

**SIMOTICS SD - 315 L - IM B3 - 4p**

|                  |                 |           |
|------------------|-----------------|-----------|
| 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> |       |
| DOL duty (S1) - 155(F) to 130(B)                    |       |      |          |      |        |         |        |                 |                                                |      |                    |      |      |                                |                                |                                |       |
| 230                                                 | Δ     | 50   | 160.00   | -/-  | 490.00 | 1490    | 1030.0 | 96.6            | 96.8                                           | 96.6 | 0.85               | 0.81 | 0.73 | 7.9                            | 3.3                            | 3.1                            | IE4   |
| 400                                                 | Y     | 50   | 160.00   | -/-  | 280.00 | 1490    | 1030.0 | 96.6            | 96.8                                           | 96.6 | 0.85               | 0.81 | 0.73 | 7.9                            | 3.3                            | 3.1                            | IE4   |
| 460                                                 | Y     | 60   | 184.00   | -/-  | 280.00 | 1790    | 980.0  | 96.5            | 96.6                                           | 96.4 | 0.86               | 0.83 | 0.75 | 7.9                            | 3.2                            | 3.0                            | IE4   |
|                                                     |       |      |          |      |        |         |        |                 |                                                |      |                    |      |      |                                |                                |                                |       |
| IM B3 / IM1001                                      |       |      | FS 315 L |      |        | IP55    | UKCA   | IEC/EN 60034    |                                                |      |                    |      |      |                                |                                |                                |       |
| Environmental conditions : -20 °C - +40 °C / 1000 m |       |      |          |      |        |         |        |                 | Locked rotor time (hot / cold) : 29.7 s   45 s |      |                    |      |      |                                |                                |                                |       |

|                                                                                        |                                            |                                |                                |                                                |
|----------------------------------------------------------------------------------------|--------------------------------------------|--------------------------------|--------------------------------|------------------------------------------------|
| Sound level (SPL / SWL) at 50Hz 60Hz                                                   | 68 / 83 dB(A) <sup>2) 3)</sup>             | 72 / 87 dB(A) <sup>2) 3)</sup> | External earthing terminal     | (Standard) Yes                                 |
| Moment of inertia                                                                      | 3.7900 kg m²                               |                                | Vibration severity grade       | Grade A                                        |
| Bearing DE   NDE                                                                       | 6319 C3                                    | 6319 C3                        | Thermal class                  | F                                              |
| permissible lateral force on (N)<br>(N)                                                | X <sub>0</sub> :<br>9300                   | X <sub>0,5</sub> :<br>8650     | X <sub>max</sub> :<br>8000     | Duty type<br>S1                                |
| bearing lifetime                                                                       |                                            |                                | 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                                      |
| Relubrication interval/quantity DE  <br>NDE                                            | 40 g   40 g<br>6000 h                      |                                | Net weight of the motor        | 1200 kg                                        |
| Lubricants                                                                             | UNIREX N3                                  |                                | Coating (paint finish)         | Special paint finish C3                        |
| Regreasing device                                                                      | with conical grease nipple acc. DIN 71412A |                                | Color, paint shade             | RAL7030                                        |
| Grease nipple                                                                          | M10x1 DIN 71412 A                          |                                | Motor protection               | 3 PTC thermistors - for tripping (2 terminals) |
| Type of bearing                                                                        | Locating bearing NDE                       |                                | Method of cooling              | IC411 - self ventilated, surface cooled        |
| Condensate drainage holes                                                              | (Standard) Yes                             |                                | 'SIMOTICS Connect 400' in IP65 | No                                             |

|                          |                |                                |                       |
|--------------------------|----------------|--------------------------------|-----------------------|
| Terminal box position    | box at the top | Max. cross-sectional area      | 240 mm²               |
| Material of terminal box | cast iron      | Cable diameter from ... to ... | 34 mm - 45 mm         |
| Type of terminal box     | TB1Q61         | Cable entry                    | 2xM63x1,5 - 2xM20x1,5 |
| Contact screw thread     | 6xM12          | 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                                                                                              |               |                                                                                       |      |
|                                                                                    | 1LE5504-3AB42-2AB4-Z |                 |             |                                                                                                              |               |                                                                                       |      |
|                                                                                    | F74+L19+M11+R52+S02  |                 |             | rev.                                                                                                         | creation date | language                                                                              | Page |
| © Siemens AG 2023                                                                  |                      |                 |             | 943                                                                                                          | 2023-06-26    | en                                                                                    | 1/2  |

**SIMOTICS SD - 315 L - IM B3 - 4p**

|     |                                                                   |     |                               |
|-----|-------------------------------------------------------------------|-----|-------------------------------|
| F74 | Sheet steel fan cowl                                              | R52 | Drilled removable entry plate |
| L19 | Regreasing device with regreasing nipple M10X1 acc.to DIN 71412-A | S02 | Special paint finish C3       |
| M11 | Stainless steel rating plate                                      |     |                               |

|                                                                                    |                               |                               |             |                                                                                                              |                             |                                                                                       |             |
|------------------------------------------------------------------------------------|-------------------------------|-------------------------------|-------------|--------------------------------------------------------------------------------------------------------------|-----------------------------|---------------------------------------------------------------------------------------|-------------|
| responsible dep.<br>DI MC LVM                                                      | technical reference           | created by<br>DT Configurator | approved by | Technical data are subject to change! There may be discrepancies between calculated and rating plate values. |                             | <a href="#">Link documents</a>                                                        |             |
|  | document type<br>datasheet    |                               |             | document status<br>released                                                                                  |                             |  |             |
|                                                                                    | title<br>1LE5504-3AB42-2AB4-Z |                               |             | document number                                                                                              |                             |                                                                                       |             |
| © Siemens AG 2023                                                                  | F74+L19+M11+R52+S02           |                               |             | rev.<br>943                                                                                                  | creation date<br>2023-06-26 | language<br>en                                                                        | Page<br>2/2 |