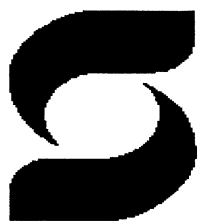


C.

ELECTRICAL

ELECTRICAL



SWELORE
Engineering Pvt.Limited.

DORR-OLIVER INDUSTRIAL DORR-OLIVER LIMITED.		DATASHEET MEDIUM VOLTAGE MOTOR (VFD)		DATASHEET NO.: 6907-117-16-00-5295 REV: A	
PURCHASER'S DATA					
A Site conditions					
1 Ambient temperature	minimum: 1 °C	3 Atmospheric condition:	Humid & highly corrosive		
	maximum: 39.8 °C	4 Altitude:	< 1000 m		
	design: 40 °C	5 Location:	Outdoor		
2 Relative humidity	93 %				
B Technical Particulars					
1 Motor tag no	117-PM-942				
2 Driven equipment name	Pentane Injection Pump				
3 Voltage	415-490V	17 Hazardous area classification	zone 2		
4 Phase	3	18 Gas group	IB		
5 Frequency	50-39% 50/60 Hz	19 Type of explosion protection	Ex d		
6 Peak Load (For System)	50KA for 0.25 Sec.	20 Type of ingress protection	IP 55		
7 Method of Starting	VFD	21 Colour shade	632 as per IS 5		
8 Winding Connection	STAR	22 Thermistors:	Required: ✓	Not Required: ✓	
9 No. of terminals	3	23 RTD:	Required: ✓	Not Required: ✓	
10 Cable Size	1R X 3C X 4 Sq mm	24 BTD:	Required: ✓	Not Required: ✓	
11 Cable type	Cu PVC Insulated	25 RTD/BTD monitoring device:	Required:	Not Required: ✓	
12 Temperature rise	75 °C				
13 Cooling	TEPC				
14 Insulation Class	F (temp rise limited to Class B)	26 Applicable specification:	EIL Spec 6-51-0032 rev 4		
15	6-51-0049 rev-0 & 6907-117-16-00-5295 rev A				
DRIVEN EQUIPMENT MANUFACTURER'S DATA					
1 Suggested motor rating:	1.5 kW	9 Torque required,	starting:	0.11	mbg
2 Manufacturer:	SWELORE		maximum:	0.34	mbg
3 B&W at full load:	0.27 kW	10 GD2 of eqpt	including flywheel:	0.007	kgm2
4 kW at end of curve:	0.38 kW		excluding flywheel:	-	kgm2
5 Speed:	180 SPM	11 Thrust,	up:	N/A	kg
6 Rotation viewed from coupling end:	Anticlockwise		down:	N/A	kg
7 Driven equipment:	Measuring Pump	12 Starting condition:	On No Load	on no load	
8 Coupling type:	Flexible	Under Loaded Condition			
MOTOR MANUFACTURER'S DATA					
1 Rating:	1.5 kW	16 Efficiency at,	75% voltage:	79	%
2 Manufacturer:	CGL		100% voltage:	80	%
3 No. of poles:	4	17 Power factor at,	Starting	0.15	
4 Frame designation:	ESOL		100% load:	0.8	
5 Full load speed:	1415 RPM	18 Moment of inertia, GD2:		0.03	kgm2
6 Mounting:	V1	19 NDE bearing type & no.:	6303ZZ		
7 Full load torque (FLT):	1.03 mkg	20 DE bearing type & no.:	6303ZZ		
8 Starting torque:	200 % of FLT	21 Type of lubrication:	Grease for life		
9 Break down or pull out torque	250 %	22 Weight of motor:	40	kg	
10 Full load current (FLC):	3.26 A	23 Thermistors,	quantity:	N/A	no
11 Starting current at 100% voltage:	550 % of FLC	make:	type:	•	
12 Rotation viewed from coupling end:	BI Directional	24 RTD	quantity:	N/A	no.
13 Starting time at,	75% voltage:	make:	type:	•	
	100% voltage:	25 BTD	quantity:	N/A	no.
	75% voltage:	make:	type:	•	
	100% voltage (Hot/Cold)	26 Shaft voltage:	V		
14 Locked rotor withstand time (cold/hot) at,	28/14 sec	27 Critical speed, 1st / 2nd stage:	RPM		
	16/8 sec	28 Canopy for outdoor motors	Required:	✓	
15 Space heater - voltage & power (Above)	N/A		Not Required:		
Applicable IEC/NEC for hazardous					

NOTE

1. Starting time calculations shall be based on operating conditions specified in material requisition eg open valve condition / closed valve condition, at no load / under load, as applicable.

2. Motor shall be suitable for operation with VFD. Refer CL 5.5.1 of spec 6-51-0049 Rev 0

1	21.05.2011	FOR YOUR APPROVAL	KMS	CNG	CNG
2	27.05.2011	FOR YOUR APPROVAL	KMS	CNG	CNG
REV NO	DATE	PURPOSE	PREPARED BY	CHECKED BY	APPROVED BY

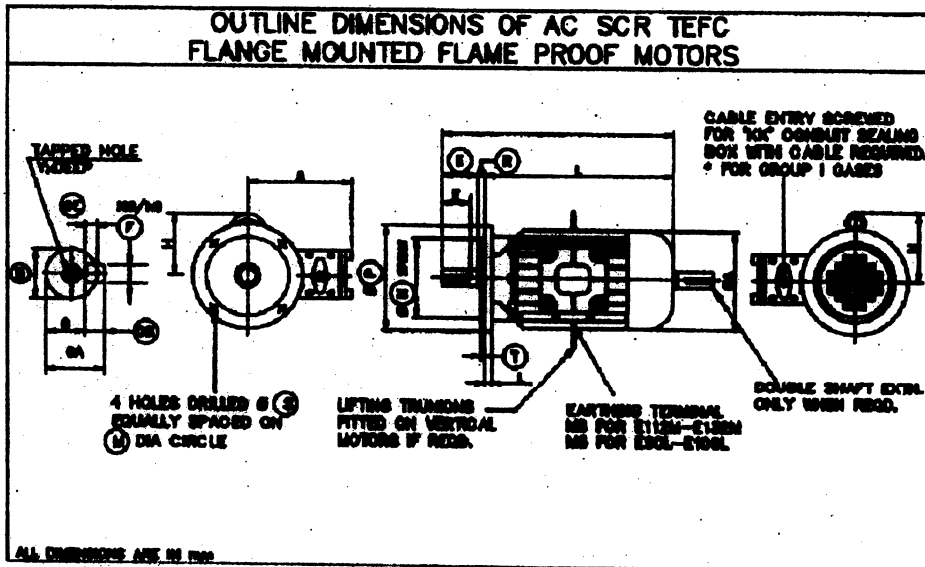
SEPL DOC NO : S13532-EL-PM-DS-001

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	1	4
	5	6
	7	8
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हस्ताक्षर एवं नाम		
Date/दिनांक		
V.P. No.		
म.सं. 5907/5978		





ALL DIMENSIONS ARE IN MM

Terminal box is rotatable in 360° in steps of 90°

FRAME SIZE	FLANGE MOUNT						SHAFT AND KEY							OVER ALL				
	M Tol	N Tol	P	S	T	LA	D Tol	E	ED	FTOL	ES TOL	G	Y	AS	AC	L	LS	MS
E20L	105	150	200	12	3.5	10	24	80	35	8	7	30	M10X22	240	210	300	300	

FRAME SIZE	CONCENTRICITY IN MICRON		PERPENDICULARITY IN MICRON		RUNOUT IN MICRON	
	NORM CLASS		NORM CLASS		SHAFT	
E20L						

KW	1.5	CUSTOMER	TEL.
POLE	4	IND NO	
FRAME	E20L	TAG NO	117 - PM - 242
DATE	3/29/2010	PO NO	

Drawing Name	EX2040
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वि.प.नं.	6907/5973

<http://59.163.13.52/dpa/asp/NewGA.asp> & Item Code: 1005 3/29/2010

21/08/14

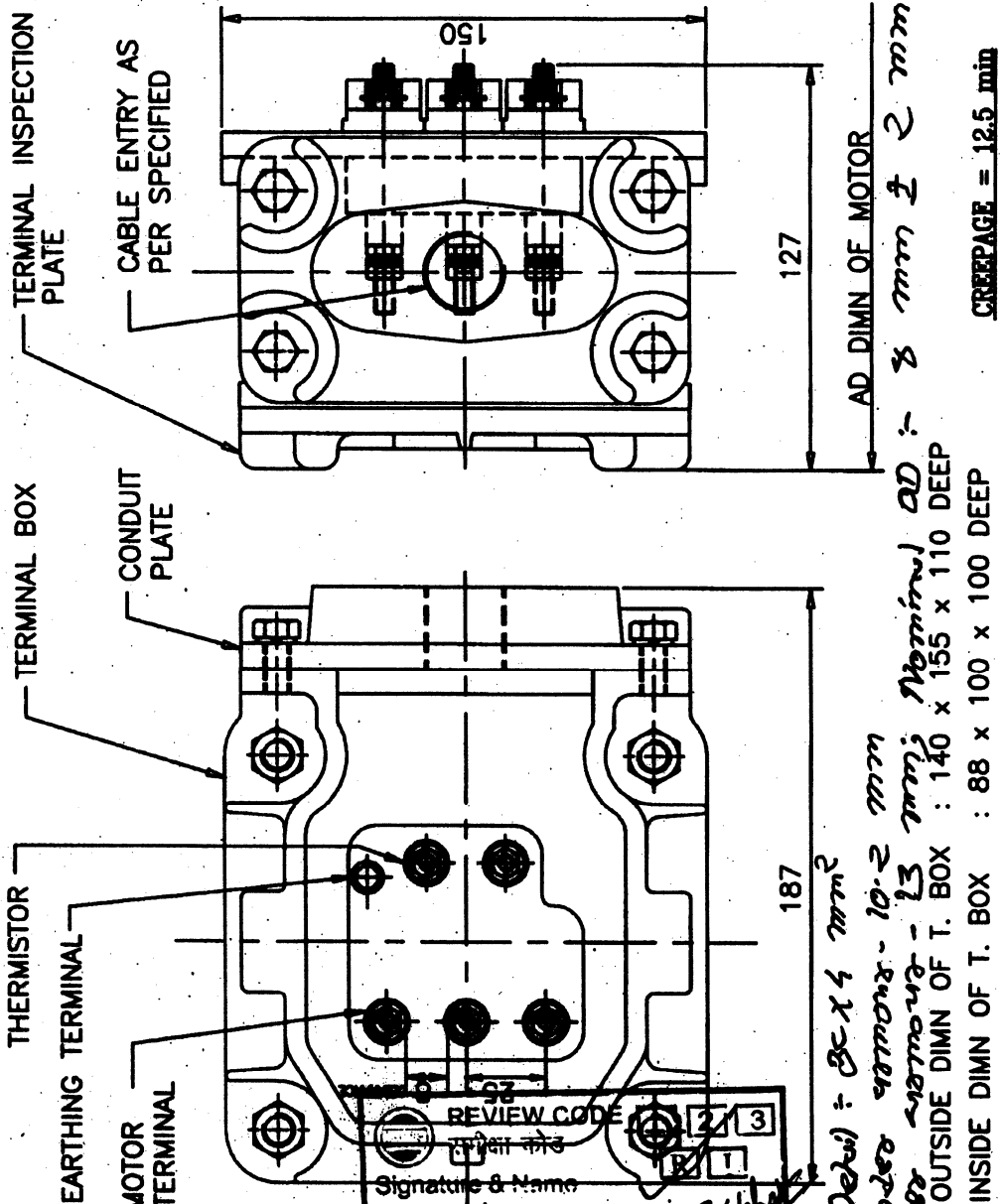
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IT MUST NOT BE COPIED OR LENT WITHOUT
THEIR PERMISSION IN WRITING



DATE:-

INDENT NO.:-

DO NOT SCALE, ASK IF IN DOUBT.
THIRD ANGLE PROJECTION



FOR CREEPAGE AND CLEARANCES IS 6381

DESIGNED	NAME	DATE	USED ON : E90L - E132M	RATING	1.5 kW
DRAWN			TITLE: TERMINAL BOX ARRANGEMENT (6 TERMINALS)	CABLE SIZE	18 x 35 x 4 mm ² 32
CHECKED			 Crompton Greaves Ltd. LT MOTORS DIVISION AMBAGANUR	GLAND REF.	
APPROVED				CUSTOMER	EIL
TRACED				INDENT REF.	
CHECKED				DRAWING NO.	EW 3650/3

A4 SIZE = 297 x 210

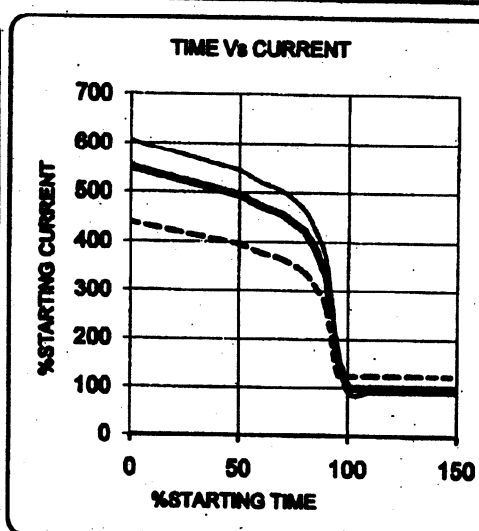
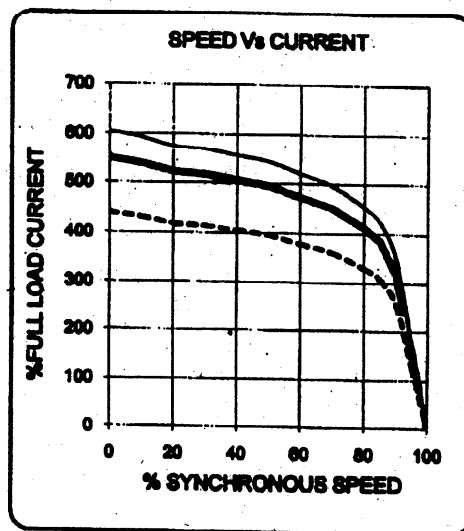
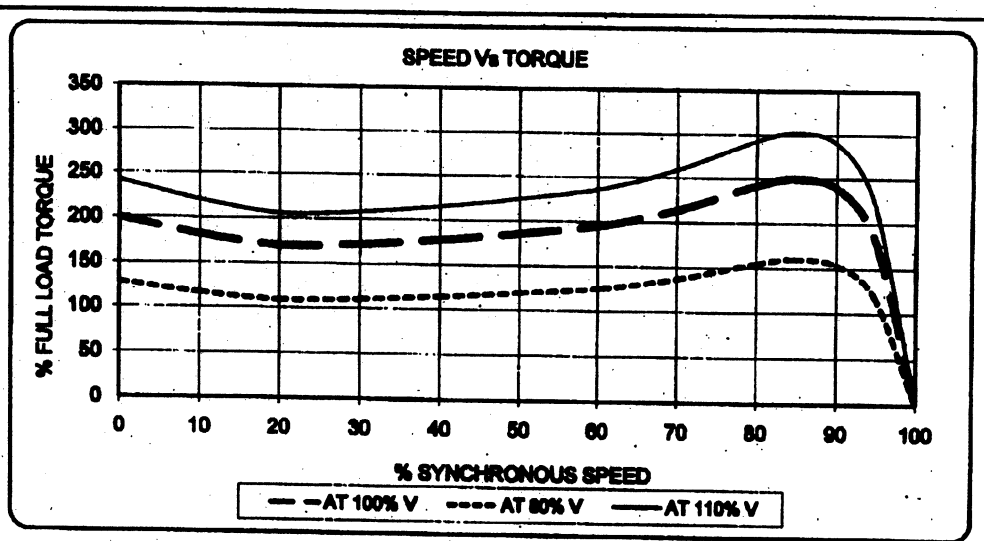
MAJOR MOTORS DESIGN

FORM NO. 111, JAN 95

DOLNO/

Cable Detail :- 3C x 4 mm²
Dia under terminal - 10.2 mm
Dia over terminal - 13 mm; Nominal OD :- 8 mm ± 2 mm
OUTSIDE DIMN OF T. BOX : 140 x 155 x 110 DEEP
INSIDE DIMN OF T. BOX : 88 x 100 x 100 DEEP

Steel box no :- 51332 - EL - PM - 000 - 002, Rev: 01, Page No: 1 of 1



CUSTOMER EIL		KW 1.5
P.O.NO.		FRAME EBOL
IND.NO.		POLE 4
CLIENT EIL		TAG NO. 117-PM-312
PROJECT EIL		

DRN	NAME	DATE	TITLE
PP	PP	25-Jun-11	SPEED TORQUE CURVE
CHD	SRN	25-Jun-11	
APPROVED	DNS	25-Jun-11	

Crompton Greaves

AMENAGAR

SC200/550

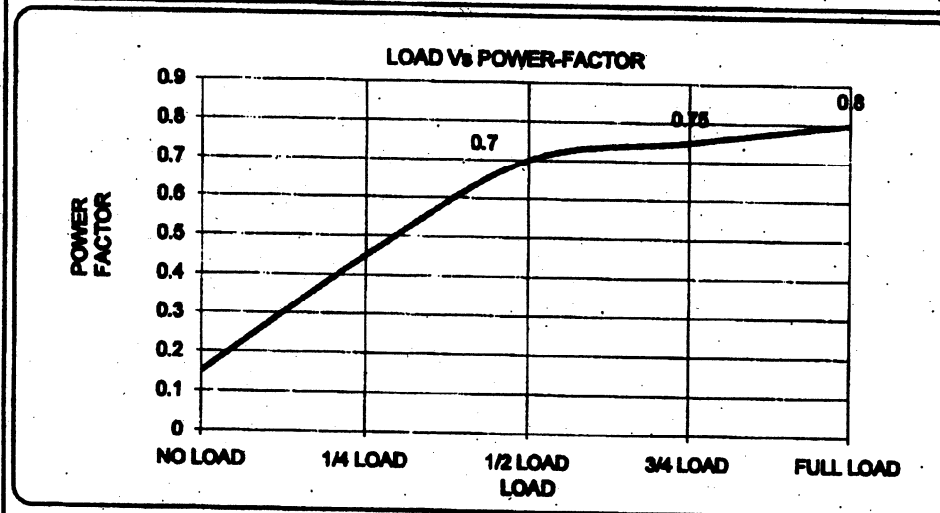
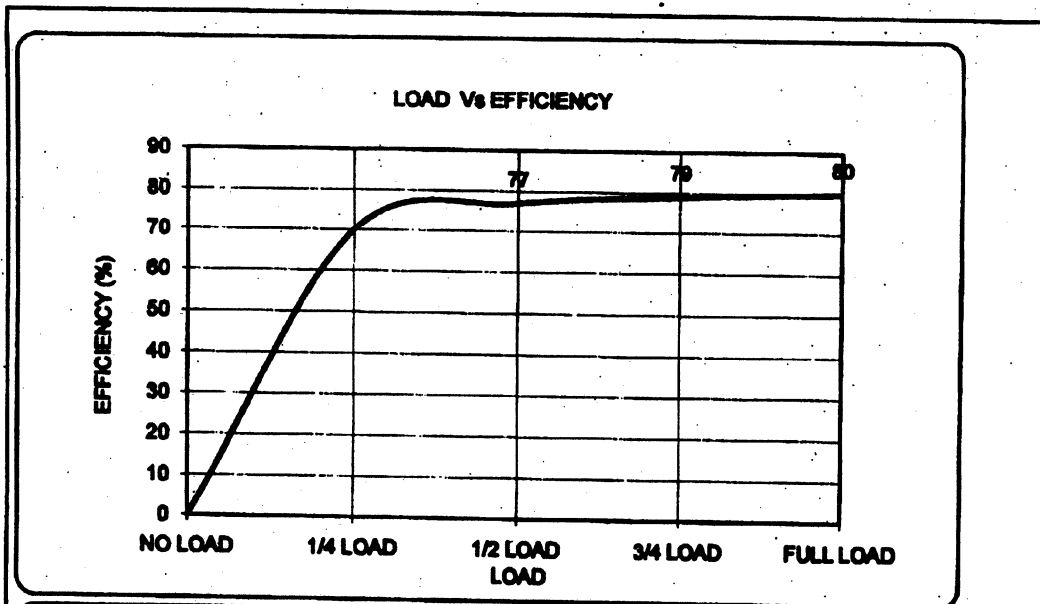
Rev.1	Rev.2
DI	DI
Rev.3	Rev.4
DI	DI

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V.P. No.		
जी.पी.नं. 6907/5972		



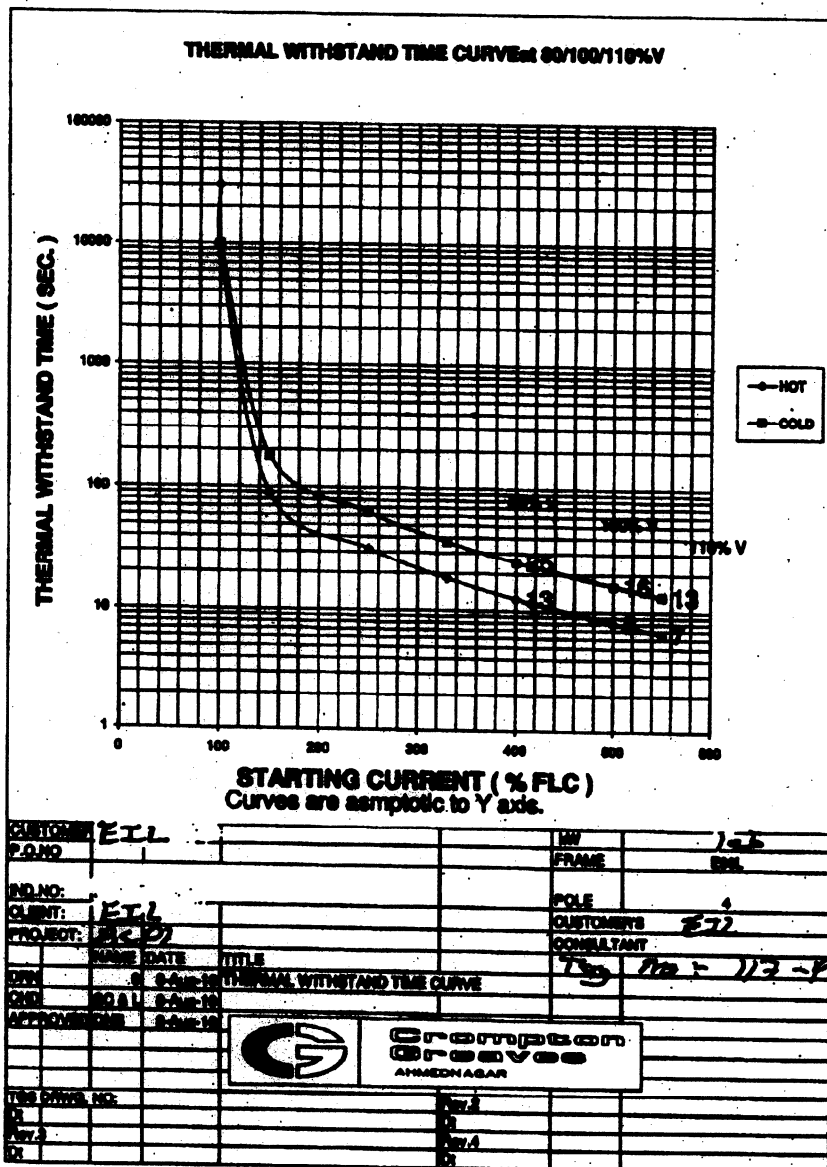
CUSTOMER: EIL		KW: 1.8	
P.O. NO:		FRAME: ESOL	
IND. NO:		POLE: 4	
CLIENT: EIL		TAG NO: 117-PM-942	
PROJECT: RED			
DRN	NAME	DATE	TITLE
PP	PP	28-Jun-11	EFFICIENCY AND POWER FACTOR CURVES
CHD	PPN	28-Jun-11	
APPROVED	ONS	28-Jun-11	
			Crompton Greaves AHMEDNAGAR
Rev.1			Rev.2
DI			DI
Rev.3			Rev.4
DI			DI

SEPL DOC NO: **53332-E2-PM-DRY-02**

REV: **01**

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Rev : 01

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**CERTIFICATE OF ROUTINE TEST
FOR 3 PHASE INDUCTION MOTOR**



Smart solutions.
Strong relationships.

CUSTOMER
ORDER NO. & DATE
INDENT NO. & DATE

MOTOR NO.	BEC2F4DJ	FRAME	E90L ✓	EXCISE REF NO.	KJAM9061
KILO WATT	1.5 ✓	DUTY	S1 ✓	INSU. CLASS	F ✓
VOLTS	415+-10%	FREQ	50+-5%	EFF (FL)	80% ✓
AMPS - CONN	3.26 STAR ✓	RATING	CONT	GAS GROUP	IIA,IIB
RPM	1415 ✓	AMB.	45°C		

BEARING DE/ODE	6205ZZ/6205ZZ	MOUNTING	B5	ENCLOSURE	FLAME PROOF
SPACE HEATER		DEG. OF PROT N	IP55	TYPE	SCR

THERMISTOR RESISTANCE BETWEEN TERMINAL **STATOR:** 6.979 Ω **ROTOR** **at Amb.** 30°C

TEST	VOLTS	AMP1	AMP2	AMP3	WATTS
NO LOAD	415	1.7	1.7	1.7	183
LOCKED ROTOR	135	4.3	4.3	4.3	422

INSULATION RESISTANCE (BEFORE AND AFTER HV TEST) ABOVE 150 MEGA Ω
REDUCED VOLTAGE RUNNING UP TEST AT 1/√3 RATED VOLTAGE OK
HIGH VOLTAGE TEST AT 2000 V FOR 1 MIN. OK
OPEN CIRCUIT ROTOR VOLTS (FOR SR MOTORS ONLY)

OTHER DETAILS

NL RPM 1509 **at** 50.32 Hzs

Remark TEMP CL.: T4

Reviewed by: *M.J. [Signature]*
S. A. Department
Bhilai Engineering Pvt. Ltd.

TEST WITNESSED BY:

WE CERTIFY THAT THIS MOTOR HAS BEEN ROUTINE TESTED AS PER IS 325 - 1996

WORKS : A-6/2, MIDC AREA, AHMEDNAGAR - 414 111, MAHARASHTRA -INDIA.
: D2/21/22/23 TIVIM INDUSTRIAL ESATE, KARASWADA BARDEZ,
GOA -403526, GOA-INDIA
GRAM : CROMGRE, PHONE : (0241) 2777372, 73, 75, 76, 78 FAX : (0241) 2777508,
TELEX: 0143- 203 CGLA IN

This certificate is
electronically generated
hence no signature
required

**QUALITY ASSURANCE
LT MOTORS**

FORMAT NO: QEF12 AUG. '97, Run Date: 19/10/2011 - 18:17:23.6667500