Intelligent Drivesystems, Worldwide Services

ELECTRIC MOTORS 30 – 55 kW

PRODUCT CATALOGUE
M7002

NORD DRIVESYSTEMS

OPTIONS
30 – 55 kW MOTORS

Abbreviations	Meaning
BRE +	Brake / brake torque + sub-option
DBR +	Double brake + sub-option
RG*	Corrosion protected version
SR*	Dust and corrosion protected version
HL	Manual brake release
MIK	Micro switch
* not with DBR	
BRB	Standstill heater / brake
NRB1 / 2	Noise-reduced brake
ERD	External earth terminal
TF	Thermistor, PTC resistor
TW	Thermostat, bimetallic switch
SH	Standstill heating
WE	2nd shaft end
RD	Protective shield
RDD	Double fan-cowl
KB	Closable condensation hole
KKV	Terminal box, encapsulated
FEU	Moisture protection insulation
TRO	Tropicalised insulation
VIK	Regulation - Vereinigung Industrieller Kraftwirtschaft (industrial power association)
F	External fan
RLS	Back stop
IG1 (IG11, 12)	Pulsed incremental encoder 1024
IG2 (IG21, 22)	Pulsed incremental encoder 2048
IG4 (IG41, 42)	Pulsed incremental encoder 4096
IG.K	Encoder with terminal box
AG	Absolute encoder

Information about options that are not depicted in the dimensioned illustrations are available on request!

Brakes standard configuration

Type			BRE 250	BRE 400	BRE 800
	IE2	IE3	M_B [Nm]		
225		RP	250	**400**	
	SH	SP	250	**400**	
	MH	MP		400	**800**
250	WH	WP		400	**800**
Extra weight [kg]			32	50	53
J [10^{-3} kgm²]			6,65	19,5	39

Please contact the NORD Engineering for additional information concerning technical data of the options and brakes.

TECHNICAL DATA
30 – 55 kW MOTORS

IE2 50 Hz															
Type	P_N	n_N	M_N	I_N		cos φ	η			η[1)]	M_A/M_N	M_K/M_N	I_A/I_N	J	Wt.
				230V	400V		1/2xPN	3/4xPN	4/4xPN	4/4xPN					*
	[kW]	[rpm]	[Nm]	[A]	[A]		[%]	[%]	[%]	[%]				[kgm²]	[kg]
225 SH/4	37	1480	239	120	69.5	0.85	94.4	94.2	93.7	93.3	2.6	3.0	6.9	0.49	315
225 MH/4	45	1480	290	141	81.4	0.84	94.4	94.5	94	94	2.6	2.7	6.9	0.60	340
250 WH/4	55	1480	355	172	99.3	0.84	94.2	94.4	94	94	2.7	3.0	7.4	0.74	380

IE2 60 Hz															
Type	P_N	n_N	M_N	I_N		cos φ	η			η[1)]	M_A/M_N	M_K/M_N	I_A/I_N	J	Wt.
				265V	460V		1/2xPN	3/4xPN	4/4xPN	4/4xPN					*
	[kW]	[rpm]	[Nm]	[A]	[A]		[%]	[%]	[%]	[%]				[kgm²]	[kg]
225 SH/4	37	1785	198	102	58.9	0.84	93.7	94.5	94.5	94	2.9	3.3	8.2	0.49	315
225 MH/4	45	1785	241	123	71.2	0.83	94.2	94.8	94.6	94.5	3.1	3.2	8.2	0.60	340
250 WH/4	55	1785	294	151	87.2	0.84	94.2	94.8	94.7	94.3	3.0	3.3	8.5	0.74	380

* Design B5, without options / η[1)] Worst value in wide range boundary

IE3 50 Hz														
Type	P_N	n_N	M_N	I_N		cos φ	η			M_A/M_N	M_K/M_N	I_A/I_N	J	Wt.
				230V	400V		1/2xPN	3/4xPN	4/4xPN					*
	[kW]	[rpm]	[Nm]	[A]	[A]		[%]	[%]	[%]				[kgm²]	[kg]
225 RP/4	30	1485	193	97.3	56.2	0.82	93.6	94.3	94.1	3.0	3.4	7.8	0.49	315
225 SP/4	37	1485	238	118	68.2	0.83	93.6	94.4	94.1	2.9	3.2	7.7	0.54	330
225 MP/4	45	1485	289	142	81.7	0.83	94.6	94.9	94.6	3.0	3.4	8.0	0.67	365
250 WP/4	55	1480	355	166	96.1	0.87	95.2	95	94.6	2.6	2.8	7.0	0.82	400

IE3 60 Hz														
Type	P_N	n_N	M_N	I_N		cos φ	η			M_A/M_N	M_K/M_N	I_A/I_N	J	Wt.
				265V	460V		1/2xPN	3/4xPN	4/4xPN					*
	[kW]	[rpm]	[Nm]	[A]	[A]		[%]	[%]	[%]				[kgm²]	[kg]
225 RP/4	30	1785	160	85.7	49.5	0.81	93.4	94.4	94.5	3.4	3.8	8.9	0.49	315
225 SP/4	37	1785	198	103	59.7	0.82	93.6	94.5	94.6	3.0	3.7	8.8	0.54	330
225 MP/4	45	1785	241	125	72	0.83	94.6	95.2	95.2	3.3	3.6	9.1	0.67	365
250 WP/4	55	1785	294	146	84.4	0.86	95.2	94.5	95.4	2.9	3.2	8.2	0.82	400

* Design B5, without options

NORD 225 SERIES
B3 IEC

Type	IE2	IE3																
		[mm]	A	AA	AB	B	BA	BB	HA	k	K	AC	AD	AG	C	H	HH	L
225	SH	SP	356	79	443	286	66	359	20	25	20	443	347	245	149	225	94	882
225	MH	MP	356	79	443	311	66	359	20	25	20	443	347	245	149	225	94	882

NORD 225 SERIES
B3 IEC

[mm]

LC	LL	AS	LS	O	D	DB	E	EB	F	GA	DA	DC	EA	EC	FA	GC
1002	245	348	968.5	M50 x 1.5	60	M20	140	125	18	64	55	M20	110	100	16	59
1002	245	348	968.5	M50 x 1.5	60	M20	140	125	18	64	55	M20	110	100	16	59

NORD 225 SERIES
B5 IEC

Type	IE2	IE3														
		[mm]	LA	M	N	P	S	D	AC	AD	AG	HH	L	LC	LE	LL
225	SH	SP	20	400	350	450	17.5	5	443	347	245	94	882	1002	140	245
225	MH	MP	20	400	350	450	17.5	5	443	347	245	94	882	1002	140	245

[mm]

AS	LS	O	D	DB	E	EB	F	GA	DA	DC	EA	EC	FA	GC
348	968.5	M50 x 1.5	60	M20	140	125	18	64	55	M20	110	100	16	59
348	968.5	M50 x 1.5	60	M20	140	125	18	64	55	M20	110	100	16	59

NORD 225 SERIES
IEC B3 BRE

Type	IE2	IE3																
		[mm]	A	AA	AB	B	BA	BB	HA	k	K	AC	AD	AG	C	H	HH	L
225	SH	SP	356	79	443	286	66	359	20	25	20	443	347	245	149	225	94	1062
225	MH	MP	356	79	443	311	66	359	20	25	20	443	347	245	149	225	94	1062

NORD 225 SERIES
IEC B3 BRE

[mm]

LC	LL	AS	LS	O	D	DB	E	EB	F	GA	DA	DC	EA	EC	FA	GC
1182	245	348	1148.5	M50 x 1.5	60	M20	140	125	18	64	55	M20	110	100	16	59
1182	245	348	1148.5	M50 x 1.5	60	M20	140	125	18	64	55	M20	110	100	16	59

NORD 225 SERIES
IEC B5 BRE

Type	IE2	IE3													
		[mm]	LA	M	N	P	S	D	AC	AD	AG	HH	L	LC	LL
225	SH	SP	20	400	350	450	17.5	5	443	347	245	94	1062	1182	245
225	MH	MP	20	400	350	450	17.5	5	443	347	245	94	1062	1182	245

NORD 225 SERIES
IEC B5 BRE

[mm]

AS	LS	O	D	DB	E	EB	F	GA	DA	DC	EA	EC	FA	GC
348	1148.5	M50 x 1.5	60	M20	140	125	18	64	55	M20	110	100	16	59
348	1148.5	M50 x 1.5	60	M20	140	125	18	64	55	M20	110	100	16	59

NORD 225 SERIES
B5

Type	IE2	IE3									
		[mm]	WN Pos.	P	AC	AD	AG	HH	L	LC	LL
225	SH		28	350	433	347	245	94	742	862	245
225	SH		78	350	443	347	245	94	742	862	245
225	SH		69	300	443	347	245	94	742	862	245
225	MH		30	350	443	347	245	94	742	862	245
225	MH		80	350	443	347	245	94	742	862	245
250	WH		32	450	443	347	245	94	742	892	245
250	WH		82	450	443	347	245	94	742	892	245
225		RP	26	350	443	347	245	94	742	862	245
225		RP	76	350	443	347	245	94	742	862	245
225		RP	68	300	443	347	245	94	742	862	245
225		SP	28	350	443	347	245	94	742	862	245
225		SP	78	350	443	347	245	94	742	862	245
225		SP	69	350	443	347	245	94	742	862	245
225		MP	30	350	443	347	245	94	742	862	245
225		MP	80	350	443	347	245	94	742	862	245
250		WP	32	450	443	347	245	94	742	892	245
250		WP	82	450	443	347	245	94	742	892	245

[mm]

AS	LS	O	DA	DC	EA	EC	FA	GC
348	828.5	M50 x 1.5	55	M20	110	100	16	59
348	828.5	M50 x 1.5	55	M20	110	100	16	59
348	828.5	M50 x 1.5	55	M20	110	100	16	59
348	828.5	M50 x 1.5	55	M20	110	100	16	59
348	828.5	M50 x 1.5	55	M20	110	100	16	59
348	828.5	M63 X 1.5	60	M20	140	125	18	64
348	828.5	M63 X 1.5	60	M20	140	125	18	64
348	828.5	M50 X 1.5	55	M20	110	100	16	59
348	828.5	M50 X 1.5	55	M20	110	100	16	59
348	828.5	M50 X 1.5	55	M20	110	100	16	59
348	828.5	M50 X 1.5	55	M20	110	100	16	59
348	828.5	M50 X 1.5	55	M20	110	100	16	59
348	828.5	M50 X 1.5	55	M20	110	100	16	59
348	828.5	M50 X 1.5	55	M20	110	100	16	59
348	828.5	M50 X 1.5	55	M20	110	100	16	59
348	828.5	M63 X 1.5	60	M20	140	125	18	64
348	828.5	M63 X 1.5	60	M20	140	125	18	64

NORD 225 SERIES
B5 BRE

Type	IE2	IE3									
		[mm]	WN Pos.	P	AC	AD	AG	HH	L	LC	LL
225	SH		28	350	433	347	245	94	922	1042	245
225	SH		78	350	443	347	245	94	922	1042	245
225	SH		69	300	443	347	245	94	922	1042	245
225	MH		30	350	443	347	245	94	922	1042	245
225	MH		80	350	443	347	245	94	922	1042	245
250	WH		32	450	443	347	245	94	922	1072	245
250	WH		82	450	443	347	245	94	922	1072	245
225		RP	26	350	443	347	245	94	922	1042	245
225		RP	76	350	443	347	245	94	922	1042	245
225		RP	68	300	443	347	245	94	922	1042	245
225		SP	28	350	443	347	245	94	922	1042	245
225		SP	78	350	443	347	245	94	922	1042	245
225		SP	69	350	443	347	245	94	922	1042	245
225		MP	30	350	443	347	245	94	922	1042	245
225		MP	80	350	443	347	245	94	922	1042	245
250		WP	32	450	443	347	245	94	922	1072	245
250		WP	82	450	443	347	245	94	922	1072	245

NORD 225 SERIES
B5 BRE FACTORY STANDARD

[mm]

AS	LS	O	DA	DC	EA	EC	FA	GC
348	1008.5	M50 x 1.5	55	M20	110	100	16	59
348	1008.5	M50 x 1.5	55	M20	110	100	16	59
348	1008.5	M50 x 1.5	55	M20	110	100	16	59
348	1008.5	M50 x 1.5	55	M20	110	100	16	59
348	1008.5	M50 x 1.5	55	M20	110	100	16	59
348	1008.5	M63 X 1.5	60	M20	140	125	18	64
348	1008.5	M63 X 1.5	60	M20	140	125	18	64
348	1008.5	M50 X 1.5	55	M20	110	100	16	59
348	1008.5	M50 X 1.5	55	M20	110	100	16	59
348	1008.5	M50 X 1.5	55	M20	110	100	16	59
348	1008.5	M50 X 1.5	55	M20	110	100	16	59
348	1008.5	M50 X 1.5	55	M20	110	100	16	59
348	1008.5	M50 X 1.5	55	M20	110	100	16	59
348	1008.5	M50 X 1.5	55	M20	110	100	16	59
348	1008.5	M50 X 1.5	55	M20	110	100	16	59
348	1008.5	M63 X 1.5	60	M20	140	125	18	64
348	1008.5	M63 X 1.5	60	M20	140	125	18	64

NORD DRIVESYSTEMS Group

Headquarters and technology centre
Bargteheide, near Hamburg

Innovative drive solutions
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