

PRODUCT INFORMATION PACKET

rotor nl®

Model No: 6RN180L04E34U46B1041-Uni

Catalog No: 6RN180L04E34U46B@1041-Uni

22.00 kW General Purpose Low Voltage IEC Motor IE3, 3 phase, 1500 rpm, D400/Y690V 50Hz,
180L Frame B3, IC411

Regal and Rotor nl are trademarks of Regal Rexnord Corporation or one of its affiliated companies.
©2022 Regal Rexnord Corporation, All Rights Reserved. MC017097E

RegalRexnord



Nameplate Specifications

Output HP	30 Hp	Output KW	22.0 kW
Frequency	50 Hz	Voltage	D400/Y690 V
Current	41.48 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		

This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created:12/02/2022

Model No. 4-Pole cage motor 6RN 180L 22kW D400V 50Hz IM1041

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 _K /T _N [pu]
			[kW]	[hp]					FL	3/4FL	1/2FL	FL	3/4FL	1/2FL			
400	D	50	22	30	41,4	1470	143	IE3	93,3	93,9	93,9	0,82	0,78	0,68	7,08	2,39	3,25
690	Y				23,9												
460	D	60	25,3	33,91	40,8	1770	136	IE3	93,6			0,83			7,16	2,30	3,15

Motor type	6RN180L04E34
Enclosure	Totally Enclosed Fan Cooling
Frame Material	Cast iron
Frame size	180L
Duty	S1
Voltage	400 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

Degree of protection	IP55
Mounting type	IM1041
Cooling method	IC411
Motor weight - approx.	182 kg
Gross weight - approx.	187 kg
Motor inertia	0,1400 kgm²
Vibration level	according IEC60034-14
Noise level (pressure) acc 60034-9	57 dB(A)

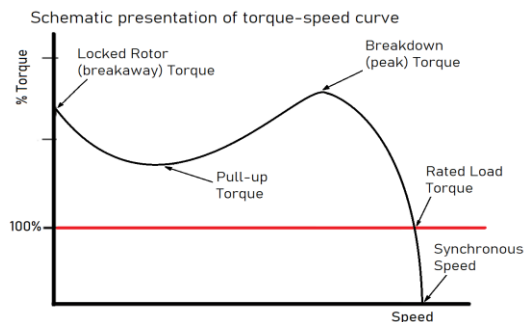
Rotor type	Cage motor
Bearing type	6310-2Z/C3WT - 6310-2Z/C3WT
Type of grease	Unirex N3
Phase resistance at 20°C	0,3033 Ohm
Country of origin	CZ

	Locked rotor Torque [nom]	Starting current [% nom]	Pull-up Torque [% nom]	Breakdown Torque [% nom]	No-load Current [A]
@ D 400V 50Hz	239%	707%	210%	325%	16,7 A
@ D 460V 60Hz	230%	715%	210%	315%	15,6 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.

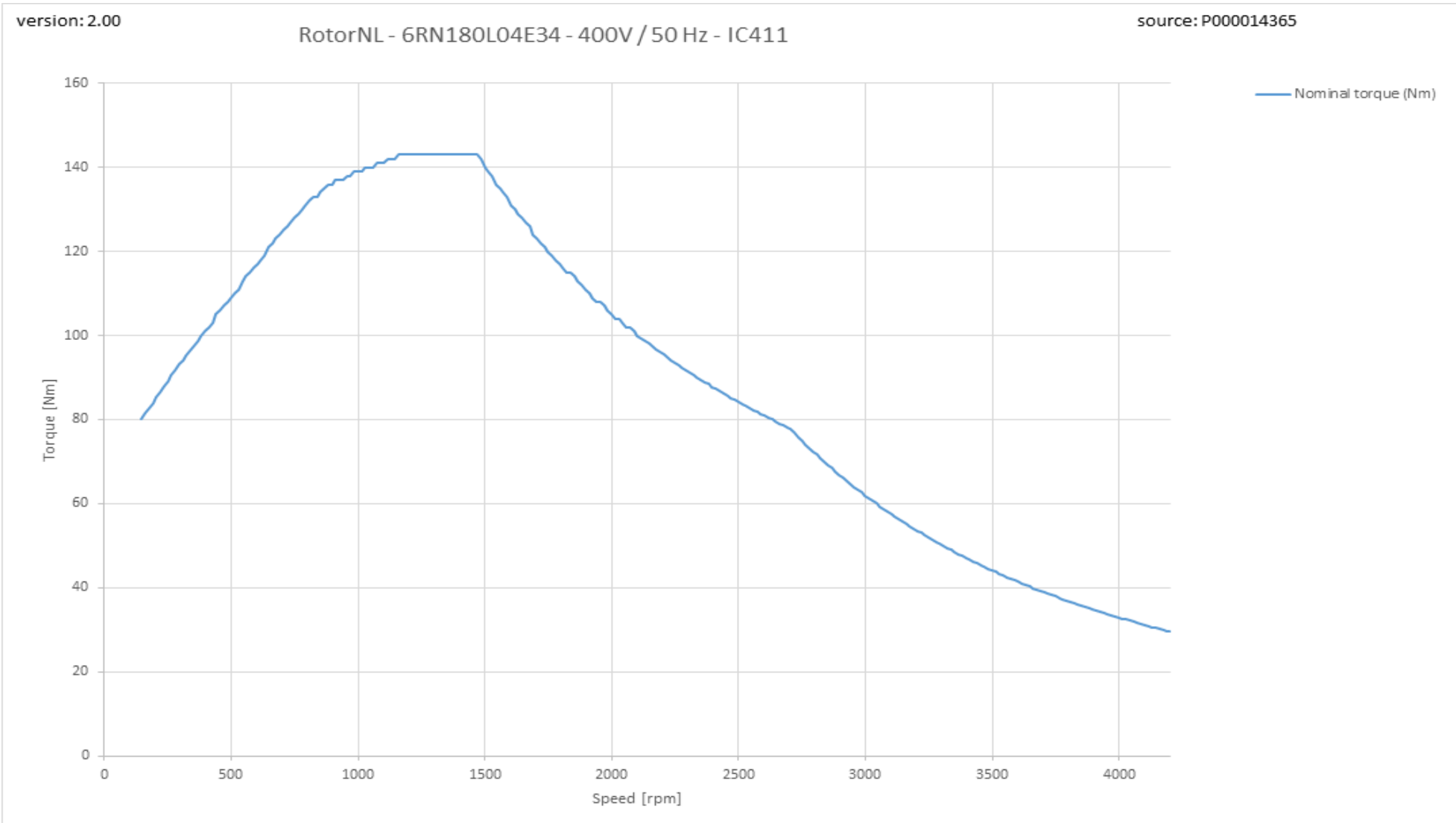
Efficiency	Europe	Global IEC
Standards	EN-IEC: 60034-30	IEC: 60034-30



6RN180L04E34 4-pole 22,00kW D/Y 400/690V 50Hz S1 IC411 IE3



Torque versus Speed curve with variable frequency drive



Therm_VSD graph

\\nleibfs01.rbc.int\temp\$\P000014365_Therm_VSD.png

Tn graph

\\nleibfs01.rbc.int\temp\$\P000014365_Tn.png