

Metric Efficient Line Aluminum and Metric Premium Line Cast-iron IEC Motors

UAE-Qatar-Bahrain-Kuwait-Egypt



MOTOR METRIC EFFICIENT LINE ALUMINUM (MELA) MOUNTING POSITION F3-F1-F2
MOTOR METRIC PREMIUM LINE CAST-IRON (MPLC) MOUNTING POSITION F3 ONLY

Nidec

NIDEC MOTOR CORPORATION

Three Phase, IEC Motors IE2 Eff. Type MELA (Aluminum Frame), IE3 Eff. Type MPLC (All Cast-iron), IP55 Severe Duty, 50°C Ambient

UAE-Qatar-Bahrain-Kuwait-Egypt



MELC

APPLICATIONS:

For severe duty environments found in the pulp & paper, lumber, aggregates, mining, chemical and other industries.

FEATURES:

- Comply with IEC 60034, 60038, 60072 and IE2 and IE3 efficiency standards
- 50°C ambient, continuous duty
- Altitude 1000 m
- Sealed bearings of same size on both ends Frame 80 to 160
- Regreasable bearings of the same size on both ends Frame 180 to 355
- Grease type Polyrex-EM
- Corrosion resistant mill & chemical duty paint RAL 7024 Grey
- VPI, Class F insulation system, 80K (°C) rise at full load on sine wave power
- Stainless steel nameplate and zinc plated hardware
- Shaft seal ring for IP55 protection
- Lifting provisions
- Multi-mounting position F3-F1-F2 on MELA, F3 mounting Only on MPLC
- Frequency 50Hz
- 230v / 415v ± 10% 50 Hz From 0.75 to 2.2 Kw
- 380v -5%, 400v ± 10%, 415v+5% From 3 to 315 Kw
- Suitable for DOL start 230V Δ & 415 v Y (up to 2.2 Kw), 380- 400V Δ above
- Suitable for wye-delta start 380-415v from 3Kw and up
- Winding connection: 230V Δ /400 v Y and 380- 415V Δ / 690v-720V Y
- Winding Protection: Dandong PTC (1 per phase) from 110KW and Up
- 6 Leads connection Y Δ with Conduit box suitable for 6 terminals
- Single Voltage nameplated @ 50Hz only
- SF 1.15
- CE mark on nameplate
- Field convertible flange FF & FT kits available

KW	HP	Pole	IEC Frame	Catalog #	Model #	DS-Sym	Weight Kg	List		
				Motors Multi-Mounting Position F3-F1-F2				B3	B5	B14
0.75	1	2	80M1	MELA075E1U	ELA501	IE2UA	14	210	220	224
		4	80M2	MELA075E2U	ELA502	IE2UA	15	250	262	267
		6	90S	MELA075E3U	ELA503	IE2UA	21	304	319	325
1.1	1.5	2	80M2	MELA1E1U	ELA504	IE2UA	16	226	237	242
		4	90S	MELA1E2U	ELA505	IE2UA	20	305	320	326
		6	90L	MELA1E3U	ELA506	IE2UA	25	364	383	390
1.5	2	2	90S	MELA32E1U	ELA507	IE2UA	20	292	306	312
		4	90L	MELA32E2U	ELA508	IE2UA	27	346	364	371
		6	100L	MELA32E3U	ELA509	IE2UA	30	444	467	475
2.2	3	2	90L	MELA2E1U	ELA510	IE2UA	24	328	344	350
		4	100L1	MELA2E2U	ELA511	IE2UA	30	469	492	502
		6	112M	MELA2E3U	ELA512	IE2UA	40	534	561	571
3	4	2	100L	MELA3E1T	ELA513	IE2UA	30	438	460	469
		4	100L2	MELA3E2T	ELA514	IE2UA	32	530	556	567
		6	132S	MELA3E3T	ELA515	IE2UA	51	691	725	739
4	5	2	112M	MELA4E1T	ELA516	IE2UA	40	547	574	585
		4	112M	MELA4E2T	ELA517	IE2UA	44	644	677	690
		6	132M1	MELA4E3T	ELA518	IE2UA	63	773	812	828
4.4	6	2	112M1	MELA4X4E1T	ELA519	IE2UA	44	538	565	575
		4	112M1	MELA4X4E2T	ELA520	IE2UA	48	658	691	704
		6	132M3	MELA4X4E3T	ELA521	IE2UA	68	781	820	836
5.5	7.5	2	132S1	MELA5E1T	ELA522	IE2UA	58	737	774	788
		4	132S	MELA5E2T	ELA523	IE2UA	61	839	881	897
		6	132M2	MELA5E3T	ELA524	IE2UA	74	910	955	974

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**Three Phase, IEC Motore IE2 Eff. Type MELA (Aluminum Frame),
IE3 Eff. Type MPLC (All Cast-iron), IP55 Severe Duty, 50°C Ambient**

KW	HP	Pole	IEC Frame	Catalog #	Model #	DS-Sym	Weight Kg	List		
				Motors F3 Mounting Position only on MPLC				B3	B5	B14
7.5	10	2	132S2	MPLC7P1T	PLC525	IE3UA	64	899	944	962
		4	132M	MPLC7P2T	PLC526	IE3UA	79	1169	1227	1250
		6	160M	MPLC7P3T	PLC527	IE3UA	108	1653	1735	1768
9.2	12.5	2	132M1	MPLC9P1T	PLC528	IE3UA	70	826	867	883
		4	132M1	MPLC9P2T	PLC529	IE3UA	86	1143	1200	1223
		6	160M1	MPLC9P3T	PLC530	IE3UA	118	1472	1546	1576
11	15	2	160M1	MPL11P1T	PLC531	IE3UA	106	1553	1630	1661
		4	160M	MPLC11P2T	PLC532	IE3UA	114	1598	1677	1709
		6	160L	MPLC11P3T	PLC533	IE3UA	135	1873	1967	2004
15	20	2	160M2	MPL15P1T	PLC534	IE3UA	118	1648	1730	1763
		4	160L	MPLC11P2T	PLC535	IE3UA	133	1791	1880	1916
		6	180L	MPLC11P3T	PLC536	IE3UA	180	2161	2270	
18.5	25	2	160L	MPLC19P1T	PLC537	IE3UA	130	1778	1867	1902
		4	180M	MPLC19P2T	PLC538	IE3UA	168	2566	2695	
		6	200L1	MPLC19P3T	PLC539	IE3UA	220	2732	2869	
22	30	2	180M	MPLC22P1T	PLC540	IE3UA	178	2383	2502	
		4	180L	MPLC22P2T	PLC541	IE3UA	188	2594	2724	
		6	200L2	MPLC22P3T	PLC542	IE3UA	230	2976	3125	
30	40	2	200L1	MPLC30P1T	PLC543	IE3UA	220	2789	2929	
		4	200L	MPLC30P2T	PLC544	IE3UA	243	3204	3364	
		6	225M	MPLC30P3T	PLC545	IE3UA	277	3972	4171	
37	50	2	200L2	MPLC37P1T	PLC546	IE3UA	233	2882	3026	
		4	225S	MPLC37P2T	PLC547	IE3UA	282	3896	4091	
		6	250M	MPLC37P3T	PLC548	IE3UA	360	4605	4835	
45	60	2	225M	MPLC45P1T	PLC549	IE3UA	300	3791	3981	
		4	225M	MPLC45P2T	PLC550	IE3UA	312	4232	4444	
		6	280S	MPLC45P3T	PLC551	IE3UA	470	6238	6549	
55	75	2	250M	MPLC55P1T	PLC552	IE3UA	389	5153	5410	
		4	250M	MPLC55P2T	PLC553	IE3UA	403	5471	5744	
		6	280M	MPLC55P3T	PLC554	IE3UA	538	6800	7140	
75	100	2	280S	MPLC75P1T	PLC555	IE3UA	482	6796	7135	
		4	280S	MPLC75P2T	PLC556	IE3UA	550	7922	8318	
		6	315S	MPLC75P3T	PLC557	IE3UA	814	10764	11302	
90	125	2	280M	MPLC90P1T	PLC558	IE3UA	536	7636	8018	
		4	280M	MPLC90P2T	PLC559	IE3UA	640	8225	8636	
		6	315M	MPLC90P3T	PLC560	IE3UA	877	11851	12444	
110	150	2	315S	MPLC110P1T	PLC561	IE3UA	802	11399	11969	
		4	315S	MPLC110P2T	PLC562	IE3UA	838	11712	12297	
		6	315L1	MPLC110P3T	PLC563	IE3UA	988	14368	15086	
132	175	2	315M	MPLC132P1T	PLC564	IE3UA	946	12172	12780	
		4	315M	MPLC132P2T	PLC565	IE3UA	980	13386	14055	
		6	315L2	MPLC132P3T	PLC566	IE3UA	1116	15596	16376	
160	200	2	315L	MPLC160P1T	PLC567	IE3UA	990	13397	14067	
		4	315L	MPLC160P2T	PLC568	IE3UA	1022	14064	14767	
		6	355M1	MPLC160P3T	PLC569	IE3UA	1506	21013		
185	250	2	315L	MPLC185P1T	PLC570	IE3UA	1050	11521	12097	
		4	315L	MPLC185P2T	PLC571	IE3UA	1100	14117	14823	
		6	355M2	MPLC185P3T	PLC572	IE3UA	1550	19205		

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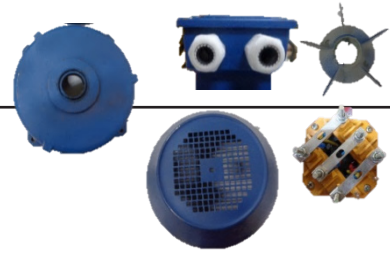


**Three Phase, IEC Motore IE2 Eff. Type MELA (Aluminum Frame),
IE3 Eff. Type MPLC (All Cast-iron), IP55 Severe Duty, 50°C Ambient**

KW	HP	Pole	IEC Frame	Catalog #	Model #	DS-Sym	Weight Kg	List		
				Motors F3 Mounting Position only on MPLC				B3	B5	B14
200	270	2	315L	MPLC200P1T	PLC573	IE3UA	1095	14932	15678	
		4	315L	MPLC200P2T	PLC574	IE3UA	1160	15834	16626	
		6	355M3	MPLC200P3T	PLC575	IE3UA	1596	23529		
250	340	2	355M2	MPLC250P1T	PLC576	IE3UA	1760	25471		
		4	355M2	MPLC250P2T	PLC577	IE3UA	1605	23184		
		6	355L3	MPLC250P3T	PLC578	IE3UA	1847	27193		
315	430	2	355L2	MPLC315P1T	PLC579	IE3UA	1850	27631		
		4	355L2	MPLC315P2T	PLC580	IE3UA	1780	25378		
		6								

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Kit FF Flange

IEC Symbol	Motor Frame	For Cast-iron MELC, MPLC			For Aluminum MELA	
		Nidec Catalog #	Comment	List	Nidec Catalog #	List
FF165	80	FF165ELC80	2-4-6 Poles	79	FF165ELA80	43
	90	FF165ELC90	2-4-6 Poles	89	FF165ELA90	45
FF215	100	FF215ELC100	2-4-6 Poles	138	FF215ELA100	70
	112	FF215ELC112	2-4-6 Poles	162	FF215ELA112	75
FF265	132	FF265ELC132	2-4-6 Poles	238	FF265ELA132	110
FF300	160	FF300ELC160	2-4-6 Poles	365		
	180	FF300ELC180	2-4-6 Poles			
FF350	200	FF350ELC200-2	2 Poles Only	522		
		FF350ELC200	4-6 Poles			
FF400	225	FF400ELC225-2	2 Poles Only	634		
		FF400ELC225	4 & 6 Poles			
FF500	250	FF500ELC250-2	2 Poles Only	896		
		FF500ELC250	4 & 6 Poles			
	280	FF500ELC280-2	2 Poles Only	1054		
		FF500ELC280	4 & 6 Poles			
FF600	315	FF600ELC315	2 Poles Only	1497		
		FF600ELC315	4 & 6 Poles			

Kit FT Flange

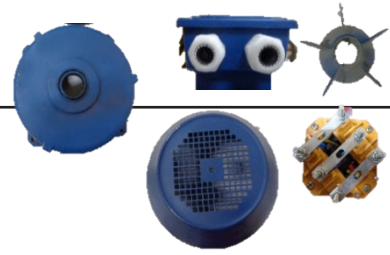
IEC Symbol	Motor Frame	For Cast-iron MELC, MPLC		For Aluminum MELA	
		Nidec Catalog #	List	Nidec Catalog #	List
FT100	80	FT100ELC80	84	FT100ELA80	45
FT115	90	FT115ELC90	94	FT115ELA90	50
FT130	100	FT130ELC100	147	FT130ELA100	80
FT130	112	FT130ELC112	172	FT130ELA112	90
FT215	132	FT215ELC132		FF265ELA132	130

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Kits and Spare Parts

IEC Motors, Cast-iron and Aluminum Frames

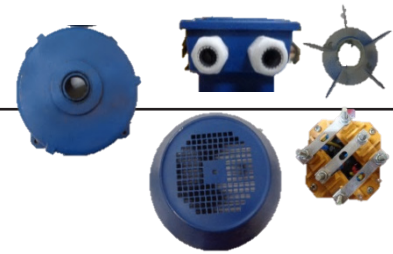


Plastic Fan

Motor Type	Motor Frame	Poles	List	Nidec Catalog #	List
MELA,MPFA, MELC, MPLC, MPFC	80	All	5	FAN80EL	5
MELA,MPFA, MELC, MPLC, MPFC	90	2 only	5	FAN80-2EL	5
MELA,MPFA, MELC, MPLC, MPFC	90	4 & 6	5	FAN80EL	5
MELA,MPFA, MELC, MPLC, MPFC	100	All	10	FAN100EL	10
MELA,MPFA, MELC, MPLC, MPFC	112	2 only	15	FAN112-2EL	15
MELA,MPFA, MELC, MPLC, MPFC	112	4 & 6 & 8	15	FAN112EL	15
MELA,MPFA, MELC, MPLC, MPFC	132	2 only	20	FAN132-2EL	20
MELA,MPFA, MELC, MPLC, MPFC	132	4 & 6 & 8	20	FAN132EL	20
MELA,MPFA, MELC, MPLC, MPFC	160	2 only	25	FAN160-2EL	25
MELA,MPFA, MELC, MPLC, MPFC	160	4 & 6 & 8	30	FAN160EL	30
MELC, MPLC & MPFC	180	2 & 4	35	FAN180-2-4ELC	35
MELC, MPLC & MPFC	180	6 & 8	40	FAN180-6-8ELC	40
MELC, MPLC & MPFC	200	2 only	45	FAN200-2ELC	45
MELC, MPLC & MPFC	200	4 & 6 & 8	50	FAN200ELC	50
MELC, MPLC & MPFC	225	2 only	60	FAN225-2ELC	60
MELC, MPLC & MPFC	225	4 & 6 & 8	75	FAN225ELC	75
MELC, MPLC & MPFC	250	2 only	80	FAN250-2ELC	80
MELC, MPLC & MPFC	250	4 & 6 & 8	100	FAN250ELC	100
MELC, MPLC & MPFC	280	2 only	110	FAN280-2ELC	110
MELC, MPLC & MPFC	280	4 & 6 & 8	150	FAN280ELC	150
MELC, MPLC & MPFC	315 & 355	2 only *	300	FAN300-2ELC	300
MELC, MPLC & MPFC	315 & 355	4 only *	300	FAN300-4ELC	300
MELC, MPLC & MPFC	315 & 355	6 & 8 *	300	FAN300-6-8ELC	300

* Aluminum





Fan Cover

Motor Type	Motor Frame	Horizontal Mount		Vertical Mount	
		Nidec Catalog #	List	Nidec Catalog #	List
MELA, MELC	80	FCG80EL	13	FCV80EL	25
MELA	90	FCG90ELA	17	FCV90ELA	35
MELC	90	FCG90ELC	17	FCV90ELC	35
MELA, MELC	100	FCG100EL	20	FCV100EL	40
MELA	112	FCG112ELA	22	FCV112EL	45
MELC	112	FCG112ELC	22	FCV112ELC	45
MELA, MELC	132	FCG132EL	32	FCV132EL	65
MELA, MELC	160	FCG160EL	55	FCV160EL	110
MELC	180	FCG180ELC	80	FCV180ELC	160
MELC	200	FCG200ELC	110	FCV200ELC	220
MELC	225	FCG225ELC	140	FCV225ELC	280
MELC	250	FCG250ELC	170	FCV250ELC	340
MELC	280	FCG280ELC	200	FCV280ELC	400
MELC	315	FCG315ELC	300	FCV315ELC	600
MELC	355	FCG355ELC	560	FCV355ELC	1100

Conduit Box and Terminal Board

Motor Type	Motor Frame	Conduit Box				Terminal Board	
		MELC, MPLC Cast-iron Frame		MELA & MPFA Aluminum Frame		MELA, MPFA, MELC, MPLC & MPFC	
		Nidec Catalog #	List	Nidec Catalog #	List	Nidec Catalog #	List
	80	CB80ELC	20	CB80ELA	30	TB80EL	15
	90	CB90-100ELC	30	CB90-100ELA	40	TB90-100EL	18
	100						
	112	CB112-132ELC	40	CB112-132ELA	60	TB112-132EL	20
	132						
	160	CB160-180ELC	60	CB160ELZ	180	TB160-180EL	40
	180						
	200	CB200-225ELC	90			TB200-225ELC	90
	225						
	250	CB250-280ELC	120			TB250-280ELC	150
	280						
	315	CB315ELC	300			TB315ELC	700
	355	CB355ELC					TB355ELC

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