

**Model No.** 4-Pole cage motor TCA 315L 160kW D400V 50Hz IM1001

| U<br>(V) | Δ / Y<br>Conn | f<br>[Hz] | P<br>[kW] | P<br>[hp] | I<br>[A] | n<br>[RPM] | T<br>[Nm] | IE<br>Class | % EFF at __ load |       |       | PF at __ load |       |       | I <sub>A</sub> /I <sub>N</sub><br>[pu] | T <sub>A</sub> /T <sub>N</sub><br>[pu] | T <sub>K</sub> /T <sub>N</sub><br>[pu] |
|----------|---------------|-----------|-----------|-----------|----------|------------|-----------|-------------|------------------|-------|-------|---------------|-------|-------|----------------------------------------|----------------------------------------|----------------------------------------|
|          |               |           |           |           |          |            |           |             | FL               | 3/4FL | 1/2FL | FL            | 3/4FL | 1/2FL |                                        |                                        |                                        |
| 400      | D             | 50        | 160       | 214,5     | 275      | 1489       | 1026,2    | IE3         | 95,9             | 96,0  | 95,6  | 0,88          | 0,86  | 0,79  | 8,40                                   | 2,81                                   | 3,80                                   |
| 690      | Y             |           |           |           | 158      |            |           |             |                  |       |       |               |       |       |                                        |                                        |                                        |
| 460      | D             | 60        | 184       | 246,6     | 274      | 1787       | 983,3     | IE2         | 95,0             | 95,0  | 94,8  | 0,89          |       |       | 8,30                                   | 2,80                                   | 3,80                                   |
|          | Y             |           |           |           |          |            |           |             |                  |       |       |               |       |       |                                        |                                        |                                        |

|                               |                                     |
|-------------------------------|-------------------------------------|
| Motor type                    | <b>TCA315LA4E3</b>                  |
| Enclosure                     | <b>Totally Enclosed Fan Cooling</b> |
| Frame Material                | <b>Cast iron</b>                    |
| Frame size                    | <b>315L</b>                         |
| Duty                          | <b>S1</b>                           |
| Voltage                       | <b>400 V</b>                        |
| Frequency                     | <b>50 Hz</b>                        |
| Power output                  | <b>160 kW</b>                       |
| Insulation class              | <b>F</b>                            |
| Ambient temperature           | <b>-20 till 40 °C</b>               |
| Temperature rise              | <b>temp.rise acc. F</b>             |
| Temperature rise winding      | <b>65 K</b>                         |
| Temperature rise surface      | <b>25 K</b>                         |
| Altitude above sea level      | <b>1000 mtr</b>                     |
| Hazardous area classification | <b>Safe area</b>                    |

|                    |                      |
|--------------------|----------------------|
| Rotor type         | <b>Cage motor</b>    |
| Bearing type       | <b>6319/C3</b>       |
| Lubrication method | <b>40gr/6000hrs</b>  |
| Type of grease     | <b>Chevron SRI-2</b> |

|                          |                   |
|--------------------------|-------------------|
| Phase resistance at 20°C | <b>0,0303 Ohm</b> |
| Country of origin        | <b>CN</b>         |

| Voltage/Freq  | Locked rotor<br>Torque [%<br>nom] | Starting<br>current<br>[% nom] | Pull-up<br>Torque<br>[% nom] | Breakdown<br>Torque<br>[% nom] | No-load<br>Current<br>[A] |
|---------------|-----------------------------------|--------------------------------|------------------------------|--------------------------------|---------------------------|
| @ D 400V 50Hz | 281%                              | 829%                           |                              | 380%                           | 83 A                      |
| @ D 460V 60Hz | 280%                              | 828%                           |                              | 380%                           |                           |

#### NOTE

All performance values at rated voltage and frequency.

All performance parameters are subjected to standard tolerance as per IEC 60034-1

Voltage, Frequency are as per IEC60034-1

Technical data are subject to change. There may be discrepancies between calculated and name plate values.

|            |                  |               |
|------------|------------------|---------------|
| Efficiency | Europe           | Global IEC    |
| Standards  | EN-IEC: 60034-30 | IEC: 60034-30 |

This is an uncontrolled copy, data can be changed anytime.

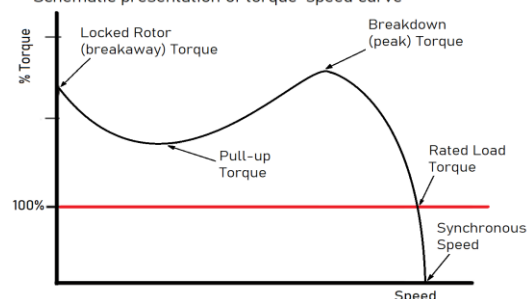
|                        |                |
|------------------------|----------------|
| Degree of protection   | <b>IP55</b>    |
| Mounting type          | <b>IM1001</b>  |
| Cooling method         | <b>IC411</b>   |
| Motor weight - approx. | <b>1290 kg</b> |
| Gross weight - approx. | <b>1330 kg</b> |

Vibration level **according IEC60034-14**

Direction of rotation **cw / ccw**

**PTC 150°C**

Schematic presentation of torque-speed curve



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Driving efficiency and sustainability

