

**Model No.** 2-Pole cage motor 6RN 315S 110kW D400V 50Hz IM1011

| 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        | 110       | 150       | 183      | 2982       | 352,3     | IE3         | 95,6             | 95,7  | 95,3  | 0,91         | 0,89  | 0,85  | 7,49                                   | 2,17                                   | 2,96                                   |
| 690      | Y             |           |           |           | 105      |            |           |             |                  |       |       |              |       |       |                                        |                                        |                                        |
| 460      | D             | 60        | 123       | 164,9     | 178      | 3582       | 327,9     | IE3         | 95,4             | 95,4  | 94,7  | 0,91         | 0,90  | 0,85  | 7,60                                   | 2,24                                   | 2,91                                   |

|                |                              |
|----------------|------------------------------|
| Motor type     | 6RN315S02E30                 |
| Enclosure      | Totally Enclosed Fan Cooling |
| Frame Material | Cast iron                    |
| Frame size     | 315S                         |
| Duty           | S1                           |
| Voltage        | 400 V                        |
| Frequency      | 50 Hz                        |
| Power output   | 110 kW                       |

|                               |                  |
|-------------------------------|------------------|
| Insulation class              | F                |
| Ambient temperature           | -20 till 40 °C   |
| Temperature rise              | temp.rise acc. F |
| Temperature rise winding      | 67 K             |
| Temperature rise surface      | 32 K             |
| Altitude above sea level      | 1000 mtr         |
| Hazardous area classification | Safe area        |
| Te time                       | 0 sec            |

|                    |              |
|--------------------|--------------|
| Rotor type         | Cage motor   |
| Bearing type       | 6316/C3      |
| Lubrication method | 30gr/3000hrs |
| Type of grease     | Unirex N3    |

|                          |            |
|--------------------------|------------|
| Phase resistance at 20°C | 0,0338 Ohm |
| 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 | 217%                              | 748%                           | 185%                         | 296%                           | 41,1 A                    |
| @ D 460V 60Hz | 224%                              | 758%                           | 183%                         | 291%                           | 38,6 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                      | IM1011                  |
| Cooling method                     | IC411                   |
| Motor weight - approx.             | 760 kg                  |
| Gross weight - approx.             | 780 kg                  |
| Motor inertia                      | 1,4000 kgm <sup>2</sup> |
| Vibration level                    | according IEC60034-14   |
| Noise level (pressure) acc 60034-9 | 73 dB(A)                |

|                       |           |
|-----------------------|-----------|
| Direction of rotation | cw /ccw   |
|                       | PTC 150°C |

Schematic presentation of torque-speed curve



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P000014512



Driving efficiency and sustainability

