

**BALDOR® • RELIANCE** 

**Product Information Packet**

**ECP3581T**

**1HP,1765RPM,3PH,60HZ,143T,0524M,TEFC,F1**

Part Detail							
Revision:	Z	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	05WGX014	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	05F008	Layout:	05LYF008	Poles:	04	Created Date:	07-26-2007
Base:	RG	Eff. Date:	06-11-2021	Leads:	9#18		

Specs			
Catalog Number:	ECP3581T	Heater Indicator:	No Heater
Enclosure:	TEFC	Insulation Class:	F
Frame:	143T	Inverter Code:	Inverter Duty
Frame Material:	Iron	KVA Code:	N
Output @ Frequency:	1.000 HP @ 60 HZ	Lifting Lugs:	Standard Lifting Lugs
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Locked Bearing Indicator:	No Locked Bearing
Voltage @ Frequency:	230.0 V @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 18 AWG
	208.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
	460.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	CLI GP A,B,C,D	Motor Type:	0524M
XP Division:	Division II	Mounting Arrangement:	F1
Agency Approvals:	UR	Power Factor:	70
	CSA EEV	Product Family:	Chemical Processing (Not DC)
	CSA	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

<b>Blower:</b>	None	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
<b>Constant Torque Speed Range:</b>	1.2	<b>Shaft Rotation:</b>	Reversible
<b>Current @ Voltage:</b>	3.000 A @ 230.0 V	<b>Shaft Slinger Indicator:</b>	Shaft Slinger
	3.300 A @ 208.0 V	<b>Speed Code:</b>	Single Speed
	1.500 A @ 460.0 V	<b>Motor Standards:</b>	NEMA
<b>Design Code:</b>	B	<b>Starting Method:</b>	Direct on line
<b>Drip Cover:</b>	No Drip Cover	<b>Thermal Device - Bearing:</b>	None
<b>Duty Rating:</b>	CONT	<b>Thermal Device - Winding:</b>	None
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Feedback Device:</b>	NO FEEDBACK	<b>Winding Thermal 1:</b>	None
<b>Front Face Code:</b>	Standard	<b>Winding Thermal 2:</b>	None
<b>Front Shaft Indicator:</b>	None	<b>XP Temp Code:</b>	T4

<b>Nameplate NP3258E</b>										
<b>CAT.NO.</b>	ECP3581T									
<b>SPEC.</b>	05F008X014G1									
<b>HP</b>	1	TE								
<b>VOLTS</b>	208-230/460									
<b>AMP</b>	3.3-3/1.5									
<b>RPM</b>	1765									
<b>FRAME</b>	143T				<b>HZ</b>	60		<b>PH</b>	3	
<b>SER.F.</b>	1.15			<b>CODE</b>	N		<b>DES</b>	B		
<b>RATING</b>	40C AMB-CONT									
<b>SN</b>										
<b>DE</b>	6205				<b>ODE</b>	6205				
<b>NEMA-NOM-EFF</b>	87.5				<b>PF</b>	70				
<b>G.MIN.EFF</b>	85.5				<b>CC</b>	010A				
<b>T. CODE</b>	T4				<b>T=</b>	135				
								<b>CL</b>	F	

<b>Nameplate NP3261E</b>	
<b>SPEC.</b>	05F008X014G1
<b>D.E. BRG.</b>	25BC02XP30X
<b>O.D.E. BRG.</b>	25BC02XP30X
<b>GREASE</b>	POLYREX EM
<b>RPM MAX</b>	2700
	<b>MAX. KVAR</b> N/A
<b>BLANK</b>	
<b>INV. TYPE</b>	PWM
<b>T=</b>	135
<b>C HP FR</b>	60
<b>CT HZ FROM</b>	1.2
<b>VT HZ FROM</b>	0-
<b>HTR-VOLTS</b>	
<b>HTR-WATTS</b>	
<b>C HP TO</b>	90
<b>CT HZ TO</b>	60
<b>VT HZ TO</b>	60
<b>HTR-AMPS</b>	
	<b>MAX. SPACE HEATER TEMP.</b>

Parts List		
Part Number	Description	Quantity
SA161349	SA 05F008X014G1	1.000 EA
RA149904	RA 05F008X014G1	1.000 EA
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	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
HW3001B02	BRASS CUP WASHER W/GROUND SYMBOL TAB,	1.000 EA
10XN2520S06	1/4 20X3/8 HX HD CAP S.S.	2.000 EA
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	2.000 EA
35EP1102B03G	FREP TEFC 205 BRG,GRSR,RLF,.125 NPT DRAI	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
HW5100A05	WVY WSHR F/205 & 304 BRGS	1.000 EA
35EP1102A67G	PUEP ENCL 205 BRG W/GRSR,REL F&.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

Parts List (continued)		
Part Number	Description	Quantity
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 EA
35FH1000A01G	35FH1000A01 W/GRAY FLUIDIZ	1.000 EA
WD4100A03	DE-750 HEYCO PLUG 62MP0750 MICRO PLASTIC	1.000 EA
10XN2520A18	1/4-20 X 1-1/8 HEX CAP SCREW.	3.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	3.000 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
HA1005A03SP	SLINGER, OD 1.750, ID .938, 205 BRG	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
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
LB1002N	LABEL,MARINE DUTY (ON ROLLS)	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB
MG1025N19	WILKOFAS, 778.50, RELIANCE BLUE-GREEN	0.022 GA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
LB1449	DIV-2/NEC WARNING LABEL	1.000 EA
NP3258E	SS CP SUPER-E DIV-2 UL CSA-C US EEV CC	1.000 EA
NP3261E	SS CP SUPER-E AUX DATA INFORMATION	1.000 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA

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36PA1000	PKG GRP, PRINT PK1016A06	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2100/bx) 4/22	1.000 EA



<b>Accessories</b>		
<b>Part Number</b>	<b>Description</b>	<b>Multiplier</b>
35-1300	C FACE KIT	A8

**AC Induction Motor Performance Data**

Record # 47106

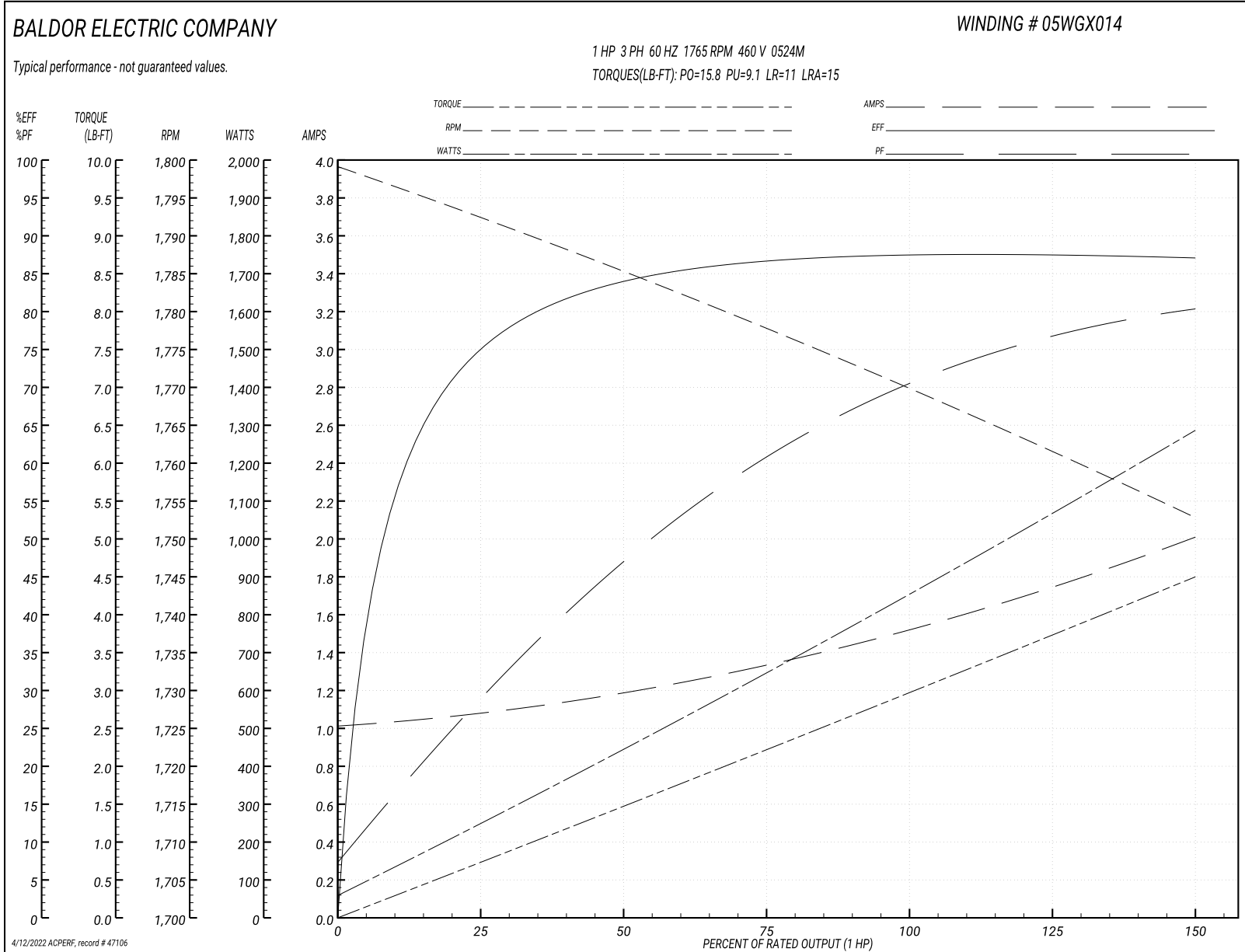
Typical performance - not guaranteed values

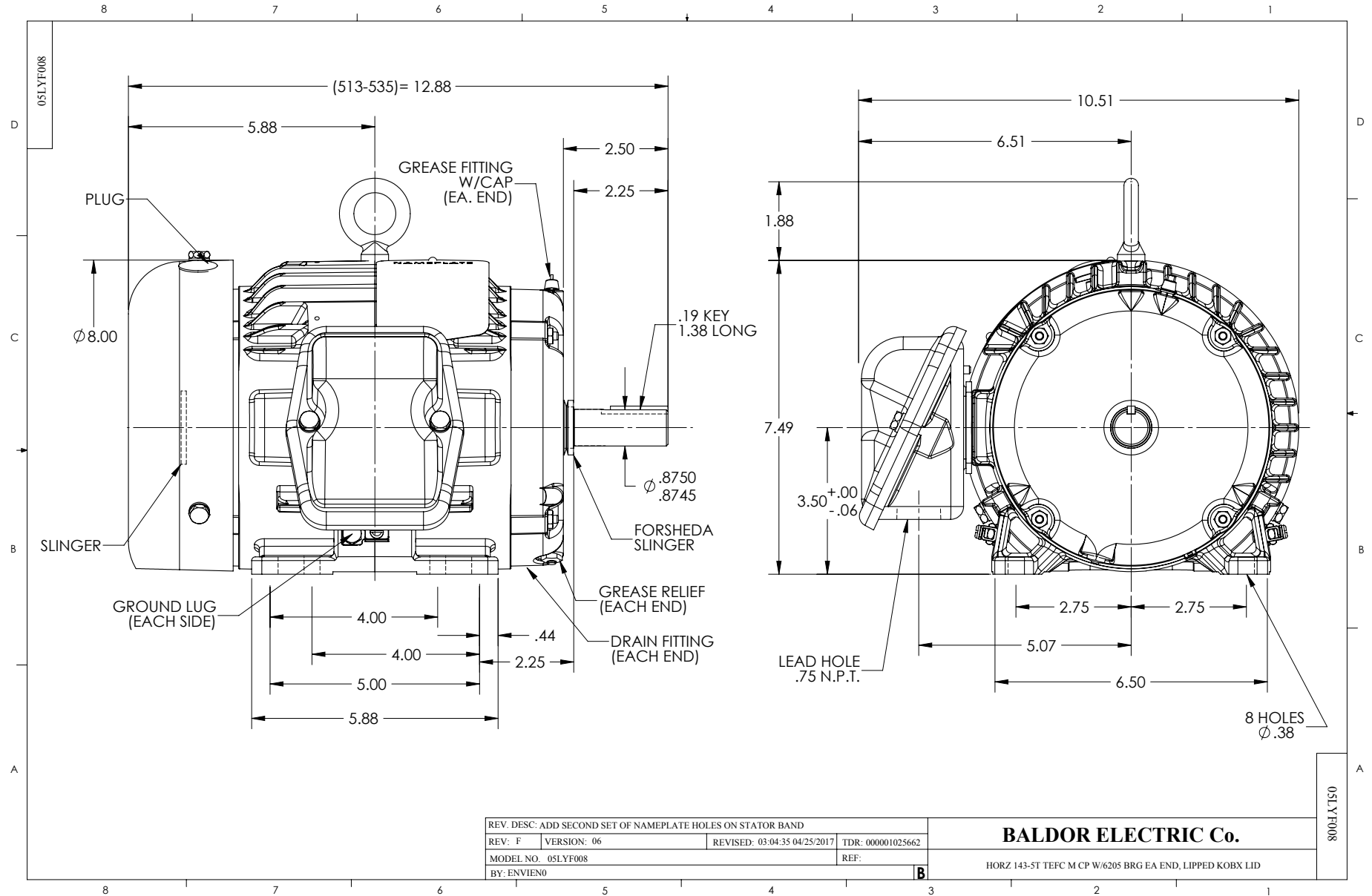
<b>Winding: 05WGX014-R050</b>		<b>Type: 0524M</b>		<b>Enclosure: TEFC</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	1	<b>Full Load Torque</b>	2.99 LB-FT		
<b>Volts</b>	208-230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	3.3-3/1.5	<b>Breakdown Torque</b>	15.8 LB-FT		
<b>R.P.M.</b>	1765	<b>Pull-up Torque</b>	9.1 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	11 LB-FT	
<b>NEMA Design Code</b>	<b>B KVA Code</b>	N	<b>Starting Current</b>	15 A	
<b>Service Factor (S.F.)</b>	1.15	<b>No-load Current</b>	1.02 A		
<b>NEMA Nom. Eff.</b>	87.5 <b>Power Factor</b>	70	<b>Line-line Res. @ 25°C</b>	12 Ω	
<b>Rating - Duty</b>	40C AMB-CONT	<b>Temp. Rise @ Rated Load</b>	21°C		
<b>S.F. Amps</b>		<b>Temp. Rise @ S.F. Load</b>	26°C		

**Load Characteristics 460 V, 60 Hz, 1 HP**

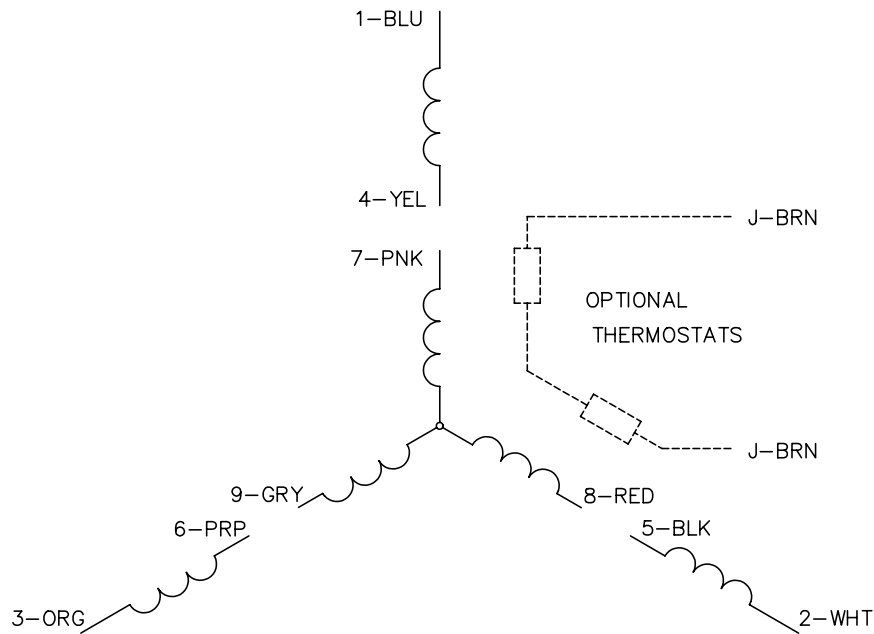
<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>S.F.</b>
<b>Power Factor</b>	28	48	60	70	77	81	74
<b>Efficiency</b>	74.8	84.4	87	87.9	87.7	87.3	87.8
<b>Speed</b>	1793	1785	1778	1770	1761	1753	1765
<b>Line amperes</b>	1.07	1.18	1.33	1.53	1.76	2	1.67

Performance Graph at 460V, 60Hz, 1.0HP Typical performance - Not guaranteed values

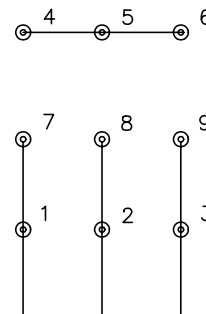




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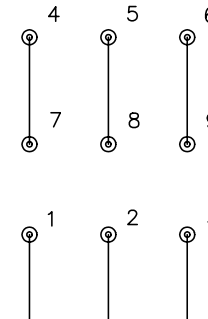


LOW VOLTAGE  
(2Y)



LINE

HIGH VOLTAGE  
(1Y)



LINE

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.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
900000		FILE: AAA00005140	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005