

# PREMIUM EFFICIENCY IE3/IE4 HIGH PERFORMANCE SMOOTH MOTORS



- Full range from 0.12-2.2 kW available
- Lower operating costs thanks to high efficiency
- Simple and highly flexible combination through full compatibility with the NORD modular system
- nsd tupH surface conversion



IE3	Type	IE	PN	nN	MN	IN	IN	IN	Eff	Eff	Eff	MA/MN	MK/MN
			[kW]	[1/min]	[Nm]	230V	400V	690V	1/2xPN	3/4xPN	4/4xPN		
NEW	71 SP/4 HM	IE3	0.12	1420	0.81	0.66	0.38	0.22	60.10	66.80	69.20	3.22	3.17
NEW	71 MP/4 HM	IE3	0.18	1400	1.22	0.95	0.55	0.32	63.50	68.90	70.00	3.04	2.98
NEW	71 LP/4 HM	IE3	0.25	1400	1.69	1.15	0.67	0.38	70.10	73.60	73.70	3.04	2.89
	80 LH/4 HM	IE3	0.37	1425	2.48	1.70	0.98	0.57	73.90	78.20	79.30	3.50	3.50
	90 SH/4 HM	IE3	0.55	1435	3.66	2.20	1.27	0.73	76.20	80.10	81.20	3.60	4.10
	100 SH/4 HM	IE3	0.75	1450	4.93	2.86	1.65	0.95	76.90	81.00	82.50	3.50	4.10
	100 LH/4 HM	IE3	1.10	1445	7.25	4.16	2.40	1.39	79.50	83.00	84.10	3.90	4.30

IE3	Type	PN	nN	MN	IN	IN	Eff	Eff	Eff	MA/MN	MK/MN	
		[kW]	[1/min]	[Nm]	265V	460V	1/2xPN	3/4xPN	4/4xPN			
NEW	71 SP/4 HM	IE3	0.12	1730	0.66	0.59	0.34	59.20	66.40	69.50	4.00	4.03
NEW	71 MP/4 HM	IE3	0.18	1720	1.00	0.85	0.49	63.30	70.10	72.30	3.86	3.80
NEW	71 LP/4 HM	IE3	0.25	1720	1.38	1.03	0.60	70.10	74.80	76.20	3.76	3.70
	80 LH/4 HM	IE3	0.37	1735	2.03	1.54	0.89	69.80	75.60	78.20	4.20	4.30
	90 SH/4 HM	IE3	0.55	1740	3.01	1.97	1.14	73.70	78.90	81.10	4.30	4.90
	100 SH/4 HM	IE3	0.75	1755	4.08	2.55	1.47	79.90	83.90	85.50	4.20	4.90
	100 LH/4 HM	IE3	1.10	1755	6.00	3.71	2.10	81.40	85.10	86.50	4.60	5.10

IE3	Type	PN	nN	MN	IN	IN	Eff	Eff	Eff	MA/MN	MK/MN	
		[kW]	[1/min]	[Nm]	230V	460V	1/2xPN	3/4xPN	4/4xPN			
NEW	71 SP/4 HM	PE	0.12	1730	0.66	0.68	0.34	59.20	66.40	69.50	4.00	4.03
NEW	71 MP/4 HM	PE	0.18	1720	1.00	0.98	0.49	63.30	70.10	72.30	3.86	3.80
NEW	71 LP/4 HM	PE	0.25	1720	1.38	1.19	0.60	70.10	74.80	76.20	3.76	3.70
	80 LH/4 HM	PE	0.37	1735	2.03	1.78	0.89	69.80	75.60	78.20	4.20	4.30
	90 SH/4 HM	PE	0.55	1740	3.01	2.28	1.14	73.70	78.90	81.10	4.30	4.90
	100 SH/4 HM	PE	0.75	1755	4.08	2.94	1.47	79.90	83.90	85.50	4.20	4.90
	100 LH/4 HM	PE	1.10	1755	6.00	1.47	2.10	81.40	85.10	86.50	4.60	5.10

IE3	Type	PN	nN	MN	IN	IN	Eff	Eff	Eff	MA/MN	MK/MN	
		[kW]	[1/min]	[Nm]	332V	575V	1/2xPN	3/4xPN	4/4xPN			
NEW	71 SP/4 HM	PE	0.12	1730	0.66	0.47	0.27	59.20	66.40	69.50	4.00	4.03
NEW	71 MP/4 HM	PE	0.18	1720	1.00	0.68	0.39	63.30	70.10	72.30	3.86	3.80
NEW	71 LP/4 HM	PE	0.25	1720	1.38	0.83	0.48	70.10	74.80	76.20	3.76	3.70
	80 LH/4 HM	PE	0.37	1735	2.03	1.23	0.71	69.80	75.60	78.20	4.20	4.30
	90 SH/4 HM	PE	0.55	1740	3.01	1.58	0.91	73.70	78.90	81.10	4.30	4.90
	100 SH/4 HM	PE	0.75	1755	4.08	2.04	1.18	79.90	83.90	85.50	4.20	4.90
	100 LH/4 HM	PE	1.10	1755	6.00	2.96	1.71	81.40	85.10	86.50	4.60	5.10

IE4	Type	IE	PN	nN	MN	Mmax	IN	kT	kE	Eff
			[kW]	[1/min]	[Nm]	[Nm]	400V	[Nm/A]	[mV/rpm]	4/4xPN
	80 T1/4 HM	IE4	0.75	2100	3.41	13.50	1.46	2.30	154.00	90.50
	90 T3/4 HM	IE4	1.10	2100	5.00	28.30	2.08	2.40	156.00	92.70
	100 T5/4 HM	IE4	2.20	2100	10.00	53.50	4.16	2.40	165.00	91.00



# PREMIUM EFFICIENCY

## IE3/IE4 HIGH PERFORMANCE SMOOTH MOTORS



### Mounting Styles

- IEC B14 flange mounted
- IEC B5 flange mounted
- NEMA C-face flange mounted
- Integral motor for NORD gear units

### International Certifications

- CE mark according to the European Union (EU) Low Voltage Directive
- Underwriters Laboratories Listed per UL standard 1004
- Canadian Standards Association CSA label
- China Compulsory Certification
- Eurasian Conformity

### International Energy Efficiency Standards

- EU: IE1 – IE4 according to IEC 60034-30
- US: Labeling acc to EISA 2014 (Department of Energy)
- CA: CSA energy verified acc to EER 2010

### Inverter Duty

- Conformance with NEMA MG 1-2009 Section 31.4.4.2 Voltage Spikes
- Speed range 5:1 constant torque
- Speed range 10:1 constant torque
- Speed range 20:1 constant torque
- Speed range 1000:1 constant torque

### Standard Construction Features

- Dual mode use: 50Hz and 60Hz
- Shaft lip seals on both ends of the motor shafts
- Stator to endbell connections sealed to exclude moisture
- Double coated magnetic wire insulation
- Dipped windings for improved moisture protection
- Inorganic insulating components for tropical protection
- Terminal box sealed with gaskets
- Corrosion resistant alloy materials
- Threaded cable entry holes
- Thermal winding protection (thermistor/thermostat)



### Environmental Protection

- IP66 protection class standard
- Totally Enclosed Non-Ventilated (TENV/IC410)
- Insulation Class F standard
- Bureau Veritas certified
- nsd tupH surface conversion

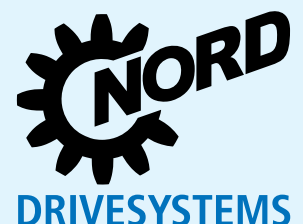
### Options

- Motor quick connectors
- IP69K protection class
- Insulation class H
- Protection canopies (single, double, for textile industry)
- Space heater
- Brake (IP55 and IP66)
  - Corrosion and/or dust protection
  - (Lockable) hand release lever

### Headquarters:

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DS1009 Mat.-Nr. 6015002 / 3417



### Global Vision, Local Support

NORD makes its wide product range easily available through a global network that includes representation in over 60 countries. By providing all of our customers with prompt delivery, and expert support services, we are firmly committed to exceeding customer expectations and being responsive to the ideas and specifications of every customer, anywhere in the world.