

Intelligent Drivesystems, Worldwide Services



Electric Motors & Brakemotors

40 - 75 Hp Premium Efficiency Motors

4 pole • 50 & 60Hz

225 Frame Motors and Brakemotors
Order Preassembled or Customized to Your Requirements

PRODUCT OVERVIEW

M7002



Spanning the globe To serve you

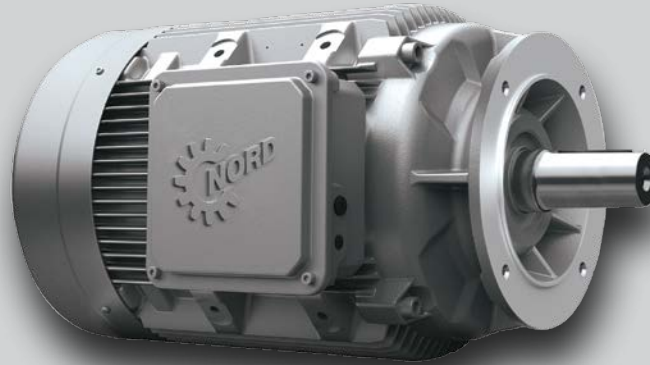
Since 1965, NORD has become well established in the power transmission industry and grown to global proportions on the strength of product performance, superior customer service, and intelligent drive solutions. NORD is constantly improving and expanding its products to meet a never-ending variety of industrial challenges.

NORD designs and manufactures drive systems engineered for adaptability. NORD's innovative drive solutions are specified and utilized for a range of applications in nearly every industry throughout the world.

NORD Drivesystems' product portfolio is extensive and continuously evolving in order to meet the needs of today's fast-changing markets. NORD's range of drive equipment includes: helical in-line, helical shaft-mount, helical-bevel, helical-worm and worm gear units with torques from 90 lb-in to 2,200,000 lb-in, readily available AC motors and from 1/6 HP to 250 HP, variable frequency drives up to 250 HP, and mechanical variable speed drives.

But NORD does far more than manufacture the world's finest drive components. We provide our customers with optimum drive configurations for their specific purposes, providing each and every one with truly complete and efficient systems at a price/quality ratio unmatched in today's competitive markets.

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.



NORD 40-75 Hp Motors & Brakemotors

Due to demand for higher powered motors that meet current global efficiency requirements, NORD has added 40-75 Hp (30-55 kw) motors to our existing line of induction motors & brakemotors. This catalog supplement contains information on the NORD, 40-75 Hp premium efficient, inverter-duty motors.

Like all NORD motors, these are a durable, low maintenance design developed to meet the demands of a wide array of applications. Motors, primary assembly components and accessories are stocked at our factories to allow adaptability and provide our customers with the advantage of short and reliable delivery times. Accessories and options are easily added and available on demand, including: brakes, encoders, constant speed ventilator fans, motor overload protection devices, space heaters and more.

The NEW 40-75 HP NORD motors are fully compatible with the NORD modular system to maintain simple, cost-effective designs. All four frame sizes including, 225RP, 225SP, 225MP, and 250 WP are available as integral gearmotor combinations. Multiple sizes are available with a foot-kit or input flange.

For additional information about other NORD products including gearmotors, gear units, and NORD Variable Frequency Drives please visit www.nord.com or contact NORD directly.

Features and Benefits

- Threaded cable entry holes
- Lip seals on both shaft ends
- Sealed and gasketed terminal boxes.
- Continuous Duty (S1) / Premium Efficient (IE3).
- Common 50 Hz and 60 Hz voltages.
- Inverter/vector duty wiring and insulation.
- Rated for voltage spikes per NEMA MG1-2011, section 31.4.4.2
- Moisture resistant varnished dipped windings.



DRIVESYSTEMS

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Selection & Nomenclature



Information

SK
Frame ①
Size ②
Poles ④
Mounting ③
Motor Options ⑤
Brake Size ⑥
Brake Options ⑦

Size & Frame Combinations ① ②			Available Mounting Combinations ③				Brake Size ⑥		Poles ④		
Frame	Size		IEC B3 Foot	IEC B5 Flange	Integral		<input type="radio"/> BRE 400 <input type="radio"/> BRE 800	Poles	60Hz [rpm]	50Hz [rpm]	
225	RP		---	---	300	350			4	1800	1500
225	SP	MP	B3-225	A450	350	---					
250	WP		---	---	350	450					

Motor Options ⑤		Brake Options ⑦	
Electrical Motor Options <input type="checkbox"/> TW - Thermostat <input type="checkbox"/> TF - Thermistor <input type="checkbox"/> SH - Space Heater (select voltage) <input type="radio"/> 110 Volt <input type="radio"/> 230 Volt <input type="radio"/> 460 Volt <input type="checkbox"/> ISO H - Class H insulation AC Drive Related Motor Options <input type="checkbox"/> F - Blower Fan (200-575V 1 & 3 Phase) <input type="checkbox"/> FC - Blower Cooling Fan (115V, 1 Phase) <input type="checkbox"/> IG__ - Incremental Encoder <input type="checkbox"/> IG__P - Incremental Encoder with Plug IG & IG__P Options: Logic: <input type="radio"/> TTL <input type="radio"/> HTL <input type="radio"/> Push-pull Supply: <input type="radio"/> 4-6V <input type="radio"/> 10-30V <input type="radio"/> 5-30V PPR: <input type="radio"/> 1024 <input type="radio"/> 2048 <input type="radio"/> 4096 <input type="checkbox"/> AG - Absolute Encoder AG Options: Turns <input type="text"/> Step <input type="text"/> AG Bus System: <input type="text"/>		Environmental Motor Options <input type="checkbox"/> RD - Canopy Drip Cover <input type="checkbox"/> RDD - Double Fan Cover <input type="checkbox"/> KB - Condensation Drain Holes (plugged) <input type="checkbox"/> KBO - Condensation Drain Holes (open) <input type="checkbox"/> KKV - Terminal Box Sealed with Resin <input type="checkbox"/> AICM - Additional Insulation <input type="checkbox"/> EP - Epoxy Dipped Windings Additional Motor Options <input type="checkbox"/> OL - Totally Enclosed Non-Ventilated (TENV) <input type="checkbox"/> OL/H - (TENV) Without Fan Cover <input type="checkbox"/> WE - Second Shaft Extension (Fan Side) <input type="checkbox"/> RLS - Motor Backstop (rotation viewing fan) <input type="radio"/> Clockwise <input type="radio"/> Counter-Clockwise <input type="checkbox"/> EKK - Small Terminal Box <input type="checkbox"/> MS - Quick Power Plug Connector <input type="checkbox"/> RS - Round Motor Power Plug Connector	
		Brake Options ⑦ <input type="checkbox"/> HL - Hand Release Lever <input type="checkbox"/> FHL - Locking Hand Release Lever <input type="checkbox"/> HLH - Hand Release Lever with Hole <input type="checkbox"/> RG - Corrosion Protected Brake <input type="checkbox"/> SR - Dust & Corrosion Protected Brake <input type="checkbox"/> ADJ _____ Nm - Brake Torque Adjustment <input type="checkbox"/> BIP66 - IP66 Brake Enclosure <input type="checkbox"/> MIK - Micro-switch <input type="checkbox"/> BSH - Brake Heating <input type="checkbox"/> NRB1 - Quiet Brake Release <input type="checkbox"/> NRB2 - Quiet Brakemotor Operation <input type="checkbox"/> DBR - Double Brake <input type="checkbox"/> G...P - High Performance Rectifier (See Rectifier Selection Below) <input type="checkbox"/> G...V - Sealed Rectifier (See Rectifier Selection Below) <input type="checkbox"/> IR - Current Sensing Relay	
		Country of Use <input type="radio"/> Continuous S1 <input type="radio"/> Time Rated S2 [min] <input type="radio"/> Intermittant S3 [%] Enclosure <input type="radio"/> IP55 <input type="radio"/> IP65 <input type="radio"/> IP66	
		Power <input type="text"/> [hp/kW]	
		Standards <input type="radio"/> North American [CUS] <input type="radio"/> International [IEC] <input type="radio"/> Other: _____	
		Hazardous Location <input type="radio"/> None <input type="radio"/> Class 1 Div 2 - Gas <input type="radio"/> Class 2 Div 2 - Dust <input type="radio"/> Global - ATEX	

Voltage & Frequency	Terminal Box Position	Conduit Entry Location	Hand Release Position
Single Speed Motors <input type="radio"/> 460V-60Hz <input type="radio"/> 575V-60Hz <input type="radio"/> 400V-50Hz <input type="radio"/> Other	<input type="radio"/> TB1 <input type="radio"/> TB2 <input type="radio"/> TB3 <input type="radio"/> TB4 	<input type="radio"/> CE I * <input type="radio"/> CE II <input type="radio"/> CE III * <input type="radio"/> CE IV 	<input type="radio"/> HL1 <input type="radio"/> HL2 <input type="radio"/> HL3 <input type="radio"/> HL4

*Brakemotor

Nomenclature

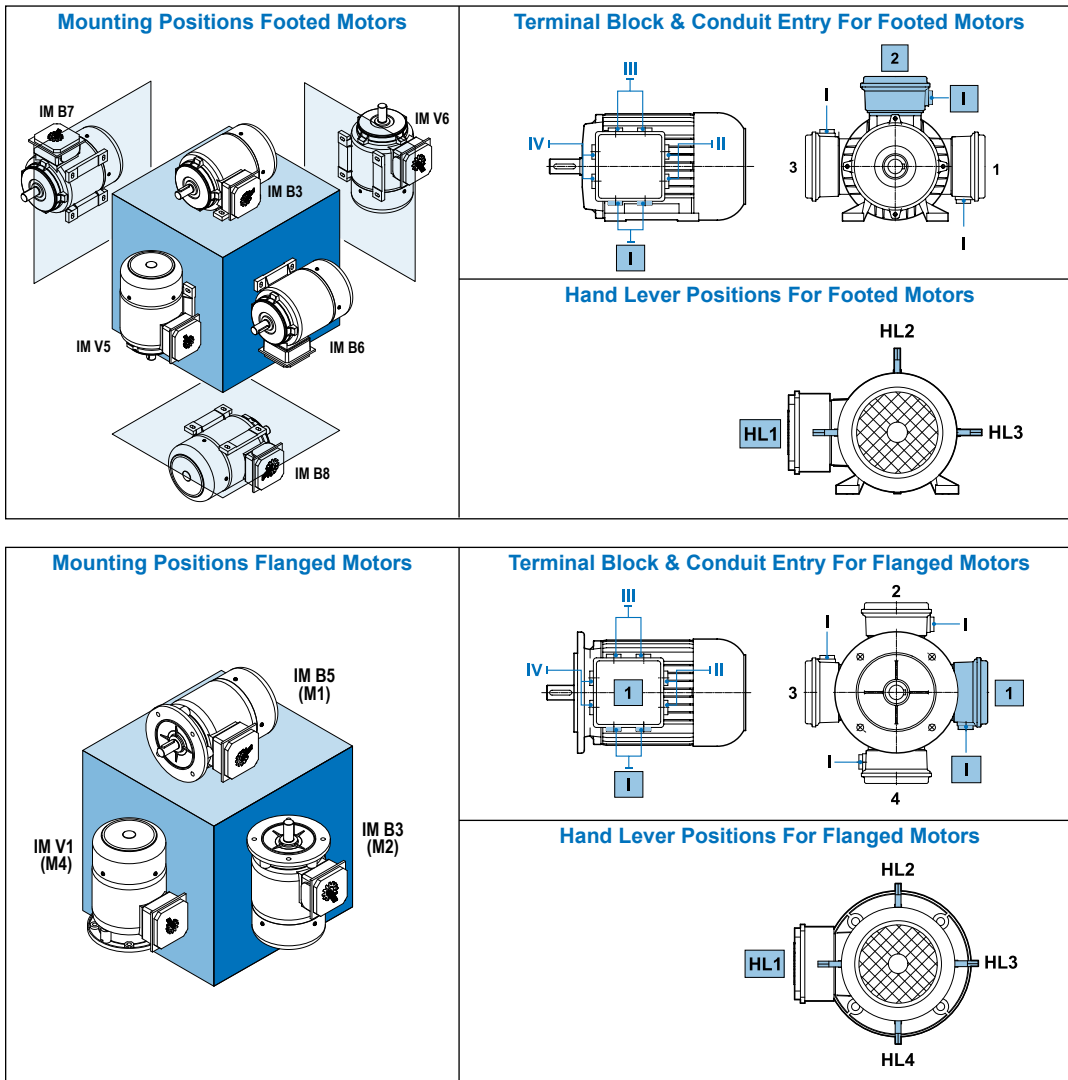
Frame Size 225 or 250			
Power Code R, S, M, W			
Efficiency: P = Premium Efficient			
Number of Poles			
225	R	P	/ 4

Type	[HP]	[kW]	Efficiency Class
225 RP/4	40	30	Premium Efficient (IE3)
225 SP/4	50	37	Premium Efficient (IE3)
225 MP/4	60	45	Premium Efficient (IE3)
250 WP/4	75	55	Premium Efficient (IE3)



Mounting Positions

The motor mounting position helps to determine the use of specific options as well as help specify the terminal box location as well as the conduit entry location. If considering any mounting positions that are not shown as catalog-standard options, it is critical that the customer consult with NORD prior to ordering. When mounting motors, secure the motor tightly to the mounting base of your equipment or onto to a flat and rigid surface.



Available Options

40 - 75 hp Motors



Motor Options & Construction

NORD motors are stocked in one of two ways. The first method is to stock a complete motor that is ready to be assembled to a gear reducer or shipped as a stand alone motor. The second method, the motor is assembled from component parts. The **M** next to a motor option designates that the option can be added to a complete motor by simple modification. The **B** next to a motor option indicates that the motor will need to be built from component parts in order to incorporate the motor option.

Motor Options

Abbreviation	Description	M	B	M7000 Page
AG	Absolute Encoder		✓	103
AICM	Additional Insulation		✓	93
BRE	Brake			107
EP	Epoxy Dipped Windings		✓	93
F	Blower Cooling Fan	✓		96
IG...P	Incremental Encoder		✓	102
ISO H	Class H Insulation		✓	90
KB	Condensation Drain Holes - Plugged		✓	92
KBO	Condensation Drain Holes - Open		✓	92
KKV	Terminal Box Sealed with Resin	✓		93
OL	Totally Enclosed Non-Ventilated	✓		94
OL/H	Totally Enclosed Non Ventilated without Fan Cover		✓	94
RD	Canopy Drip Cover	✓		93
RDD	Double Fan Cover	✓		93
RLS	Motor Backstop		✓	95
RS	Round Motor Power Connectors		✓	99
SH	Space Heater		✓	90
TF	Thermistor (PTC Resistor)		✓	90
TW	Thermostat (Bimetallic Switch)		✓	89
WE	2nd Shaft Extension on Fan Side		✓	94
-	IP65 Enclosure Protection	✓		93
-	IP66 Enclosure Protection	✓		16
-	Paint Coatings	✓		92

Additional information can be found in the M7000 catalog. Additional options may be available upon special request.



Brake Selection

Each NORD motor may be supplied with a number of brake torque sizes and options. Each brake may be adjusted to different brake torque values and special needs. Additional information about brake sizing and selection may be found in the M7000 catalog or in the user manuals.

Motor Size & Efficiency		Brake Size and Torque			
Frame Size	PE	Nm	BRE250	BRE400	BRE800
		lb-in	250	400	800
		lb-ft	2213	3540	7080
225	RP		Opt.	Std.	
225	SP		Opt.	Std.	
225	MP			Opt.	Std.
250	WP			Opt.	Std.
Weight	kg		32	50	53
	lb		71	110	117
Inertia	kg-m ² x 10 ⁻³		6.65	19.5	39
	lb-ft ² x 10 ⁻³		158	463	926

Contact the NORD Engineering department for additional information regarding technical information on brakes and their options.

Brake Options

Abbreviation	Description	M7000 Page
ADJ	Torque Adjustment - Brake torque may be adjusted at the factory	109
HL	Hand Release Lever - Manual hand release lever	115
IR	Current Sensing Relay - Fast brake engagement (stopping) without external control equipment	117
MIK	Micro-Switch - Brake fitted with a micro-switch for sensing the brake state (released or engaged)	116
NRB1	Quiet Brake Release - An o-ring is placed between the coil body and the armature plate for noise reduction	116
NRB2	Quiet Brake Motor Operation - An o-ring is placed between the carrier hub & the armature plate to prevent clattering.	116
RG	Corrosion Protected Brake - Corrosion protected brake	115
SR	Dust & Corrosion Protected Brake - Dust & corrosion protected brake	115

Brake Rectifier Options

Abbreviation	Description	Page
Rectifiers	Most NORD brakes are provided with a rectifier that converts AC voltage to DC voltage. Rectifiers are used because most motors are AC powered, but brakes require DC power.	119
GHE	Half Wave Rectifiers	125
PMG	Push Hybrid Rectifiers - External DC Switching*	128
GVE	Full Wave Rectifiers	124

* The PMG rectifier is required when utilizing the larger 800 Nm (590 ft-lb) twin rotor brake. In order to prevent rapid wear the rectifier must be used to "overexcite" the brake release.

Performance Data

40 - 75 hp Motors



Premium Efficient • Inverter duty • TEFC
 Synchronous speed 1800rpm @ 60Hz • 4-pole • Three-phase
 Voltages: 460 & 575V – 60Hz • 1.15 Service Factor
 Continuous Duty • 40°C Ambient • up to 3300ft Elevation
 Class B temperature rise • Class F insulation



60 HZ Premium Efficient (IE3)														
Motor Type	P _n Full Load Power		n _N Full-Load Speed	I _n Full-Load Current		I _a /I _n Locked Rotor Current Ratio	NEMA Code Letter	T _n Full-Load Torque	T _a /T _n Locked Rotor Torque Ratio	T _k /T _n Break Down Torque Ratio	pf Power Factor	η Full Load Efficiency	J _m Rotor Inertia	Wt. Weight
	[hp]	[kW]		[rpm]	460V [A]									
225 RP/4	40	30	1785	49.5	39.6	890	K	1412	3.4	3.8	0.81	94.5	11.63	694
225 SP/4	50	37	1785	59.7	47.8	880	K	1765	3.0	3.7	0.82	94.6	12.81	728
225 MP/4	60	45	1785	72.0	57.6	910	K	2118	3.3	3.6	0.83	95.2	15.90	805
250 WP/4	75	55	1785	84.4	67.5	920	J	2648	2.9	3.2	0.86	95.4	19.46	882

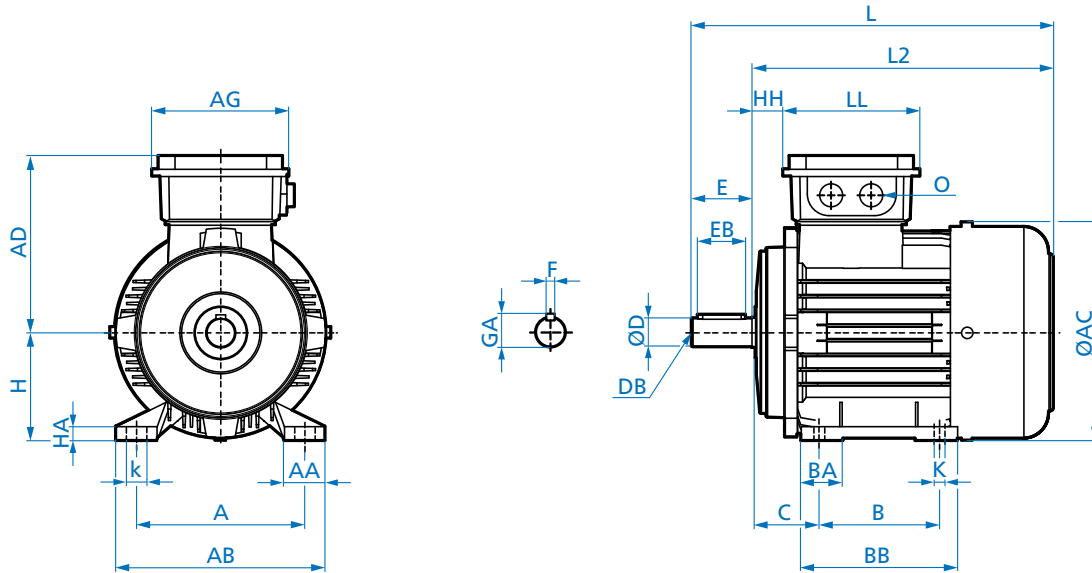
Premium Efficient • Inverter duty • Induction motor • TEFC
 Synchronous speed 1500rpm @ 50Hz • 4-pole • Three-phase
 Voltages: 400V (380-420V) – 50Hz • 1.0 Service Factor
 Continuous Duty • 40°C Ambient • up to 3300ft Elevation
 Class B temperature rise • Class F insulation



50 HZ Premium Efficient (IE3)														
Motor Type	P _n Full Load Power		n _N Full-Load Speed	I _n Full-Load Current		I _a /I _n Locked Rotor Current Ratio	NEMA Code Letter	T _n Full-Load Torque	T _a /T _n Locked Rotor Torque Ratio	T _k /T _n Break Down Torque Ratio	pf Power Factor	η Full Load Efficiency	J _m Rotor Inertia	Wt. Weight
	[hp]	[kW]		[rpm]	400V [A]									
225 RP/4	40	30	1485	56.2	780	J	1707	3.0	3.4	0.82	94.1	11.63	694	
225 SP/4	50	37	1485	68.2	770	J	2106	2.9	3.2	0.83	94.1	12.81	728	
225 MP/4	60	45	1485	81.7	800	J	2561	3.0	3.4	0.83	94.6	15.90	805	
250 WP/4	75	55	1480	96.1	700	H	3141	2.6	2.8	0.87	94.6	19.46	882	



IEC B3 Foot Mounted Motor Dimensions



Dimensions

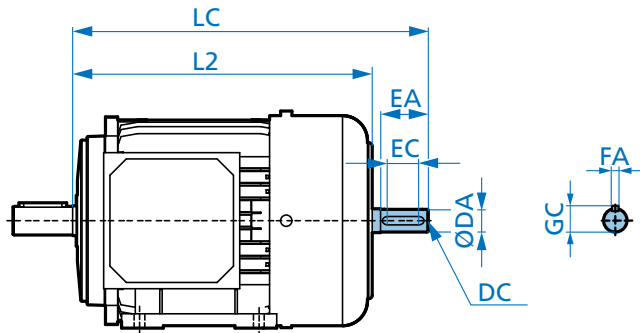
Motor Frame	Efficiency	Overall			Feet									
		L	L2	ØAC	A	B	C	AA	BA	AB	BB	k	K	HA
225	SP	882	742	443	356	286	149	79	66	443	359	25	20	20
225	MP	882	742	443	356	311	149	79	66	443	359	25	20	20

Motor Frame	Efficiency	Shaft							Terminal Box				
		ØD	DB	E	EB	GA	F	H	AD	HH	LL	AG	O
225	SP	60 ^{+0.030} _{+0.011}	M20 X 42	140	125	64	18	225	347	94	245	245	M50 X 1.5
225	MP	60 ^{+0.030} _{+0.011}	M20 X 42	140	125	64	18	225	347	94	245	245	M50 X 1.5

IEC B3 Foot Mounted Motor Option Dimensions

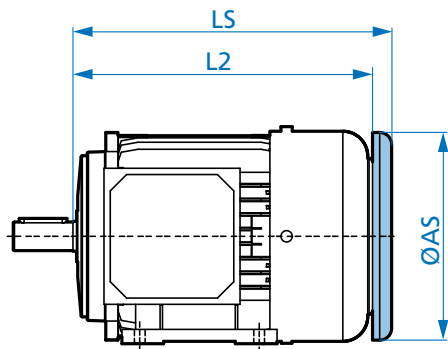


Option WE - 2nd Shaft Extension

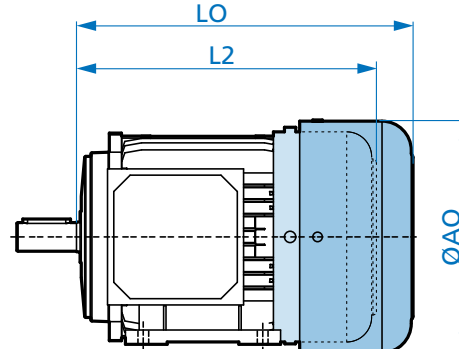


Dimensions

Option RD - Canopy Drip Cover



Option RDD - Double Fan Cover

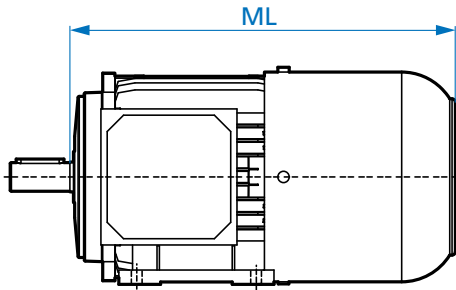


Motor Frame	Efficiency IE3	L2	LC	WE						RD		RDD	
				DA	EA	EC	DC	GC	FA	LS	ØAS	LO	ØAO
225	SP	742	862	55 ^{+0.030} / _{+0.011}	110	100	M20 X 42	59.3	16	828.5	348	826	519
225	MP	742	862	55 ^{+0.030} / _{+0.011}	110	100	M20 X 42	59.3	16	828.5	348	826	519

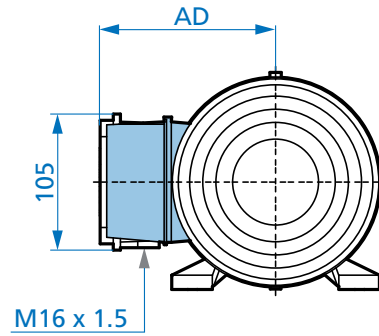
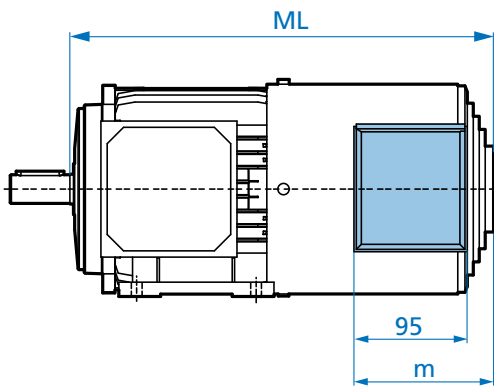


IEC B3 Foot Mounted Motor Option Dimensions

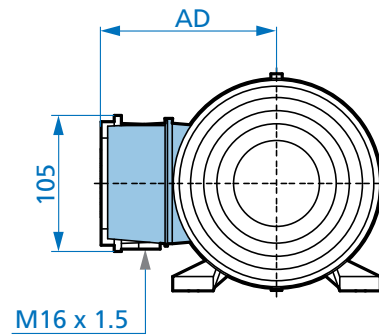
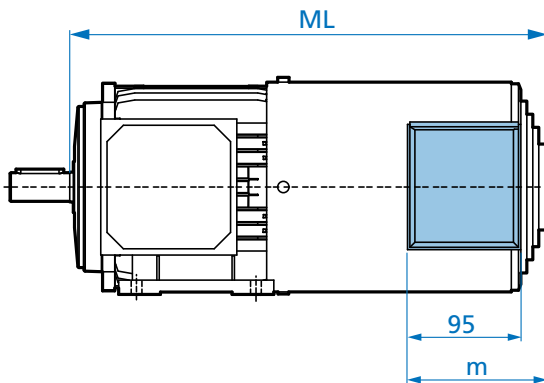
Option IG - Incremental Encoder



Option F - Forced Cooling Fan



Option IG-F - Incremental Encoder & Forced Cooling Fan



Dimensions

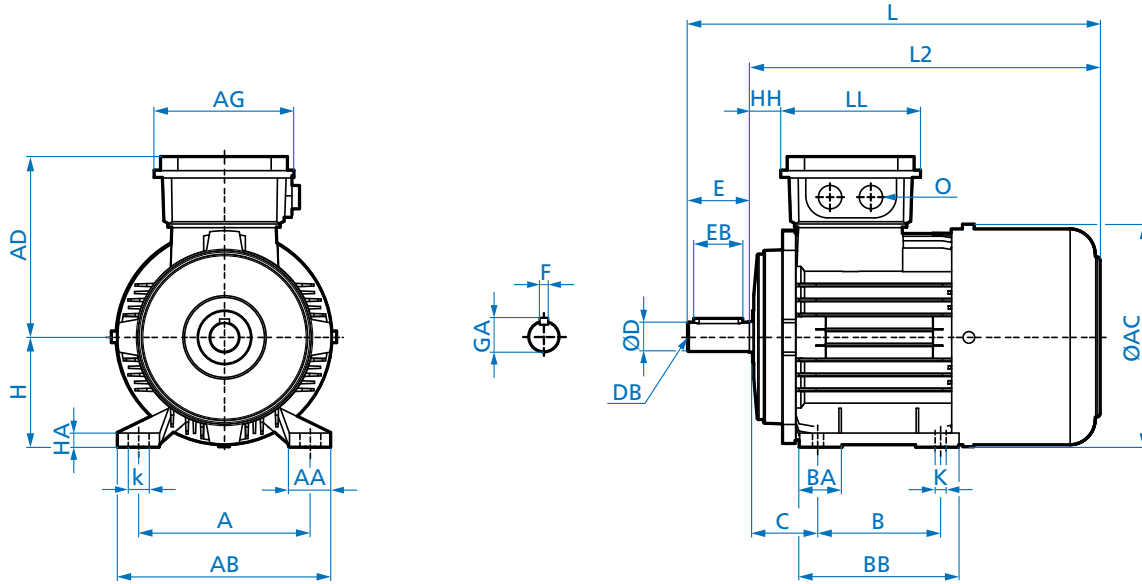
Motor Frame	Efficiency IE3	IG		F		IG-F		
		ML	ML	m	AD	ML	m	AS
225	SP	809	942.5	144	249.5	1032.5	144	249.5
225	MP	809	942.5	144	249.5	1032.5	144	249.5

IEC B3 Foot Mounted Brakemotor Dimensions



Standard Brakemotor

Dimensions



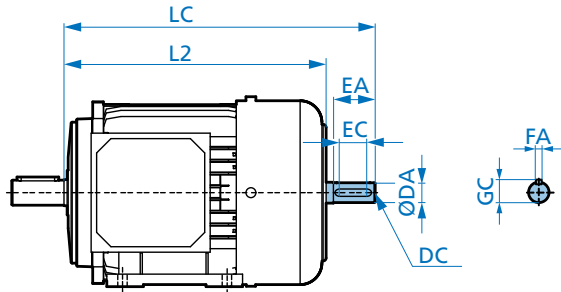
Motor Frame	Efficiency IE3	BRE Size	Overall			Feet									
			L	L2	ØAC	A	B	C	AA	BA	AB	BB	k	K	HA
225	SP	400	1062	922	443	356	286	149	79	66	443	359	25	20	20
225	MP	400	1062	922	443	356	311	149	79	66	443	359	25	20	20

Motor Frame	Efficiency IE3	BRE Size	Shaft						Terminal Box					
			ØD	DB	E	EB	GA	F	H	AD	HH	LL	AG	O
225	SP	400	60 ^{+0.030} _{+0.011}	M20 X 42	140	125	64	18	225	347	94	245	245	M50 X 1.5
225	MP	400	60 ^{+0.030} _{+0.011}	M20 X 42	140	125	64	18	225	347	94	245	245	M50 X 1.5

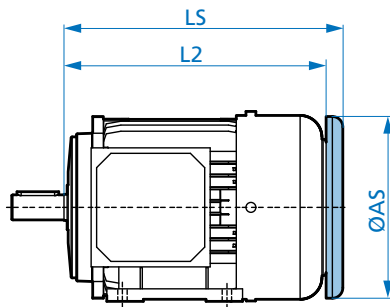


IEC B3 Foot Mounted Brakemotor Option Dimensions

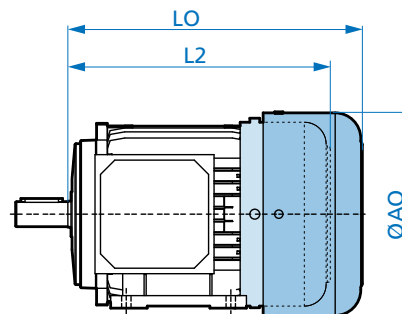
Option WE - 2nd Shaft Extension



Option RD - Canopy Drip Cover



Option RDD - Double Fan Cover



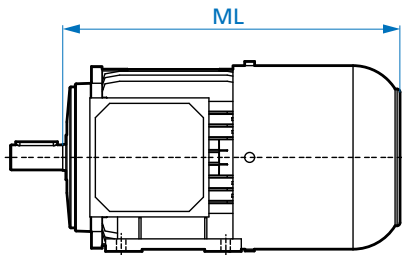
Dimensions

Motor Frame	Efficiency IE3	BRE	L2	WE							RD		RDD	
				LC	DA	EA	EC	DC	GC	FA	LS	ØAS	LO	ØAO
225	SP	400	922	1042	55 ^{+0.030} / _{+0.011}	110	100	M20 X 42	59	16	1008.5	348	1006	519
225	MP	400	922	1042	55 ^{+0.030} / _{+0.011}	110	100	M20 X 42	59	16	1008.5	348	1006	519

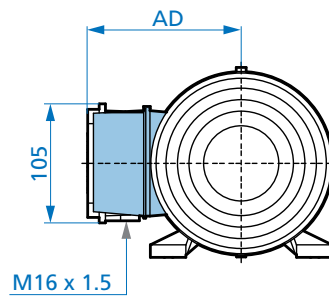
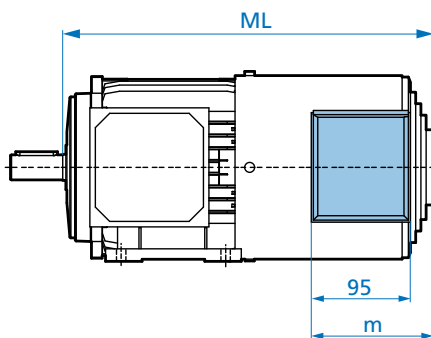
IEC B3 Foot Mounted Brakemotor Option Dimensions



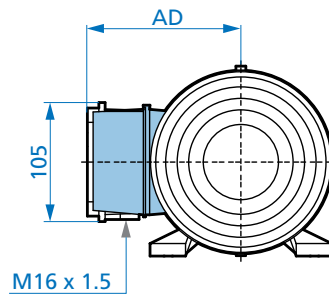
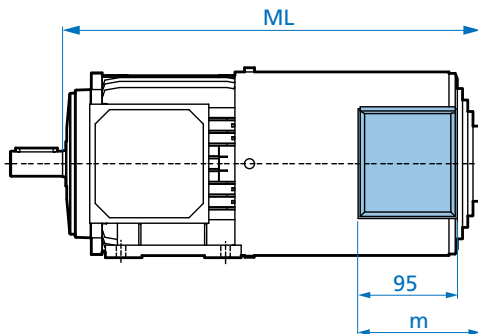
Option IG - Incremental Encoder



Option F - Forced Cooling Fan



Option IG-F - Incremental Encoder & Forced Cooling Fan

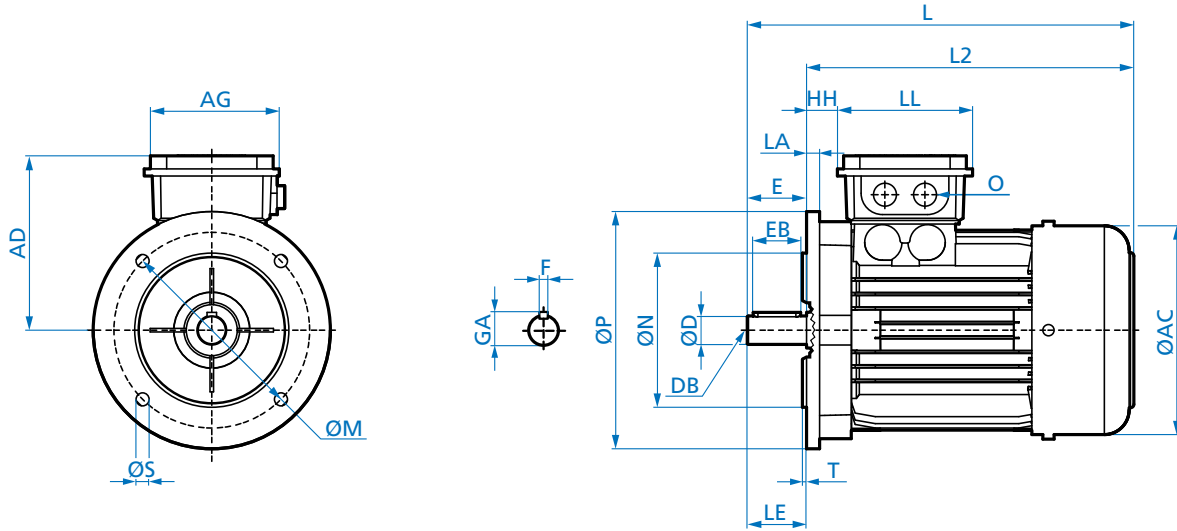


Dimensions

Motor Frame	Efficiency		IG ML	ML	F m	AD	ML	IG-F m	ØAS
	IE3	BRE							
225	SP	400	989	1112.5	144	249.5	1202.5	144	249.5
225	MP	400	989	1112.5	144	249.5	1202.5	144	249.5



IEC B5 Flange Mounted Motor Dimensions



Dimensions

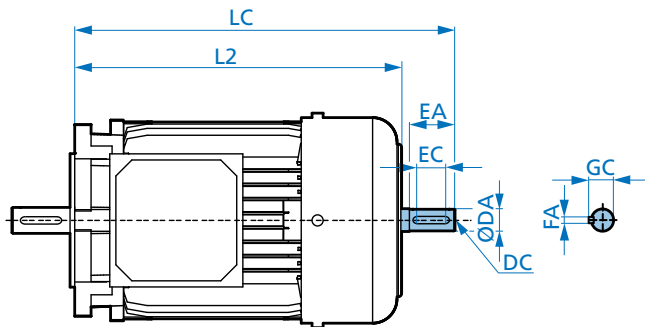
Motor Frame	Efficiency IE3	Flange Size	Overall			Mounting Flange					
			L	L2	ØAC	M	N	P	T	LA	S
225	SP	A450	882	742	443	400	350 ^{+0.000} _{-0.036}	450	5	20	17.5
225	MP	A450	882	742	443	400	350 ^{+0.000} _{-0.036}	450	5	20	17.5

Motor Frame	Efficiency IE3	Flange Size	Shaft							Terminal Box				
			ØD	DB	E	LE	EB	GA	F	AD	HH	LL	AG	O
225	SP	A450	60 ^{+0.030} _{+0.011}	M20 X 42	140	140	125	64	18	347	94	245	245	M50 X 1.5
225	MP	A450	60 ^{+0.030} _{+0.011}	M20 X 42	140	140	125	64	18	347	94	245	245	M50 X 1.5

IEC B5 Flange Mounted Motor Option Dimensions

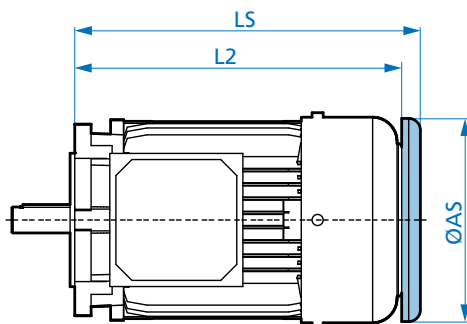


Option WE - 2nd Shaft Extension

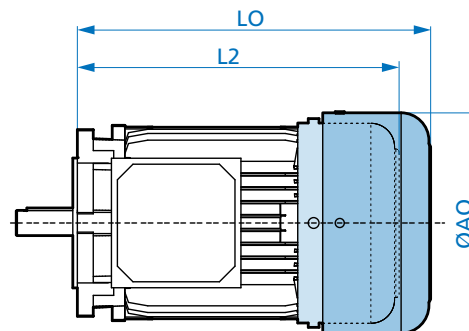


Dimensions

Option RD - Canopy Drip Cover



Option RDD - Double Fan Cover

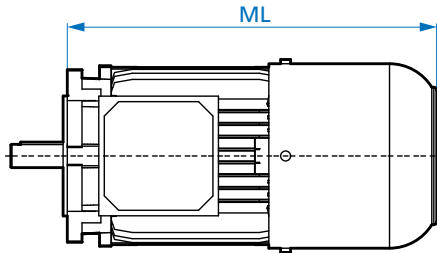


Motor Frame	Efficiency IE3	L2	WE							RD		RDD	
			LC	ØDA	EA	EC	DC	GC	FA	LS	ØAS	LO	ØAO
225	SP	742	862	55 ^{+0.030} _{+0.011}	110	100	M20 X 42	59.3	16	828.5	348	826	519
225	MP	742	862	55 ^{+0.030} _{+0.011}	110	100	M20 X 42	59.3	16	828.5	348	826	519

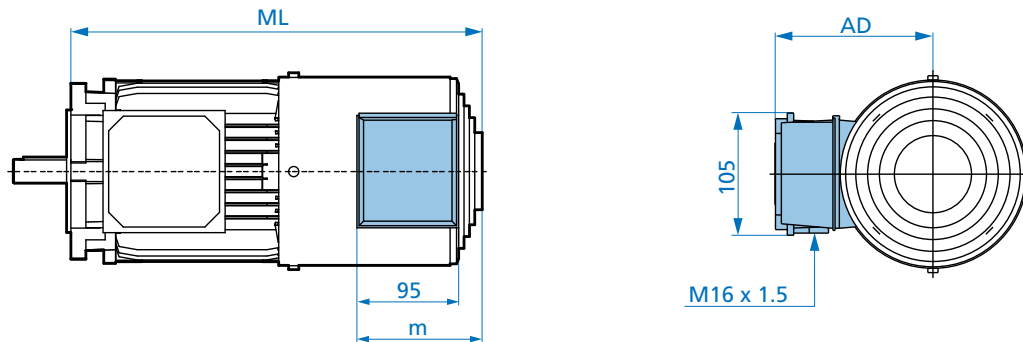


IEC B5 Flange Mounted Motor Option Dimensions

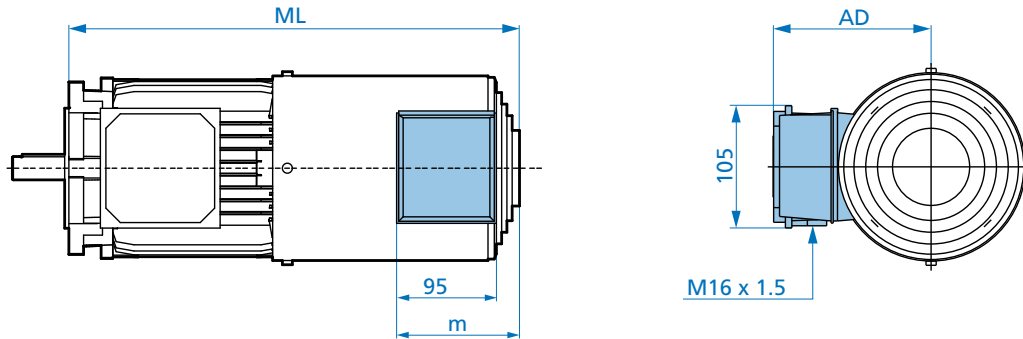
Option IG - Incremental Encoder



Option F - Forced Cooling Fan



Option IG-F - Incremental Encoder & Forced Cooling Fan



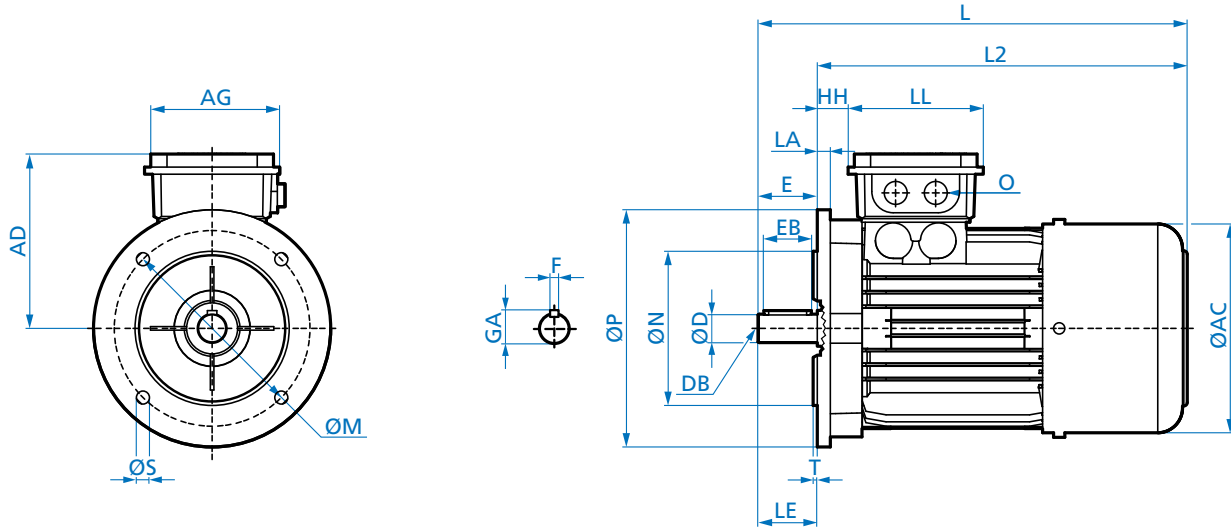
Dimensions

Motor Frame	Efficiency	IG		F		IG-F		
		ML	ML	m	AD	ML	m	ØAS
225	SP	809	942.5	144	249.5	1032.5	144	249.5
225	MP	809	942.5	144	249.5	1032.5	144	249.5

IEC B5 Flange Mounted Brakemotor Dimensions



Dimensions



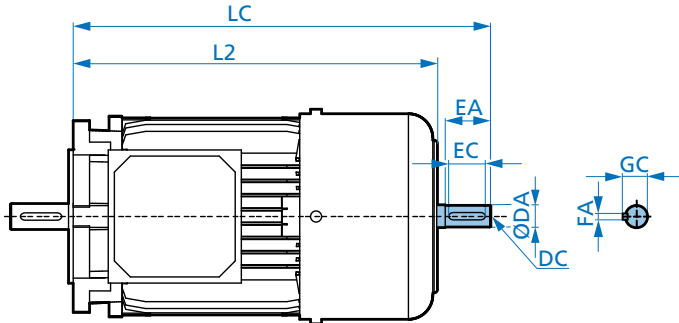
Motor Frame	Efficiency IE3	Flange Size	BRE	Overall			Mounting Flange						
				L	L2	ØAC	M	N	P	T	LA	S	
225	SP	A450	400	1062	922	443	400	350	^{+0.000} _{-0.036}	450	5	20	17.5
225	MP	A450	400	1062	922	443	400	350	^{+0.000} _{-0.036}	450	5	20	17.5

Motor Frame	Efficiency IE3	Flange Size	BRE	Shaft							Terminal Box					
				ØD	DB	E	LE	EB	GA	F	AD	HH	LL	AG	O	
225	SP	A450	400	60	^{+0.030} _{+0.011}	M20 X 42	140	140	125	64	18	347	94	245	245	M50 X 1.5
225	MP	A450	400	60	^{+0.030} _{+0.011}	M20 X 42	140	140	125	64	18	347	94	245	245	M50 X 1.5

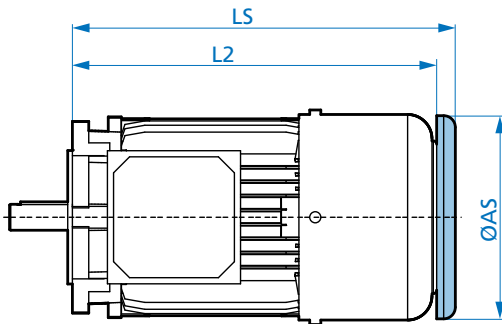


IEC B5 Flange Mounted Brakemotor Option Dimensions

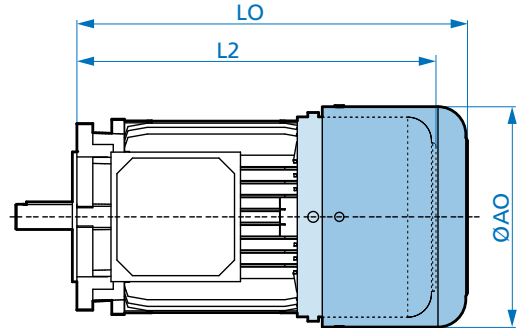
Option WE - 2nd Shaft Extension



Option RD - Canopy Drip Cover



Option RDD - Double Fan Cover



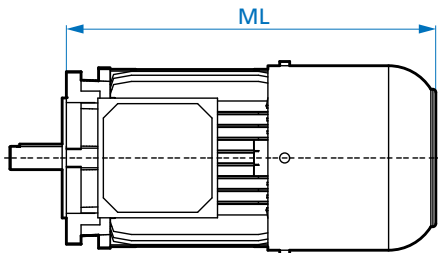
Dimensions

Motor Frame	Efficiency IE3	BRE	L2	WE								RD		RDD	
				LC	ØDA	EA	EC	DC	GC	FA	LS	ØAS	LO	ØAO	
225	SP	400	922	1042	55 ^{+0.030} / _{+0.011}	110	100	M20 X 42	59.3	16	1008.5	348	1006	519	
225	MP	400	922	1042	55 ^{+0.030} / _{+0.011}	110	100	M20 X 42	59.3	16	1008.5	348	1006	519	

IEC B5 Flange Mounted Brakemotor Option Dimensions

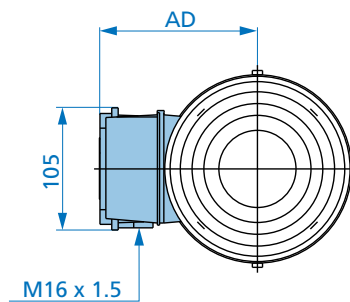
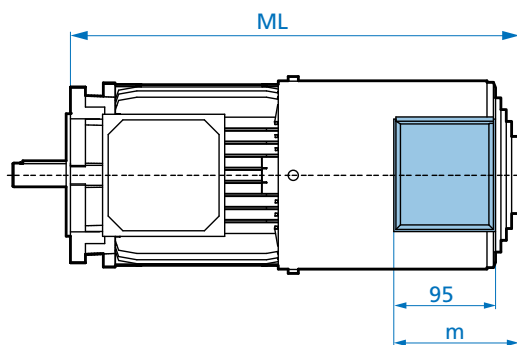


Option IG - Incremental Encoder

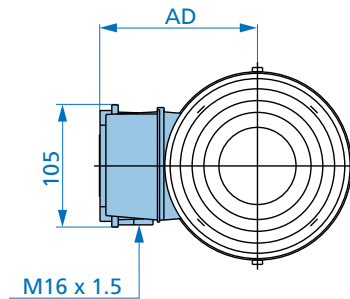
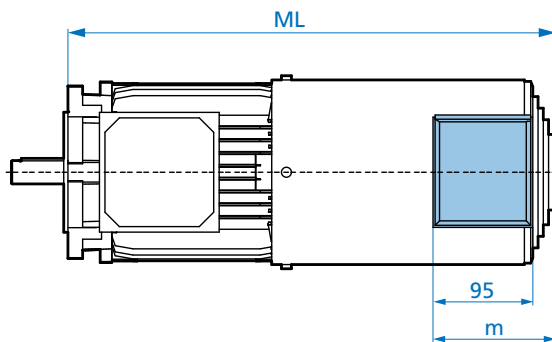


Option F - Forced Cooling Fan

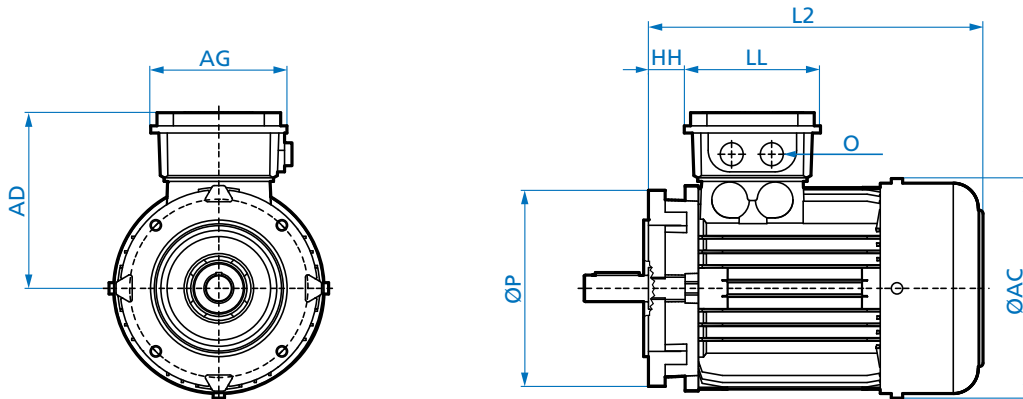
Dimensions



Option IG-F - Incremental Encoder & Forced Cooling Fan



mm	Efficiency		IG	F			IG F	AD	
Motor Frame	PE	BRE	ML	ML	m	AD	ML	m	AD
225	SP	400	989	1112.5	144	249.5	1202.5	144	249.5
250	MP	400	989	1112.5	144	249.5	1202.5	144	249.5



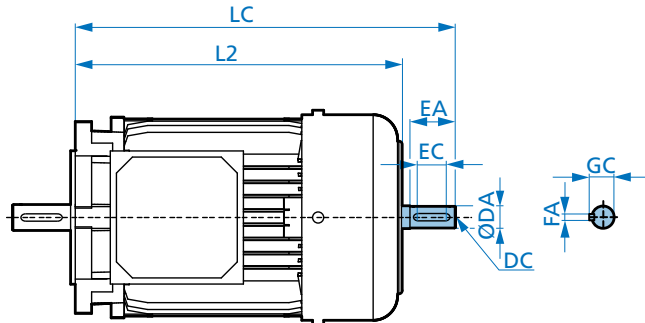
inch Motor Frame	Efficiency PE	Overall		Flange ØP	Terminal Box				
		L2	ØAC		AD	HH	LL	AG	O (NPT)
225	RP	29.21	17.44	11.81	13.66	3.70	9.65	9.65	1-1/2" NPT
225	RP	29.21	17.44	13.78	13.66	3.70	9.65	9.65	1-1/2" NPT
225	SP	29.21	17.44	13.78	13.66	3.70	9.65	9.65	1-1/2" NPT
225	MP	29.21	17.44	13.78	13.66	3.70	9.65	9.65	1-1/2" NPT
250	WP	29.21	17.44	17.72	13.66	3.70	9.65	9.65	2" NPT

mm Motor Frame	Efficiency PE	Overall		Flange ØP	Terminal Box				
		L2	ØAC		AD	HH	LL	AG	O (NPT)
225	RP	742	443	300	347	94	245	245	M50 X 1.5
225	RP	742	443	350	347	94	245	245	M50 X 1.5
225	SP	742	443	350	347	94	245	245	M50 X 1.5
225	MP	742	443	350	347	94	245	245	M50 X 1.5
250	WP	742	443	450	347	94	245	245	M63 X 1.5

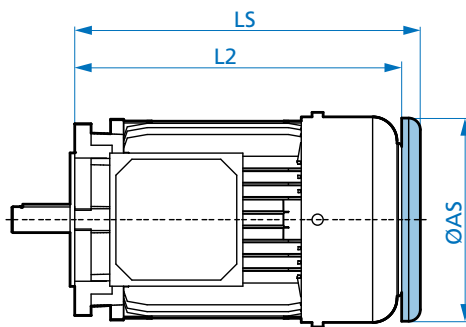
Integral Motor Option Dimensions



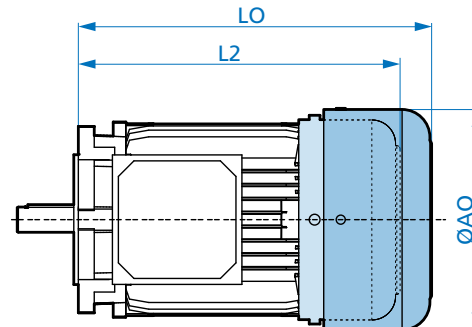
Option WE - 2nd Shaft Extension



Option RD - Canopy Drip Cover



Option RDD - Double Fan Cover



Dimensions

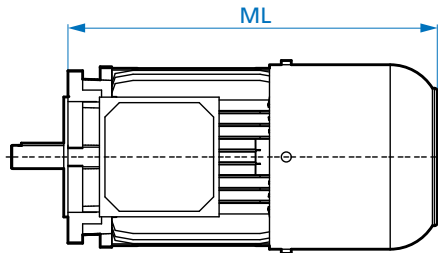
inch Motor Frame	Efficiency PE	L2	LC	DA	WE						RD		RDD	
					EA	EC	DC	GC	FA	LS	øAS	LO	øAO	
225	RP	29.21	33.94	2.17 <small>+0.0012 +0.0004</small>	4.33	3.94	M20 X 42	2.33	0.63	32.62	13.70	32.52	20.43	
225	RP	29.21	33.94	2.17 <small>+0.0012 +0.0004</small>	4.33	3.94	M20 X 42	2.33	0.63	32.62	13.70	32.52	20.43	
225	SP	29.21	33.94	2.17 <small>+0.0012 +0.0004</small>	4.33	3.94	M20 X 42	2.33	0.63	32.62	13.70	32.52	20.43	
225	MP	29.21	33.94	2.17 <small>+0.0012 +0.0004</small>	4.33	3.94	M20 X 42	2.33	0.63	32.62	13.70	32.52	20.43	
250	WP	29.21	35.12	2.36 <small>+0.0012 +0.0004</small>	5.51	4.92	M20 X 42	2.54	0.71	32.62	13.70	32.52	20.43	

mm Motor Frame	Efficiency PE	L2	LC	DA	WE						RD		RDD	
					EA	EC	DC	GC	FA	LS	øAS	LO	øAO	
225	RP	742	862	55 <small>+0.030 +0.011</small>	110	100	M20 X 42	59.3	16	828.5	348	826	519	
225	RP	742	862	55 <small>+0.030 +0.011</small>	110	100	M20 X 42	59.3	16	828.5	348	826	519	
225	SP	742	862	55 <small>+0.030 +0.011</small>	110	100	M20 X 42	59.3	16	828.5	348	826	519	
225	MP	742	862	55 <small>+0.030 +0.011</small>	110	100	M20 X 42	59.3	16	828.5	348	826	519	
250	WP	742	892	60 <small>+0.030 +0.011</small>	140	125	M20 X 42	64.4	18	828.5	348	826	519	

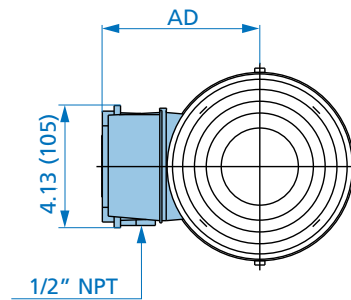
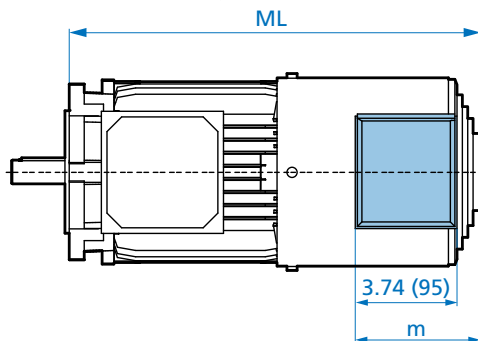


Integral Motor Option Dimensions

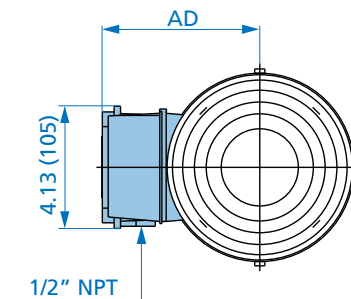
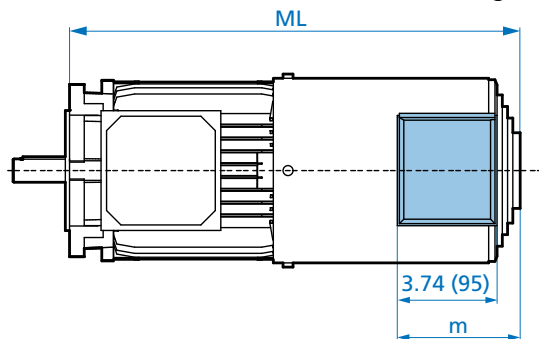
Option IG - Incremental Encoder



Option F - Forced Cooling Fan



Option IG-F - Incremental Encoder & Forced Cooling Fan



Dimensions

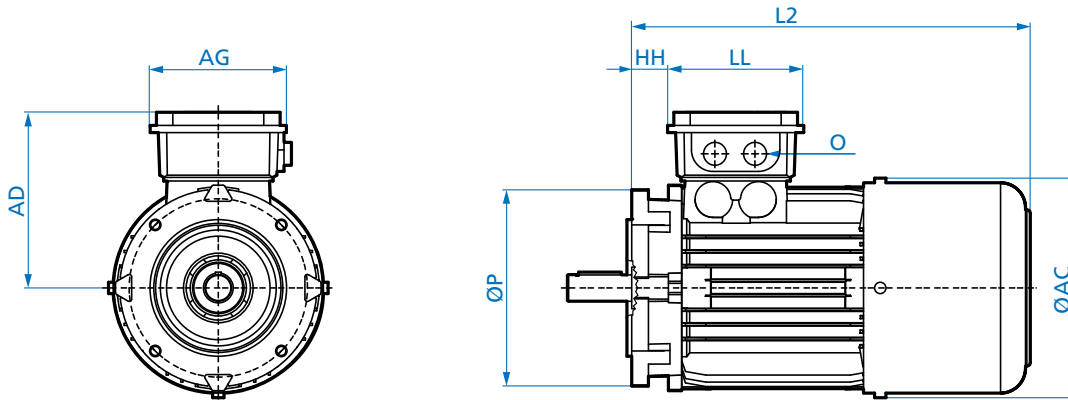
inch Motor Frame	Efficiency PE	IG ML	ML	F m	AD	ML	IG F m	AD
225	RP	31.85	37.11	5.67	9.82	40.65	5.67	9.82
225	RP	31.85	37.11	5.67	9.82	40.65	5.67	9.82
225	SP	31.85	37.11	5.67	9.82	40.65	5.67	9.82
225	MP	31.85	37.11	5.67	9.82	40.65	5.67	9.82
250	WP	31.85	37.11	5.67	9.82	40.65	5.67	9.82

mm Motor Frame	Efficiency PE	IG ML	ML	F m	AD	ML	IG F m	AD
225	RP	809	942.5	144	249.5	1032.5	144	249.5
225	RP	809	942.5	144	249.5	1032.5	144	249.5
225	SP	809	942.5	144	249.5	1032.5	144	249.5
225	MP	809	942.5	144	249.5	1032.5	144	249.5
250	WP	809	942.5	144	249.5	1032.5	144	249.5

Integral Brakemotor Dimensions



Dimensions



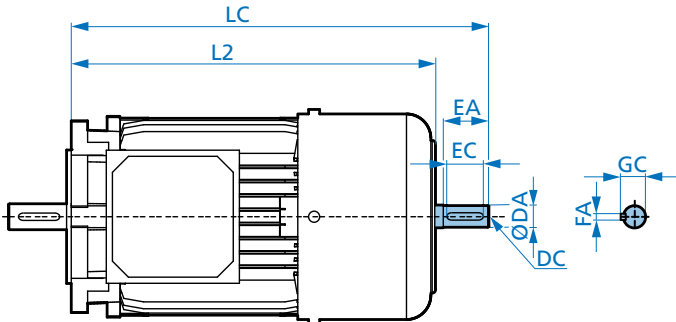
inch Motor Frame	Efficiency		Overall		Flange ØP	Terminal Box				
	PE	BRE	L2	ØAC		AD	HH	LL	AG	O (NPT)
225	RP	400	36.30	17.44	11.81	13.66	3.70	9.65	9.65	1-1/2" NPT
225	RP	400	36.30	17.44	13.78	13.66	3.70	9.65	9.65	1-1/2" NPT
225	SP	400	36.30	17.44	13.78	13.66	3.70	9.65	9.65	1-1/2" NPT
225	MP	800	36.30	17.44	13.78	13.66	3.70	9.65	9.65	1-1/2" NPT
250	WP	800	36.30	17.44	17.72	13.66	3.70	9.65	9.65	2" NPT

mm Motor Frame	Efficiency		Overall		Flange ØP	Terminal Box				
	PE	BRE	L2	ØAC		AD	HH	LL	AG	O (NPT)
225	RP	400	922	443	300	347	94	245	245	M50 X 1.5
225	RP	400	922	443	350	347	94	245	245	M50 X 1.5
225	SP	400	922	443	350	347	94	245	245	M50 X 1.5
225	MP	800	922	443	350	347	94	245	245	M50 X 1.5
250	WP	800	922	443	450	347	94	245	245	M63 X 1.5

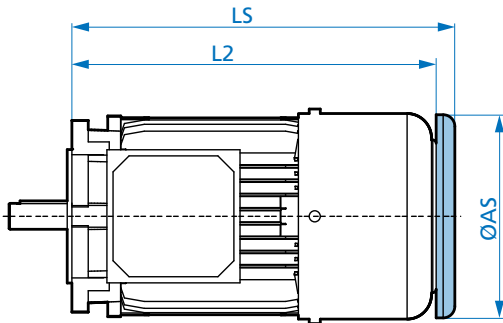


Integral Brakemotor Option Dimensions

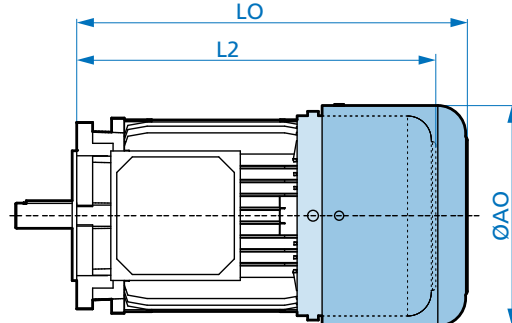
Option WE - 2nd Shaft Extension



Option RD - Canopy Drip Cover



Option RDD - Double Fan Cover



Dimensions

inch Motor Frame	Efficiency PE	BRE	L2	LC	DA	WE					RD		RDD	
						EA	EC	DC	GC	FA	LS	øAS	LO	øAO
225	RP	400	36.30	41.02	2.17 <small>+0.0012 -0.0004</small>	4.33	3.94	M20 X 42	2.33	0.63	39.70	13.70	39.61	20.43
225	RP	400	36.30	41.02	2.17 <small>+0.0012 -0.0004</small>	4.33	3.94	M20 X 42	2.33	0.63	39.70	13.70	39.61	20.43
225	SP	400	36.30	41.02	2.17 <small>+0.0012 -0.0004</small>	4.33	3.94	M20 X 42	2.33	0.63	39.70	13.70	39.61	20.43
225	MP	800	36.30	41.02	2.17 <small>+0.0012 -0.0004</small>	4.33	3.94	M20 X 42	2.33	0.63	39.70	13.70	39.61	20.43
225	WP	800	36.30	42.20	2.36 <small>+0.0012 -0.0004</small>	5.51	4.92	M20 X 42	2.54	0.71	39.70	13.70	39.61	20.43

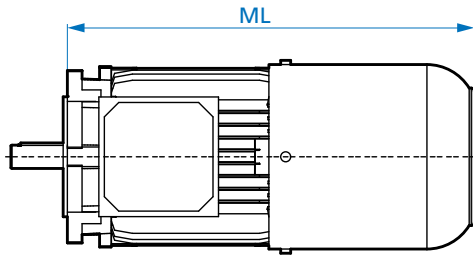
mm Motor Frame	Efficiency PE	BRE	L2	LC	DA	WE					RD		RDD	
						EA	EC	DC	GC	FA	LS	øAS	LO	øAO
225	RP	400	922	1042	55 <small>+0.030 +0.011</small>	110	100	M20 X 42	59.3	16	1008.5	348	1006	519
225	RP	400	922	1042	55 <small>+0.030 +0.011</small>	110	100	M20 X 42	59.3	16	1008.5	348	1006	519
225	SP	400	922	1042	55 <small>+0.030 +0.011</small>	110	100	M20 X 42	59.3	16	1008.5	348	1006	519
225	MP	800	922	1042	55 <small>+0.030 +0.011</small>	110	100	M20 X 42	59.3	16	1008.5	348	1006	519
225	WP	800	922	1072	60 <small>+0.030 +0.011</small>	140	125	M20 X 42	64.4	18	1008.5	348	1006	519

Integral Brakemotor Option Dimensions

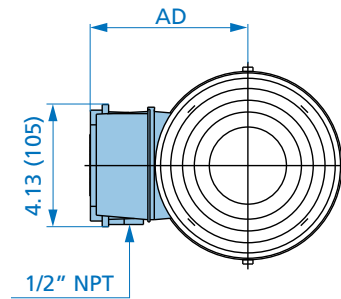
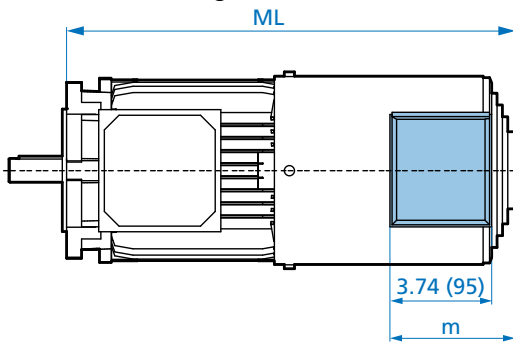


Dimensions

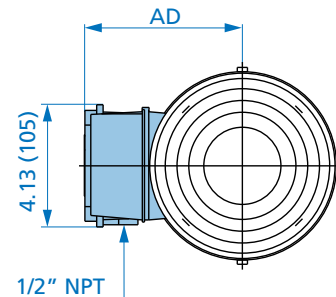
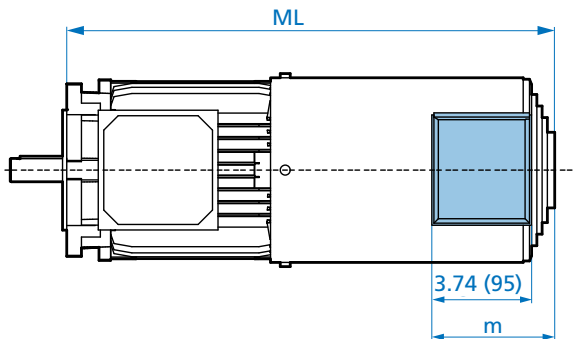
Option IG - Incremental Encoder



Option F - Forced Cooling Fan



Option IG-F - Incremental Encoder & Forced Cooling Fan



inch Motor Frame	Efficiency PE	BRE	IG ML	ML	F m	AD	ML	IG F m	AD
225	RP	400	38.94	43.80	5.67	9.82	47.34	5.67	9.82
225	RP	400	38.94	43.80	5.67	9.82	47.34	5.67	9.82
225	SP	400	38.94	43.80	5.67	9.82	47.34	5.67	9.82
225	MP	800	38.94	43.80	5.67	9.82	47.34	5.67	9.82
250	WP	800	38.94	43.80	5.67	9.82	47.34	5.67	9.82

mm Motor Frame	Efficiency PE	BRE	IG ML	ML	F m	AD	ML	IG F m	AD
225	RP	400	989	1112.5	144	249.5	1202.5	144	249.5
225	RP	400	989	1112.5	144	249.5	1202.5	144	249.5
225	SP	400	989	1112.5	144	249.5	1202.5	144	249.5
225	MP	800	989	1112.5	144	249.5	1202.5	144	249.5
250	WP	800	989	1112.5	144	249.5	1202.5	144	249.5

UNICASE™ SPEED REDUCERS



HELICAL IN-LINE

- Foot or Flange Mount
- Torque up to 205,000 lb-in
- Gear ratios – 1.82:1 to over 300,000:1



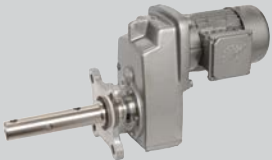
NORDBLOC®.1 HELICAL IN-LINE

- Foot or Flange Mount
- Torque up to 26,550 lb-in
- Gear ratios – 1.88:1 to over 370:1



PARALLEL HELICAL CLINCHER™

- Shaft, Flange or Foot Mount
- Torque up to 797,000 lb-in
- Gear ratios – 4.26:1 to over 300,000:1



SCP SCREW CONVEYOR PACKAGE

- Shaft, or Flange Mount
- Torque up to 53,100 lb-in
- Gear ratios – 4.32:1 to over 1500:1



RIGHT ANGLE

HELICAL-BEVEL 2-STAGE

- Foot, Flange or Shaft Mount
- Torque up to 5,840 lb-in
- Gear ratios – 4.1:1 to 70:1



RIGHT ANGLE HELICAL-BEVEL

- Foot, Flange or Shaft Mount
- Torque up to 283,000 lb-in
- Gear ratios – 8.04:1 to over 300,000:1



RIGHT ANGLE HELICAL-WORM

- Foot, Flange or Shaft Mount
- Torque up to 27,585 lb-in
- Gear ratios – 4.40:1 to over 300,000:1

HIGH PERFORMANCE MOTORS & BRAKEMOTORS



INVERTER/VECTOR DUTY

- Standard or Energy Efficient
- Integral, NEMA or Metric IEC
- 1/6 to 250 hp

UNICASE™ SPEED REDUCERS



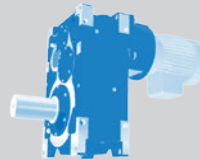
MINICASE™ RIGHT ANGLE WORM

- Foot, Flange or Shaft Mount
- Torque up to 3,540 lb-in
- Gear ratios – 5:1 to 500:1



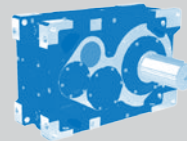
FLEXBLOC™ WORM

- Modular bolt-on options
- Torque up to 4,683 lb-in
- Gear ratios – 5:1 to 3,000:1



MAXXDRIVE™ LARGE INDUSTRIAL GEAR UNITS PARALLEL HELICAL

- Modular bolt-on options
- Torque up to 2,027,000 lb-in
- Gear ratios – 5:1 to 1,600:1



MAXXDRIVE™ LARGE INDUSTRIAL GEAR UNITS HELICAL-BEVEL

- Modular bolt-on options
- Torque up to 2,027,000 lb-in
- Gear ratios – 5:1 to 1,600:1

NORDAC AC VECTOR DRIVES



SK180E FAMILY

- Distributed, simple speed control
- 380-480V, 3-phase to 3.0 hp
- 200-240V, 3-phase to 1.5 hp
- 200-240V, 1-phase to 1.5 hp
- 100-120V, 1-phase to 0.75 hp



SK200E FAMILY

- Distributed, high performance
- 380-480V, 3-phase to 30 hp
- 200-240V, 3-phase to 15 hp
- 200-240V, 1-phase to 1.5 hp
- 100-120V, 1-phase to 1 hp



SK500E FAMILY

- Compact, cabinet mount, high performance
- 380-480V, 3-phase, to 125 hp
- 200-240V, 3-phase, to 25 hp
- 200-240V, 1-phase, to 3 hp
- 100-120V, 1-phase, to 1.5 hp



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.



Global Presence

Allows for short lead times and quick response times throughout the world.

Modular Design

More than 20 million totally unique product combinations guarantees that you won't need to look anywhere else.

Quality Manufacturing

NORD produces maintenance free products that have a long life in order to save you money for the long haul.

Dependable Service

With emergency service available 24/7 we can help you out when you need us most.

Innovative Products

Our engineers are hard at work creating solutions to everyday problems.

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