IE4 Efficiency

Permanent Magnet Motor

DVLF Series
DVLS Series

Energy Conservation / Emissions Reduction / Intelligence / Automation

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Product introduction

- The rotor of the permanent magnet motor adopts a surface magnet design (SPM) for quick response and excellent characteristics.
- Full range of product with a maximum power output of up to 75kW.

Lightweight

- Smaller & Lighter
- Reducing volume and weight by over 35% compared to traditional motors.

High efficiency

- Utilize high-grade permanent magnets, with a motor efficiency up to IE4.

Energy-saving

- The motor is highly efficient and suitable for a wide range of applications, reducing equipment power consumption and meeting the demand for energy-saving and carbon reduction.

Product patent

- The product has a patented new rotor structure, making the permanent magnet motor low in vibration and noise.
- It has a patented stator structure design, with low cogging torque characteristics.

Precise and highly reliable

- The product is of high quality, with production facilities certified by IS0-9001, IS0-14001, and OHSAS 18001, and the product meets CE safety standards.
- Won the Taiwan Excellence Award with elegant appearance.
- Solid and reliable TEFC frame structure design.
- IP55 protection, in line with international standards, providing better safety protection.
- TECO Precision Testing Laboratory has been accredited by the NVLAP (200378-0) of NIST of the US Department of Commerce (DOC) as the first precision laboratory in Asia, ensuring the accuracy and reliability of the product.

Product Information

RATING	Kind of Motors	SPM Motor (Surface Permanent Magnet Motor)
	Voltage	220 V, 380 V
	Frequency	50HZ
	R.P.M.	Rated 1000,1500, 2000 R.P.M
	Output Range	2.2 - 75kW
	Frame Size	112 - 160
	Protection Enclosure	Totally Enclosed (IP 55)
	Cooling Method	IC416: Forced Ventilation Surface Cooled
	Forced Fan Voltage	Single-Phase 220 V, 50/60 Hz
	Mounting	Horizontal Foot and Flange Mounting. (IM 2001) (F#112~160)
APPLICATION	Environment Conditions	Ambient Temperature: -20℃ to 40℃ Relative Humidity: Less than 90%RH (Non - Condensation) Altitude: Less than 1,000 Meters.
	Drive Method	Direct - Coupling
	Direction of Rotation	Bi - Directional
CONSTRUCTION	Frame	Aluminum extrusion
	Flange Bracket	Cast Iron
	Shaft	Carbon Steel, Cylindrical Single Extension with Keyway and Key
	Bearing	Grease Pre-Packed Shielded Rolling Bearings
	Shaft Opening Shield	Metallic Oil Seal
	Terminal Box	Steel Plate
	Lead Terminal	Solderless Lug Terminals
	Iron Core	High Grade, Insulated, Cold - Rolled Electro - Magnetic Steel Plate
	Stator Winding	Pre-Formed, Random Wound, Made of Heavy Polyester Enameled Copper Wire.
	Stator Insulation	Class F Insulation System
	Name Plate	Stainless Steel Plate
	Bolt Thread	ISO Metric System
	Thermostat	Normal Closed Type: Trip at 145℃
	Thermistor	Negative temperature coefficient (NTC) thermistor
	Feedback Device	Resolver (Optional Encoder, Sensorless)
PERFORMANCE	Max. Speed	150% Rated Speed (Rated Speed 1000, 2000 rpm Series) 166% Rated Speed (Rated Speed 1500 rpm Series)
	Max. Torque	170% Rated Torque for 10 Sec (Rated Speed 1000 rpm Series) 200% Rated Torque for 10 Sec (Rated Speed 1500, 2000 rpm
DRIVE	Motor Control	Controlled by Permanent Magnet Synchronous Motor Drive
	Driver Input Power Supply	220 V class: 3-phase 200 to 240 Vac 50/60 Hz 380 V class: 3-phase 380 to 480 Vac 50/60 Hz

DVLF (220V Series)

Output		Frame NO. (EG)	Speed		TORQUE		CURRENT		ROTOR INERTIAJ (kg-m²)	TORQUE CONSTANT (Nm/A)	Eff. (%)
kW	HP		RATED (rpm)	MAX. (rpm)	RATED (Nm)	MAX. (Nm)	RATED (A_{rms})	MAX. (A_{rms})			
2.2	3	112	1000	1500	21.0	35.7	8.4	14.4	31.4	2.50	87.4
3.7	5				35.3	60.1	14.0	25.2	42.1	2.52	89.3
5.5	7.5				52.5	89.3	20.5	36.9	57.6	2.56	90.5
7.5	10				71.6	121.8	28.0	50.4	83.7	2.56	91.3
11	15	132			105.0	178.6	40.0	72.0	183.3	2.63	92.3
15	20				143.2	243.5	54.0	97.2	225.0	2.65	92.9
18.5	25				176.7	300.3	66.0	118.8	295.9	2.68	93.4
22	30				210.1	357.1	81.0	145.8	366.9	2.59	93.7
30	40				286.5	487.0	113.0	203.4	437.8	2.54	94.2
37	50	160			353.3	600.7	130.0	234.0	815.1	2.72	94.5
45	60				429.7	730.5	160.0	288.0	1007.1	2.69	94.8
55	75				525.2	892.9	206.0	370.8	1384.0	2.55	95.1
3.7	5	112	1500	2500	23.6	47.1	14.0	29.4	31.4	1.68	90.9
5.5	7.5				35.0	70.0	20.5	43.1	42.1	1.71	91.9
7.5	10				47.7	95.5	27.5	57.8	57.6	1.74	92.6
11	15				70.0	140.1	42.0	88.2	83.7	1.67	93.3
15	20	132			95.5	191.0	56.0	117.6	183.3	1.71	93.9
18.5	25				117.8	235.5	68.0	142.8	225.0	1.73	94.2
22	30				140.1	280.1	81.0	170.1	295.9	1.73	94.5
30	40				191.0	382.0	113.0	237.3	366.9	1.69	94.9
37	50				235.5	471.1	136.0	285.6	437.8	1.73	95.2
45	60	160			286.5	573.0	156.0	327.6	815.1	1.84	95.4
55	75				350.1	700.3	190.0	399.0	1007.1	1.84	95.7
75	100				477.5	954.9	260.0	546.0	1384.0	1.84	96.0
5.5	7.5	112	2000	3000	26.3	52.5	20.5	43.1	31.4	1.28	90.9
7.5	10				35.8	71.6	28.0	58.8	42.1	1.28	91.7
11	15				52.5	105.0	42.0	88.2	57.6	1.25	92.6
15	20				71.6	143.2	58.0	121.8	83.7	1.23	93.3
18.5	25	132			88.3	176.7	67.0	140.7	183.3	1.32	93.7
22	30				105.0	210.1	81.0	170.1	225.0	1.30	94.0
30	40				143.2	286.5	114.0	239.4	295.9	1.26	94.5
37	50				176.7	353.3	133.0	279.3	366.9	1.33	94.8
45	60				214.9	429.7	165.0	346.5	437.8	1.30	95.0
55	75	160			262.6	525.2	200.0	420.0	815.1	1.31	95.3
75	100				358.1	716.2	288.0	604.8	1007.1	1.24	95.6

NOTE

*The motors from 15kW to 75 kW (1500rpm rated _ F#132, F#160) have obtained UL certification.

DVLF (380V Series)

Output		Frame NO. (EG)	Speed		TORQUE		CURRENT		ROTOR INERTIAJ (kg-m²)	TORQUE CONSTANT (Nm/A)	Eff. (%)
kW	HP		RATED (rpm)	MAX. (rpm)	RATED (Nm)	MAX. (Nm)	RATED (A_{rms})	MAX. (A_{rms})			
2.2	3	112	1000	1500	21.0	35.7	4.2	7.6	31.4	5.00	87.4
3.7	5				35.3	60.1	7.0	12.6	42.1	5.05	89.3
5.5	7.5				52.5	89.3	10.5	18.9	57.6	5.00	90.5
7.5	10				71.6	121.8	14.0	25.2	83.7	5.12	91.3
11	15	132			105.0	178.6	21.0	37.8	183.3	5.00	92.3
15	20				143.2	243.5	28.5	51.3	225.0	5.03	92.9
18.5	25				176.7	300.3	35.0	63.0	295.9	5.05	93.4
22	30				210.1	357.1	42.0	75.6	366.9	5.00	93.7
30	40				286.5	487.0	56.5	101.7	437.8	5.07	94.2
37	50	160			353.3	600.7	70.0	126.0	815.1	5.05	94.5
45	60				429.7	730.5	84.0	151.2	1007.1	5.12	94.8
55	75				525.2	892.9	103.0	185.4	1384.0	5.10	95.1
3.7	5	112	1500	2500	23.6	47.1	8.0	16.8	31.4	2.94	90.9
5.5	7.5				35.0	70.0	12.0	25.2	42.1	2.92	91.9
7.5	10				47.7	95.5	16.5	34.7	57.6	2.89	92.6
11	15				70.0	140.1	24.0	50.4	83.7	2.92	93.3
15	20	132			95.5	191.0	33.0	69.3	183.3	2.89	93.9
18.5	25				117.8	235.5	40.0	84.0	225.0	2.94	94.2
22	30				140.1	280.1	47.0	98.7	295.9	2.98	94.5
30	40				191.0	382.0	63.0	132.3	366.9	3.03	94.9
37	50				235.5	471.1	78.0	163.8	437.8	3.02	95.2
45	60	160			286.5	573.0	94.0	197.4	815.1	3.05	95.4
55	75				350.1	700.3	113.0	237.3	1007.1	3.10	95.7
75	100				477.5	954.9	152.0	319.2	1384.0	3.14	96.0
5.5	7.5	112	2000	3000	26.3	52.5	12.0	25.2	31.4	2.19	90.9
7.5	10				35.8	71.6	16.5	34.7	42.1	2.17	91.7
11	15				52.5	105.0	24.0	50.4	57.6	2.19	92.6
15	20				71.6	143.2	32.5	68.3	83.7	2.20	93.3
18.5	25	132			88.3	176.7	39.0	81.9	183.3	2.26	93.7
22	30				105.0	210.1	48.0	100.8	225.0	2.19	94.0
30	40				143.2	286.5	62.0	130.2	295.9	2.31	94.5
37	50				176.7	353.3	77.0	161.7	366.9	2.29	94.8
45	60				214.9	429.7	93.0	195.3	437.8	2.31	95.0
55	75	160			262.6	525.2	112.0	235.2	815.1	2.34	95.3
75	100				358.1	716.2	156.0	327.6	1007.1	2.30	95.6

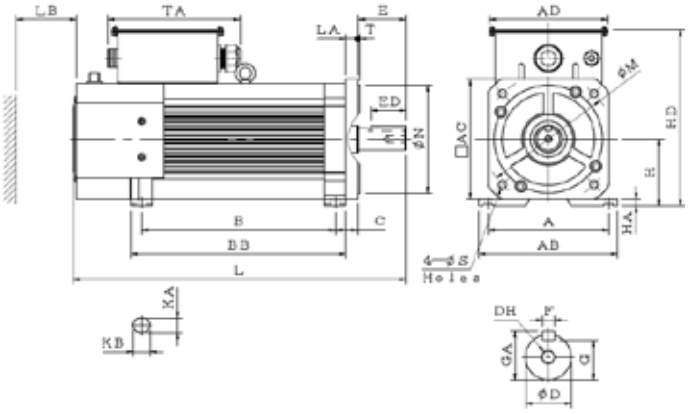


Fig 1

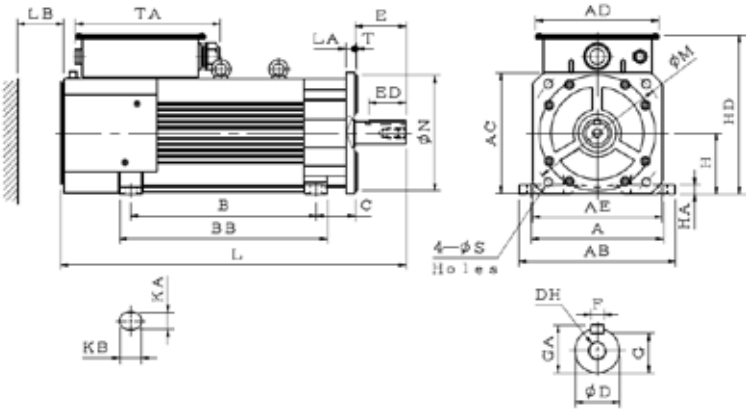


Fig 2

Output (kW)			FRAME SIZE	FIG. NO.	Dimensions in [mm]															
1000 rpm	1500 rpm	2000 rpm			A	AB	AC	AD	AE	B	BB	C	H	HA	HD	KA	KB	L	LA	LB
2.2	3.7	5.5	112	1	200	230	200	198	-	216	251	37.5	112	12	295	12	14	448	20	100
3.7	5.5	7.5			200	230	200	198	-	236	271	37.5	112	12	295	12	14	468	20	100
5.5	7.5	11			200	230	200	198	-	277	312	37.5	112	12	295	12	14	509	20	100
7.5	11	15			200	230	200	198	-	330	365	37.5	112	12	295	12	14	562	20	100
11	15	18.5	132	2	285	337	260	266	280	267	315	84	132	20	343	18.5	24	612	20	100
15	18.5	22			285	337	260	266	280	299	347	84	132	20	343	18.5	24	644	20	100
18.5	22	30			285	337	260	266	280	356	404	84	132	20	343	18.5	24	701	20	100
22	30	37			285	337	260	266	280	401	449	84	132	20	343	18.5	24	746	20	100
30	37	45			285	337	260	266	280	458	506	84	132	20	343	18.5	24	803	20	100
37	45	55	160	3	356	408	316	310	-	484	560	64.5	160	20	409	18.5	24	818	20	100
45	55	75			356	408	316	310	-	516	592	64.5	160	20	409	18.5	24	850	20	100
55	75	-			356	408	316	310	-	614	690	64.5	160	20	409	18.5	24	948	20	100

NOTE

1. Tolerance of shaft end diameter D: h6
2. Tolerance of N: h7

Tolerance of shaft center high H: +0 , -0.5

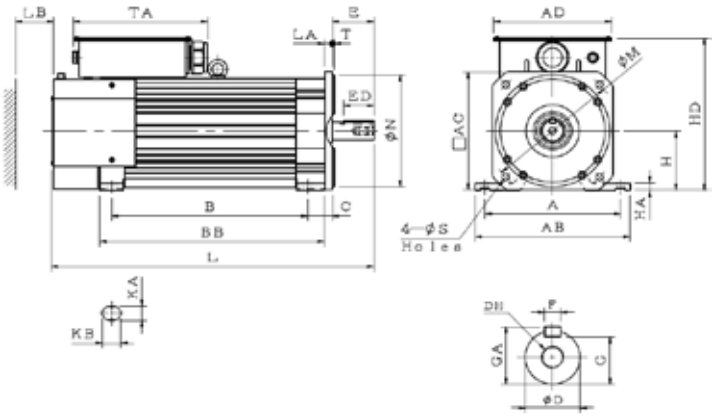


Fig 3

FRAME SIZE	FIG.	M	N	S	T	TA	SHAFT EXTENSION							BEARING		Weight (kg)
							D	E	ED	F	G	GA	DH	DRIVE END	OPPOSITE DRIVE END	
112	1	215	180	13.5	4	220	38	80	58	10	33	41	M12X28	6209ZZ	6206ZZ	38
		215	180	13.5	4	220	38	80	58	10	33	41	M12X28	6209ZZ	6206ZZ	40
		215	180	13.5	4	220	38	80	58	10	33	41	M12X28	6209ZZ	6206ZZ	54
		215	180	13.5	4	220	38	80	58	10	33	41	M12X28	6209ZZ	6206ZZ	60
132	2	300	250	18.5	4	313	48	110	80	14	42.5	51.5	M20X40	6312ZZ	6309ZZ	90
		300	250	18.5	4	313	48	110	80	14	42.5	51.5	M20X40	6312ZZ	6309ZZ	100
		300	250	18.5	4	313	48	110	80	14	42.5	51.5	M20X40	6312ZZ	6309ZZ	116
		300	250	18.5	4	313	48	110	80	14	42.5	51.5	M20X40	6312ZZ	6309ZZ	130
		300	250	18.5	4	313	48	110	80	14	42.5	51.5	M20X40	6312ZZ	6309ZZ	146
160	3	350	300	18.5	5	354	48	110	80	14	42.5	51.5	M20X40	6313ZZ	6311ZZ	182
		350	300	18.5	5	354	48	110	80	14	42.5	51.5	M20X40	6313ZZ	6311ZZ	208
		350	300	18.5	5	354	48	110	80	14	42.5	51.5	M20X40	6313ZZ	6311ZZ	245

Product introduction

- The rotor of the permanent magnet motor adopts an internal magnet design (IPM) for excellent structural rigidity and a maximum speed of up to 6500rpm.
- Full range of product with a maximum power output of up to 90kW.

Lightweight

- Smaller & Lighter
- Reducing volume and weight by over 35% compared to traditional motors.

High efficiency

- Utilize high-grade permanent magnets, with a motor efficiency up to IE4.

Energy-saving

- The motor is highly efficient and suitable for a wide range of applications, reducing equipment power consumption and meeting the demand for energy-saving and carbon reduction.

Product patent

- The product has a patented new rotor structure, making the permanent magnet motor low in vibration and noise.

Precise and highly reliable

- The product is of high quality, with production facilities certified by IS0-9001, IS0-14001, and OHSAS 18001, and the product meets CE safety standards.
- Won the Taiwan Excellence Award with elegant appearance.
- Solid and reliable TEFC frame structure design.
- IP55 protection, in line with international standards, providing better safety protection.
- TECO Precision Testing Laboratory has been accredited by the NVLAP (200378-0) of NIST of the US Department of Commerce (DOC) as the first precision laboratory in Asia, ensuring the accuracy and reliability of the product.

Product Information

RATING	Kind of Motors	IPM Motor (Interior Permanent Magnet Motor)
	Voltage	220 V, 380 V
	R.P.M.	Rated 3000, 4500 R.P.M
	Output Range	15 - 90kW
	Frame Size	132 - 160
	Protection Enclosure	Totally Enclosed (IP 55)
	Cooling Method	IC416: Forced Ventilation Surface Cooled
	Forced Fan Voltage	Single-Phase 220 V, 50/60 Hz
	Mounting	Horizontal Foot and Flange Mounting. (IM 2001)
APPLICATION	Environment Conditions	Ambient Temperature: -15℃ to 40℃ Relative Humidity: Less than 90%RH (Non - Condensation) Altitude: Less than 1,000 Meters.
	Drive Method	Direct - Coupling
	Direction of Rotation	Bi - Directional
CONSTRUCTION	Frame	Aluminum extrusion
	Flange Bracket	Cast Iron
	Shaft	Carbon Steel, Cylindrical Single Extension with Keyway and Key
	Bearing	Grease Pre-Packed Shielded Rolling Bearings
	Shaft Opening Shield	Oil Seal
	Terminal Box	Steel Plate
	Lead Terminal	Solderless Lug Terminals
	Iron Core	High Grade, Insulated, Cold - Rolled Electro - Magnetic Steel Plate
	Stator Winding	Pre-Formed, Random Wound, Made of Heavy Polyester Enameled
	Stator Insulation	Copper Wire.
	Name Plate	Stainless Steel Plate
	Bolt Thread	ISO Metric System
	Thermostat	Normal Closed Type: Trip at 145℃
	Thermistor	Negative temperature coefficient (NTC) thermistor
	Feedback Device	Sensorless (Optional Resolver, Encoder)
PERFORMANCE	Winding Temperature Rise	Not to Exceed 105℃ Rise By Resistance Method at S.F. 1.0
	Max. Speed	150% Rated Speed (Rated Speed 3000 rpm Series) 144% Rated Speed (Rated Speed 4500 rpm Series)
	Max. Torque	150% Rated Torque For 60 Sec
DRIVE	Motor Control	Controlled by Permanent Magnet Synchronous Motor Drive
	Driver Input Power Supply	220 V class: 3-phase 200 to 240 Vac 50/60 Hz 380 V class: 3-phase 380 to 480 Vac 50/60 Hz

DVLS (220V Series)

Output		Frame NO. (EG)	Speed		TORQUE		CURRENT		ROTOR INERTIAJ (kg-m²)	TORQUE CONSTANT (Nm/A)	Eff. (%)
kW	HP		RATED (rpm)	MAX. (rpm)	RATED (Nm)	MAX. (Nm)	RATED (A_{rms})	MAX. (A_{rms})			
15	20	132	3000	4500	47.7	71.6	55.0	88.0	206.0	0.87	93.3
18.5	25				58.9	88.3	69.0	110.4	252.8	0.85	93.7
22	30				70	105	78.0	124.8	286.2	0.90	94.0
30	40				95.5	143.2	105.0	168.0	399.8	0.91	94.5
37	50				117.8	176.7	132.0	211.2	466.6	0.89	94.8
45	60				143.2	214.9	165.0	264.0	546.8	0.87	95.0
55	75				175.1	262.6	196.0	313.6	693.7	0.89	95.3
15	20		4500	6500	31.8	47.7	55.0	88.0	125.9	0.58	93.3
18.5	25				39.3	58.9	69.0	110.4	172.6	0.57	93.7
22	30				46.7	70	78.0	124.8	206.0	0.60	94.0
30	40				63.7	95.5	105.0	168.0	286.2	0.61	94.5
37	50				78.5	117.8	132.0	211.2	319.6	0.59	94.8
45	60				95.5	143.2	165.0	264.0	399.8	0.58	95.0
55	75				116.7	175.1	196.0	313.6	466.6	0.60	95.3
75	100	160	3000	4500	238.7	358.1	245.0	392.0	1216.8	0.97	95.6
90	125				286.5	429.7	283.0	452.8	1661.9	1.01	95.8
75	100		4500	6500	159.2	238.7	278.0	444.8	954.9	0.57	95.6

DVLS (380V Series)

Output		Frame NO. (EG)	Speed		TORQUE		CURRENT		ROTOR INERTIAJ (kg-m²)	TORQUE CONSTANT (Nm/A)	Eff. (%)
kW	HP		RATED (rpm)	MAX. (rpm)	RATED (Nm)	MAX. (Nm)	RATED (A_{rms})	MAX. (A_{rms})			
15	20	132	3000	4500	47.7	71.6	27.5	44.0	206.0	1.74	93.3
18.5	25				58.9	88.3	34.5	55.2	252.8	1.71	93.7
22	30				70.0	105.0	39.0	62.4	286.2	1.80	94.0
30	40				95.5	143.2	52.5	84.0	399.8	1.82	94.5
37	50				117.8	176.7	66.0	105.6	466.6	1.78	94.8
45	60				143.2	214.9	82.5	132.0	546.8	1.74	95.0
55	75				175.1	262.6	98.0	156.8	693.7	1.79	95.3
15	20		4500	6500	31.8	47.7	27.5	44.0	125.9	1.16	93.3
18.5	25				39.3	58.9	34.5	55.2	172.6	1.14	93.7
22	30				46.7	70.0	39.0	62.4	206.0	1.20	94.0
30	40				63.7	95.5	52.5	84.0	286.2	1.21	94.5
37	50				78.5	117.8	66.0	105.6	319.6	1.19	94.8
45	60				95.5	143.2	82.5	132.0	399.8	1.16	95.0
55	75				116.7	175.1	98.0	156.8	466.6	1.19	95.3
75	100	160	3000	4500	238.7	358.1	139.0	222.4	1216.8	1.72	95.6
90	125				286.5	429.7	163.0	260.8	1661.9	1.76	95.8
75	100		4500	6500	159.2	238.7	139.0	222.4	954.9	1.14	95.6

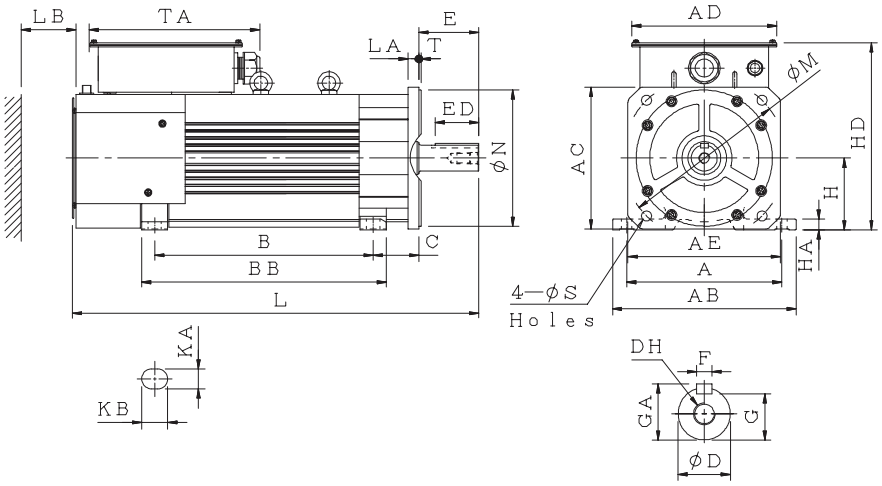


Fig 4

Output (kW)							FRAME SIZE	FIG. NO.	Dimensions in [mm]												
3000 rpm			4500 rpm						A	AB	AC	AD	AE	B	BB	C	H	HA	HD	KA	KB
15	18.5	22	15	18.5	22	30	132	4	285	337	260	266	280	267	315	84	132	20	343	18.5	24
-			37						285	337	260	266	280	299	347	84	132	20	343	18.5	24
30		37	45		55				285	337	260	266	280	356	404	84	132	20	343	18.5	24
45			-						285	337	260	266	280	401	449	84	132	20	343	18.5	24
55			-						285	337	260	266	280	458	506	84	132	20	343	18.5	24

FRAME SIZE	FIG.	L	LA	LB	M	N	S	T	TA	SHAFT EXTENSION							Bearing		Weight (kg)
										D	E	ED	F	G	GA	DH	Drive End	Non-Drive End	
132	4	612	20	100	300	250	18.5	4	312	48	110	80	14	42.5	51.5	M20X40	6312ZZ	6309ZZ	90
		644	20	100	300	250	18.5	4	312	48	110	80	14	42.5	51.5	M20X40	6312ZZ	6309ZZ	100
		701	20	100	300	250	18.5	4	312	48	110	80	14	42.5	51.5	M20X40	6312ZZ	6309ZZ	114
		746	20	100	300	250	18.5	4	312	48	110	80	14	42.5	51.5	M20X40	6312ZZ	6309ZZ	126
		803	20	100	300	250	18.5	4	312	48	110	80	14	42.5	51.5	M20X40	6312ZZ	6309ZZ	144

NOTE

1. Tolerance of shaft end diameter D: h6
2. Tolerance of N: h7

Tolerance of shaft center high H: +0 , -0.5

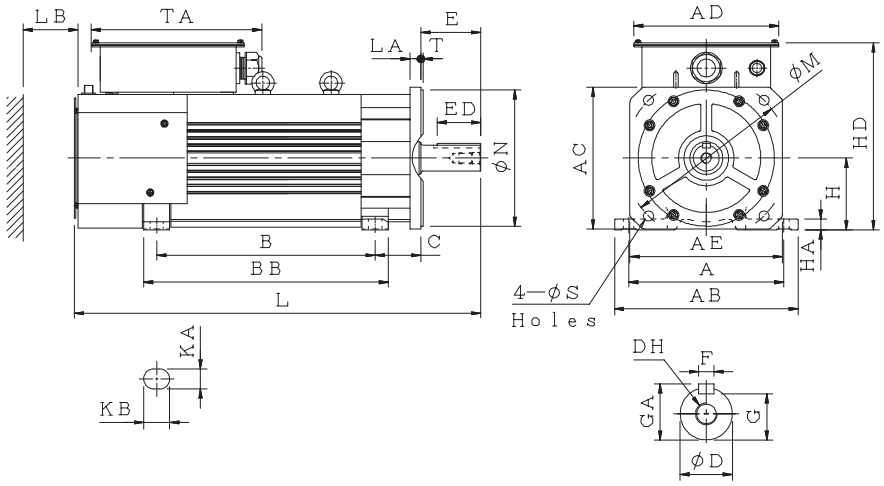
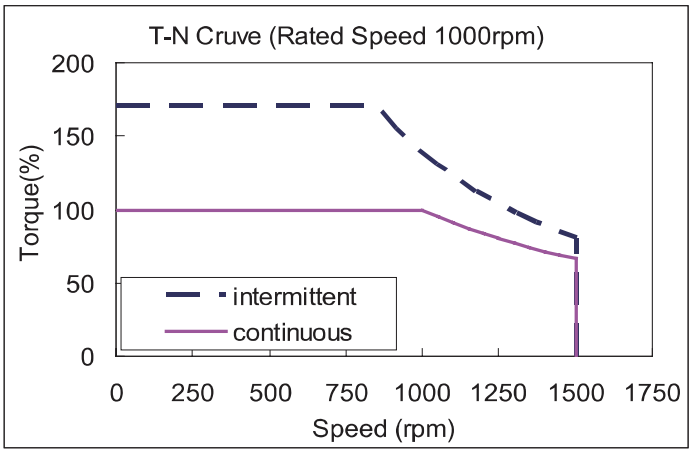


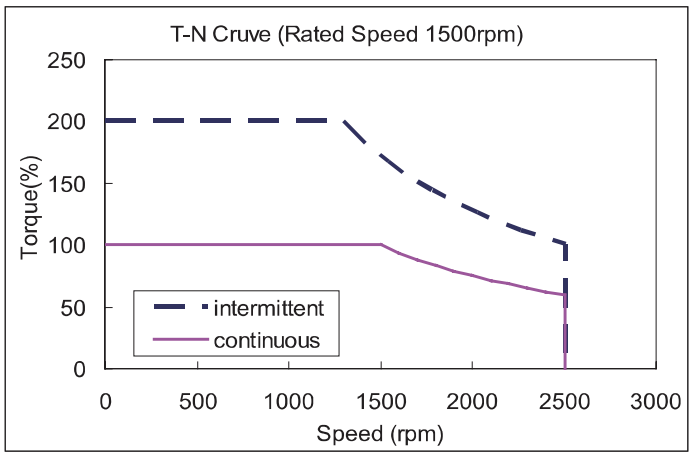
Fig 5

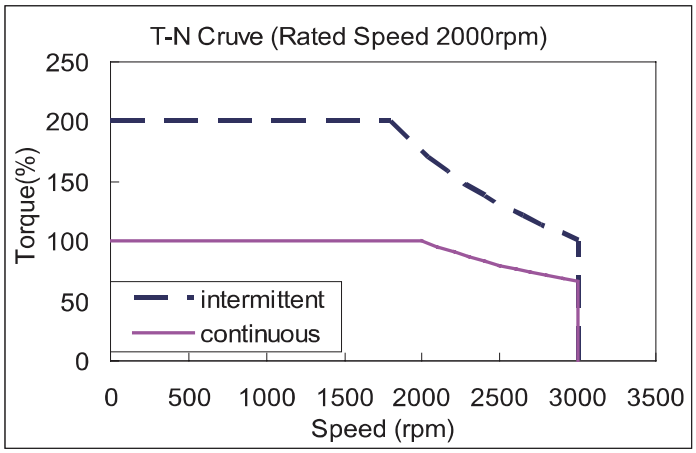
Output (kW)		FRAME SIZE	FIG. NO.	Dimensions in [mm]													
3000 rpm	4500 rpm			A	AB	AC	AD	B	BB	C	H	HA	HD	KA	KB	LA	LB
75	75	160	5	356	408	316	310	484	560	64.5	160	20	409	18.5	24	20	100
90	-			356	408	316	310	614	690	64.5	160	20	409	18.5	24	20	100

FRAME SIZE	FIG.	L	M	N	S	T	TA	SHAFT EXTENSION							Bearing		Weight (kg)
								D	E	ED	F	G	GA	DH	Drive End	Non-Drive End	
160	5	818	350	300	18.5	5	353	48	110	80	14	42.5	51.5	M20X40	6313ZZ	6311ZZ	177
		948	350	300	18.5	5	354	48	110	80	14	42.5	51.5	M20X40	6313ZZ	6311ZZ	220

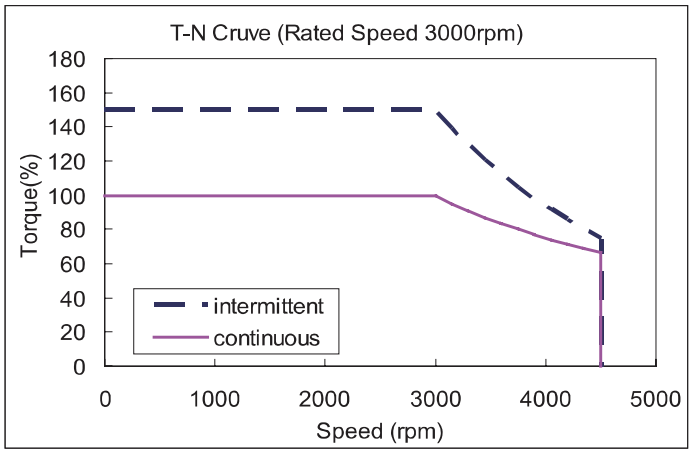
DVLF Series (220V / 380V)

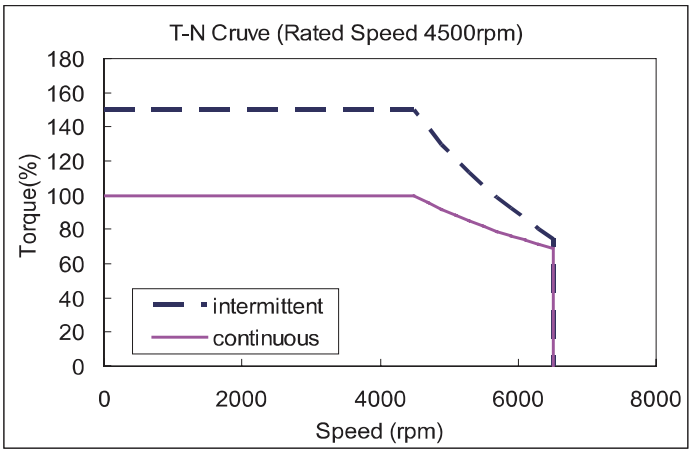






DVLS Series (220V / 380V)





Encoding Rules

DVLF -- R E 15K0 C F

Motor Series
DVLF Series
DVLS Series

Major modification Standard type
-- Standard

Feedback Device	
N	Sensorless
R	Resolver (1X)
3	Encoder (2500ppr)

Rated speed	
C	1000 rpm
E	1500 rpm
G	2000 rpm
J	3000 rpm
N	4500 rpm

Rated output	
03K7	3.7kW
05K5	5.5kW
07K5	7.5kW
11K0	11kW
15K0	15kW

Voltage	
B	220V
C	380V

Max speed	
B	1000 rpm
F	2500 rpm
H	3000 rpm
K	4500 rpm
P	6500 rpm

Rated Speed 1000R.P.M Series

Output(kW)	Frame	220V	380V
2.2	112	DVLF--RC02K2BB	DVLF--RC02K2CB
3.7		DVLF--RC03K7BB	DVLF--RC03K7CB
5.5		DVLF--RCO5K5BB	DVLF--RCO5K5CB
7.5		DVLF--RC07K5BB	DVLF--RC07K5CB
11	132	DVLF--RC11K0BB	DVLF--RC11K0CB
15		DVLF--RC15K0BB	DVLF--RC15K0CB
18.5		DVLF--RC18K5BB	DVLF--RC18K5CB
22		DVLF--RC22K0BB	DVLF--RC22K0CB
30		DVLF--RC30K0BB	DVLF--RC30K0CB
37	160	DVLF--RC37K0BB	DVLF--RC37K0CB
45		DVLF--RC45K0BB	DVLF--RC45K0CB
55		DVLF--RC55K0BB	DVLF--RC55K0CB

Rated Speed 1500R.P.M Series

Output(kW)	Frame	220V	380V
3.7	112	DVLF--RE03K7BF	DVLF--RE03K7CF
5.5		DVLF--RE05K5BF	DVLF--RE05K5CF
7.5		DVLF--RE07K5BF	DVLF--RE07K5CF
11		DVLF--RE11K0BF	DVLF--RE11K0CF
15	132	DVLF--RE15K0BF	DVLF--RE15K0CF
18.5		DVLF--RE18K5BF	DVLF--RE18K5CF
22		DVLF--RE22K0BF	DVLF--RE22K0CF
30		DVLF--RE30K0BF	DVLF--RE30K0CF
37		DVLF--RE37K0BF	DVLF--RE37K0CF
45	160	DVLF--RE45K0BF	DVLF--RE45K0CF
55		DVLF--RE55K0BF	DVLF--RE55K0CF
75		DVLF--RE75K0BF	DVLF--RE75K0CF

Rated Speed 2000R.P.M Series

Output(kW)	Frame	220V	380V
5.5	112	DVLF--RG05K5BH	DVLF--RG05K5CH
7.5		DVLF--RG07K5BH	DVLF--RG07K5CH
11		DVLF--RG11K0BH	DVLF--RG11K0CH
15		DVLF--RG15K0BH	DVLF--RG15K0CH
18.5	132	DVLF--RG18K5BH	DVLF--RG18K5CH
22		DVLF--RG22K0BH	DVLF--RG22K0CH
30		DVLF--RG30K0BH	DVLF--RG30K0CH
37		DVLF--RG37K0BH	DVLF--RG37K0CH
45		DVLF--RG45K0BH	DVLF--RG45K0CH
55	160	DVLF--RG55K0BH	DVLF--RG55K0CH
75		DVLF--RG75K0BH	DVLF--RG75K0CH

NOTE

The feedback component for the DVLF motor standard is RESOLVER.
If the motor is to be paired with an ENCODER (2500ppr), the product code of the motor will be changed from "R" to "3" for the 7th digit.
If the motor is not to be paired with a feedback component (SENSORLESS), the product code of the motor will be changed from "R" to "N" for the 7th digit.

Rated Speed 3000R.P.M Series

Output(kW)	Frame	220V	380V
15	132	DVLS--NJ15K0BK	DVLS--NJ15K0CK
18.5		DVLS--NJ18K5BK	DVLS--NJ18K5CK
22		DVLS--NJ22K0BK	DVLS--NJ22K0CK
30		DVLS--NJ30K0BK	DVLS--NJ30K0CK
37		DVLS--NJ37K0BK	DVLS--NJ37K0CK
45		DVLS--NJ45K0BK	DVLS--NJ45K0CK
55		DVLS--NJ55K0BK	DVLS--NJ55K0CK
75	160	DVLS--NJ75K0BK	DVLS--NJ75K0CK
90		DVLS--NJ90K0BK	DVLS--NJ90K0CK

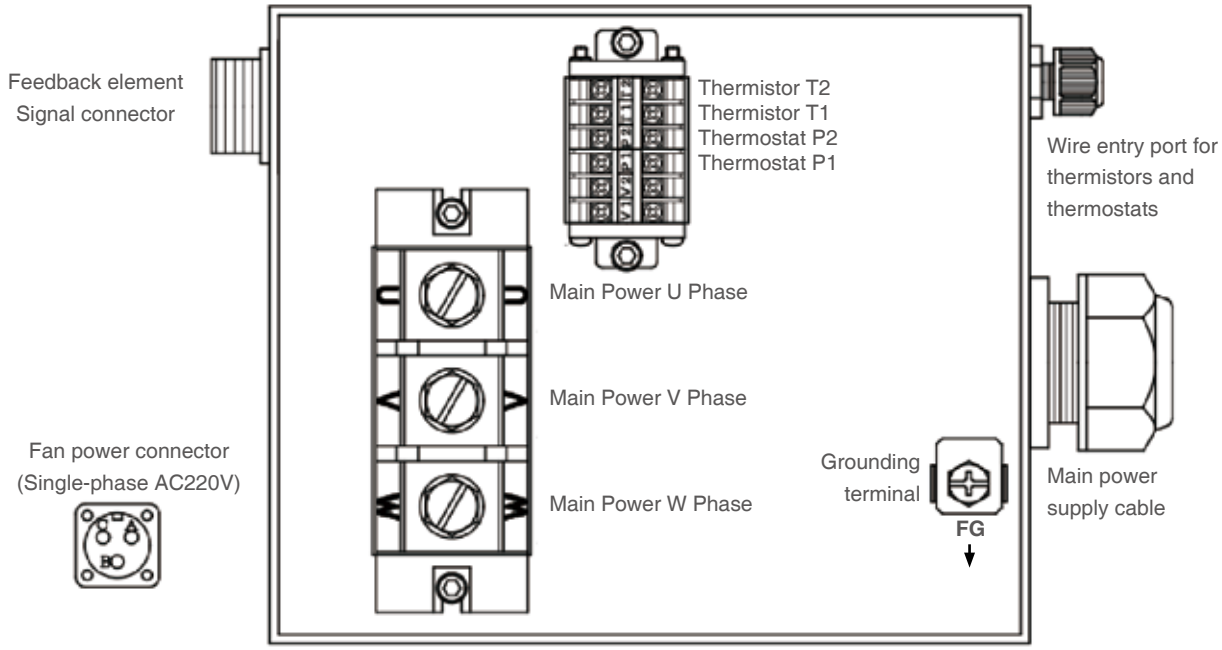
Rated Speed 4500R.P.M Series

Output(kW)	Frame	220V	380V
15	132	DVLS--NN15K0BP	DVLS--NN15K0CP
18.5		DVLS--NN18K5BP	DVLS--NN18K5CP
22		DVLS--NN22K0BP	DVLS--NN22K0CP
30		DVLS--NN30K0BP	DVLS--NN30K0CP
37		DVLS--NN37K0BP	DVLS--NN37K0CP
45		DVLS--NN45K0BP	DVLS--NN45K0CP
55		DVLS--NN55K0BP	DVLS--NN55K0CP
75	160	DVLS--NN75K0BP	DVLS--NN75K0CP

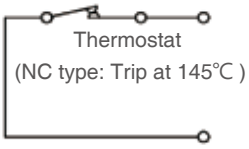
NOTE

The DVLS motor standard does not come with a feedback component (SENSORLESS).
If the motor is to be paired with a RESOLVER (1X), the product code of the motor will be changed from "N" to "R" for the 7th digit.
If the motor is to be paired with an ENCODER (2500ppr), the product code of the motor will be changed from "N" to "3" for the 7th digit.

• Terminal Box Includes, Main Power Leads Terminal Seat, Thermistor, Thermostat and Feedback Element Signal Connector.

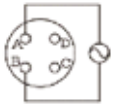


• Thermostat



• Thermistor

• Fan power connector

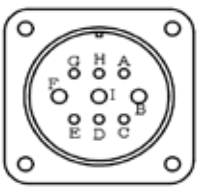


V: AC200~240V

Motor-side connector type: MS3102A 14S-2P
Client-side connector type: MS3102A 14S-2P

• When the motor is equipped with different feedback element, the feedback elements connector symbols are defined as follows.

Symbol	With Resolver	With Encoder
A	REF+ (RI)	B+
B	--	+5V
C	REF- (R2)	B-
D	COS- (S3)	A-
E	SIN- (S4)	Z-
F	--	FG
G	SIN+ (S2)	Z+
H	COS+ (SI)	A+
I	--	0V



Motor-side connector type: MS3102A 20-18P
Client-side connector type: MS3102A 20-18S

Thermistor specifications

- **Negative temperature coefficient (NTC) thermistor (EPCOS B57861S0103)**
- **R_{25}=10KΩ, $B_{20/100}$=3988K**

Temperature(℃)	R_T/R_{25}	α(%/K)	Temperature(℃)	R_T/R_{25}	α(%/K)
-20	9.707	5.8	70	0.1752	3.4
-15	7.293	5.6	75	0.1481	3.3
-10	5.533	5.5	80	0.1258	3.2
-5	4.232	5.3	85	0.1072	3.2
0	3.265	5.1	90	0.09177	3.1
5	2.539	5.0	95	0.07885	3.0
10	1.990	4.8	100	0.06800	2.9
15	1.571	4.7	105	0.05886	2.9
20	1.249	4.5	110	0.05112	2.8
25	1.000	4.4	115	0.04454	2.7
30	0.8057	4.3	120	0.03893	2.6
35	0.6531	4.1	125	0.03417	2.6
40	0.5327	4.0	130	0.03009	2.5
45	0.4369	3.9	135	0.02654	2.5
50	0.3603	3.8	140	0.02348	2.4
55	0.2986	3.7	145	0.02083	2.4
60	0.2488	3.6	150	0.01853	2.3
65	0.2083	3.5	155	0.01653	2.3

Date source https://www.tdk-electronics.tdk.com

Drive temperature protection setting recommendations:
When the temperature reaches 135 ℃ , the drive must enter the alert state.
When the temperature reaches 145 ℃ , the drive must immediately stop the motor.

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