



Customer information packet

VEM3770T-5

7.5HP, 1770RPM, 3PH, 60HZ, 213TC, 0738M, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	213TC
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	7.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	CSA EEV CURUSEEV NEMA PREMIUM NEMA_PREMIUM UR
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	7.500 A @ 575.0 V
Design Code	A
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	Y
Type	AC
Mech. spec.	07G082
Base	
Status	PRD/A
Elec. spec.	07WGX817
Layout	07LYG082
Eff. date	05-28-2025
CD Diagram	CD0006
Poles	04
Leads	3#14
Proprietary	False
Created date	03-20-2009

High Voltage Full Load Amps	7.5 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0738M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	19.20 IN
Power Factor	81
Product Family	General Purpose
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	1770 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

NP3441L									
CAT.NO.	VEM3770T-5								
SPEC.	07G082X817								
HP	7.5								
VOLTS	575								
AMP	7.5								
RPM	1770								
FRAME	213TC		HZ	60		PH	3		
SER.F.	1.15	CODE	J	DES	A	CL	F		
NEMA-NOM-EFF	91.7	PF	81						
RATING	40C AMB-CONT								
CC	010A								
DE	6307		ODE	6206					
ENCL	TEFC	SN							
VPWM INVERTER READY									
CT6-60H(10:1)VT3-60H(20:1									
	SFA 8.7								

AC Induction Motor Performance Data

Record # 26661

Typical performance - not guaranteed values

Winding: 07WGX817-R001				Type: 0738M		Enclosure: TEFC					
Nameplate Data				575 V, 60 Hz: Single Voltage Motor							
Rated Output (HP)		7.5		Full Load Torque		22.1 LB-FT					
Volts		575		Start Configuration		direct on line					
Full Load Amps		7.5		Breakdown Torque		73 LB-FT					
R.P.M.		1770		Pull-up Torque		33.7 LB-FT					
Hz		60 Phase		3		Locked-rotor Torque		44.4 LB-FT			
NEMA Design Code		A		KVA Code		J		Starting Current		58.7 A	
Service Factor (S.F.)				1.15		No-load Current				3.66 A	
NEMA Nom. Eff.		91.7		Power Factor		81		Line-line Res. @ 25°C		2.23 Ω	
Rating - Duty				40C AMB-CONT		Temp. Rise @ Rated Load				42°C	
S.F. Amps						Temp. Rise @ S.F. Load				51°C	
						Locked-rotor Power Factor				37.9	
						Rotor inertia				0.934 LB-FT2	

Load Characteristics 575 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	40	62	73	79	82	84	82
Efficiency	86.9	91.4	92.2	91.7	90.9	89.7	90.9
Speed	1793	1786	1779	1771	1761	1751	1764
Line amperes	4.07	4.98	6.23	7.7	9.4	11.2	8.58

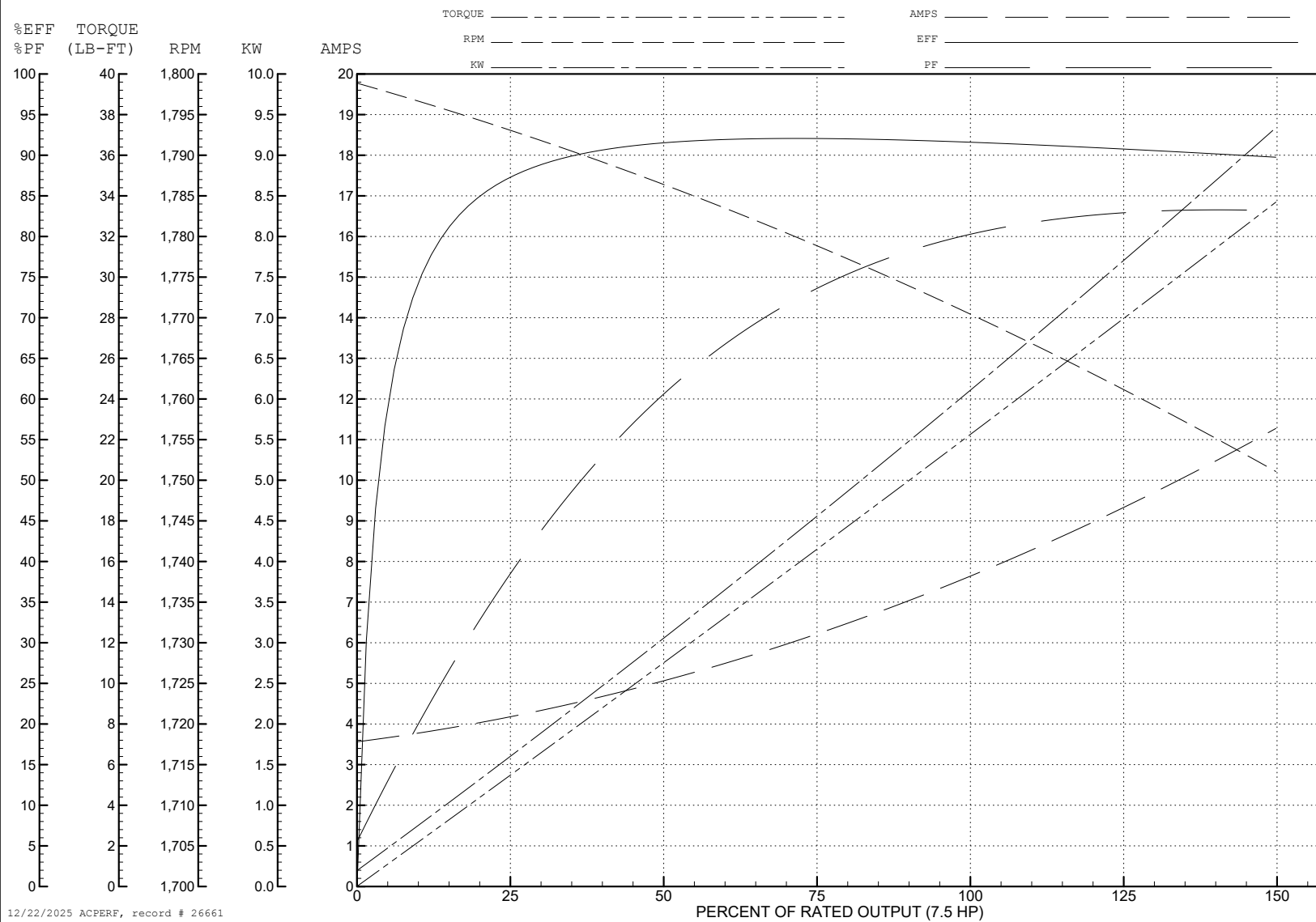
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WINDING # 07WGX817

Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 1770 RPM 575 V 0738M

TORQUES (LB-FT): PO=73 PU=33.7 LR=44.4 LRA=58.7



AC Induction Motor Performance Data

Record # 44991

Typical performance - not guaranteed values

Winding: 07WGX817-R001			Type: 0738M		Enclosure: TEFC		
Nameplate Data			550 V, 50 Hz: Single Voltage Motor				
Rated Output (HP)		7.5	Full Load Torque		26.6 LB-FT		
Volts		550	Start Configuration		direct on line		
Full Load Amps		9.1	Breakdown Torque		95.8 LB-FT		
R.P.M.		1450	Pull-up Torque		50.5 LB-FT		
Hz	50	Phase	3	Locked-rotor Torque		66.5 LB-FT	
NEMA Design Code		A	KVA Code	K	Starting Current		69.3 A
Service Factor (S.F.)		1.15		No-load Current		5.77 A	
NEMA Nom. Eff.		89.5	Power Factor	71	Line-line Res. @ 25°C		2.23 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		56°C	
S.F. Amps				Temp. Rise @ S.F. Load		67°C	
				Locked-rotor Power Factor		44.1	
				Rotor inertia		0.934 LB-FT2	

Load Characteristics 550 V, 50 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	29	48	61	70	75	78	74
Efficiency	83.2	89.2	90.1	90.2	89.6	88.6	89.4
Speed	1494	1487	1480	1473	1464	1456	1466
Line amperes	6.09	6.83	7.9	9.29	10.9	12.7	10.1

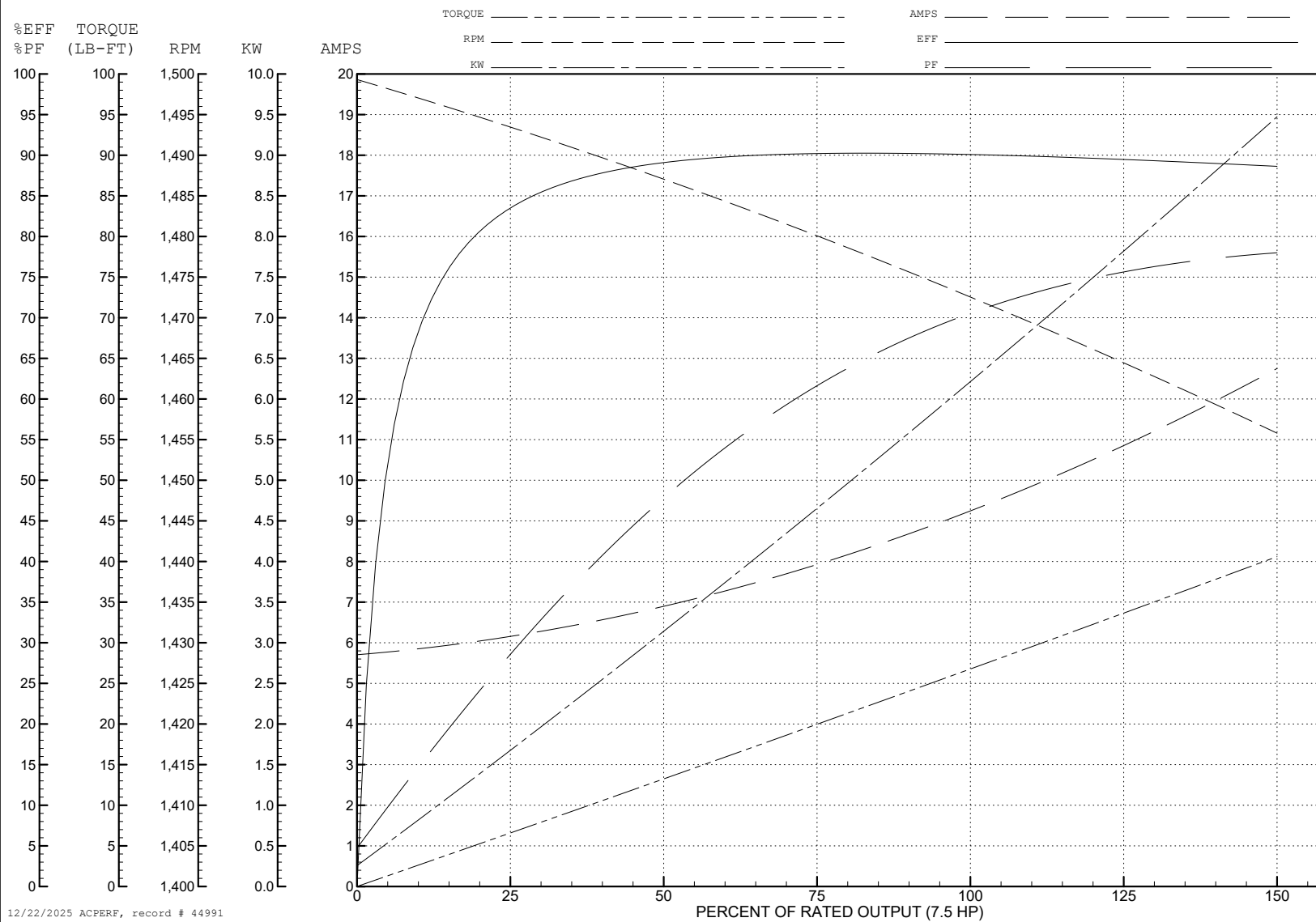
ABB Motors and Mechanical Inc.

WINDING # 07WGX817

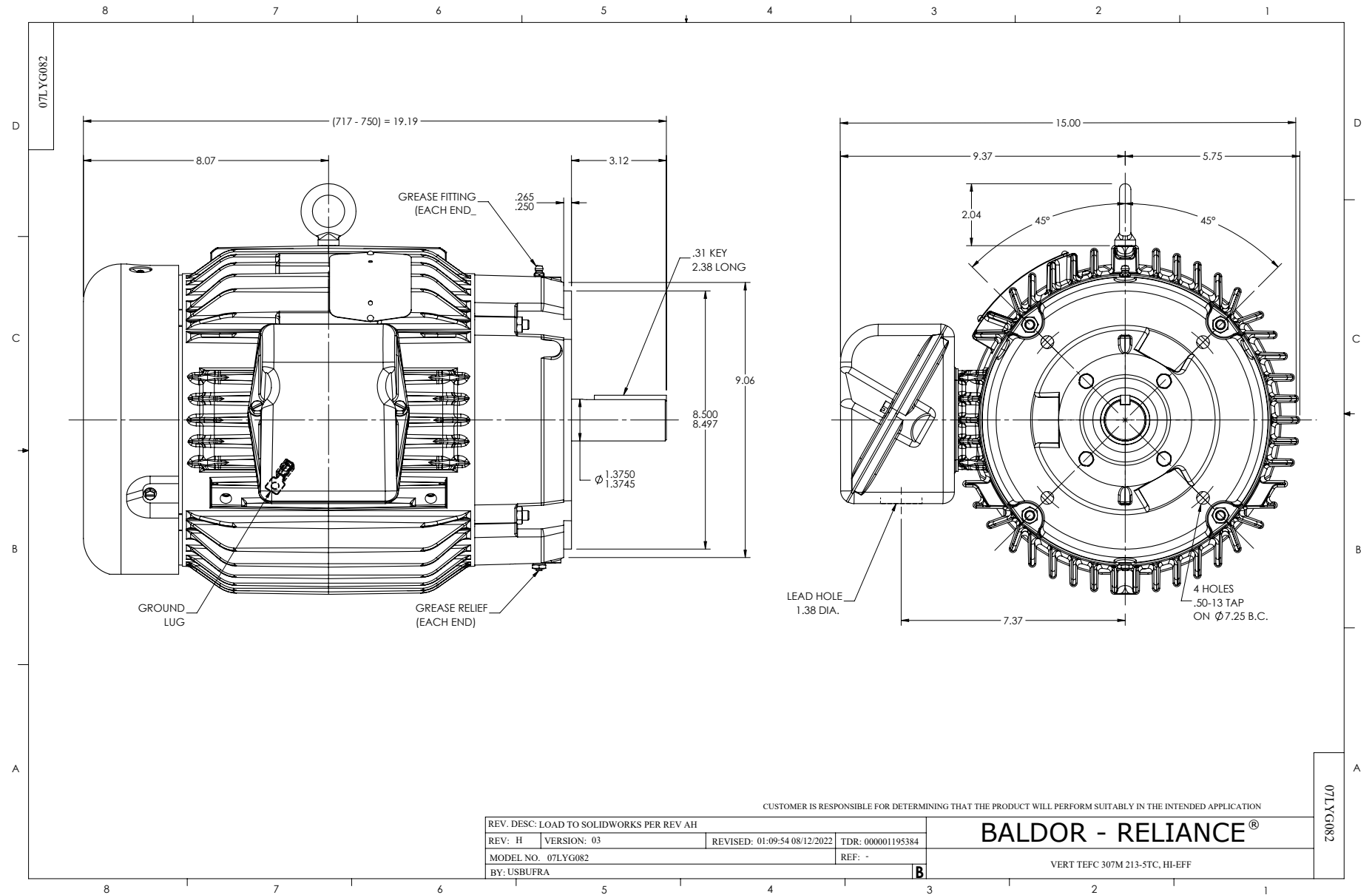
Typical performance - not guaranteed values.

7.5 HP 3 PH 50 HZ 1450 RPM 550 V 0738M

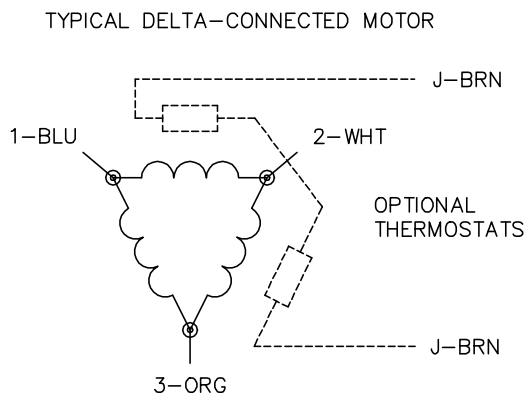
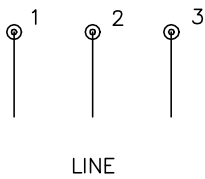
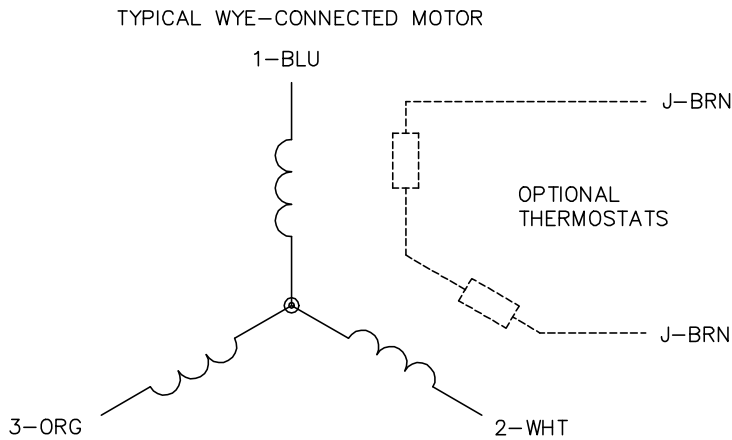
TORQUES (LB-FT): PO=95.8 PU=50.5 LR=66.5 LRA=69.3



12/22/2025 ACPERF, record # 44991



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