

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM4106T-G**

**20HP,3520RPM,3PH,60HZ,256T,0936M,TEFC,F1**

Part Detail							
Revision:	AB	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	09WGZ601	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	09J359	Layout:	09LYJ359	Poles:	02	Created Date:	11-29-2011
Base:	RG	Eff. Date:	09-17-2019	Leads:	9#12		

Specs			
Catalog Number:	EM4106T-G	Heater Indicator:	No Heater
Enclosure:	TEFC	Insulation Class:	H
Frame:	256T	Inverter Code:	Inverter Ready
Frame Material:	Iron	KVA Code:	H
Output @ Frequency:	20.000 HP @ 60 HZ	Lifting Lugs:	Standard Lifting Lugs
Synchronous Speed @ Frequency:	3600 RPM @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 12 AWG
	230.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
XP Class and Group:	None	Motor Lead Termination:	Flying Leads
XP Division:	Not Applicable	Motor Type:	0936M
Agency Approvals:	UR	Mounting Arrangement:	F1
	CSA EEV	Power Factor:	89
	CSA	Product Family:	General Purpose
Auxillary Box:	No Auxillary Box	Pulley End Bearing Type:	Ball
Auxillary Box Lead Termination:	None	Pulley Face Code:	Standard
Base Indicator:	Rigid	Pulley Shaft Indicator:	Standard
Bearing Grease Type:	Polyrex EM (-20F +300F)	Rodent Screen:	None
Blower:	None	Shaft Extension Location:	Pulley End

<b>Current @ Voltage:</b>	23.000 A @ 460.0 V	<b>Shaft Ground Indicator:</b>	Shaft Grounding
	46.000 A @ 230.0 V	<b>Shaft Rotation:</b>	Reversible
	50.000 A @ 208.0 V	<b>Shaft Slinger Indicator:</b>	Shaft Slinger
<b>Design Code:</b>	A	<b>Speed Code:</b>	Single Speed
<b>Drip Cover:</b>	No Drip Cover	<b>Motor Standards:</b>	NEMA
<b>Duty Rating:</b>	CONT	<b>Starting Method:</b>	Direct on line
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Thermal Device - Bearing:</b>	None
<b>Feedback Device:</b>	NO FEEDBACK	<b>Thermal Device - Winding:</b>	None
<b>Front Face Code:</b>	Standard	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Front Shaft Indicator:</b>	None	<b>Winding Thermal 1:</b>	None
		<b>Winding Thermal 2:</b>	None

Nameplate NP3441LUA

CAT.NO.	EM4106T-G					
SPEC	09J359Z601G1					
HP	20					
VOLTS	230/460					
AMPS	46/23					
RPM	3520					
FRAME	256T		HZ	60	PH	3
SF	1.15		CODE	H	DES	A
NEMA NOM. EFF	91		PF	89	CLASS	H
RATING	40C AMB-CONT					
CC	010A		USABLE AT 208V		50	
ENCL	TEFC		SER			
DE	6309		ODE	6208		
VPWM INVERTER READY						
CT6-60H(10:1)VT3-60H(20:1						
	50HZ 20HP 190/380V 56/28A					
	SF1.0					

Parts List		
Part Number	Description	Quantity
SA235032	SA 09J359Z601G1	1.000 EA
RA221996	RA 09J359Z601G1	1.000 EA
37FN3002C02	EXFN, PLASTIC, 6.00 OD, 1.503 ID	1.000 EA
HW1002A63	0ASHER, 5/8 HI-COLLAR SPRLCKWASHER	1.000 EA
09CB3002SP	CB W/1.38 LEAD HOLE FOR 37, 39, 307 & 30	1.000 EA
09GS1000SP	GASKET-CONDUIT BOX, 1/16 THICK LEXIDE	1.000 EA
10XN2520K12	1/4-20 X.75 GRD 5	2.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 EA
09EP1101A11SP	PU ENDPLATE, MACH	1.000 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
HW4600B44	V-RING SLINGER 1.500 X 1.810 X .28 VITON	1.000 EA
09FE1100A14	FREP ASSEMBLY, 09EP1100A14	1.000 EA
XY3816A12	3/8-16 FINISHED NUT	4.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
HW5100A08	W3118-035 WVY WSHR (WB)	1.000 EA
10XN2520K28	1/4-20 X 1.75" HX HD SCRWGRADE 5, ZINC P	2.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 EA
10XN2520K36	1/4-20 X 2.25" HX HD SCRWGRADE 5, ZINC P	4.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 EA
HA3113A02	THRUBOLT 3/8-16 X 16.750	4.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
09FH4000SP	309 FH - BLACK PRIMER	1.000 EA
HA2081A05	SPACER TUBE, 309 FAN HSG, 2.00 LONG	4.000 EA

Parts List (continued)		
Part Number	Description	Quantity
XY3816A12	3/8-16 FINISHED NUT	4.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
09CB3501SP	CONDUIT BOX LID FOR 09CB3001 & 09CB3002	1.000 EA
09GS1013SP	09 GS FOR 09CB3501 LID - LEXIDE	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 EA
HW2501G26	KEY, 3/8 SQ X 3.000	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
HW4500A05	1669B ALEM/UNIV860 GR FTG X	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 3/19	1.000 EA
LB1350	BAR CODE LABEL FOR YORK	1.000 EA
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.080 LB
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 EA
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 EA
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.050 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 EA
NP3441LUA	ALUM SUPER-E VPWM INV READY UL CSA-EEV C	1.000 EA
09PA1000	PACKAGING GROUP COMBINED PRINT	1.000 EA

PE-0000003	ZRTG PE ASSEMBLY	1.000 EA
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**AC Induction Motor Performance Data**

Record # 36290 - Typical performance - not guaranteed values

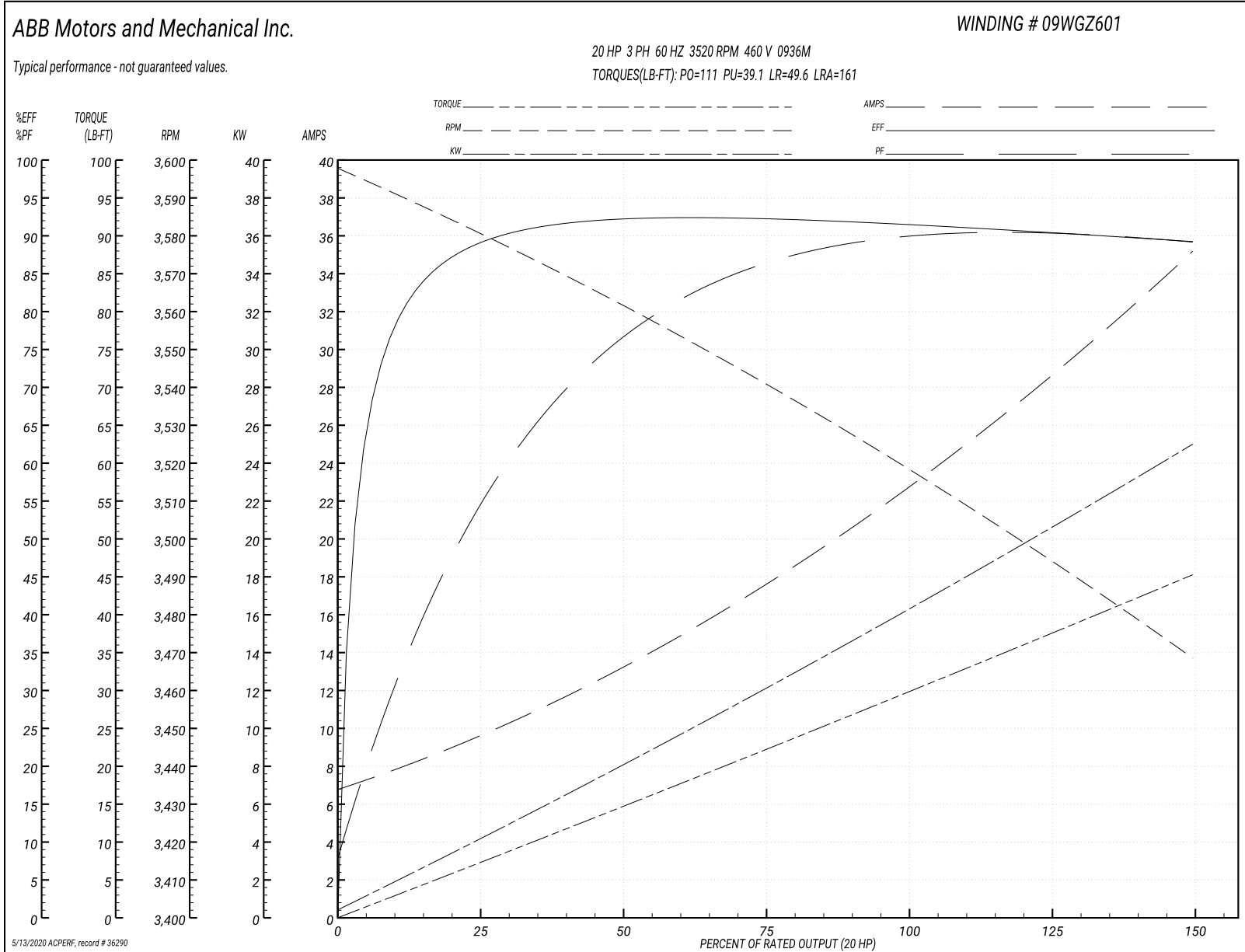
<b>Winding:</b> 09WGZ601-R024	<b>Type:</b> 0936M	<b>Enclosure:</b> TEFC
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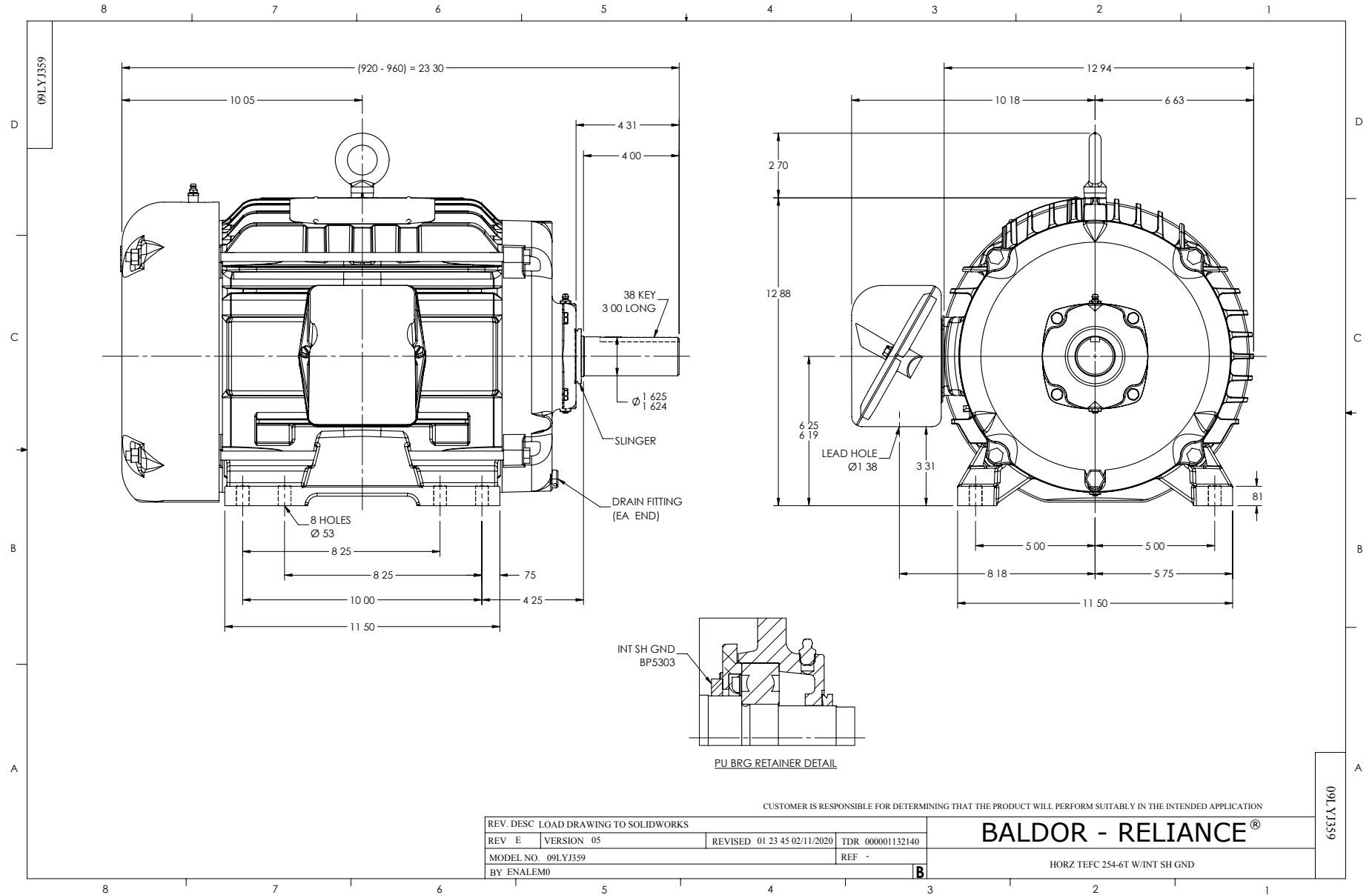
Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	20			Full Load Torque	29.6 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	46/23			Breakdown Torque	111 LB-FT
R.P.M.	3520			Pull-up Torque	39.1 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	49.6 LB-FT
NEMA Design Code	B	KVA Code	H	Starting Current	161 A
Service Factor (S.F.)	1.15			No-load Current	7.17 A
NEMA Nom. Eff.	91	Power Factor	89	Line-line Res. @ 25°C	0.47592 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	76°C
S.F. Amps				Temp. Rise @ S.F. Load	95°C
				Locked-rotor Power Factor	29
				Rotor inertia	0.92 LB-FT <sup>2</sup>

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	58	78	86	89	90	90	90
Efficiency	88.9	92.2	92.4	91.7	90.7	89.2	91.1
Speed	3579.6	3561.5	3541.3	3519.5	3495.4	3467.8	3505
Line amperes	9	13	17.7	22.9	28.6	35	26.3

Performance Graph at 460V, 60Hz, 20.0HP Typical performance - Not guaranteed values

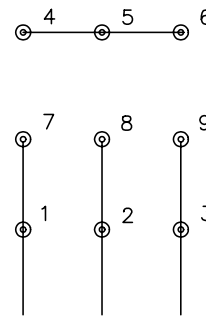




CD0005

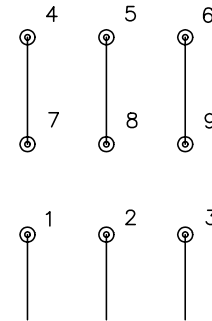


LOW VOLTAGE  
(2Y)



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
90000		FILE: AAA00005140	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005

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