

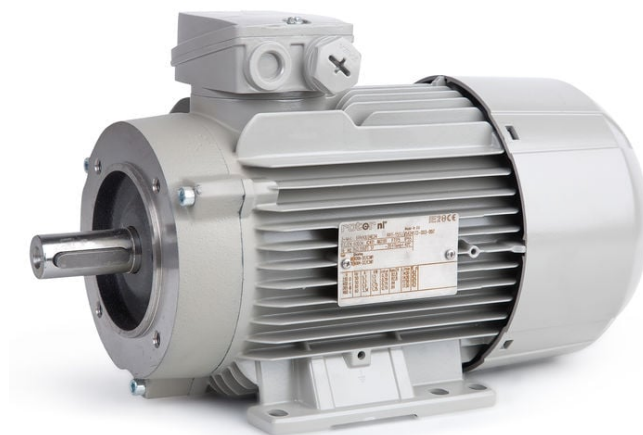
PRODUCT INFORMATION PACKET



Model No: 6RN90L04E34U24B2181-B

Catalog No: 6RN90L04E34U24B@2181-B

1.50 kW General Purpose Low Voltage IEC Motor IE3, 3 phase, 1500 rpm, D230/Y400V 50Hz,
90L Frame B34, IC411



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Nameplate Specifications

| | | | |
|------------------------|-----------------------------|----------------------------|-----------------------------|
| Output HP | 2.00 Hp | Output KW | 1.5 kW |
| Frequency | 50 Hz | Voltage | D230/Y400 V |
| Current | 5.61 A | Speed | 1445 rpm |
| Service Factor | 1 | Phase | 3 |
| Efficiency | 85.3 % | Power Factor | 0.79 |
| Duty | S1 | Insulation Class | F |
| Frame | 90L | Enclosure | Totally Enclosed Fan Cooled |
| Thermal Protection | No Protection | Ambient Temperature | 40 °C |
| Drive End Bearing Size | 6205-2Z/C3WT (-40°C/+160°C) | Opp Drive End Bearing Size | 6004-2Z/C3WT (-40°C/+160°C) |
| UL | No | CSA | Optional |
| CE | Yes | IP Code | IP55 |
| Number of Speeds | 1 | Efficiency Class | IE3 |

Technical Specifications

| | | | |
|-----------------|--------------------|-------------------|---------------------|
| Electrical Type | Squirrel Cage | Starting Method | Direct On Line |
| Poles | 4 | Rotation | Clockwise Shaft End |
| Mounting | B34 | Motor Orientation | Any |
| Frame Material | Cast iron | Shaft Type | Keyed |
| Shaft Diameter | 24 mm | Shaft Extension | 50 mm |
| Outline Drawing | 6RN90L04E34_2141-B | | |

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Datasheet



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Model No. 4-Pole cage motor 6RN 90L 1,5kW D230V 50Hz IM2181-FT130

| U (V) | Δ/Y Conn | f [Hz] | P | | I [A] | n [RPM] | T [Nm] | IE Class | % EFF at __ load | | | PF at __load | | | I _A /I _N [pu] | T _A /T _N [pu] | T _R /T _N [pu] |
|----------|-------------|-----------|------|-------|----------|------------|-----------|-------------|------------------|-------|-------|--------------|-------|-------|--|--|--|
| | | | [kW] | [hp] | | | | | FL | 3/4FL | 1/2FL | FL | 3/4FL | 1/2FL | | | |
| 230 | D | 50 | 1,5 | 2 | 5,61 | 1445 | 9,92 | IE3 | 85,0 | 85,3 | 84,3 | 0,79 | 0,75 | 0,65 | 7,05 | 2,80 | 3,64 |
| 400 | Y | | | | 3,25 | | | | | | | | | | | | |
| 265 | D | 60 | 1,75 | 2 1/3 | 5,46 | 1745 | 9,6 | IE3 | 86,5 | 86,5 | 85,5 | 0,80 | 0,75 | 0,65 | 7,70 | 3,90 | 2,80 |
| 460 | Y | | | | 3,15 | | | | | | | | | | | | |

| | |
|-------------------------------|-------------------------------------|
| Motor type | 6RN90L04E34 |
| Enclosure | Totally Enclosed Fan Cooling |
| Frame Material | Aluminum |
| Frame size | 90L |
| Duty | S1 |
| Voltage | 230 V |
| Frequency | 50 Hz |
| Power output | 1,5 kW |
| Insulation class | F |
| Ambient temperature | -20 till 40 °C |
| Temperature rise | temp.rise acc. B (80K) |
| Temperature rise winding | 33 K |
| Temperature rise surface | |
| Altitude above sea level | 1000 mtr |
| Hazardous area classification | Safe area |

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

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

| | |
|--------------------------|-------------------|
| Phase resistance at 20°C | 3,8500 Ohm |
| Country of origin | CZ |

| Voltage/Freq | Locked rotor Torque [nom] [%] | Starting current [% nom] | Pull-up Torque [% nom] | Breakdown Torque [% nom] | No-load Current [A] |
|---------------|-------------------------------|--------------------------|------------------------|--------------------------|---------------------|
| @ D 230V 50Hz | 280% | 709% | 220% | 364% | 3,1 A |
| @ D 265V 60Hz | 390% | 769% | 240% | 280% | 2,87 A |

NOTE

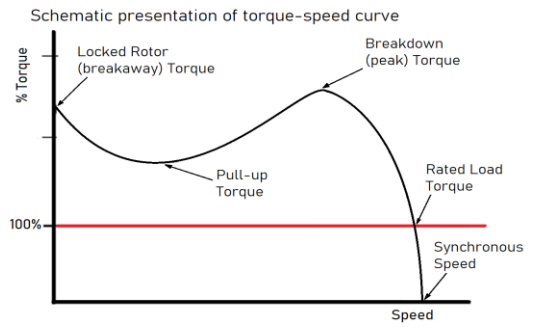
All performance values at rated voltage and frequency.
 All performance parameters are subjected to standard tolerance as per IEC 60034-1
 Voltage, Frequency are as per IEC60034-1
 Technical data are subject to change. There may be discrepancies between calculated and name plate values.

| | | |
|------------|------------------|---------------|
| Efficiency | Europe | Global IEC |
| Standards | EN-IEC: 60034-30 | IEC: 60034-30 |

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| | |
|------------------------------------|-------------------------------|
| Degree of protection | IP55 |
| Mounting type | IM2181-FT130 |
| Cooling method | IC411 |
| Motor weight - approx. | 21 kg |
| Gross weight - approx. | 22 kg |
| Motor inertia | 0,0036 kgm² |
| Vibration level | according IEC60034-14 |
| Noise level (pressure) acc 60034-9 | 56 dB(A) |

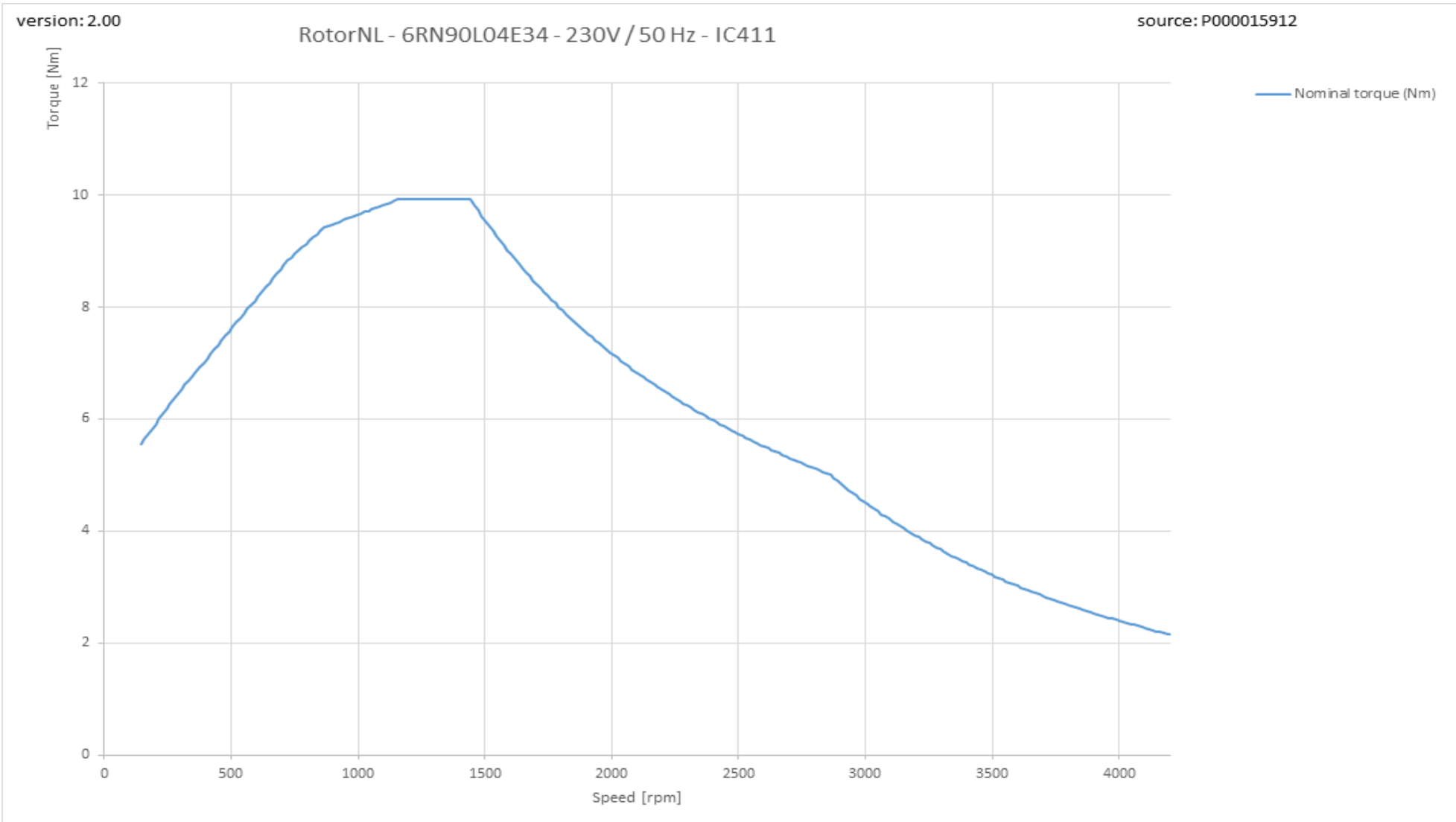
| | |
|-----------------------|----------------|
| Direction of rotation | cw /ccw |
|-----------------------|----------------|



6RN90L04E34 4-pole 1,50kW D/Y 230/400V 50Hz S1 IC411 IE3

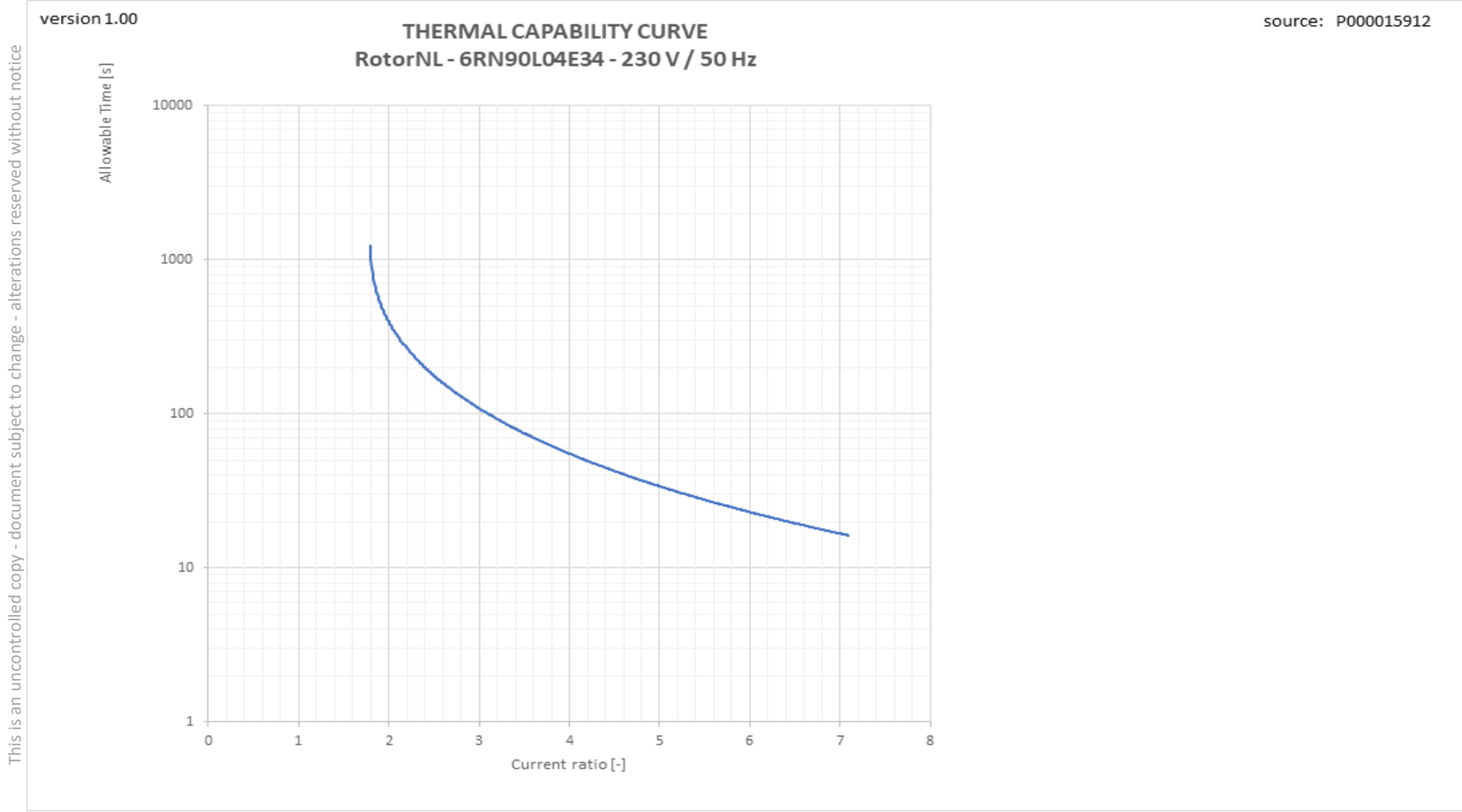


Torque versus Speed curve with variable frequency drive



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Therm_VSD graph



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Tn graph

