## **PRODUCT INFORMATION PACKET**

Model No: 6RN132S04E30U46B1089 Catalog No: 6RN132S04E30U46B@1089 5.50 kW General Purpose Low Voltage IEC Motor IE3, 3 phase, 1500 rpm, D400/Y690V 50Hz, 132S Frame B3, IC411



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# rotor nl

## Nameplate Specifications

| Output HP                                    | 7.5 Hp                                       | Output KW   | 5.5 kW                               |
|--|--|---|--------------------------------------|
| Frequency                                    | 50 Hz  | Voltage   | D400/Y690 V                          |
| Current                                      | 10.50 A                                      | Speed   | 1475 rpm                             |
| Service Factor                               | 1  | Phase   | 3                                    |
| Efficiency                                   | 89.6 %                                       | Power Factor                                      | 0.84                                 |
| Duty   | S1   | Insulation Class                                  | F                                    |
| Frame  | 132S   | Enclosure   | Totally Enclosed Fan Cooled          |
|  |  |   |                                      |
| Thermal Protection                           | No Protection                                | Ambient Temperature                               | 40 °C                                |
| Thermal Protection<br>Drive End Bearing Size | No Protection<br>6308-2Z/C3WT (-40°C/+160°C) | Ambient Temperature<br>Opp Drive End Bearing Size | 40 °C<br>6308-2Z/C3WT (-40°C/+160°C) |
|  |  | ·   |                                      |
| Drive End Bearing Size                       | 6308-2Z/C3WT (-40°C/+160°C)                  | Opp Drive End Bearing Size                        | 6308-2Z/C3WT (-40°C/+160°C)          |

## **Technical Specifications**

| Electrical Type | Squirrel Cage | Starting Method   | Direct On Line      |
|-----------------|---------------|-------------------|---------------------|
| Poles           | 4             | Rotation          | Clockwise Shaft End |
| Mounting        | B3            | Motor Orientation | Any                 |
| Frame Material  | Cast iron     | Shaft Type        | Keyed               |
| Shaft Diameter  | 38 mm         | Shaft Extension   | 80 mm               |

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#### Model No. 4-Pole cage motor 6

|        | tel.: +31 545 4646<br>tel.: +31 545 4646 |             |          |       |                |                |                                  |   |  |
|--------|--|-------------|----------|-------|----------------|----------------|----------------------------------|---|--|
| 6RN 13 | 2S 5,5kV                                 | V D400V 50H | z IM1089 |       |                |                |                                  |   |  |
|        |  |             |          |       |                |                |                                  |   |  |
| Р      | I  | n           | т        | IE    | % EFF at load  | PF atload      | I <sub>A</sub> /I <sub>N</sub> 1 | Γ <sub>Α</sub> /Τ <sub>Ν</sub> Τ <sub>Κ</sub> /Τ <sub>Ν</sub> |  |
| [hp]   | [A]                                      | [RPM]       | [Nm]     | Class | FL 3/4FL 1/2FL | FL 3/4FL 1/2FL | [pu]                             | [pu] [pu]   |  |

| U   | Δ/Υ  | f    | Р    | Р     | 1    | n     | т    | IE    | % EI | FF at | load  | PF   | atlo  | ad    | I <sub>A</sub> /I <sub>N</sub> | $T_A/T_N$ | T <sub>κ</sub> /T <sub>N</sub> |  |
|-----|------|------|------|-------|------|-------|------|-------|------|-------|-------|------|-------|-------|--------------------------------|-----------|--------------------------------|--|
| (V) | Conn | [Hz] | [kW] | [hp]  | [A]  | [RPM] | [Nm] | Class | FL   | 3/4FL | 1/2FL | FL   | 3/4FL | 1/2FL | [pu]                           | [pu]      | [pu]                           |  |
| 400 | D    | 50   | 5,5  | 7,25  | 10,5 | 1475  | 36   | IE3   | 89,6 | 89,6  | 88,6  | 0,84 | 0,80  | 0,71  | 8,20                           | 2,80      | 3,90                           |  |
| 690 | Y    |      |      |       | 6,1  |       |      |       |      |       |       |      |       |       |                                |           |                                |  |
| 460 | D    | 60   | 6,3  | 8,445 | 10,4 | 1775  | 33,9 | IE2   | 90,5 |       |       | 0,84 |       |       | 7,78                           | 2,30      | 3,36                           |  |
|     |      |      |      |       |      |       |      |       |      |       |       |      |       |       |                                |           |                                |  |

| Motor type                    | 6RN132S04E30                 |
|-------------------------------|------------------------------|
| Enclosure                     | Totally Enclosed Fan Cooling |
| Frame Material                | Cast iron                    |
| Frame size                    | 1325                         |
| Duty                          | S1                           |
| Voltage                       | <b>400</b> V                 |
| Frequency                     | <b>50</b> Hz                 |
| Power output                  | 5,5 kW                       |
|                               |                              |
| Insulation class              | F                            |
| Ambient temperature           | <b>-20 till 40</b> °C        |
| Temperature rise              | temp.rise acc. B (80K)       |
| Temperature rise winding      | <b>47</b> K                  |
| Temperature rise surface      |                              |
| Altitude above sea level      | <b>1000</b> mtr              |
| Hazardous area classification | Safe area                    |
|                               |                              |
|                               |                              |

| Degree of protection               | IP55                           |
|------------------------------------|--------------------------------|
| Mounting type                      | IM1089                         |
| Cooling method                     | IC411                          |
| Motor weight - approx.             | <b>74</b> kg                   |
| Gross weight - approx.             | <b>76</b> kg                   |
| Motor inertia                      | <b>0,0460</b> kgm <sup>2</sup> |
|                                    |                                |
| Vibration level                    | according IEC60034-14          |
| Noise level (pressure) acc 60034-9 | <b>57</b> dB(A)                |
|                                    |                                |

 $\Box$ 

Mors 1-5, 7151 MX Eibergen NL

b.v.

Direction of rotation

cw /ccw

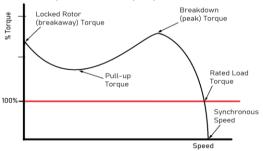
BvD

| Rotor type     | Cage motor                  |
|----------------|-----------------------------|
| Bearing type   | 6308-2Z/C3WT - 6308-2Z/C3WT |
|                |                             |
| Type of grease | Unirex N3                   |
|                |                             |
|                |                             |

| Phase resistance at 20°C | <b>2,2810</b> 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 | 280%                              | 820%                           | 220%                         | 390%                           | 4,4 A                     |
| @ D 460V 60Hz | 230%                              | 777%                           | 173%                         | 336%                           | 4.06 A                    |

### Schematic presentation of torque-speed curve



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

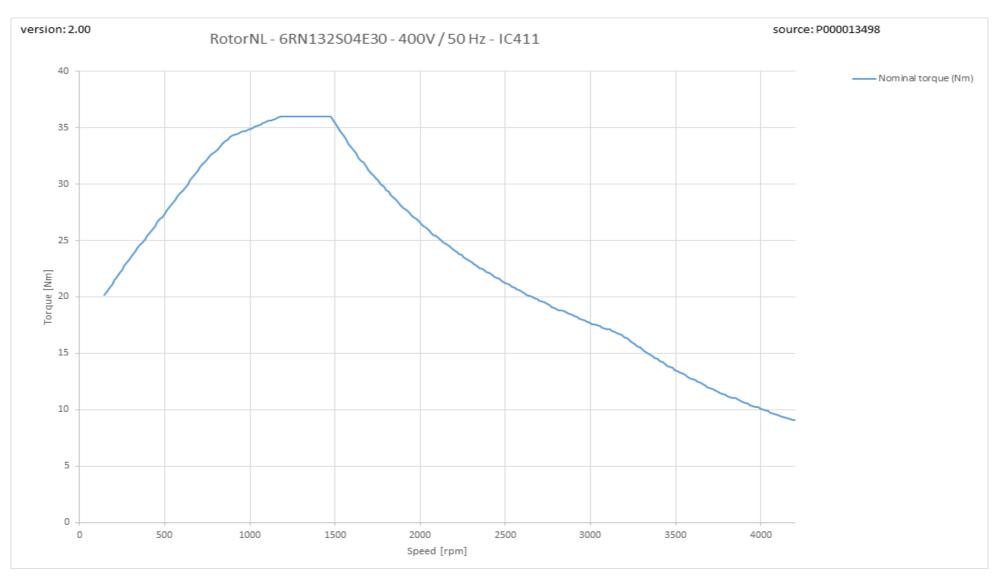
| Technical dat | a are subject to change. Th | ere may be discrepancies between calculated and name plate values. | rotor     |
|---------------|-----------------------------|--|-----------|
| Efficiency    | Europe                      | Global IEC   | ISO 9001  |
| Standards     | EN-IEC: 60034-30            | IEC: 60034-30  | certified |
|               |                             |  | company   |

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## 6RN132S04E30 4-pole 5,50kW D/Y 400/690V 50Hz S1 IC411 IE3

## rotor ni

## Torque versus Speed curve with variable frequency drive



Therm\_VSD graph

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Tn graph

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