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# Customer information packet

## ECP84109T-4

40HP, 3545RPM, 3PH, 60HZ, 324TS, TEFC, F1

EGM, LLC

Class - CLI GP A,B,C,D

Division - Division II

## Specifications

Enclosure	TEFC
Frame	324TS
Frame Material	Iron
Frequency	60.00 Hz
Output @ Frequency	40.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
XP Class and Group	CLI GP A,B,C,D
XP Division	Division II
Agency Approvals	CCSA US CSA EEV UR
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Constant Torque Speed Range	6
Current @ Voltage	44.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	92.4 %
Electrically Isolated Bearing	Not Electrically Isolated
Enclosure Modification	841
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	44.0 a
Insulation Class	F
Inverter Code	Inverter Duty

## Part detail

Revision	B
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	12WGY667
Layout	12LYF808
Eff. date	12-08-2020
CD Diagram	CD0006
Poles	02
Leads	3#8
Proprietary	False
Created date	12-11-2018

<b>IP Rating</b>	IP56
<b>KVA Code</b>	G
<b>Lifting Lugs</b>	Standard Lifting Lugs
<b>Locked Bearing Indicator</b>	Locked Bearing
<b>Max Speed</b>	5400 rpm
<b>Motor Lead Termination</b>	Ring Terminals
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	1256M
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	2
<b>Overall Length</b>	29.03 IN
<b>Power Factor</b>	91
<b>Product Family</b>	Chem Process S/P 32-8 IEEE 841
<b>Pulley Face Code</b>	Standard
<b>Rodent Screen</b>	None
<b>Service Factor</b>	1.15
<b>Shaft Diameter</b>	1.875 IN
<b>Shaft Ground Indicator</b>	No Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Speed</b>	3545 rpm
<b>Speed Code</b>	Single Speed
<b>Starting Method</b>	Direct on line
<b>Thermal Device - Winding</b>	None
<b>Vibration Sensor Indicator</b>	No Vibration Sensor
<b>Winding Thermal 1</b>	None
<b>Winding Thermal 2</b>	None
<b>XP Temp Code</b>	T3

**Nameplate**

**NP3190**

<b>STK.NO.</b>	ECP84109T-4	<b>P/N</b>		<b>ENCLOSURE</b>	TEFC
<b>SPEC.</b>	12-0000-0363	<b>CC</b>	010A	<b>FRAME</b>	324TS
<b>HP</b>	40	<b>CLASS</b>	F	<b>HZ</b>	60
<b>RPM</b>	3545	<b>RPM MAX</b>	5400	<b>ODE BRG</b>	6312
<b>VOLT</b>	460	<b>PH</b>	3	<b>DE BRG</b>	6312
<b>AMP</b>	44	<b>DES</b>	B	<b>D.E. BRG.</b>	60BC03X30X
<b>RATING</b>	40C AMB-CONT	<b>PH</b>	3	<b>O.D.E. BRG.</b>	60BC03X30X
<b>NEMA-NOM-EFF</b>	92.4	<b>KVA-CODE</b>	G	<b>MOTOR WEIGHT</b>	626
<b>G.MIN.EFF</b>	91	<b>MAX. KVAR</b>	4	<b>GREASE</b>	POLYREX EM
<b>TEMP CODE</b>	T3	<b>SER.F.</b>	1.15	<b>BLANK</b>	
<b>TEMP =</b>	200	<b>IP</b>	56	<b>INV.TYPE</b>	PWM
<b>CT HZ FROM</b>	6	<b># OF ROTOR BARS</b>	28	<b>PF</b>	91
<b>HTR-VOLTS</b>		<b># OF STATOR SLOTS</b>	36	<b>INVERTER-TEMP-CODE</b>	200
<b>HTR-AMPS</b>		<b>C HP FR</b>	60	<b>C HP TO</b>	90
<b>HTR-WATTS</b>		<b>CT HZ TO</b>	60	<b>MAX. SPACE HEATER TEMP.</b>	
<b>VT HZ FROM</b>	3	<b>VT HZ TO</b>	60		

## Parts list

Part number	Description	Quantity
SA363993	SA 12-0000-0363	1.000 ea
RA353296	RA 12-0000-0363	1.000 ea
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 ea
LB1119N	WARNING LABEL	1.000 ea
LC0006	CONNECTION LABEL	1.000 ea
LB1449	DIV-2/NEC WARNING LABEL	1.000 ea
NP3190	SS IEEE841 INV DIV-2 UL CSA-C US EEV	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 1/21	1.000 ea
WD1000B48	T&B D73, RING TERMINAL 8 AWG 3/8 STUD	3.000 ea
WD1000B19	TERMINAL BURNDY L250HP	1.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	1.000 ea
80XN3816A12	SET SCREW,HEX SOCKET CUP POINT,3/8-16 X	4.000 ea
12FH1002A15GP6	FAN COVER, MACH, W/PRIMER W/MG1025N19	1.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I	4.000 ea
XY5013A12	NUT,1/2-13,HEX,STEEL,ZINCPLATED	4.000 ea
37FN3002B04	EXFN, PLASTIC, 7.50 OD, 2.003 ID	1.000 ea
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 ea
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 ea
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.200 lb
10XN3816K08	3/8-16 X .50 HEX HD CAP SCREW GRADE 5	1.000 ea
12EP1111A02GP6	FR ENDPLATE, MACH W/EPOXY PRIMER & RELIA	1.000 ea
HA3400A32	STUD, 1/2-13 X 7.38	4.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I	4.000 ea
HW4601A55	INPRO/SEAL #1698-A-M0022-0 VBXX 312 BRG/	1.000 ea
HW5100A15	W4997-050 WVY WSHR (WB)	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
HA4017A02	.125X2.50 GREASER EXTENS.F/S	1.000 ea
HA4017A01	1/8 X 4 GREASE EXT (F/S)	1.000 ea
HW4019A01	PIPE COUPLING 1/8 NPT,STEEL,ZINC COATING	1.000 ea
10XN3118K40	5/16-18 X 2.50" HEX HD, GRADE 5	4.000 ea

HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HW4500A21	1618BALEMITE FITTING 825 UNIVERSAL	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HA4002A03	#304 S.S. DRAIN FITTING, .125 NPT (.44 H	1.000 ea
HA4002A03	#304 S.S. DRAIN FITTING, .125 NPT (.44 H	1.000 ea
12EP1111A01P	SPL PUEP 312 BRG FOR INPRO SEAL W/EPOXY	1.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT, .879 OD, .509 I	4.000 ea
10XN5013K28	1/2-13 X 1.75 HEX HEAD MACH SCREW, GRAD	4.000 ea
HW4601A55	INPRO/SEAL #1698-A-M0022-0 VBXX 312 BRG/	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
10XN3118K40	5/16-18 X 2.50" HEX HD, GRADE 5	4.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
10CB1000A04P	KO BOX, MACH W/2.00 NPT W/EPOXY PRIMER	1.000 ea
09GS1010	GASKET, DWG, LEADWIRE SEPERATOR	1.000 ea
10XN3118K16	5/16-18 X 1' GRADE #5, STL, ZINC PLATE	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT .591 OD, .319 I	4.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
59XW2520G07	.25-20X.44, HEX SER WSHR, TAPTITE 2, GREEN	1.000 ea
10CB1503A01P	CONDUIT BOX LIPPED LID, MACH W/EPXY PRMR	1.000 ea
14GS1003	GASKET CONDUIT BOX LID, NEOP	1.000 ea
10XN2520K16	1/4-20 X 1" HX HD SCRW GRADE 5, ZINC P	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 ea
MG1025N19	WILKOFAS, 778.50, RELIANCE BLUE-GREEN	0.125 ga
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.031 qt
MJ5002A01	SILICON RUBBER SEALANT, 732CL 10.3 OZ TU	0.033 ea
MJ5002A01	SILICON RUBBER SEALANT, 732CL 10.3 OZ TU	0.025 ea
12PA1000	PACKAGING GROUP PRINT PK1024A06	1.000 ea
HW2501H18	KEY, 1/2 SQ X 2.000	1.000 ea
MJ5004A59	ADHESIVE LOCTITE #401 SURFACE INSENSITIV	0.010 ea

**AC Induction Motor Performance Data**

Record # 47225

Typical performance - not guaranteed values

Winding: 12WGY667-R012		Type: 1256M	Enclosure: TEFC
<b>Nameplate Data</b>		<b>460 V, 60 Hz: Single Voltage Motor</b>	
Rated Output (HP)	40	Full Load Torque	59.1 LB-FT
Volts	460	Start Configuration	direct on line
Full Load Amps	44	Breakdown Torque	194 LB-FT
R.P.M.	3545	Pull-up Torque	63.8 LB-FT
Hz	60 Phase	Locked-rotor Torque	80.9 LB-FT
NEMA Design Code	B KVA Code	Starting Current	284 A
Service Factor (S.F.)	1.15	No-load Current	9.79 A
NEMA Nom. Eff.	92.4 Power Factor	Line-line Res. @ 25°C	0.154 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	67°C
S.F. Amps		Temp. Rise @ S.F. Load	83°C
		Locked-rotor Power Factor	20.5
		Rotor inertia	4.38 LB-FT <sup>2</sup>

**Load Characteristics 460 V, 60 Hz, 40 HP**

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	72	86	91	91	91	90	91
Efficiency	86.9	91.6	92.5	92.4	91.9	91	92.4
Speed	3588	3575	3561	3545	3529	3510	3526
Line amperes	15.1	23.7	33.6	44.3	56	68.5	51.2

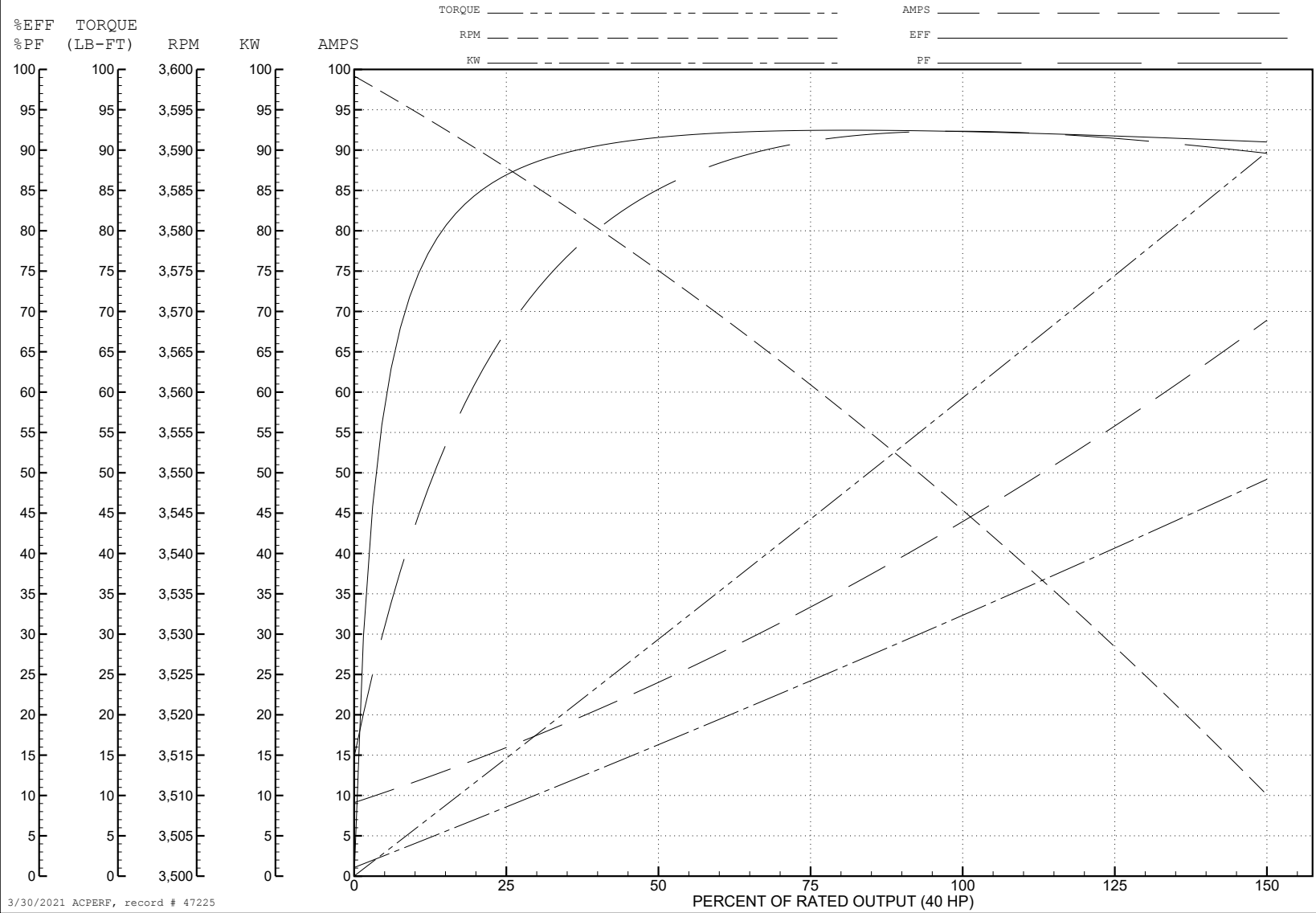
ABB Motors and Mechanical Inc.

WINDING # 12WGY667

Typical performance - not guaranteed values.

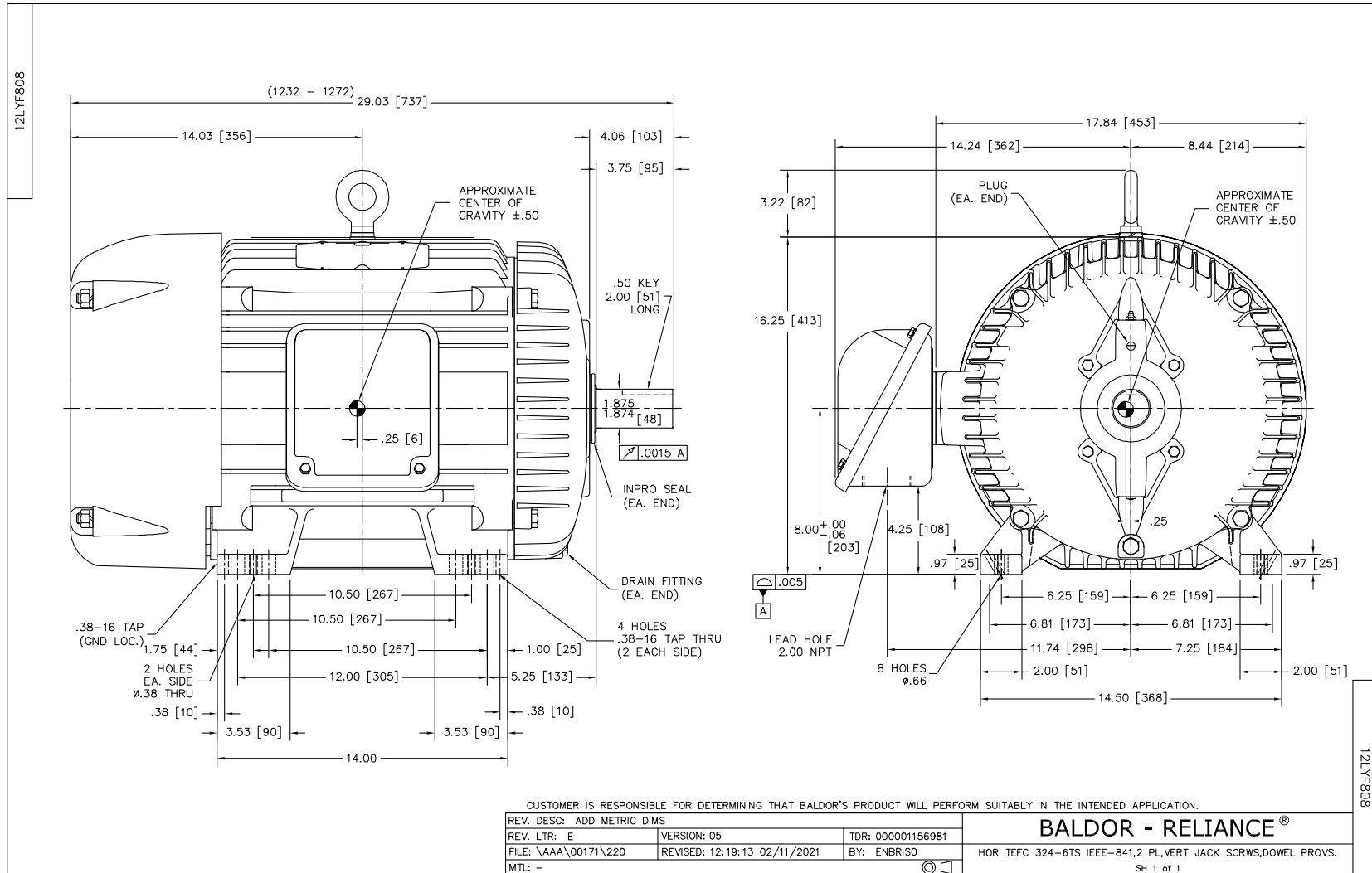
40 HP 3 PH 60 HZ 3545 RPM 460 V 1256M

TORQUES (LB-FT): PO=194 PU=63.8 LR=80.9 LRA=284

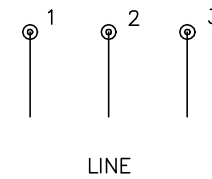
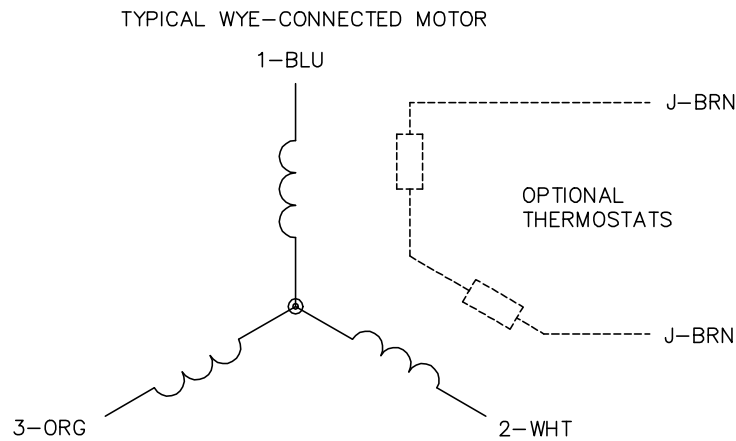


3/30/2021 ACPERF, record # 47225





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

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REV. LTR: E	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIRO
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**BALDOR - RELIANCE®**

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

SH 1 of 1