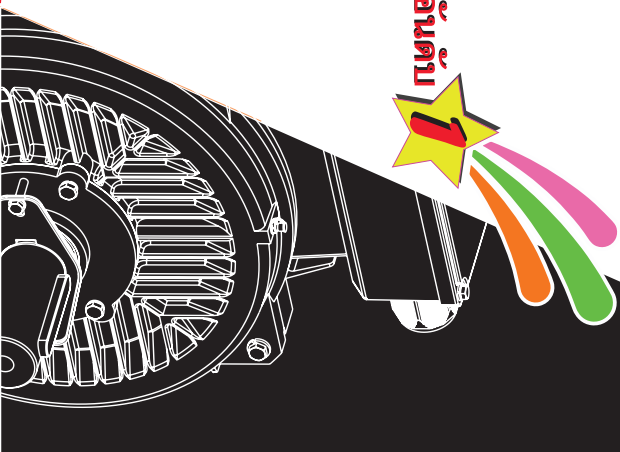


INDUCTION MOTOR

AD THREE-PHASE ALUMINIUM ASYNCHRONOUS MOTOR



สินค้าขายดีอันดับ 1



IE 1

ND THREE-PHASE CAST-IRON ASYNCHRONOUS MOTOR



รับประกันคุณภาพ 1 ปีเต็ม



ISO 9001



Authentication by CCE



Catalogue 2017

ND/AD Series

General introduction

IE 1

ND series three-phase asynchronous motors, developed with new techniques.

ND series motors are defined as totally enclosed, fan cooled, squirrel cage type and noted for their novel design, beautiful model, compact structured, low noise, high efficiency, large torque, excellent starting performance, easy serving, etc. The motors are adopted with F class insulation and designed with assessing method for insulation system according to international practice, it enhances greatly have reached an international advanced level of the same kind of products at the initial days of the 90s.

ND series motors can be widely used as driving equipments of various machineries, such as machine tools, blowers, pumps, compressors, transporters, agricultural and food processing. Pedestal installation size and centre height and other indexes of the motor completely measured by ND series three-phase asynchronous motor.

Operating conditions

Ambient temperature: $-15^{\circ}\text{C} \sim 40^{\circ}\text{C}$ Altitude: Altitude should be higher than 1000 metres above sea level.
Rated voltage: 380V, 400V, 415V, 440V. Rated frequency: 50Hz, 60Hz. Connection: Y Star-connection for 3kw or less whereas and delta-connection. Duty/Rating: Continuous (S1).
Insulation class: F, the temperature rise of the stator winding is examined at 80K (by resistance method). Protection class: IP55.
Cooling method: IC411.

AD three-phase asynchronous motor

AD motor means the aluminum body, detachable feet motor, is a name for the shape, don't associate with the motor inside construction, both y2 and y3 series motor can upgrade to AD series without change the insider construction.

AD series of motor have many advantages such as high-efficiency, saving energy, long starting torque, good performance, lower noise, lower vibration, high reliability, power grade and installation size. According with IEC standard (EN60034-1). It windy used for exactitude machine in general place without. Special requirement, especially used in reducer, air-compressor, pumps, production line, package, food machine and so on.

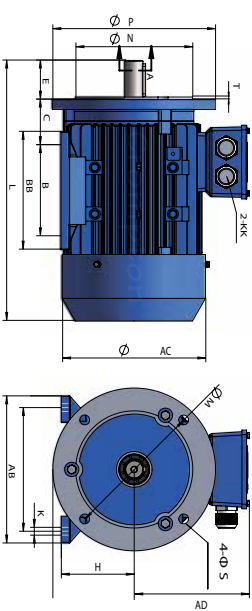
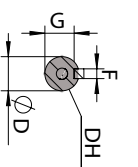
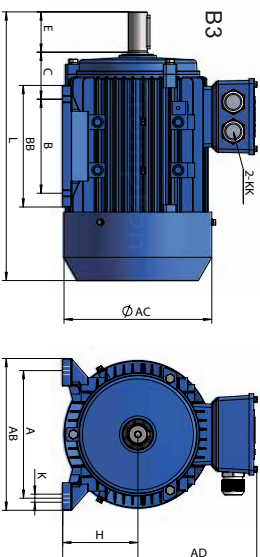
- (1) aluminum body, detachable feet.
- (2) IC411 T.E.F.C., with IEC 60034-6.
- (3) insulation class F /temperature rise class B.
- (4) IP55, IE 1 Note: AD motor is a upgrade for the appearance.

IE2, IE3, IE4

สามารถสั่งซื้อสินค้าได้ โปรดติดต่อฝ่ายขาย โดยตรง หรือจะระยะเวลาประมาณ 3 - 4 สัปดาห์ - รับผลิตภัณฑ์มอเตอร์พิเศษตามสั่ง ทุกรุ่น

TECHNICAL DATA OF ALUMINIUM FRAME (AD SERIES)

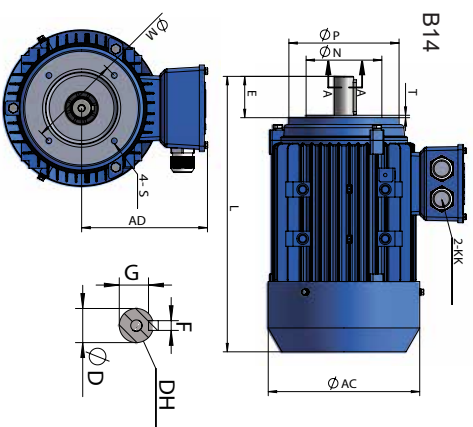
Frame and size	Rated power		Full load current at rated voltage				Full load speed in rpm	Frequency at constant power	Direct on line starting torque ratio	Direct on line full speed cut-off ratio	Direct on line starting current ratio	Efficiency	Power factor (cosφ)	Mean sound pressure level @ 1m on no load	Weight	J
			Amps													
Type	Power		(A)													
	kW	HP	380V	400V	415V	r/min	(Hz)					(%)				
AD561-2	0.09	0.12	0.29	0.27	0.26	2700	50	2.2	2.1	5.2	62	0.77	57	3.8	0.00018	
AD562-2	0.12	0.16	0.37	0.35	0.33	2700	50	2.2	2.1	5.2	64	0.78	57	4	0.00023	
AD63M1-2	0.18	0.25	0.53	0.5	0.49	2720	50	2.3	2.3	5.5	65	0.8	61	4.5	0.00031	
AD63M2-2	0.25	0.34	0.69	0.65	0.63	2720	50	2.3	2.3	5.5	68	0.81	61	4.7	0.00060	
AD71M1-2	0.37	0.5	1.01	0.96	0.92	2755	50	2.2	2.3	6.1	69	0.81	64	6	0.00075	
AD71M2-2	0.55	0.75	1.38	1.3	1.26	2790	50	2.3	2.3	6.1	74	0.82	64	6.3	0.00090	
AD80M1-2	0.75	1	1.77	1.67	1.6	2845	50	2.3	2.2	6.1	75	0.83	67	10	0.00120	
AD80M2-2	1.1	1.5	2.61	2.34	2.24	2835	50	2.3	2.2	6.9	76.2	0.84	67	11	0.00140	
AD90S-2	1.5	2	3.46	3.29	3.15	2850	50	2.3	2.2	7	78.5	0.84	72	13	0.00290	
AD90L-2	2.2	3	4.85	4.6	4.4	2855	50	2.3	2.2	7	81	0.85	72	14	0.00550	
AD100L-2	3	4	6.34	6.02	5.77	2860	50	2.3	2.2	7.5	82.6	0.87	76	24	0.01090	
AD112M-2	4	5.5	8.2	7.8	7.46	2880	50	2.3	2.2	7.5	84.2	0.88	77	28	0.01260	
AD132S1-2	5.5	7.5	11.1	10.5	10.1	2900	50	2.3	2.2	7.5	85.7	0.88	80	40	0.03770	
AD132S2-2	7.5	10	14.9	14.15	13.56	2900	50	2.3	2.2	7.5	87	0.88	80	43	0.04990	
AD160M1-2	11	15	21.3	20.2	19.4	2930	50	2.3	2.2	7.5	88	0.89	86	83	0.05500	
AD160M2-2	15	20	28.8	27.4	26.2	2930	50	2.3	2.2	7.5	89	0.89	86	90	0.07500	
AD160L-2	18.5	25	34.7	32.97	31.6	2930	50	2.3	2.2	7.5	90	0.9	86	104	0.12400	
AD561-4	0.06	0.08	0.23	0.22	0.21	1300	50	2.1	2	4	56	0.7	48	3.8	0.00030	
AD562-4	0.09	0.12	0.33	0.31	0.3	1300	50	2.1	2	4	58	0.72	48	4	0.00040	
AD63M1-4	0.12	0.18	0.44	0.42	0.4	1310	50	2.2	2.1	4.4	57	0.72	52	4.5	0.00050	
AD63M2-4	0.18	0.25	0.62	0.59	0.56	1310	50	2.2	2.1	4.4	60	0.73	52	4.7	0.00060	
AD71M1-4	0.25	0.34	0.79	0.75	0.72	1340	50	2.2	2.1	5.2	65	0.74	55	6	0.00090	
AD71M2-4	0.37	0.5	1.12	1.1	1.1	1340	50	2.2	2.1	5.2	67	0.75	55	6.3	0.00190	
AD80M1-4	0.55	0.75	1.52	1.44	1.38	1390	50	2.3	2.4	5.2	71	0.75	58	10	0.00180	
AD80M2-4	0.75	1	1.95	1.85	1.77	1390	50	2.3	2.3	6	73	0.76	58	11	0.00210	
AD90S-4	1.1	1.5	2.85	2.7	2.6	1390	50	2.3	2.3	6	76.2	0.77	61	12	0.00230	
AD90L-4	1.5	2	3.72	3.53	3.39	1400	50	2.3	2.3	6	78.5	0.78	61	14	0.00270	
AD100L1-4	2.2	3	5.09	4.83	4.6	1420	50	2.3	2.3	7	81	0.81	64	23	0.00540	
AD100L2-4	3	4	6.78	6.4	6.17	1420	50	2.3	2.3	7	82.6	0.82	64	25	0.00670	
AD112M-4	4	5.5	8.8	8.36	8	1435	50	2.3	2.3	7	84.2	0.82	65	29	0.00950	
AD132S-4	5.5	7.5	11.7	11.12	10.65	1440	50	2.3	2.3	7	85.7	0.83	71	43	0.02140	
AD132M-4	7.5	10	15.6	14.8	14.2	1450	50	2.3	2.3	7	87	0.84	71	55	0.02960	
AD160M-4	11	15	22.3	21.2	20.3	1460	50	2.3	2.3	7	88	0.85	75	86	0.07470	
AD160L-4	15	20	30.1	28.6	27.4	1460	50	2.3	2.3	7	89	0.85	75	100	0.09180	
AD71M1-6	0.18	0.25	0.74	0.7	0.67	870	50	2	1.9	4	56	0.66	52	6	0.00110	
AD71M2-6	0.25	0.34	0.95	0.9	0.86	870	50	2	1.9	4	59	0.68	52	6.3	0.00140	
AD80M1-6	0.37	0.5	1.23	1.17	1.12	880	50	2	1.9	4.7	62	0.7	54	10	0.00160	
AD80M2-6	0.55	0.75	1.7	1.6	1.55	880	50	2.1	1.9	4.7	65	0.72	54	11	0.00190	
AD90S-6	0.75	1	2.29	2.18	2.08	905	50	2.1	2	5.3	69	0.72	57	13	0.00290	
AD90L-6	1.1	1.5	3.18	3.02	2.9	905	50	2.1	2	5.5	72	0.73	57	14	0.00350	
AD100L-6	1.5	2	4	3.8	3.64	920	50	2.1	2	5.5	76	0.76	61	23	0.00690	
AD112M-6	2.2	3	5.6	5.32	5.1	935	50	2.1	2	6.5	79	0.76	65	28	0.01400	
AD132S-6	3	4	7.4	7.03	6.73	960	50	2.1	2.1	6.5	81	0.76	69	38	0.02860	
AD132M1-6	4	5.5	9.5	9.03	8.65	960	50	2.1	2.1	6.5	82	0.76	69	50	0.03570	
AD132M2-6	5.5	7.5	12.6	11.97	11.16	960	50	2.1	2.1	6.5	84	0.77	69	57	0.04490	
AD160M-6	7.5	10	16.9	16.1	15.6	970	50	2.1	2	6.5	86	0.78	73	82	0.08100	
AD160L-6	11	15	24.2	22.99	22.02	970	50	2.1	2	6.5	87.5	0.79	73	93	0.01160	



AD56-160 B3 , B5 , B35 , B14

Frame size	Mounting dimensions																Overall dimensions			
	A	AA	AB	BB	HA	AC	AD	B	C	D	DH	E	F	G	H	K	KK		L	
																	METRIC	PG		
AD56	90	23	115	88	7	112	100	71	36	9	Max12	20	3	7.2	56	5.8	2-M20x1.5	2-PG13.5	201	
AD63	100	24	135	100	7	123	109	80	40	11	Max12	23	4	8.5	63	7	2-M20x1.5	2-PG13.5	224	
AD71	112	26	150	110	8	136	127	90	45	14	Max12	30	5	11	71	7	2-M20x1.5	2-PG13.5	247	
AD80	125	35	156	125	9	155	134	100	50	19	Max16	40	6	15.5	80	10	2-M20x1.5	2-PG16	291	
AD90S	140	37	175	125	10	175	140	100	56	24	Max19	50	8	20	90	10	2-M25x1.5	2-PG16	316	
AD90L	140	37	175	150	10	175	140	125	56	24	Max19	50	8	20	90	10	2-M25x1.5	2-PG16	340	
AD100L	160	40	204	172	11	196	160	140	63	28	Max22	60	8	24	100	12	2-M32x1.5	2-PG21	392	
AD112M	190	41	227	181	12	220	178	140	70	28	Max22	80	8	24	112	12	2-M32x1.5	2-PG21	402	
AD132S	216	51	258	186	14.5	259	206	140	89	38	Max28	80	10	33	132	12	2-M32x1.5	2-PG21	483	
AD132M	216	51	258	224	14.5	259	206	178	89	38	Max28	80	10	33	132	12	2-M32x1.5	2-PG21	510	
AD160M	254	55	314	280	18	315	255	210	108	42	Max36	110	12	37	160	15	2-M40x1.5	2-PG29	615	
AD160L	254	55	314	304	18	315	255	254	108	42	Max36	110	12	37	160	15	2-M40x1.5	2-PG29	670	

Frame size	FLANGE B5					FLANGE B14				
	M	N	P	S	T	M	N	P	S	T
AD56	100	80	120	Ø7	3	65	50	80	M5	2.5
AD63	115	95	140	Ø10	3	75	60	90	M5	2.5
AD71	130	110	160	Ø10	3.5	85	70	105	M6	2.5
AD80	165	130	200	Ø12	3.5	100	80	120	M6	3
AD90S	165	130	200	Ø12	3.5	115	95	140	M8	3
AD90L	165	130	200	Ø12	3.5	115	95	140	M8	3
AD100L	215	180	250	Ø15	4	130	110	160	M8	3.5
AD112M	215	180	250	Ø15	4	130	110	160	M8	3.5
AD132S	265	230	300	Ø15	4	165	130	200	M10	3.5
AD132M	265	230	300	Ø15	4	165	130	200	M10	3.5
AD160M	300	250	350	Ø19	5	215	180	250	M12	4
AD160L	300	250	350	Ø19	5	215	180	250	M12	4

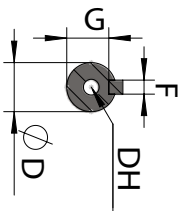
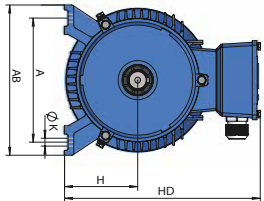
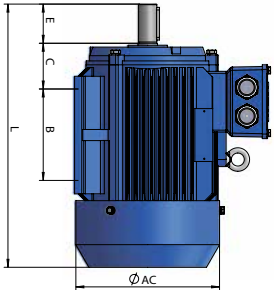


TECHNICAL DATA OF CAST-IRON FRAME (ND SERIES)

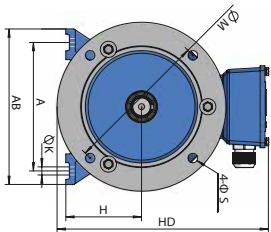
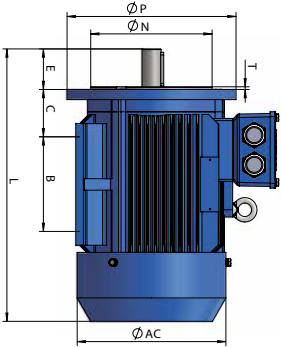


Frame and size	Full load current at rated voltage				Rated power		Full load speed in revolutions per minute	Efficiency %	Power factor cosφ	Direct on line starting torque ratio	Direct on line starting current ratio	Direct on line pull out ratio	Mean sound pressure level @1m on no load	Weight		Reborn inertia Wm2
	Amps (A)			Power	Speed	P.F.								LTR/RTL	LRA/LRA	
Type	380V	400V	415V	kW	HP	r/min	%									
ND-80M1-2	1.77	1.74	1.68	0.75	1	2840	75	0.83		2.2	6.1	2.3	67	16	0.0008	
ND-80M2-2	2.61	2.48	2.39	1.1	1.5	2840	76.2	0.84		2.2	6.9	2.3	67	17	0.0009	
ND-90S-2	3.46	3.28	3.16	1.5	2	2850	78.5	0.84		2.2	7	2.3	72	20	0.0012	
ND-90L-2	4.85	4.61	4.45	2.2	3	2855	81	0.85		2.2	7	2.3	72	23	0.0014	
ND-100L-2	6.34	6.03	5.81	3	4	2860	82.6	0.87		2.2	7.5	2.3	76	30	0.0029	
ND-112M-2	8.2	7.79	7.51	4	5.5	2880	84.2	0.88		2.2	7.5	2.3	77	41	0.0055	
ND-132S1-2	11.1	10.53	10.15	5.5	7.5	2900	85.7	0.88		2.2	7.5	2.3	80	57.5	0.0109	
ND-132S2-2	14.9	14.1	13.6	7.5	10	2900	87	0.88		2.2	7.5	2.3	80	60.5	0.0126	
ND-160M1-2	21.2	20.2	19.5	11	15	2930	88.4	0.89		2.2	7.5	2.3	86	107	0.0377	
ND-160M2-2	28.6	27.2	26.2	15	20	2930	89.4	0.89		2.2	7.5	2.3	86	104	0.0499	
ND-160L-2	34.7	33	31.8	18.5	25	2930	90	0.9		2.2	7.5	2.3	86	133	0.055	
ND-180M-2	41	39	37.6	22	30	2940	90.5	0.9		2	7.5	2.3	89	156	0.075	
ND-200L1-2	55.4	52.6	50.7	30	40	2950	91.4	0.9		2	7.5	2.3	92	218	0.124	
ND-200L2-2	67.9	64.5	62.2	37	50	2950	92	0.9		2	7.5	2.3	92	230	0.139	
ND-225M-2	82.1	78	75.2	45	60	2960	92.5	0.9		2	7.5	2.3	92	290	0.233	
ND-250M-2	100	94.8	91.4	55	75	2970	93	0.9		2	7.5	2.3	93	359	0.312	
ND-280S-2	135	129	124	75	100	2975	93.6	0.9		2	7	2.3	94	494	0.579	
ND-280M-2	160	152	147	90	125	2975	93.9	0.91		2	7.1	2.3	94	510	0.675	
ND-315S-2	195	186	179	110	150	2975	94	0.91		1.8	7.1	2.2	96	875	1.18	
ND-315M-2	233	222	214	132	180	2975	94.5	0.91		1.8	7.1	2.2	96	983	1.82	
ND-315L1-2	279	265	256	160	220	2975	94.6	0.92		1.8	7.1	2.2	99	1010	2.08	
ND-315L2-2	348	331	319	200	270	2975	94.8	0.92		1.8	7.1	2.2	99	1138	2.38	
ND-355M2-2	433	412	397	250	340	2980	95.2	0.92		1.6	7.1	2.2	103	1900	3	
ND-355L-2	545	518	499	315	430	2980	95.4	0.92		1.6	7.1	2.2	103	2300	3.5	
ND-80M1-4	1.57	1.49	1.44	0.55	0.75	1390	71	0.75		2.4	5.2	2.3	58	15	0.0018	
ND-80M2-4	2.05	1.95	1.88	0.75	1	1390	73	0.76		2.3	6	2.3	58	15.5	0.0021	
ND-90S-4	2.85	2.71	2.61	1.1	1.5	1390	76.2	0.77		2.3	6	2.3	61	19	0.0023	
ND-90L-4	3.72	3.54	3.41	1.5	2	1400	78.5	0.78		2.3	6	2.3	61	23	0.0027	
ND-100L1-4	5.09	4.9	4.72	2.2	3	1410	81	0.81		2.3	7	2.3	64	29	0.0054	
ND-100L2-4	6.78	6.39	6.16	3	4	1410	82.6	0.82		2.3	7	2.3	64	31	0.0067	
ND-112M-4	8.8	8.36	8.06	4	5.5	1435	84.2	0.82		2.3	7	2.3	65	42	0.0095	
ND-132S-4	11.7	11.2	10.8	5.5	7.5	1440	85.7	0.83		2.3	7	2.3	71	52	0.0214	
ND-132M-4	15.6	14.8	14.3	7.5	10	1450	87	0.84		2.3	7	2.3	71	64.5	0.0296	
ND-160M-4	22.5	21.4	20.6	11	15	1460	88.4	0.84		2.2	7	2.3	75	100	0.0747	
ND-160L-4	30	28.5	27.5	15	20	1460	89.4	0.85		2.2	7.5	2.3	75	129	0.0918	
ND-180M-4	36.3	34.5	33.3	18.5	25	1470	90	0.86		2.2	7.5	2.3	76	150	0.139	
ND-180L-4	43.2	40.8	39.3	22	30	1470	90.5	0.86		2.2	7.5	2.3	76	166	0.158	
ND-200L-4	57.6	55.1	53.1	30	40	1470	91.4	0.86		2.2	7.2	2.3	79	228	0.262	
ND-225S-4	70.2	66.7	64.3	37	50	1475	92	0.87		2.2	7.2	2.3	81	268	0.406	
ND-225M-4	84.9	80.7	77.8	45	60	1475	92.5	0.87		2.2	7.2	2.3	81	313	0.469	
ND-250M-4	103	98.1	94.6	55	75	1480	93	0.87		2.2	7.2	2.3	83	366	0.66	
ND-280S-4	138.3	131	127	75	100	1480	93.6	0.88		2.2	6.8	2.3	86	480	1.12	
ND-280M-4	165	157	152	90	125	1480	93.9	0.88		2.2	6.8	2.3	86	560	1.64	
ND-315S-4	201	191	184	110	150	1480	94.5	0.88		2.1	6.9	2.2	93	846	3.1	
ND-315M1-4	240	228	220	132	180	1480	94.8	0.88		2.1	6.9	2.2	93	940	3.62	
ND-315L1-4	288	273	264	160	220	1480	94.9	0.89		2.1	6.9	2.2	97	1044	4.13	
ND-315L2-4	360	342	329	200	270	1480	94.9	0.89		2.1	6.9	2.2	97	1162	4.73	
ND-355M1-4	443	421	406	250	340	1490	95.2	0.9		2.1	6.9	2.2	101	1700	6.5	
ND-355L-4	559	531	511	315	430	1490	95.2	0.9		2.1	6.9	2.2	101	1900	8.2	

Frame and size	Type	Full load current at rated voltage			Rated power		Full load speed in revolutions per minute		Efficiency		Power factor		Direct on line starting torque ratio		Direct on line starting current ratio		Direct on line pull out ratio		Mean sound pressure level @ 1m on no load		Weight		Rotor inertia	
		380V	400V	415V	kW	HP	r/min	%	cosφ	LTR/RTL	LRA/LRA	BDT/RTL	Lw(dBA)	kg	kgm²	J								
ND-80M1-6		1.3	1.23	1.19	0.37	0.5	880	62	0.7	1.9	4.7	2	54	15	0.0016									
ND-80M2-6		1.8	1.7	1.64	0.55	0.75	880	65	0.72	1.9	4.7	2.1	54	16	0.0019									
ND-90S-6		2.29	2.18	2.1	0.75	1	905	69	0.72	2	5.3	2.1	57	20	0.0029									
ND-90L-6		3.18	3.02	2.91	1.1	1.5	905	72	0.73	2	5.5	2.1	57	23	0.0035									
ND-100L-6		4	3.8	3.66	1.5	2	920	76	0.75	2	5.5	2.1	61	29	0.0069									
ND-112M-6		5.6	5.29	5.1	2.2	3	935	79	0.76	2	6.5	2.1	65	41	0.014									
ND-132S-6		7.4	7.03	6.78	3	4	960	81	0.76	2.1	6.5	2.1	69	59	0.0288									
ND-132M1-6		9.75	9.26	8.93	4	5.5	960	82	0.76	2.1	6.5	2.1	69	66	0.0357									
ND-132M2-6		12.9	12.3	11.8	5.5	7.5	960	84	0.77	2.1	6.5	2.1	69	76.5	0.0449									
ND-160M-6		17.2	16.3	15.8	7.5	10	970	86	0.77	2	6.5	2.1	73	106	0.081									
ND-180L-6		24.5	23.3	22.4	11	15	970	87.5	0.78	2	6.5	2.1	73	122	0.116									
ND-180L-6		31.6	30	28.9	15	20	970	89	0.81	2	7	2.1	73	154	0.207									
ND-200L1-6		38.6	36.6	35.3	18.5	25	980	90	0.81	2.1	7	2.1	76	202	0.315									
ND-200L2-6		44.7	42.5	41	22	30	980	90	0.83	2	7	2.1	76	216	0.36									
ND-225M-6		59.3	56.3	54.3	30	40	980	91.5	0.84	2	7	2.1	76	287	0.547									
ND-250M-6		71	67.5	65.1	37	50	980	92	0.86	2.1	7	2.1	78	355	0.843									
ND-280S-6		86	81.7	78.1	45	60	980	92.5	0.86	2.1	7	2	80	444	1.39									
ND-280M-6		104	99.5	95.9	55	75	980	92.8	0.86	2.1	7	2	80	498	1.65									
ND-315S-6		142	135	130	75	100	985	93.5	0.86	2	6.7	2	85	859	4.11									
ND-315M-6		169	161	155	90	125	985	93.8	0.86	2	6.7	2	85	950	4.78									
ND-315L1-6		207	196	189	110	150	985	94	0.86	2	6.7	2	85	1031	5.45									
ND-315L2-6		245	232	224	132	180	985	94.2	0.87	2	6.7	2	85	1107	6.12									
ND-355M1-6		292	278	268	160	220	990	94.5	0.88	1.9	6.7	2	92	1550	9.5									
ND-355M2-6		365	347	335	200	270	990	94.5	0.88	1.9	6.7	2	92	1600	10.4									
ND-355L-6		457	434	418	250	340	990	94.5	0.88	1.9	6.7	2	92	1700	12.4									
ND-80M1-8		0.83	0.84	0.8	0.18	0.25	645	51	0.61	1.8	3.3	1.9	52	15	0.0025									
ND-80M2-8		1.1	1.1	1.06	0.25	0.34	645	54	0.61	1.8	3.3	1.9	52	16	0.003									
ND-90S-8		1.49	1.41	1.36	0.37	0.5	675	62	0.61	1.8	4	1.9	56	20	0.0051									
ND-90L-8		2.17	2.07	1.99	0.55	0.75	680	63	0.61	1.8	4	2	56	23	0.0065									
ND-100L1-8		2.43	2.31	2.22	0.75	1	680	70	0.67	1.8	4	2	59	29	0.009									
ND-100L2-8		3.36	3.2	3.08	1.1	1.5	680	72	0.69	1.6	5	2	59	31	0.011									
ND-112M-8		4.4	4.18	4.03	1.5	2	690	74	0.7	1.8	5	2	61	41	0.0245									
ND-132S-8		6	5.66	5.46	2.2	3	710	79	0.71	1.8	6	2	64	61	0.0314									
ND-132M-8		7.8	7.41	7.15	3	4	710	80	0.73	1.8	6	2	64	74	0.0395									
ND-160M1-8		10.3	9.76	9.41	4	5.5	720	81	0.73	1.9	6	2	68	95.5	0.0753									
ND-160M2-8		13.6	12.9	12.5	5.5	7.5	720	83	0.74	1.9	6	2	68	107	0.0931									
ND-180L-8		17.8	16.9	16.3	7.5	10	720	85.5	0.75	1.9	6	2	68	128	0.126									
ND-200L-8		25.5	24.2	23.3	11	15	730	87.5	0.75	2	6.5	2	70	169	0.203									
ND-225S-8		34.1	32.4	31.2	15	20	730	88	0.76	2	6.6	2	73	236	0.339									
ND-225S-8		41.1	39	37.6	18.5	25	730	90	0.76	1.9	6.6	2	73	274	0.491									
ND-225M-8		48.9	45	43.4	22	30	730	90.5	0.78	1.9	6.6	2	73	300	0.547									
ND-250M-8		63	60.2	58.1	30	40	735	91	0.79	1.9	6.5	2	75	370	0.834									
ND-280S-8		78	73.9	71.2	37	50	740	91.5	0.79	1.9	6.6	2	76	488	1.65									
ND-280M-8		94	89.4	86.1	45	60	740	92	0.79	1.9	6.6	2	76	563	1.93									
ND-315S-8		111	106	102	55	75	735	92.8	0.81	1.8	6.6	2	82	882	4.79									
ND-315M-8		150	143	138	75	100	735	93.5	0.81	1.8	6.2	2	82	933	5.88									
ND-315L1-8		178	169	163	90	125	735	93.8	0.82	1.8	6.4	2	82	1027	6.37									
ND-315L2-8		217	206	199	110	150	735	94	0.82	1.8	6.4	2	82	1117	7.23									
ND-355M1-8		281	248	239	132	180	740	93.7	0.82	1.8	6.4	2	90	2000	7.9									
ND-355M2-8		315	299	288	160	220	740	94.2	0.82	1.8	6.4	2	90	2150	10.3									
ND-355L-8		387	368	355	200	270	740	94.5	0.83	1.8	6.4	2	90	2250	12.3									



Frame with feet and end-shield



ND80-355 B3, B5, B35

FRAME SIZE	POLES	A	A/2	B	C	D	E	F	G	H	K
80M	2 4 6 8	125	62.5	100	50	19	40	6	15.5	80	10
90S	2 4 6 8	140	70	100	56	24	50	8	20	90	10
90L	2 4 6 8	140	70	125	56	24	50	8	20	90	10
100L	2 4 6 8	160	80	140	63	28	60	8	24	100	12
112M	2 4 6 8	190	95	140	70	28	60	8	24	112	12
132S	2 4 6 8	216	108	140	89	38	80	10	33	132	12
132M	2 4 6 8	216	108	178	89	38	80	10	33	132	12
160M	2 4 6 8	254	127	210	108	42	110	12	37	160	15
160L	2 4 6 8	254	127	254	108	42	110	12	37	160	15
180M	2 4 6 8	279	139.5	241	121	48	110	14	42.5	180	15
180L	2 4 6 8	279	139.5	279	121	48	110	14	42.5	180	15
200L	2 4 6 8	318	159	305	133	55	110	16	49	200	19
225S	4 8	356	178	286	149	60	140	18	53	225	19
225M	2	356	178	311	149	55	110	16	49	225	19
225M	4 6 8	356	178	311	149	60	140	18	53	225	19
250M	2	406	203	349	168	60	140	18	53	250	24
250M	4 6 8	406	203	349	168	65	140	18	58	250	24
280S	2	457	228.5	368	190	65	140	18	58	280	24
280S	4 6 8	457	228.5	368	190	75	140	20	67.5	280	24
280M	2	457	228.5	419	190	65	140	18	58	280	24
280M	4 6 8	457	228.5	419	190	75	140	20	67.5	280	24
315S	2	508	254	406	216	65	140	18	58	315	28
315S	4 6 8	508	254	406	216	80	170	22	71	315	28
315M	2	508	254	457	216	65	140	18	58	315	28
315M	4 6 8	508	254	457	216	80	170	22	71	315	28
315L	2	508	254	508	216	65	140	18	58	315	28
315L	4 6 8	508	254	508	216	80	170	22	71	315	28
355M	2	610	305	560	254	75	140	20	67.5	355	28
355M	4 6 8	610	305	560	254	95	170	25	86	355	28
355L	2	610	305	630	254	75	140	20	67.5	355	28
355L	4 6 8	610	305	630	254	95	170	25	86	355	28

AB	AC	AD	HD	L	DH*	M	N	P	S	T	FLANGE HOLES
165	155	145	220	295	M6X16	165	130	200	12	3.5	4
180	175	155	250	320	M8x19	165	130	200	12	3.5	4
180	175	155	250	345	M8x19	165	130	200	12	3.5	4
205	195	180	270	385	M10X22	215	180	250	15	4	4
230	220	190	300	400	M10X22	215	180	250	15	4	4
270	258	210	345	470	M12x28	265	230	300	15	4	4
270	258	210	345	510	M12X28	265	230	300	15	4	4
320	315	255	420	615	M16x36	300	250	350	19	5	4
320	315	255	420	660	M16x36	300	250	350	19	5	4
355	355	280	455	700	M16x36	300	250	350	19	5	4
355	355	280	455	740	M16x36	300	250	350	19	5	4
395	397	305	505	770	M20x42	350	300	400	19	5	4
435	445	335	560	815	M20x42	400	350	450	19	5	8
435	445	335	560	820	M20X42	400	350	450	19	5	8
435	445	335	560	845	M20x42	400	450	550	19	5	8
490	484	370	615	920	M20x42	500	450	550	19	5	8
490	484	370	615	920	M20x42	500	450	550	19	5	8
550	546	410	680	995	M20X42	500	450	550	19	5	8
550	546	410	680	995	M20X42	500	450	550	19	5	8
550	546	410	680	1045	M20X42	500	450	550	19	5	8
550	546	410	680	1045	M20X42	500	450	550	19	5	8
635	620	530	845	1185	M20x42	600	550	660	24	6	8
635	620	530	845	1220	M20x42	600	550	660	24	6	8
635	620	530	845	1290	M20X42	600	550	660	24	6	8
635	620	530	845	1325	M20X42	600	550	660	24	6	8
635	620	530	845	1290	M20X42	600	550	660	24	6	8
635	620	530	845	1290	M20X42	600	550	660	24	6	8
635	620	530	845	1325	M20X42	600	550	660	24	6	8
730	700	655	1010	1500	M20X42	740	680	800	24	6	8
730	700	655	1010	1530	M20x42	740	680	800	24	6	8
730	700	655	1010	1500	M20x42	740	680	800	24	6	8
730	700	655	1010	1530	M20x42	740	680	800	24	6	8