



**SIMOTICS XP - 160 L - IM B35 - 2p**

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

|         |
|---------|
| Remarks |
|---------|

## II 2G Ex db eb IIB T4 Gb

| U   | $\Delta / Y$ | f    | P    | P    | I   | n       | M    | $\eta^{3)}$ |     |     | $\cos \varphi^{3)}$ |     |     | $I_A/I_N$ | $M_A/M_N$ | $M_K/M_N$ | IE-CL |
|-----|--------------|------|------|------|-----|---------|------|-------------|-----|-----|---------------------|-----|-----|-----------|-----------|-----------|-------|
| [V] |              | [Hz] | [kW] | [hp] | [A] | [1/min] | [Nm] | 4/4         | 3/4 | 2/4 | 4/4                 | 3/4 | 2/4 | $I/I_N$   | $T_I/T_N$ | $T_B/T_N$ |       |

|     |   |    |       |     |       |      |      |      |      |      |      |      |      |     |     |     |     |
|-----|---|----|-------|-----|-------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|
| 400 | Δ | 50 | 18.50 | -/- | 32.00 | 2955 | 60.0 | 92.4 | 92.8 | 92.3 | 0.90 | 0.87 | 0.80 | 8.3 | 2.8 | 3.9 | IE3 |
| 690 | Y | 50 | 18.50 | -/- | 18.60 | 2955 | 60.0 | 92.4 | 92.8 | 92.3 | 0.90 | 0.87 | 0.80 | 8.3 | 2.8 | 3.9 | IE3 |

|     |   |    |      |  |      |      |      |  |      |                   |                                    |
|-----|---|----|------|--|------|------|------|--|------|-------------------|------------------------------------|
| 40  | Δ | 5  | 1.04 |  | 21   | 275  | 36.3 |  | 0.88 | Type of converter | Voltage source converter, general. |
| 200 | Δ | 25 | 7.9  |  | 28.5 | 1460 | 51.9 |  | 0.89 |                   |                                    |
| 400 | Δ | 50 | 17.2 |  | 30   | 2960 | 55.4 |  | 0.89 |                   |                                    |
| 400 | Δ | 80 | 17.2 |  | 29   | 4735 | 34.7 |  | 0.91 |                   |                                    |

IM B35 / IM 2001

FS 160 L

IP55

|  |  |
|--|--|
|  |  |
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Environmental conditions : -20 °C - +40 °C / 1000 m

Locked rotor time (hot / cold) : 16.8 s | 25.1 s

## Mechanical data

|                                                                                        |                                |                                |                            |                                                    |
|----------------------------------------------------------------------------------------|--------------------------------|--------------------------------|----------------------------|----------------------------------------------------|
| Sound level (SPL / SWL) at 50Hz 60Hz                                                   | 77 / 85 dB(A) <sup>2) 3)</sup> | 77 / 89 dB(A) <sup>2) 3)</sup> | Thermal class              | F                                                  |
| Moment of inertia                                                                      | 0.0637 kg m²                   |                                | Duty type                  | S1                                                 |
| Bearing DE   NDE                                                                       | 6309 C3                        | 6309 C3                        | Direction of rotation      | bidirectional                                      |
| <b>bearing lifetime</b>                                                                |                                |                                | Frame material             | cast iron                                          |
| L <sub>10mh</sub> F <sub>Rad,min</sub> for coupling operation<br>50 60Hz <sup>1)</sup> | 40000 h                        | 32000 h                        | Net weight of the motor    | 199 kg                                             |
| Regreasing device                                                                      | Without                        |                                | Motor weight incl. options | 199 kg                                             |
| Grease nipple                                                                          | -/-                            |                                | Coating (paint finish)     | Standard paint finish C2                           |
| Type of bearing                                                                        | Locating bearing DE            |                                | Color, paint shade         | RAL7030                                            |
| Condensate drainage holes                                                              | Without                        |                                | Motor protection           | (B) 3 PTC thermistors - for tripping (2 terminals) |
| External earthing terminal                                                             | With (standard)                |                                | Method of cooling          | IC411 - self ventilated, surface cooled            |
| Vibration severity grade                                                               | A                              |                                |                            |                                                    |

## Terminal box

|                          |           |                                |               |
|--------------------------|-----------|--------------------------------|---------------|
| Terminal box position    | top       | Max. cross-sectional area      | 16 mm²        |
| Material of terminal box | cast iron | Cable diameter from ... to ... | 19 mm - 28 mm |
| Type of terminal box     | TB1 J21   | Cable entry                    | -/-           |
| Contact screw thread     | M5        |                                |               |

**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                                                                                              |               |                                                                                       |      |
|                                                                                    | 1MB1563-1DA43-4JB4-Z |                 |             |                                                                                                              |               |                                                                                       |      |
|                                                                                    | B43                  |                 |             | rev.                                                                                                         | creation date | language                                                                              | Page |
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Data sheet for three-phase Squirrel-Cage-Motors SIMOTICS



Motor type : 1CD3164A

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Special design

B43 Version for converter operation with operating data on voltage-source DC link converter

Notes:

|                                                                                    |                               |                               |             |                                                                                                              |                                |
|------------------------------------------------------------------------------------|-------------------------------|-------------------------------|-------------|--------------------------------------------------------------------------------------------------------------|--------------------------------|
| 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>1MB1563-1DA43-4JB4-Z |                               |             |                                                                                                              | document number                |
| © Siemens AG 2023                                                                  | B43                           |                               |             |                                                                                                              | rev.<br>943                    |
|                                                                                    |                               |                               |             |                                                                                                              | creation date<br>2023-06-27    |
|                                                                                    |                               | language<br>en                | Page<br>2/2 |                         |                                |