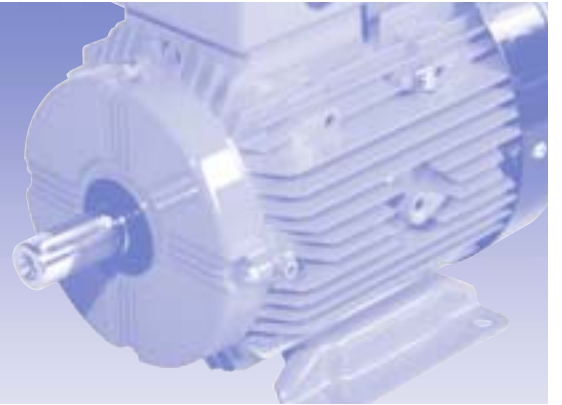


# High efficiency aluminium motors



Frames 63 to 132 M

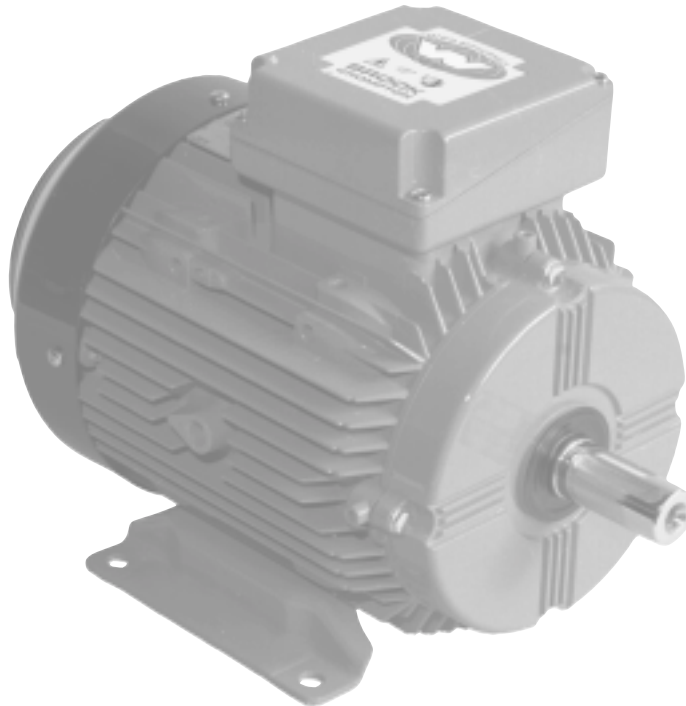


Sold and Serviced by  
**Crompton  
Greaves**  
LT MOTORS DIVISION

Manufactured By  
**Brook Crompton Greaves Ltd.**  
B-108/109, MIDC,  
AHMEDNAGAR 414 111,  
INDIA



## High efficiency aluminium motors 63 to 132 M



### **Brook crompton Greaves Ltd. (BCGL)**

BCGL is a leading manufacturer of electric motors for the global industrial market, with motor solutions which benefit a wide range of customers.

Our products are used in almost every industrial activity including water treatment, building services, chemical/petrochemicals, general processing and manufacturing where they drive fans, pumps, compressors and conveyors, amongst other things.

BCGL use technology of Brook Crompton of UK and Crompton Greaves Ltd. of India

### **Quality assurance**

Stringent quality procedures are observed from first design to finished product in accordance with the ISO9001 documented quality systems.

BCGL have been assessed to meet these requirements, a further assurance that only the highest possible standards of quality are accepted.

### **High efficiency range**

The BCGL aluminium motor range covers products with outputs from 0.07k W to 11 kW in frame sizes W-DA63 to W-DA132M. They are widely used in a diverse range of applications from food and drink to water and sewage. From heating and ventilation to refrigeration. Some of the benefits of aluminium over cast iron, include, high resistance to corrosion and atmospheric attack (except chlorine, salt-laden or sulphuric acid) and the fact that aluminium is approximately one third the weight of cast iron.

### **Multi-Mount**

By simply changing the position of the feet, the user is able to obtain right, left or top mounted terminal box positions and by removing the standard endshield you can change it for a flange or face version.

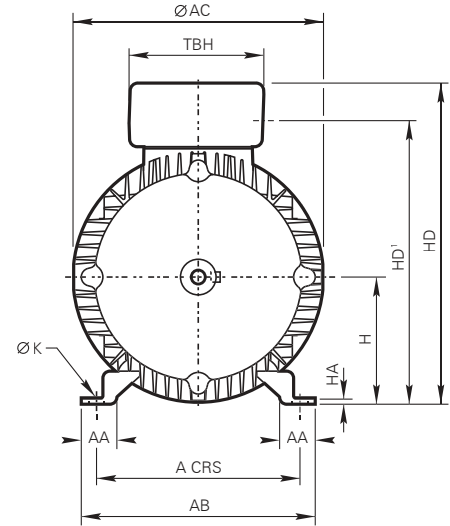
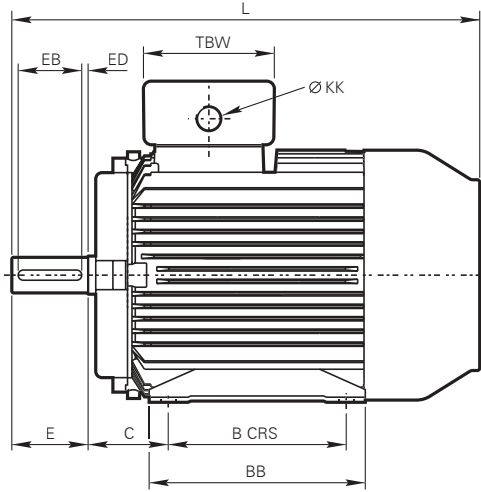
### **Benefits include :**

- high efficiency for low running costs
- low noise levels
- Voltage - 415 +/- 10 %
- Frequency - 50 +/- 5%
- high power factors
- high torque with smooth acceleration and low current
- 2-year warranty
- IP55 protection

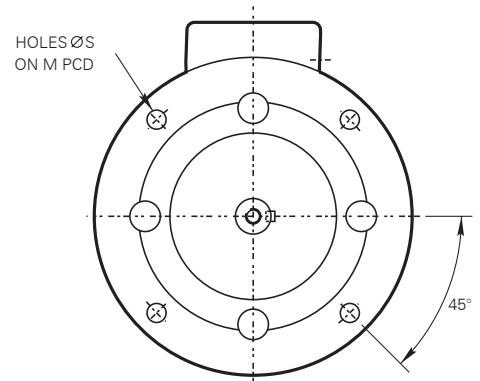
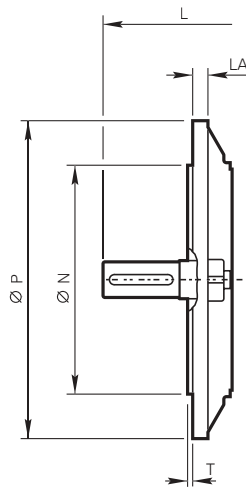
# Dimensions

## Foot flange and face mounting - frame sizes 63 to 132

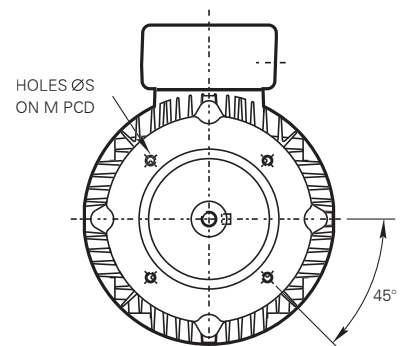
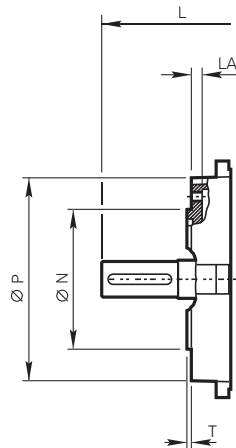
IM B3  
IM 1001  
Mounting options



IM B5/IM B35  
IM 3001/IM 2001  
Mounting options



IM B14/IM B34  
IM 3601/IM 2101  
Mounting options

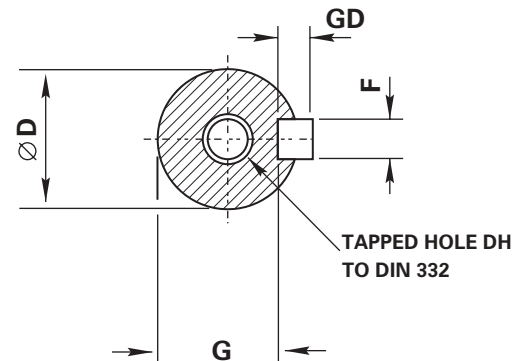


Foot, flange and face mouting - frame sizes 63 to 132

Type	General													Terminal box		
	A	B	C	H	K	L	AA	AB	AC	BB	HA	HD	HD'	TBW	TBH	KK
W-DA63S	100	80	40	63	7	207	19	119	126	100	2	163	138	86	86	20
W-DA71S	112	90	45	71	7	238	19	131	140	110	2	186	162	86	86	20
W-DA80M	125	100	50	80	10	278	27	157	160	127	4	212	183	86	86	20
W-DA90S	140	100	56	90	10	322	28	164	178	150	4	225	201	86	86	20
W-DA90L	140	125	56	90	10	322	28	164	178	150	4	225	201	86	86	20
W-DA100L	160	140	63	100	12	368	28	184	199	170	4	254	223	106	106	20
W-DA112M	190	140	70	112	12	382	35	218	215	170	4	279	245	127	127	25
W-DA132S	216	140	89	132	12	451	38	242	255	208	5	320	287	127	127	25
W-DA132M	216	178	89	132	12	451	38	242	255	208	5	320	287	127	127	25

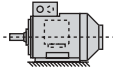
Type	IM B5 mounting						IM B14 mounting					
	M	N	P	S	T	LA	M	N	P	S	T	LA
W-DA63S	115	95	140	10	3	7	75	60	90	M5	2.5	7
W-DA71S	130	110	160	10	3.5	7	85	70	105	M6	2.5	9
W-DA80M	165	130	200	12	3.5	12	100	80	120	M6	3	9
W-DA90S	165	130	200	12	3.5	10	115	95	140	M8	3	9
W-DA90L	165	130	200	12	3.5	10	115	95	140	M8	3	9
W-DA100L	215	180	250	14.5	4	12	130	110	160	M8	3.5	12.5
W-DA112M	215	180	250	14.5	4	12	130	110	164	M8	3.5	13
W-DA132S	265	230	300	14.5	4	12	165	130	200	M10	3.5	14
W-DA132M	265	230	300	14.5	4	12	165	130	200	M10	3.5	14

Type	Shaft							
	D	E	F	G	GD	EB	ED	DH
W-DA63S	11	23	4	8.5	4	10	13	M4 x 10
W-DA71S	14	30	5	11	5	20	5	M5 x 12.5
W-DA80M	19	40	6	15.5	6	32	4	M6 x 16
W-DA90S	24	50	8	20	7	40	5	M8 x 19
W-DA90L	24	50	8	20	7	40	5	M8 x 19
W-DA100L	28	60	8	23.9	7	50	5	M10 x 22
W-DA112M	28	60	8	23.9	7	50	5	M10 x 22
W-DA132S	38	80	10	33	8	70	5	M12 x 28
W-DA132M	38	80	10	33	8	70	5	M12 x 28

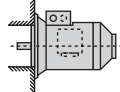


## Mounting options

### Horizontal shaft:



**IM B3**  
**IM 1001**  
foot mounted



**IM B5**  
**IM 3001**  
flange at DE  
no feet



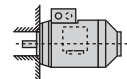
**IM B6**  
**IM 1051**  
foot wall mounted with  
feet on left-hand side  
when viewed from DE



**IM B7**  
**IM 1061**  
foot wall mounted with  
feet on right-hand side  
when viewed from DE

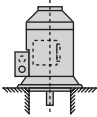


**IM B8**  
**IM 1071**  
ceiling mounted  
with feet  
above motor

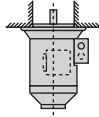


**IM B14**  
**IM 3601**  
face at DE  
no feet

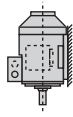
### Vertical shaft:



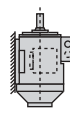
**IM V1**  
**IM 3011**  
flange at DE  
shaft down  
no feet



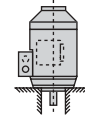
**IM V3**  
**IM 3031**  
flange at DE  
shaft up  
no feet



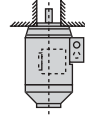
**IM V5**  
**IM 1011**  
vertical foot  
wall mounted  
shaft down



**IM V6**  
**IM 1031**  
vertical foot  
wall mounted  
shaft up



**IM V18**  
**IM 3611**  
face at DE  
shaft down  
no feet



**IM V19**  
**IM 3631**  
face at DE  
shaft up  
no feet

## Approximate shipping specifications

Type	Net weight (kg)	Gross weight (kg)	Cubage (m <sup>3</sup> )
W-DA63	5	5.4	0.01
W-DA71	6.5	6.9	0.01
W-DA80M	9	10	0.02
W-DA90S	12.5	13.5	0.03
W-DA90L	14.5	15.5	0.03
W-DA100L	24.3	27	0.038
W-DA112M	29.4	33	0.05
W-DA132S	45	50	0.071
W-DA132M	50	56	0.076

# Technical information: Mechanical

## Bearings and greasing arrangements

Bearings are pre-packed with a lithium complex based grease or Polyurea.

Grease details		
Type	Lithium complex	Polyurea
80-132	Esso Unirex N3 with temperature range of -30°C to +140°C	EA6 with a temperature range of -40°C to +160°C

Bearing references and oil seals						
Type	Mounting	Number of poles	Bearings		Oil seals – bore x O/D x width in mm	
			Drive end	Non-drive end	Drive end	Non-drive end
W-DA63	All	All	62022Z	62022Z	15 x 24 x 5	15 x 24 x 5
W-DA71	All	All	60032Z	60032Z	17 x 28 x 6	17 x 28 x 6
W-DA80	All	All	62042Z	60032Z	20 x 30 x 7	15 x 24 x 5
W-DA90	All	All	62052Z	62032Z	25 x 35 x 7	17 x 28 x 6
W-DA100	All	All	62062Z	62052Z	30 x 42 x 7	25 x 37 x 7
W-DA112	All	All	62062Z	62052Z	30 x 42 x 7	25 x 37 x 7
W-DA132	All	All	62082Z	63052Z	40 x 52 x 7	25 x 37 x 7

Grease life a 80°C bearing temperature x 10 <sup>5</sup> hours								
Type	3000 min <sup>-1</sup>		1500 min <sup>-1</sup>		1000 min <sup>-1</sup>		750 min <sup>-1</sup>	
	Horizontal	Vertical	Horizontal	Vertical	Horizontal	Vertical	Horizontal	Vertical
W-DA63	30	30	30	30	30	30	30	30
W-DA71	30	30	30	30	30	30	30	30
W-DA80	30	30	30	30	30	30	30	30
W-DA90	30	30	30	30	30	30	30	30
W-DA100	30	30	30	30	30	30	30	30
W-DA112	30	30	30	30	30	30	30	30
W-DA132	30	25	30	30	30	30	30	30

# Technical information: Mechanical

## Axial and radial loads

Maximum permissible external axial and radial loads in Newtons*								
Type	Poles	Horizontal shaft		Vertical shaft				Maximum permissible radial load at end of shaft (horizontal mounting)
		Load towards motor	Load away from motor	Shaft up		Shaft down		
				Load towards motor	Load away from motor	Load towards motor	Load away from motor	
W-DA63	2	324	480	316	491	335	472	434
	4	253	409	245	420	264	401	372
	6	280	436	272	448	292	428	396
W-DA71	2	236	392	227	405	249	383	340
	4	207	363	196	380	224	352	314
	6	189	345	174	362	206	330	292
W-DA80	2	339	539	321	565	362	521	774
	4	303	503	283	530	330	583	729
	6	284	484	260	516	316	460	646
	8	296	496	272	528	328	472	662
W-DA90	2	444	684	421	716	476	661	915
	4	398	638	366	682	442	606	854
	6	349	589	309	641	401	549	720
	8	369	609	334	656	416	574	747
W-DA100	2	781	1101	743	1159	839	1063	1295
	4	710	1030	655	1107	787	975	1215
	6	560	880	506	963	643	826	1145
	8	580	900	521	985	665	841	1018
W-DA112	2	768	1088	715	1170	850	1035	1295
	4	690	1010	612	1131	811	932	1202
	6	541	861	463	979	659	783	1141
	8	565	885	487	1003	683	807	1009
W-DA132	2	1355	1707	1266	1838	1486	1618	2114
	4	1253	1605	1130	1779	1427	1482	2068
	6	1167	1519	1035	1711	1359	1387	1968
	8	997	1349	858	1556	1204	1210	1600

\* All figures are based on lna bearing life of 20,000 hours. Lna = adjusted L10 life rating taking account of  
 \* Reliability \* material improvements \* lubrication conditions

# Rotating Electrical Machines

Every care has been taken to ensure the accuracy of the information contained in this publication, but, due to a policy of continuous development and improvement the right is reserved to supply products which may differ slightly from those illustrated and described in this publication



**CROMPTON**   
**GREAVES**

Brook Crompton Greaves Ltd.  
B-108/109, MIDC  
Ahmednagar 414 111.  
India