

ABB BALDOR RELIANCE III

Customer information packet

CECP83770T-5

7.5HP, 1765RPM, 3PH, 60HZ, 213TC, 0740M, TEFC

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	213TC
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CL I GP A,B,C,D
Haz Area Division	Division II
Motor Letter Type	Three Phase
Output @ Frequency	7.520 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	CSA EEV NEMA PREMIUM NEMA_PREMIUM UR CCSA US
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
Constant Torque Speed Range	1.2
Current @ Voltage	7.520 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Enclosure Modification	841
Feedback Device	NO FEEDBACK
Front Face Code	Standard

Part Detail

Revision	AE
Type	AC
Mech. spec.	07M320
Base	
Status	PRD/A
Elec. spec.	07WGX614
Layout	07LYM320
Eff. date	04-16-2024
CD Diagram	CD0006
Poles	04
Leads	3#14
Proprietary	False
Created date	08-21-2012

Front Shaft Indicator	None
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	7.5 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 14 AWG
Motor Lead Termination	Ring Terminals
Motor Standards	NEMA
Motor Type	0740M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	20.23 IN
Power Factor	81
Product Family	Chem Process S/P 32-8 IEEE 841
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.375 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1765 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

NP4328									
CAT.NO.	CECP83770T-5								
SPEC.	07M320X614G1								
HP	7.5 TE			IP	56				
VOLTS	575								
AMPS	7.52								
R.P.M.	1765								
FRAME	213TC		HZ	60		PH	3		
SER.F.	1.15	CODE	H	DES.	B	CLASS	F		
RATING	40C AMB-CONT								
SN									
DE	6307		ODE	6307					
NEMA NOM. EFF.	91.7		P.F.	81					
GUAR. MIN. EFF.	90.2		CC	010A					
T. CODE	T3C		TEMP=	160					

NP3186									
SPEC.	07M320X614G1								
ABMA DE BRG	35BC03X30X								
ABMA ODE BRG	35BC03X30X								
GREASE	POLYREX EM								
MOTOR WEIGHT	211	ROTOR BARS		28	STATOR BARS		36		
MAX. R.P.M.	2700	MAX. KVAR		1.5					
INV.TYPE	PWM								
T=	160								
CHP	60	TO	90						
CT	1.2	TO	60						
VT	-0	TO	60						
HTR-VOLTS	N/A	HTR-AMPS		N/A					
HTR-WATTS	N/A	MAX. SPACE HEATER TEMP.							N/A

AC Induction Motor Performance Data

Record # 92345

Typical performance - not guaranteed values

Winding: 07WGX614-R013			Type: 0740M		Enclosure: TEFC		
Nameplate Data			575 V, 60 Hz: Single Voltage Motor				
Rated Output (HP)		7.5	Full Load Torque		22.21 LB-FT		
Volts		575	Start Configuration		direct on line		
Full Load Amps		7.6	Breakdown Torque		62.26 LB-FT		
R.P.M.		1765	Pull-up Torque		33.88 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		41.28 LB-FT	
NEMA Design Code		B	KVA Code	H	Starting Current		50.8 A
Service Factor (S.F.)		1.15	No-load Current		2.96 A		
NEMA Nom. Eff.		91.7	Power Factor	81	Line-line Res. @ 25°C		2.3 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		46°C	
S.F. Amps				Temp. Rise @ S.F. Load		57°C	
				Locked-rotor Power Factor		36.5	
				Rotor inertia		0.984 lb-ft²	

Load Characteristics 575 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	46	68	77	81	83	84	81
Efficiency	88.6	91.7	91.9	91.7	91	89.1	91.4
Speed	1791	1783	1774	1765	1755	1743	1758
Line amperes	3.42	4.47	5.85	7.52	9.35	11.35	8.68

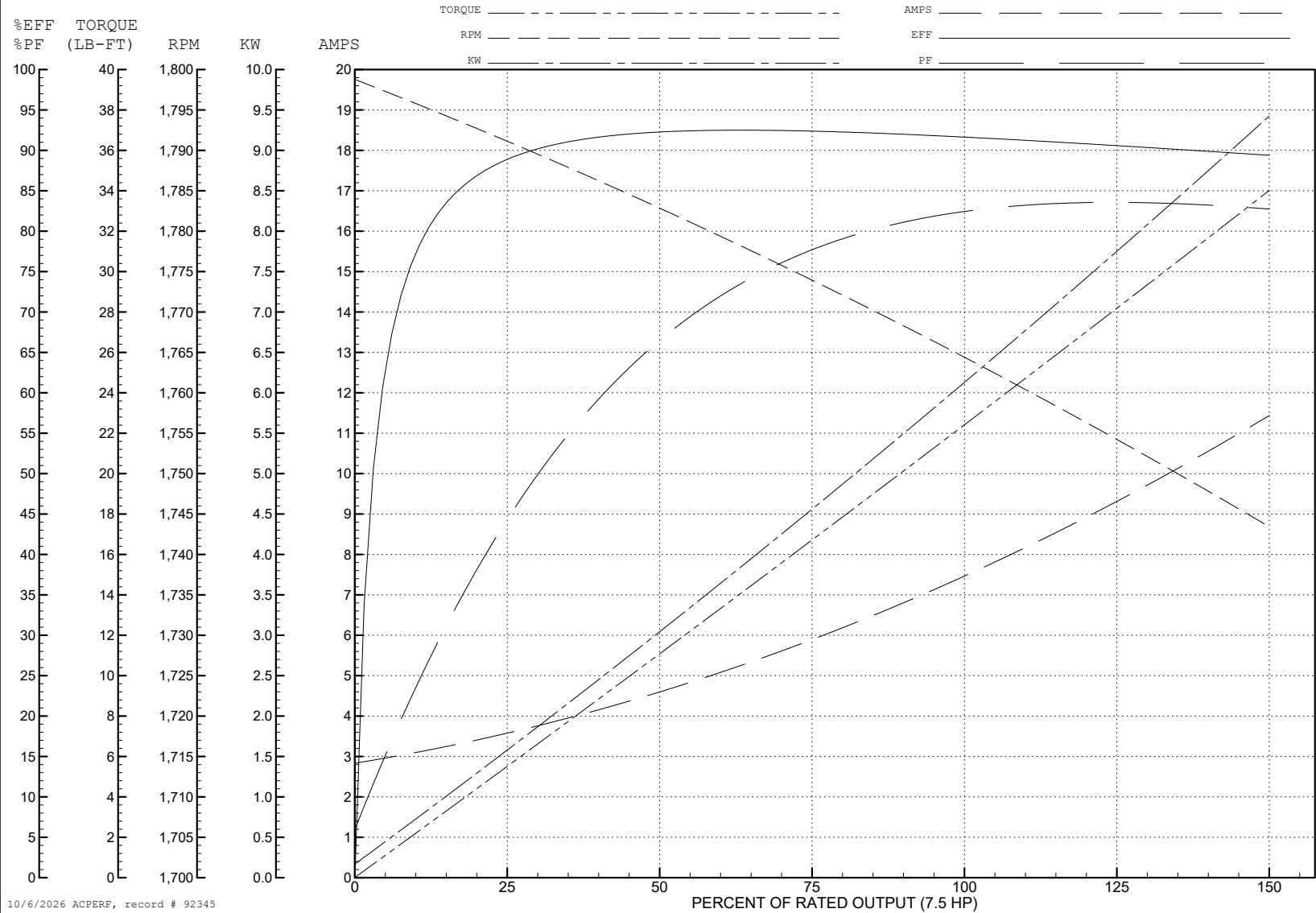
ABB Motors and Mechanical Inc.

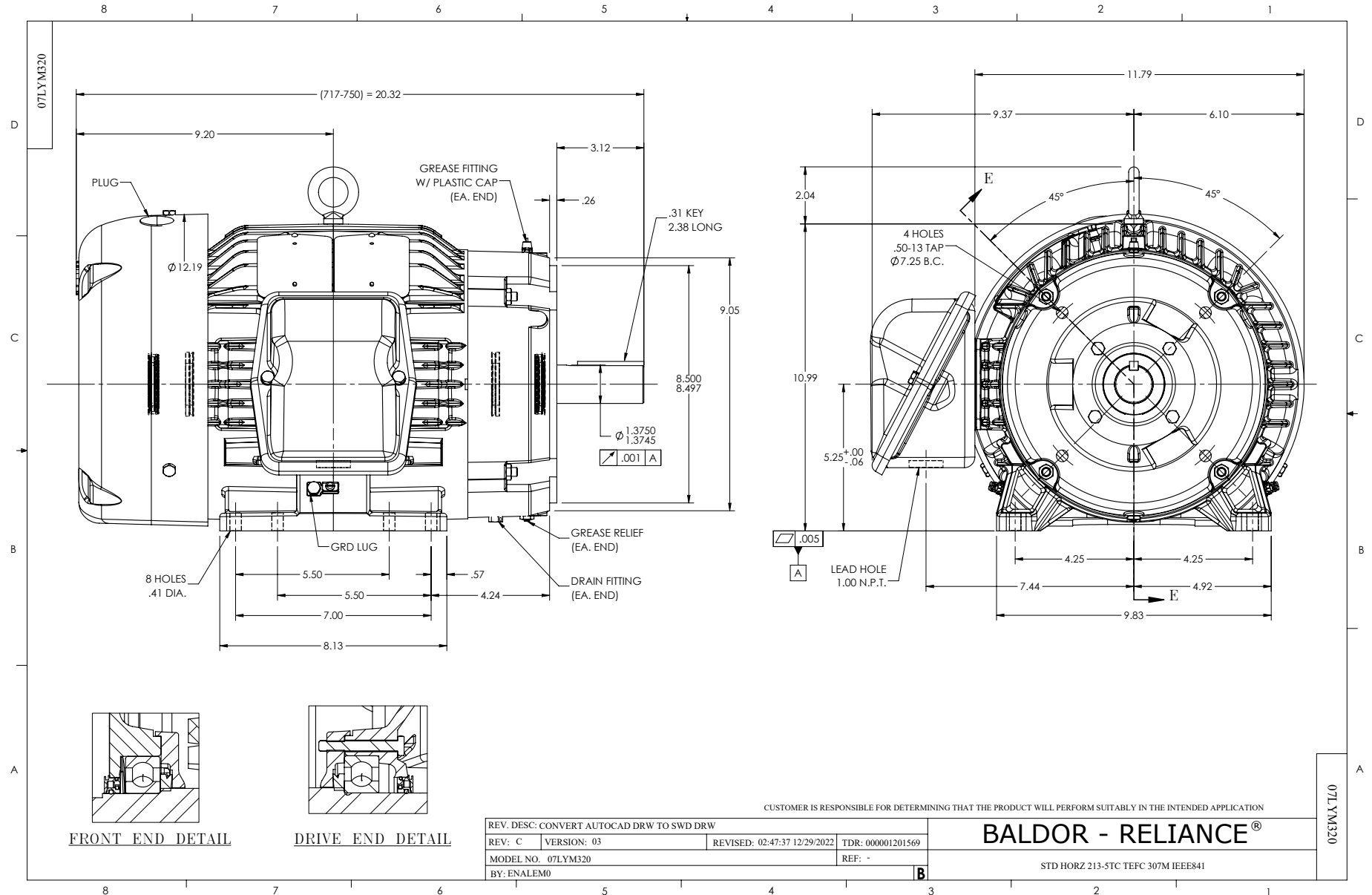
WINDING # 07WGX614

Typical performance - not guaranteed values.

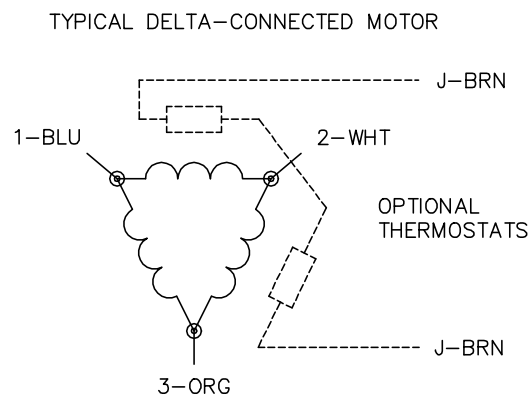
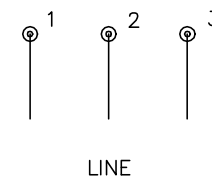
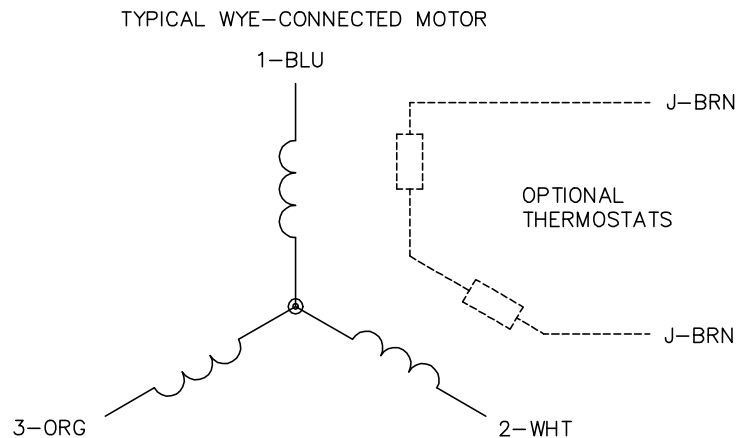
7.5 HP 3 PH 60 HZ 1765 RPM 575 V 0740M

TORQUES (LB-FT) : PO=62.26 PU=33.88 LR=41.28 LRA=50.8





CD0006


NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007

REV. LTR: E

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\141

REVISED: 10: 24: 49 02/19/2019

BY: ENBRIRO

MTL: —


BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

SH 1 of 1