

**SIMOTICS SD - 315 M - IM B5 - 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> |       |  |
| DOL duty (S1) - 155(F) to 130(B)                    |       |      |          |      |        |         |       |                 |                                                |              |                    |      |      |                                |                                |                                |       |  |
| 500                                                 | Δ     | 50   | 132.00   | -/-  | 176.00 | 2988    | 420.0 | 96.2            | 96.2                                           | 95.6         | 0.90               | 0.88 | 0.81 | 9.8                            | 2.6                            | 3.9                            | IE4   |  |
|                                                     |       |      |          |      |        |         |       |                 |                                                |              |                    |      |      |                                |                                |                                |       |  |
|                                                     |       |      |          |      |        |         |       |                 |                                                |              |                    |      |      |                                |                                |                                |       |  |
|                                                     |       |      |          |      |        |         |       |                 |                                                |              |                    |      |      |                                |                                |                                |       |  |
|                                                     |       |      |          |      |        |         |       |                 |                                                |              |                    |      |      |                                |                                |                                |       |  |
| IM B5 / IM3001                                      |       |      | FS 315 M |      |        |         | IP55  | UKCA            |                                                | IEC/EN 60034 |                    |      |      |                                |                                |                                |       |  |
| Environmental conditions : -20 °C - +40 °C / 1000 m |       |      |          |      |        |         |       |                 | Locked rotor time (hot / cold) : 27 s   40.9 s |              |                    |      |      |                                |                                |                                |       |  |

## Mechanical data

|                                                                                        |                                            |                                |                                |                                                |    |
|----------------------------------------------------------------------------------------|--------------------------------------------|--------------------------------|--------------------------------|------------------------------------------------|----|
| Sound level (SPL / SWL) at 50Hz 60Hz                                                   | 73 / 88 dB(A) <sup>2) 3)</sup>             | 77 / 92 dB(A) <sup>2) 3)</sup> | External earthing terminal     | (Standard) Yes                                 |    |
| Moment of inertia                                                                      | 2.0800 kg m²                               |                                | Vibration severity grade       | Grade A                                        |    |
| Bearing DE   NDE                                                                       | 6316 C3                                    | 6316 C3                        | Thermal class                  | F                                              |    |
| permissible lateral force on (N)<br>(N)                                                | X <sub>0</sub> :<br>5800                   | X <sub>0.5</sub> :<br>5500     | X <sub>max</sub> :<br>5200     | Duty type                                      | 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                                    | -/-                            |                                |                                                |    |
| Relubrication interval/quantity DE  <br>NDE                                            | 30 g   30 g<br>3000 h                      |                                | Frame material                 | cast iron                                      |    |
| Lubricants                                                                             | UNIREX N3                                  |                                | Net weight of the motor        | 1050 kg                                        |    |
| Regreasing device                                                                      | with conical grease nipple acc. DIN 71412A |                                | 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               | 3 PTC thermistors - for tripping (2 terminals) |    |
| Condensate drainage holes                                                              | (Standard) Yes                             |                                | Method of cooling              | IC411 - self ventilated, surface cooled        |    |
|                                                                                        |                                            |                                | 'SIMOTICS Connect 400' in IP65 | No                                             |    |

## Terminal box

|                          |                |                                |                       |
|--------------------------|----------------|--------------------------------|-----------------------|
| 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:

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

1) L10mh 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>                                                        |      |
| DI MC LVM                                                                          |                      | DT Configurator |             |                                                                                                              |               |  |      |
|  | document type        |                 |             | document status                                                                                              |               |  |      |
|                                                                                    | datasheet            |                 |             | released                                                                                                     |               |                                                                                       |      |
|                                                                                    | title                |                 |             | document number                                                                                              |               |                                                                                       |      |
|                                                                                    | 1LE5504-3AA24-0FB4-Z |                 |             |                                                                                                              |               |                                                                                       |      |
|                                                                                    | F74+L19+M11+R52+S02  |                 |             | rev.                                                                                                         | creation date | language                                                                              | Page |
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|     |                                                                   |     |                               |
|-----|-------------------------------------------------------------------|-----|-------------------------------|
| 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                                      |     |                               |

**Notes:**

|                                                                                    |                               |                               |             |                                                                                                              |                             |                                                                                       |             |
|------------------------------------------------------------------------------------|-------------------------------|-------------------------------|-------------|--------------------------------------------------------------------------------------------------------------|-----------------------------|---------------------------------------------------------------------------------------|-------------|
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|  | document type<br>datasheet    |                               |             | document status<br>released                                                                                  |                             |  |             |
|                                                                                    | title<br>1LE5504-3AA24-0FB4-Z |                               |             | document number                                                                                              |                             |                                                                                       |             |
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