

Model No. 4-Pole cage motor 6RN 315M 110kW D400V 50Hz IM2021-FF600

| 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       | 192      | 1491       | 704,6     | IE4         | 96,5             | 96,5  | 96,1  | 0,85         | 0,82  | 0,74  | 9,04                                   | 3,29                                   | 3,26                                   |
| 690      | Y             |           |           |           | 110      |            |           |             |                  |       |       |              |       |       |                                        |                                        |                                        |
| 460      | D             | 60        | 127       | 170,2     | 192      | 1791       | 677,2     | IE4         | 96,4             | 96,4  | 95,9  | 0,86         | 0,83  | 0,75  | 8,87                                   | 3,20                                   | 3,11                                   |

|                |                              |
|----------------|------------------------------|
| Motor type     | 6RN315M04E40                 |
| Enclosure      | Totally Enclosed Fan Cooling |
| Frame Material | Cast iron                    |
| Frame size     | 315M                         |
| 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. B |
| Temperature rise winding      | 48 K             |
| Temperature rise surface      | 25 K             |
| Altitude above sea level      | 1000 mtr         |
| Hazardous area classification | Safe area        |

|                    |              |
|--------------------|--------------|
| Rotor type         | Cage motor   |
| Bearing type       | 6319/C3      |
| Lubrication method | 40gr/6000hrs |
| 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 | 329%                              | 906%                           | 250%                         | 326%                           | 65,6 A                    |
| @ D 460V 60Hz | 320%                              | 880%                           | 234%                         | 311%                           | 61 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          | IM2021-FF600            |
| Cooling method         | IC411                   |
| Motor weight - approx. | 890 kg                  |
| Gross weight - approx. | 920 kg                  |
| Motor inertia          | 2,7000 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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Driving efficiency and sustainability

