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Product Information Packet

ECP83771T-4

10HP,3475RPM,3PH,60HZ,215T,0742M,TEFC,F1

Part Detail

Revision:	AD	**Status:**	PRD/A	**Change #:**		**Proprietary:**	No
Type:	AC	**Elec. Spec:**	07WGY930	**CD Diagram:**	CD0006	**Mfg Plant:**	
Mech. Spec:	07K629	**Layout:**	07LYK629	**Poles:**	02	**Created Date:**	01-14-2012
Base:	RG	**Eff. Date:**	08-29-2022	**Leads:**	3#14		

Specs

Catalog Number:	ECP83771T-4	**Insulation Class:**	F
Enclosure:	TEFC	**Inverter Code:**	Inverter Duty
Frame:	215T	**KVA Code:**	H
Frame Material:	Iron	**Lifting Lugs:**	Standard Lifting Lugs
Motor Letter Type:	Three Phase	**Locked Bearing Indicator:**	Locked Bearing
Output @ Frequency:	10.000 HP @ 60 HZ	**Motor Lead Quantity/Wire Size:**	3 @ 14 AWG
Synchronous Speed @ Frequency:	3600 RPM @ 60 HZ	**Motor Lead Exit:**	Ko Box
Voltage @ Frequency:	460.0 V @ 60 HZ	**Motor Lead Termination:**	Flying Leads
XP Class and Group:	CLI GP A,B,C,D	**Motor Type:**	0742M
XP Division:	Division II	**Mounting Arrangement:**	F1
Agency Approvals:	CSA	**Power Factor:**	91
	CSA EEV	**Product Family:**	Super-E Chemical Processing
	UR	**Pulley End Bearing Type:**	Ball
Auxillary Box:	No Auxillary Box	**Pulley Face Code:**	Standard
Auxillary Box Lead Termination:	None	**Pulley Shaft Indicator:**	Standard
Base Indicator:	Rigid	**Rodent Screen:**	None
Bearing Grease Type:	Polyrex EM (-20F +300F)	**Shaft Extension Location:**	Pulley End
Blower:	None	**Shaft Ground Indicator:**	No Shaft Grounding

Constant Torque Speed Range:	6	**Shaft Rotation:**	Reversible
Current @ Voltage:	11.300 A @ 460.0 V	**Shaft Slinger Indicator:**	Shaft Slinger
Design Code:	B	**Speed Code:**	Single Speed
Drip Cover:	No Drip Cover	**Motor Standards:**	NEMA
Duty Rating:	CONT	**Starting Method:**	Direct on line
Electrically Isolated Bearing:	Not Electrically Isolated	**Thermal Device - Bearing:**	None
Enclosure Modification:	841	**Thermal Device - Winding:**	None
Feedback Device:	NO FEEDBACK	**Vibration Sensor Indicator:**	No Vibration Sensor
Front Face Code:	Standard	**Winding Thermal 1:**	None
Front Shaft Indicator:	None	**Winding Thermal 2:**	None
Heater Indicator:	No Heater	**XP Temp Code:**	T3C

Nameplate NP3235E

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				

Nameplate NP3186E

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

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

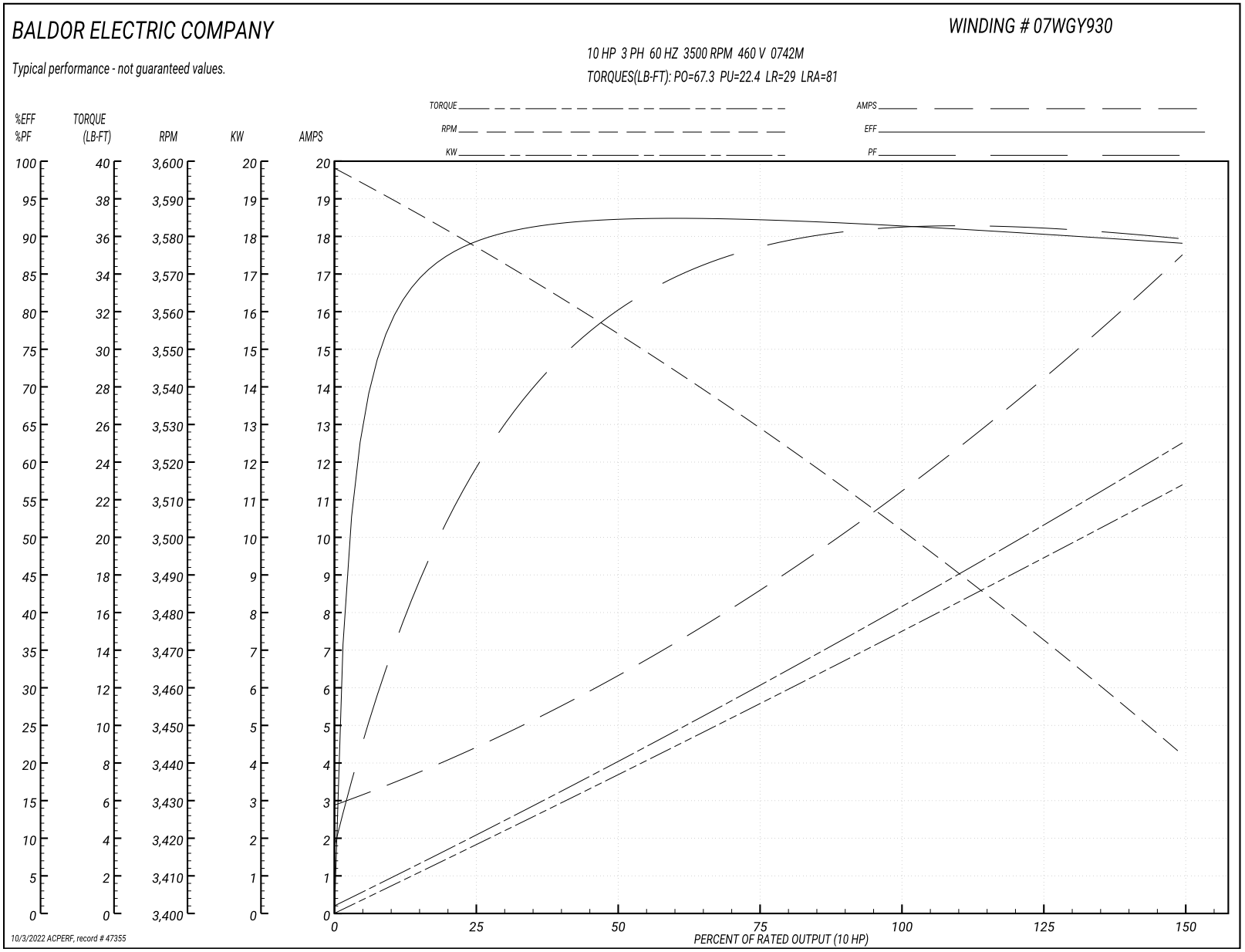
Winding: 07WGY930-R013	**Type:** 0742M	**Enclosure:** TEFC

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

Performance Graph at 460V, 60Hz, 10.0HP Typical performance - Not guaranteed values



AC Induction Motor Performance Data
Record # 65135
Typical performance - not guaranteed values

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

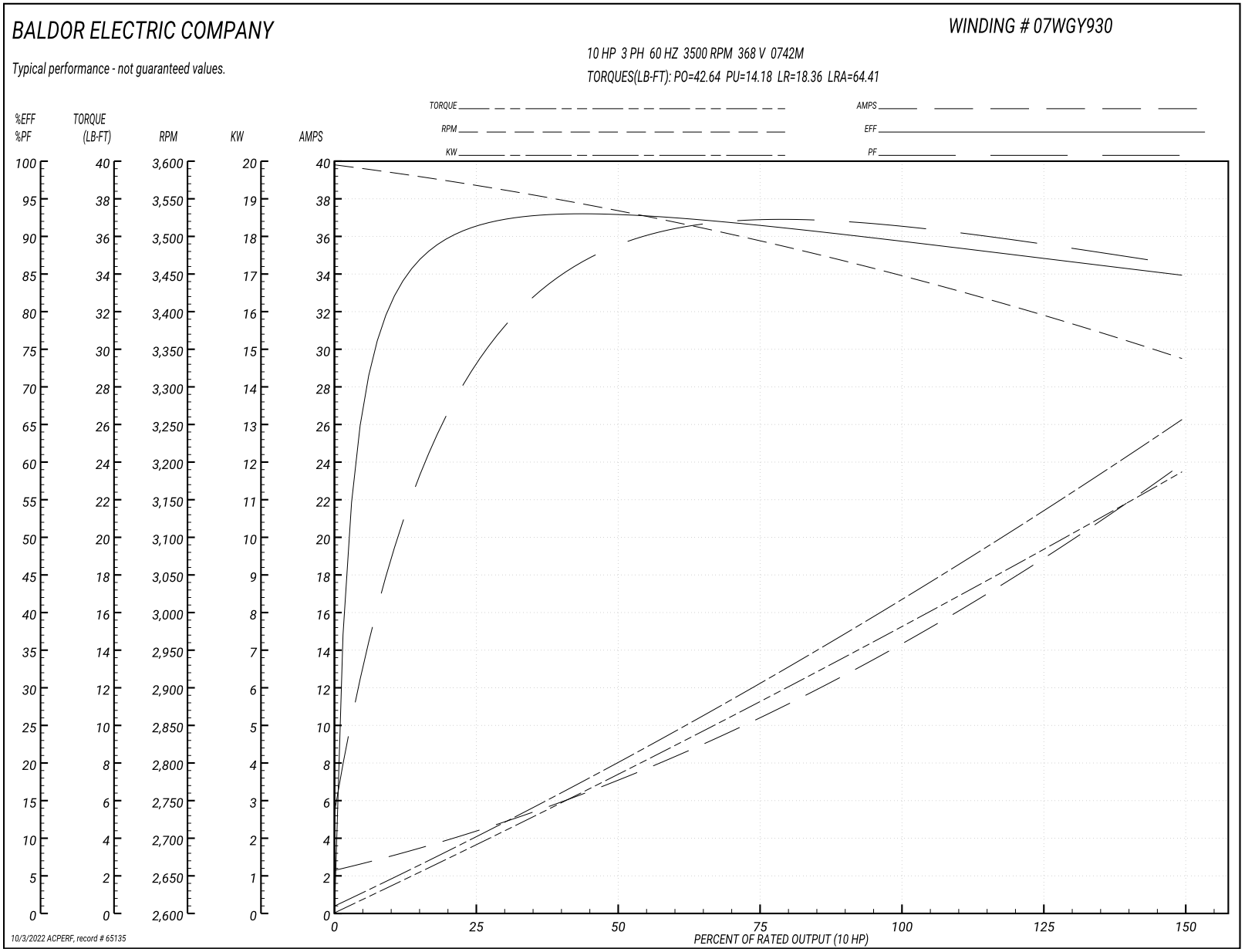
Nameplate Data		
Rated Output (HP)		10
Volts		460
Full Load Amps		11.3
R.P.M.		3500
Hz	60 **Phase**	3
NEMA Design Code	B **KVA Code**	H
Service Factor (S.F.)		1.15
NEMA Nom. Eff.	91 **Power Factor**	91
Rating - Duty		40C AMB-CONT
S.F. Amps		

368 V, 60 Hz: Single Voltage Motor	
Full Load Torque	15.02 LB-FT
Start Configuration	direct on line
Breakdown Torque	42.64 LB-FT
Pull-up Torque	14.18 LB-FT
Locked-rotor Torque	18.36 LB-FT
Starting Current	64.41 A
No-load Current	2.43 A
Line-line Res. @ 25ºC	0.791 Ω
Temp. Rise @ Rated Load	66°C
Temp. Rise @ S.F. Load	87°C
Locked-rotor Power Factor	30.1
Rotor inertia	0.383 LB-FT2

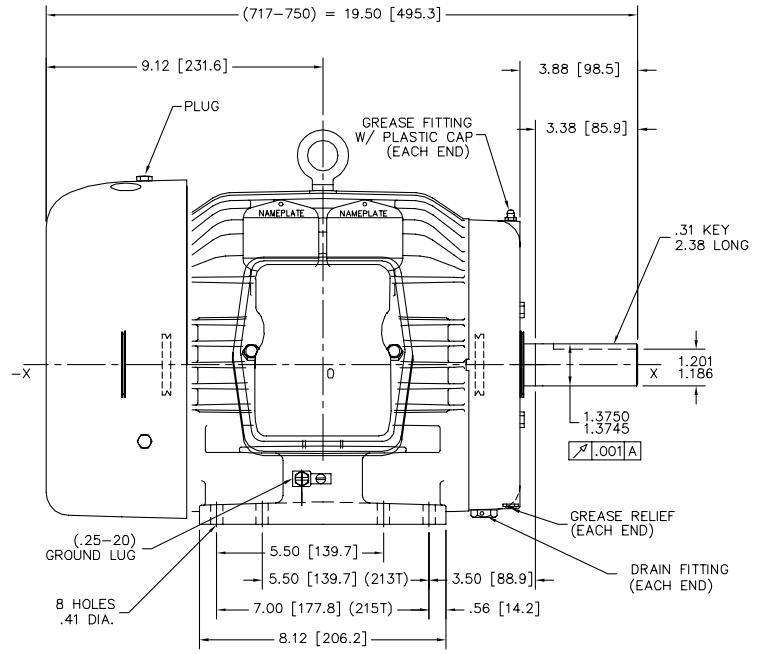
Load Characteristics 368 V, 60 Hz, 10 HP

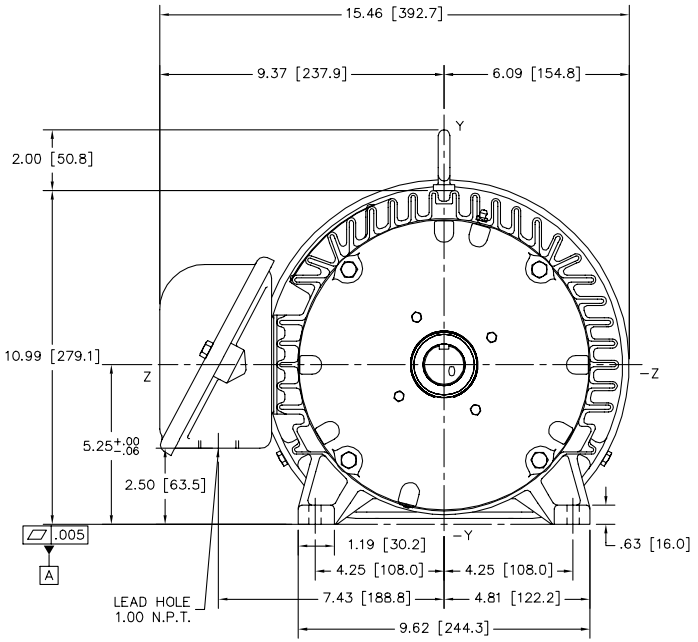
% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	79	89	91	90	90	86	90
Efficiency	90.5	92.3	91.4	89.7	87.4	84.6	88.3
Speed	3565	3532	3495	3453	3401	3335	3422
Line amperes	4.09	7.1	10.43	14.25	18.44	23.94	16.8

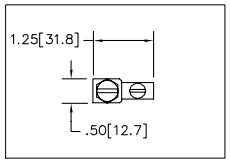
Performance Graph at 368V, 60Hz, 10.0HP Typical performance - Not guaranteed values



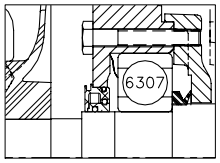
07LYK629



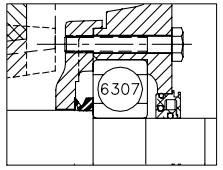




GROUND LUG DETAIL



FRONT END DETAIL



PULLEY END DETAIL

*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: ADD DIM FROM FOOT TO KOBX		
REV. LTR: K	VERSION: 10	TDR: 000001189953
FILE: \AAA\00118\406	REVISED: 09:40:00 04/29/2022	BY: USCOPIC1
MTL: –		

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

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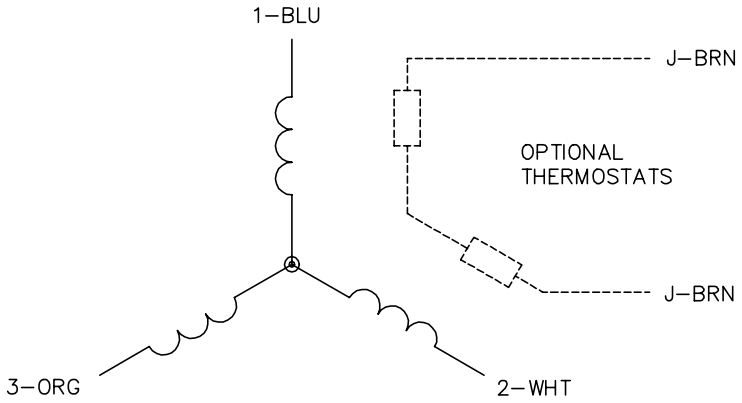
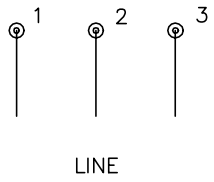
07LYK629

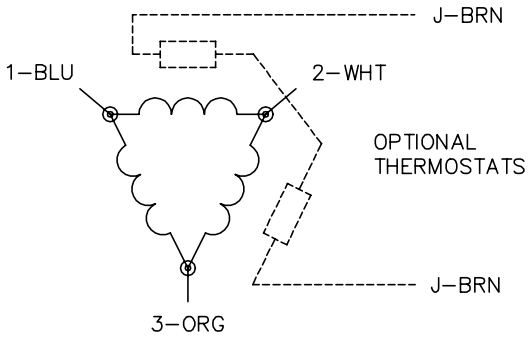
CD0006

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

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