

**Model No.** 2-Pole cage motor 6RN 180M 22kW D400V 50Hz IM3011-FF300

| 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        | 22        | 30        | 40,5     | 2945       | 71,3      | IE1         | 89,9                               | 0,87                            | 7,70                                   | 2,50                                   | 3,50                                   |
| 690      | Y             |           |           |           | 23,3     |            |           |             |                                    |                                 |                                        |                                        |                                        |
| 460      | D             | 60        | 24,5      | 32,84     | 39,5     | 3550       | 65,9      | IE1         | 89,5                               | 0,87                            | 8,20                                   | 2,35                                   | 3,70                                   |

|                |                              |
|----------------|------------------------------|
| Motor type     | 6RN180M02E12                 |
| Enclosure      | Totally Enclosed Fan Cooling |
| Frame Material | Cast iron                    |
| Frame size     | 180M                         |
| Duty           | S1                           |
| Voltage        | 400 V                        |
| Frequency      | 50 Hz                        |
| Power output   | 22 kW                        |

|                               |                  |
|-------------------------------|------------------|
| Insulation class              | F                |
| Ambient temperature           | -20 till 40 °C   |
| Temperature rise              | temp.rise acc. F |
| Temperature rise winding      | 74 K             |
| Temperature rise surface      |                  |
| Altitude above sea level      | 1000 mtr         |
| Hazardous area classification | Safe area        |
| Te time                       | 0 sec            |

|              |              |
|--------------|--------------|
| Rotor type   | Cage motor   |
| Bearing type | 6310-2Z/C3WT |

|                |           |
|----------------|-----------|
| Type of grease | Unirex N3 |
|----------------|-----------|

|                   |    |
|-------------------|----|
| Country of origin | CZ |
|-------------------|----|

| 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%                              | 767%                           | 252%                         | 350%                           | 14,9 A                    |
| @ D 460V 60Hz | 235%                              | 817%                           | 250%                         | 370%                           | 13,1 A                    |

### 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          | IM3011-FF300            |
| Cooling method         | IC411                   |
| Motor weight - approx. | 152 kg                  |
| Gross weight - approx. | 157 kg                  |
| Motor inertia          | 0,0690 kgm <sup>2</sup> |
| Vibration level        | according IEC60034-14   |

|                       |          |
|-----------------------|----------|
| Direction of rotation | cw / ccw |
|-----------------------|----------|

Schematic presentation of torque-speed curve



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Driving efficiency and sustainability

