



**BS British Standard 1 | General Purpose | High Efficiency | Aluminium
4 pole 50Hz | 22(kW) | W-DA180LJ**

Performance Data	
Performance Data	Value
Output (kW)	22
Pole	4
Full load speed (RPM)	1470
Full Load Torque (Nm)	143
Full load current @ 380V (A)	43
Full load current @ 400V (A)	41
Full load current @ 415V (A)	41
Efficiency Full load (%)	93
Efficiency 3/4 load (%)	93
Efficiency 3/4 load (%)	92
Power Factor Full load	0.84
Power Factor 3/4 load	0.8
Power Factor 1/2 load	0.69
Direct on line starting torque ratio	2.5
Direct on line starting current ratio	7.5
Direct on line Pull out torque ratio	2.9
Direct on line Pull up torque ratio	2
Star Delta starting torque ratio	0.75
Star Delta starting current ratio	2.2
Start Delta Pull up torque star	0.6
Rotor inertia (kgm ²)	0.19
Mean sound pressure @1m on no load (dB(A))	62

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	2749
Horizontal shaft load away motor	3312
Vertical shaft up, load towards motor	2426
Vertical shaft up, load away motor	3801
Vertical shaft down, load towards motor	3238
Vertical shaft down, load away motor	2988
Maximum radial load at end of shaft	4556
Bearing life (hours)	20000

Bearings and Oil Seals	
Feature	Standard Product
Drive end bearing	63102Z
Non-drive end bearing	63082Z
Drive end oil seal	50 x 65 x 8
Non drive end oil seal	40 x 52 x 7
Grease life (horizontal mounting)	30,000
Grease life (vertical mounting)	30,000

Variations to the standard specification can be supplied on request

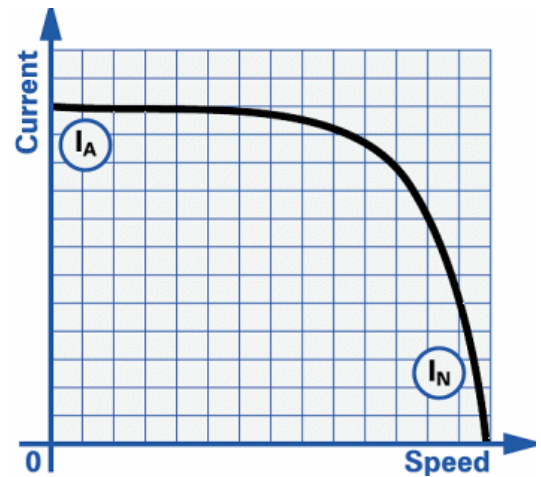
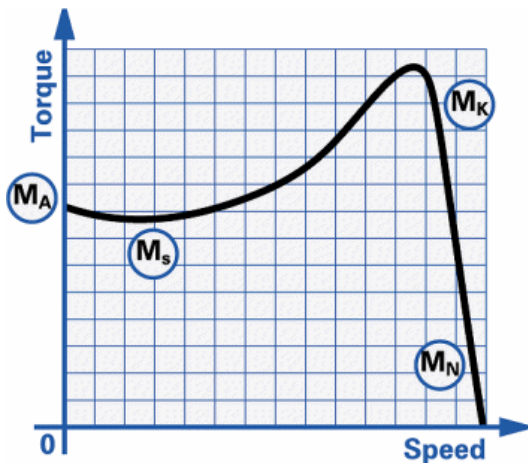
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E&OE

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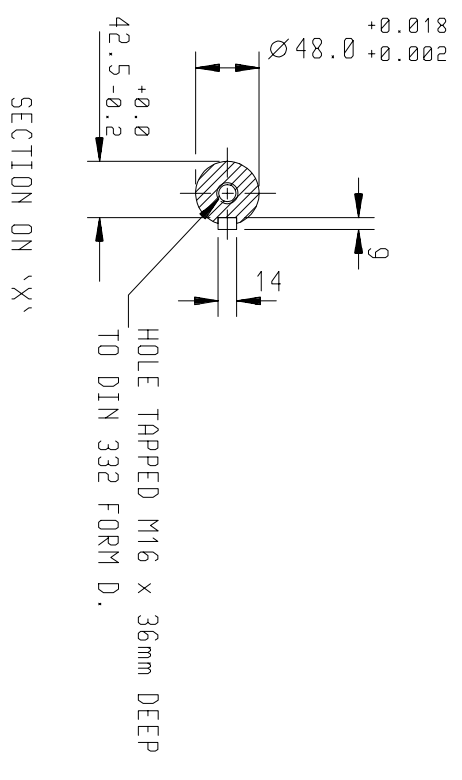
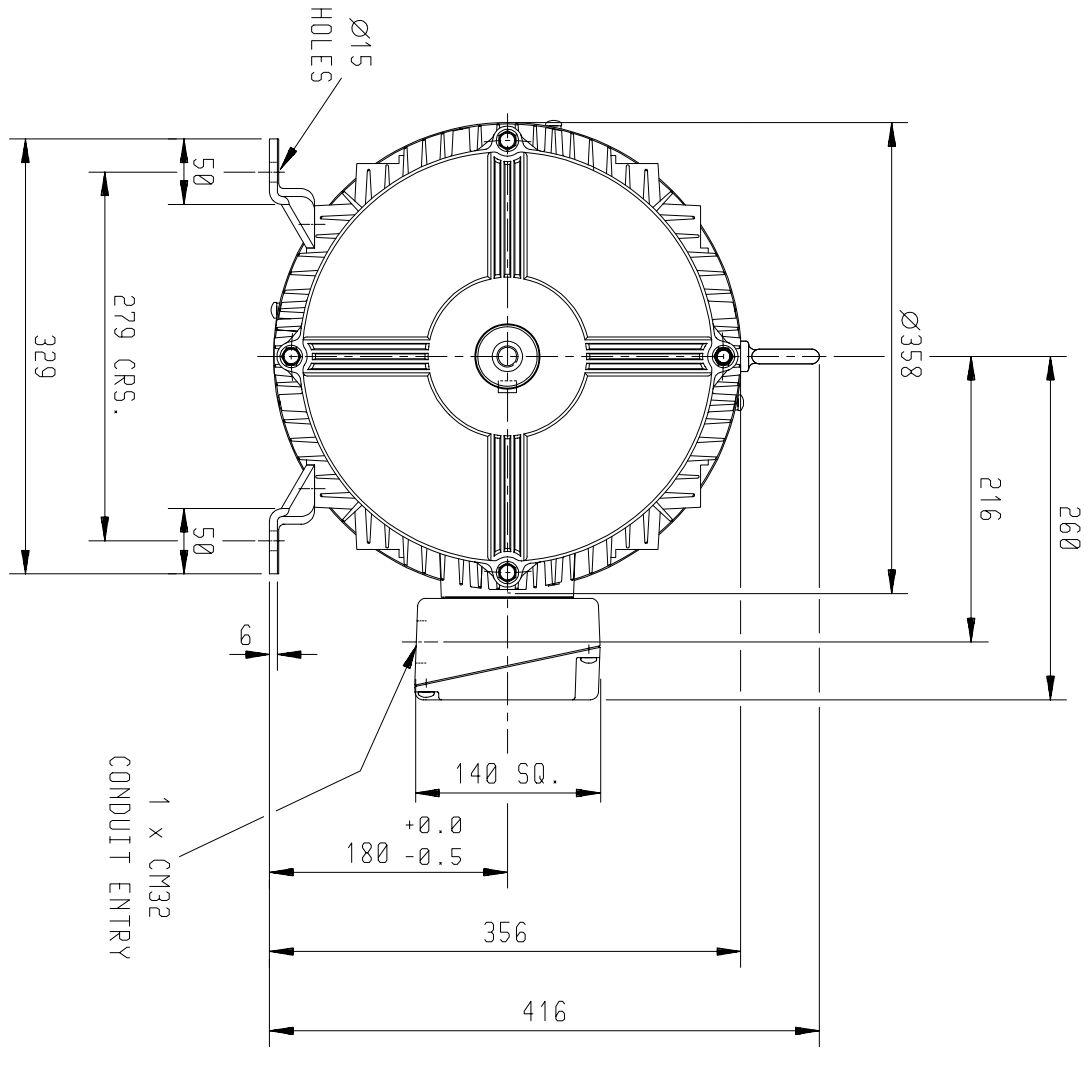
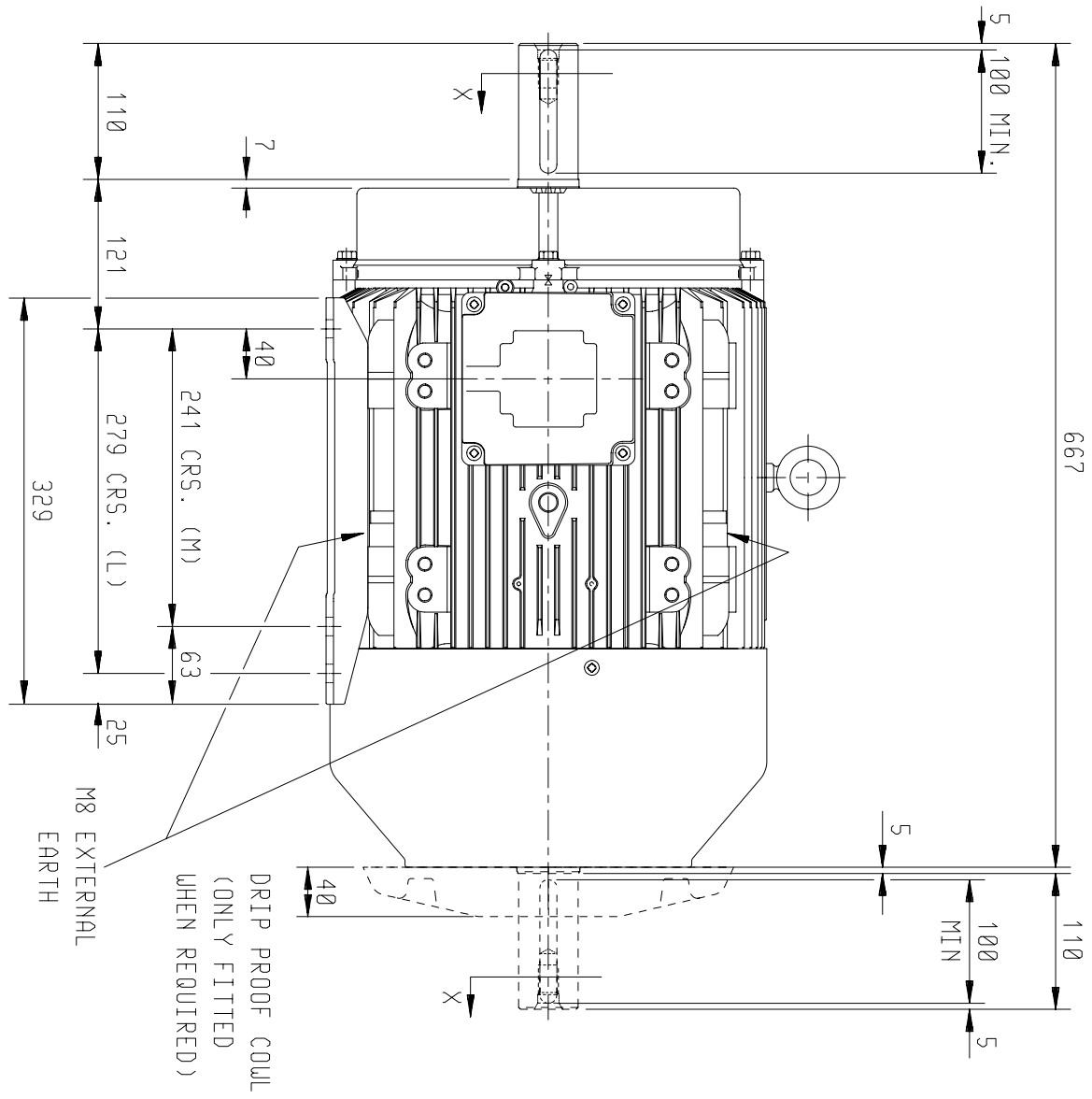
BROOK CROMPTON



4 pole 50Hz | 22(kW) | W-DA180LJ

DOL Performance Curves

Typical DOL speed / torque curve		Typical DOL speed / current curve	
GRAPH LEGEND		GRAPH LEGEND	
M_A --Starting/Locked Rotor Torque (Nm)	358	I_A --Starting Current (Amps)	308
M_S --Pull up/Run up Torque (Nm)	286	I_N --Full Load Current (Amps)	41.00
M_K --Pull out/Breakdown Torque (Nm)	415		
M_N --Full Load Torque (Nm)	143		



SECTION ON 'X'

DRAIN HOLES:- WHEN TERMINAL BOX IS MOVED FROM STANDARD POSITION THEY WILL NEED TO BE PLUGGED AND RE-LOCATED ELSEWHERE - IF REQUIRED
 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).

SHEET SIZE
A3

TITLE
 OUTLINE DIMENSION DRAWING W ALUMINIUM TOTALLY ENCLOSED FAN COOLED 180M/L FRAME FOOT MOUNTED MOTOR

DRAWN	NAME	DATE
CHECKED	MI	13-03-96
SCALE	1 : 6	

CUSTOMER	ORDER No.	PART No.	OUR ORDER No.	FRAME SIZE	KW.	RPM.	HZ	PHASE	VOLTS	POLES	BRGS.	DE.	NDE.	MOTOR NETT WT.	Kg.	SPECIAL REMARKS
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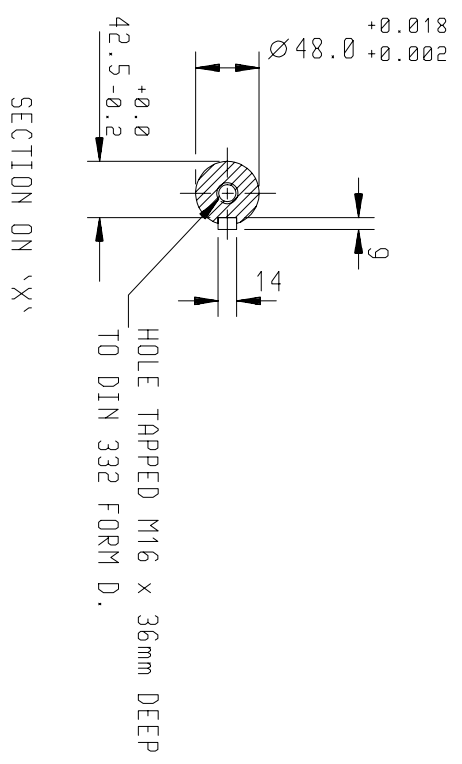
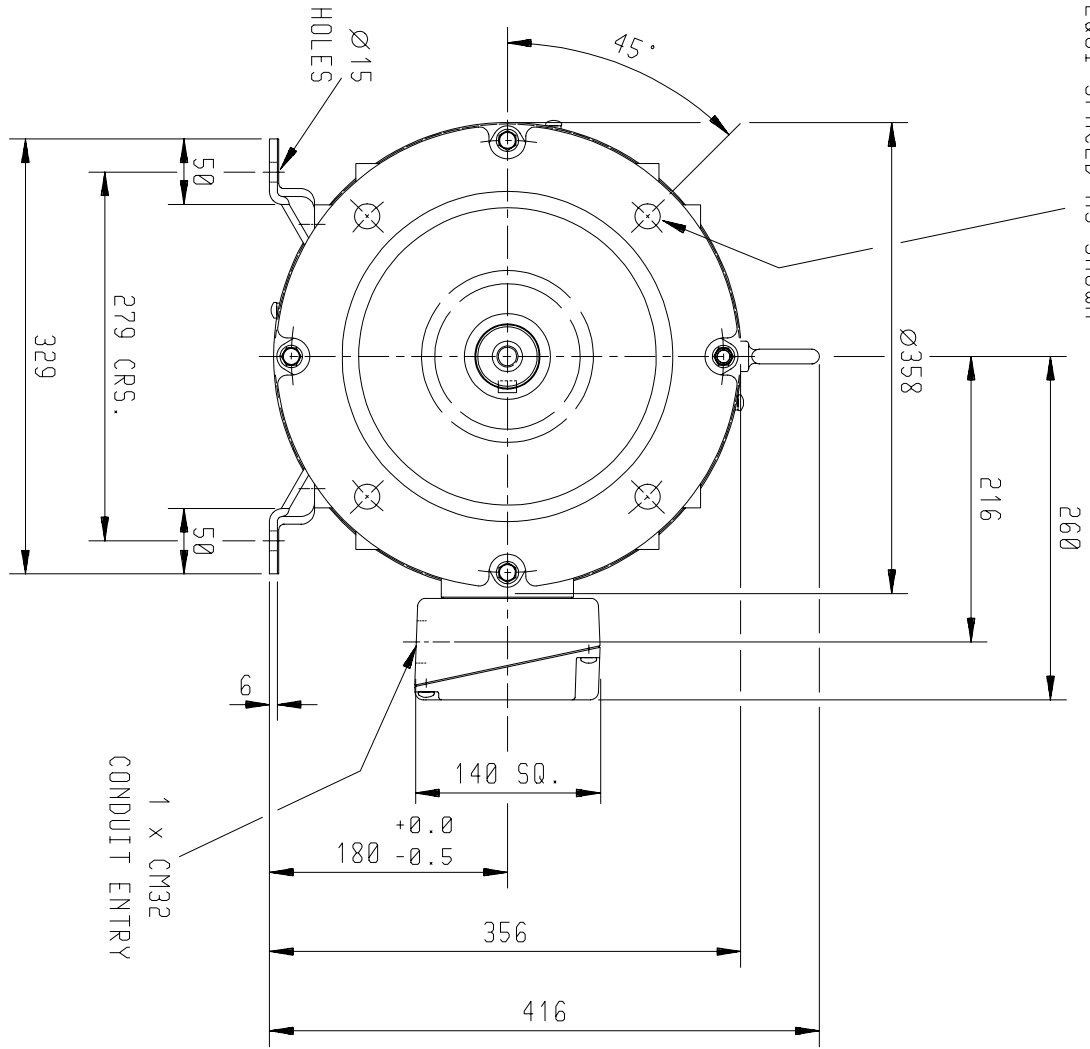
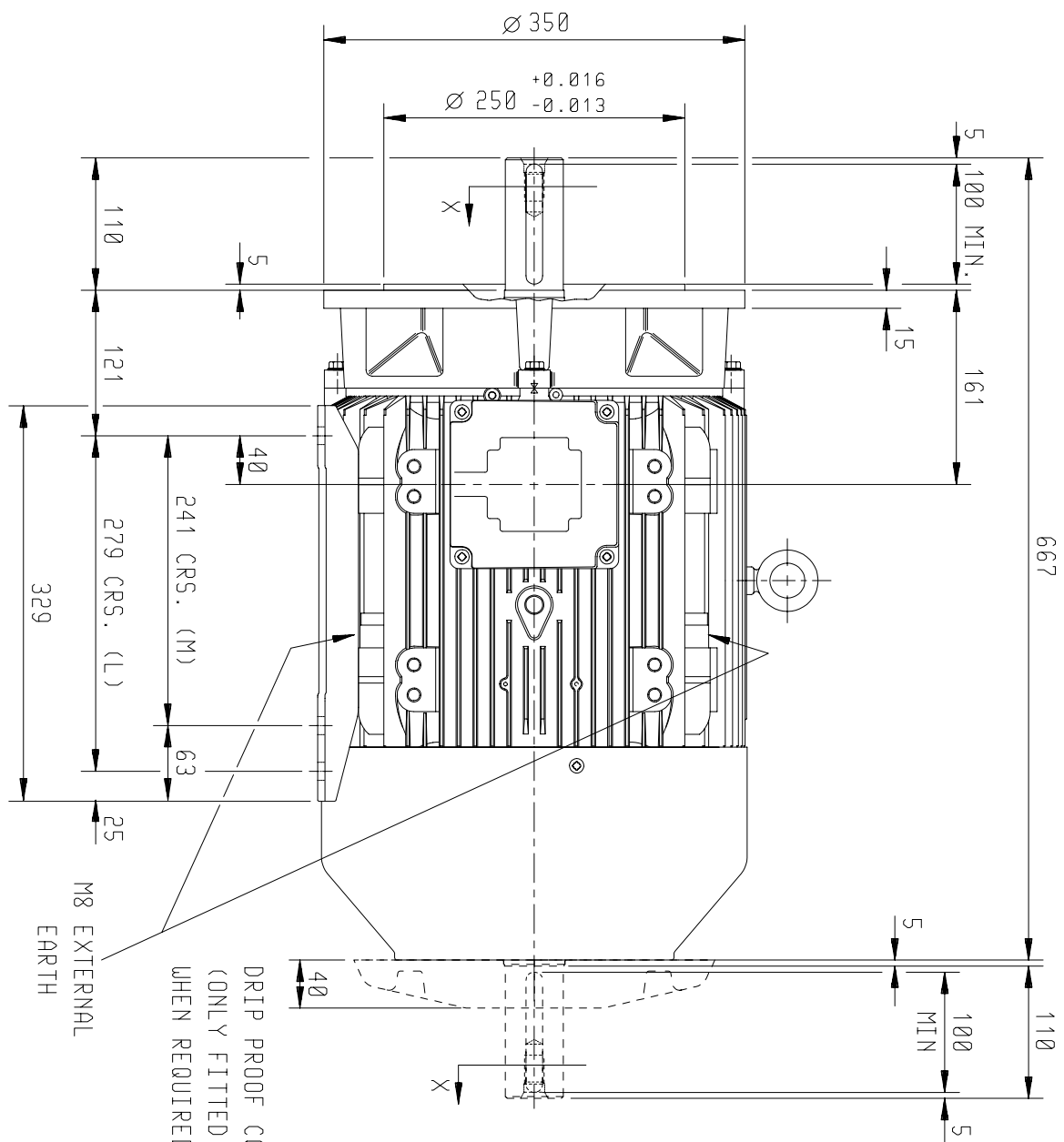
ALL DIMENSIONS IN MILLIMETRES.
 FIRST ANGLE PROJECTION

BROOK PROMPTON

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

DRG. No.	W30GF000/2
DRG. REF.	
REVISION:	RR DATE 02/05/03

4 HOLES DRILLED Ø18.5
 ON A 300 P.C.D.
 EQUI-SPACED AS SHOWN



DRAIN HOLES:- WHEN TERMINAL BOX IS MOVED FROM STANDARD POSITION THEY WILL NEED TO BE PLUGGED AND RE-LOCATED ELSEWHERE - IF REQUIRED
 TERMINAL BOX POSITION : - CAN BE ARRANGED AT EITHER 9, 12 OR 3 O'CLOCK BY MOVING FEET.
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CONDUIT ENTRIES:- TERMINAL BOX CAN BE ROTATED AT 90° INTERVALS (CONDUIT ENTRY POSITION SHOWN FOR ILLUSTRATION ONLY).

SHEET TITLE
 SIZE OUTLINE DIMENSION DRAWING W ALUMINIUM TOTALLY ENCLOSED FAN COOLED
 A3 180M/L FRAME FOOT & 'D' FLANGE MOUNTED MOTOR

DRAWN	NAME	DATE
CHECKED	MI	23-11-95
SCALE	JWD	23-11-95
	1 : 6	

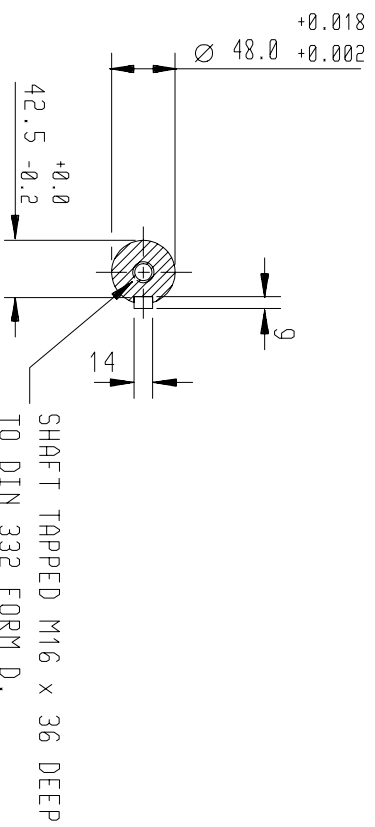
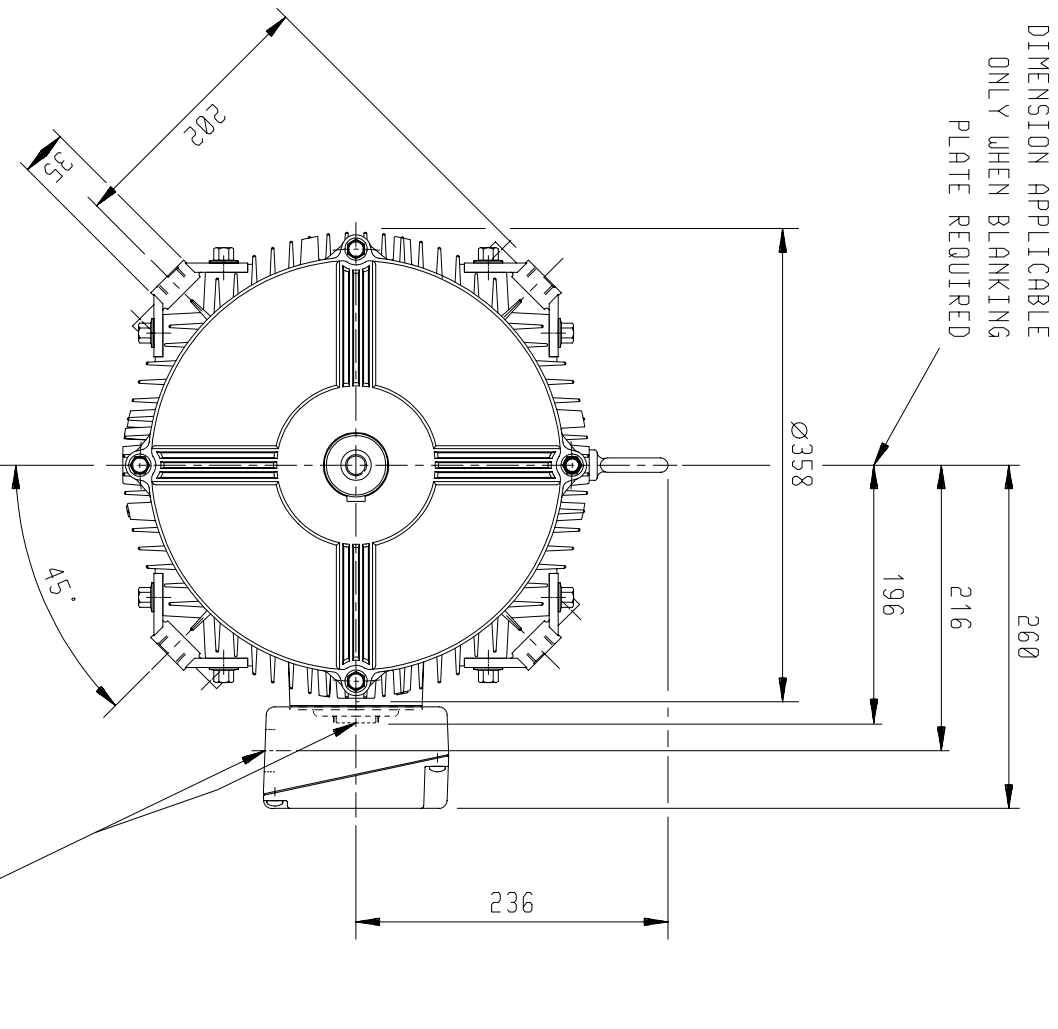
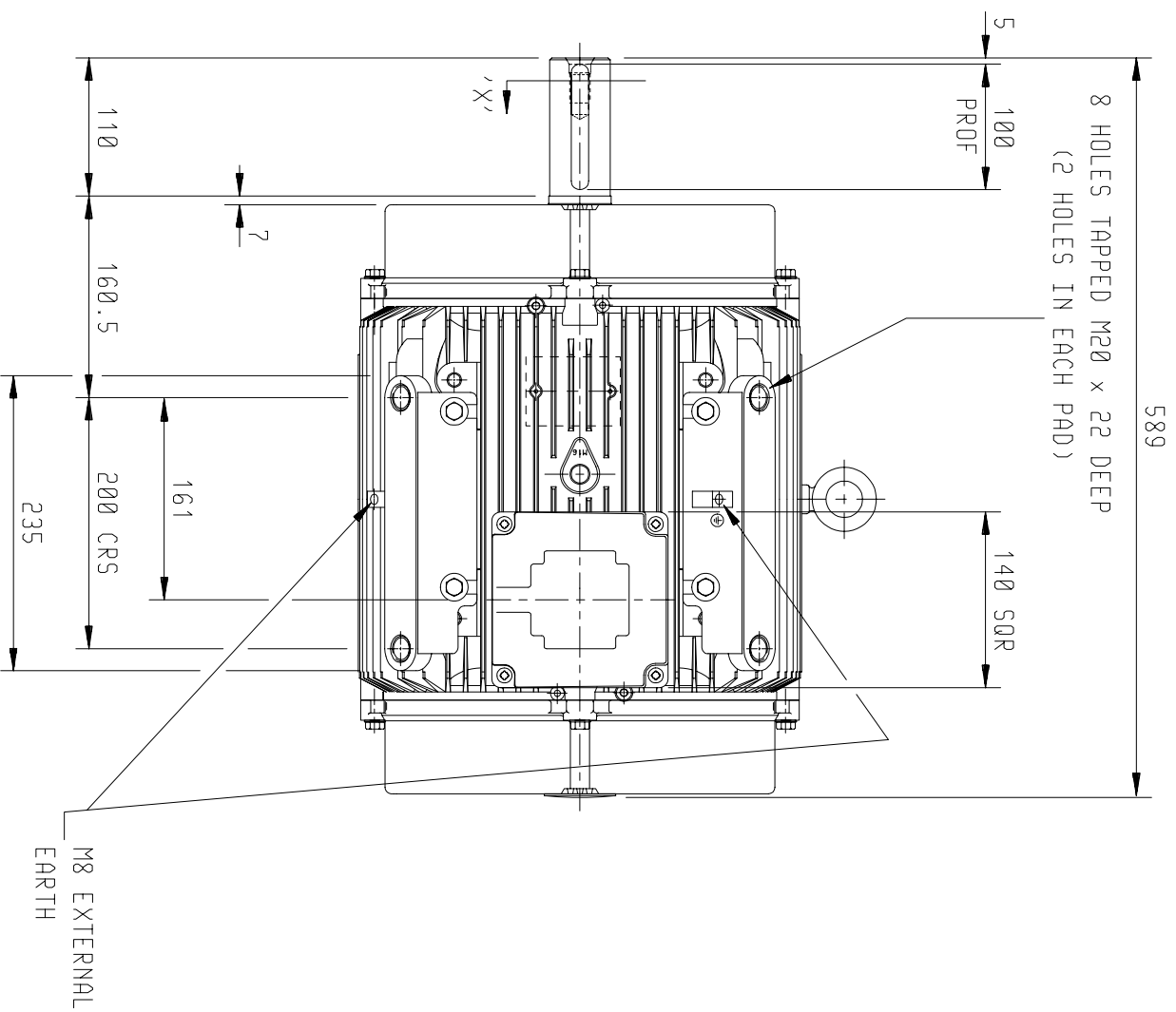
CUSTOMER	ORDER No.	PART No.	OUR ORDER No.	FRAME SIZE	KW.	RPM.	HZ	PHASE	VOLTS	POLES	BRGS.	DE.	NDE.	MOTOR NETT WT.	Kg.	SPECIAL REMARKS

ALL DIMENSIONS IN MILLIMETRES.
 FIRST ANGLE PROJECTION

BROOK PROMPTON

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

DRG. No.	U30GDD000/3
DRG. REF.	
REVISION:	RR DATE 08/05/03



SECTION ON 'X'

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

OUTLINE DIMENSION DRAWING IN ALUMINIUM TOTALLY ENCLOSED NO FAN

180M/L FRAME PAD MOUNTED MOTOR

CUSTOMER	
ORDER No.	
PART No.	
OUR ORDER 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

DRAWN	NAME	DATE
CHECKED	AH	30-10-96
SCALE	JWD	30-10-96
		1:6

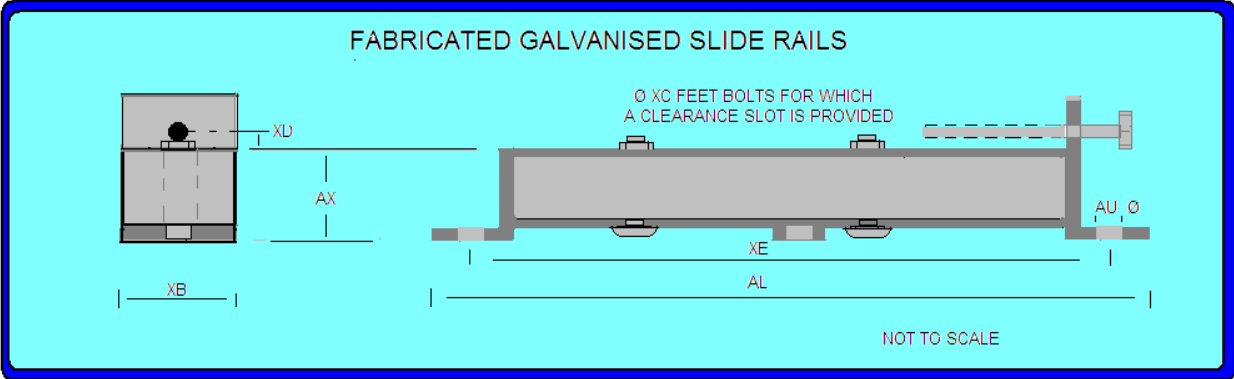
DRG. No.	W30GP000/2
DRG. REF.	
REVISION:	RR DATE 09/05/03

TITLE

SHEET SIZE

A3

Slide Rails



Code	AL	AU	AX	XB	XD	XE	Bolt Size	Frame Size	BT	XC Motor Foot Bolts
M1618	615	15	64	57	10	565	M12 X 220	160 180	160 125	M12 X 80

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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
[Soco Electric Motors](mailto:sales@soco.co.nz), 473 Tremaine Ave, Palmerston North. sales@soco.co.nz

