

**Model No.** 2-Pole cage motor QCA 280M 90kW D400V 50Hz IM2001-FF500

| 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        | 90        | 120       | 150      | 2982       | 288,2     | IE4         | 95,8             | 95,8  | 94,8  | 0,90          | 0,88  | 0,81  | 7,50                                   | 2,20                                   | 3,60                                   |
| 690      | Y             |           |           |           | 86,8     |            |           |             |                  |       |       |               |       |       |                                        |                                        |                                        |
| 460      | D             | 60        | 104       | 139,4     | 151      | 3581       | 277,4     | IE4         | 95,4             | 95,4  | 95,0  | 0,91          |       |       | 7,40                                   | 2,10                                   | 3,40                                   |

|                               |                              |
|-------------------------------|------------------------------|
| Motor type                    | QCA280MA2E4                  |
| Enclosure                     | Totally Enclosed Fan Cooling |
| Frame Material                | Cast iron                    |
| Frame size                    | 280M                         |
| Duty                          | S1                           |
| Voltage                       | 400 V                        |
| Frequency                     | 50 Hz                        |
| Power output                  | 90 kW                        |
| Insulation class              | F                            |
| Ambient temperature           | -20 till 40 °C               |
| Temperature rise              | -                            |
| Temperature rise surface      |                              |
| Altitude above sea level      | 1000 mtr                     |
| Hazardous area classification | Safe area                    |

|                    |               |
|--------------------|---------------|
| Rotor type         | Cage motor    |
| Bearing type       | 6314/C3       |
| Lubrication method | 23gr/4300hrs  |
| Type of grease     | Chevron SRI-2 |

|                   |    |
|-------------------|----|
| Country of origin | CN |
|-------------------|----|

| Voltage/Freq  | Locked rotor<br>Torque [%<br>nom] | Starting<br>current [% nom] | Pull-up<br>Torque [% nom] | Breakdown<br>Torque [% nom] | No-load<br>Current [A] |
|---------------|-----------------------------------|-----------------------------|---------------------------|-----------------------------|------------------------|
| @ D 400V 50Hz | 220%                              | 746%                        |                           | 360%                        |                        |
| @ D 460V 60Hz | 210%                              | 735%                        |                           | 340%                        |                        |

#### 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   | IP55                    |
| Mounting type          | IM2001-FF500            |
| Cooling method         | IC411                   |
| Motor weight - approx. | 860 kg                  |
| Gross weight - approx. | 890 kg                  |
| Motor inertia          | 1,5530 kgm <sup>2</sup> |
| Vibration level        | according IEC60034-14   |
| Direction of rotation  | cw /ccw                 |
|                        | PTC 150°C               |

Schematic presentation of torque-speed curve



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P000054360



Driving efficiency and sustainability

