

ABB BALDOR RELIANCE III

Customer information packet

CEM3704T-G

3HP, 1160RPM, 3PH, 60HZ, 213TC, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	213TC
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	3.000 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	CSA CSA EEV NEMA PREMIUM UR
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	9.200 A @ 230.0 V 4.600 A @ 460.0 V
Design Code	B
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	4.6 a

Part Detail

Revision	D
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	37WGS519
Layout	37LYJ841
Eff. date	05-01-2024
CD Diagram	CD0005
Poles	06
Leads	9#14
Proprietary	False
Created date	12-17-2019

Insulation Class	H
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	L
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3738M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	19.76 IN
Power Factor	68
Product Family	General Purpose
Pulley Face Code	C-Face
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.375 IN
Shaft Ground Indicator	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

NP3441LUA									
CAT.NO.	CEM3704T-G								
SPEC	37-0000-0188								
HP	3								
VOLTS	230/460								
AMPS	9.2/4.6								
RPM	1160								
FRAME	213TC		HZ	60		PH	3		
SF	1.15	CODE	L	DES	B	CLASS	H		
NEMA NOM. EFF	89.5	PF	68						
RATING	40C AMB-CONT								
CC	010A								
ENCL	TEFC	SER							
DE	6307		ODE	6206					
VPWM INVERTER READY									
CT6-60H(10:1)VT3-60H(20:1									
50HZ 3HP 190/380V 10.6/5.3A									SF1.0

AC Induction Motor Performance Data

Record # 37131

Typical performance - not guaranteed values

Winding: 37WGS519-R005			Type: 3738M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		3	Full Load Torque		13.4 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		9.2/4.6	Breakdown Torque		50.4 LB-FT		
R.P.M.		1160	Pull-up Torque		31.8 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		33.9 LB-FT	
NEMA Design Code		B	KVA Code	L	Starting Current		34 A
Service Factor (S.F.)		1.15		No-load Current		2.56 A	
NEMA Nom. Eff.		89.5	Power Factor	68	Line-line Res. @ 25°C		2.67 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		38°C	
S.F. Amps				Temp. Rise @ S.F. Load		45°C	
				Locked-rotor Power Factor		22.9	
				Rotor inertia		0.945 LB-FT2	

Load Characteristics 460 V, 60 Hz, 3 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	30	50	62	69	73	75	70
Efficiency	82.1	88.6	89.5	89.8	89.1	87.6	89.1
Speed	1193	1186	1178	1170	1160	1149	1166
Line amperes	2.74	3.19	3.82	4.53	5.44	6.41	5.14

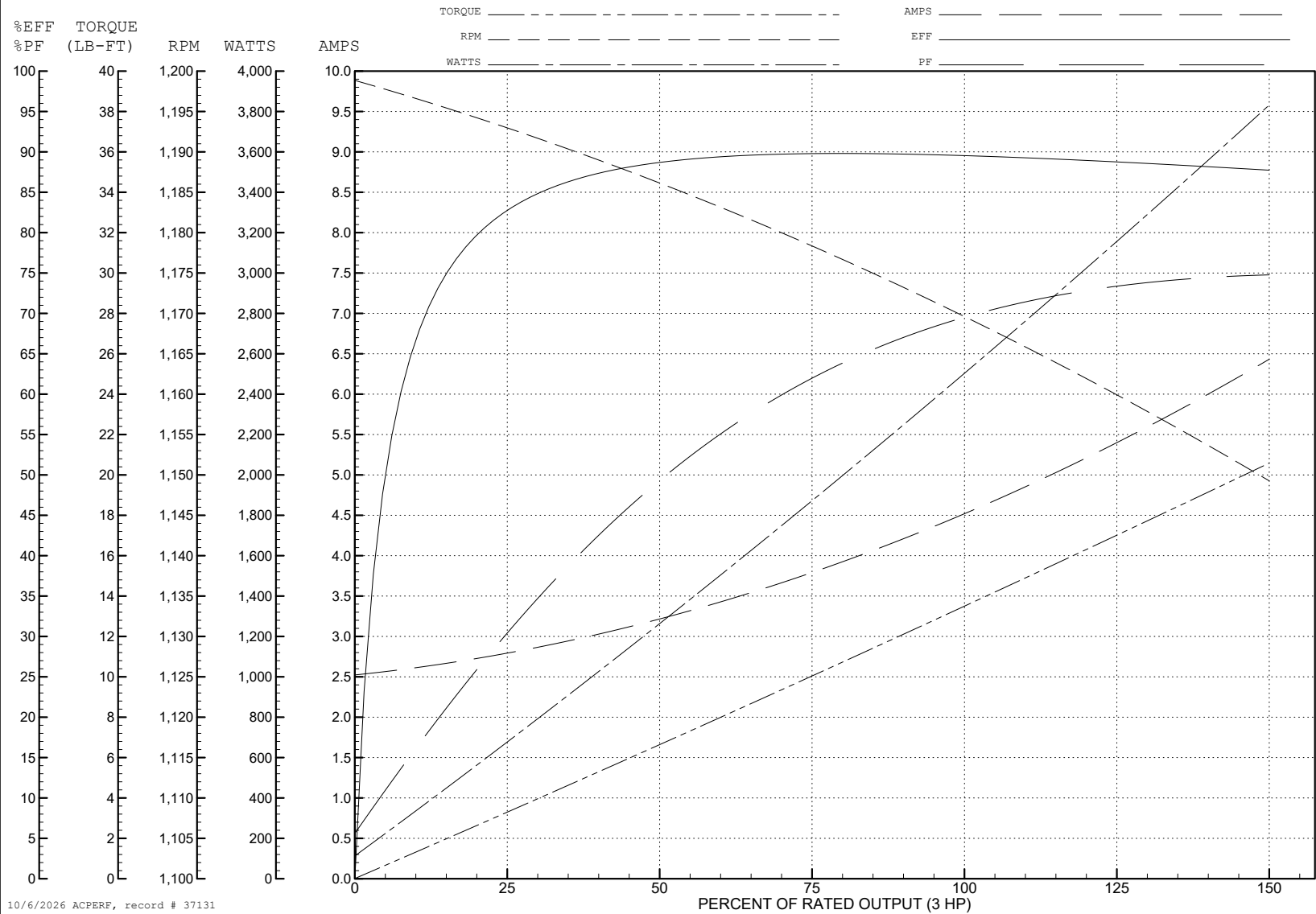
ABB Motors and Mechanical Inc.

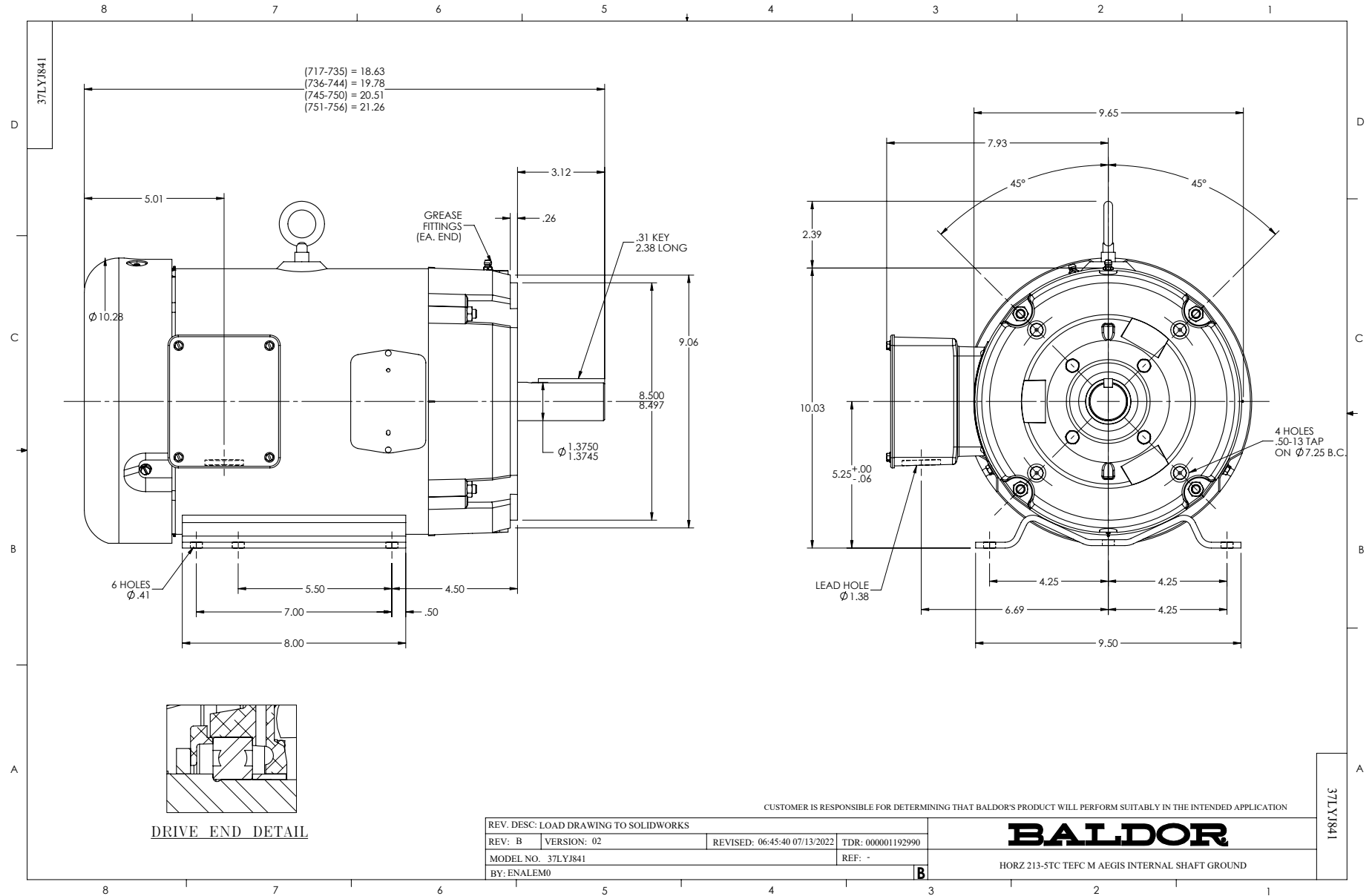
WINDING # 37WGS519

Typical performance - not guaranteed values.

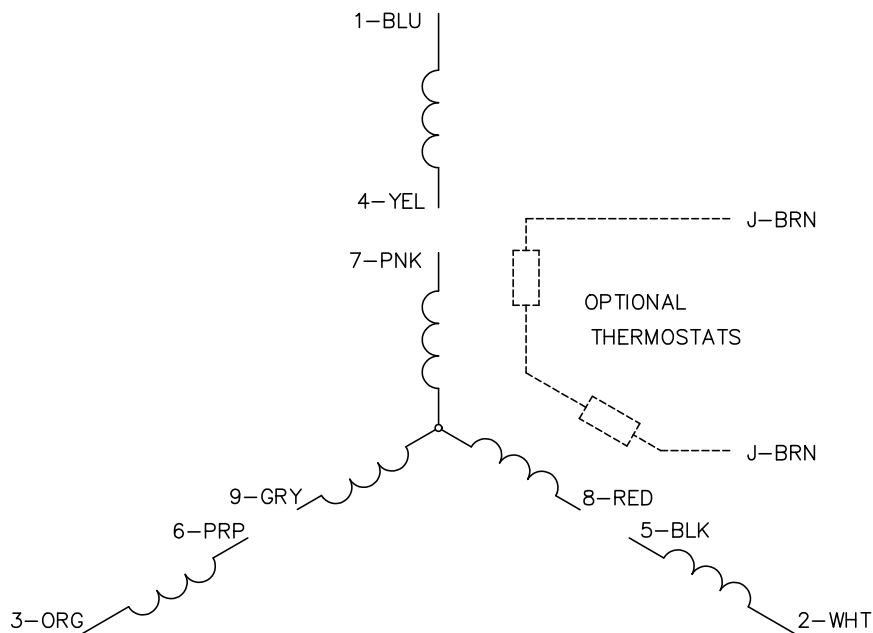
3 HP 3 PH 60 HZ 1160 RPM 460 V 3738M

TORQUES (LB-FT): PO=50.4 PU=31.8 LR=33.9 LRA=34

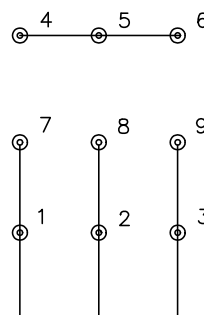




CD0005

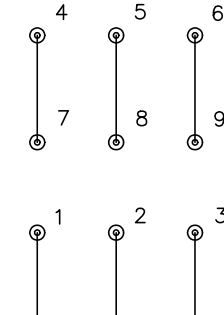


LOW VOLTAGE
(2Y)



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