

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM3581T-BG**

**1HP,1760RPM,3PH,60HZ,143T,TEFC,F1**

Part Detail							
Revision:	A	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	05WGX122	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:		Layout:	05LYH015	Poles:	04	Created Date:	04-09-2019
Base:		Eff. Date:	07-03-2019	Leads:	9#18		

Specs			
Catalog Number:	EM3581T-BG	Feedback Device:	NO FEEDBACK
Enclosure:	TEFC	Heater Indicator:	No Heater
Frame:	143T	Insulation Class:	H
Frame Material:	Iron	Inverter Code:	Inverter Ready
Output @ Frequency:	1.000 HP @ 60 HZ	IP Rating:	NONE
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	KVA Code:	L
Voltage @ Frequency:	460.0 V @ 60 HZ	Lifting Lugs:	Standard Lifting Lugs
	230.0 V @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
XP Class and Group:	None	Motor Lead Termination:	Flying Leads
XP Division:	Not Applicable	Motor Type:	0518M
Agency Approvals:	CSA	Mounting Arrangement:	F1
	CSA EEV	Power Factor:	71
	UR	Product Family:	General Purpose
Auxillary Box:	No Auxillary Box	Pulley Face Code:	Standard
Auxillary Box Lead Termination:	None	Rodent Screen:	None
Base Indicator:	Rigid	Shaft Ground Indicator:	Shaft Grounding
Bearing Grease Type:	Polyrex EM (-20F +300F)	Shaft Rotation:	Reversible
Blower:	None	Speed Code:	Single Speed

<b>Current @ Voltage:</b>	3.100 A @ 208.0 V	<b>Motor Standards:</b>	NEMA
	3.000 A @ 230.0 V	<b>Starting Method:</b>	Direct on line
	1.500 A @ 460.0 V	<b>Thermal Device - Bearing:</b>	None
<b>Design Code:</b>	B	<b>Thermal Device - Winding:</b>	None
<b>Drip Cover:</b>	No Drip Cover	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Duty Rating:</b>	CONT	<b>Winding Thermal 1:</b>	None
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Winding Thermal 2:</b>	None

<b>Nameplate NP3441LUA</b>										
<b>CAT.NO.</b>	EM3581T-BG									
<b>SPEC</b>	05-0000-0052									
<b>HP</b>	1									
<b>VOLTS</b>	230/460									
<b>AMPS</b>	3/1.5									
<b>RPM</b>	1760									
<b>FRAME</b>	143T				<b>HZ</b>	60			<b>PH</b>	3
<b>SF</b>	1.15		<b>CODE</b>	L	<b>DES</b>	B		<b>CLASS</b>	H	
<b>NEMA NOM. EFF</b>	85.5		<b>PF</b>	71						
<b>RATING</b>	40C AMB-CONT									
<b>CC</b>	010A			<b>USABLE AT 208V</b>						3.1
<b>ENCL</b>	TEFC		<b>SER</b>							
<b>DE</b>	6205			<b>ODE</b>	6203					
<b>VPWM INVERTER READY</b>										
<b>CT6-60H(10:1)VT3-60H(20:1</b>										
	50HZ 1HP 190/380V 3.6/1.8A								SF1.0	

Parts List		
Part Number	Description	Quantity
SA368243	SA 05-0000-0052	1.000 EA
RA357741	RA 05-0000-0052	1.000 EA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
NP3441LUA	ALUM SUPER-E VPWM INV READY UL CSA-EEV C	1.000 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2100/bx) 4/22	1.000 EA
HW3201A05	3/8-16 EYEBOLT	1.000 EA
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 EA
10XN2520A06	1/4 20X3/8 HX HD CAP	2.000 EA
35FH4005A02	IEC FH W/GREASER - W/PRIMER	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 EA
35FN3002A05SP	EXFN, PLASTIC, 6.376 OD, .638 ID	1.000 EA
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB
HA3100A37	THRUBOLT 10-32 X 8.500	4.000 EA
LB1508	LABEL "SHAFT GROUNDING BRUSH" 1.50 X .81	1.000 EA
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 EA
35EP1100A02	FR ENDPLATE, TEFC W/GREASER	1.000 EA
HW5100A03	WAVY WASHER (W1543-017)	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
35EP1102A42	PULLEY ENCL 205 BRG W/ GREASER & LOCKED	1.000 EA
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
06CB3000	BALDOR CONDUIT BOX CAST	1.000 EA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
06GS1000	GASKET,CONDUIT BOX	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
06CB3500	BALDOR CONDUIT BOX LID	1.000 EA
06GS1001	BALDOR CONDUIT BOX GASKET	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.022 GA
36PA1000	PKG GRP, PRINT PK1016A06	1.000 EA
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 EA
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 EA

**AC Induction Motor Performance Data**

Record # 75455

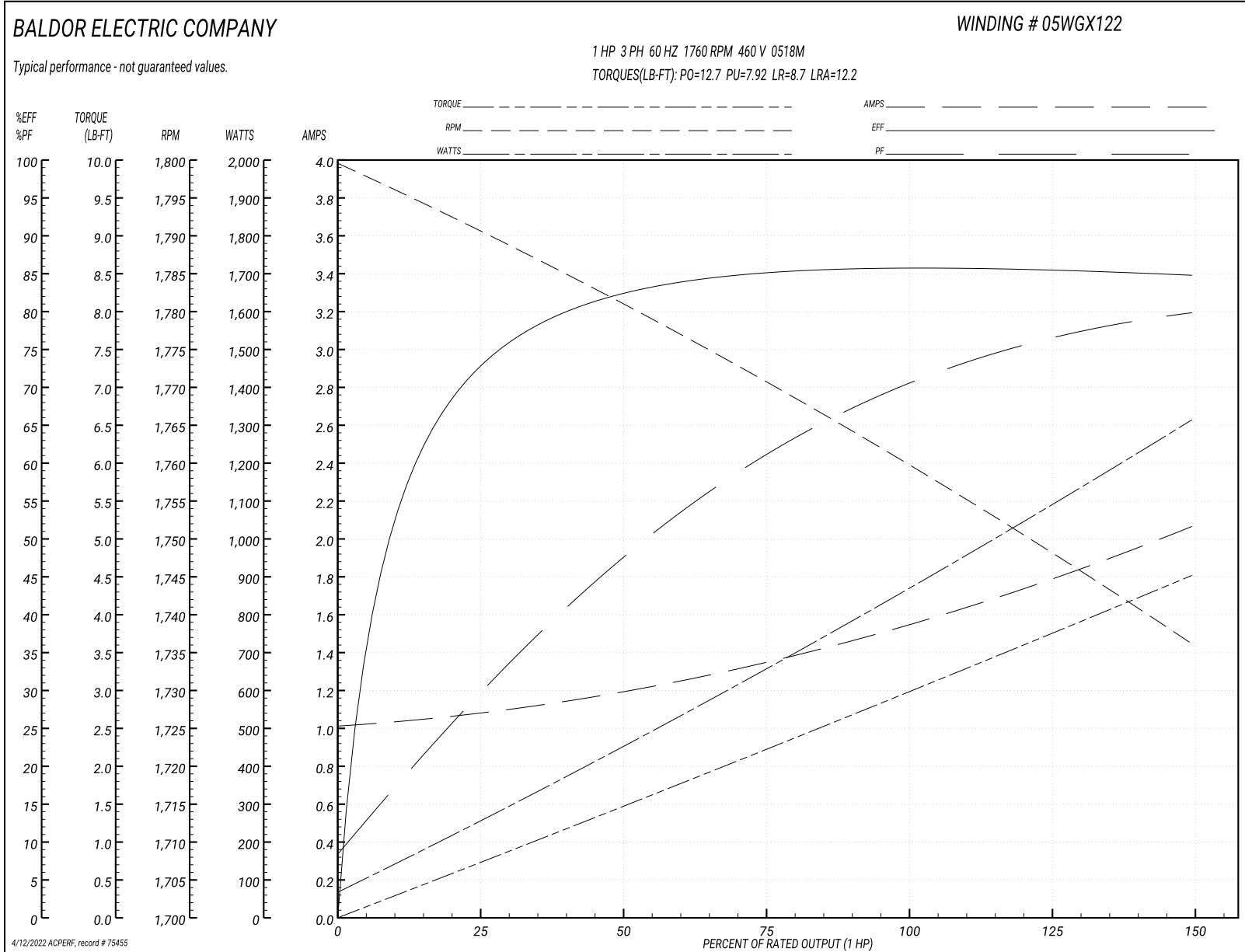
Typical performance - not guaranteed values

Winding: 05WGX122-R005		Type: 0518M		Enclosure: TEFC	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
Rated Output (HP)	1	Full Load Torque	2.98 LB-FT		
Volts	230/460	Start Configuration	direct on line		
Full Load Amps	3/1.5	Breakdown Torque	12.7 LB-FT		
R.P.M.	1760	Pull-up Torque	7.92 LB-FT		
Hz	60 Phase	Locked-rotor Torque	8.7 LB-FT		
NEMA Design Code	B KVA Code	Starting Current	12.2 A		
Service Factor (S.F.)	1.15	No-load Current	1.02 A		
NEMA Nom. Eff.	85.5 Power Factor	Line-line Res. @ 25°C	15.4 Ω		
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	29°C		
S.F. Amps		Temp. Rise @ S.F. Load	34°C		
		Locked-rotor Power Factor	54.1		
		Rotor inertia	0.106 LB-FT <sup>2</sup>		

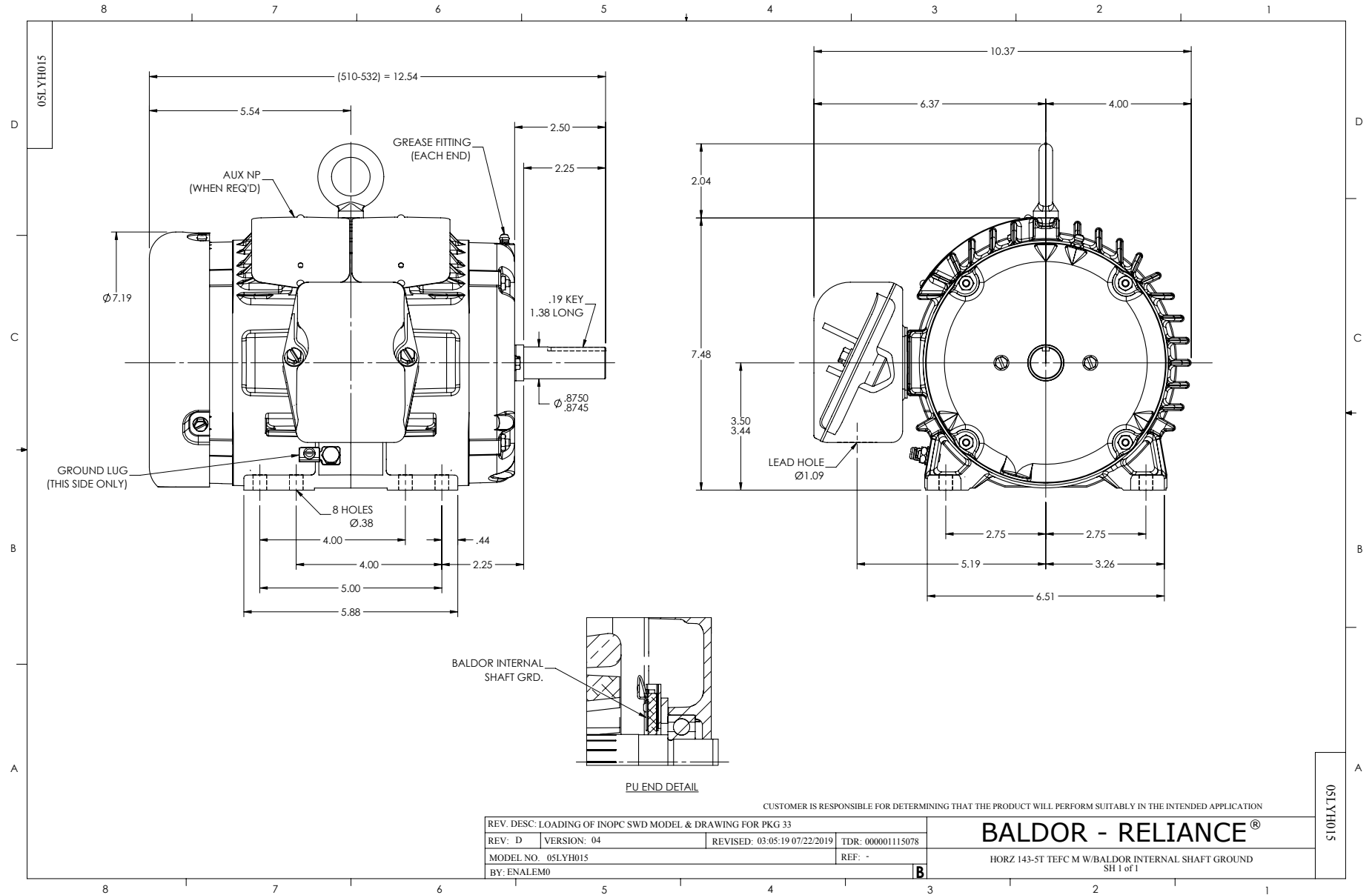
**Load Characteristics 460 V, 60 Hz, 1 HP**

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	30	48	61	70	76	80	74
Efficiency	72.1	82.1	85.1	85.9	85.5	84.7	85.7
Speed	1790	1781	1771	1760	1748	1736	1753
Line amperes	1.07	1.19	1.35	1.55	1.8	2.06	1.7

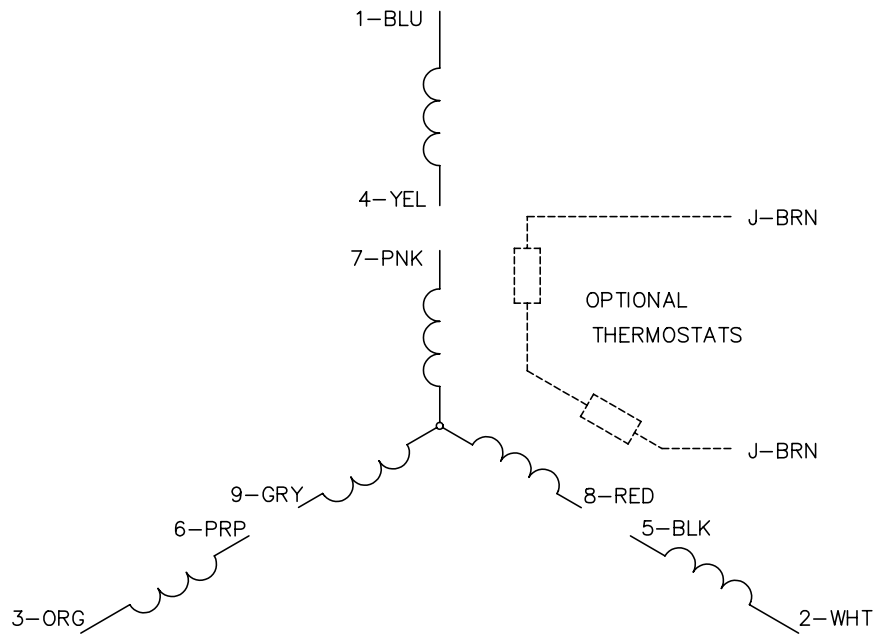
Performance Graph at 460V, 60Hz, 1.0HP Typical performance - Not guaranteed values



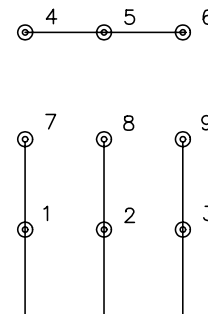




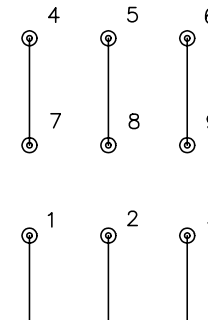
CD0005



LOW VOLTAGE  
(2Y)



HIGH VOLTAGE  
(1Y)



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
900003		FILE: AAA00005140	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005

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