

PRODUCT INFORMATION PACKET

rotor nl®

Model No: 6RN180L04E34U241041

Catalog No: 6RN180L04E34U24@1041

22.00 kW General Purpose Low Voltage IEC Motor IE3, 3 phase, 1500 rpm, D230/Y400V 50Hz,
180L Frame B3, IC411



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Nameplate Specifications

Output HP	30 Hp	Output KW	22.0 kW
Frequency	50 Hz	Voltage	D230/Y400 V
Current	72.18 A	Speed	1470 rpm
Service Factor	1	Phase	3
Efficiency	93 %	Power Factor	0.82
Duty	S1	Insulation Class	F
Frame	180L	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6310-2Z/C3WT (-40°C/+160°C)	Opp Drive End Bearing Size	6310-2Z/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	B3	Motor Orientation	Any
Frame Material	Cast iron	Shaft Type	Keyed
Shaft Diameter	48 mm	Shaft Extension	110 mm
Outline Drawing	6RN180L04E34_1041		

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Datasheet

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Model No. 4-Pole cage motor 6RN 180L 22kW D230V 50Hz IM1081

U (V)	Δ / Y Conn	f [Hz]	P [kW]	P [hp]	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 _K /T _N [pu]
									FL	3/4FL	1/2FL	FL	3/4FL	1/2FL			
230	D	50	22	30	72,2	1470	143	IE3	93,3	93,9	93,9	0,82	0,78	0,68	7,08	2,39	3,25
400	Y				41,7												
265	D	60	25,3	33,91	71	1770	136	IE3	93,7	94,2	94,0	0,83	0,79	0,70	7,16	2,30	3,15
460	Y				41												

Motor type	6RN180L04E34
Enclosure	Totally Enclosed Fan Cooling
Frame Material	Cast iron
Frame size	180L
Duty	S1
Voltage	230 V
Frequency	50 Hz
Power output	22 kW
Insulation class	F
Ambient temperature	-20 till 40 °C
Temperature rise	temp.rise acc. B (80K)
Temperature rise winding	59 K
Temperature rise surface	26 K
Altitude above sea level	1000 mtr
Hazardous area classification	Safe area

Rotor type	Cage motor
Bearing type	6310-2Z/C3WT

Type of grease	Unirex N3
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Country of origin	CZ
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Voltage/Freq	Locked rotor Torque [% nom]	Starting current [% nom]	Pull-up Torque [% nom]	Breakdown Torque [% nom]	No-load Current [A]
@ D 230V 50Hz	239%	706%	210%	325%	29,1 A
@ D 265V 60Hz	230%	715%	210%	315%	27,1 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.

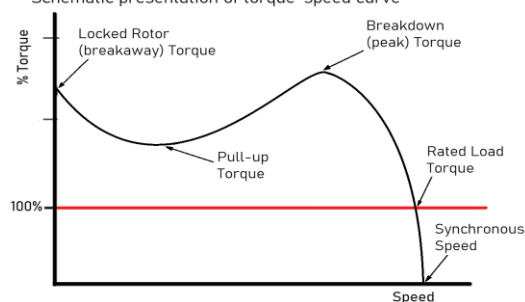
Efficiency	Europe	Global IEC
Standards	EN-IEC: 60034-30	IEC: 60034-30

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Degree of protection	IP55
Mounting type	IM1081
Cooling method	IC411
Motor weight - approx.	170 kg
Gross weight - approx.	175 kg
Motor inertia	0,1400 kgm ²
Vibration level	according IEC60034-14
Noise level (pressure) acc 60034-9	57 dB(A)

Direction of rotation	cw / ccw
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Schematic presentation of torque-speed curve



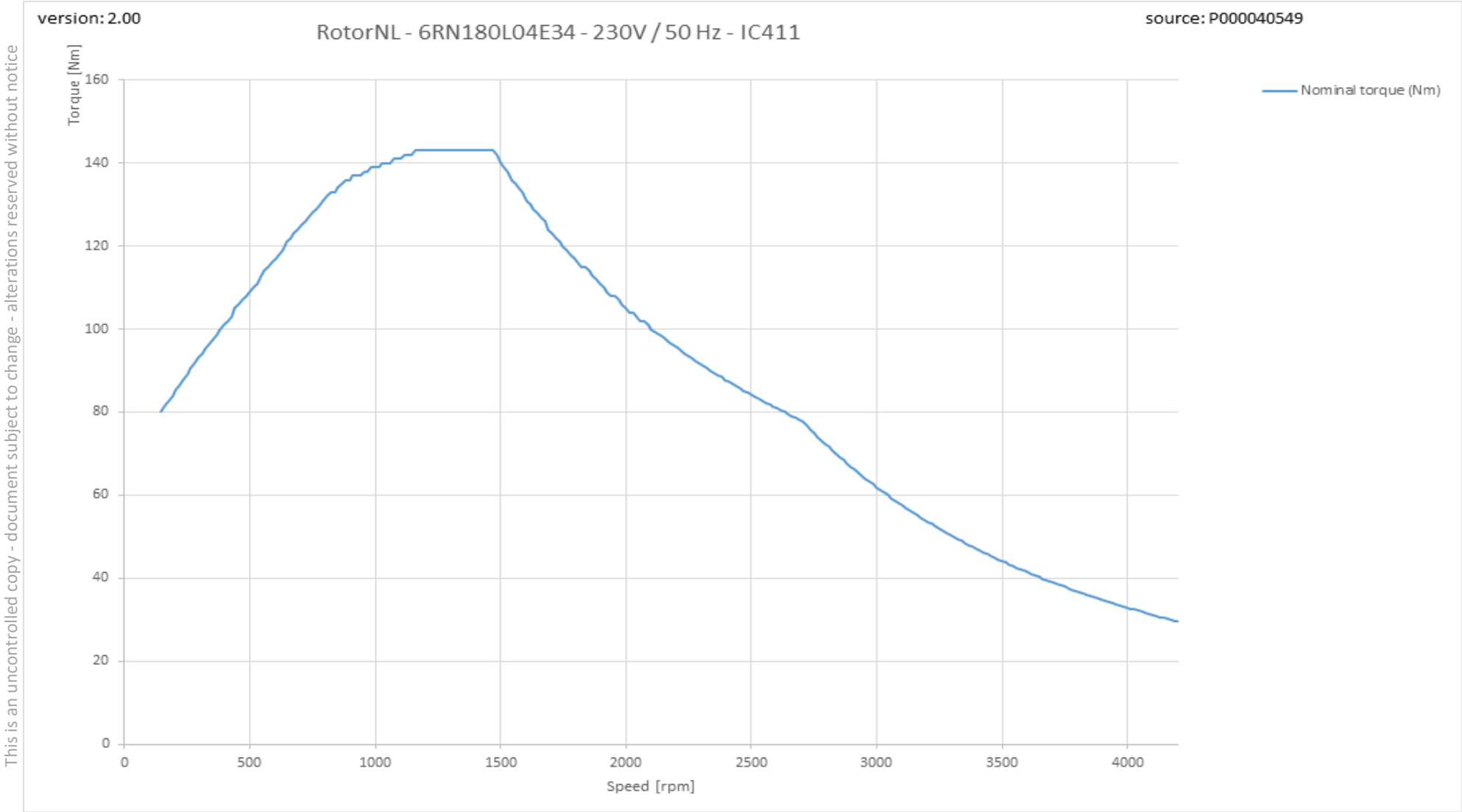
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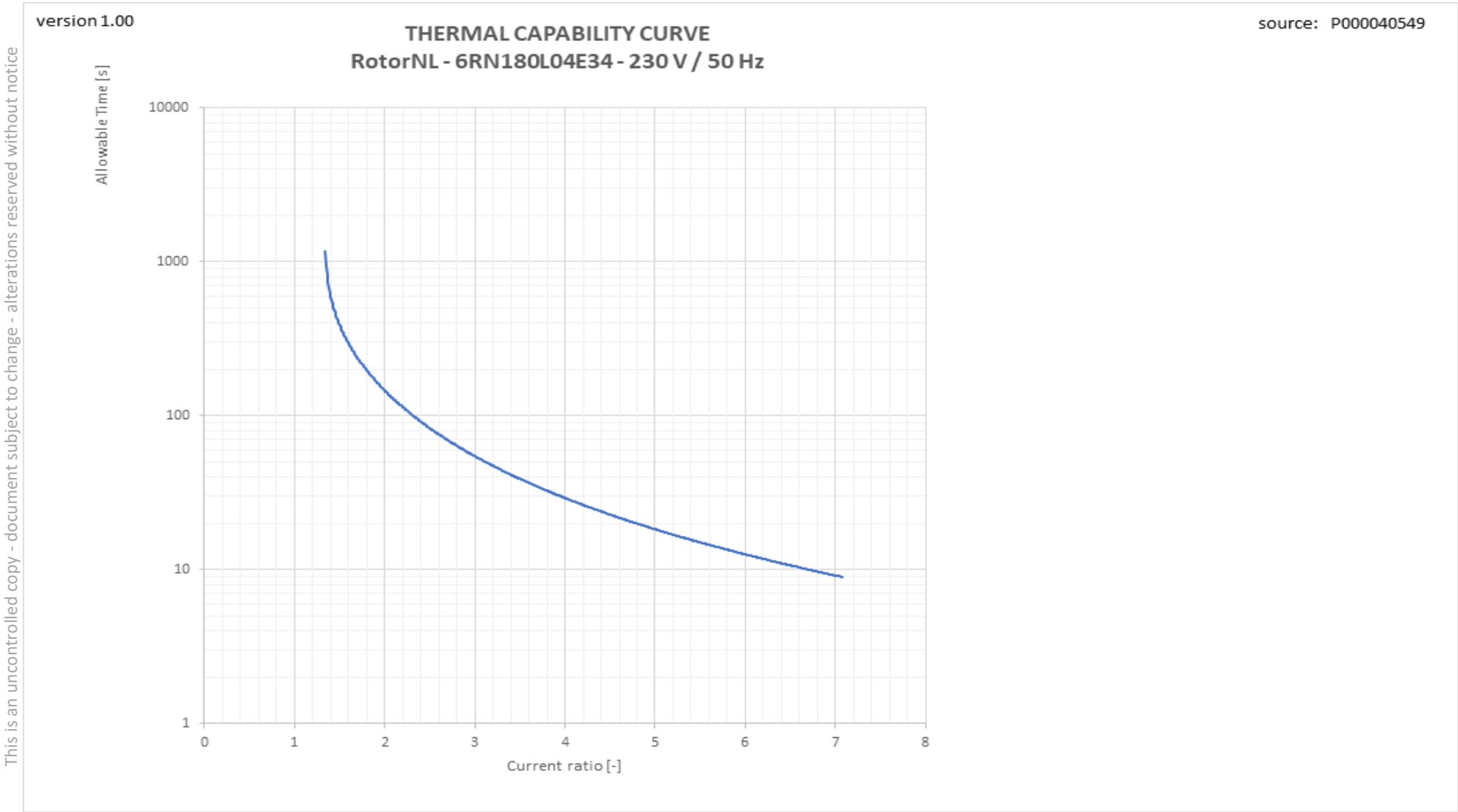
6RN180L04E34 4-pole 22,00kW D/Y 230/400V 50Hz S1 IC411 IE3



Torque versus Speed curve with variable frequency drive



Therm_VSD graph



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