            | 3.2                            | IE2   |
| 460             | Δ     | 60   | 84.00    | -/-  | 128.00 | 3578    | 225.0 | 94.5            | 94.1 | 92.7         | 0.87               | 0.84                   | 0.76 | 7.2                            | 2.5                            | 3.1                            | IE2   |
| 460             | Δ     | 60   | 75.00    | -/-  | 116.00 | 3580    | 200.0 | 93.6            | 92.9 | 91.1         | 0.87               | 0.83                   | 0.74 | 7.7                            | 2.8                            | 3.5                            | IE2   |
| IM B3 / IM 1001 |       |      | FS 280 S |      | 490 kg |         | IP55  |                 |      | IEC/EN 60034 |                    | IEC, DIN, ISO, VDE, EN |      |                                |                                |                                |       |

Locked rotor time (hot / cold) : 28.3 s | 48.2 s

|                                                                                        |                                 |                                 |                            |                                         |
|----------------------------------------------------------------------------------------|---------------------------------|---------------------------------|----------------------------|-----------------------------------------|
| Sound level (SPL / SWL) at 50Hz 60Hz                                                   | 76.0 / 89.0 dB(A) <sup>2)</sup> | 81.0 / 95.0 dB(A) <sup>2)</sup> | External earthing terminal | Yes (standard)                          |
| Moment of inertia                                                                      | 0.7100 kg m <sup>2</sup>        |                                 | Vibration severity grade   | A                                       |
| Bearing DE   NDE                                                                       | 6315 C3                         | 6315 C3                         | Insulation                 | 155(F) to 130(B)                        |
| bearing lifetime                                                                       |                                 |                                 | Duty type                  | S1                                      |
| L <sub>10mh</sub> F <sub>Rad min</sub><br>50 60Hz <sup>1)</sup> for coupling operation | 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                       |                                 | Coating (paint finish)     | Standard paint finish C2                |
| Regreasing device                                                                      | Yes (standard)                  |                                 | Color, paint shade         | RAL7030                                 |
| Grease nipple                                                                          | M10x1 DIN 3404 A                |                                 | Motor protection           | (A) without (Standard)                  |
| Type of bearing                                                                        | Locating bearing NDE            |                                 | Method of cooling          | IC411 - self ventilated, surface cooled |
| Condensate drainage holes                                                              | Yes (standard)                  |                                 |                            |                                         |

|                          |           |                                |                   |
|--------------------------|-----------|--------------------------------|-------------------|
| Terminal box position    | top       | Max. cross-sectional area      | 240.0 mm²         |
| Material of terminal box | cast iron | Cable diameter from ... to ... | 38.0 mm - 45.0 mm |
| Type of terminal box     | TB1 Q01   | Cable entry                    | 2xM63x1,5         |
| Contact screw thread     | M12       | Cable gland                    | 1 gland, 1 plug   |

|                                                          |                                           |                                                                  |
|----------------------------------------------------------|-------------------------------------------|------------------------------------------------------------------|
| $I_{lr}/I_{ln}$ = 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 |
| $M_{lr}/M_{ln}$ = locked rotor torque / torque nominal   | 2) at rated power / at full load          |                                                                  |
| $M_b/M_{ln}$ = 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. |          |          |  |
| DI MC LVM                                                                          |                                             | DT Configurator |                 |                                                                                                              |          |          |  |
|  | document type                               | datasheet       |                 | document status                                                                                              |          | customer |  |
|                                                                                    | title                                       |                 |                 | released                                                                                                     |          |          |  |
| © Siemens AG 2021                                                                  | 1LE1501-2DA03-4AA4-Z<br>F74+F76+H01+R15+R50 |                 | document number |                                                                                                              |          |          |  |
|                                                                                    |                                             |                 | rev.            | creation date                                                                                                |          |          |  |
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|                                                                                    |                                             |                 |                 |                                                                                                              | en       | 1/2      |  |

## Data sheet for three-phase Squirrel-Cage-Motors SIMOTICS



Motor type : 1CV2280A

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### Special design

|     |                                           |     |                       |
|-----|-------------------------------------------|-----|-----------------------|
| F74 | Sheet steel fan cowl                      | R15 | One metal cable gland |
| F76 | Metal external fan                        | R50 | Larger terminal box   |
| H01 | Bolted on mounting feet (instead of cast) |     |                       |

### Notes:

|                                                                                    |                               |                               |             |                             |                                                                                                              |                |             |  |
|------------------------------------------------------------------------------------|-------------------------------|-------------------------------|-------------|-----------------------------|--------------------------------------------------------------------------------------------------------------|----------------|-------------|--|
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