

ABB BALDOR RELIANCE III

Customer information packet

ECP83771T-5

10HP, 3475RPM, 3PH, 60HZ, 215T, 0742M, TEFC, F1

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	215T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP A,B,C,D
Haz Area Division	Division II
Motor Letter Type	Three Phase
Output @ Frequency	10.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 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	6
Current @ Voltage	9.300 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	90.2 %
Electrically Isolated Bearing	Not Electrically Isolated
Enclosure Modification	841
Feedback Device	NO FEEDBACK
Front Face Code	Standard

Part Detail

Revision	AC
Type	AC
Mech. spec.	07K629
Base	
Status	PRD/A
Elec. spec.	07WGY302
Layout	07LYK629
Eff. date	07-18-2023
CD Diagram	CD0006
Poles	02
Leads	3#14
Proprietary	False
Created date	04-04-2012

Front Shaft Indicator	None
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	9.3 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0742M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	19.50 IN
Power Factor	91
Product Family	Super-E Chemical Processing
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
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	3500 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.	ECP83771T-5								
SPEC.	07K629Y302G1								
HP	10 TE			IP	56				
VOLTS	575								
AMPS	9.3								
R.P.M.	3500								
FRAME	215T		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.	90.2		P.F.	91					
GUAR. MIN. EFF.	88.5		CC	010A					
T. CODE	T3C		TEMP=	160					

NP3186									
SPEC.	07K629Y302G1								
ABMA DE BRG	35BC03X30X								
ABMA ODE BRG	35BC03X30X								
GREASE	POLYREX EM								
MOTOR WEIGHT	225	ROTOR BARS		28	STATOR BARS		36		
MAX. R.P.M.	5400	MAX. KVAR		N/A					
INV.TYPE	PWM								
T=	160								
CHP	60	TO		90					
CT	6	TO		60					
VT	3	TO		60					
HTR-VOLTS	N/A	HTR-AMPS		N/A					
HTR-WATTS		MAX. SPACE HEATER TEMP.							N/A

AC Induction Motor Performance Data

Record # 95364

Typical performance - not guaranteed values

Winding: 07WGY302-R003			Type: 0742M		Enclosure: TEFC	
Nameplate Data			575 V, 60 Hz: Single Voltage Motor			
Rated Output (HP)		10	Full Load Torque		14.92 LB-FT	
Volts		575	Start Configuration		direct on line	
Full Load Amps		9	Breakdown Torque		59.4 LB-FT	
R.P.M.		3475	Pull-up Torque		15.8 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque	26.9 LB-FT	
NEMA Design Code	B	KVA Code	H	Starting Current	64.9 A	
Service Factor (S.F.)		1.15	No-load Current		2.72 A	
NEMA Nom. Eff.	90.2	Power Factor	91	Line-line Res. @ 25°C	1.26 Ω	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		59°C	
S.F. Amps			Temp. Rise @ S.F. Load		73°C	
			Locked-rotor Power Factor		30.4	
			Rotor inertia		0.383 lb-ft²	

Load Characteristics 575 V, 60 Hz, 10 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	68	86	90	91	92	92	92
Efficiency	77.9	85.8	87.6	90.2	87.8	86.8	88
Speed	3577	3553	3529	3503	3473	3440	3485
Line amperes	3.52	5.16	7.17	9.3	11.59	14.18	10.7

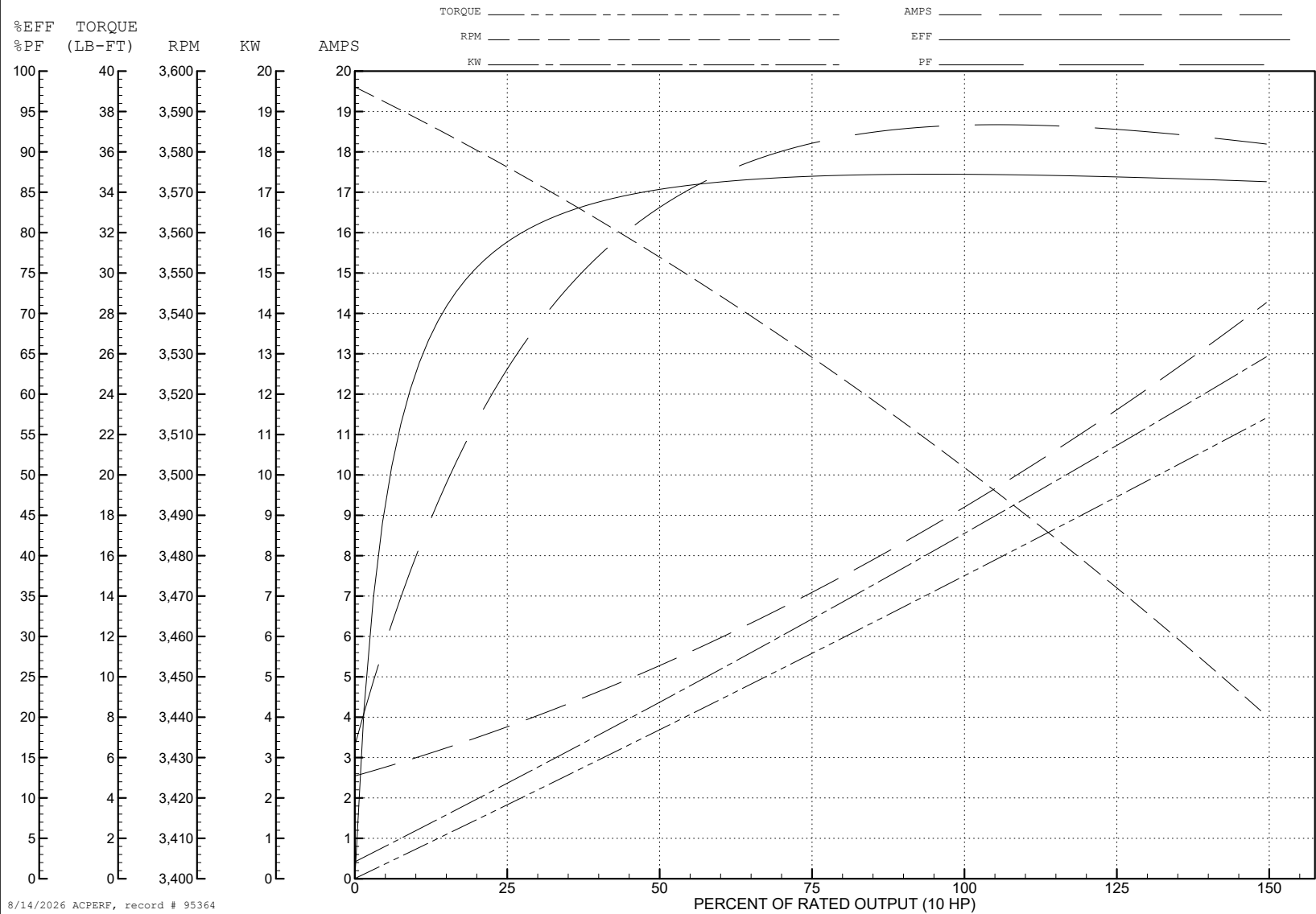
ABB Motors and Mechanical Inc.

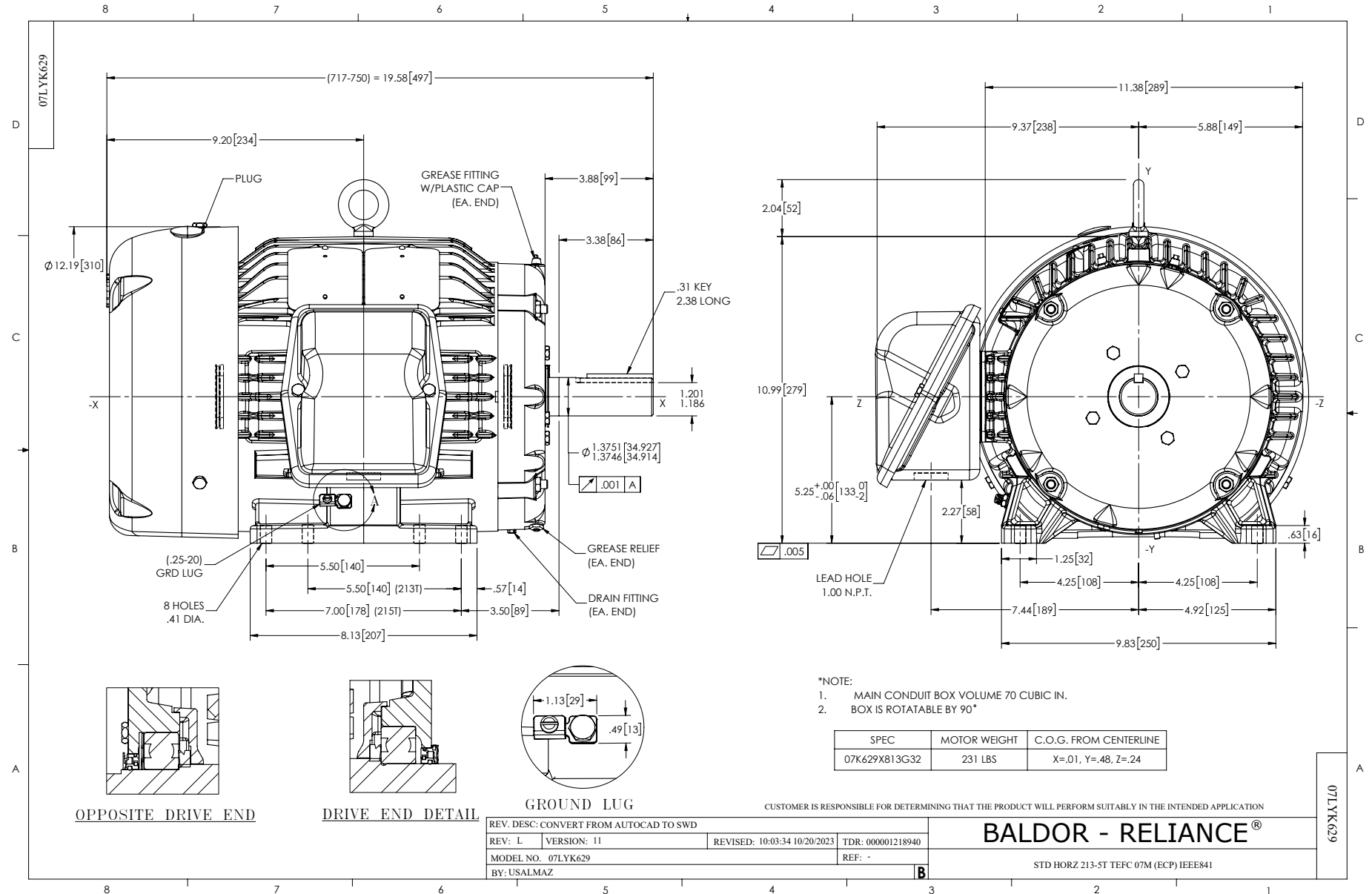
WINDING # 07WGY302

Typical performance - not guaranteed values.

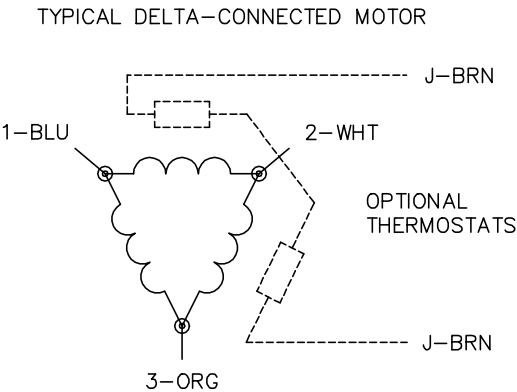
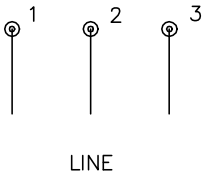
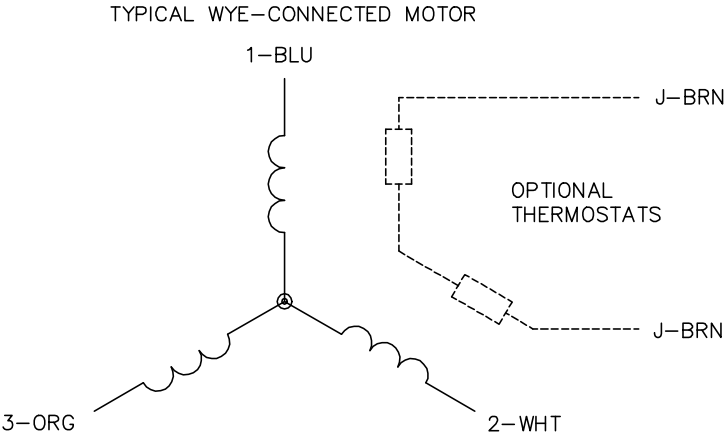
10 HP 3 PH 60 HZ 3475 RPM 575 V 0742M

TORQUES (LB-FT) : PO=59.4 PU=15.8 LR=26.9 LRA=64.9





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

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