ABB BALDOR RELIANCE

Customer information packet

ECP83771T-4

10HP, 3475RPM, 3PH, 60HZ, 215T, 0742M, TEFC, F1
Class - CLI GP A,B,C,D
Division - Division II

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Specifications

Enclosure	TEFC
Frame	215T
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	10.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 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
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	6
Current @ Voltage	11.300 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Enclosure Modification	841
Feedback Device	NO FEEDBACK
Front Face Code	Standard

Part Detail

Revision	AH
Type	AC
Mech. spec.	07K629
Base	
Status	PRD/A
Elec. spec.	07WGY930
Layout	07LYK629
Eff. date	10-01-2025
CD Diagram	CD0006
Poles	02
Leads	3#14
Proprietary	False
Created date	01-14-2012

Front Shaft Indicator	None
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	11.3 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0742M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	19.50 IN
Power Factor	91
Product Family	Super-E Chemical Processing
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
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	Shaft Slinger
Speed	3500 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.	ECP83771T-4								
SPEC.	07K629Y930G1								
HP	10 TE			**IP**	56				
VOLTS	460								
AMPS	11.3								
R.P.M.	3500								
FRAME	215T	**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	**P.F.**	91						
GUAR. MIN. EFF.	89.5	**CC**	010A						
T. CODE	T3C	**TEMP=**	160						

NP3186							
SPEC.	07K629Y930G1						
ABMA DE BRG	35BC03X30X						
ABMA ODE BRG	35BC03X30X						
GREASE	POLYREX EM						
MOTOR WEIGHT	225	**ROTOR BARS**	28	**STATOR BARS**	36		
MAX. R.P.M.	5400	**MAX. KVAR**	N/A				
INV.TYPE	PWM						
T=	160						
CHP	60	**TO**	90				
CT	6	**TO**	60				
VT	3	**TO**	60				
HTR-VOLTS	N/A	**HTR-AMPS**	N/A				
HTR-WATTS		**MAX. SPACE HEATER TEMP.**			N/A		

Parts List

Part number	Description	Quantity
SA237639	SA 07K629Y930G1	1.000 ea
RA224567	RA 07K629Y930G1	1.000 ea
36FN3000C02SP	EXFN, PLASTIC, 5.25 OD, 1.175 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
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	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
07EP1119A02G	307 BRG,C.I.FH,GRSR,RLF,DRAIN FITTING,IN	1.000 ea
HW4601B25	INPRO SEAL, 307 BRG, MINI66	1.000 ea
10XN2520A26	1/4-20X 1 5/8 HEX HD	4.000 ea
XY3118A12	5/16-18 HEX NUT DIRECTIONAL SERRATION	4.000 ea
07FH1001A01G	SPL FAN HOUSING, 307, W/GREASER, GRAY EP	1.000 ea
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
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
HW5100A08	W3118-035 WVY WSHR (WB)	1.000 ea
07EP1119A01G	307 BRG,BRG RET,GRSR,RLF,DRAIN FITTING,I	1.000 ea
HW4601B25	INPRO SEAL, 307 BRG, MINI66	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
10XN2520A26	1/4-20X 1 5/8 HEX HD	4.000 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
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. CONTAINE	0.001 qt
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 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
HA4010A01	T-DRAIN PLUG,416 S.S.,W/ 1/4-28 THD & .0	1.000 ea
HA4010A01	T-DRAIN PLUG,416 S.S.,W/ 1/4-28 THD & .0	1.000 ea
HA3104A32	THRUBOLT- 5/16-18 X12.750	4.000 ea
MG1025N19	WILKOFAST, 778.50, RELIANCE BLUE-GREEN 8	0.036 ga
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	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
NP4328	SS IEEE841-2021 DIV-2 UL EEV CSA-C US	1.000 ea
NP3186	SS IEEE841 INV AUX DATA INFORMATION	1.000 ea
07PA1011	PKG GRP, 07 CAST IRON PK1181	1.000 ea
10XL3807A28	3/8-7 X 1 3/4" LAG SCREW	2.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea

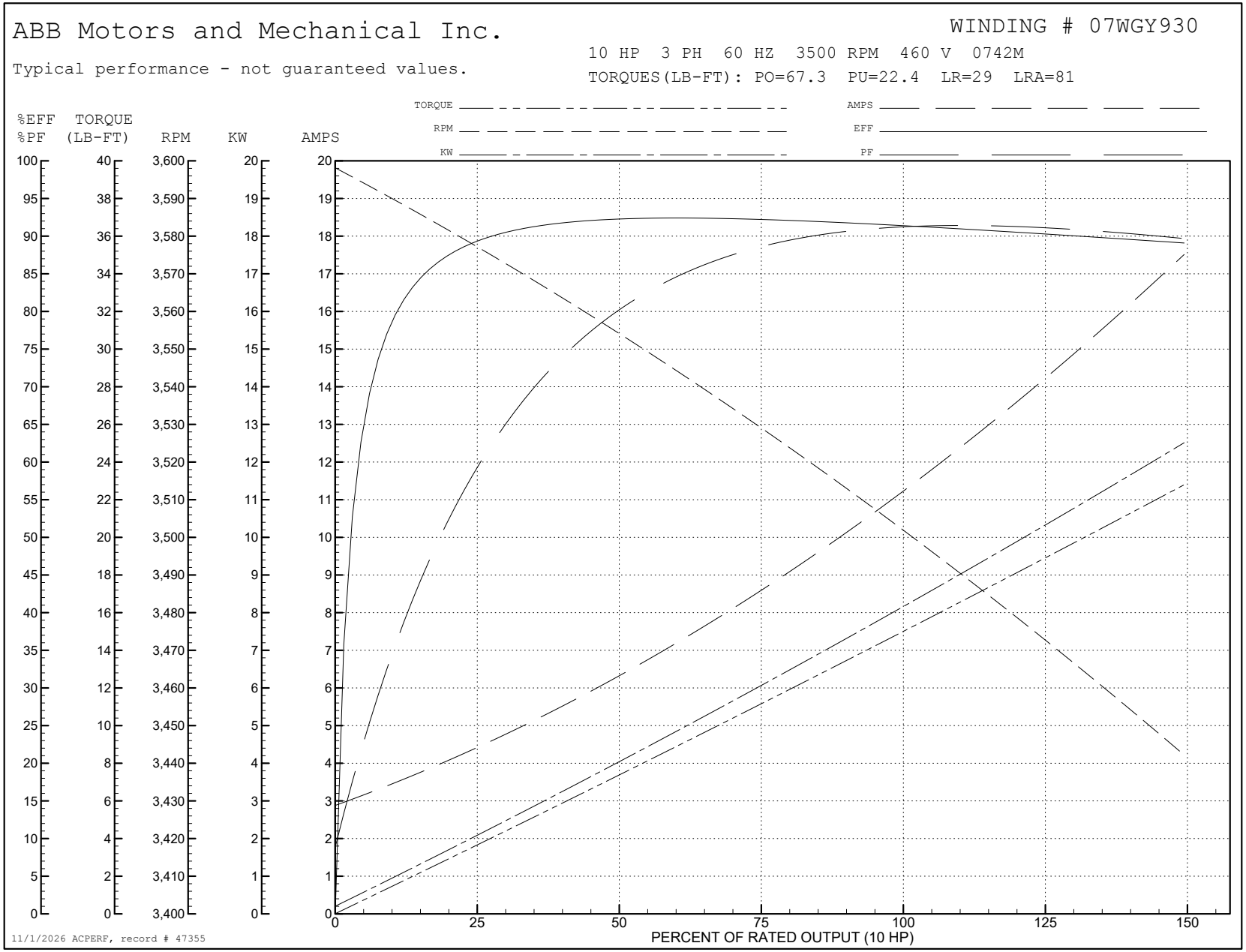
AC Induction Motor Performance Data
Record # 47355
Typical performance - not guaranteed values

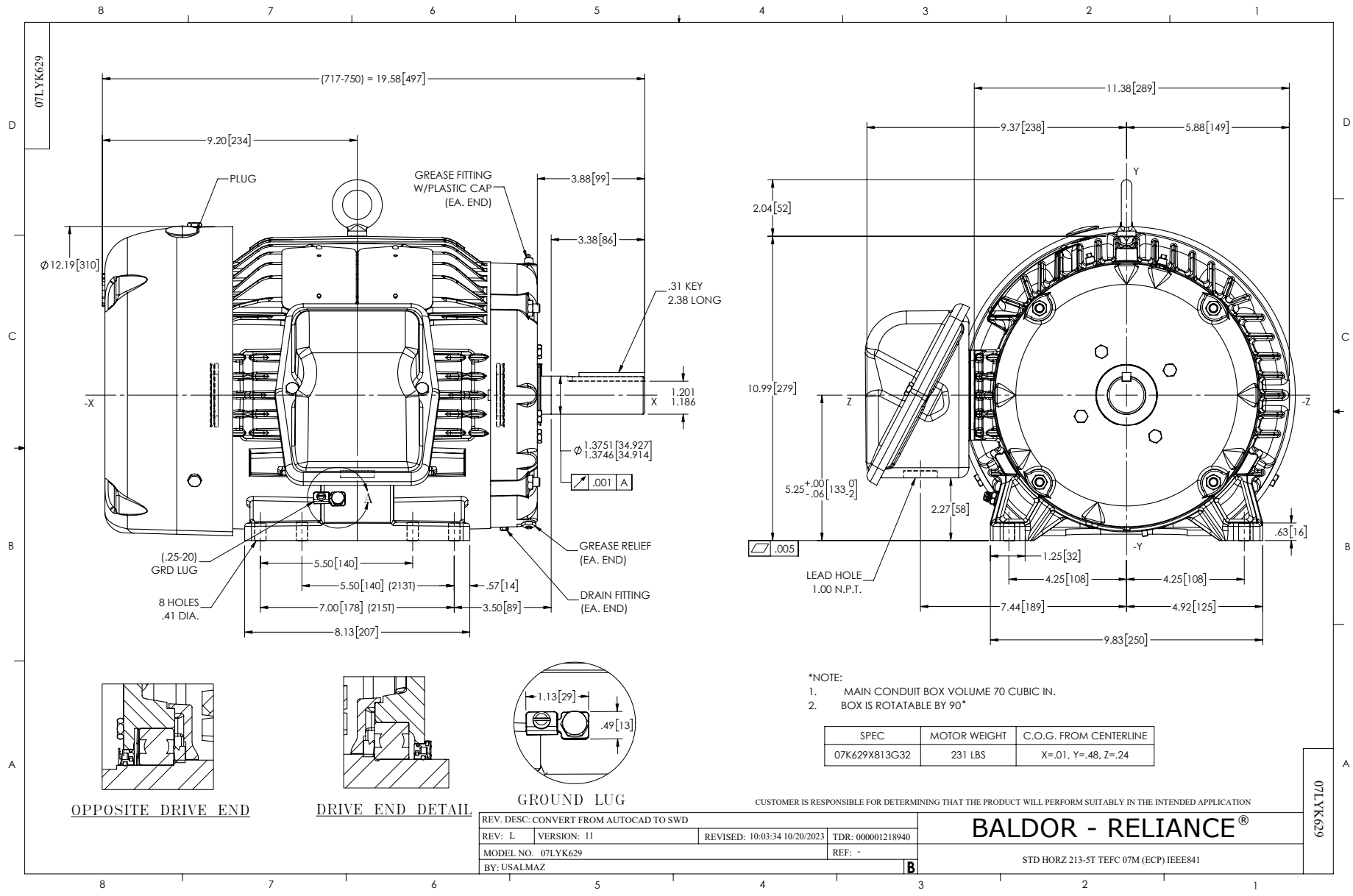
Winding: 07WGY930-R013	**Type:** 0742M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: Single Voltage Motor**	
Rated Output (HP)			10	**Full Load Torque**	14.8 LB-FT
Volts			460	**Start Configuration**	direct on line
Full Load Amps			11.3	**Breakdown Torque**	67.3 LB-FT
R.P.M.			3500	**Pull-up Torque**	22.4 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	29 LB-FT
NEMA Design Code	B	**KVA Code**	H	**Starting Current**	81 A
Service Factor (S.F.)			1.15	**No-load Current**	3.11 A
NEMA Nom. Eff.	91	**Power Factor**	91	**Line-line Res. @ 25ºC**	0.791 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	50°C
S.F. Amps				**Temp. Rise @ S.F. Load**	62°C
				Locked-rotor Power Factor	30.3
				Rotor inertia	0.383 LB-FT2

Load Characteristics 460 V, 60 Hz, 10 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	64	81	88	89	91	90	91
Efficiency	89.1	92.2	92.3	91.6	90.3	89.1	90.9
Speed	3576	3554	3530	3504	3474	3442	3486
Line amperes	4.08	6.21	8.61	11.3	14.1	17.4	13


ABB Motors and Mechanical Inc.
WINDING # 07WGY930
10 HP 3 PH 60 HZ 3500 RPM 460 V 0742M
Typical performance - not guaranteed values.
TORQUES(LB-FT): PO=67.3 PU=22.4 LR=29 LRA=81
TORQUE
RPM
KW
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
KW
AMPS
PERCENT OF RATED OUTPUT (10 HP)
11/1/2026 ACPERF, record # 47355



OPPOSITE DRIVE END

DRIVE END DETAIL

GROUND LUG

*NOTE:
1. MAIN CONDUIT BOX VOLUME 70 CUBIC IN.
2. BOX IS ROTATABLE BY 90°

SPEC	MOTOR WEIGHT	C.O.G. FROM CENTERLINE
07K629X813G32	231 LBS	X=.01, Y=.48, Z=.24

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION

REV. DESC: CONVERT FROM AUTOCAD TO SWD			
REV: L	VERSION: 11	REVISED: 10:03:34 10/20/2023	TDR: 000001218940
MODEL NO. 07LYK629			REF: -
BY: USALMAZ			B

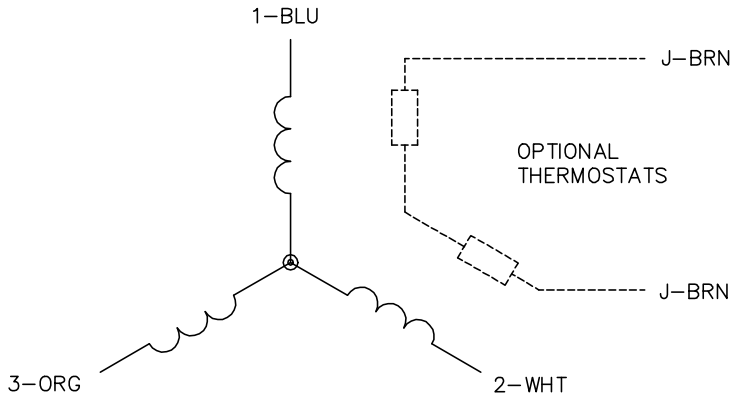
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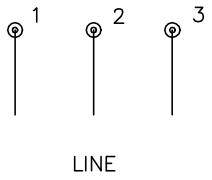
STD HORZ 213-5T TEFC 07M (ECP) IEEE841

07LYK629

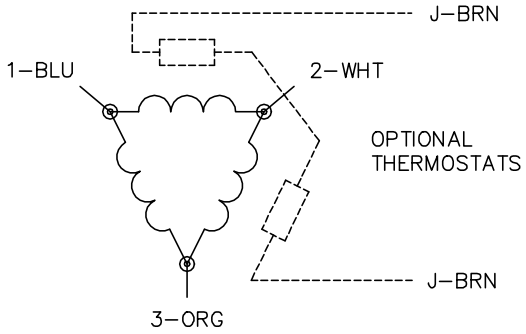
CD0006

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

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: E	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIR0
MTL: –		

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

SH 1 of 1