



**BS British Standard 1 | General Purpose | High Efficiency | Aluminium**  
**4 pole 50Hz | 2.2(kW) | W-DA100LJ**

Performance Data	
Performance Data	Value
Output (kW)	2.2
Pole	4
Full load speed (RPM)	1415
Full Load Torque (Nm)	14.8
Full load current @ 380V (A)	5.2
Full load current @ 400V (A)	4.9
Full load current @ 415V (A)	4.3
Efficiency Full load (%)	86.4
Efficiency 3/4 load (%)	86.4
Efficiency 1/2 load (%)	84.4
Power Factor Full load	0.61
Power factor 3/4 load	0.78
Power Factor 1/2 load	0.83
Direct on line starting torque ratio	2
Direct on line starting current ratio	5.5
Direct on line Pull out torque ratio	2.1
Direct on line Pull up torque ratio	1.8
Rotor inertia (kgm <sup>2</sup> )	0.008
Mean sound pressure @1m on no load (dB(A))	54

Standard Features	
Feature	Standard Product
Frequency (Hz)	50Hz / 60Hz
Enclosure	IP55 protection
Cooling Method	IC411 TEFV (Totally Enclosed Fan Ventilated)
T-box position	Top
Lubrication	Regreasing facilities available on request
Balance	Grade N
Bearings	Ball/ball C3 clearance
Drain Holes	160 & 180 frame only
Temperature Rise	Class B (80°C)
Insulation Class	Class F (155°C)
Duty Cycle	S1 continuous rated
Earth Facility	Internal and external
Thermal Protection	Available on request

Shaft Loads	
Mounting	Shaft Load (Nm)
Horizontal shaft load towards motor	710
Horizontal shaft load away motor	1030
Vertical shaft up, load towards motor	655
Vertical shaft up, load away motor	1107
Vertical shaft down, load towards motor	787
Vertical shaft down, load away motor	975
Maximum radial load at end of shaft	1215
Bearing life (hours)	20000

Bearings and Oil Seals	
Feature	Standard Product
Drive end bearing	62062Z
Non-drive end bearing	62052Z
Drive end oil seal	30 x 42 x 7
Non drive end oil seal	25 x 37 x 7
Grease life (horizontal mounting)	30,000
Grease life (vertical mounting)	30,000

Variations to the standard specification can be supplied on request

All data is subject to confirmation by BROOK MTL

E&OE

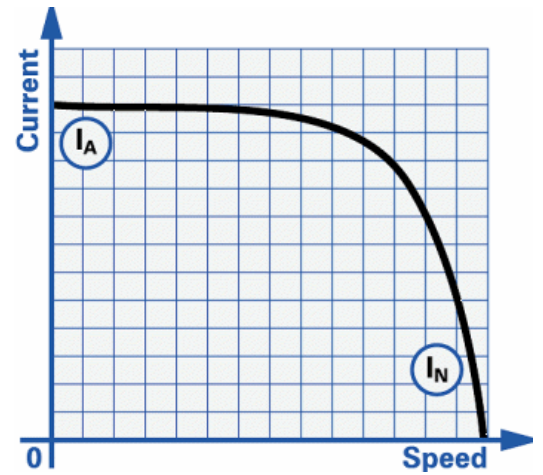
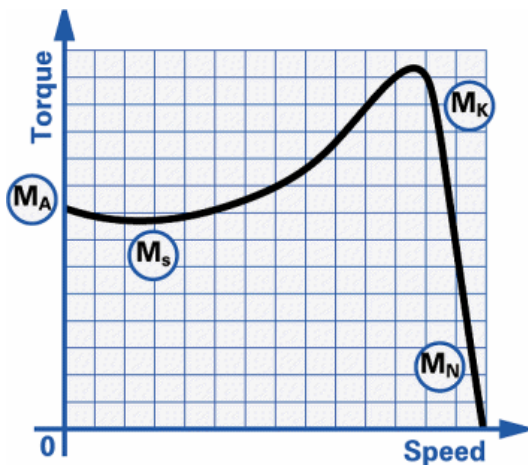
**BROOK-MTL**, 63 Allens Road, East Tamaki, Auckland 2161, New Zealand  
 Tel +64 9 271 6063 - Fax +64 9 271 6020 www.brookmtl.co.nz - [info@brookmtl.co.nz](mailto:info@brookmtl.co.nz)

Associate company: [Rotating Machinery Supplies](http://RotatingMachinerySupplies.com), 6 Devon Road, Hamilton 3242 [rotatingmachinery@clear.net.nz](mailto:rotatingmachinery@clear.net.nz)  
[Soco Electric Motors](http://SocoElectricMotors.com), 473 Tremaine Ave, Palmerston North 4412 [sales@soco.co.nz](mailto:sales@soco.co.nz)

# BROOK CROMPTON

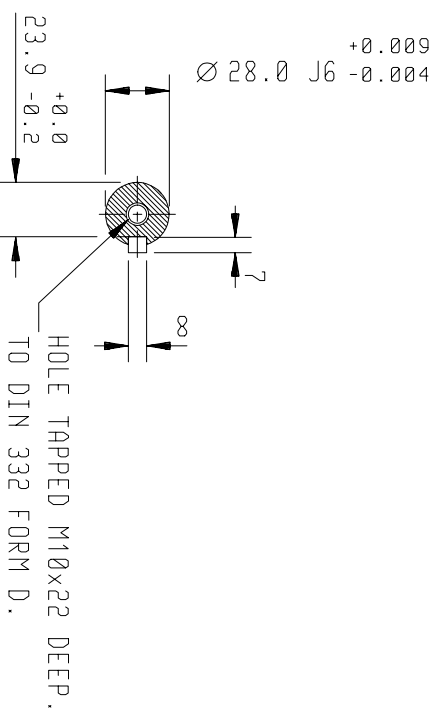
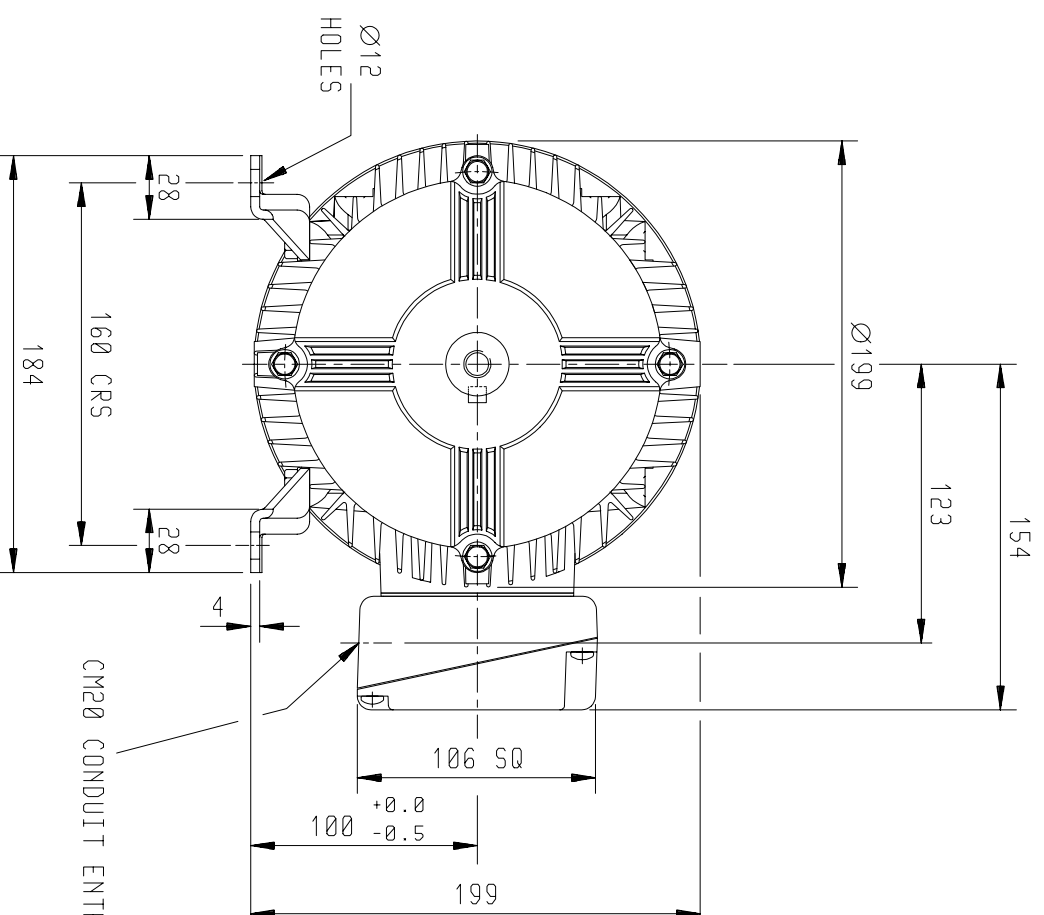
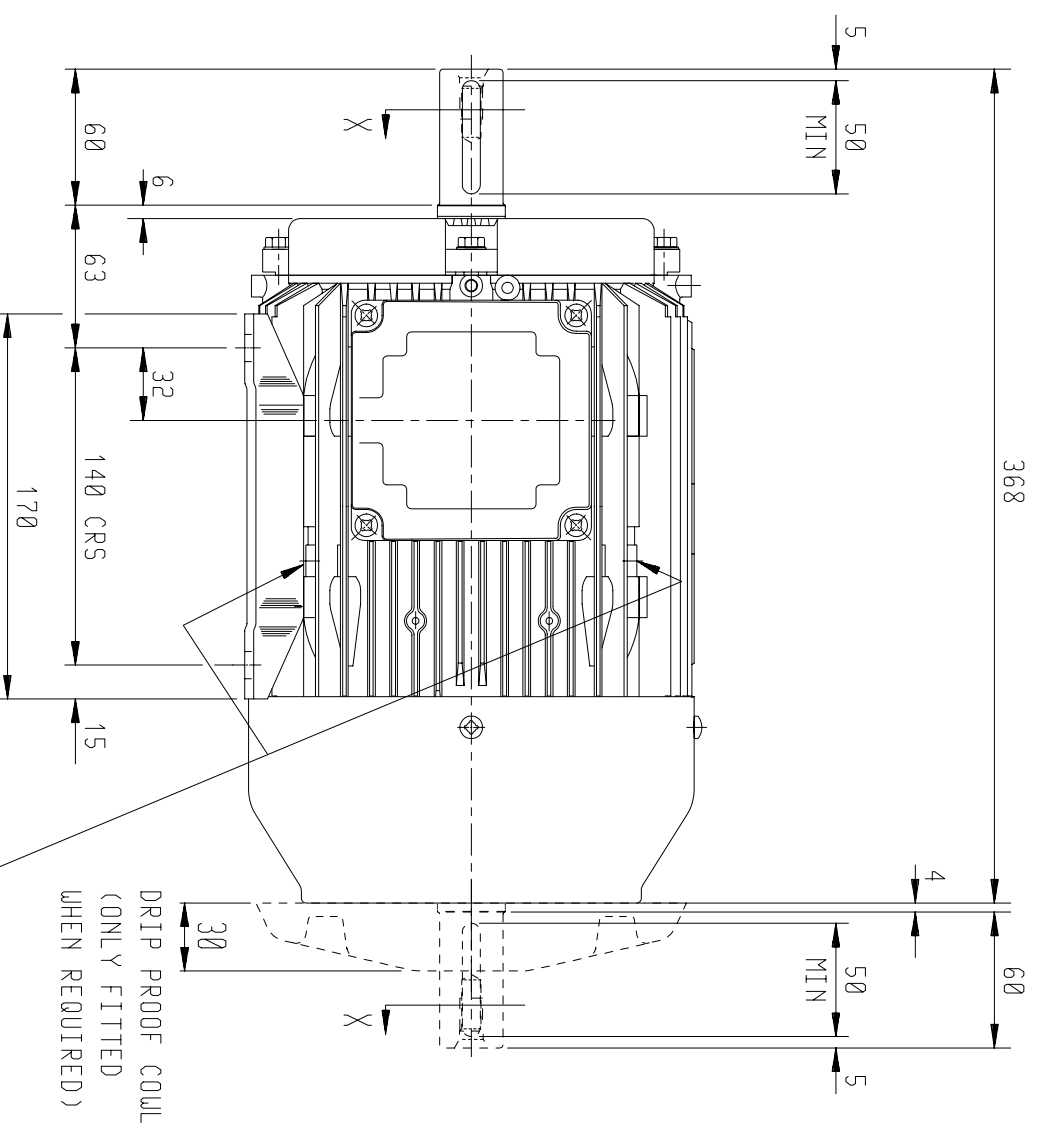
4 pole 50Hz | 2.2(kW) | W-DA100LJ

DOL Performance Curves



Typical DOL speed / torque curve		Typical DOL speed / current curve	
<b>GRAPH LEGEND</b>		<b>GRAPH LEGEND</b>	
$M_A$ --Starting/Locked Rotor Torque (Nm)	29.60	$I_A$ --Starting Current (Amps)	26.95
$M_S$ --Pull up/Run up Torque (Nm)	26.64	$I_N$ --Full Load Current (Amps)	4.90
$M_K$ --Pull out/Breakdown Torque (Nm)	31.08		
$M_N$ --Full Load Torque (Nm)	14.80		

DRG. No. W10GF000/3  
 DRG. REF.



VIEW ON 'X'

TERMINAL BOX POSITION:- CAN BE ARRANGED AT EITHER 9,12 OR 3 O'CLOCK BY MOVING FEET.

STANDARD TERMINAL BOX POSITION IS 3 O'CLOCK AS SHOWN.

CONDUIT ENTRIES:- TERMINAL BOX CAN BE ROTATED AT 90° INTERVALS  
 (CONDUIT ENTRY POSITION SHOWN FOR ILLUSTRATION ONLY).

OUTLINE DIMENSION DRAWING W ALUMINIUM TOTALLY ENCLOSED FAN COOLED

100L FRAME FOOT MOUNTED MOTOR

CUSTOMER	
ORDER No.	
PART No.	
FRAME SIZE	
Kw.	RPM.
HZ	PHASE
VOLTS	POLES
BRGS.	DE.
MOTOR NETT WT.	NDE.
SPECIAL REMARKS	Kg.

ALL DIMENSIONS IN MILLIMETRES.



# BROOK PROMPTON

Small Industrial Motors

Huddersfield, W. Yorkshire, HD1 3LJ

DRG. No. W10GF000/3

DRG. REF.

REVISION: RR DATE 09/06/03

SHEET TITLE

SIZE

A3

DRAWN

NAME

DATE

CHECKED

MI

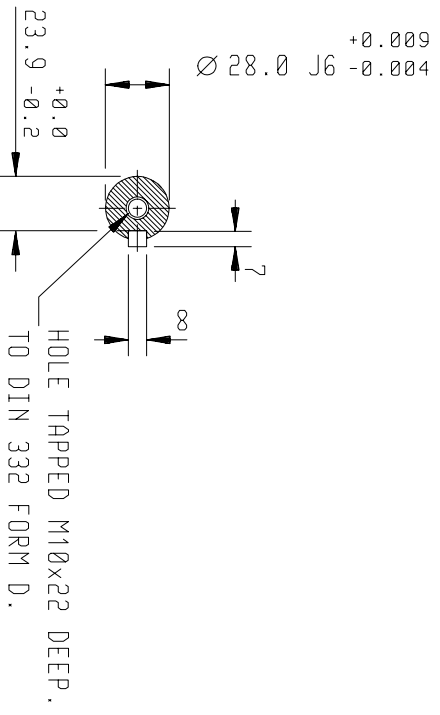
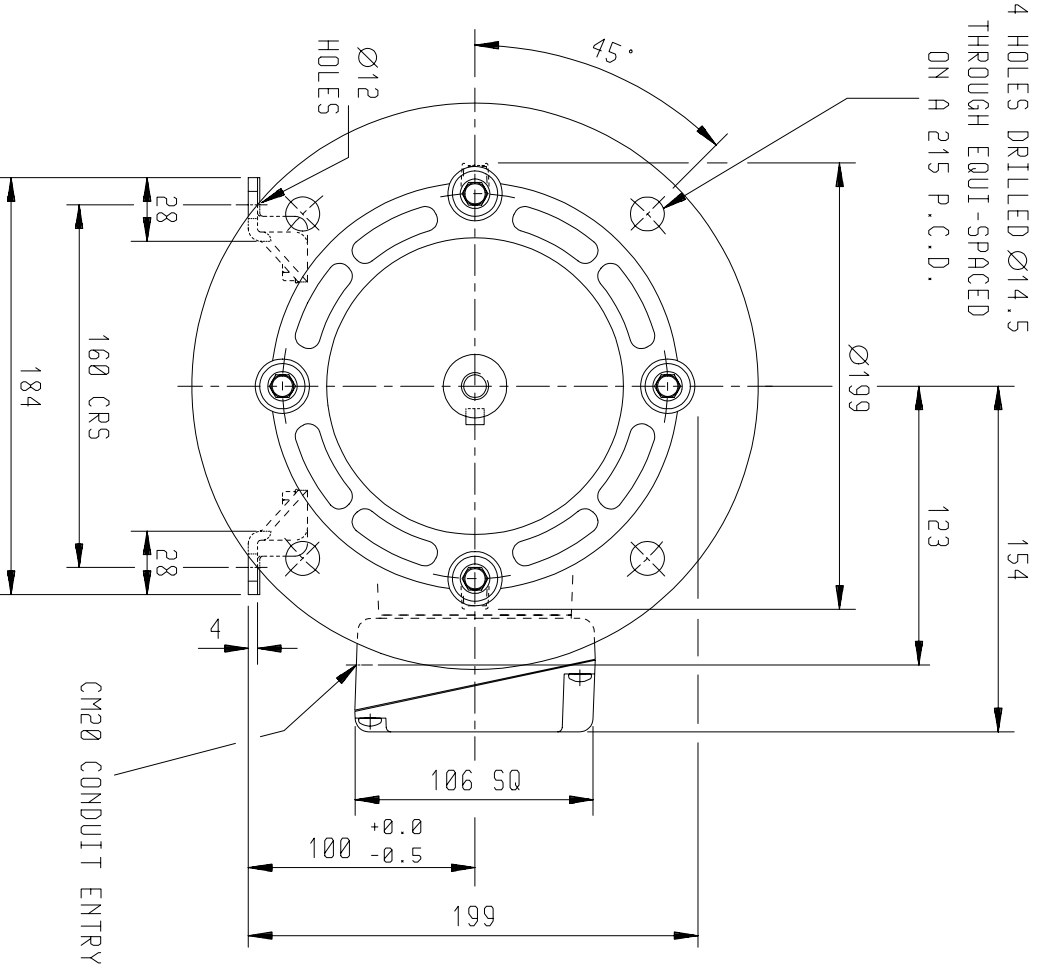
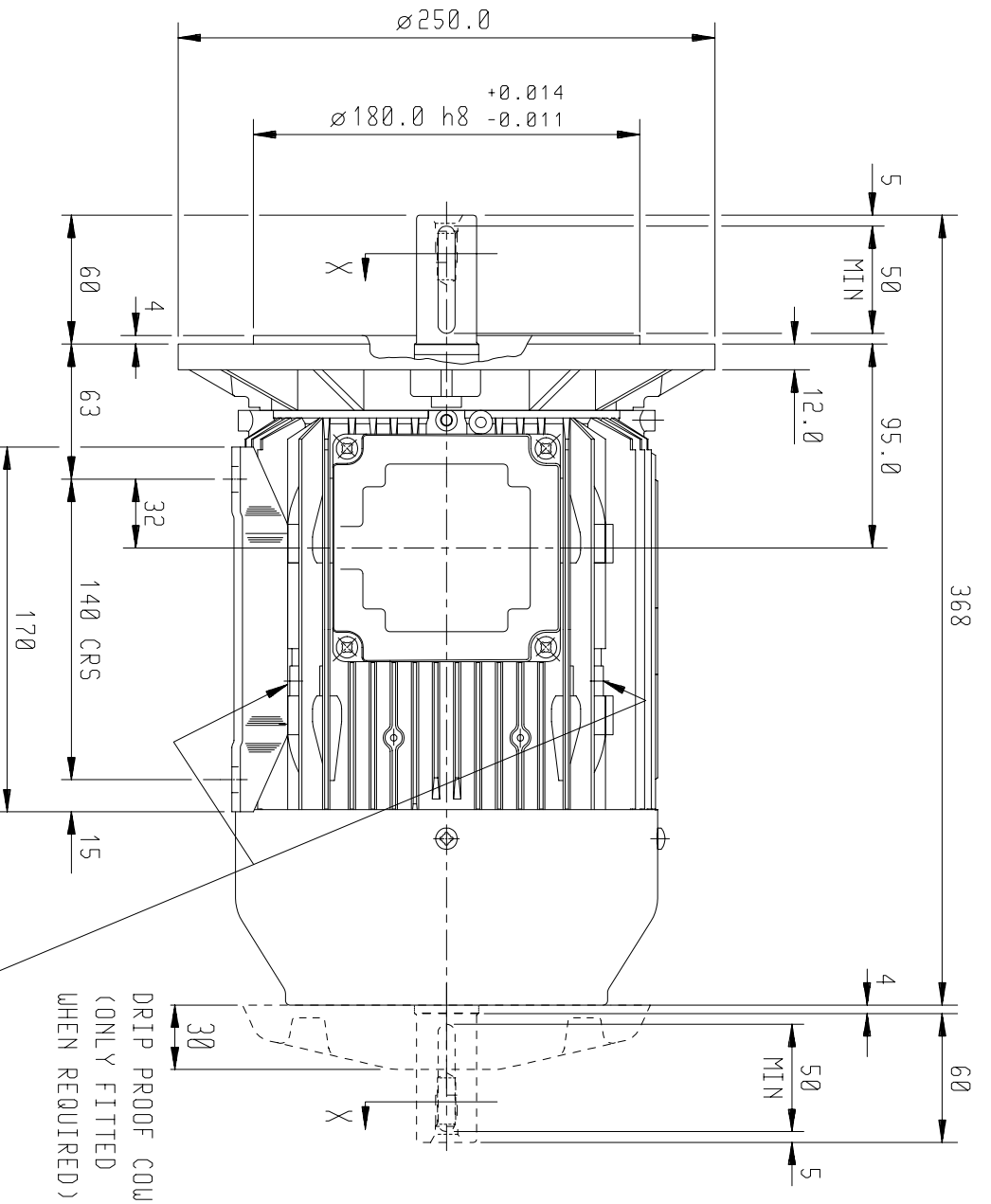
11-03-93

SCALE

JWD

11-03-93

1:3.5



VIEW ON 'X'

TERMINAL BOX POSITION:- CAN BE ARRANGED AT EITHER 9,12 OR 3 O'CLOCK BY MOVING FEET.

STANDARD TERMINAL BOX POSITION IS 3 O'CLOCK AS SHOWN.

CONDUIT ENTRIES:- TERMINAL BOX CAN BE ROTATED AT 90° INTERVALS

(CONDUIT ENTRY POSITION SHOWN FOR ILLUSTRATION ONLY).

OUTLINE DIMENSION DRAWING W ALUMINIUM TOTALLY ENCLOSED FAN COOLED

100L FRAME FOOT AND 'D' FLANGE MOUNTED MOTOR

CUSTOMER	
ORDER No.	
PART No.	
FRAME SIZE	
KW.	RPM.
HZ	PHASE
VOLTS	POLES
BRGS.	DE.
MOTOR NETT WT.	NDE.
SPECIAL REMARKS	Kg.

ALL DIMENSIONS IN MILLIMETRES.



**BROOK**  
**PROMPTON**

Small Industrial Motors  
 Huddersfield, W. Yorkshire, HD1 3LJ

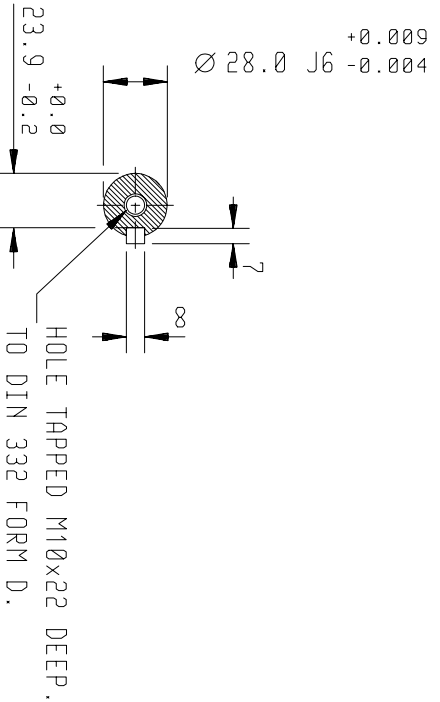
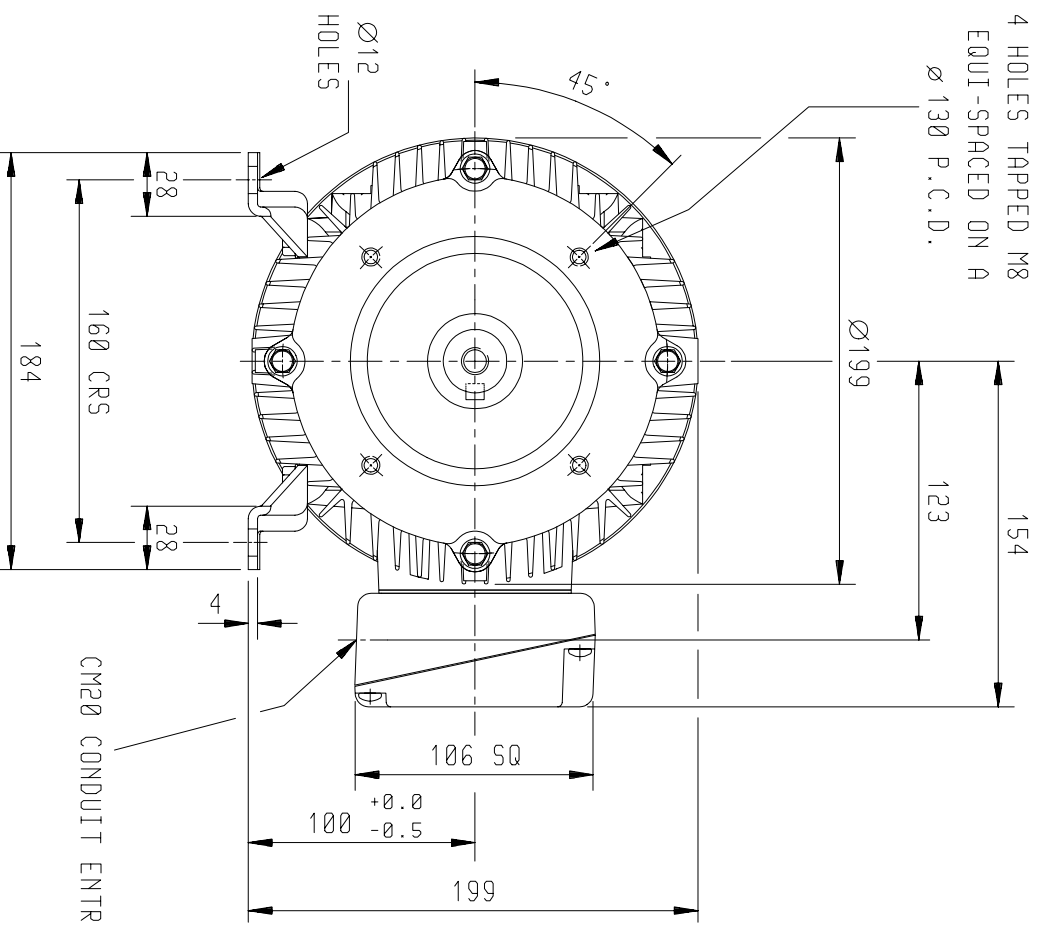
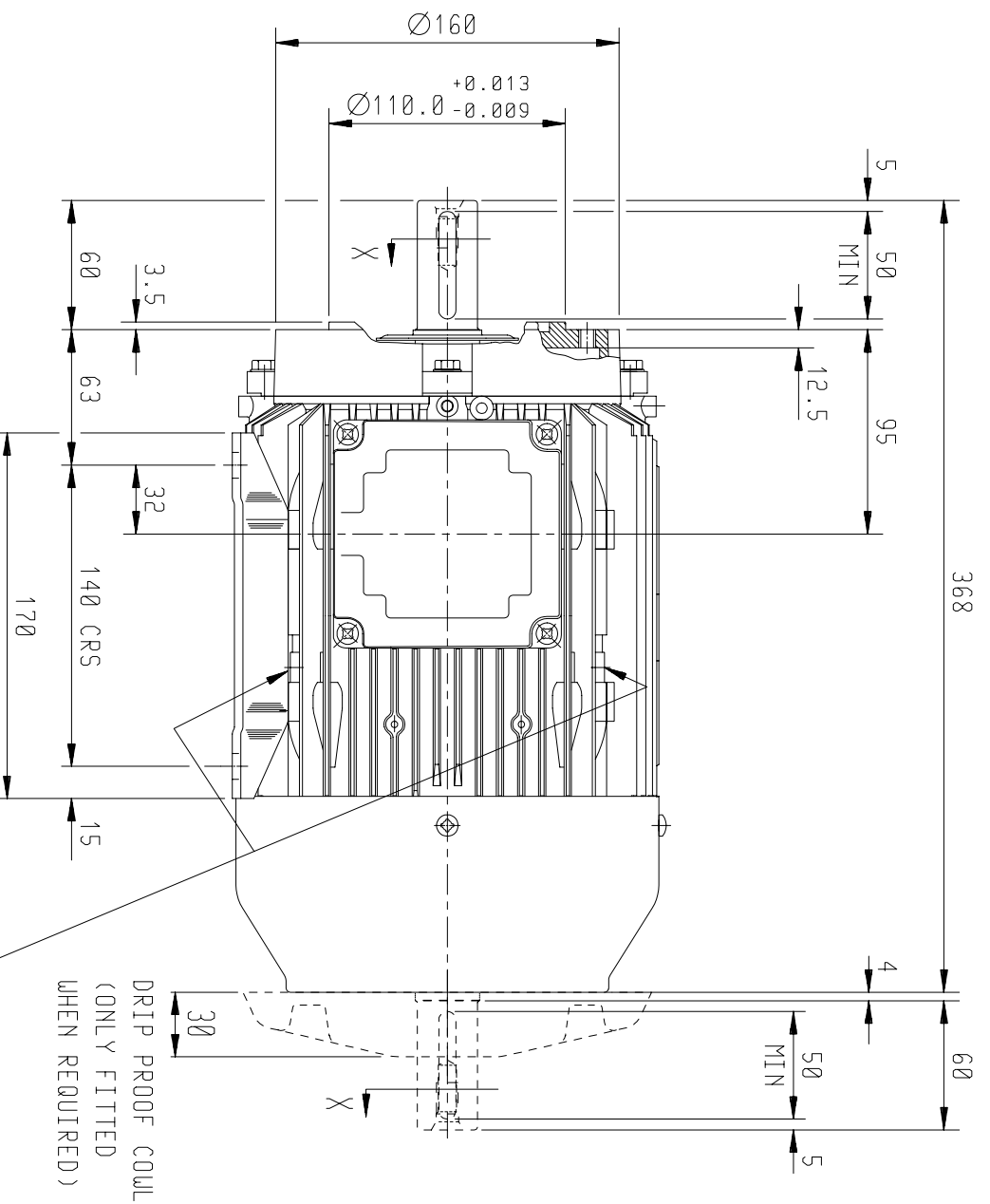
DRAWN	NAME	DATE
CHECKED	MI	01-08-94
SCALE	JWD	01-08-94
		1:3.5

DRG. No.	W10GD000/4		
DRG. REF.			
REVISION:	RR	DATE	11/06/03

SHEET SIZE  
**A3**

TITLE

CUSTOMER	
ORDER No.	
PART No.	
FRAME SIZE	
KW.	RPM.
HZ	PHASE
VOLTS	POLES
BRGS.	DE.
MOTOR NETT WT.	NDE.
SPECIAL REMARKS	Kg.



VIEW ON 'X'

CARE SHOULD BE TAKEN TO ENSURE THAT THE SCREWS OR STUDS DO NOT EXTEND INSIDE THE MOTOR BEYOND THE DEPTH OF THE TAPPED FIXING HOLE.  
 TERMINAL BOX POSITION:- CAN BE ARRANGED AT EITHER 9,12 OR 3 O'CLOCK BY MOVING FEET.  
 STANDARD TERMINAL BOX POSITION IS 3 O'CLOCK AS SHOWN.

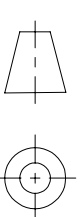
CONDUIT ENTRIES:- TERMINAL BOX CAN BE ROTATED AT 90° INTERVALS  
 (CONDUIT ENTRY POSITION SHOWN FOR ILLUSTRATION ONLY).

M6 EXTERNAL EARTH  
 DRIP PROOF COUL (ONLY FITTED WHEN REQUIRED)  
 30

4 HOLES TAPPED M8  
 EQUI-SPACED ON A  
 Ø130 P.C.D.

CM20 CONDUIT ENTRY

ALL DIMENSIONS IN MILLIMETRES.



FIRST ANGLE PROJECTION

**BROOK PROMPTON**

Small Industrial Motors

Huddersfield, W. Yorkshire, HD1 3LJ

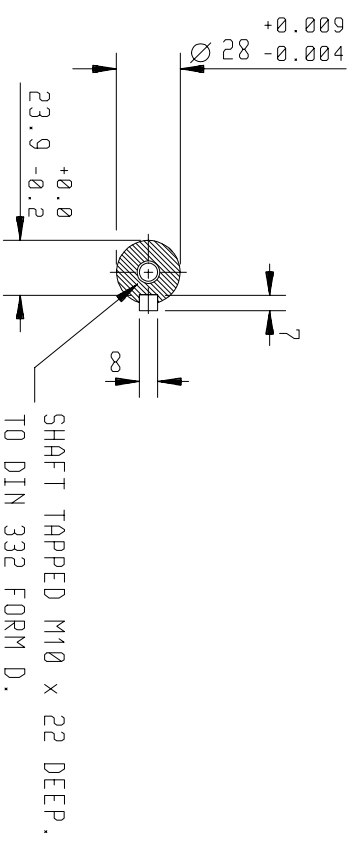
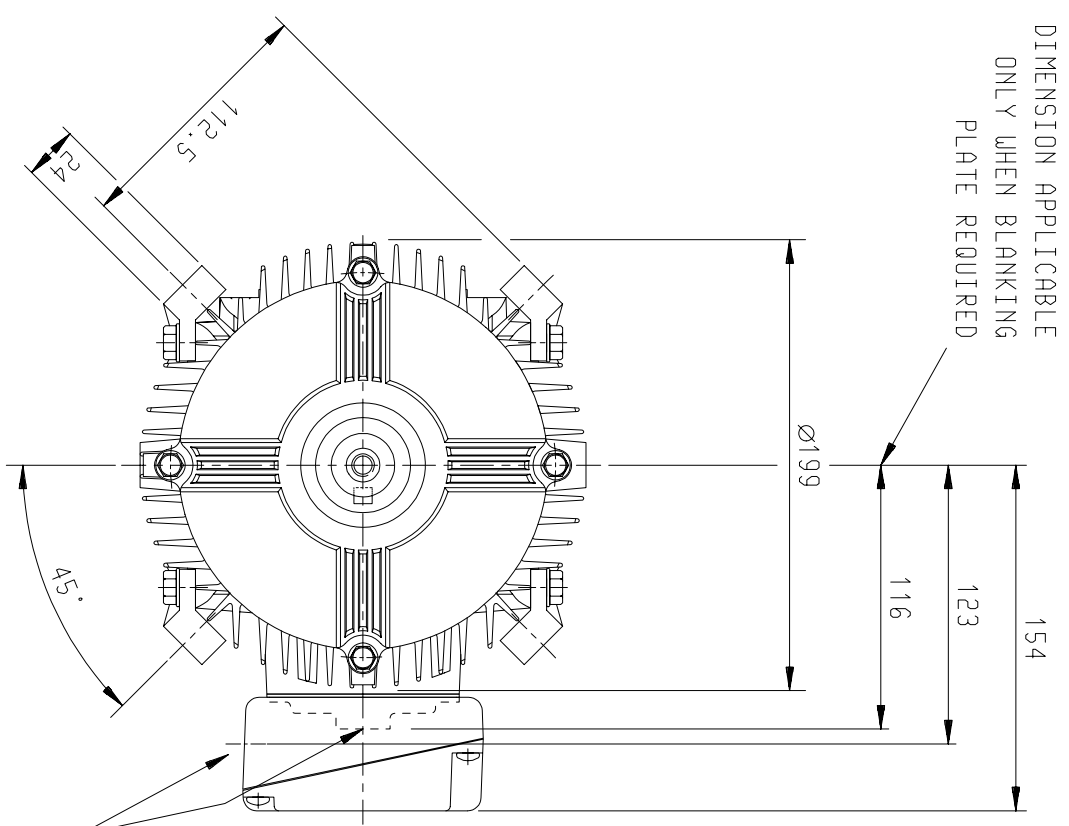
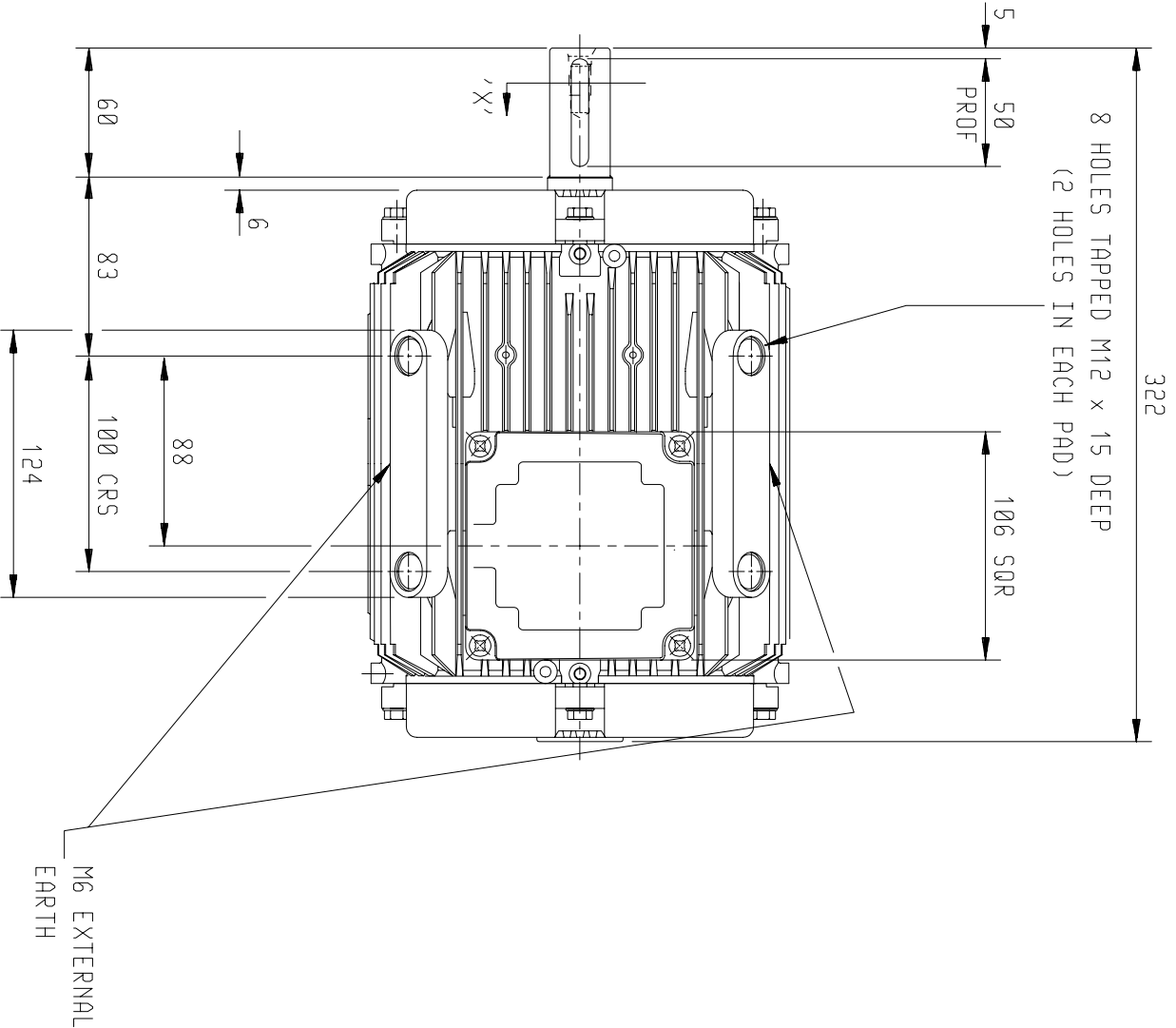
TITLE OUTLINE DIMENSION DRAWING W ALUMINIUM TOTALLY ENCLOSED FAN COOLED

SHEET SIZE A3

100L FRAME FOOT AND 'C' FACE MOUNTED MOTOR

DRAWN	MI	NAME	DATE
CHECKED	JWD		
SCALE			

DRG. No.	W10GCC000/3
DRG. REF.	
REVISION:	VLS DATE 30-04-01



VIEW ON 'X'

SHAFT TAPPED M10 x 22 DEEP.  
 TO DIN 332 FORM D.

DIMENSION APPLICABLE  
 ONLY WHEN BLANKING  
 PLATE REQUIRED

TERMINAL BOX POSITION:- CAN BE ARRANGED AT EITHER 9,12 OR 3 O'CLOCK.  
 STANDARD TERMINAL BOX POSITION IS 3 O'CLOCK AS SHOWN.  
 CONDUIT ENTRIES:- TERMINAL BOX CAN BE ROTATED AT 90° INTERVALS  
 (CONDUIT ENTRY POSITION SHOWN FOR ILLUSTRATION ONLY).

SHEET  
 SIZE  
**A3**

TITLE  
 OUTLINE DIMENSION DRAWING W ALUMINIUM TOTALLY ENCLOSED NO FAN  
 100L FRAME PAD MOUNTED MOTOR

DRAWN	NAME	DATE
CHECKED	MI	19-09-94
SCALE	JWD	19-09-94
		1:3.5

CUSTOMER	
ORDER No.	
PART No.	
FRAME SIZE	
KW.	RPM.
HZ	PHASE
VOLTS	POLES
BRGS.	DE.
MOTOR NETT WT.	Kg.
SPECIAL REMARKS	

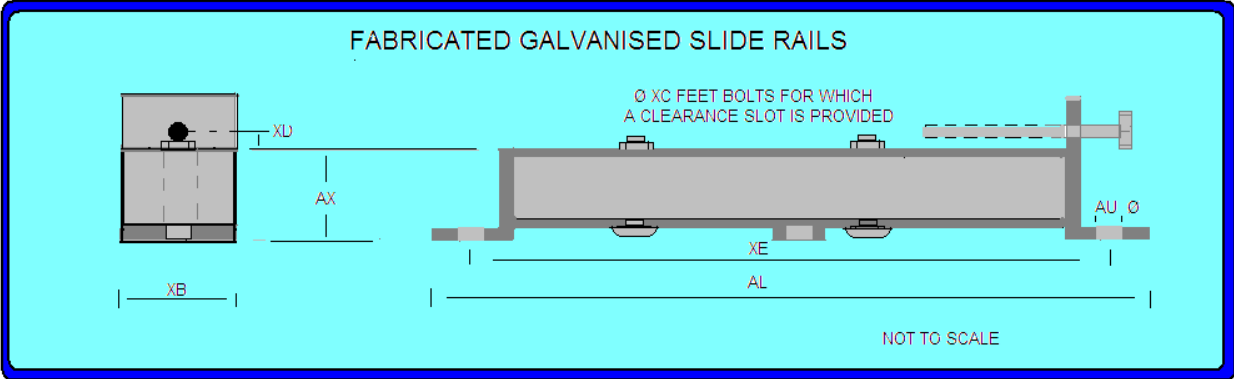
ALL DIMENSIONS IN MILLIMETRES.  
 FIRST ANGLE PROJECTION

**BROOK**  
**PROMPTON**

Small Industrial Motors  
 Huddersfield, W. Yorkshire, HD1 3LJ

DRG. No.	W10GP000/3
DRG. REF.	
REVISION:	DH
DATE	13-07-04

# Slide Rails



Code	AL	AU	AX	XB	XD	XE	Bolt Size	Frame Size	BT	XC Motor Foot Bolts
<b>M1013</b>	470	12	44	45	6	430	M10 X 200	100	171	M10 X 60
								112	137	
								132	106	

All data is subject to confirmation by BROOK-MTL

E&OE

BROOK MTL, 63 Allens Road, East Tamaki, Auckland, New Zealand

Associate companies: [Rotating Machinery Supplies](mailto:rotatingmachinery@clear.net.nz), 6 Devon Road, Hamilton. [rotatingmachinery@clear.net.nz](mailto:rotatingmachinery@clear.net.nz)  
[Soco Electric Motors](mailto:sales@soco.co.nz), 473 Tremaine Ave, Palmerston North. [sales@soco.co.nz](mailto:sales@soco.co.nz)

