

Model No. 2-Pole cage motor 6RN 225M 45kW D400V 50Hz IM2021-FF400

| 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        | 45        | 60,32     | 80       | 2970       | 144,7     | IE4         | 95,1             | 95,1  | 94,4  | 0,84          | 0,80  | 0,70  | 9,10                                   | 3,06                                   | 4,10                                   |
| 690      | Y             |           |           |           | 46,1     |            |           |             |                  |       |       |               |       |       |                                        |                                        |                                        |
| 460      | D             | 60        | 51        | 68,36     | 78       | 3570       | 136,4     | IE4         | 95,4             | 95,3  | 94,5  | 0,86          | 0,82  | 0,73  | 9,14                                   | 3,05                                   | 3,97                                   |

|                |                              |
|----------------|------------------------------|
| Motor type     | 6RN225M02E42                 |
| Enclosure      | Totally Enclosed Fan Cooling |
| Frame Material | Cast iron                    |
| Frame size     | 225M                         |
| Duty           | S1                           |
| Voltage        | 400 V                        |
| Frequency      | 50 Hz                        |
| Power output   | 45 kW                        |

|                               |                  |
|-------------------------------|------------------|
| Insulation class              | F                |
| Ambient temperature           | -20 till 40 °C   |
| Temperature rise              | temp.rise acc. B |
| Temperature rise winding      | 58 K             |
| Temperature rise surface      | 26 K             |
| Altitude above sea level      | 1000 mtr         |
| Hazardous area classification | Safe area        |

|                    |              |
|--------------------|--------------|
| Rotor type         | Cage motor   |
| Bearing type       | 6313/C3      |
| Lubrication method | 22gr/4000hrs |
| Type of grease     | Unirex N3    |

|                          |            |
|--------------------------|------------|
| Phase resistance at 20°C | 0,0778 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 | 306%                              | 920%                           | 282%                         | 410%                           | 30,6 A                    |
| @ D 460V 60Hz | 305%                              | 915%                           | 274%                         | 397%                           | 27,5 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.

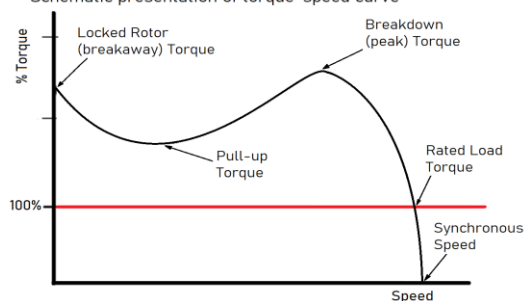
|            |                  |               |
|------------|------------------|---------------|
| Efficiency | Europe           | Global IEC    |
| Standards  | EN-IEC: 60034-30 | IEC: 60034-30 |

This is an uncontrolled copy, data can be changed anytime.

|                                    |                         |
|------------------------------------|-------------------------|
| Degree of protection               | IP55                    |
| Mounting type                      | IM2021-FF400            |
| Cooling method                     | IC411                   |
| Motor weight - approx.             | 340 kg                  |
| Gross weight - approx.             | 350 kg                  |
| Motor inertia                      | 0,2600 kgm <sup>2</sup> |
| Vibration level                    | according IEC60034-14   |
| Noise level (pressure) acc 60034-9 | 75 dB(A)                |

Direction of rotation cw / ccw

Schematic presentation of torque-speed curve



P000040398  
P000040455



Driving efficiency and sustainability

