

Model No. 6-Pole cage motor 6RN 280S 45kW D440V 60Hz IM2021-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<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] |
|----------|-------------|-----------|-----------|-----------|----------|------------|-----------|-------------|------------------------------------|---------------------------------|----------------------------------------|----------------------------------------|----------------------------------------|
| 440      | D           | 60        | 45        | 60,32     | 73,8     | 1187       | 362,0     | IE3         | 94,2                               | 0,85                            | 7,82                                   | 2,77                                   | 2,75                                   |
|          |             |           |           |           |          |            |           |             |                                    |                                 |                                        |                                        |                                        |

|                               |                              |
|-------------------------------|------------------------------|
| Motor type                    | 6RN280S06E30                 |
| Enclosure                     | Totally Enclosed Fan Cooling |
| Frame Material                | Cast iron                    |
| Frame size                    | 280S                         |
| Duty                          | S1                           |
| Voltage                       | 440 V                        |
| Frequency                     | 60 Hz                        |
| Power output                  | 45 kW                        |
| Insulation class              | F                            |
| Ambient temperature           | -20 till 40 °C               |
| Temperature rise              | temp.rise acc. B             |
| Temperature rise winding      | 39 K                         |
| 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    |

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

| Voltage/Freq  | Locked rotor<br>Torque [%<br>nom] | Starting<br>current [% nom] | Pull-up<br>Torque [% nom] | Breakdown<br>Torque [% nom] | No-load<br>Current [A] |
|---------------|-----------------------------------|-----------------------------|---------------------------|-----------------------------|------------------------|
| @ D 440V 60Hz | 277%                              | 765%                        | 209%                      | 275%                        | 23,6 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                      | IM2021-FF500            |
| Cooling method                     | IC411                   |
| Motor weight - approx.             | 510 kg                  |
| Gross weight - approx.             | 530 kg                  |
| Motor inertia                      | 1,4000 kgm <sup>2</sup> |
| Vibration level                    | according IEC60034-14   |
| Noise level (pressure) acc 60034-9 | 64 dB(A)                |

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

Schematic presentation of torque-speed curve



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Driving efficiency and sustainability

