

**Model No.** 4-Pole cage motor 6RN 90L 1,5kW D400V 50Hz IM3641-FT130

| 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        | 1,5       | 2         | 3,35     | 1415       | 10,1      | IE1         | 76,3             | 76,9  | 73,9  | 0,80          | 0,72  | 0,57  | 4,73                                   | 2,35                                   | 2,56                                   |
| 690      | Y             |           |           |           | 1,95     |            |           |             |                  |       |       |               |       |       |                                        |                                        |                                        |
| 460      | D             | 60        | 1,75      | 2 1/3     | 3,35     | 1710       | 9,8       | IE1         | 78,7             | 79,0  | 76,4  | 0,81          | 0,73  | 0,60  | 5,50                                   | 2,52                                   | 2,77                                   |

|                               |                              |
|-------------------------------|------------------------------|
| Motor type                    | 6RN90L04E14                  |
| Enclosure                     | Totally Enclosed Fan Cooling |
| Frame Material                | Aluminum                     |
| Frame size                    | 90L                          |
| Duty                          | S1                           |
| Voltage                       | 400 V                        |
| Frequency                     | 50 Hz                        |
| Power output                  | 1,5 kW                       |
| Insulation class              | F                            |
| Ambient temperature           | -20 till 40 °C               |
| Temperature rise              | temp.rise acc. H             |
| Temperature rise winding      | 84 K                         |
| Temperature rise surface      | 49 K                         |
| Altitude above sea level      | 1000 mtr                     |
| Hazardous area classification | Safe area                    |
| Te time                       | 0 sec                        |

|                                    |                         |
|------------------------------------|-------------------------|
| Degree of protection               | IP55                    |
| Mounting type                      | IM3641-FT130            |
| Cooling method                     | IC411                   |
| Motor weight - approx.             | 15 kg                   |
| Gross weight - approx.             | 15 kg                   |
| Motor inertia                      | 0,0033 kgm <sup>2</sup> |
| Vibration level                    | according IEC60034-14   |
| Noise level (pressure) acc 60034-9 | 51 dB(A)                |

|              |              |
|--------------|--------------|
| Rotor type   | Cage motor   |
| Bearing type | 6004-2Z/C3WT |

|                |           |
|----------------|-----------|
| Type of grease | Unirex N3 |
|----------------|-----------|

|                          |             |
|--------------------------|-------------|
| Phase resistance at 20°C | 15,0290 Ohm |
| 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 400V 50Hz | 235%                              | 495%                        |                           | 256%                        | 2,37 A                 |
| @ D 460V 60Hz | 252%                              | 561%                        |                           | 277%                        | 2,1 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.

Schematic presentation of torque-speed curve



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Driving efficiency and sustainability

