

**Model No.** 4-Pole cage motor TCA 112M 4kW D400V 50Hz IM2101-FT165

| 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<br>FL 3/4FL 1/2FL | PF at __ load<br>FL 3/4FL 1/2FL | 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] |
|----------|---------------|-----------|-----------|-----------|----------|------------|-----------|-------------|------------------------------------|---------------------------------|----------------------------------------|----------------------------------------|----------------------------------------|
| 400      | D             | 50        | 4         | 5 1/3     | 8,02     | 1451       | 26,3      | IE3         | 88,7                               | 0,82                            | 8,00                                   | 2,70                                   | 3,10                                   |
| 690      | Y             |           |           |           | 4,63     |            |           |             |                                    |                                 |                                        |                                        |                                        |
| 460      | D             | 60        | 4,6       | 6,166     | 8        | 1751       | 25,1      | IE1         | 87,0 87,0 87,0                     | 0,83                            | 8,90                                   | 3,16                                   | 3,73                                   |
|          |               |           |           |           | 4,59     |            |           |             |                                    |                                 |                                        |                                        |                                        |

|                               |                                     |
|-------------------------------|-------------------------------------|
| Motor type                    | <b>TCA112MB4E3</b>                  |
| Enclosure                     | <b>Totally Enclosed Fan Cooling</b> |
| Frame Material                | <b>Cast iron</b>                    |
| Frame size                    | <b>112M</b>                         |
| Duty                          | <b>S1</b>                           |
| Voltage                       | <b>400 V</b>                        |
| Frequency                     | <b>50 Hz</b>                        |
| Power output                  | <b>4 kW</b>                         |
| Insulation class              | <b>F</b>                            |
| Ambient temperature           | <b>-20 till 40 °C</b>               |
| Temperature rise              | <b>-</b>                            |
| Temperature rise winding      | <b>80 K</b>                         |
| Temperature rise surface      | <b>-</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>6206-2Z/C3WT</b> |

|                |                      |
|----------------|----------------------|
| Type of grease | <b>Chevron SRI-2</b> |
|----------------|----------------------|

|                          |                   |
|--------------------------|-------------------|
| Phase resistance at 20°C | <b>3,2507 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 | 270%                              | 799%                           |                              | 310%                           |                           |
| @ D 460V 60Hz | 316%                              | 890%                           |                              | 373%                           |                           |

#### 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>IM2101-FT165</b>          |
| Cooling method         | <b>IC411</b>                 |
| Motor weight - approx. | <b>45 kg</b>                 |
| Gross weight - approx. | <b>46 kg</b>                 |
| Motor inertia          | <b>0,0192 kgm²</b>           |
| Vibration level        | <b>according IEC60034-14</b> |
| Direction of rotation  | <b>cw /ccw</b>               |
|                        | <b>PTC 150°C</b>             |

Schematic presentation of torque-speed curve



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Driving efficiency and sustainability

