



**SIMOTICS SD - 315 L - 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> |       |
| <b>DOL duty (S1) - 155(F) to 130(B)</b>              |       |      |          |      |        |         |       |                 |                                               |              |                    |                        |      |                                |                                |                                |       |
| 400                                                  | Δ     | 50   | 200.00   | -/-  | 335.00 | 2982    | 640.0 | 94.0            | 93.9                                          | 93.5         | 0.92               | 0.91                   | 0.87 | 7.1                            | 2.2                            | 2.8                            | IE1   |
| 690                                                  | Y     | 50   | 200.00   | -/-  | 194.00 | 2982    | 640.0 | 94.0            | 93.9                                          | 93.5         | 0.92               | 0.91                   | 0.87 | 7.1                            | 2.2                            | 2.8                            | IE1   |
| 460                                                  | Δ     | 60   | 224.00   | -/-  | 325.00 | 3582    | 600.0 | 94.1            | 93.9                                          | 93.2         | 0.92               | 0.91                   | 0.88 | 7.1                            | 2.4                            | 2.7                            | IE1   |
|                                                      |       |      |          |      |        |         |       |                 |                                               |              |                    |                        |      |                                |                                |                                |       |
| IM B3 / IM 1001                                      |       |      | FS 315 L |      |        |         | IP55  | UKCA            |                                               | IEC/EN 60034 |                    | IEC, DIN, ISO, VDE, EN |      |                                |                                |                                |       |
| Environmental conditions : -20 °C - +40 °C / 1,000 m |       |      |          |      |        |         |       |                 | Locked rotor time (hot / cold) : 0 s   66.8 s |              |                    |                        |      |                                |                                |                                |       |

|                                                                             |                                |                                |                                 |                                                              |
|-----------------------------------------------------------------------------|--------------------------------|--------------------------------|---------------------------------|--------------------------------------------------------------|
| Sound level (SPL / SWL) at 50Hz 60Hz                                        | 80 / 94 dB(A) <sup>2) 3)</sup> | 84 / 98 dB(A) <sup>2) 3)</sup> | External earthing terminal      | Yes (standard)                                               |
| Moment of inertia                                                           | 2.1000 kg m²                   |                                | Vibration severity grade        | A                                                            |
| Bearing DE   NDE                                                            | 6316 C3                        | 6316 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   NDE                                    | 30 g   30 g<br>3000 h          |                                | Frame material                  | cast iron                                                    |
| Lubricants                                                                  | Unirex N3                      |                                | Net weight of the motor (IM B3) | 1000 kg                                                      |
| Regreasing device                                                           | Yes (standard)                 |                                | Coating (paint finish)          | Standard paint finish C2                                     |
| Grease nipple                                                               | M10x1 DIN 3404 A               |                                | Color, paint shade              | RAL7030                                                      |
| Type of bearing                                                             | Locating bearing DE            |                                | Motor protection                | (C) 6 PTC thermistors - for alarm and tripping (4 terminals) |
| Condensate drainage holes                                                   | Yes (standard)                 |                                | Method of cooling               | IC411 - self ventilated, surface cooled                      |

|                          |           |                                |                     |
|--------------------------|-----------|--------------------------------|---------------------|
| Terminal box position    | top       | Max. cross-sectional area      | 240 mm²             |
| Material of terminal box | cast iron | Cable diameter from ... to ... | 38 mm - 45 mm       |
| Type of terminal box     | TB1 Q01   | Cable entry                    | 2xM63x1,5-2xM20x1,5 |
| Contact screw thread     | M12       | 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 |
| $M_{lr}/M_{ln}$ = 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. |               | <a href="#">Link documents</a>                                                        |      |
| DI MC LVM                                                                          |                      | DT Configurator |             |                                                                                                              |               |  |      |
|  | document type        |                 |             | document status                                                                                              |               |  |      |
|                                                                                    | datasheet            |                 |             | released                                                                                                     |               |                                                                                       |      |
|                                                                                    | title                |                 |             | document number                                                                                              |               |                                                                                       |      |
|                                                                                    | 1LE1502-3AA53-4AC4-Z |                 |             |                                                                                                              |               |                                                                                       |      |
|                                                                                    | B02+B60+B61+L51      |                 |             | rev.                                                                                                         | creation date | language                                                                              | Page |
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Data sheet for three-phase Squirrel-Cage-Motors SIMOTICS



Motor type : 1CV1315A

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Special design

|     |                                                  |     |                                  |
|-----|--------------------------------------------------|-----|----------------------------------|
| B02 | Acceptance test certificate 3.1 acc. to EN 10204 | B61 | Document order dimension drawing |
| B60 | Document electrical datasheet                    | L51 | Bearing insulation NDE           |

Notes:

|                                                                                    |                                                  |                               |             |                                                                                                              |                                |
|------------------------------------------------------------------------------------|--------------------------------------------------|-------------------------------|-------------|--------------------------------------------------------------------------------------------------------------|--------------------------------|
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|  | document type<br>datasheet                       |                               |             |                                                                                                              | document status<br>released    |
|                                                                                    | title<br>1LE1502-3AA53-4AC4-Z<br>B02+B60+B61+L51 |                               |             |                                                                                                              | document number                |
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|                                                                                    |                                                  |                               |             | language<br>en                                                                                               | Page<br>2/2                    |

