

**SIMOTICS SD - 315 M - 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)                    |       |      |          |      |        |         |       |                 |                                                  |              |                    |                        |      |                                |                                |                                |       |
| 400                                                 | Δ     | 50   | 132.00   | -/-  | 235.00 | 1490    | 850.0 | 96.4            | 96.6                                             | 96.3         | 0.85               | 0.81                   | 0.73 | 8.2                            | 3.3                            | 3.2                            | IE4   |
| 690                                                 | Y     | 50   | 132.00   | -/-  | 135.00 | 1490    | 850.0 | 96.4            | 96.6                                             | 96.3         | 0.85               | 0.81                   | 0.73 | 8.2                            | 3.3                            | 3.2                            | IE4   |
| 460                                                 | Δ     | 60   | 132.00   | -/-  | 205.00 | 1791    | 700.0 | 96.5            | 96.5                                             | 95.9         | 0.84               | 0.80                   | 0.71 | 9.2                            | 3.6                            | 3.6                            | IE4   |
| 460                                                 | Δ     | 60   | 152.00   | -/-  | 235.00 | 1790    | 810.0 | 96.5            | 96.6                                             | 96.3         | 0.85               | 0.82                   | 0.74 | 8.1                            | 3.2                            | 3.1                            | IE4   |
|                                                     |       |      |          |      |        |         |       |                 |                                                  |              |                    |                        |      |                                |                                |                                |       |
| IM B3 / IM1001                                      |       |      | FS 315 M |      |        |         | IP55  | UKCA            |                                                  | IEC/EN 60034 |                    | IEC, DIN, ISO, VDE, EN |      |                                |                                |                                |       |
| Environmental conditions : -20 °C - +40 °C / 1000 m |       |      |          |      |        |         |       |                 | Locked rotor time (hot / cold) : 25.4 s   39.5 s |              |                    |                        |      |                                |                                |                                |       |

|                                                                                        |                                |                                |                            |                                                |   |
|----------------------------------------------------------------------------------------|--------------------------------|--------------------------------|----------------------------|------------------------------------------------|---|
| Sound level (SPL / SWL) at 50Hz 60Hz                                                   | 67 / 81 dB(A) <sup>2) 3)</sup> | 72 / 86 dB(A) <sup>2) 3)</sup> | Condensate drainage holes  | (Standard) Yes                                 |   |
| Moment of inertia                                                                      | 2.9100 kg m²                   |                                | External earthing terminal | (Standard) Yes                                 |   |
| Bearing DE   NDE                                                                       | 6319 C3                        | 6319 C3                        | Vibration severity grade   | Grade A                                        |   |
| 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 | Thermal class                                  | F |
| bearing lifetime                                                                       |                                |                                | Duty type                  | S1                                             |   |
| L <sub>10mh</sub> F <sub>Rad min</sub> for coupling operation<br>50 60Hz <sup>1)</sup> | 40000 h                        | 32000 h                        | Direction of rotation      | bidirectional                                  |   |
| Relubrication interval/quantity DE  <br>NDE                                            | 40 g   40 g<br>6000 h          |                                | Frame material             | cast iron                                      |   |
| Lubricants                                                                             | UNIREX N3                      |                                | Net weight of the motor    | 942 kg                                         |   |
| Regreasing device                                                                      |                                |                                | Coating (paint finish)     | Special paint finish C3                        |   |
| Grease nipple                                                                          | M10x1 DIN 3404 A               |                                | Color, paint shade         | RAL7030                                        |   |
| Type of bearing                                                                        | Locating bearing DE            |                                | Motor protection           | 3 PTC thermistors - for tripping (2 terminals) |   |
| Bearing insulation DE / Bearing<br>insulation NDE                                      | Yes (Non-drive end)            |                                | Method of cooling          | IC411 - self ventilated, surface cooled        |   |

|                          |                |                                |                       |
|--------------------------|----------------|--------------------------------|-----------------------|
| 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     | TB1Q01         | Cable entry                    | 2xM63x1,5 - 2xM20x1,5 |
| Contact screw thread     | 6xM12          | Cable gland                    | 4 plugs               |

## Notes:

$I_A/I_N$  = locked rotor current / current nominal  
 $M_A/M_N$  = locked rotor torque / torque nominal  
 $M_K/M_N$  = break down torque / nominal torque

1)  $L_{10mh}$  according to DIN ISO 281 10/2010  
2) at rated power / at full load

3) Value is valid only for DOL operation with motor design IC411

|                                                                                    |                      |            |             |                                                                                                              |               |                                                                                       |      |
|------------------------------------------------------------------------------------|----------------------|------------|-------------|--------------------------------------------------------------------------------------------------------------|---------------|---------------------------------------------------------------------------------------|------|
| 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>                                                        |      |
| IN LVM                                                                             |                      | SPC        |             |                                                                                                              |               |  |      |
|  | document type        |            |             | document status                                                                                              |               |  |      |
|                                                                                    | datasheet            |            |             | released                                                                                                     |               |                                                                                       |      |
|                                                                                    | title                |            |             | document number                                                                                              |               |                                                                                       |      |
|                                                                                    | 1LE5504-3AB23-4AB4-Z |            |             |                                                                                                              |               |                                                                                       |      |
|                                                                                    | L51+Q82+S02          |            |             | rev.                                                                                                         | creation date | language                                                                              | Page |
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|                                                                                    |                               |                   |             |                                                                                                              |                             |                                                                                       |             |
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|  | document type<br>datasheet    |                   |             | document status<br>released                                                                                  |                             |  |             |
|                                                                                    | title<br>1LE5504-3AB23-4AB4-Z |                   |             | document number                                                                                              |                             |                                                                                       |             |
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