



KIRLOSKAR ELECTRIC

Committed to Innovation and Excellence



THREE PHASE AC MOTORS - CAGE, SPDP



Product Line of Kirloskar Electric

AC & DC Motors | Generators | Transformers | Switchgear | Drives | DG Sets | Projects | Engineering

ISO 9001:2008



**BUREAU
VERITAS**

THREE PHASE AC MOTORS - CAGE, SPDP

FEATURES

- Foot / Flange mounting with single shaft extension
- Class 'F' insulation, Class 'B' Temperature Rise
- Cast Iron body
- Cast Iron end covers
- Optimum fan design for better cooling and minimum energy consumption
- Rigidly sealed Terminal Box at RHS when viewed from Drive End
- EC grade aluminum die- cast rotors
- Suitable for flexible direct coupling or belt drives with high load GD2
- Suitable for DOL / STAR-DELTA Starting
- Bi-directional rotation

COMPLIES TO

- | | | |
|-------------------------------|---|-----------|
| • Specifications | : | IS : 325 |
| • General Requirements | : | BS : 4999 |
| • Rating & Performance | : | IEC: 34-1 |
| • Dimensions, foot mounted IS | : | 1231 |
| • Dimensions, flange mounted | : | IS: 2223 |

APPLICATIONS

- Pumps
- Compressors
- Machine Tools
- Textiles
- Fans
- Crushers
- Material Handling
- Cranes

When you order please furnish

- Application
- Mounting
- Input supply condition & % variation
- Load GD2
- Method of power transmission



WE CAN ALSO SUPPLY

- Foot or flange mounting with double shaft extensions
- Motors for high inertia load
- Supply voltages 220/380/400/440/660 V
- Supply frequency : 50 / 60Hz
- Motors to suit for customized duty cycle
- Thermister and anti condensation heaters
- Multi speed motors
- Dual voltage motors
- IP 22 / 23 protection

SPECIFICATIONS

- | | |
|---------------------|-----------------------|
| • Input Voltage (V) | : 415V+/-10%, 3 Ph AC |
| • Frequency (Hz) | : 50+/-5% |
| • Insulation | : F |
| • Duty | : S1 |
| • Protection | : IP 21 |
| • Enclosure | : IC 01 |
| • Ambient | : 0 to 50°C |
| • Rating | : 15 - 135 kW |
| • Frame size | : 180 - 280 |

KIRLOSKAR ELECTRIC CO. LTD.

Regd. Office: PB. No. 5555, Malleswaram West, Bangalore 560 055 | Tel: 080-23374865 | Fax: 080-23377706
Email: enq@hub.vrkec.com | www.kirloskar-electric.com

REMOVE ALL BURRS AND SHARP EDGES

Z122383200JR

THIS SUPERSEDES FROM dt. AS PER DCN No.		THIS SUPERSEDED BY FROM dt. AS PER DCN No.	
MATERIAL SPECIFICATION	RAW MATERIAL SIZE	WEIGHT kg RM FIN.	
_____	_____	— —	
CASTING/FAB REF. _____		No.P.S.: —	SCALE NTS
USED ON		REDRAWN	CHECKED STANDARD APPROVED
SA180 TO 225		sd/-	sd/- sd/- sd/-
		dt. 21/1/09	dt. 21/1/09 dt. 21/1/09 dt. 21/1/09
TITLE: DIMENSION SHEET (WITH TERMINAL BOX ARRANGEMENT)			32238398R2
KIRLOSKAR ELECTRIC COMPANY LTD. HUBLI-580030 (INDIA)			SHEET one OF one

AS PER KSD-02-027

IF IN DOUBT ASK

MMME

7

6

5

4

3

2

1

DO NOT SCALE THE DRAWING

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE STATED

REMOVE ALL BURRS AND SHARP EDGES

SHAFT EXTENSION DETAILS

NOTE:-

1. DIMENSIONS ARE AS PER IS:1231

2. DEGREE OF PROTECTION IP:22, (IP:23 CAN BE GIVEN AS AN OPTION)

3. TOLERANCE ON H: +0.00 -1.00

4. TOLERANCE ON D: m6

5. PROTECTED CENTRE HOLE
M20 x 40 DEEP FOR "D" 70
AND M24 x 50 DEEP FOR "D" 90
AS PER IS:2540 AT SHAFT EXTENSION.

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UNMENTIONED

ANGLES ± 1/2°

LINEAR DIMENSIONS (MACHINED)

ABOVE 0

UP TO 6

TOLERANCE ±0.2

UC:

6

315

1000

2000

4000

8000

CHAM:

2000

4000

8000

±0.5

±0.8

±1.2

±2

±3

SA 315L	2	508	110	620	730	690	508	120	590	216	70	140	20	74.5	12	7.5	315	32	-	755	810	28	1235
SA 315M	4, 6, & 8	508	110	620	730	690	457	120	540	216	90	170	25	95	14	9	315	32	630	-	810	28	1125
SA 315M	2	508	110	620	730	690	457	120	540	216	70	140	20	74.5	12	7.5	315	32	630	-	810	28	1095
SA 315S	4, 6, & 8	508	110	620	730	690	406	120	490	216	90	170	25	95	14	9	315	32	630	-	810	28	1075
SA 315S	2	508	110	620	730	690	406	120	490	216	70	140	20	74.5	12	7.5	315	32	630	-	810	28	1045
FRAME	POLE	A	AA	AB	AC	AD	B	BA	BB	C	D	E	F	GA	GD	GE	H	HA	HC	HC'	HD	K	L

REV.

ZONE

BRIEF RECORD

SIGNATURE

DATE

PP&MM SH II

PRINTS ISSUED TO

THIS SUPERSEDES FROM dt SIGN & dt

THIS SUPERSEDED BY FROM dt SIGN & dt

MATERIAL SPECIFICATION

RAW MATERIAL SIZE

WEIGHT kg

RM

FIN

CRISTING/FAB REF.

No.P.S.: 1

USED ON

SA 315

TITLE: DIMENSIONAL DRAWING

KIRLOSKAR ELECTRIC COMPANY LTD. BANGALORE - 560055 (INDIA)

SCALE N.T.S.

DRAWN Sd/SUMAN

CHECKED Sd/BRJ

APPROVED Sd/HCR

dt:17/03/06 dt:17/03/06 dt:17/03/06

SHEET NO. ONE OF ONE

Kirloskar

FORM No. 11401033

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SIGN & DATE.

FROM dt.

DRAWING No.

THIS SUPERSEDES

THIS IS SUPERSEDED BY

D

C

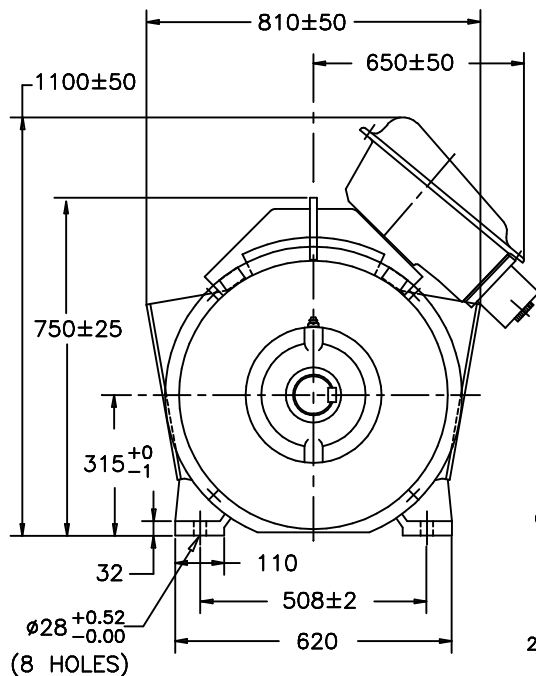
B

A

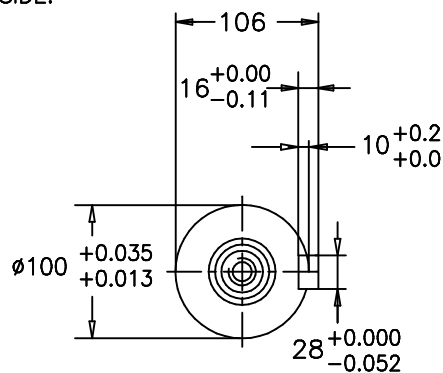
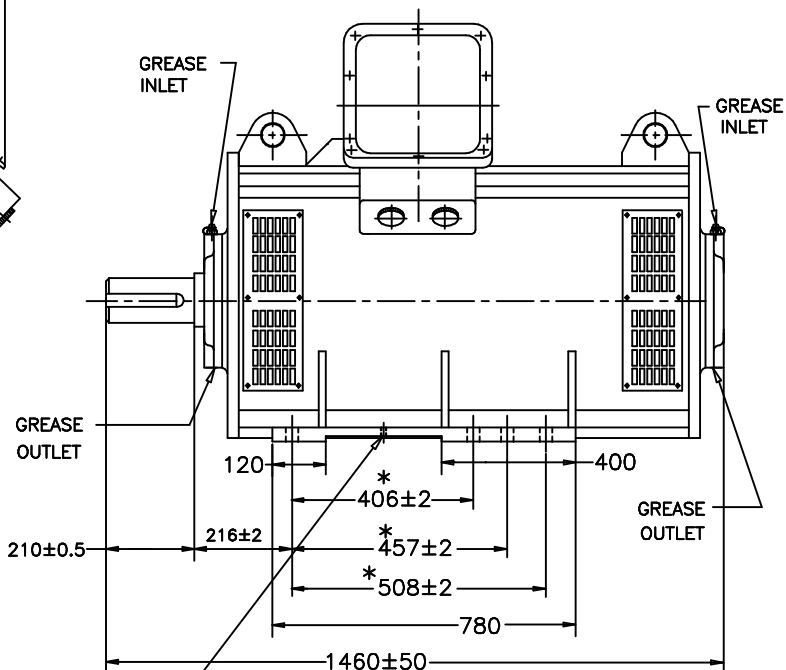
FORM No. 11401037

DO NOT SCALE THE DRAWING

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE STATED



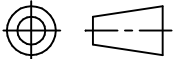
M12, 2 NOS. EARTHING SCREW
ONE ON EACH SIDE.

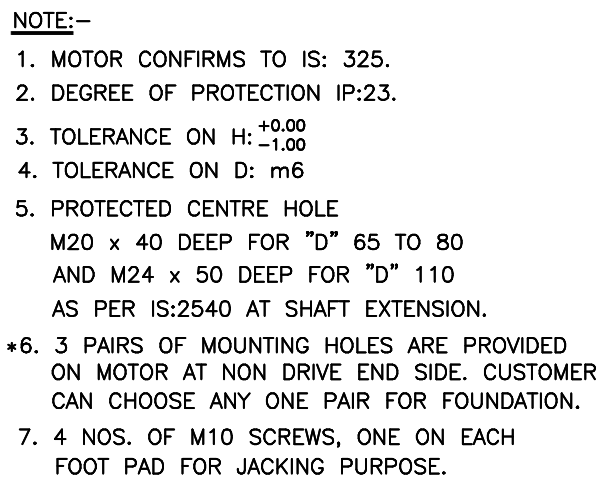


SHAFT EXTENSION DETAILS

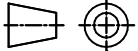
NOTE:—

1. MOTOR CONFIRMS TO IS: 325.
2. DEGREE OF PROTECTION: IP:22.
3. PROTECTED CENTER HOLE "M24X50" DEEP AS PER IS: 2540 AT SHAFT EXTENSION.
4. TERMINAL BOX CAN BE ROTATED THROUGH 360° IN STEPS OF 180°.
- * 5. 3 PAIRS OF MOUNTING HOLES ARE PROVIDED ON MOTOR AT NON DRIVE END SIDE, CUSTOMER CAN CHOOSE ANY ONE PAIR FOR FOUNDATION.
6. 4 NOS. OF M10 SCREWS, ONE ON EACH FOOT PAD FOR JACKING PURPOSE.
7. DIMENSIONS WITHOUT TOLERANCE, ARE FOR REFERENCE ONLY.

CUSTOMER:				CONSULTANT:			
PROJECT:				JOB NO.:			
							MKTG. ACM
REV.	ZONE	BRIEF RECORD				SIGNATURE	DATE
CUSTOMER / O/A No.				SCALE		DRAWN	HRN
				NTS		CHECKED	HCR
USED ON / TYPE						APPROVED	HCR
FRAME: SA315LX kW, SRPM							
TITLE:						DRG. NO.	
DIMENSIONAL DRAWING						41100907	
						SHEET NO.....1..... OF.....1.....	
KIRLOSKAR ELECTRIC COMPANY LTD. BANGALORE - 560055 (INDIA)							



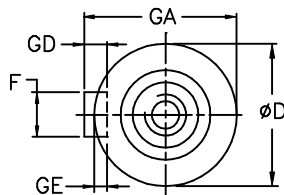
										THIS SUPERSEDES FROM dt SIGN & dt. THIS SUPERSEDED BY FROM dt SIGN & dt. MATERIAL SPECIFICATION RAW MATERIAL SIZE WEIGHT kg RM FIN. SCALE No.8.S. CASTING/FAB REF. No.P.S.: 1 USED ON SA 355 TITLE: DIMENSIONAL DRAWING SHEET NO. 0001 OF 0007 <									

THIS SUPERSEDES FROM dt. SIGN & dt.				THIS SUPERSEDED BY FROM dt. SIGN & dt.							
MATERIAL SPECIFICATION		RAW MATERIAL SIZE		WEIGHT kg							
_____		_____		<table border="1"> <tr> <td>RM</td> <td>FIN.</td> </tr> <tr> <td>_____</td> <td>_____</td> </tr> </table>						RM	FIN.
RM	FIN.										
_____	_____										
CASTING/FAB REF. _____				No.P.S.: 1		SCALE N.T.S.					
USED ON SA 355						DRAWN		CHECKED		APPROVED	
TITLE: DIMENSIONAL DRAWING						dt.21-3-07		dt. 21-3-07		dt.21-3-07	
						31101207					
						SHEET NO. <u>0001</u> OF <u>0007</u>					
KIRLOSKAR ELECTRIC COMPANY LTD. BANGALORE - 560055 (INDIA)											

REMOVE ALL BURRS AND SHARP EDGES

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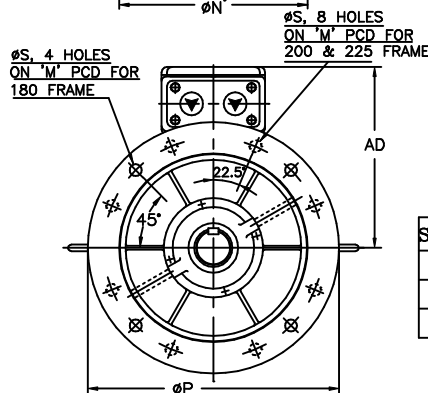
TERMINAL BOX ARRANGEMENT



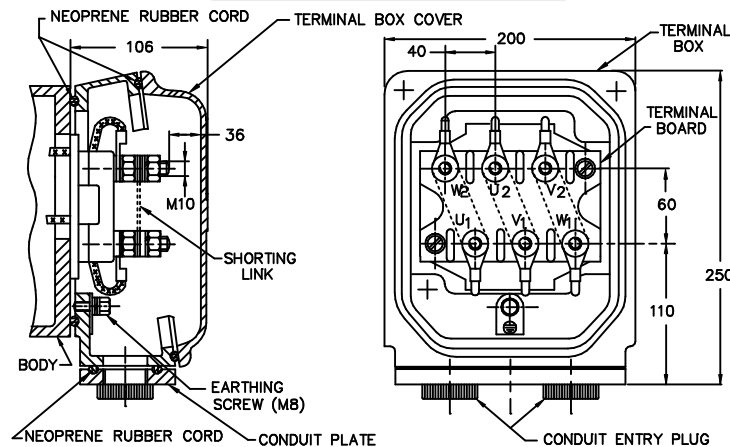
2 Nos.OF M10 EARTHING
SCREWS ONE ON EACH SIDE.

NOTE:

1. DIMENSIONS ARE AS PER IS:2223 & IS:1231.
2. INDEX OF PROTECTION : IP:21.
3. TOLERANCE ON 'D' : m6 INCLUDING & ABOVE $\phi 55$
4. PROTECTED CENTRE HOLE AT SHAFT EXTENSION AS PER IS:2540.
"M20 X 40" FOR 'D' - $\phi 55$ TO $\phi 80$
5. KEY & KEYWAY ARE AS PER IS:2048 & TOLERANCE ON KEYWAY IS P9.



SL.No.	FRAME	POLES	AC	AD	ØD	E	F	GA	GD	GE	L	LA	LB	LD	ØM	ØN	ØP	R	ØS	'
1	VSA 180	2,4,6 & 8	535	308	55	110	16	59	10	6	780	15	670	72	350	300	400	0	19	'
2	VSA 200	2,4,6 & 8	625	343	60	140	18	64	11	7	870	16	730	75	400	350	450	0	19	'
3	VSA 225	4,6 & 8	665	361	65	140	18	69	11	7	895	18	755	52	500	450	550	0	19	'

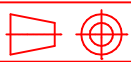


NOTE:

- MAX.CABLE SIZE : 2X3CX70sqmm.
- SHORTING LINKS ARE PROVIDED ONLY FOR DOL START WITH SINGLE ENTRY, NOT FOR STAR-DELTA STARTING.

ITEM/TAG No.			
RATING			
CABLE SIZE		JOB No. :	
O/A NO.:		CUSTOMER :	
PROJECT :		CONSULTANT :	

Z122429100JR

THIS SUPERSEDES FROM dt. AS PER DCN No.			
THIS SUPERSEDED BY FROM dt. AS PER DCN No.			
MATERIAL SPECIFICATION	RAW MATERIAL SIZE	WEIGHT kg RM FIN.	
_____	_____	— —	
CASTING/FAB REF. _____		No.P.S.: —	SCALE
USED ON		REDRAWN	CHECKED
VSA180 TO 225		sd/-	sd/-
		dt.21/1/09	dt.21/1/09
TITLE: DIMENSION SHEET (WITH TERMINAL BOX ARRANGEMENT)		STANDARD	
		APPROVED	
32242998R1		sd/-	
		dt.21/1/09	dt.21/1/09
SHEET one OF one		32242998R1	
KIRLOSKAR ELECTRIC COMPANY LTD. HUBLI-580030 (INDIA)			

FORM No	02	201	028	(ISSUE 7)
	09		D	

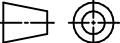


1. DIMENSIONS ARE AS PER IS:1231 & 2223,
TYPE 'B' FLANGE.
2. DEGREE OF PROTECTION IP:23
3. TOLERANCE ON D: m6
4. PROTECTED CENTRE HOLE
M20 x 40 DEEP FOR "D" 75 & 80
AND M24 x 50 DEEP FOR "D" 90
AS PER IS:2540 AT SHAFT EXTENSION.
5. TOLERANCE ON 'M': ± 1
6. TOLERANCE ON 'N': js6

VSA 315	4, 6, & 8	900	670	90	170	25	95	14	9	1280	25	1110	90	740	680	800	0	24	6
VSA 280	4, 6, & 8	785	625	80	170	22	85	14	9	1150	22	980	76	600	550	660	0	24	6
VSA 250	4, 6, & 8	745	506	75	140	20	79.5	12	7.5	960	22	820	—	600	550	660	0	24	6
FRAME	POLE	AC	AD	D	E	F	GA	GD	GE	L	LA	LB	LD	M	N	P	R	S	T

ANGLES	± 1/2°		RAD:	UC:	CHAM:
	LINEAR	DIMENSIONS			
ABOVE	0	6	315	1000	4000
UPTO	6	315	1000	2000	8000
TO 15°	15	1000	2000	4000	4000
TO 30°	30	4000	4000	8000	8000
TO 45°	45	8000	8000	16000	16000
TO 60°	60	16000	16000	32000	32000
TO 75°	75	32000	32000	64000	64000
TO 90°	90	64000	64000	128000	128000
TO 105°	105	128000	128000	256000	256000
TO 120°	120	256000	256000	512000	512000
TO 135°	135	512000	512000	1024000	1024000
TO 150°	150	1024000	1024000	2048000	2048000
TO 165°	165	2048000	2048000	4096000	4096000
TO 180°	180	4096000	4096000	8192000	8192000
TO 195°	195	8192000	8192000	16384000	16384000
TO 210°	210	16384000	16384000	32768000	32768000
TO 225°	225	32768000	32768000	65536000	65536000
TO 240°	240	65536000	65536000	131072000	131072000
TO 255°	255	131072000	131072000	262144000	262144000
TO 270°	270	262144000	262144000	524288000	524288000
TO 285°	285	524288000	524288000	1048576000	1048576000
TO 300°	300	1048576000	1048576000	2097152000	2097152000
TO 315°	315	2097152000	2097152000	4194304000	4194304000
TO 330°	330	4194304000	4194304000	8388608000	8388608000
TO 345°	345	8388608000	8388608000	16777216000	16777216000
TO 360°	360	16777216000	16777216000	33554432000	33554432000

[illegible]

THIS SUPERSEDES FROM dt.		SIGN & dt.		
THIS SUPERSEDED BY FROM dt.		SIGN & dt.		
MATERIAL SPECIFICATION		RAW MATERIAL SIZE		
		WEIGHT kg		
		RM	FIN.	
				SCALE
CASTING/FAB REF.		No.P.S.:		NTS
USED ON				
VSA 250 TO 315				DRAWN
				CHECKED
				APPROVED
				-Sd-
dt. 21/10/98				dt. 21/10/98
dt. 21/10/98				dt. 21/10/98
TITLE:				
DIMENSIONAL DRAWING				31112098
SHEET NO. OF				
KIRLOSKAR ELECTRIC COMPANY LTD. BANGALORE - 560055 (INDIA)				