

**Model No.** 4-Pole cage motor 5RN 90S 1,1kW D400V 50Hz IM3641-FT115

| 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] |
|----------|---------------|-----------|-----------|-----------|----------|------------|-----------|-------------|------------------------------------|---------------------------------|----------------------------------------|----------------------------------------|----------------------------------------|
| 400      | D             | 50        | 1,1       | 1 1/2     | 2,55     | 1440       | 7,3       | IE2         | 81,4 81,4                          | 0,77                            | 6,67                                   | 2,70                                   | 3,20                                   |
| 690      | Y             |           |           |           | 1,47     |            |           |             |                                    |                                 |                                        |                                        |                                        |
| 460      | D             | 60        | 1,3       | 1,743     | 2,5      | 1729       | 7,2       | IE2         | 84,0                               | 0,77                            | 6,40                                   | 2,70                                   | 3,20                                   |

|                               |                              |
|-------------------------------|------------------------------|
| Motor type                    | 5RN90S04E20                  |
| Enclosure                     | Totally Enclosed Fan Cooling |
| Frame Material                | Cast iron                    |
| Frame size                    | 90S                          |
| Duty                          | S1                           |
| Voltage                       | 400 V                        |
| Frequency                     | 50 Hz                        |
| Power output                  | 1,1 kW                       |
| Insulation class              | F                            |
| Ambient temperature           | -20 till 40 °C               |
| Temperature rise              | -                            |
| Temperature rise winding      | 33 K                         |
| Temperature rise surface      | 14 K                         |
| Altitude above sea level      | 1000 mtr                     |
| Hazardous area classification | Safe area                    |
| Te time                       | 0 sec                        |

|                        |              |
|------------------------|--------------|
| Degree of protection   | IP55         |
| Mounting type          | IM3641-FT115 |
| Cooling method         | IC411        |
| Motor weight - approx. | 12 kg        |
| Gross weight - approx. | 12 kg        |

Vibration level according IEC60034-14

Direction of rotation cw / ccw

|              |              |
|--------------|--------------|
| Rotor type   | Cage motor   |
| Bearing type | 6205-2Z/C3WT |

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

|                          |             |
|--------------------------|-------------|
| Phase resistance at 20°C | 16,0000 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 | 270%                              | 666%                           | 220%                         | 320%                           | 1,6 A                     |
| @ D 460V 60Hz | 270%                              | 640%                           |                              | 320%                           |                           |

### 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

