ABB BALDOR RELIANCE

Customer information packet

VECP3770T

7.5HP, 1770RPM, 3PH, 60HZ, 213TC, 0738M, TEFC
Class - CLI GP A,B,C,D
Division - Division II

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Specifications

Enclosure	TEFC
Frame	213TC
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	7.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
	230.0 V @ 60 HZ
Agency Approvals	CCSA US
	CSA EEV
	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
Constant Torque Speed Range	1
Current @ Voltage	9.500 A @ 460.0 V
	19.000 A @ 230.0 V
Design Code	A
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK

Part Detail

Revision	C
Type	AC
Mech. spec.	07K370
Base	
Status	PRD/A
Elec. spec.	07WGT510
Layout	07LYK370
Eff. date	10-01-2025
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	01-28-2021

Front Shaft Indicator	None
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	9.5 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0738M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	21.36 IN
Power Factor	81
Product Family	Chemical Processing (Not DC)
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft 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

NP3257								
CAT.NO.	VECP3770T							
SPEC.	07K370T510G1							
HP	7.5 TE							
VOLTS	230/460							
AMP	19/9.5							
RPM	1770							
FRAME	213TC	**HZ**	60			**PH**	3	
SER.F.	1.15	**CODE**	J	**DES**	A	**CL**	F	
RATING	40C AMB-CONT							
SN								
DE	6307	**ODE**	6307					
NEMA-NOM-EFF	91.7	**PF**	81					
G.MIN.EFF	90.2	**CC**	010A					
T. CODE	T3C	**T=**	160					

NP3260					
SPEC.	07K370T510G1				
D.E. BRG.	35BC03XP30X				
O.D.E. BRG.	35BC03XP30X				
GREASE	POLYREX EM				
RPM MAX	2700	**MAX. KVAR**	1.4		
BLANK					
INV.TYPE	PWM				
T=	160				
C HP FR	60	**C HP TO**	90		
CT HZ FROM	1	**CT HZ TO**	60		
VT HZ FROM	0-	**VT HZ TO**	60		
HTR-VOLTS		**HTR-AMPS**			
HTR-WATTS		**MAX. SPACE HEATER TEMP.**			

AC Induction Motor Performance Data
Record # 86631
Preliminary Data Sheet

Winding: 07WGT510-R004	**Type:** 0738M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			7.5	**Full Load Torque**	22.3 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			19/9.5	**Breakdown Torque**	69.1 LB-FT
R.P.M.			1770	**Pull-up Torque**	28.7 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	39.1 LB-FT
NEMA Design Code	A	**KVA Code**	J	**Starting Current**	67.4 A
Service Factor (S.F.)			1.15	**No-load Current**	4.07 A
NEMA Nom. Eff.	91.7	**Power Factor**	81	**Line-line Res. @ 25ºC**	1.55 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	48°C
S.F. Amps			21.4/10.4	**Temp. Rise @ S.F. Load**	62°C
				Locked-rotor Power Factor	41.2
				Rotor inertia	0.934 lb-ft²

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	44	66	76	81	84	85	83
Efficiency	88	91.7	92.2	91.7	90.7	89.3	90.9
Speed	1792	1785	1777	1769	1759	1749	1761
Line amperes	4.61	5.85	7.48	9.43	11.6	13.9	10.7

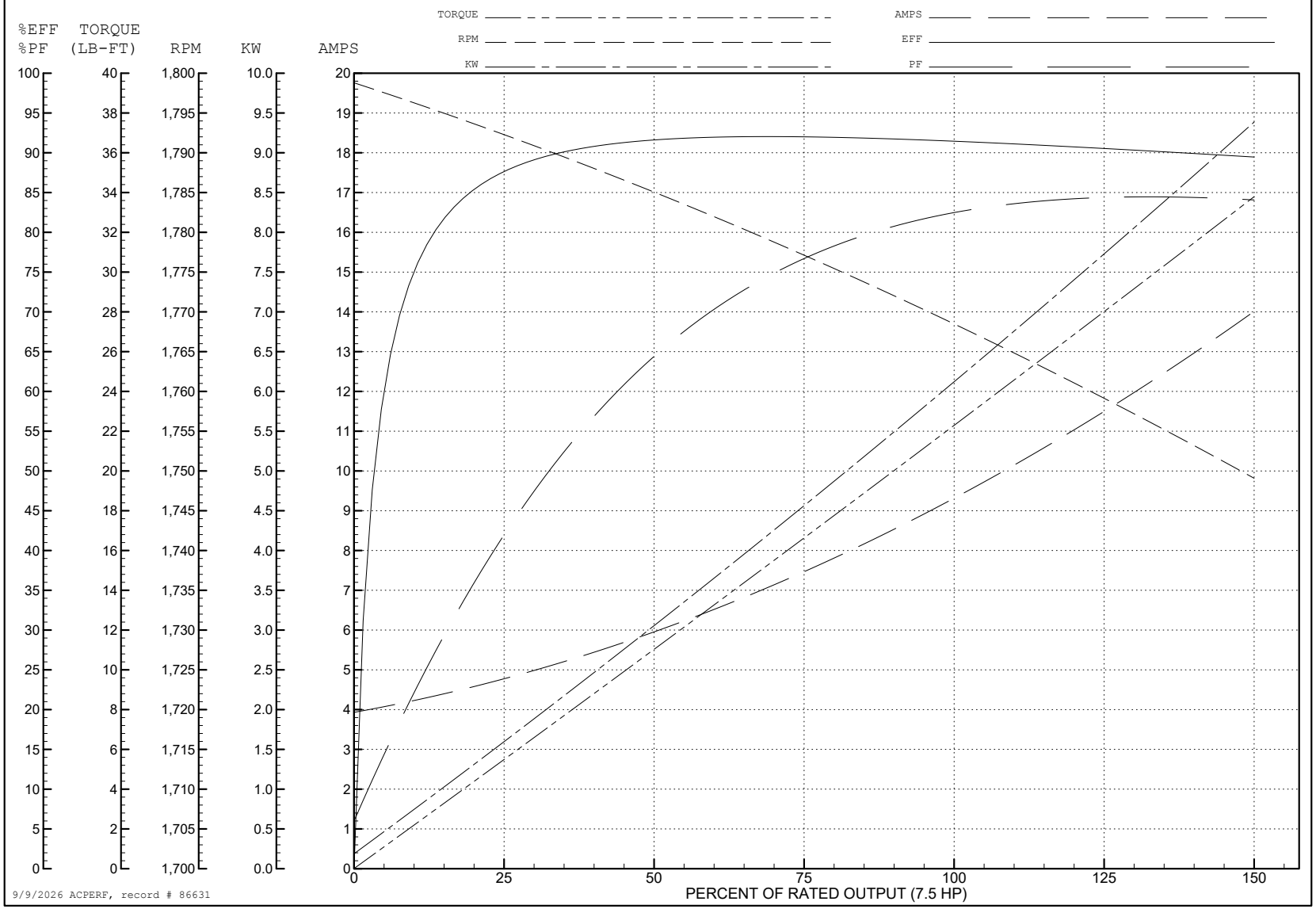
ABB Motors and Mechanical Inc.

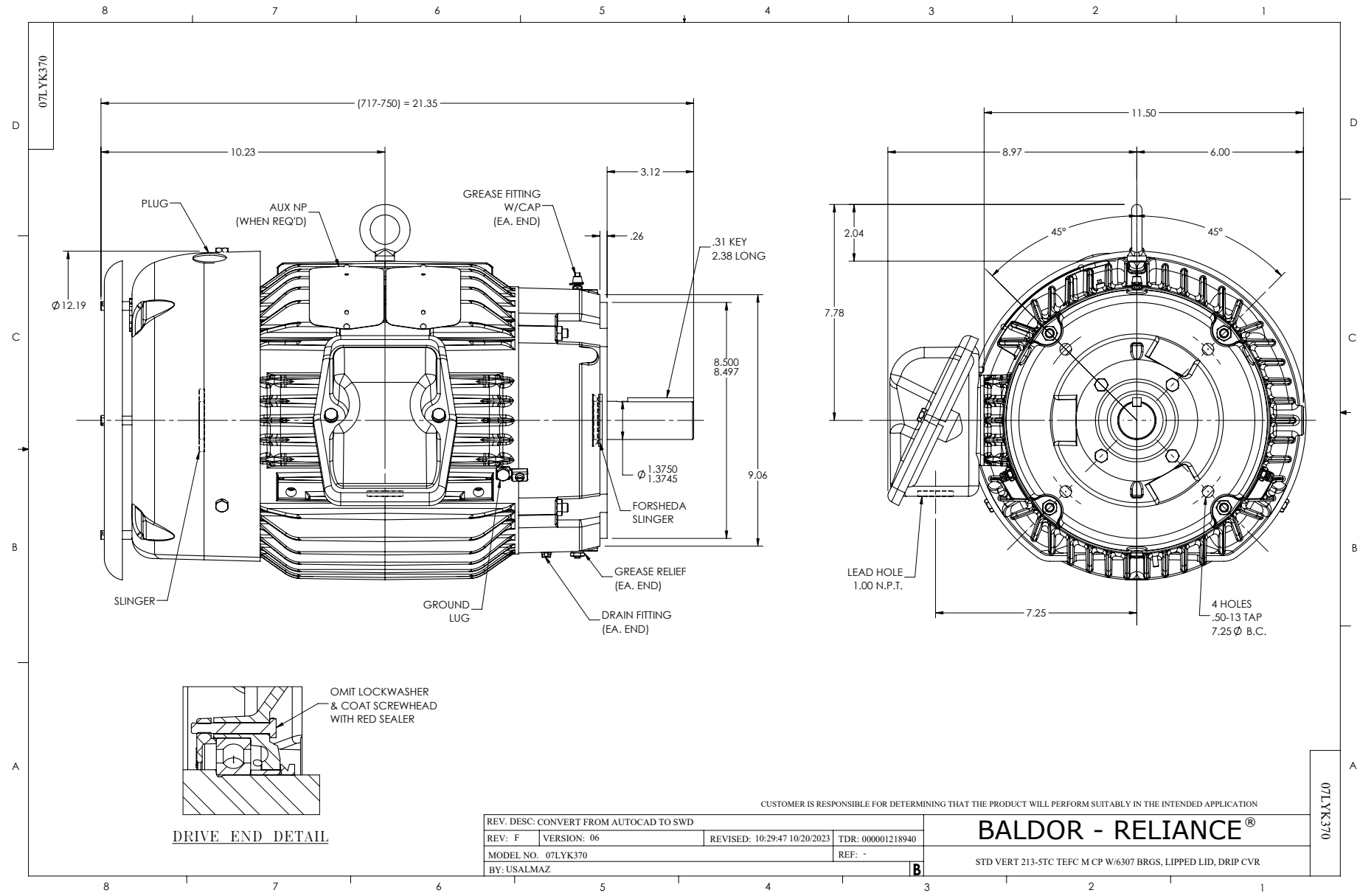
WINDING # 07WGT510

7.5 HP 3 PH 60 HZ 1770 RPM 460 V 0738M

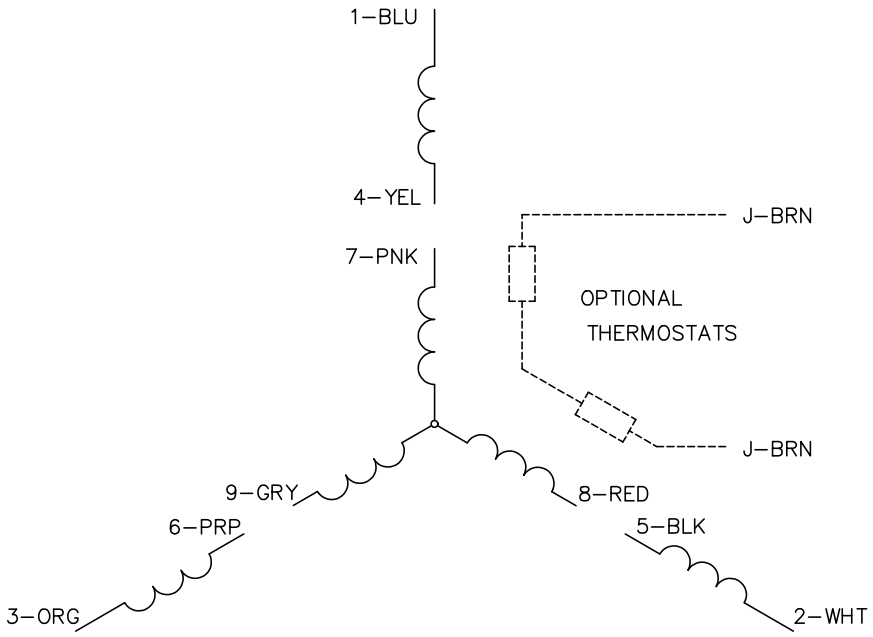
Typical performance - not guaranteed values.

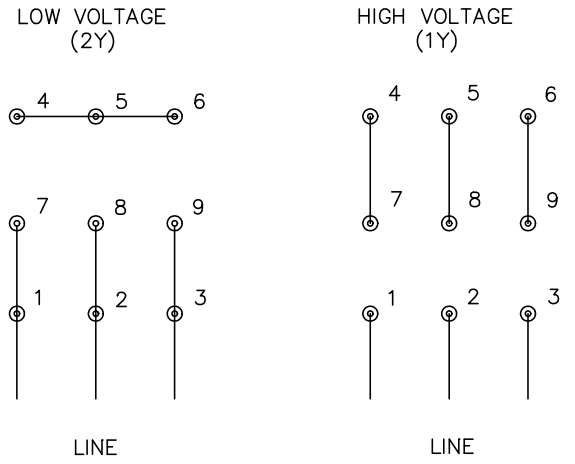
TORQUES(LB-FT): PO=69.1 PU=28.7 LR=39.1 LRA=67.4




07LYK370
(717-750) = 21.35
10.23
3.12
PLUG
AUX NP
(WHEN REQ'D)
GREASE FITTING
W/CAP
(EA. END)
.26
.31 KEY
2.38 LONG
Ø12.19
8.500
8.497
9.06
Ø 1.3750
1.3745
FORSHEDA
SLINGER
SLINGER
GROUND
LUG
GREASE RELIEF
(EA. END)
DRAIN FITTING
(EA. END)
11.50
8.97
6.00
2.04
45°
45°
7.78
LEAD HOLE
1.00 N.P.T.
7.25
4 HOLES
.50-13 TAP
7.25Ø B.C.
OMIT LOCKWASHER
& COAT SCREWHEAD
WITH RED SEALER
DRIVE END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CONVERT FROM AUTOCAD TO SWD
REV: F
VERSION: 06
REVISED: 10:29:47 10/20/2023
TDR: 000001218940
MODEL NO. 07LYK370
REF: -
BY: USALMAZ
B
BALDOR - RELIANCE®
STD VERT 213-5TC TEFC M CP W/6307 BRGS, LIPPED LID, DRIP CVR
07LYK370

CD0005





NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
CD0005		FILE: AAA00005140	MDL: –
		MTL: –	3PH, DV, 9 LEADS