

**Model No.** 6-Pole cage motor 6RN 280M 75kW D400V 50Hz IM3021-FF500

| 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       | 139      | 985        | 727,2     | N/A         | 92,6             | 93,3  | 93,2  | 0,84          | 0,84  | 0,71  | 7,00                                   | 2,90                                   | 2,70                                   |
| 690      | Y             |           |           |           | 81       |            |           |             |                  |       |       |               |       |       |                                        |                                        |                                        |
| 460      | D             | 60        | 90        | 120       | 143      | 1185       | 725,3     | N/A         | 93,0             | 93,7  | 93,7  | 0,85          | 0,82  | 0,74  | 7,00                                   | 2,80                                   | 2,60                                   |

|                               |                              |
|-------------------------------|------------------------------|
| Motor type                    | 6RN280M06E16                 |
| Enclosure                     | Totally Enclosed Fan Cooling |
| Frame Material                | Cast iron                    |
| Frame size                    | 280M                         |
| Duty                          | S1                           |
| Voltage                       | 400 V                        |
| Frequency                     | 50 Hz                        |
| Power output                  | 75 kW                        |
| Insulation class              | F                            |
| Ambient temperature           | -20 till 40 °C               |
| Temperature rise              | -                            |
| Temperature rise surface      |                              |
| Altitude above sea level      | 1000 mtr                     |
| Hazardous area classification | Safe area                    |

|                    |              |
|--------------------|--------------|
| Rotor type         | Cage motor   |
| Bearing type       | 6317/C3      |
| Lubrication method | 30gr/8000hrs |
| Type of grease     | Unirex N3    |

|                          |            |
|--------------------------|------------|
| Phase resistance at 20°C | 0,2877 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 | 290%                              | 700%                           |                              | 270%                           |                           |
| @ D 460V 60Hz | 280%                              | 699%                           | 236%                         | 260%                           | 46,2 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

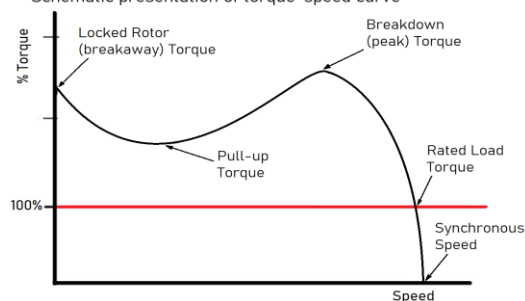
Technical data are subject to change. There may be discrepancies between calculated and name plate values.

|            |                  |               |
|------------|------------------|---------------|
| 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          | IM3021-FF500            |
| Cooling method         | IC411                   |
| Motor weight - approx. | 560 kg                  |
| Gross weight - approx. | 580 kg                  |
| Motor inertia          | 1,7000 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

