

ABB BALDOR RELIANCE III

Customer information packet

EM2515T-8G

20HP, 1765RPM, 3PH, 60HZ, 256T, 3948M, OPSB, F1

Class -

Division - Not Applicable

Specifications

Enclosure	OPSB
Frame	256T
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	20.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	200.0 V @ 60 HZ
Agency Approvals	CSA CSA EEV UR
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	55.000 A @ 200.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	55.0 a
Insulation Class	H
Inverter Code	Inverter Ready

Part Detail

Revision	R
Type	AC
Mech. spec.	39E366
Base	
Status	PRD/A
Elec. spec.	39WGX981
Layout	39LYE366
Eff. date	02-11-2026
CD Diagram	CD0695
Poles	04
Leads	6#8
Proprietary	False
Created date	06-20-2016

KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	6 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3948M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	23.19 IN
Power Factor	85
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1765 rpm
Speed Code	Single Speed
Starting Method	Part Winding
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3553L									
CAT.NO.	EM2515T-8G								
SPEC	39E366X981G1								
HP	20								
VOLTS	200								
AMPS	55								
RPM	1765								
FRAME	256T		HZ	60			PH	3	
SF	1.15	CODE	G	DES	A	CLASS		H	
NEMA NOM. EFF	93	PF	85						
RATING	40C AMB-CONT								
CC	010A								
ENCL	OPSB	SER							
DE	6309		ODE	6208					
VPWM INVERTER READY									
CT30-60(2:1) VT3-60(20:1)									

Parts List

Part number	Description	Quantity
SA322713	SA 39E366X981G1	1.000 ea
RA310512	RA 39E366X981G1	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
39EP3201A22	PU ENDPLATE, MACH	1.000 ea
XY3816A12	3/8-16 FINISHED NUT W/SERRATIONS	8.000 ea
BP5303A01	AEGIS SH GRD W/RETAINER RING RB3001A30	1.000 ea
10XN2520K28	1/4-20 X 1.75" HX HD SCRWGRADE 5, ZINC P	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 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
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
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.050 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
39AD2002A01	BAFFLE PLATE 39 OPEN, SLOTTED BAND MTRS	1.000 ea
39AD2002A01	BAFFLE PLATE 39 OPEN, SLOTTED BAND MTRS	1.000 ea
HA3154A03	STUD, 3/8-16 X 17.75	4.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea

LC0695	CONNECTION LABEL	1.000 ea
NP3553L	ALUM SUPER-E,VPWM INV READY,UL EV,CC,NEM	1.000 ea
39PA1000	PACKAGING GROUP 39 PRINT	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LB1350	BAR CODE LABEL FOR YORK	1.000 ea
LD7020F06	LEAD SET, 8AWG, 6 LEAD, 20" LONG LEADS	1.000 ea

AC Induction Motor Performance Data

Record # 57710

Typical performance - not guaranteed values

Winding: 39WGX981-R002			Type: 3948M		Enclosure: OPSB			
Nameplate Data			200 V, 60 Hz: Single Voltage Motor					
Rated Output (HP)		20	Full Load Torque		59.8 LB-FT			
Volts		200	Start Configuration		direct on line			
Full Load Amps		55	Breakdown Torque		182 LB-FT			
R.P.M.		1765	Pull-up Torque		76.1 LB-FT			
Hz	60	Phase	3	Locked-rotor Torque		109 LB-FT		
NEMA Design Code		A	KVA Code	G	Starting Current		350 A	
Service Factor (S.F.)		1.15	No-load Current		19.6 A			
NEMA Nom. Eff.		93	Power Factor		85	Line-line Res. @ 25°C		0.0886 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		37°C	
S.F. Amps					Temp. Rise @ S.F. Load		46°C	
					Locked-rotor Power Factor		33.3	
					Rotor inertia		2.1 LB-FT2	

Load Characteristics 200 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	51	73	82	85	87	87	86
Efficiency	90.5	93.3	93.5	93.1	92.1	90.8	92.5
Speed	1792	1785	1776	1767	1757	1745	1761
Line amperes	23.5	31.7	42.4	54.5	67.5	81.9	62.3

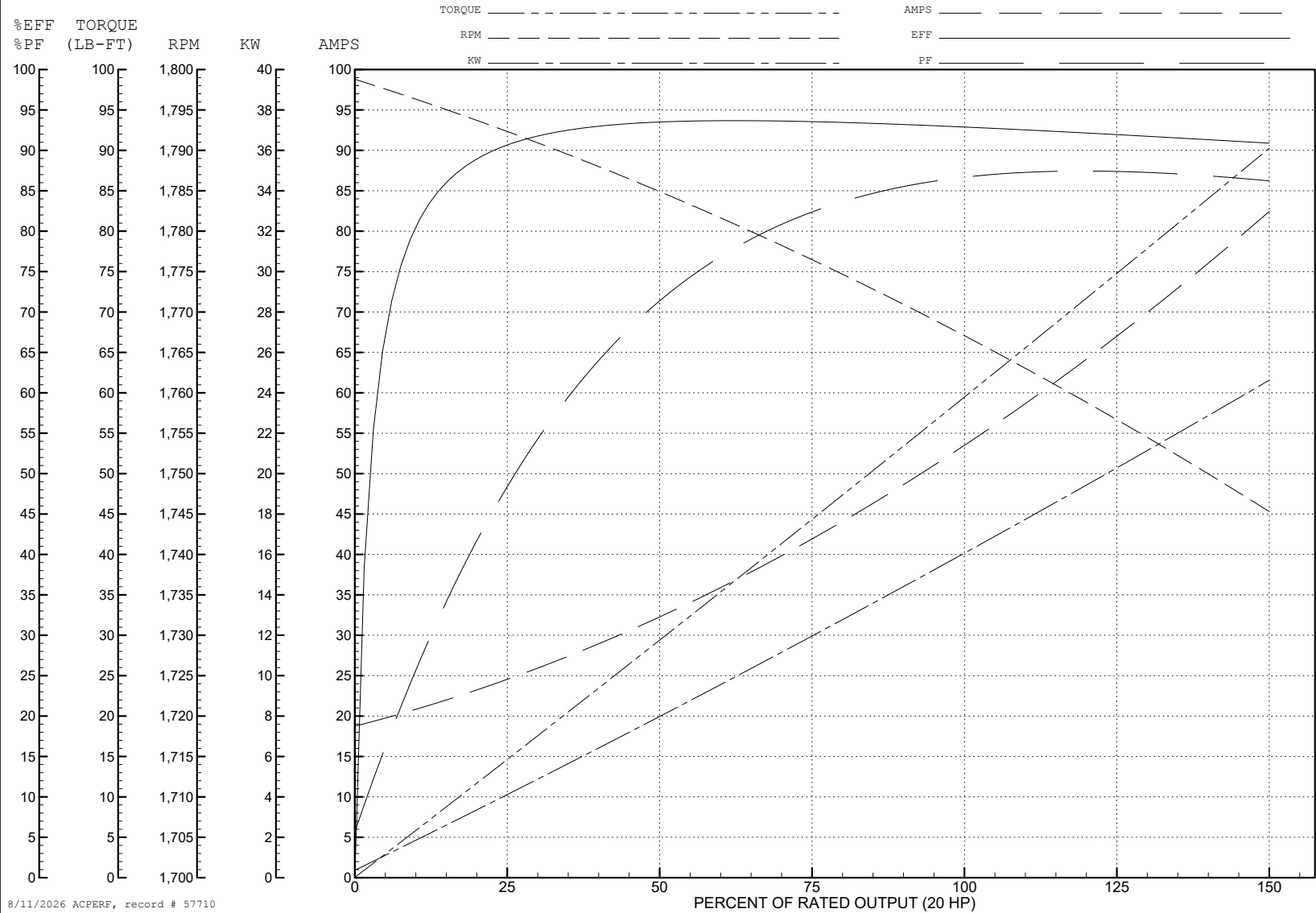
ABB Motors and Mechanical Inc.

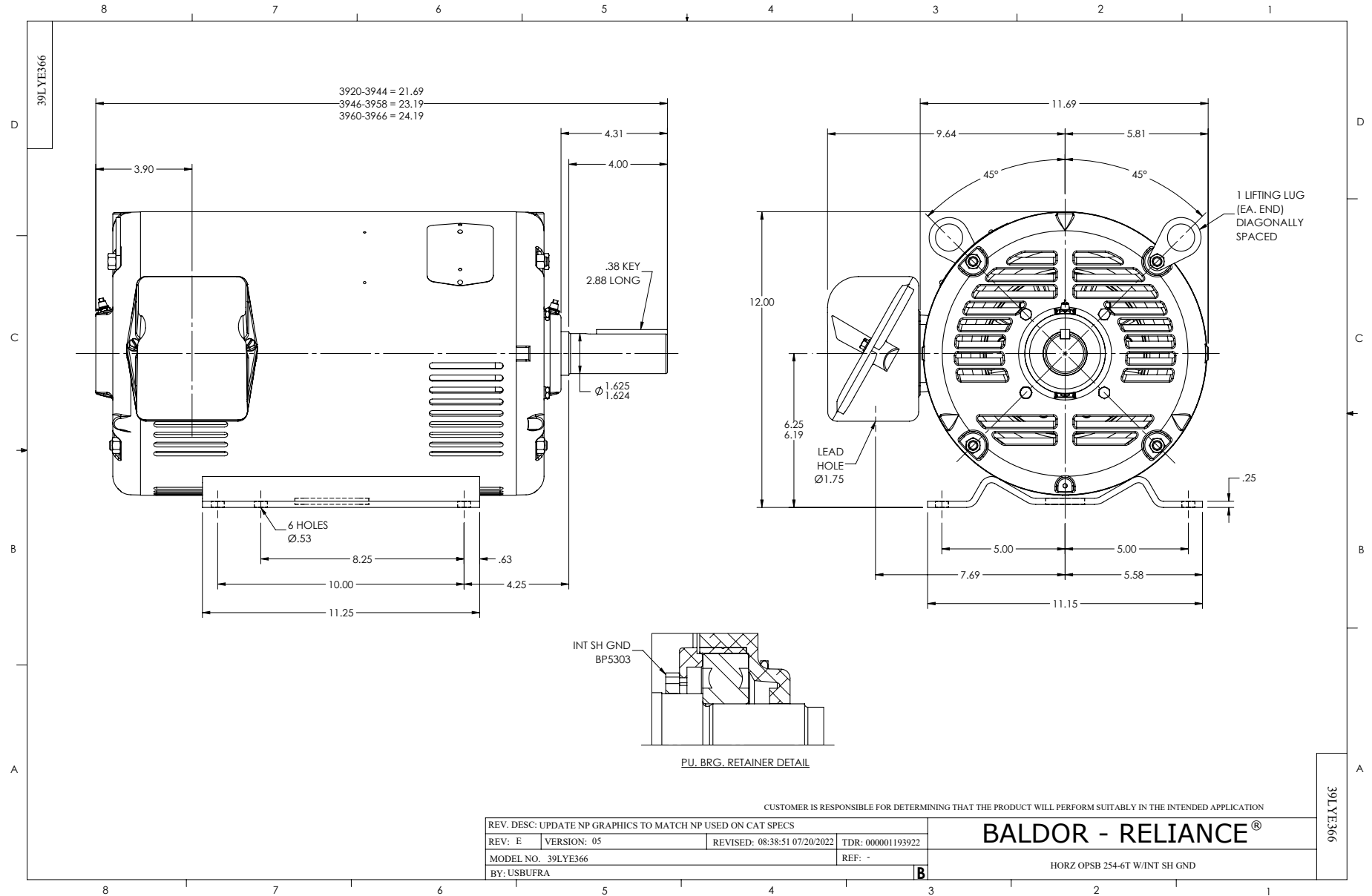
WINDING # 39WGX981

Typical performance - not guaranteed values.

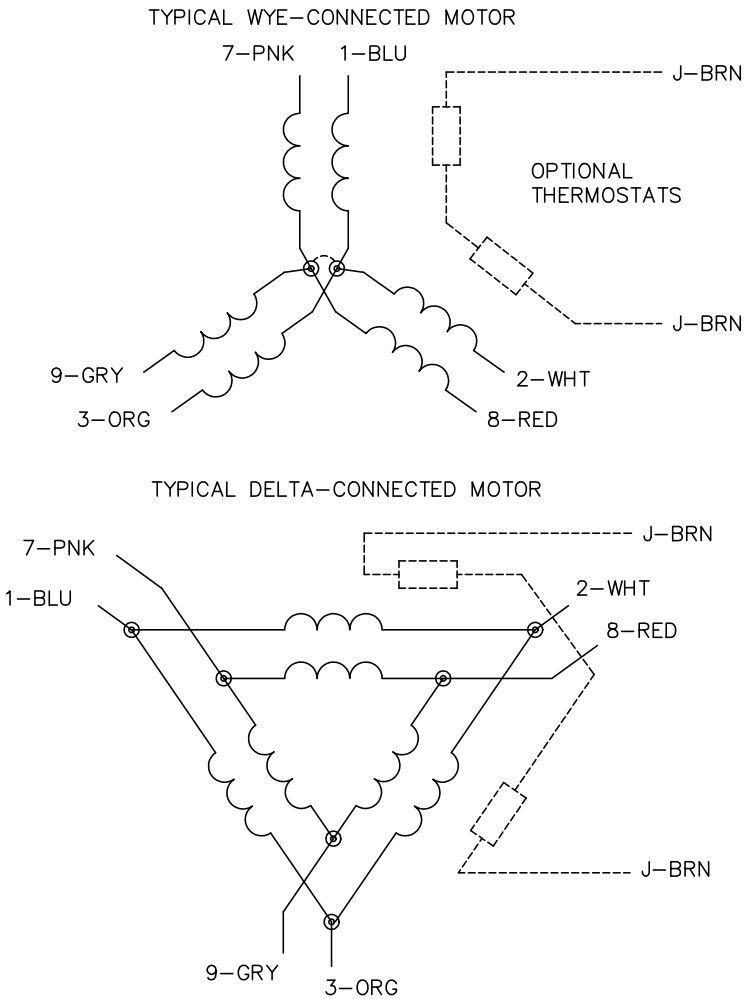
20 HP 3 PH 60 HZ 1765 RPM 200 V 3948M

TORQUES (LB-FT): PO=182 PU=76.1 LR=109 LRA=350

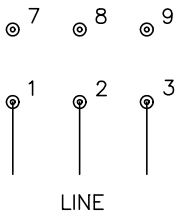




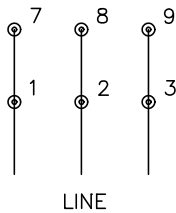
CD0695



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.

CD0695

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: C	BY: JLP	REVISED: 01/21/99 3:19	TDR: 0171435
S69000		FILE: AAA00005151	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, SV, 6 LEADS, PART WINDING START