

BALDOR • RELIANCE

Customer information packet

VECP83770T-4

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	7.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CSA EEV NEMA PREMIUM NEMA_PREMIUM UR CCSA US
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Constant Torque Speed Range	1.2
Current @ Voltage	9.500 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part detail

Revision	AL
Type	AC
Mech. spec.	07M323
Base	
Status	PRD/A
Elec. spec.	07WGX814
Layout	07LYM323
Eff. date	07-26-2022
CD Diagram	CD0006
Poles	04
Leads	3#14
Proprietary	False
Created date	08-21-2012

Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	9.5 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	Flying Leads
Motor Standards	NEMA
Motor Type	0740M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	20.24 IN
Power Factor	82
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	No 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.	VECP83770T-4								
SPEC.	07M323X814G1								
HP	7.5 TE					IP	56		
VOLTS	460								
AMPS	9.5								
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.	82					
GUAR. MIN. EFF.	90.2	CC	010A						
T. CODE	T3C		TEMP=	160					

NP3186

SPEC.	07M323X814G1		
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	1.3
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		MAX. SPACE HEATER TEMP.	N/A

AC Induction Motor Performance Data

Record # 92344

Typical performance - not guaranteed values

Winding: 07WGX814-R056		Type: 0740M	Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: Single Voltage Motor		
Rated Output (HP)	7.5	Full Load Torque	22.32 LB-FT		
Volts	460	Start Configuration	direct on line		
Full Load Amps	9.5	Breakdown Torque	66.8 LB-FT		
R.P.M.	1765	Pull-up Torque	30 LB-FT		
Hz	60 Phase	3	Locked-rotor Torque	39.7 LB-FT	
NEMA Design Code	B	KVA Code	H	Starting Current	63.5 A
Service Factor (S.F.)	1.15	No-load Current	3.71 A		
NEMA Nom. Eff.	91.7	Power Factor	81	Line-line Res. @ 25°C	1.485 Ω
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load	54°C	
S.F. Amps			Temp. Rise @ S.F. Load	67°C	
			Locked-rotor Power Factor	36.2	

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	46	68	78	82	84	85	83
Efficiency	88.6	92.1	92.4	91.7	90.7	89.3	91.1
Speed	1789.9	1782.7	1774.5	1765.4	1755.6	1743.7	1760
Line amperes	4.3	5.61	7.32	9.31	11.5	13.9	10.6

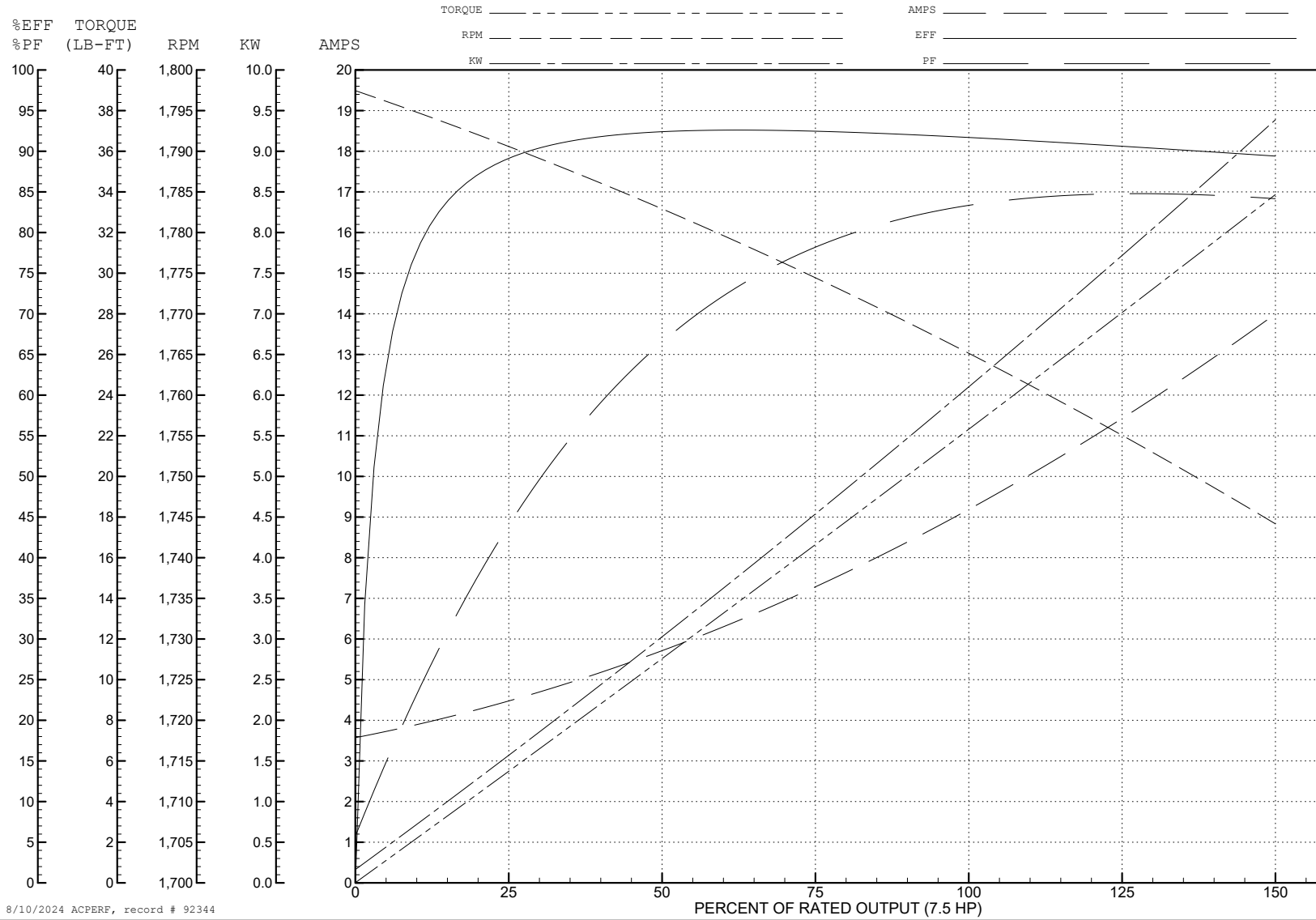
ABB Motors and Mechanical Inc.

WINDING # 07WGX814

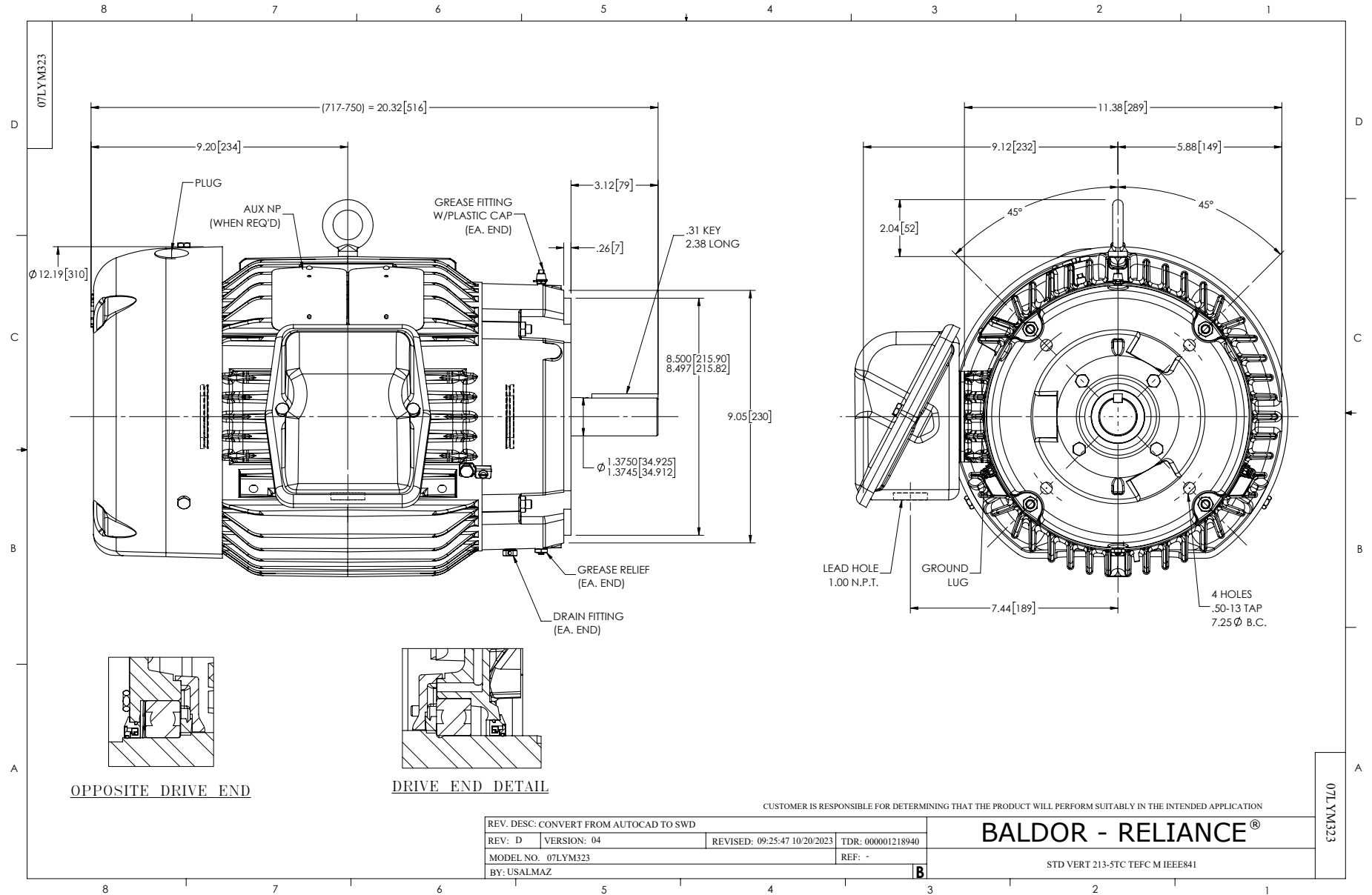
Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 1765 RPM 460 V 0740M

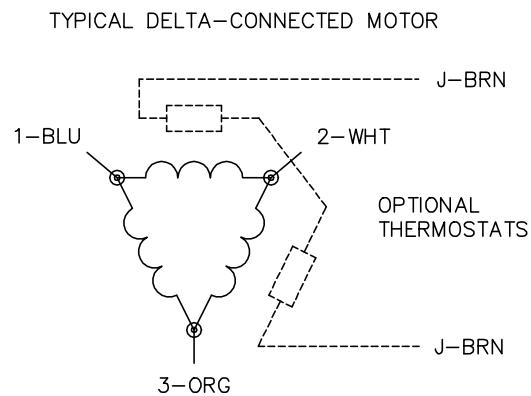
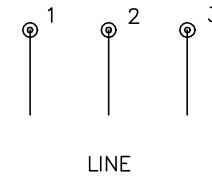
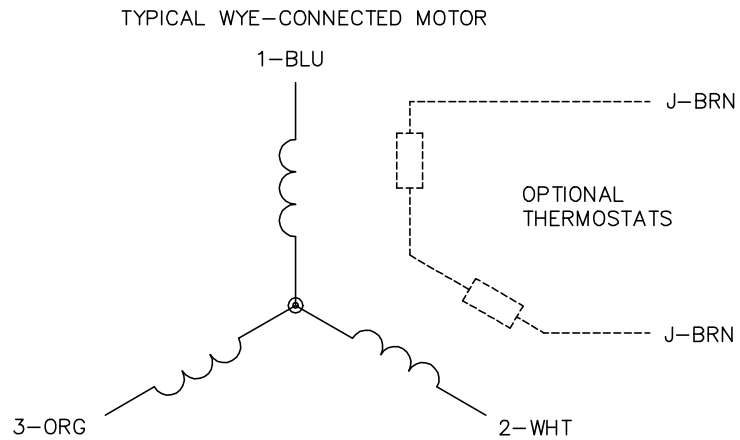
TORQUES (LB-FT): PO=66.8 PU=30 LR=39.7 LRA=63.5



8/10/2024 ACPERF, record # 92344



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

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