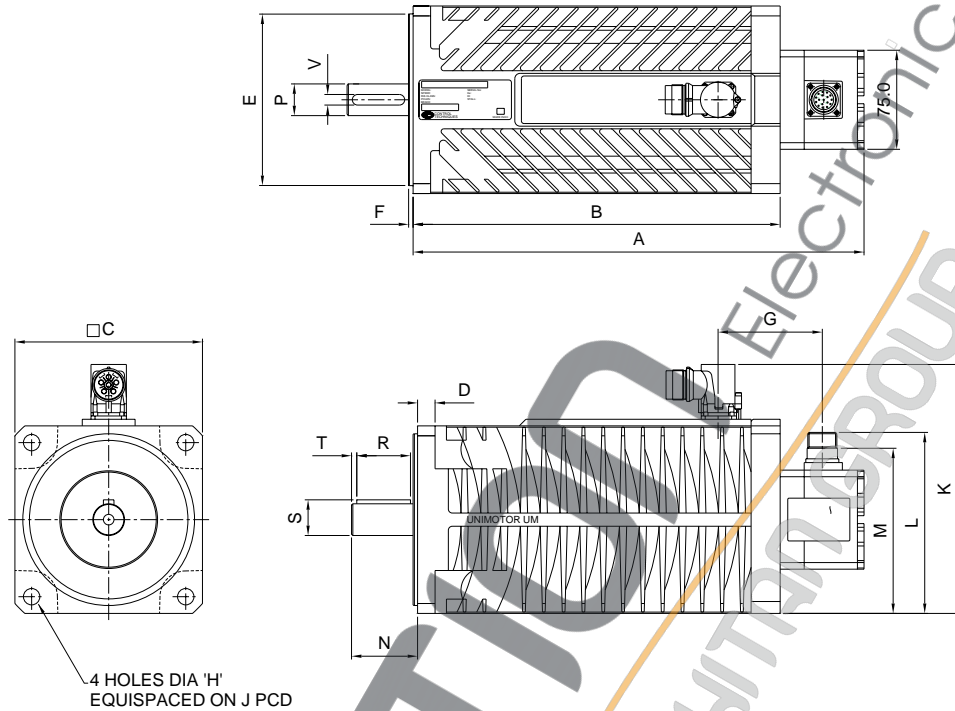


Outline Drawings - Frame Sizes 75 - 142



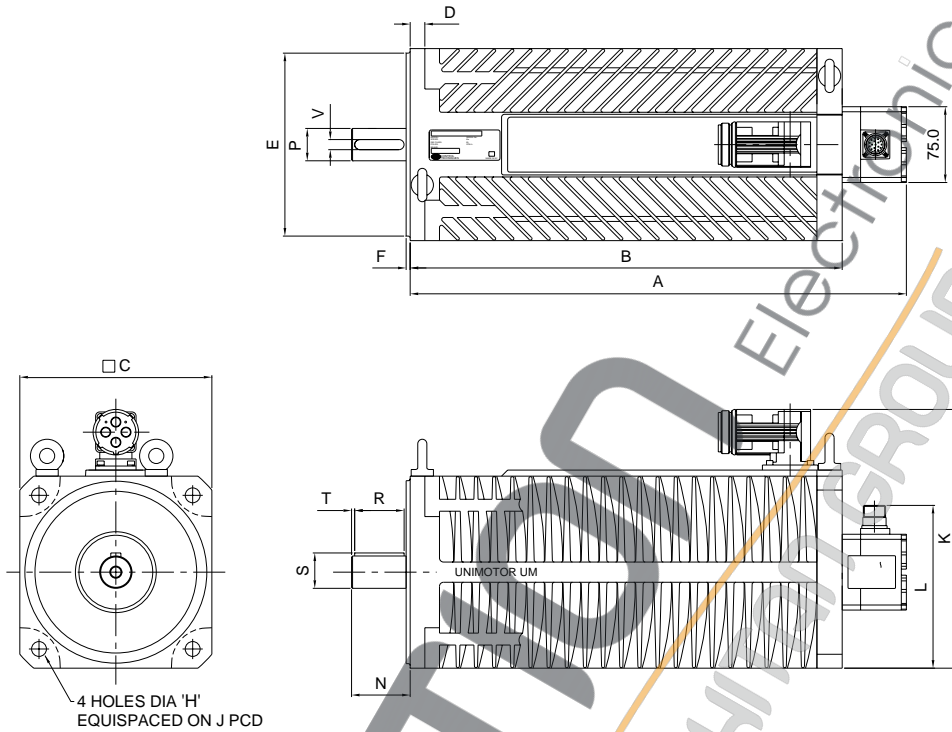
Dimensions - Frame Sizes 75 - 142

FRAME SIZE	75				95					115					142				
Dimension / Length suffix	A	B	C	D	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E
A Length Overall (Unbraked)	211	241	271	301	222	252	282	312	342	242	272	302	332	362	225	255	285	315	345
A Length Overall (Braked)	241	271	301	331	252	282	312	342	372	272	302	332	362	392	285	315	345	375	405
B Body Length (Unbraked)	146	176	206	236	157	187	217	247	277	177	207	237	267	297	160	190	220	250	280
B Body Length (Braked)	176	206	236	266	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	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	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
S Key Height	12.4	15.9	15.9	15.9	15.9	21.4	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
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
V Key Width	4.0	5.0	5.0	5.0	5.0	6.0	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

Outline Drawings - Frame Size 190



Dimensions - Frame Size 190

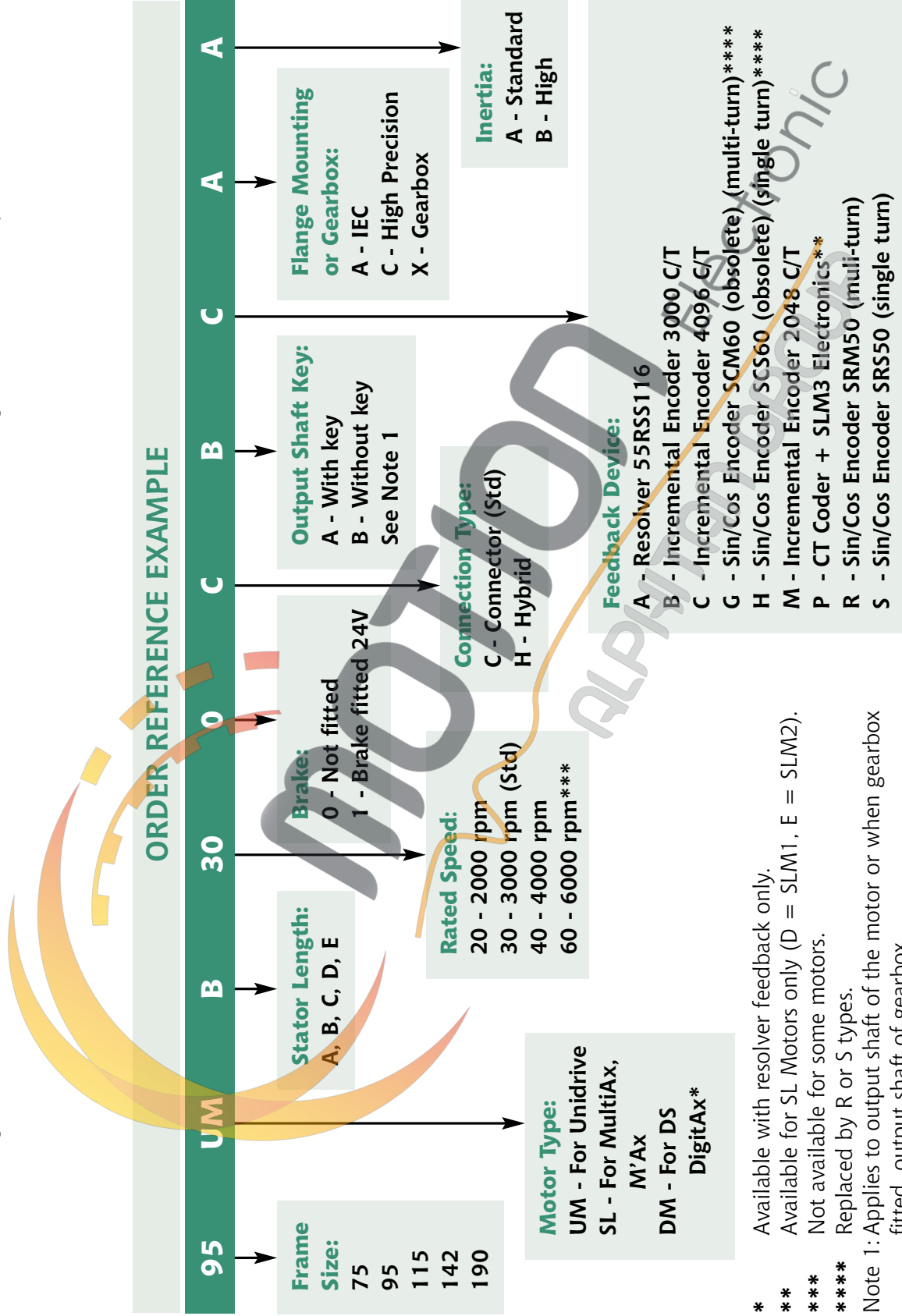
FRAME SIZE		190			
Dimension / Length suffix		A	B	C	D
A	Length Overall (Unbraked)	273	327	381	435
A	Length Overall (Braked)	327	381	435	489
B	Body Length (Unbraked)	210	264	318	372
B	Body Length (Braked)	264	318	372	425
C	Flange Square		190.0		
D	Flange Thickness		14.5		
E	Register Diameter		180.0 (J6)		
F	Register Length		4.0		
H	Fixing Holes Diameter		14.5 (H14)		
J	Fixing Hole p.c.d.		215.0		
K	Overall Height		260.0		
L	Signal Connector Height		161.1		
N	Shaft Length (front)		58.0		
P	Shaft Diameter (front)		32.0		

Shaft Output Key Dimensions (option A)

R	Shaft Key Length	49.0
S	Shaft Key Height	35.0
T	Shaft Key to Shaft End	3.1
V	Shaft Key Width	10.0

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	103.4	32.4	45.9	65.4	85.9	103.4	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	47.0	57.0	68.0	28.0	34.3	47.0	57.0	68.0	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	40.4	14.1	20.5	26.8	33.1	40.4	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	24.2	13.2	15.5	17.8	20.5	24.2	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	442	217	275	301	365	442	217
Maximum Cogging (Nm)	0.02	0.03	0.04	0.05	0.03	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	0.44	0.16	0.23	0.30	0.35	0.44	0.16
Rated Speed 2000 (rpm)																														
	Ke (V/(krpm)) 2.40																													
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	25.4	30.8	10.3	14.6	20.0	25.4	30.8	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	5.46	6.73	2.16	3.06	4.19	5.46	6.73	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	0.98	3.60	2.10	1.80	1.30	0.98	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	9.90	7.73	29.8	18.7	13.0	9.90	7.73	29.8
Rated Speed 3000 (rpm)																														
	Ke (V/(krpm)) 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	31.0	9.0	12.2	19.2	25.6	31.0	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	17.9	22.1	6.8	9.6	13.7	17.9	22.1	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	5.10	6.60	8.10	2.83	3.83	5.10	6.60	8.10	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	0.58	0.44	1.72	0.94	0.79	0.58	0.44	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	4.50	3.60	13.3	8.30	6.11	4.50	3.60	13.3
Rated Speed 4000 (rpm)																														
	Ke (V/(krpm)) 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	6.3	7.5	8.7	3.6	7.0	8.9	10.7	12.2	7.0	8.9	12.2	15.8	19.5	7.0	8.9	12.2	15.8	19.5	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	19.2	25.6	31.0	9.0	12.8	19.2	25.6	31.0	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	3.14	3.64	1.51	2.93	3.73	4.48	5.11	2.93	3.73	4.96	6.46	7.96	2.93	3.73	4.96	6.46	7.96	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	3.12	1.00	0.53	0.35	0.24	3.12	1.00	0.53	0.35	0.24	3.12
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	2.10	7.50	4.70	3.60	2.70	2.10	7.50
Rated Speed 6000 (rpm)																														
	Ke (V/(krpm)) 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	5.1	N/A	2.9	4.5	5.1	5.1	N/A	4.5	5.1	6.6	8.1	9.6	4.5	5.1	6.6	8.1	9.6	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	11.8	N/A	7.9	13.5	13.5	13.5	N/A	13.5	13.5	18.0	22.5	27.0	13.5	18.0	22.5	27.0	31.5	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	3.20	N/A	1.82	2.83	2.83	2.83	N/A	2.83	2.83	3.73	4.64	5.55	2.83	3.73	4.64	5.55	6.46	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	0.50	N/A	1.42	0.46	0.46	0.46	N/A	0.46	0.46	0.61	0.76	0.91	0.46	0.61	0.76	0.91	1.06	0.46
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	2.94	N/A	7.72	3.44	3.44	3.44	N/A	3.44	3.44	4.50	5.55	6.60	3.44	4.50	5.55	6.60	7.65	3.44

The information contained in this specification is for guidance only and does not form part of any contract.
 CT Dynamics Limited have an ongoing process of development and reserve the right to change the specification without notice.

N/A Not available

▲ Consult factory