ABB BALDOR RELIANCE

Customer information packet

ENCP3581T-4

1HP, 1775RPM, 3PH, 60HZ, 143T, 0524M, TENV, F1
Class - CLI GP A,B,C,D
Division - Division II

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Specifications

Enclosure	TENV
Frame	143T
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	1.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 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	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Constant Torque Speed Range	1.2
Current @ Voltage	1.500 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	87.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Haz Area Temp Code	T4

Part Detail

Revision	-
Type	AC
Mech. spec.	05F068
Base	
Status	PRD/A
Elec. spec.	05WGX611
Layout	05LYF068
Eff. date	12-13-2022
CD Diagram	CD0006
Poles	04
Leads	3#18
Proprietary	False
Created date	03-11-2022

Heater Indicator	No Heater
High Voltage Full Load Amps	1.5 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	N
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	3 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0524M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	11.36 IN
Power Factor	72
Product Family	Chemical Processing (Not DC)
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1775 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

NP3258									
CAT.NO.	ENCP3581T-4								
SPEC.	05F068X611G1								
HP	1 TE								
VOLTS	460								
AMP	1.5								
RPM	1775								
FRAME	143T	**HZ**	60		**PH**	3			
SER.F.	1.15	**CODE**	N	**DES**	B		**CL**	F	
RATING	40C AMB-CONT								
SN									
DE	6205	**ODE**	6203						
NEMA-NOM-EFF	87.5	**PF**	72						
G.MIN.EFF	85.5	**CC**	010A						
T. CODE	T4	**T=**	135						

NP3261					
SPEC.	05F068X611G1				
D.E. BRG.	25BC02XP30X				
O.D.E. BRG.	17BC02XP30X				
GREASE	POLYREX EM				
RPM MAX	2700	**MAX. KVAR**	0.4		
BLANK	SFA 1.6				
INV.TYPE	PWM				
T=	135				
C HP FR	60	**C HP TO**	90		
CT HZ FROM	1.2	**CT HZ TO**	60		
VT HZ FROM	-0	**VT HZ TO**	60		
HTR-VOLTS		**HTR-AMPS**			
HTR-WATTS		**MAX. SPACE HEATER TEMP.**			

Parts List

Part number	Description	Quantity
SA408966	SA 05F068X611G1	1.000 ea
RA400513	RA 05F068X611G1	1.000 ea
HW3201A05	3/8-16 EYEBOLT	1.000 ea
06CB1000A02G	CONDUIT BOX, MACH GRAY	1.000 ea
RM1016	LEAD SEPARATOR GASKET - 305/306 C.P.MOTO	1.000 ea
51XW2520A12	SCREW, HEX SER SLT HD, ZN, 1/4-20 X .75	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.	1.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
35EP1100A99G	FREP TENV 203 BRG W/GRSR, REL & .125 DRA	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
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP1102A67G	PUEP ENCL 205 BRG W/GRSR,RELF&.125 NPT D	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
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
HA3100A37	THRUBOLT 10-32 X 8.500	4.000 ea
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 ea
06CB1502G	LIPPED CONDUIT BOX LID CAST, GRAY EPOXY	1.000 ea
06GS1003	GASKET, KOBX LID, 1/8" THICK BLACK NEOPR	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
HW4600B32SP	V-RING SLINGER 1.000 X 1.540 X .24 VITON	1.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 qt

MG1500Y02	WILKOPON PRIMER YELLOW	0.017 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1025N19	WILKOFAST, 778.50, RELIANCE BLUE-GREEN 8	0.022 ga
LC0006	CONNECTION LABEL	1.000 ea
LB1304	LABEL "INVERTER READY"	1.000 ea
LB1449	DIV-2/NEC WARNING LABEL	1.000 ea
NP3258	SS CP SUPER-E DIV-2 UL CSA-C US EEV CC	1.000 ea
NP3261	SS CP SUPER-E AUX DATA INFORMATION	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
LB1002N	LABEL,MARINE DUTY (ON ROLLS)	1.000 ea
36PA1000	PKG GRP, PRINT PK1016A08	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea

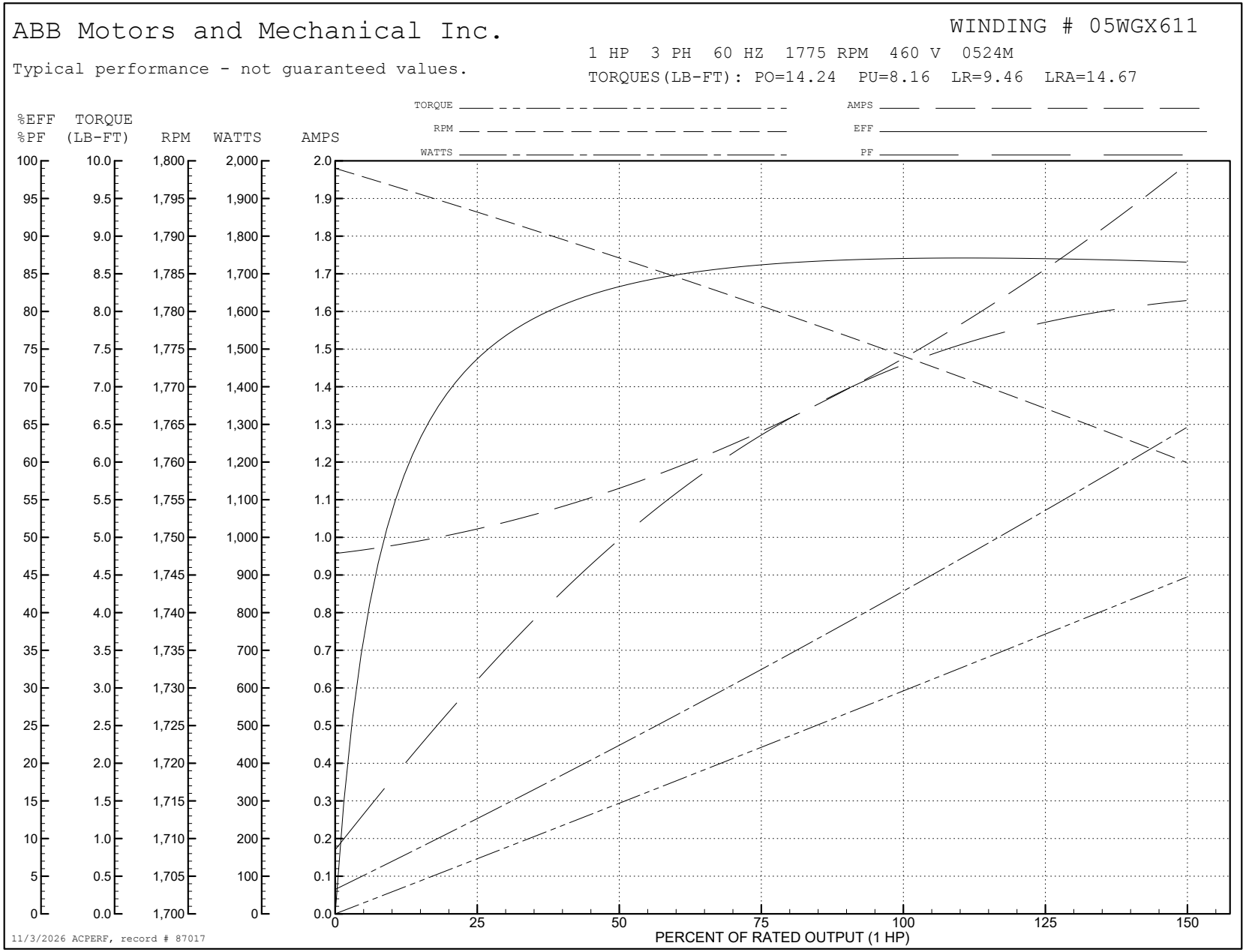
AC Induction Motor Performance Data
Record # 87017
Preliminary Data Sheet

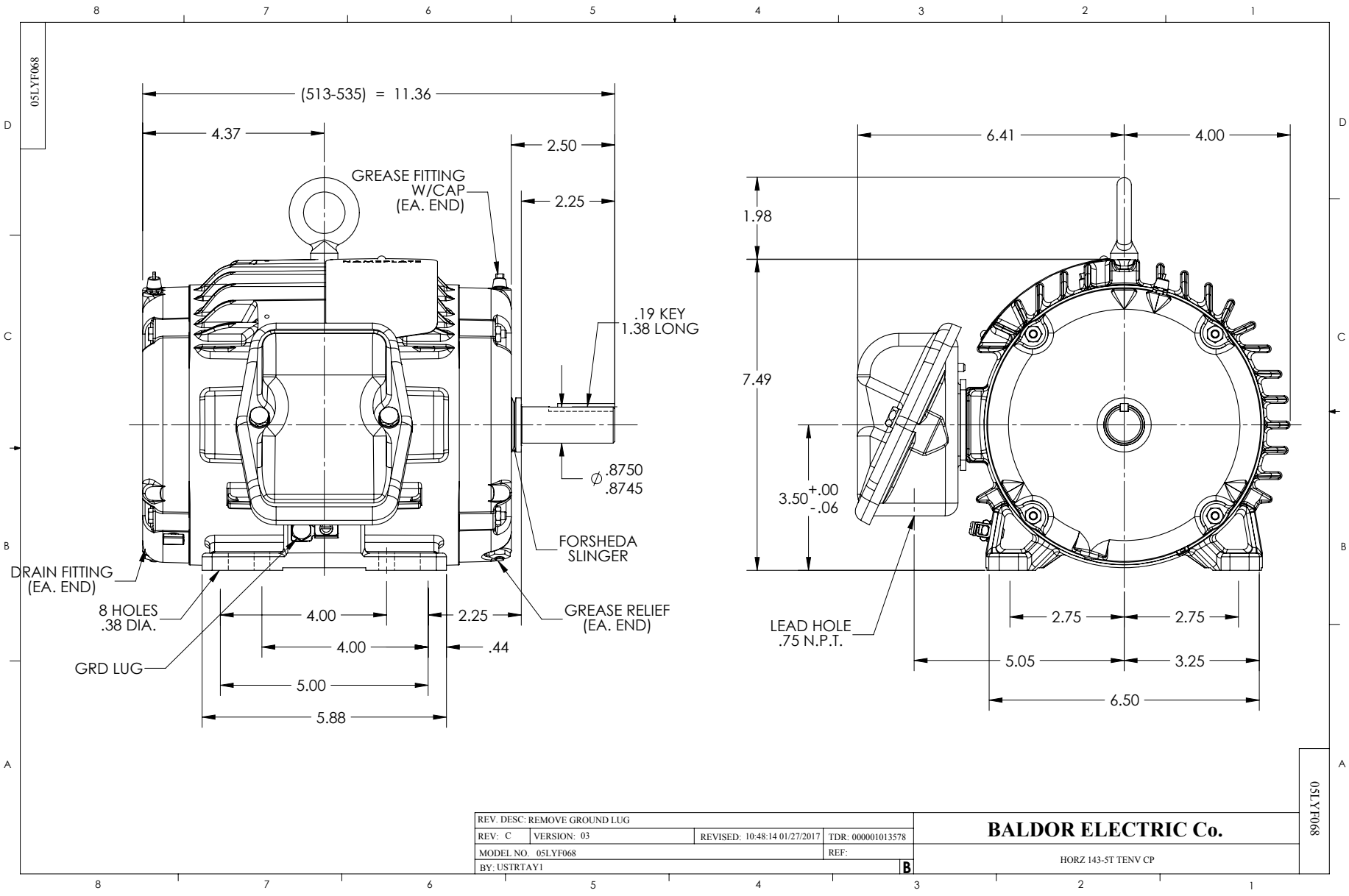
Winding: 05WGX611-R001	**Type:** 0524M	**Enclosure:** TENV

Nameplate Data				**460 V, 60 Hz: Single Voltage Motor**	
Rated Output (HP)			1	**Full Load Torque**	2.96 LB-FT
Volts			460	**Start Configuration**	direct on line
Full Load Amps			1.5	**Breakdown Torque**	14.24 LB-FT
R.P.M.			1775	**Pull-up Torque**	8.16 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	9.46 LB-FT
NEMA Design Code	B	**KVA Code**	N	**Starting Current**	14.67 A
Service Factor (S.F.)			1.15	**No-load Current**	0.97 A
NEMA Nom. Eff.	87.5	**Power Factor**	72	**Line-line Res. @ 25ºC**	15 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	50°C
S.F. Amps			1.6	**Temp. Rise @ S.F. Load**	54°C
				Locked-rotor Power Factor	57.3
				Rotor inertia	0.173 lb-ft²

Load Characteristics 460 V, 60 Hz, 1 HP

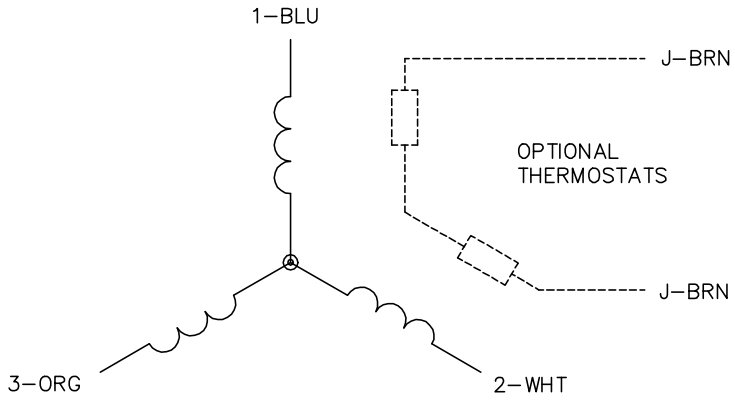
% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	33	50	63	72	78	82	76
Efficiency	73.6	83.3	86.3	87	87.1	86.5	87.1
Speed	1793	1787	1781	1774	1767	1760	1770
Line amperes	1.01	1.12	1.28	1.49	1.72	1.98	1.63

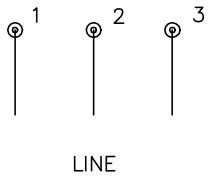

ABB Motors and Mechanical Inc.
WINDING # 05WGX611
Typical performance - not guaranteed values.
1 HP 3 PH 60 HZ 1775 RPM 460 V 0524M
TORQUES(LB-FT): PO=14.24 PU=8.16 LR=9.46 LRA=14.67
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
PERCENT OF RATED OUTPUT (1 HP)
11/3/2026 ACPERF, record # 87017


05LYF068
(513-535) = 11.36
4.37
2.50
2.25
GREASE FITTING W/CAP (EA. END)
.19 KEY
1.38 LONG
⌀.8750
.8745
FORSHEDA SLINGER
DRAIN FITTING (EA. END)
8 HOLES .38 DIA.
GRD LUG
4.00
2.25
4.00
.44
5.00
5.88
GREASE RELIEF (EA. END)
6.41
4.00
1.98
7.49
3.50 +.00 -.06
LEAD HOLE .75 N.P.T.
2.75
2.75
5.05
3.25
6.50
REV. DESC: REMOVE GROUND LUG
REV: C
VERSION: 03
REVISED: 10:48:14 01/27/2017
TDR: 000001013578
MODEL NO. 05LYF068
REF:
BY: USTRTAY1
B
BALDOR ELECTRIC Co.
HORZ 143-5T TENV CP
05LYF068

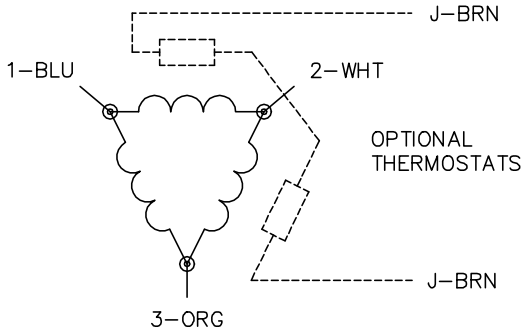
CD0006

TYPICAL WYE–CONNECTED MOTOR





TYPICAL DELTA–CONNECTED MOTOR



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

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FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIR0
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BALDOR - RELIANCE®

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

SH 1 of 1