

**Model No.** 4-Pole cage motor QCA 280S 75kW 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        | 75        | 100       | 131      | 1489       | 481,0     | IE4         | 96,0             | 95,6  | 94,8  | 0,86          | 0,84  | 0,78  | 6,80                                   | 2,50                                   | 3,00                                   |
| 690      | Y             |           |           |           | 75       |            |           |             |                  |       |       |               |       |       |                                        |                                        |                                        |
| 460      | D             | 60        | 86        | 115,3     | 131      | 1790       | 458,8     | IE3         | 95,4             | 95,4  | 95,0  | 0,86          |       |       | 6,90                                   | 2,60                                   | 2,80                                   |

|                |                                     |
|----------------|-------------------------------------|
| Motor type     | <b>QCA280S4E4</b>                   |
| Enclosure      | <b>Totally Enclosed Fan Cooling</b> |
| Frame Material | <b>Cast iron</b>                    |
| Frame size     | <b>280S</b>                         |
| Duty           | <b>S1</b>                           |
| Voltage        | <b>400 V</b>                        |
| Frequency      | <b>50 Hz</b>                        |
| Power output   | <b>75 kW</b>                        |

|                               |                       |
|-------------------------------|-----------------------|
| Insulation class              | <b>F</b>              |
| Ambient temperature           | <b>-20 till 40 °C</b> |
| Temperature rise              | <b>-</b>              |
| Temperature rise winding      | <b>56 K</b>           |
| Temperature rise surface      | <b>27 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>6317/C3</b>       |
| Lubrication method | <b>30gr/8000hrs</b>  |
| Type of grease     | <b>Chevron SRI-2</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 | 250%                              | 681%                           |                              | 300%                           |                           |
| @ D 460V 60Hz | 260%                              | 690%                           |                              | 280%                           |                           |

#### 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>760 kg</b>                |
| Gross weight - approx. | <b>780 kg</b>                |
| Motor inertia          | <b>2,9060 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

