

Technical Data Sheet - Marathon Electric make Motors	
Indent Ref. : AEI/E/09/0145	
<b>DESCRIPTION</b>	
General	
Application	Crusher
Quantity	1
Make	M/s. Marathon Electric Motors (I) Ltd.
Frame Size	NDW710W
Application standard	IS:325
Type Of Motor	CACW Slip Ring Induction Motor
Duty Cycle	S1
Rated Continuous Output at 50 Deg C	450KW
Pole	10 Pole
Rated Speed	595 r.p.m.
Rated Voltage & Variation Range	5600 V <sub>±</sub> -10%
Rated Frequency & Variation Range	50 Hz. ±5%
Combine Variation	10%
Full Load Current	53.5 Amps
P.F. at (100%, 75%, 50% ) rated voltage & Frequency	0.78/0.73/0.60
Efficiency at (100%, 75%, 50% ) rated voltage & Frequency (%)	93.5/92.8/91.3
Rotor Voltage	686 Volts ±5%
Rotor Amps.	396 Amps ±5%
Stator Connection	Star
Rotor Connection	Star
Method of Starting	Rotor resistance starter
Starting Current	Depends on rotor resistance starter
Starting Torque	Depends on rotor resistance starter
P. O. T.	270% of F.L.T
Degree of Protection	IP-55
Method of Cooling	IC 8A1W7
Insulation Class	" F "
Temperature Rise Over 45 Deg. C Amb (By Resistance method)	Class "B"
Tropicalised	Yes
Bearing -Make	SKF/FAG/NTN/Equivalent
Type	Anti-Friction
Recommended Lubricant	Grease
Type of Mounting	Horizontal Foot (B3)
Motor GD2	1506 KgM <sup>2</sup>
Direction of Rotation	Bidirectional

Note :

- 1) All above performance figures are subject to IS tolerance.
- 2) Motor is fitted with 6 Nos. Pt.100, Simplex Type RTD, 2 Nos. Pt.100 Duplex Type BTM, Space Heater suitable for 240 Volt Supply, 50 Hz., 1-Ph., 1 no. PSTB, 1 no. NPT, 1 no. std. air insulated Rotor Terminal box
- 3) Noise & Vibration level will be as per IS.
- 4) Paint shade 631 of IS:5
- 5) Complete routine test as per IS:325 will be conducted.

*Approved*  
*Perish*  
 06/02/2019



*Perish*  
 16/05/2022



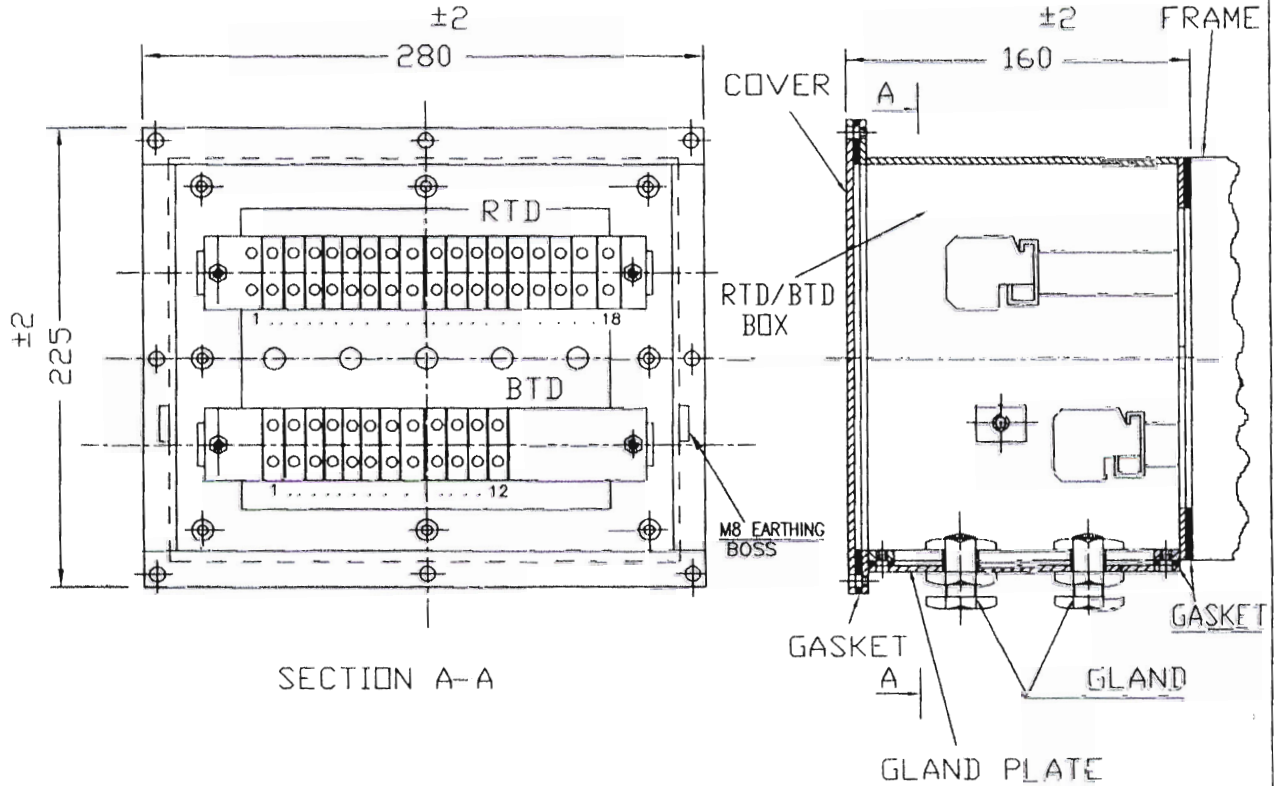


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REV.	CHK'D. APPV'D.	REV.	CHK'D. APPV'D.	REV.	CHK'D. APPV'D.	REV.	CHK'D. APPV'D.	REV.	CHK'D. APPV'D.

ALL DIMENSIONS ARE IN MM UNLESS STATED OTHERWISE

DEGREE OF PROTECTION - IP55.



G4		G3		G2		G1		01	RTD/BTD ARRANGEMENT	ASSEMBLY
QUANTITY								PT. NO.	DESCRIPTION	MATERIAL SPEC.
REF. DRG. A3C 17591										Marathon Electric Motors (India) Ltd. AEI WORKS, 1, TARATALA ROAD, KOLKATA-700024, INDIA
<b>SECTIONAL ASSLY. FOR RTD/BTD ARRANGEMENT</b>										
GEN. TOLERANCE		DRAWN		RANJAN.C		26.02.2015		DRAWING NO.		REV. NO.
SCALE		TRACED		---		---		A4G 17591A		00
NTS.		CHECKED		P.DAS		26.02.2015				
		APPV'D		S.SEN		26.02.2015				

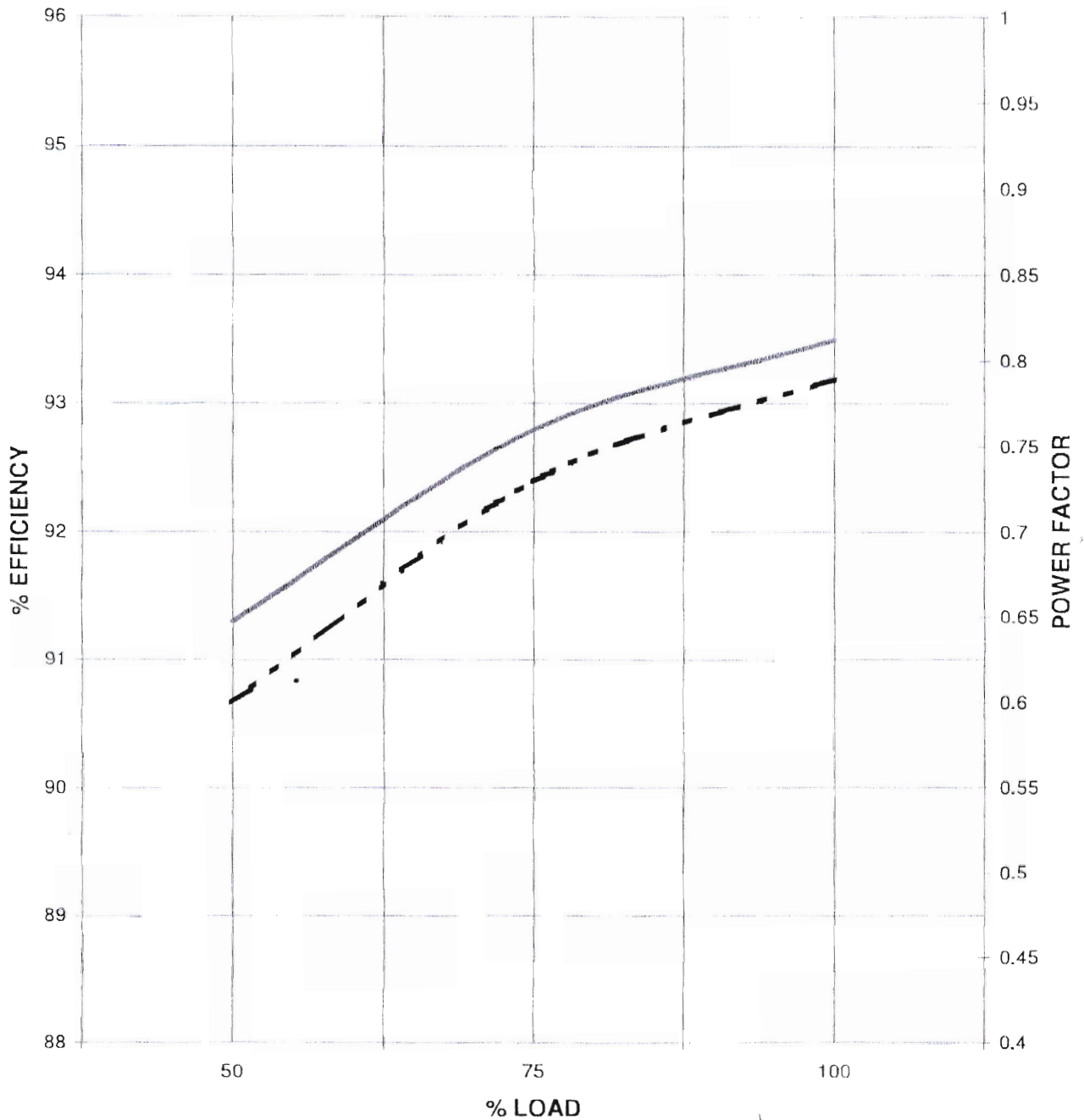
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*Handwritten:* Pending 16/05/2022

*Handwritten:* Approved P. Das 26/02/2015



**EFFICIENCY & POWER FACTOR VS % LOAD CURVE**  
**450 KW, 10 POLE, 6600V, NDW710W Motor**



----- EFFICIENCY      - - - - - POWER FACTOR

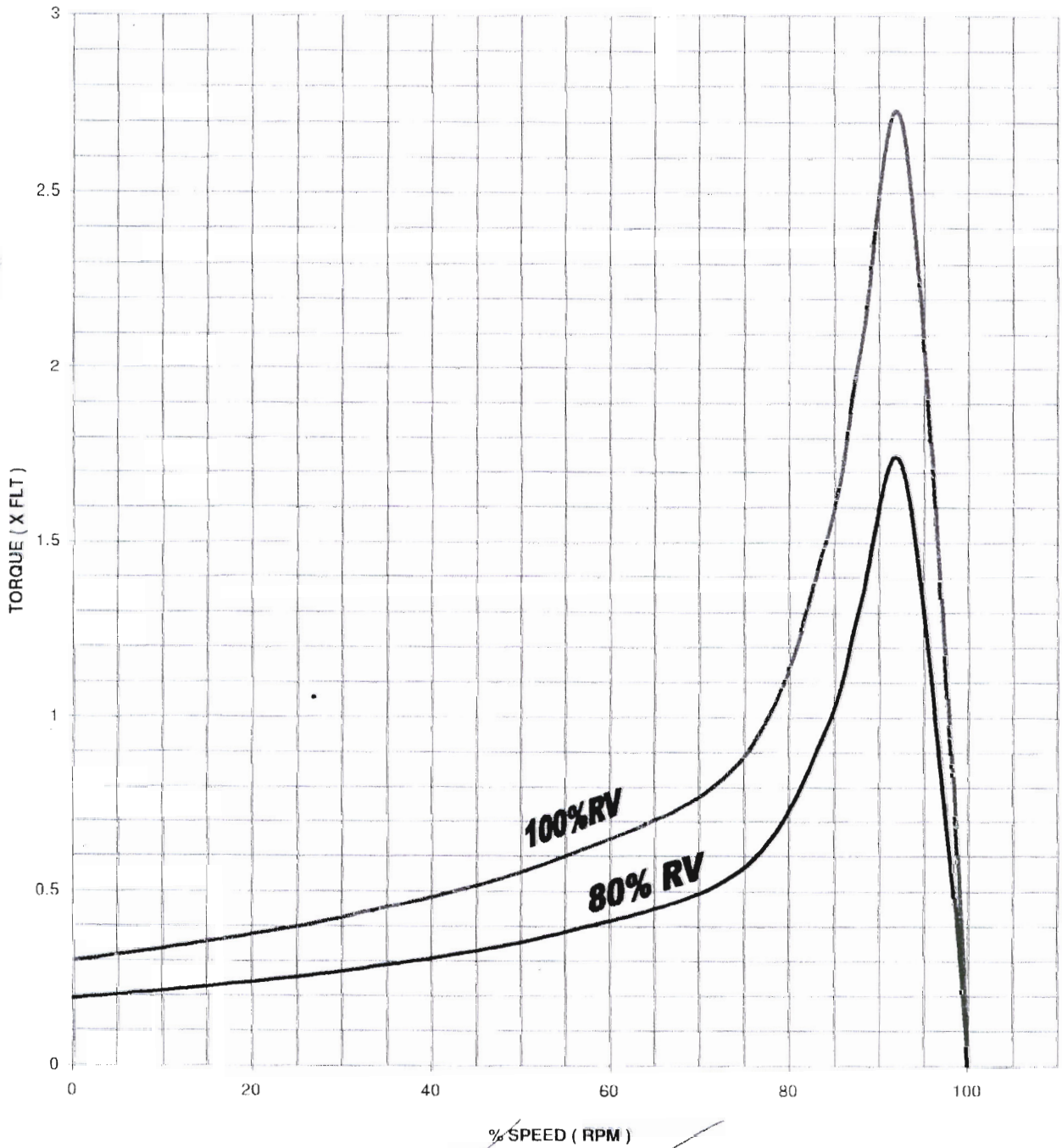
Marathon Electric Motors (I) Ltd.

*Perdumb*  
*16/11/2012*

*Approved*  
*Patil*  
*26/02/2012*



**TORQUE Vs. SPEED CHARACTERISTIC CURVE**  
 (Without External resistance to rotor ckt.)  
 450KW, 10 POLE, 6600 V, NDW710W MOTOR



Marathon Electric

*Approved*  
*Prakash*  
*06/02/2022*

T-S Chart 3

*Prakash*  
*16/05/2022*

