



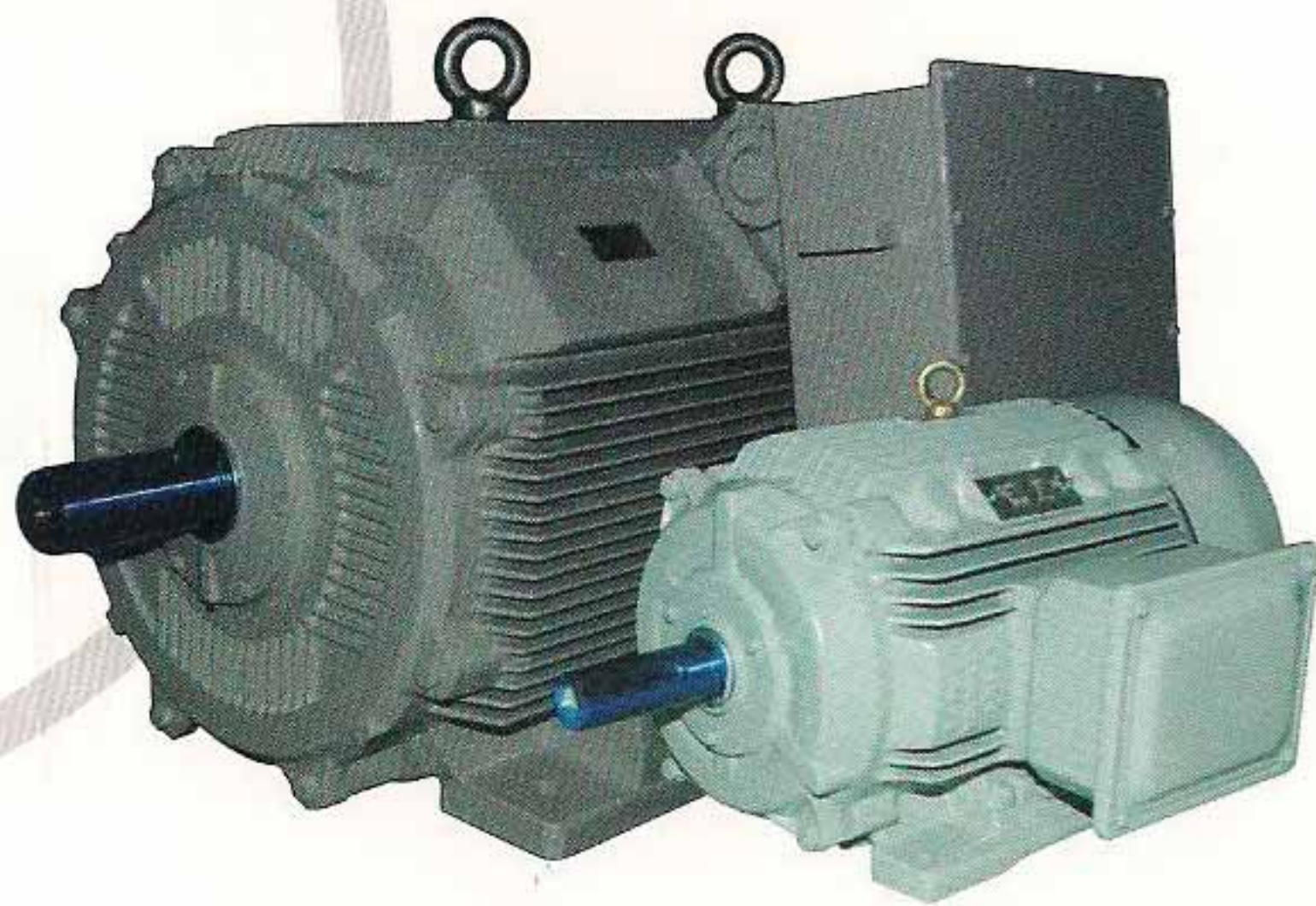
Smart solutions.
Strong relationships.

LT Motors & Drives

Range & Features at a glance

Cat No.: LTM / LFL / 01 / Dec. 2009

(Replaces earlier 6 page leaflet April 09)



ND Series

The Power Behind The Drive

Frames 80 to 400 in cast iron body

Range : 0.37 kW to 500 kW

Squirrel cage & Slipring Motors

Foot / Flange & Face Mounting

2 Pole / 4 Pole / 6 Pole / 8 Pole / 10 Pole

Motors for every applications

Full range available for use in Hazardous area Zone 2



AC Drives

Range : CG Drive -SK

Single Phase, Dual Phase, Three Phase
200 V/400 V Class, 0.25 kW to 45 kW

PLC functionality for small applications

Dynamic braking transistor as standard

Interfacing protocols-

Modbus/Profibus/Devicenet/Ethernet

CG Drive-SG

Three Phase 200 / 400 V Class

5.5 KW to 200 kW Extended upto 400 kW

Motor parameters self tuning

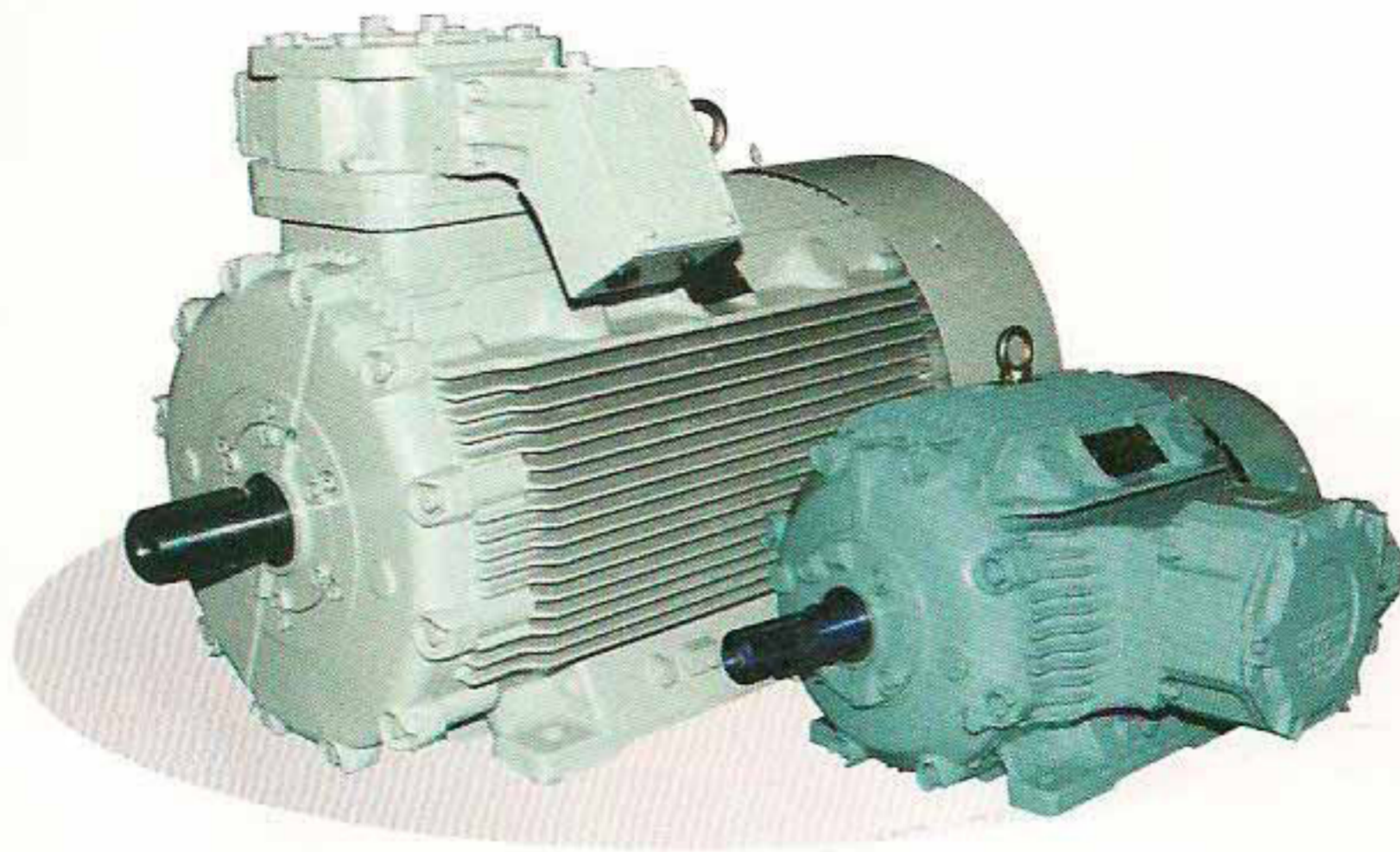
Auto capture function

Interfacing protocols Modbus/Profibus/Devicenet



AVANTHA
GROUP COMPANY





Hazardous Area Motors

Type 'e' & 'n' and Flameproof for Gas Group I, IIA, IIB

Flameproof Motors from frame 80 to 355

Suitable for gas group I, IIA, IIB

Range 0.37 kW to 325 kW (Squirrel Cage)

22 kW to 160 kW (Slipring)

Foot & Flange Mounting

2 Pole / 4 Pole / 6 Pole / 8 Pole

Approved by ERTL / PESO / DGMS

DGFAS & LI in india and BASEEFA / ATEX CE

Mark abroad

Increased safety (Type'e') & Non sparking

(Type'n') from frame 90 to 355

Approved by ERTL / PESO / DGFAS&LI in India and
CSA abroad

Hazardous Area Motors

Flameproof for Gas Group IIC

Flameproof Motors from frame 80 to 315M &
355LX

Suitable for gas group IIC

Range 0.37 kW to 325 kW

2 Pole / 4 Pole / 6 Pole / 8 Pole

Approved by ERTL / PESO / DGFAS&LI



SPDP Slipring Motors

Screen Protected Drip Proof Slip Ring Motors

Frame 160 to 400

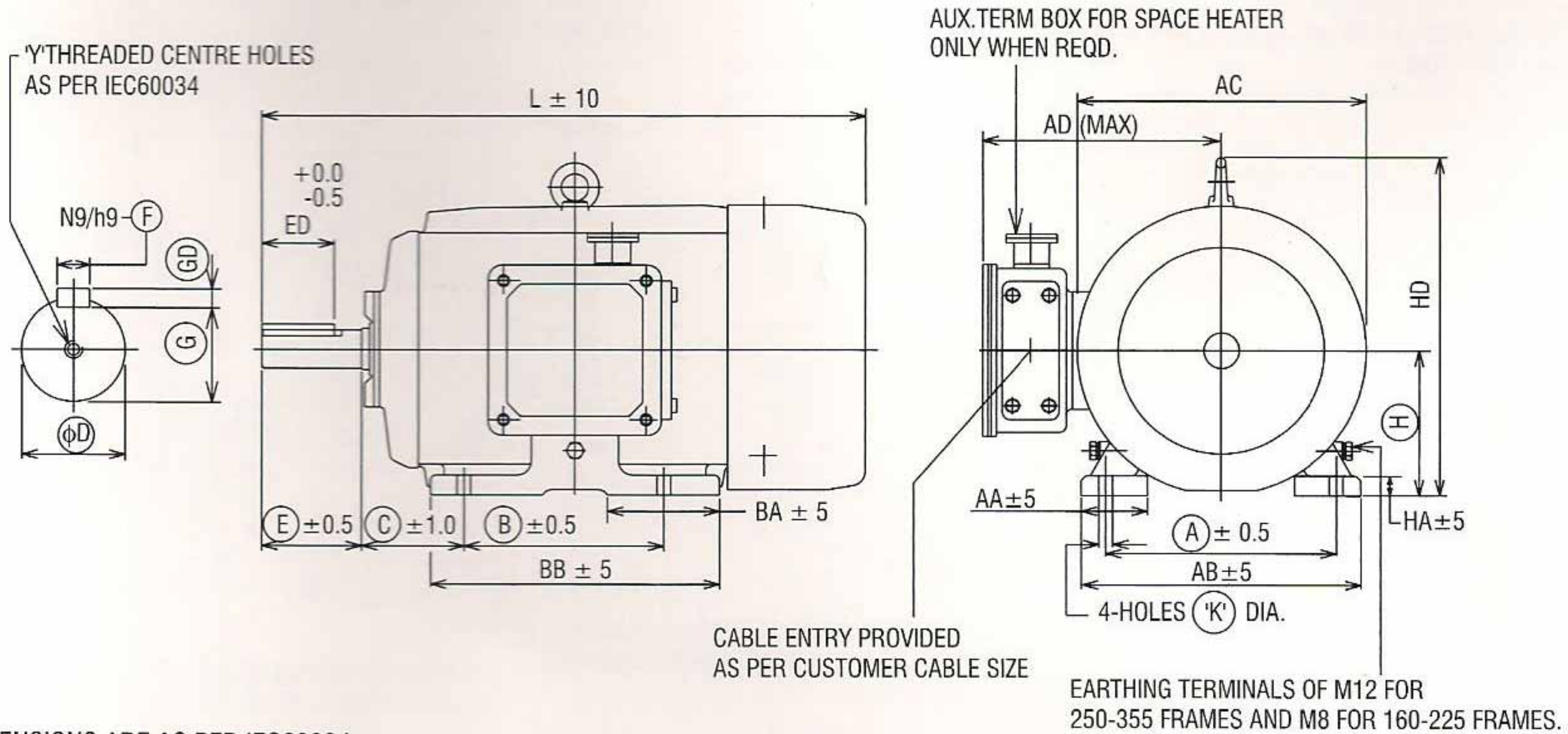
Range 7.5 kW to 350 kW

Foot & Flange Mounting

4 Pole / 6 Pole / 8 Pole / 10 Pole

Strip wound rotor for 280 Frame & above

OUTLINE DIMENSION DRAWING FOR 3 PHASE SQUIRREL CAGE TEFC FOOT MOUNTED INDUCTION MOTORS (4 POLE & UP FOR ALL FRAMES & 2 POLE & UP, UPTO ND200L FRAME.)

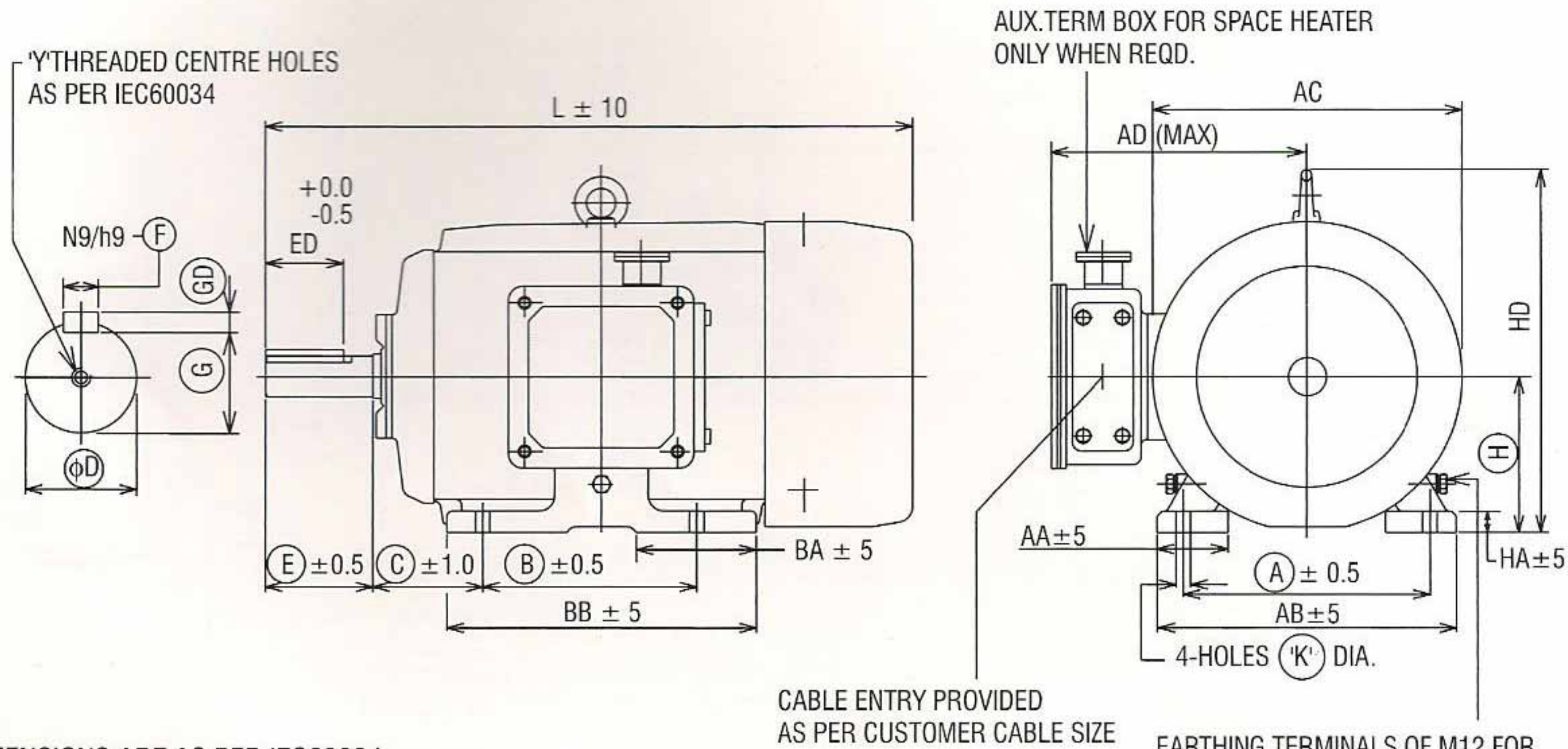


RINGED DIMENSIONS ARE AS PER IEC60034
ALL DIMENSIONS ARE IN mm.

Frame	A	B	C	H	AA	AB	BA	BB	K	D	E	ED	F	GD	G	Y	AD	AC	L	HD	HA
ND80	125	100	50	80.0 79.5	35	152	45	124	10.0 10.5	19.009 18.996	40	27	6.00 5.970	6.00 5.970	15.0 14.8	M6x16	134	170	285	200	11
ND90S ND90L	140	100 125	56	90.0 89.5	35	168	40 52	127 152	10.0 10.5	24.009 23.996	50	36	8.00 7.91	7.00 6.91	20.8 19.8	M8x19	150	195	315 340	230	13
ND100L	160	140	63	100.0 99.5	36	192	45	170	12.0 12.5	28.009 23.996	60	44	8.00 7.91	7.00 6.91	24.0 23.8	M10x22	160	215	370	250	13
ND112M	190	140	70	112.0 111.5	36	222	60	170	12.0 12.5	28.009 23.996	60	44	8.00 7.91	7.00 6.91	24.0 23.8	M10x22	170	235	395	275	13
ND132S ND132M	216	140 178	89	132.0 131.5	48	254	54	178	12.0 12.5	38.018 38.002	80	60	10.0 9.91	8.00 7.91	33.0 32.8	M12x28	190	275	470 510	320	16
ND160M	254	210	108	160.0 159.5	73	308	76	254	15.0 15.5	42.018 42.002	110	80	12.00 11.957	8.00 7.91	37.0 36.8	M16X32	325	318	605	376	22
ND160L	254	254	108	160.0 159.5	73	308	101	298	15.0 15.5	42.018 42.002	110	80	12.00 11.957	8.00 7.91	37.0 36.8	M16X32	325	318	650	376	22
ND180M	279	241	121	180.0 179.5	84	348	85	286	15.0 15.5	48.018 48.002	110	80	14.00 13.957	9.00 8.91	42.5 42.3	M16X32	345	352	677	418	22
ND180L	279	279	121	180.0 179.5	84	348	106	323	15.0 15.5	48.018 48.002	110	80	14.00 13.957	9.00 8.91	42.5 42.3	M16X32	345	352	715	418	22
ND200L	318	305	133	200.0 199.5	66	381	115	356	19.0 19.5	55.030 55.011	110	80	16.00 15.957	10.0 9.91	49.0 48.8	M20X40	430	428	790	480	25
ND225S	356	286	149	225.0 224.5	70	425	102	340	19.0 19.5	60.030 60.011	140	110	18.00 17.957	11.00 10.91	53.0 52.8	M20X40	455	470	840	534	25
ND225M	356	311	149	225.0 224.5	70	425	102	375	19.0 19.5	60.030 60.011	140	110	18.00 17.957	11.00 10.91	53.0 52.8	M20X40	455	470	865	534	25
ND250S	406	311	168	250.0 249.5	80	483	140	419	24.0 24.5	65.030 65.011	140	110	18.00 17.957	11.00 10.91	58.0 57.8	M20X40	485	500	940	598	32
ND250M	406	349	168	250.0 249.5	80	483	140	419	24.0 24.5	65.030 65.011	140	110	18.00 17.957	11.00 10.91	58.0 57.8	M20X40	485	500	940	598	32
ND280S	457	368	190	280.0 279.0	100	538	137	440	24.0 24.5	75.030 75.011	140	110	20.00 19.948	12.00 11.91	67.5 67.3	M20X40	530	536	1035	642	35
ND280M	457	419	190	280.0 279.0	100	538	162	487	24.0 24.5	75.030 75.011	140	110	20.00 19.948	12.00 11.91	67.5 67.3	M20X40	530	536	1085	642	35
ND315S	508	406	216	315.0 314.0	110	597	138	485	28.0 28.5	80.030 80.011	170	140	22.00 21.948	14.00 13.91	71.0 70.8	M20X40	530	590	1180	725	35
ND315M	508	457	216	315.0 314.0	110	597	164	533	28.0 28.5	80.030 80.011	170	140	22.00 21.948	14.00 13.91	71.0 70.8	M20X40	530	590	1230	725	35
ND315L	508	508	216	315.0 314.0	110	610	204	655	28.0 28.5	90.035 90.013	170	140	25.00 24.948	14.00 13.91	81.0 80.8	M24X50	570	655	1295	755	38
ND315LX	508	508	216	315.0 314.0	110	610	235	740	28.0 28.5	90.035 90.013	170	140	25.00 24.948	14.00 13.91	81.0 80.8	M24X50	570	655	1390	755	38
ND355S	610	510	254	355.0 354.0	110	710	253	745	28.0 28.5	100.035 100.013	210	160	28.000 27.948	16.00 15.89	90.0 89.8	M24X50	560	672	1505	780	40
ND355M	610	560	254	355.0 354.0	110	710	253	745	28.0 28.5	100.035 100.013	210	160	28.000 27.948	16.00 15.89	90.0 89.8	M24X50	560	672	1505	780	40
ND355L	610	630	254	355.0 354.0	110	710	253	745	28.0 28.5	100.035 100.013	210	160	28.000 27.948	16.00 15.89	90.0 89.8	M24X50	560	672	1505	780	40
ND355LX	610	630	254	355.0 354.0	110	710	250	880	28.0 28.5	100.035 100.013	210	160	28.000 27.948	16.00 15.89	90.0 89.8	M24X50	600	720	1570	827	40

*FOR 2 POLE MOTORS IN FRAME 225 & ABOVE PLEASE REFER SEPERATE DRAWING.

OUTLINE DIMENSION DRAWING FOR 3 PHASE SQUIRREL CAGE TEFC FOOT MOUNTED INDUCTION MOTORS (FOR 2 POLE)



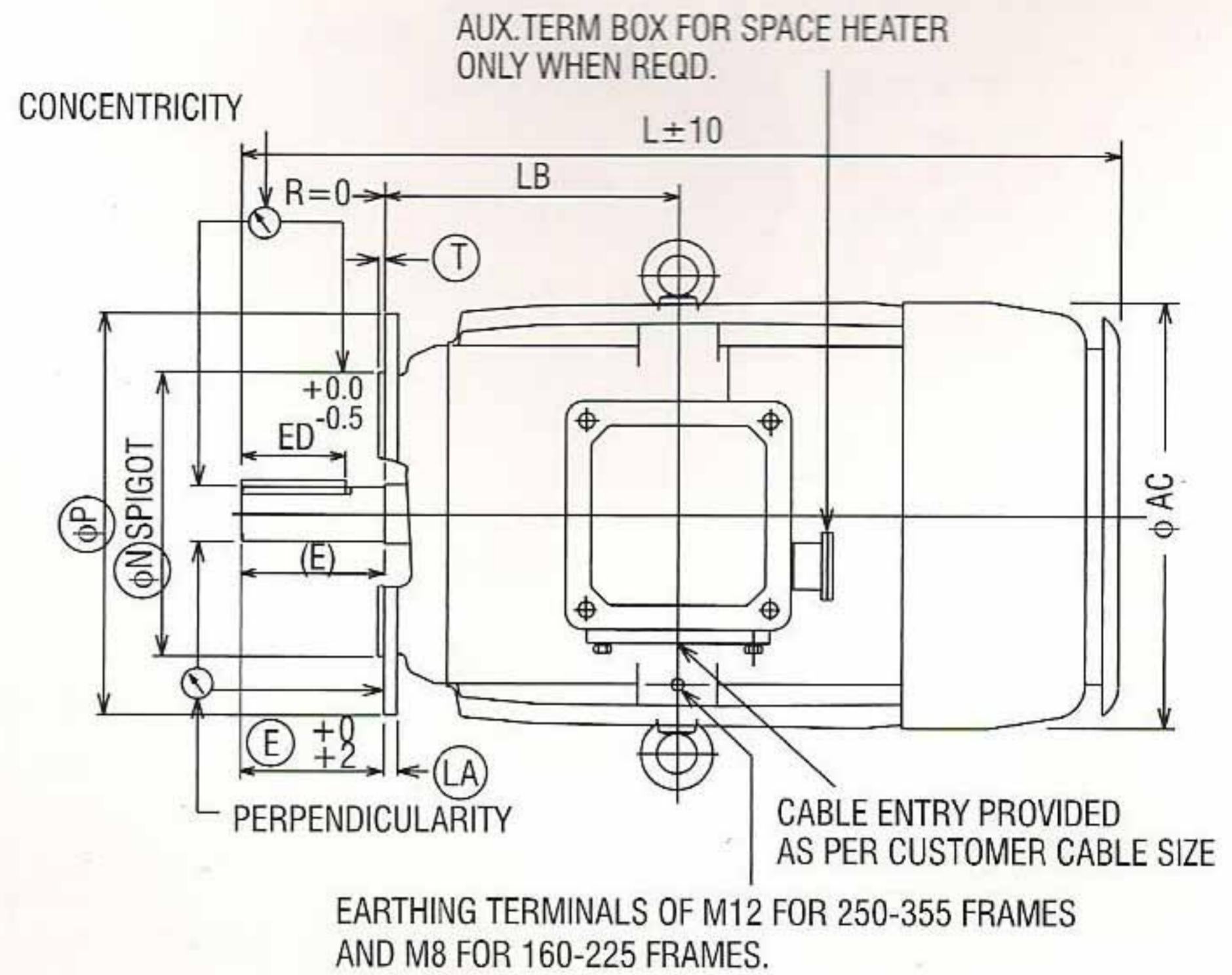
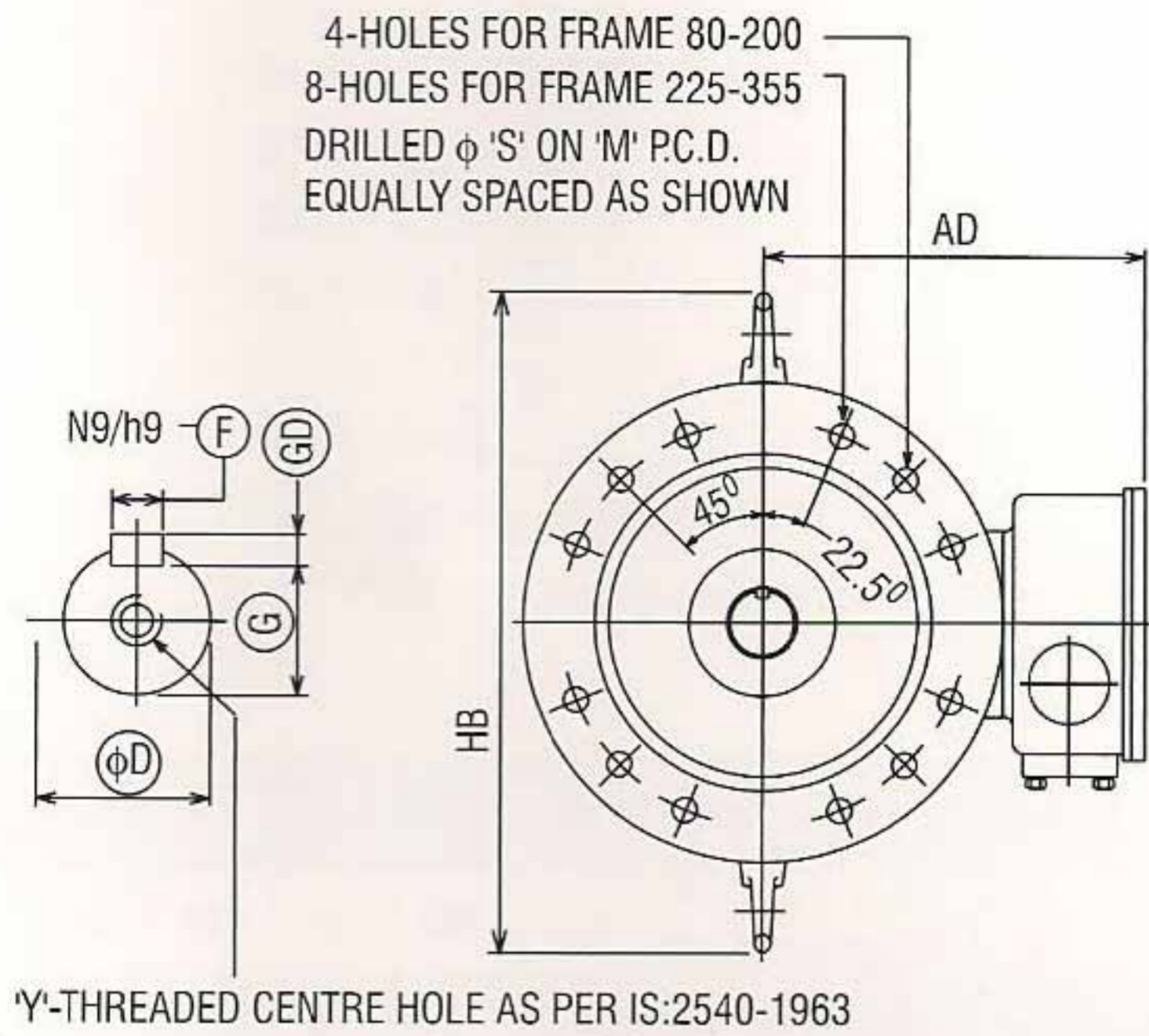
RINGED DIMENSIONS ARE AS PER IEC60034
ALL DIMENSIONS ARE IN mm.

CABLE ENTRY PROVIDED
AS PER CUSTOMER CABLE SIZE

EARTHING TERMINALS OF M12 FOR
250-355 FRAMES AND M8 FOR 160-225 FRAMES.

Frame	A	B	C	H	AA	AB	BA	BB	K	D	E	ED	F	GD	G	Y	AD	AC	L	HD	HA
ND225S	356	286	149	224.5 225.0	70	425	102	340	19.0 19.5	55.011 55.030	110	80	16.00 15.957	10.00 9.91	49.0 48.8	M20X40	455	470	810	534	25
ND225M	356	311	149	224.5 225.0	70	425	102	375	19.0 19.5	55.011 55.030	110	80	16.00 15.957	10.00 9.91	49.0 48.8	M20X40	455	470	825	534	25
ND250S	406	311	168	249.5 250.0	80	483	140	419	24.0 24.5	60.011 60.030	140	110	18.00 17.957	11.00 10.91	53.0 52.8	M20X40	485	500	940	598	32
ND250M	406	349	168	249.5 250.0	80	483	140	419	24.0 24.5	60.011 60.030	140	110	18.00 17.957	11.00 10.91	53.0 52.8	M20X40	485	500	940	598	32
ND280S	457	368	190	279.0 280.0	100	538	137	440	24.0 24.5	65.011 65.030	140	110	18.00 17.957	11.00 10.91	58.0 57.8	M20X40	530	536	1035	642	35
ND280M	457	419	190	279.0 280.0	100	538	162	487	24.0 24.5	65.011 65.030	140	110	18.00 17.957	11.00 10.91	58.0 57.8	M20X40	530	536	1085	642	35
ND315S	508	406	216	314.0 315.0	110	597	138	485	28.0 28.5	65.011 65.030	140	110	18.00 17.957	11.00 10.91	58.0 57.8	M20X40	530	590	1150	725	35
ND315M	508	457	216	314.0 315.0	110	597	164	533	28.0 28.5	65.011 65.030	140	110	18.00 17.957	11.00 10.91	58.0 57.8	M20X40	530	590	1200	725	35
ND315L	508	508	216	314.0 315.0	110	610	204	655	28.0 28.5	70.011 70.030	140	110	20.00 19.948	12.00 11.91	62.3 62.5	M20X40	570	655	1265	755	38
ND315LX	508	508	216	315.0 314.0	110	610	235	740	28.0 28.5	70.011 70.030	140	110	20.00 19.948	12.00 11.91	62.5 62.3	M20X40	570	655	1360	755	38
ND355S	610	510	254	354.0 355.0	110	710	253	745	28.0 28.5	75.011 75.030	170	140	20.00 19.948	12.00 11.91	67.3 67.5	M20X40	560	672	1465	780	40
ND355M	610	560	254	354.0 355.0	110	710	253	745	28.0 28.5	75.011 75.030	170	140	20.00 19.948	12.00 11.91	67.3 67.5	M20X40	560	672	1465	780	40
ND355L	610	630	254	354.0 355.0	110	710	253	745	28.0 28.5	75.011 75.030	170	140	20.00 19.948	12.00 11.91	67.3 67.5	M20X40	560	672	1465	780	40
ND355LX	610	630	254	355.0 354.0	110	710	250	880	28.0 28.5	75.011 75.030	170	140	20.00 19.948	12.00 11.91	67.3 67.5	M20X40	600	720	1530	827	40

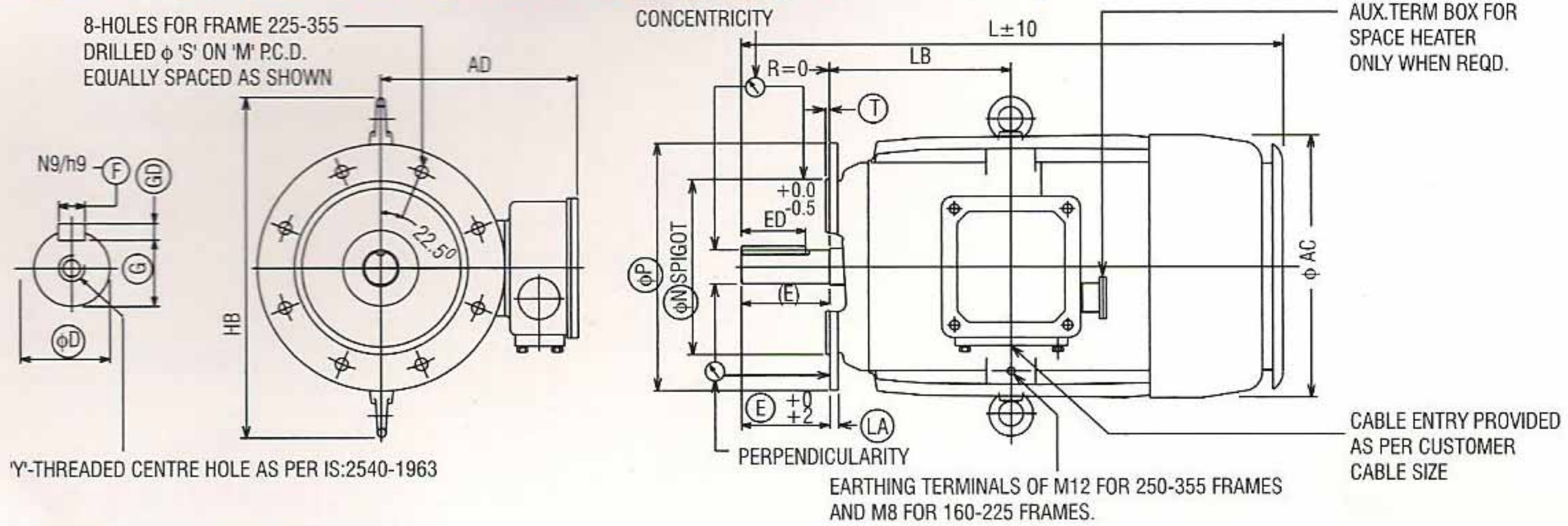
OUTLINE DIMENSION DRAWING FOR 3 PHASE SQUIREL CAGE TEFC FLANGE MOUNTED INDUCTION MOTORS (4 POLE & UP FOR ALL FRAMES & 2 POLE & UP, UPTO ND200L FRAME.)



RINGED DIMENSIONS ARE AS PER IS:2223
ALL DIMENSIONS ARE IN mm.

Frame	D	E	ED	F	GD	G	Y	AD	AC	L	M Tol	N Tol	P	S	T	LA	LB	HB
ND80	19.009 18.996	40	27	6.00 5.970	6.00 5.970	15.0 14.8	M6x16	134	170	325	165.30 164.70	130.014 129.989	200	12	3.5	10	100	260
ND90S	24.009	50	36	8.00	7.0	20.0	M8x19	185	195	375	165.30	130.014	200	12	3.5	10	122	280
ND90L	23.996			7.964	6.91	19.8												
ND100L	28.009 27.996	60	44	8.00 7.964	7.0 6.91	24.0 23.8	M10x12	195	215	440	215.30 214.70	180.016 179.987	250	15	4.0	11	137	300
ND112M	28.009 27.996	60	44	8.00 7.964	7.0 6.91	24.0 23.8	M10x12	210	235	465	215.30 214.70	180.016 179.987	250	15	4.0	11	140	320
ND132S	38.018	80	60	10.00	8.0	33.0	M12x28	230	275	542	265.30	230.016	300	15	4.0	14	158	380
ND132M	38.002			9.91	7.91	32.8												
ND160M	42.018 42.002	110	80	12.00 11.957	8.00 7.91	37.0 36.8	M16x32	325	318	660	300.5 299.5	250.016 249.987	350	19	5	18	213	421
ND160L	42.018 42.002	110	80	12.00 11.957	8.00 7.91	37.0 36.8	M16x32	325	318	705	300.5 299.5	250.016 249.987	350	19	5	18	235	421
ND180M	48.018 48.002	110	80	14.00 13.957	9.00 8.91	42.5 42.3	M16x32	345	352	750	300.5 299.5	250.016 249.987	350	19	5	18	241.5	478
ND180L	48.018 48.002	110	80	14.00 13.957	9.00 8.91	42.5 42.3	M16x32	345	352	790	300.5 299.5	250.016 249.987	350	19	5	18	260.5	478
ND200L	55.030 55.011	110	80	16.00 15.957	10.00 9.91	49.0 48.8	M20x40	430	428	830	350.5 349.5	300.018 299.982	400	19	5	18	285.5	557
ND225S	60.030 60.011	140	110	18.00 17.957	11.00 10.91	53.0 52.8	M20x40	455	470	895	400.5 399.5	350.018 349.982	450	19	5	19	304.5	618
ND225M	60.030 60.011	140	110	18.00 17.957	11.00 10.91	53.0 52.8	M20x40	455	470	895	400.5 399.5	350.018 349.982	450	19	5	19	304.5	618
ND250S	65.030 65.011	140	110	18.00 17.957	11.00 10.91	58.0 57.8	M20x40	485	500	1020	500.5 499.5	450.020 449.980	550	19	5	22	342.5	688
ND250M	65.030 65.011	140	110	18.00 17.957	11.00 10.91	58.0 57.8	M20x40	485	500	1020	500.5 499.5	450.020 449.980	550	19	5	22	342.5	688
ND280S	75.030 75.011	140	110	20.00 19.948	12.00 11.91	67.5 67.3	M20x40	530	536	1170	500.5 499.5	450.020 449.980	550	19	5	22	399.5	722
ND280M	75.030 75.011	140	110	20.00 19.948	12.00 11.91	67.5 67.3	M20x40	530	536	1170	500.5 499.5	450.020 449.980	550	19	5	22	399.5	722
ND315S	80.030 80.011	170	140	22.00 21.948	14.00 13.91	71.0 70.8	M20x40	530	590	1325	601.0 599.0	550.022 549.978	660	24	6	25	444.5	812
ND315M	80.030 80.011	170	140	22.00 21.948	14.00 13.91	71.0 70.8	M20x40	530	590	1325	601.0 599.0	550.022 549.978	660	24	6	25	444.5	812
ND315LX	90.035 90.013	170	140	25.00 24.948	14.00 13.91	81.0 80.8	M24x50	570	655	1495	601.0 599.0	550.022 549.978	660	24	6	25	530.5	880
ND355S	100.035 100.013	210	160	28.00 27.948	16.0 15.89	90.0 89.8	M24x50	570	672	1513	741.0 739.0	680.025 679.975	800	24	6	28	570	890
ND355M																		
ND355L																		
ND355LX																		

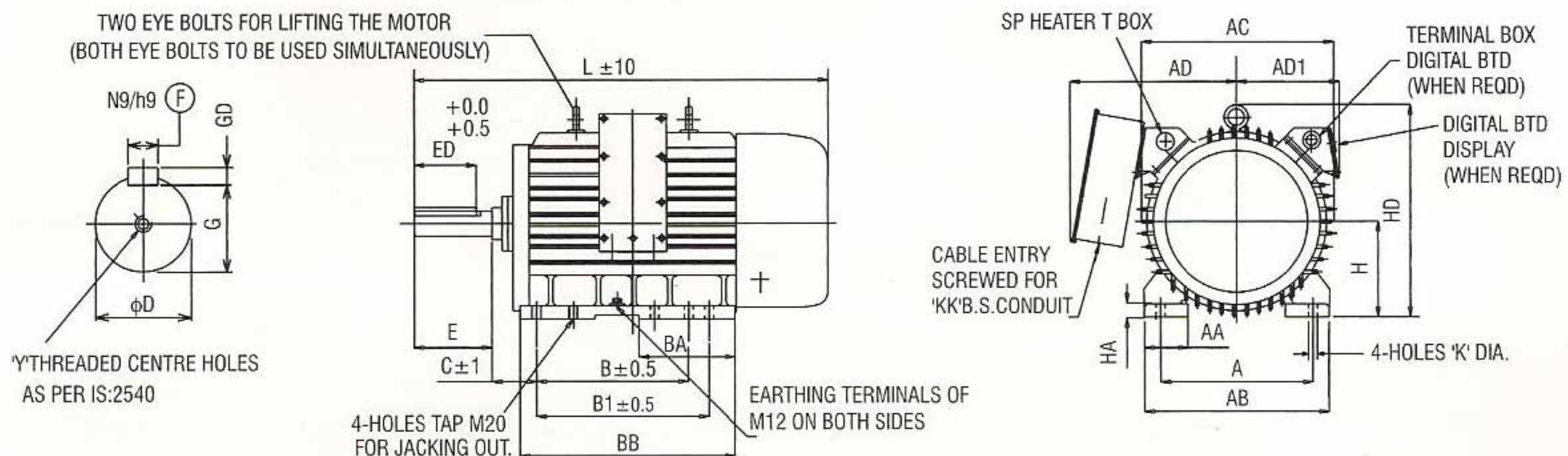
OUTLINE DIMENSION DRAWING FOR 3 PHASE SQUIRREL CAGE TEFC FLANGE MOUNTED INDUCTION MOTORS (FOR 2 POLE)



RINGED DIMENSIONS ARE AS PER IS:2223 ALL DIMENSIONS ARE IN mm.

Frame	D	E	ED	F	GD	G	Y	AD	AC	L	M Tol	N Tol	P	S	T	LA	LB	HB
ND225S	55.011 55.030	110	80	16.0 15.957	10.0 9.91	49.0 48.8	M20X40	455	470	865	400.5 399.5	350.018 349.982	450	19	5	19	304.5	618
ND225M	55.011 55.030	110	80	16.0 15.957	10.0 9.91	49.0 48.8	M20X40	455	470	865	400.5 399.5	350.018 349.982	450	19	5	19	304.5	618
ND250S	60.011 60.030	140	110	18.00 17.957	11.00 10.91	53.0 52.8	M20X40	485	500	1020	500.5 499.5	450.020 449.980	550	19	5	22	342.5	688
ND250M	60.011 60.030	140	110	18.00 17.957	11.00 10.91	53.0 52.8	M20X40	485	500	1020	500.5 499.5	450.020 449.980	550	19	5	22	342.5	688
ND280S	65.011 65.030	140	110	18.00 17.957	11.00 10.91	58.0 57.8	M20X40	530	536	1170	500.5 499.5	450.020 449.980	550	19	5	22	399.5	722
ND280M	65.011 65.030	140	110	18.00 17.957	11.00 10.91	58.0 57.8	M20X40	530	536	1170	500.5 499.5	450.020 449.980	550	19	5	22	399.5	722
ND315S	65.011 65.030	140	110	18.00 17.957	11.00 10.91	58.0 57.8	M20X40	530	590	1295	601.0 599.0	550.022 549.978	660	24	6	25	444.5	812
ND315M	65.011 65.030	140	110	18.00 17.957	11.00 10.91	58.0 57.8	M20X40	530	590	1295	601.0 599.0	550.022 549.978	660	24	6	25	444.5	812
ND315LX	70.011 70.030	140	110	20.00 19.948	12.00 11.91	62.5 62.3	M20X50	570	655	1465	601.0 599.0	550.022 549.978	660	24	6	25	530.5	880
ND355S	75.030 75.011	170	140	20.00 19.948	12.00 11.91	67.5 67.3	M20x40	570	672	1473	741.0 739.0	680.025 679.975	800	24	6	28	570	890
ND355M																		
ND355L																		
ND355LX																		

DIMENSION DRAWING FOR 3 PHASE TEFC SQUIRREL CAGE FOOT MOUNTED INDUCTION MOTORS



FRAME SIZE	FOOT FIXING										SHAFT AND KEY *								OVERALL					
	A	B	B1	C	H TOL	AA	AB	BA	BB	K TOL	D TOL	E	ED	F TOL	GD TOL	G	Y	AD	AD1	AC	L	HD	HA	KK
ND400LX 4P & UP	686	800	900	280	400 399	195	845	400	1057	35.0 34.5	100.035 100.013	210	160	28.00 27.948	16.00 15.89	90.0 89.8	M24x50	800	521	875	1855	980	45	2 NOS X 3"

MACHINES RUNNING AT 3000 RPM HAVE SMALLER SHAFTS AS SHOWN HERE	FRAME	D TOL	E	ED	F TOL	GD TOL	G	L
	ND400LX	85.035	170	140	22.00	14.00	76.0	1870
	2 POLE	85.013			21.95	13.91	75.8	