

ABB BALDOR RELIANCE III

Customer information packet

CEM3309T

5HP, 1160RPM, 3PH, 60HZ, 215TC, OPSB, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	OPSB
Frame	215TC
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	5.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CURUSEEV NEMA PREMIUM
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	14.800 A @ 230.0 V 7.400 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	7.4 a
Insulation Class	F
Inverter Code	Inverter Ready

Part Detail

Revision	F
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	37WGS521
Layout	37LYB102
Eff. date	01-02-2026
CD Diagram	CD0005
Poles	06
Leads	9#14
Proprietary	False
Created date	02-24-2020

IP Rating	NONE
KVA Code	K
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3744M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	18.19 IN
Power Factor	71
Product Family	General Purpose
Pulley Face Code	C-Face
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	1160 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP1259L									
CAT.NO.	CEM3309T								
SPEC.	37-0000-0220								
HP	5								
VOLTS	230/460								
AMP	14.8/7.4								
RPM	1160								
FRAME	215TC		HZ	60			PH	3	
SER.F.	1.15	CODE	K	DES	A	CL	F		
NEMA-NOM-EFF	89.5	PF	71						
RATING	40C AMB-CONT								
CC	010A								
DE	6307		ODE	6206					
ENCL	OPSB	SN							

AC Induction Motor Performance Data

Record # 53393

Typical performance - not guaranteed values

Winding: 37WGS521-R008			Type: 3744M		Enclosure: OPSB	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		5	Full Load Torque		22.5 LB-FT	
Volts		230/460	Start Configuration		direct on line	
Full Load Amps		14.8/7.4	Breakdown Torque		77.9 LB-FT	
R.P.M.		1160	Pull-up Torque		47.4 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque	54.8 LB-FT	
NEMA Design Code	A	KVA Code	K	Starting Current	53 A	
Service Factor (S.F.)		1.15	No-load Current		3.84 A	
NEMA Nom. Eff.	89.5	Power Factor	71	Line-line Res. @ 25°C	1.7514 Ω	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		33°C	
S.F. Amps			Temp. Rise @ S.F. Load		41°C	
			Locked-rotor Power Factor		23	
			Rotor inertia		1.09 LB-FT2	

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	33	53	65	71	74	76	73
Efficiency	84.5	89.4	90.1	89.5	88.3	86.5	88.8
Speed	1191.9	1183.8	1173.7	1164.6	1153.5	1139.2	1158
Line amperes	4.14	4.95	6.08	7.36	8.92	10.7	8.3

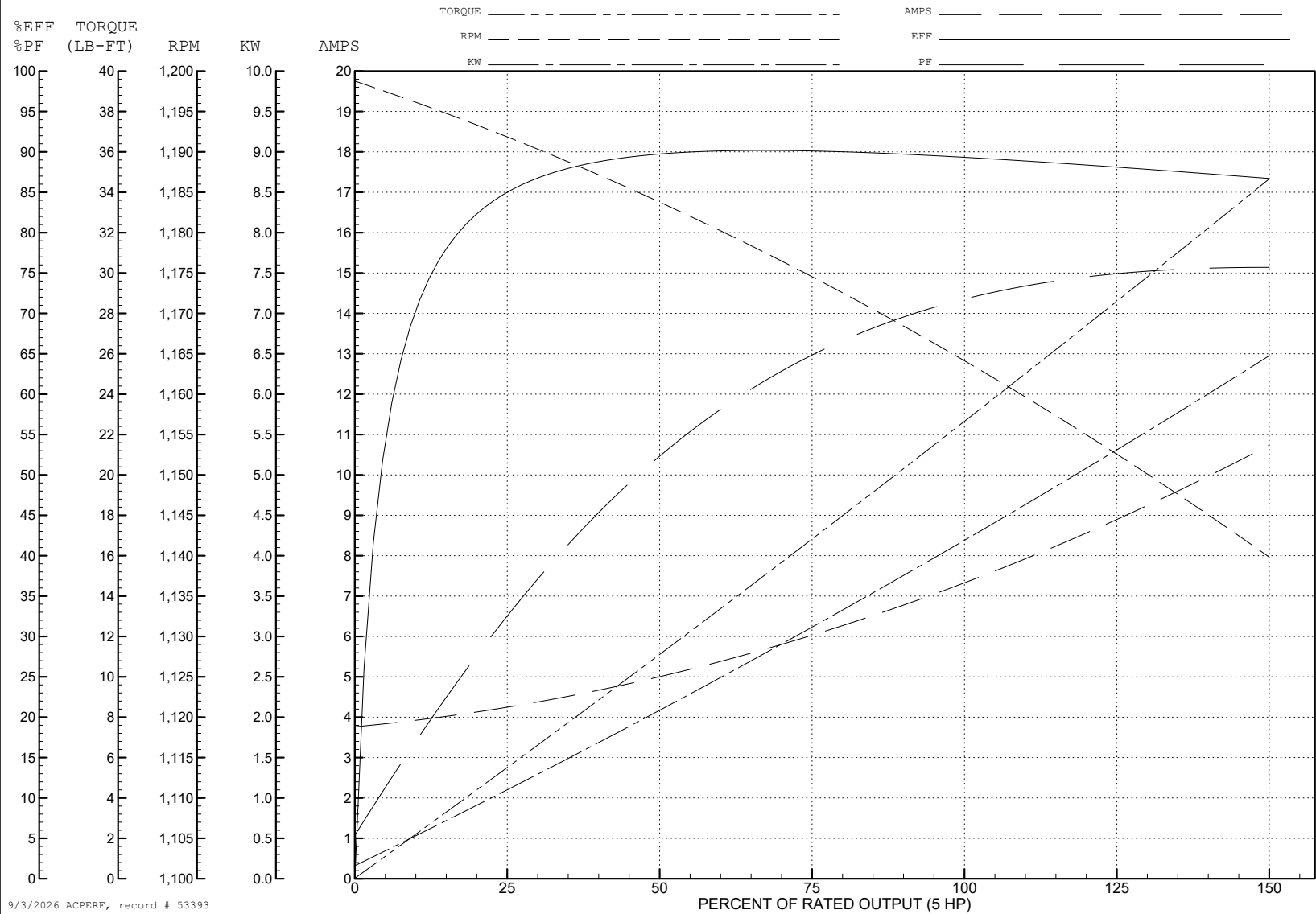
ABB Motors and Mechanical Inc.

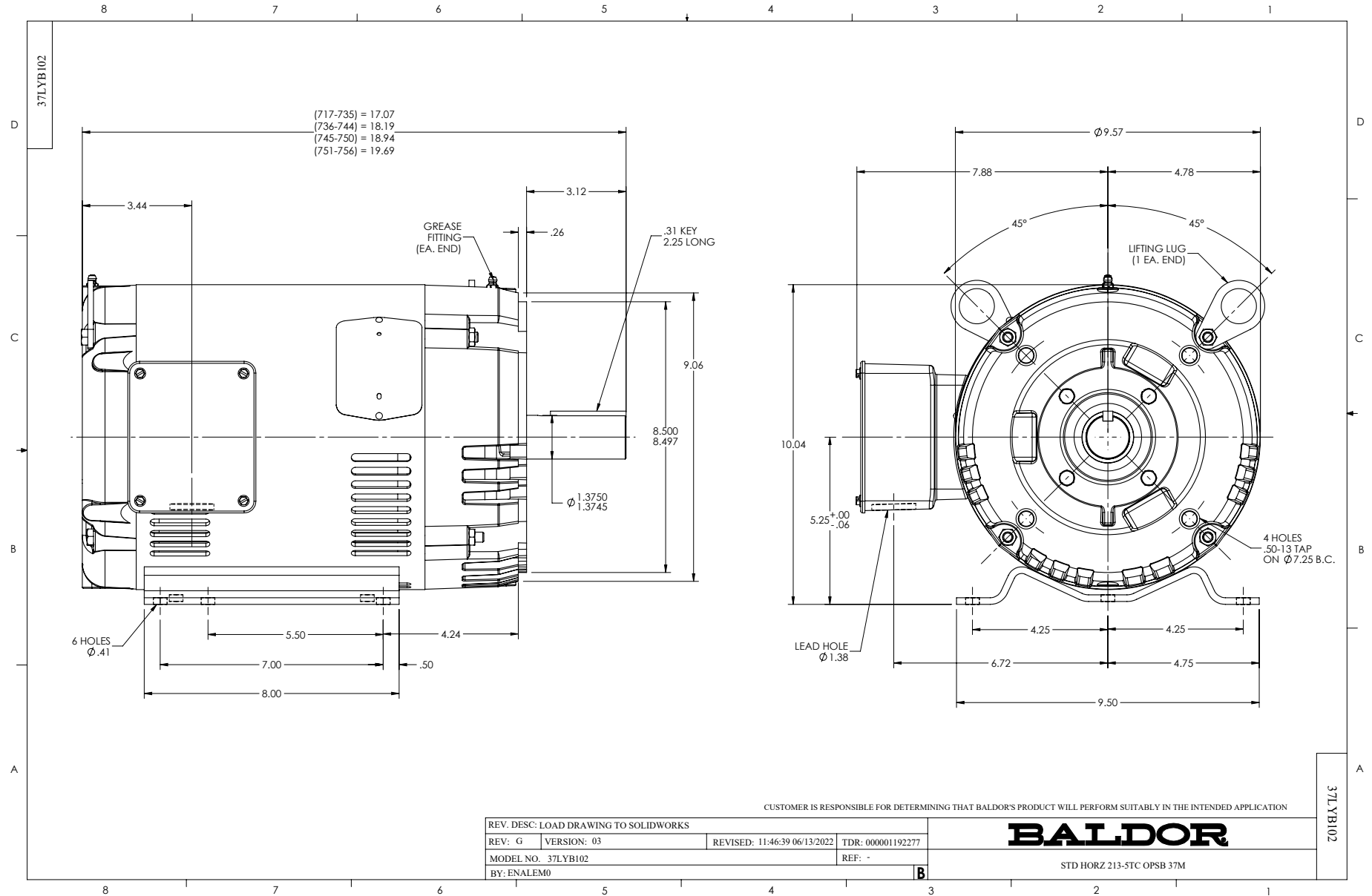
WINDING # 37WGS521

Typical performance - not guaranteed values.

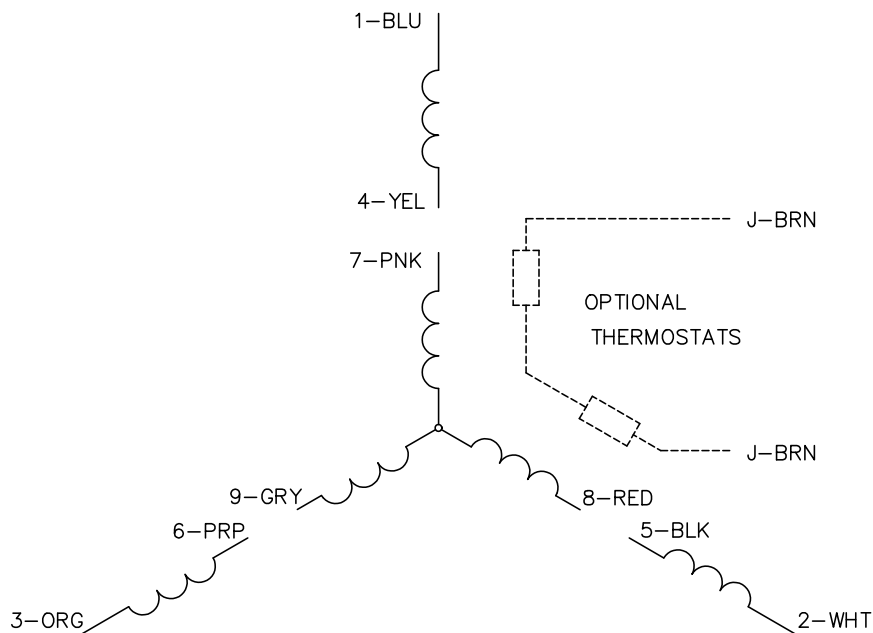
5 HP 3 PH 60 HZ 1160 RPM 460 V 3744M

TORQUES (LB-FT): PO=77.9 PU=47.4 LR=54.8 LRA=53

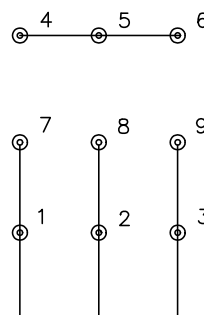




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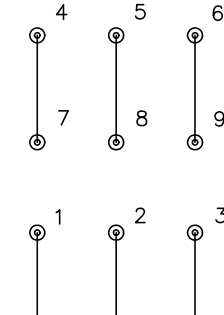


LOW VOLTAGE
(2Y)



LINE

HIGH VOLTAGE
(1Y)



LINE

NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS

REV. LTR: E BY: JLP REVISED: 01/19/99 10:15 TDR: 0171435

900000

FILE: AAA00005140

MDL: -

MTL: -

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005