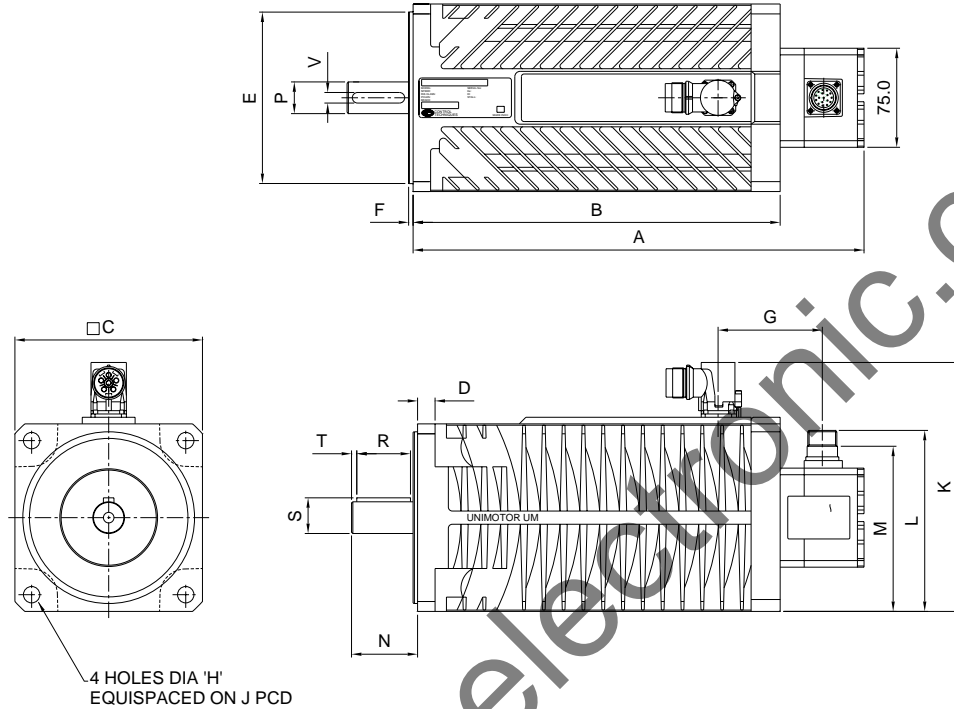


Outline Drawings - Frame Sizes 75 - 142



Dimensions - Frame Sizes 75 - 142

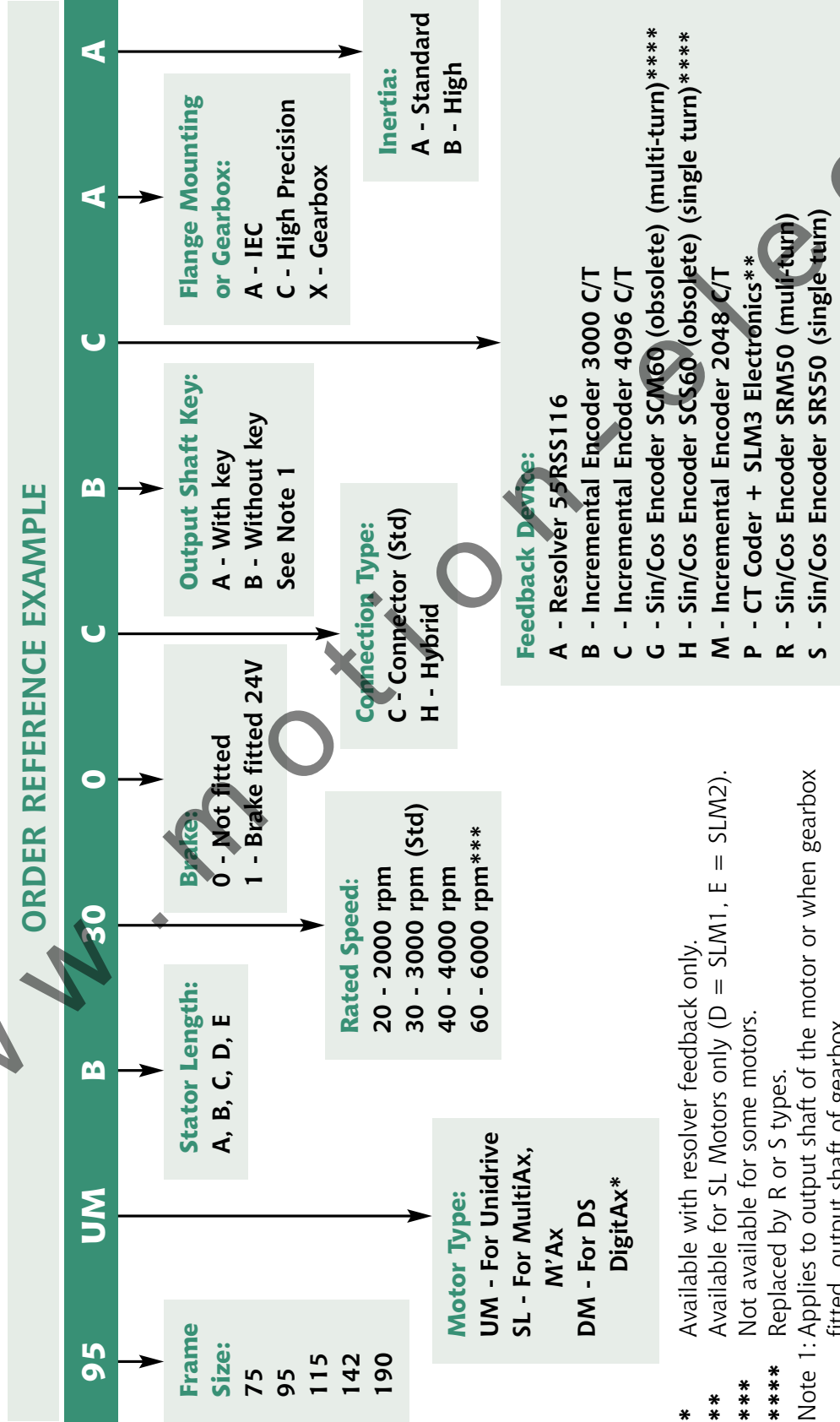
FRAME SIZE	75					95					115					142				
Dimension / Length suffix	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E
A Length Overall (Unbraked)	211	241	271	301	342	222	252	282	312	342	242	272	302	332	362	225	255	285	315	345
A Length Overall (Braked)	241	271	301	331	372	252	282	312	342	372	272	302	332	362	392	285	315	345	375	405
B Body Length (Unbraked)	146	176	206	236	277	157	187	217	247	277	177	207	237	267	297	160	190	220	250	280
B Body Length (Braked)	176	206	236	266	307	187	217	247	277	307	207	237	267	297	327	220	250	280	310	340
C Flange Square		75.0						95.0					115.0					142.0		
D Flange Thickness		7.0						9.0					11.0					12.3		
E Register Diameter		60.0 (J6)						80.0 (J6)					95.0 (J6)					130.0 (J6)		
F Register Length		2.4						2.9					2.9					3.4		
G Power to Connect C/L		61.0						62.5					66.0					80.0		
H Fixing Holes Diameter		5.8 (H14)						7.0 (H14)					10.0 (H14)					12.0 (H14)		
J Fixing Hole p.c.d.		75.0						100.0					115.0					165.0		
K Overall Height		126.0						146.0					166.0					193.0		
L Signal Connector Height (UM)		107.0						117.0					127.0					140.0		
M Signal Connector Height (SL)		88.0						98.0					108.0					121.0		
N Shaft Length (front)	23.0	30.0	30.0	30.0	40.0	30.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
P Shaft Diameter (front)	11.0	14.0	14.0	14.0	19.0	14.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0

Shaft Key Dimensions (option A)

R Key Length	14.0	22.0	22.0	22.0	22.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
S Key Height	12.4	15.9	15.9	15.9	15.9	15.9	21.4	21.4	21.4	21.4	21.4	21.4	26.9	26.9	26.9	26.9	26.9	26.9	26.9	26.9
T Key to Shaft End	3.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
V Key Width	4.0	5.0	5.0	5.0	5.0	5.0	6.0	6.0	6.0	6.0	6.0	6.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0

Ordering Information

Use the information given in the illustration below to create an order code for a Unimotor. The details in the green band are an example of an order reference.



- * Available with resolver feedback only.
 - ** Available for SL Motors only (D = SLM1, E = SLM2).
 - *** Not available for some motors.
 - **** Replaced by R or S types.
- Note 1: Applies to output shaft of the motor or when gearbox fitted, output shaft of gearbox.

Unimotor technical specifications

For 3 Phase VPWM Drives 380 - 480Vrms

v:18M, last updated: 6/3/03

Unimotors with Encoder Feedback
 $\Delta t = 100 \text{ degC}$

Stall torque; rated torque and power relate to maximum continuous operation in a 40 °C ambient

All data subject to +/-10% tolerance

All Speeds	75					95					115					142					190									
	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E					
Continuous Stall Torque (Nm)	1.2	2.2	3.1	3.9	2.3	4.3	5.9	7.5	9.0	3.5	6.6	9.4	12.4	15.3	6.3	10.8	15.3	19.8	23.4	10.8	15.3	21.8	28.3	34.8	10.8	15.3	21.8	28.3	34.8	10.8
Peak Torque nominal (Nm)	3.6	6.6	9.3	11.7	6.9	12.9	17.7	22.5	27.0	10.5	19.8	28.2	37.2	45.9	18.9	32.4	45.9	59.4	70.2	32.4	45.9	65.4	85.9	105.4	32.4	45.9	65.4	85.9	105.4	32.4
High Inertia (kgcm ²)	1.2	1.6	2.1	2.5	3.5	4.5	5.6	6.7	7.8	9.7	12.0	14.3	16.6	18.8	21.6	28.0	34.3	40.7	47.0	28.0	34.3	40.7	47.0	53.3	28.0	34.3	40.7	47.0	53.3	28.0
Standard Inertia (kgcm ²)	0.6	1.0	1.5	1.9	1.4	2.5	3.6	4.7	5.8	3.2	5.5	7.8	10.0	12.3	7.8	14.1	20.5	26.8	33.1	14.1	20.5	26.8	33.1	39.4	14.1	20.5	26.8	33.1	39.4	14.1
Weight (kg)	3.0	3.7	4.4	5.1	5.0	6.1	7.2	8.3	9.5	6.5	8.2	9.9	11.6	13.2	10.9	13.2	15.5	17.8	20.5	13.2	15.5	17.8	20.5	23.2	13.2	15.5	17.8	20.5	23.2	13.2
Winding Thermal Time Const.(sec)	81	74	94	100	172	168	183	221	228	175	185	198	217	241	213	217	275	301	365	217	275	301	365	429	217	275	301	365	429	217
Maximum Cogging (Nm)	0.02	0.03	0.04	0.05	0.08	0.06	0.08	0.10	0.13	0.06	0.10	0.14	0.18	0.21	0.09	0.16	0.23	0.30	0.35	0.16	0.23	0.30	0.35	0.42	0.16	0.23	0.30	0.35	0.42	0.16
Rated Speed 2000 (rpm)																														
Kt (Nm/A) 2.40 Ke (V/krpm) 147																														
Rated Torque (Nm)	1.1	2.1	3.0	3.8	2.2	4.0	5.5	6.9	8.2	3.2	6.1	8.7	10.8	14.0	5.9	10.3	14.6	18.4	21.3	10.3	14.6	20.0	26.4	32.8	10.3	14.6	20.0	26.4	32.8	10.3
Stall Current (A)	0.5	1.0	1.3	1.7	1.0	1.8	2.5	3.2	3.8	1.5	2.8	4.0	5.2	6.4	2.7	4.5	6.4	8.3	9.8	4.5	6.4	9.1	11.8	14.5	4.5	6.4	9.1	11.8	14.5	4.5
Rated Power(kW)	0.23	0.44	0.63	0.80	0.46	0.84	1.15	1.45	1.72	0.67	1.28	1.82	2.26	2.93	1.24	2.16	3.06	3.85	4.46	2.16	3.06	4.19	5.32	6.45	2.16	3.06	4.19	5.32	6.45	2.16
R (ph-ph) (Ohms)	144	48.2	25.0	15.7	59.0	17.0	9.90	6.00	4.30	27.8	8.55	4.55	2.96	2.17	12.5	3.60	2.10	1.35	0.98	3.60	2.10	1.80	1.30	0.90	3.60	2.10	1.80	1.30	0.90	3.60
L (ph-ph) (mH)	214	99.2	59.2	44.7	131	54.5	36.5	25.6	18.9	94.6	40.5	25.7	18.6	14.7	58.0	29.8	18.7	13.6	10.7	29.8	18.7	13.0	9.0	6.30	29.8	18.7	13.0	9.0	6.30	29.8
Rated Speed 3000 (rpm)																														
Kt (Nm/A) 1.6 Ke (V/krpm) 98.0																														
Rated Torque (Nm)	1.1	2.0	2.8	3.5	2.0	3.9	5.4	6.8	8.1	3.0	5.5	8.1	10.4	12.6	5.4	9.0	12.2	15.8	18.0	9.0	12.2	19.2	25.6	32.0	9.0	12.2	19.2	25.6	32.0	9.0
Stall Current (A)	0.8	1.4	2.0	2.5	1.5	2.7	3.7	4.7	5.7	2.2	4.2	5.9	7.8	9.6	4.0	6.8	9.6	12.4	14.7	6.8	9.6	13.7	18.3	22.9	6.8	9.6	13.7	18.3	22.9	6.8
Rated Power(kW)	0.35	0.63	0.88	1.10	0.63	1.23	1.70	2.14	2.54	0.94	1.73	2.54	3.27	3.96	1.70	2.83	3.83	4.96	5.65	2.83	3.83	5.03	6.44	7.85	2.83	3.83	5.03	6.44	7.85	2.83
R (ph-ph) (Ohms)	60.8	20.1	10.5	7.5	24.5	6.80	4.00	2.50	2.00	12.6	3.86	2.02	1.40	1.10	5.63	1.72	0.94	0.61	0.44	1.72	0.94	0.79	0.50	0.30	1.72	0.94	0.79	0.50	0.30	1.72
L (ph-ph) (mH)	98.4	41.8	27.6	19.7	57.9	24.3	15.5	10.9	8.50	43.1	18.6	11.4	8.60	7.40	31.0	13.3	8.30	6.10	4.80	13.3	8.30	6.11	4.30	3.00	13.3	8.30	6.11	4.30	3.00	13.3
Rated Speed 4000 (rpm)																														
Kt (Nm/A) 1.20 Ke (V/krpm) 73.5																														
Rated Torque (Nm)	1.0	1.7	2.3	2.9	1.8	3.0	4.0	4.9	5.7	2.5	4.7	6.5	8.7	10.4	3.6	7.0	8.9	10.7	12.2	7.0	8.9	13.2	17.6	22.0	7.0	8.9	13.2	17.6	22.0	7.0
Stall Current (A)	1.0	1.9	2.6	3.3	2.0	3.6	5.0	6.3	7.5	3.0	5.5	7.9	10.4	12.8	5.3	9.0	12.8	16.5	19.5	9.0	12.8	18.3	23.8	29.3	9.0	12.8	18.3	23.8	29.3	9.0
Rated Power(kW)	0.42	0.71	0.96	1.21	0.75	1.26	1.68	2.05	2.39	1.05	1.97	2.64	3.44	3.64	1.51	2.93	3.73	4.48	5.11	2.93	3.73	5.03	6.44	7.85	2.93	3.73	5.03	6.44	7.85	2.93
R (ph-ph) (Ohms)	36.8	10.5	6.30	4.20	12.7	4.08	2.10	1.50	1.03	6.91	2.14	1.16	0.73	0.57	3.12	1.00	0.53	0.35	0.24	1.00	0.53	0.30	0.20	0.10	1.00	0.53	0.30	0.20	0.10	1.00
L (ph-ph) (mH)	54.9	24.8	14.9	10.8	31.5	13.6	8.50	6.30	4.80	23.5	10.2	6.60	4.70	3.90	17.6	7.50	4.70	3.60	2.70	7.50	4.70	3.60	2.70	2.00	7.50	4.70	3.60	2.70	2.00	7.50
Rated Speed 6000 (rpm)																														
Kt (Nm/A) 0.80 Ke (V/krpm) 49.0																														
Rated Torque (Nm)	0.9	1.6	2.1	2.6	1.3	2.1	2.8	3.3	3.7	2.2	4.0	5.1	6.1	7.1	2.9	4.5	5.5	6.5	7.5	4.5	5.5	7.5	9.5	11.5	4.5	5.5	7.5	9.5	11.5	4.5
Stall Current (A)	1.5	2.8	3.9	4.9	2.9	5.4	7.4	9.4	11.3	4.4	8.3	11.8	14.8	17.8	7.9	13.5	18.3	23.0	27.7	13.5	18.3	24.0	30.7	37.4	13.5	18.3	24.0	30.7	37.4	13.5
Rated Power(kW)	0.57	1.01	1.32	1.63	0.82	1.32	1.76	2.07	2.32	1.38	2.51	3.20	3.90	4.59	1.82	2.83	3.73	4.48	5.11	2.83	3.73	5.03	6.44	7.85	2.83	3.73	5.03	6.44	7.85	2.83
R (ph-ph) (Ohms)	15.0	5.00	2.66	1.90	5.45	1.82	1.05	0.62	0.48	3.10	0.97	0.50	0.30	0.20	1.42	0.46	0.20	0.10	0.05	1.42	0.20	0.10	0.05	0.05	1.42	0.20	0.10	0.05	0.05	1.42
L (ph-ph) (mH)	24.0	10.6	6.80	4.80	14.1	6.00	3.80	2.70	2.10	15.5	4.81	2.94	2.00	1.50	7.72	3.44	2.00	1.50	1.00	7.72	2.00	1.50	1.00	0.70	7.72	2.00	1.50	1.00	0.70	7.72

▲ Consult factory
 N/A Not available
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