



Customer information packet

VECP83770T-4

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

ELECTRIC MOTOR WHOLESale.COM

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	213TC
Frame Material	Iron
Frequency	60.00 Hz
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
XP Class and Group	CL I GP A,B,C,D
XP Division	Division II
Agency Approvals	CSA CSA EEV NEMA PREMIUM UR
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
Heater Indicator	No Heater

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

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	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	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
XP Temp Code	T3C

Nameplate

NP4328E									
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						

NP3186E

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

Parts list

Part number	Description	Quantity
SA250236	SA 07M323X814G1	1.000 ea
RA237092	RA 07M323X814G1	1.000 ea
37FN3002C01	EXFN, PLASTIC, 6.00 OD, 1.155 ID	1.000 ea
HW3201A05	3/8-16 EYEBOLT	1.000 ea
09CB1002A05G	CONDUIT BOX, 1.00 N.P.T. (GRAY)	1.000 ea
RM1017	LEAD SEPERATOR GASKET MODEL 307 1/8" THK	1.000 ea
19XW2520A16	SCREW,1/4-20X1 TAPTITE-II OR ROLOC 91	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
HW3001B01	BRASS CUP WASHER, FOR #10 SCREW	1.000 ea
10XN2520S06	1/4 20X3/8 HX HD CAP S.S.	2.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
07EP1119A02G	307 BRG,C.I.FH,GRSR,RLF,DRAIN FITTING,IN	1.000 ea
HW4601A25	200.O SEAL, 307 BRG, VBX,	1.000 ea
10XN2520A26	1/4-20X 1 5/8 HEX HD	4.000 ea
HW4500A32	FIT./EXT 1698-B (ALEMITE)GREASE FITTING	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HA4010A01	T-DRAIN PLUG,416 S.S.,W/ 1/4-28 THD & .0	1.000 ea
HW5100A08	W3118-035 WVY WSHR (WB)	1.000 ea
37EP1314A01G	PU ENDPLATE, MACH GRAY	1.000 ea
HW4601A25	200.O SEAL, 307 BRG, VBX,	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HA4002A03	#304 S.S. DRAIN FITTING, .125 NPT (.44 H	1.000 ea
10XN2520A30	HEX HD CAP SCREW-STD THD-.25 X 20 THD PE	4.000 ea
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 ea
XY3118A12	5/16-18 HEX NUT DIRECTIONAL SERRATION	4.000 ea
07FH1001A01G	SPL FAN HOUSING, 307, W/GREASER, GRAY EP	1.000 ea
10XN2520A28	1/4-20X 1 3/4 HEX HD	3.000 ea
WD4100A02	DP-1000 HEYCO PLUG OR 62MP1000 MICRO PL	1.000 ea

12CB1503G	CONDUIT BOX CAST. (GRAY)	1.000 ea
09GS1013A01	09 GS FOR 09CB3501 LID - BLACK NEOPRENE	1.000 ea
10XN2520A12	1/4-20 X 3/4 HEX HEAD CAP	2.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 ea
MJ5001A02	732 CL SEALANT 3 OZ DIXIE BEARING 289100	0.010 ea
HW2501F21	KEY, 5/16 SQ X 2.375	1.000 ea
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	1.000 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 qt
MJ1000A73	INPRO P-80 ASSEMBLY LUB./ 1 QT. CONTAIN	0.001 qt
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 ea
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 ea
LT0019A00	MOTOR NO-LOAD PERFORMANCE DATA SHEET	1.000 ea
WD1000D21	TRM,T&B #B71M,RING,18-14,.25,NON-INSL	3.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1025N19	WILKOFAS, 778.50, RELIANCE BLUE-GREEN 8	0.036 ga
HA3104A32	THRUBOLT- 5/16-18 X12.750	4.000 ea
LB1119N	WARNING LABEL	1.000 ea
LB1002N	LABEL,MARINE DUTY (ON ROLLS)	1.000 ea
LC0006	CONNECTION LABEL	1.000 ea
LB1449	DIV-2/NEC WARNING LABEL	1.000 ea
NP4328E	SS IEEE841-2021 DIV-2 UL CSA-C US EEV	1.000 ea
NP3186E	SS IEEE841 INV AUX DATA INFORMATION	1.000 ea
07PA1011	PKG GRP, 07 CAST IRON PK1181	1.000 ea
07PA1095	PKG GRP, VER 07 CAST IRON	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2200bx) 4/22	1.000 ea

AC Induction Motor Performance Data

Record # 83955

Typical performance - not guaranteed values

Winding: 07WGX814-R056		Type: 0740M		Enclosure: TEFC		
Nameplate Data			368 V, 60 Hz: Single Voltage Motor			
Rated Output (HP)	7.5	Full Load Torque	22.6 LB-FT			
Volts	460	Start Configuration	direct on line			
Full Load Amps	9.5	Breakdown Torque	41.76 LB-FT			
R.P.M.	1765	Pull-up Torque	20.55 LB-FT			
Hz	60 Phase	3	Locked-rotor Torque	26.49 LB-FT		
NEMA Design Code	B KVA Code	H	Starting Current	51.32 A		
Service Factor (S.F.)	1.15	No-load Current	2.84 A			
NEMA Nom. Eff.	91.7 Power Factor	81	Line-line Res. @ 25°C	1.47 Ω		
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load	73°C		
S.F. Amps			Temp. Rise @ S.F. Load	97°C		
			Locked-rotor Power Factor	36.2		
			Rotor inertia	0.984 lb-ft ²		

Load Characteristics 368 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	63	80	85	86	84	82	85
Efficiency	90.9	92.4	91.5	89.8	87.4	84.2	88.4
Speed	1787	1775	1762	1746	1727	1700	1735
Line amperes	3.89	5.98	8.5	11.39	14.91	19.04	13.5

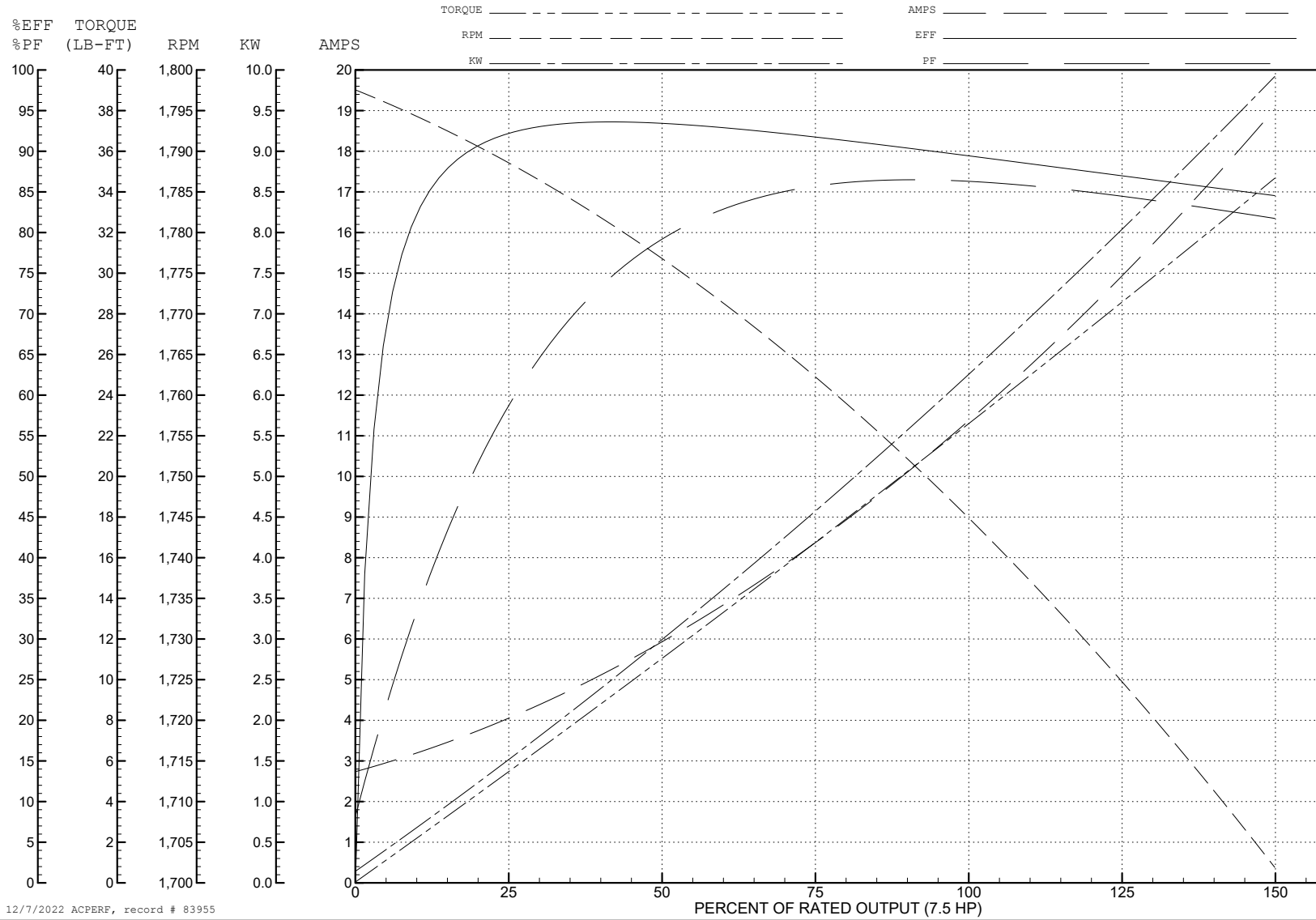
ABB Motors and Mechanical Inc.

WINDING # 07WGX814

Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 1765 RPM 368 V 0740M

TORQUES (LB-FT): PO=41.76 PU=20.55 LR=26.49 LRA=51.32



12/7/2022 ACPERF, record # 83955

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	49°C	
S.F. Amps			Temp. Rise @ S.F. Load	61°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

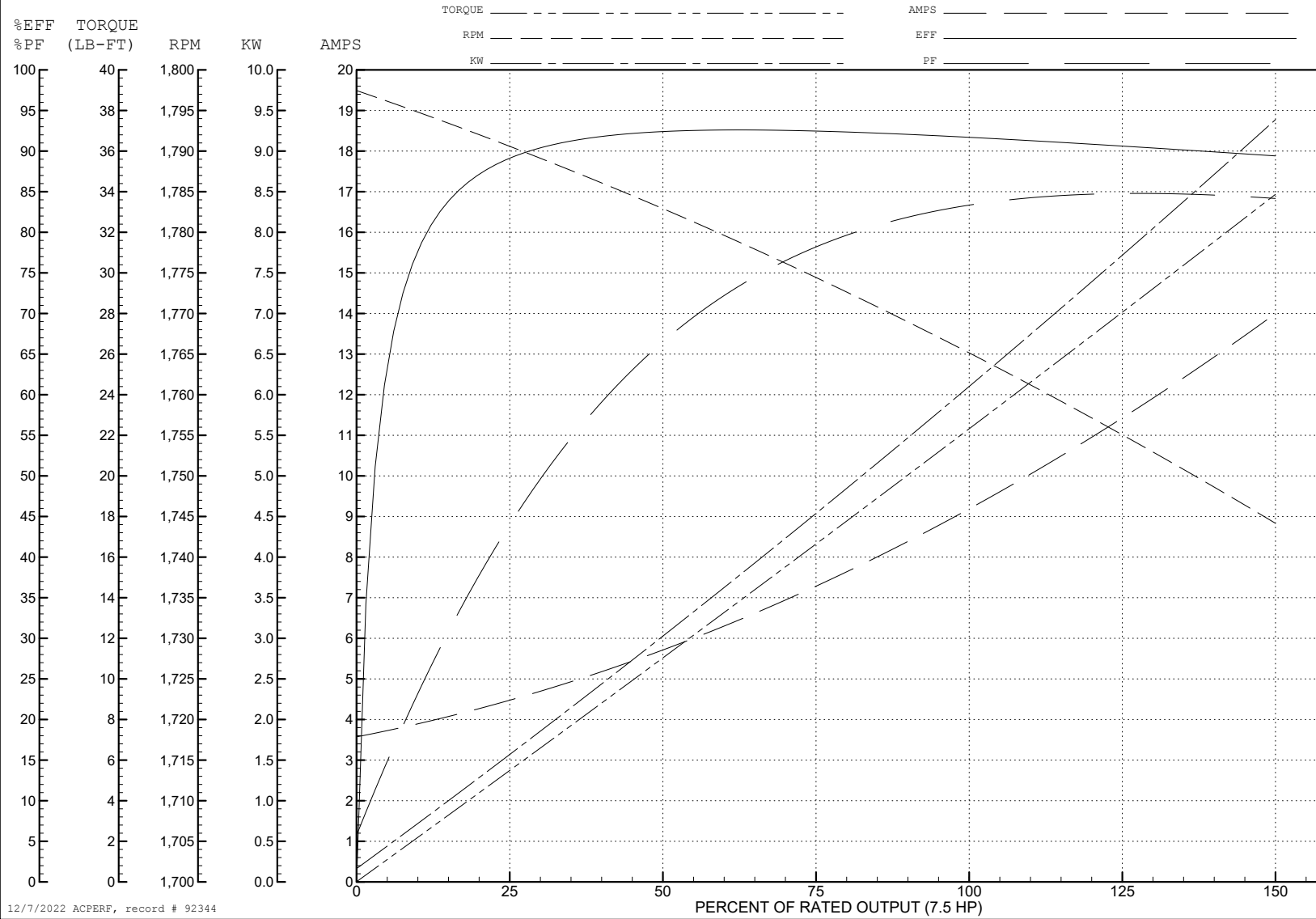
ABB Motors and Mechanical Inc.

WINDING # 07WGX814

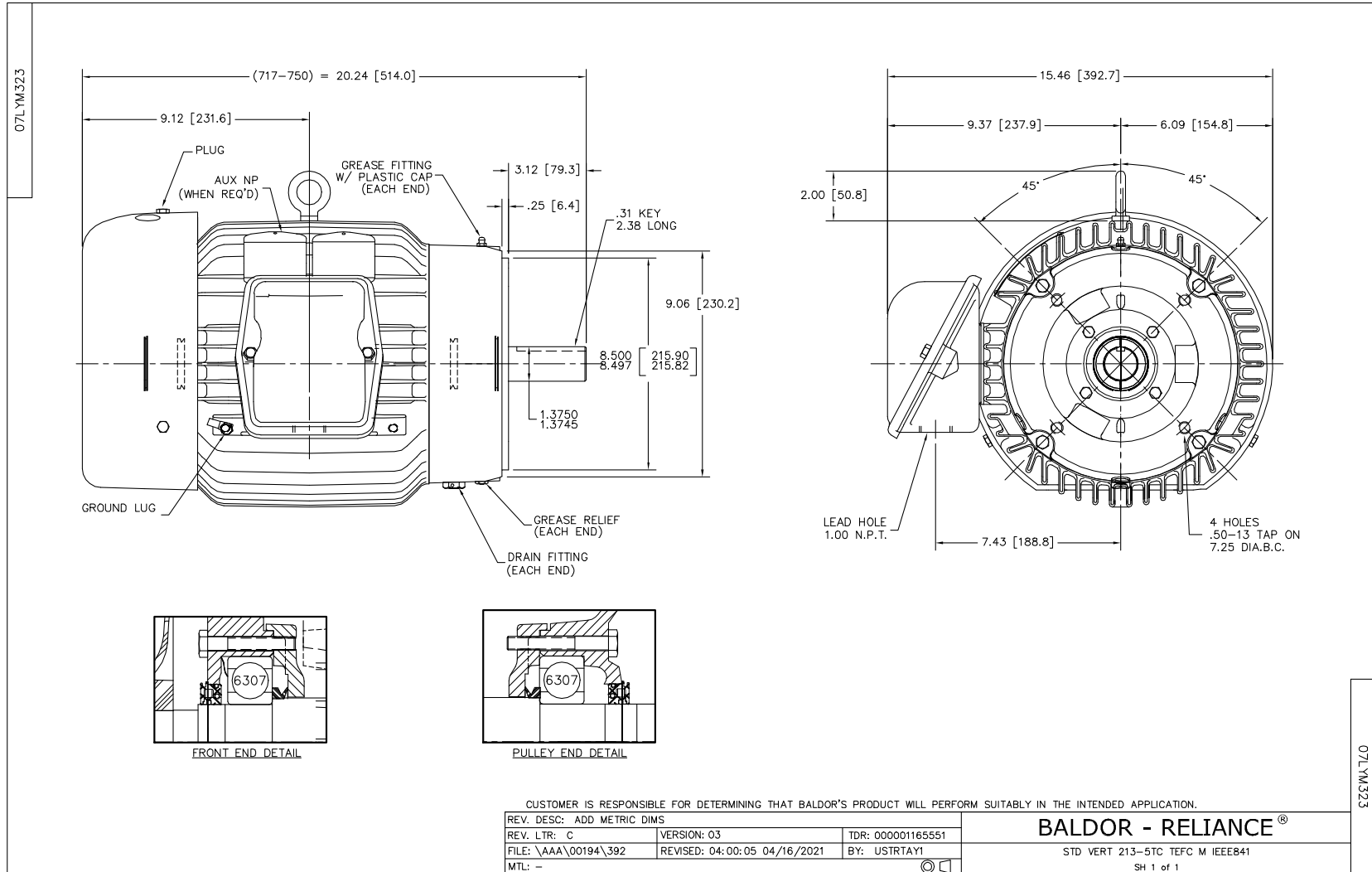
Typical performance - not guaranteed values.

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

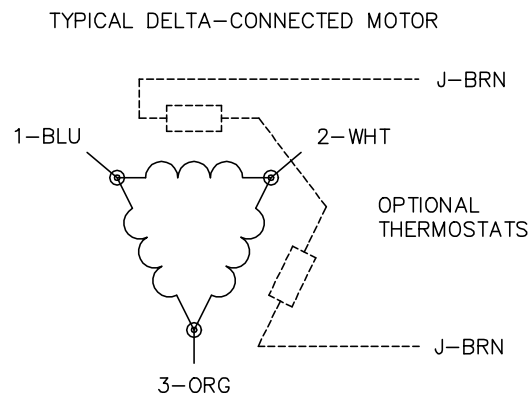
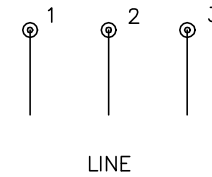
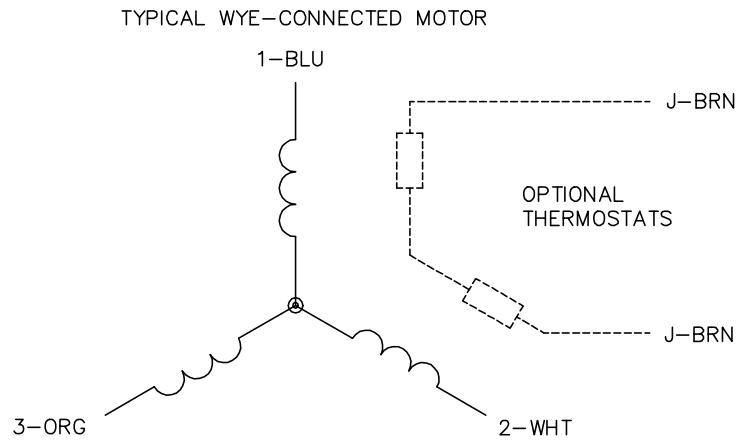
TORQUES (LB-FT): PO=66.8 PU=30 LR=39.7 LRA=63.5



12/7/2022 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		
REV. LTR: E	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIRO
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BALDOR - RELIANCE®

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

SH 1 of 1