

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM2514T-8**

**20HP,3510RPM,3PH,60HZ,254T,3928M,OPSB,F1**

Part Detail							
Revision:	R	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	39WG814	CD Diagram:	CD0695	Mfg Plant:	
Mech. Spec:	39K57	Layout:	39LYK057	Poles:	02	Created Date:	05-14-2012
Base:	RG	Eff. Date:	10-22-2021	Leads:	6#8		

Specs			
Catalog Number:	EM2514T-8	Insulation Class:	F
Enclosure:	OPSB	Inverter Code:	Inverter Ready
Frame:	254T	KVA Code:	G
Frame Material:	Steel	Lifting Lugs:	Standard Lifting Lugs
Motor Letter Type:	Three Phase	Locked Bearing Indicator:	No Locked Bearing
Output @ Frequency:	20.000 HP @ 60 HZ	Motor Lead Quantity/Wire Size:	6 @ 8 AWG
Synchronous Speed @ Frequency:	3600 RPM @ 60 HZ	Motor Lead Exit:	Ko Box
Voltage @ Frequency:	200.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	3928M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	CSA	Power Factor:	88
	CSA EEV	Product Family:	General Purpose
	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

<b>Current @ Voltage:</b>	53.000 A @ 200.0 V	<b>Shaft Rotation:</b>	Reversible
<b>Design Code:</b>	B	<b>Shaft Slinger Indicator:</b>	No Slinger
<b>Drip Cover:</b>	No Drip Cover	<b>Speed Code:</b>	Single Speed
<b>Duty Rating:</b>	CONT	<b>Motor Standards:</b>	NEMA
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Starting Method:</b>	Part Winding
<b>Feedback Device:</b>	NO FEEDBACK	<b>Thermal Device - Bearing:</b>	None
<b>Front Face Code:</b>	Standard	<b>Thermal Device - Winding:</b>	None
<b>Front Shaft Indicator:</b>	None	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Heater Indicator:</b>	No Heater	<b>Winding Thermal 1:</b>	None
		<b>Winding Thermal 2:</b>	None

<b>Nameplate NP3553L</b>										
<b>CAT.NO.</b>	EM2514T-8									
<b>SPEC</b>	39K057X814									
<b>HP</b>	20									
<b>VOLTS</b>	200									
<b>AMPS</b>	53									
<b>RPM</b>	3510									
<b>FRAME</b>	254T				<b>HZ</b>	60			<b>PH</b>	3
<b>SF</b>	1.15		<b>CODE</b>	G	<b>DES</b>	B		<b>CLASS</b>	F	
<b>NEMA NOM. EFF</b>	91		<b>PF</b>	88						
<b>RATING</b>	40C AMB-CONT									
<b>CC</b>	010A				<b>USABLE AT 208V</b>					
<b>ENCL</b>	OPSB		<b>SER</b>							
<b>DE</b>	6309			<b>ODE</b>	6208					
<b>VPWM INVERTER READY</b>										
<b>CT30-60(2:1) VT3-60(20:1)</b>										

Parts List		
Part Number	Description	Quantity
SA244477	SA 39K057X814	1.000 EA
RA231361	RA 39K057X814	1.000 EA
HA6361A01	LIFTING LUG FOR 37, 39 & 40 FRAME ZINC	2.000 EA
HA6016	ADAPTER, CAST CONDUIT BOX	1.000 EA
09CB3003	CB W/1.75" DIA LD HL - 37, 39, 307 & 309	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 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
39EP3200A01SP	FR/PU ENDPLATE, MACH	1.000 EA
HW5100A08	W3118-035 WVY WSHR (WB)	1.000 EA
39EP3201A13	PU ENDPLATE, MACH	1.000 EA
XY3816A12	3/8-16 FINISHED NUT	8.000 EA
09CB3501SP	CONDUIT BOX LID FOR 09CB3001 & 09CB3002	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 EA
HW2501G25	KEY, 3/8 SQ X 2.875	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2200bx) 4/22	1.000 EA
LD7020F06	LEAD SET, 8AWG, 6 LEAD, 20" LONG LEADS	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	1.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON	0.030 LB
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
HW4500A20	1/8NPT SL PIPE PLUG	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
39AD2002C01	BAFFLE PLATE,"X" DIM=2.12 OPEN SLOT BAND	1.000 EA
39AD2002C01	BAFFLE PLATE,"X" DIM=2.12 OPEN SLOT BAND	1.000 EA
HA3154A09	TB STUD 3/8-16 X 16.25	4.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0695	CONNECTION LABEL	1.000 EA
NP3553L	ALUM SUPER-E VPWM INVERTER READY UL CSA-	1.000 EA
39PA1000	PACKAGING GROUP 39 PRINT	1.000 EA

<b>Accessories</b>		
<b>Part Number</b>	<b>Description</b>	<b>Multiplier</b>
39-3400	C FACE KIT	A8

**AC Induction Motor Performance Data**

Record # 38396

Typical performance - not guaranteed values

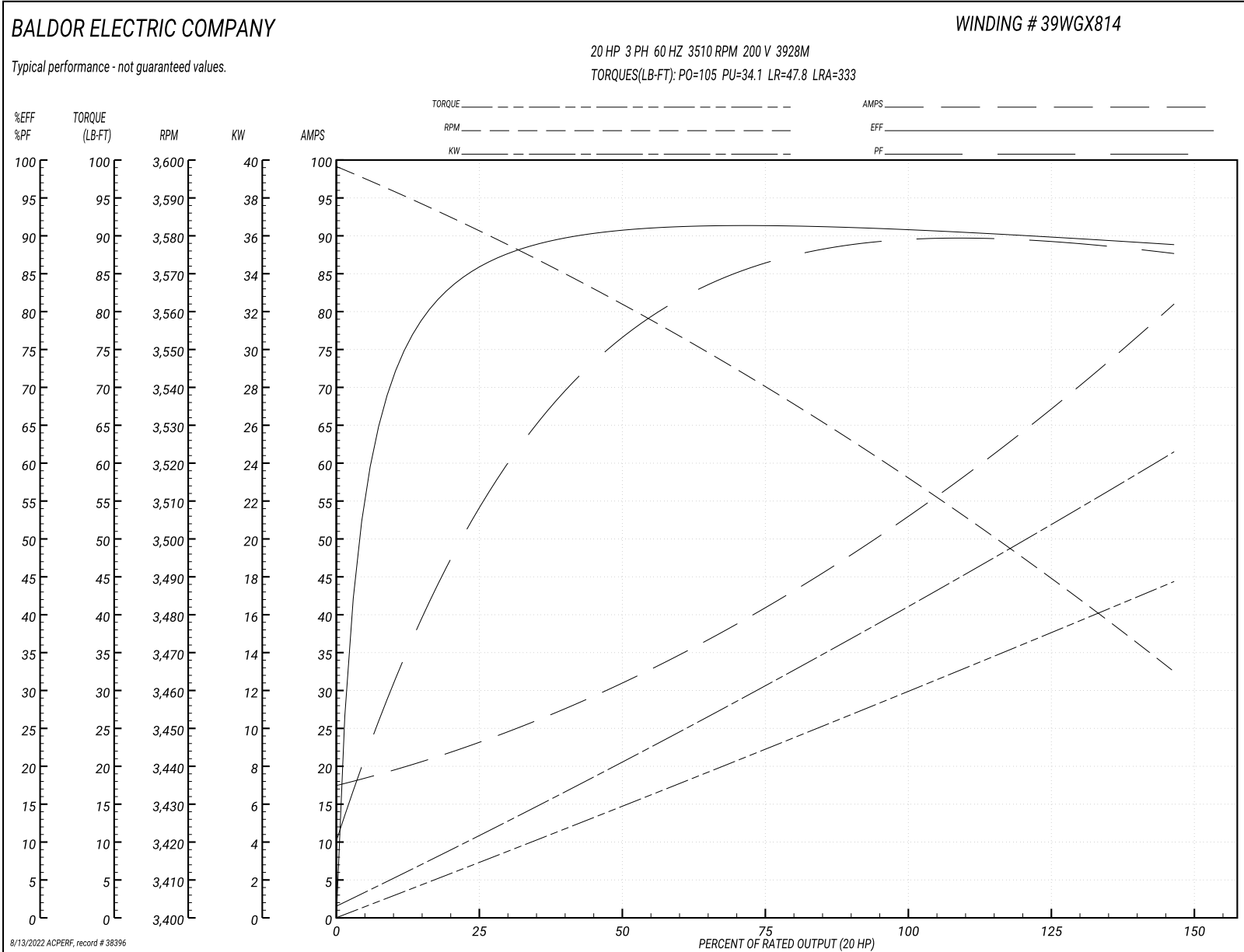
Winding: 39WGX814-R001		Type: 3928M	Enclosure: OPSB
<b>Nameplate Data</b>		<b>200 V, 60 Hz: Single Voltage Motor</b>	
Rated Output (HP)	20	Full Load Torque	29.6 LB-FT
Volts	200	Start Configuration	direct on line
Full Load Amps	53	Breakdown Torque	105 LB-FT
R.P.M.	3510	Pull-up Torque	34.1 LB-FT
Hz	60 Phase	Locked-rotor Torque	47.8 LB-FT
NEMA Design Code	B KVA Code	Starting Current	333 A
Service Factor (S.F.)	1.15	No-load Current	18.2 A
NEMA Nom. Eff.	91 Power Factor	Line-line Res. @ 25°C	0.102 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	44°C
S.F. Amps		Temp. Rise @ S.F. Load	54°C
		Locked-rotor Power Factor	30
		Rotor inertia	0.715 lb-ft <sup>2</sup>

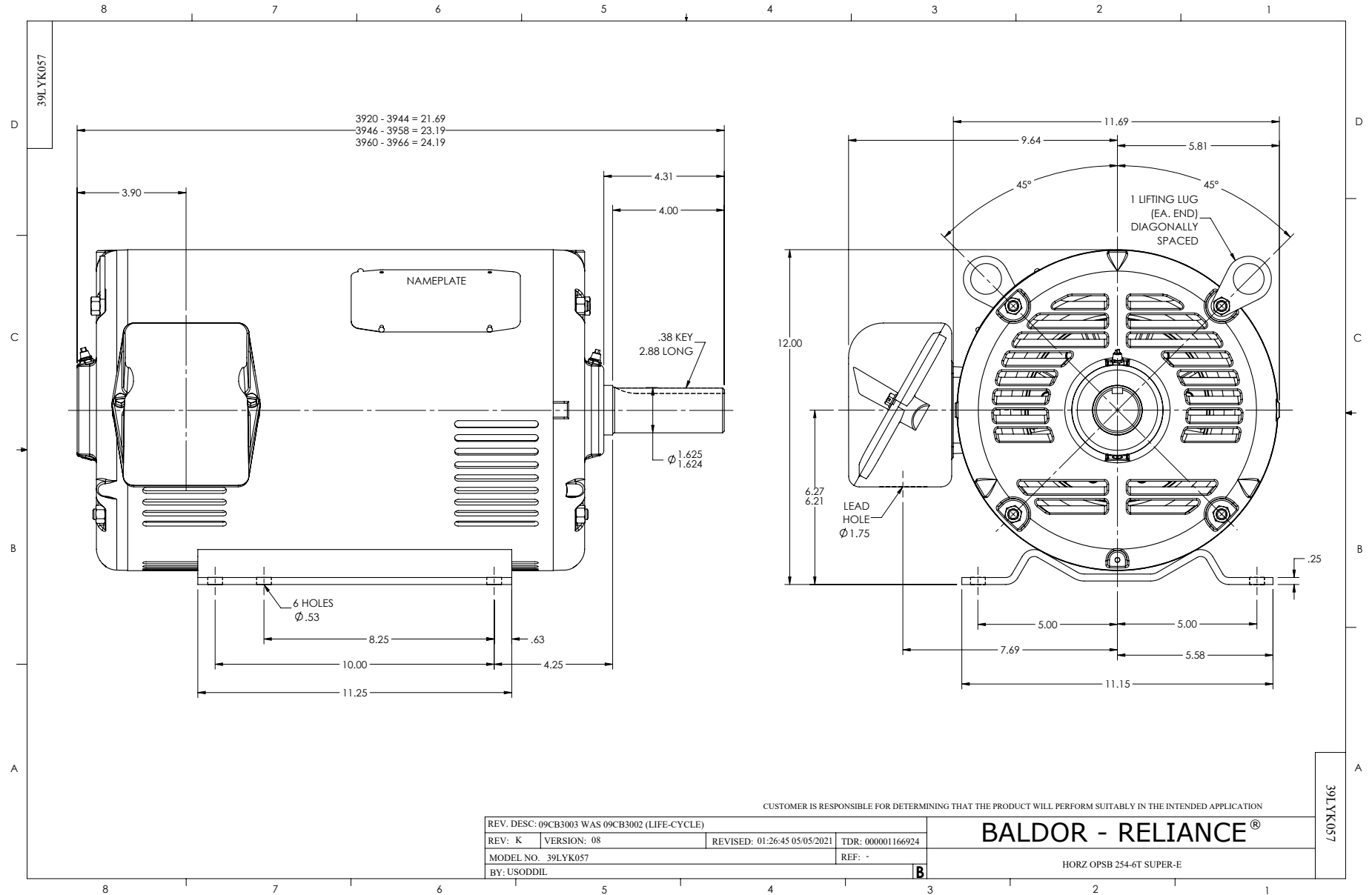
**Load Characteristics 200 V, 60 Hz, 20 HP**

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	58	77	86	88	89	88	89
Efficiency	85.5	90.7	91.5	91	90	88.8	90.4
Speed	3580	3561	3541	3518	3491	3465	3502
Line amperes	22.2	31	40.8	53.1	66.5	80.4	61.1

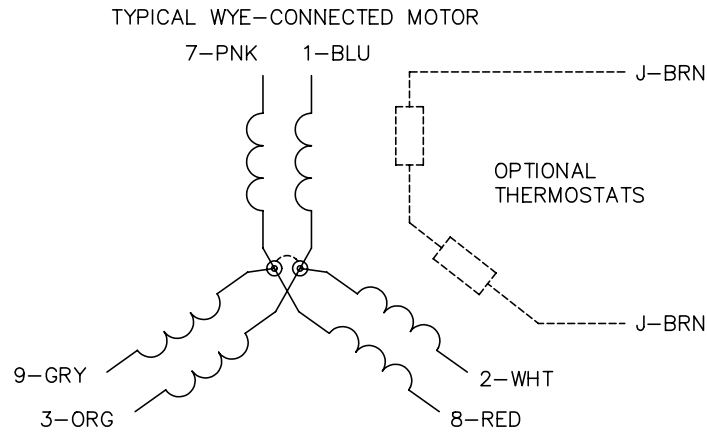


Performance Graph at 200V, 60Hz, 20.0HP Typical performance - Not guaranteed values

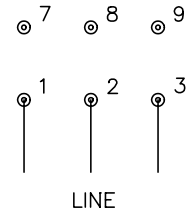




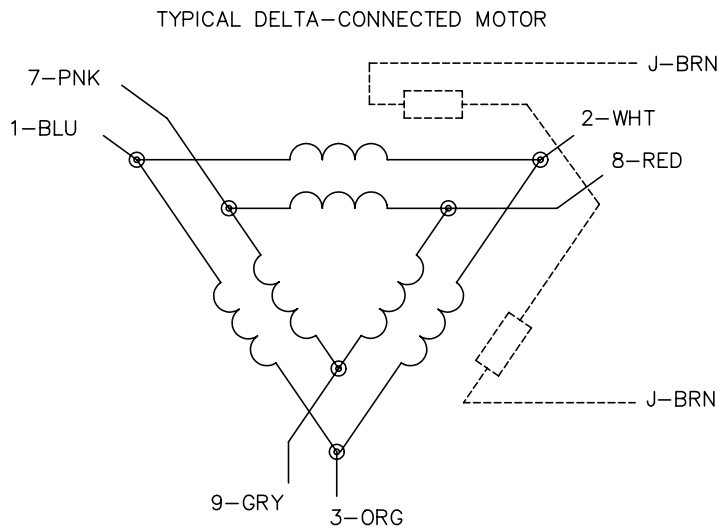
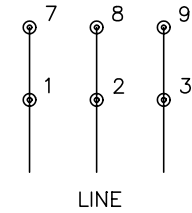
CD0695



START CONNECTION



RUN CONNECTION



NOTES:

1. MOTOR MAY BE 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 ALWAYS BE NUMBERED AS SHOWN.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS

REV. LTR: C BY: JLP

REVISED: 01/21/99 3:19

TDR: 0171435

9690D0

FILE: AAA00005151

MDL: -

MTL: -

**BALDOR ELECTRIC Co.**

3PH, SV, 6 LEADS, PART WINDING START

CD0695

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