BALDOR • RELIANCE

Product Information Packet

EM2543T-8

50HP,1775RPM,3PH,60HZ,326T,4256M,OPSB,F1

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Part Detail

Revision:	AD	**Status:**	PRD/A	**Change #:**		**Proprietary:**	No
Type:	AC	**Elec. Spec:**	42WGW479	**CD Diagram:**	CD0695	**Mfg Plant:**	
Mech. Spec:	42F56	**Layout:**	42LYF056	**Poles:**	04	**Created Date:**	
Base:	RG	**Eff. Date:**	08-23-2018	**Leads:**	6#6		

Specs

Catalog Number:	EM2543T-8	**Inverter Code:**	Inverter Ready
Enclosure:	OPSB	**KVA Code:**	G
Frame:	326T	**Lifting Lugs:**	Standard Lifting Lugs
Frame Material:	Steel	**Locked Bearing Indicator:**	No Locked Bearing
Output @ Frequency:	50.000 HP @ 60 HZ	**Motor Lead Quantity/Wire Size:**	6 @ 6 AWG
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	**Motor Lead Exit:**	Ko Box
Voltage @ Frequency:	200.0 V @ 60 HZ	**Motor Lead Termination:**	Flying Leads
Agency Approvals:	CSA	**Motor Type:**	4256M
	CSA EEV	**Mounting Arrangement:**	F1
	UR	**Power Factor:**	87
Auxillary Box:	No Auxillary Box	**Product Family:**	General Purpose
Auxillary Box Lead Termination:	None	**Pulley End Bearing Type:**	Ball
Base Indicator:	Rigid	**Pulley Face Code:**	Standard
Bearing Grease Type:	Polyrex EM (-20F +300F)	**Pulley Shaft Indicator:**	Standard
Blower:	None	**Rodent Screen:**	None
Current @ Voltage:	131.000 A @ 208.0 V	**Shaft Extension Location:**	Pulley End
	132.000 A @ 200.0 V	**Shaft Ground Indicator:**	No Shaft Grounding
Design Code:	A	**Shaft Rotation:**	Reversible

Drip Cover:	No Drip Cover
Duty Rating:	CONT
Electrically Isolated Bearing:	Not Electrically Isolated
Feedback Device:	NO FEEDBACK
Front Face Code:	Standard
Front Shaft Indicator:	None
Heater Indicator:	No Heater
Insulation Class:	F

Shaft Slinger Indicator:	No Slinger
Speed Code:	Single Speed
Motor Standards:	NEMA
Starting Method:	Part Winding
Thermal Device - Bearing:	NONE (OLD)
Thermal Device - Winding:	None
Vibration Sensor Indicator:	No Vibration Sensor
Winding Thermal 1:	None
Winding Thermal 2:	None

Nameplate NP3554L

CAT.NO.	EM2543T-8			P/N				ENCL	OPSB
SPEC.	42F056W479	CC	010A	FRAME	326T			SER.NO.	
HP	50			CLASS	F	HZ	60		
RPM	1775			PH	3	DES	A		
VOLTS	200			CODE	G			ODE BRG	6311
AMPS	132			USABLE AT 208V	131			DE BRG	6312
RATING	40C AMB-CONT			NEMA-NOM-EFF	94.5			GREASE	POLYREX EM
PF	87	SER.F.	1.15	VPWM INVERTER READY					
HTR-VOLTS		HTR-AMPS		MAX. SPACE HEATER TEMP.					

Parts List

Part Number	Description	Quantity
SA049160	SA 42F056W479	1.000 EA
RA044174	RA 42F056W479	1.000 EA
HA6360	LIFTING LUG FOR 42 FRAME MOTORS.	2.000 EA
HA6017	CAST ADAPTER, 40,42 KOBX	1.000 EA
19XW3118A12	.31-18 X .75 HEX WASHER HEAD TAPTITE II	2.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	2.000 EA
WD1000B25	GND LUG, BURNDY L125HP OR T&B L125HP-BB	1.000 EA
19XW3118G08	.31-18X.50,HEX WSHR HD,TAPTITE 2,GREEN	1.000 EA
10CB3001	CONDUIT BOX CAST W/2.500 LEAD HOLE	1.000 EA
19XW3118A12	.31-18 X .75 HEX WASHER HEAD TAPTITE II	4.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 EA
42EP3200A01	FR ENDPLATE, MACH	1.000 EA
HW5100A13	W4627-047 WVY WSHER	1.000 EA
42EP3200B02	PU ENDPLATE, MACH	1.000 EA
XY5013A12	NUT,1/2-13,HEX,STEEL,ZINCPLATED	8.000 EA
10CB3500SP	CONDUIT BOX LID, CAST	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 EA
HW2501H33	KEY, 1/2 SQ X 3.875	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 5/18	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
42AD2001A01	BAFFLE PLATE 42 OPEN, SLOTTED BAND MTRS	1.000 EA
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	1.000 EA

Parts List (continued)

Part Number	Description	Quantity
MJ1000A02	GREASE, POLYREX EM EXXON (USe 4824-15A)	0.030 LB
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
42AD2001A01	BAFFLE PLATE 42 OPEN, SLOTTED BAND MTRS	1.000 EA
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	1.000 EA
HA3151A03	THRUBOLT STUD 1/2-13 X 20.5	4.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.080 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0695	CONNECTION LABEL	1.000 EA
NP3554L	SS SUPER-E UL CSA-EEV PREM CC	1.000 EA
40PA1000	PACKAGING GROUP	1.000 EA

Accessories

Part Number	Description	Multiplier
42-1300	C FACE KIT	A8
42EP1601A01	SP'L D-FLANGE MTD. PU. E.P. MDL.42 W/BFL	P1

AC Induction Motor Performance Data

Record # 13698 - Typical performance - not guaranteed values

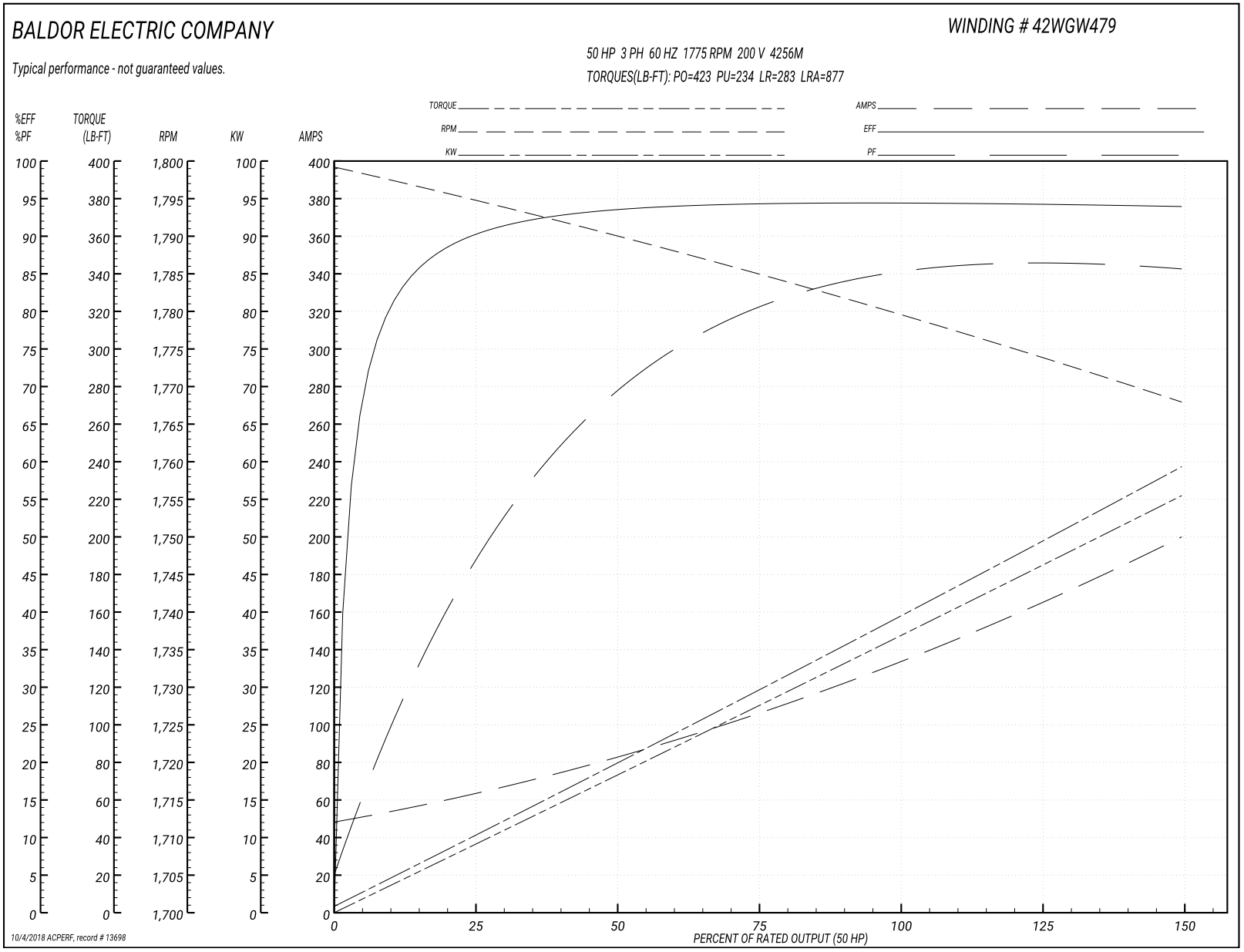
Winding: 42WGW479-R001	**Type:** 4256M	**Enclosure:** OPSB

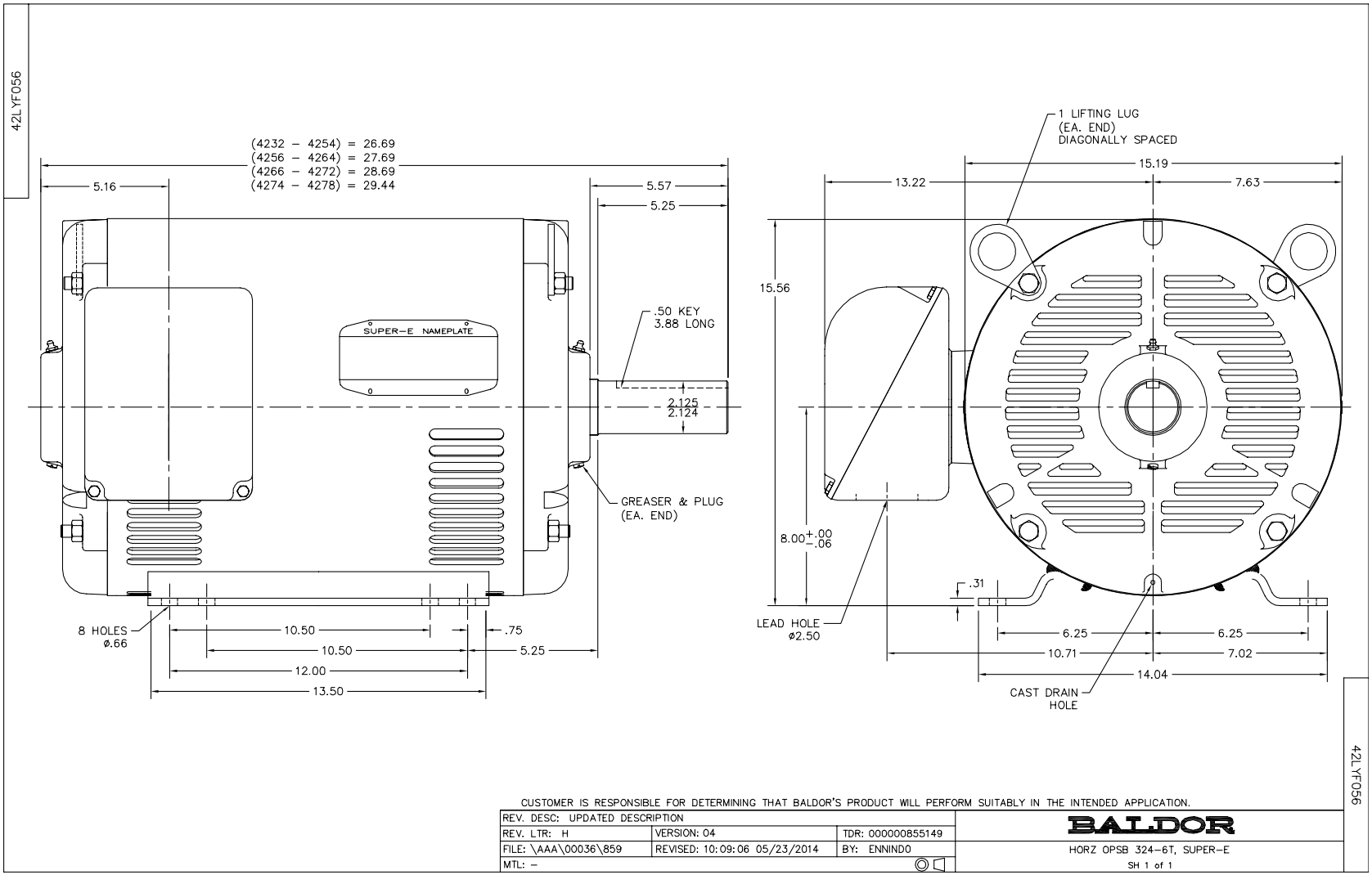
Nameplate Data				200 V, 60 Hz: Single Voltage Motor	
Rated Output (HP)	50			Full Load Torque	148 LB-FT
Volts	200			Start Configuration	direct on line
Full Load Amps	132			Breakdown Torque	423 LB-FT
R.P.M.	1775			Pull-up Torque	234 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	283 LB-FT
NEMA Design Code	A	KVA Code	G	Starting Current	877 A
Service Factor (S.F.)	1.15			No-load Current	48 A
NEMA Nom. Eff.	94.5	Power Factor	87	Line-line Res. @ 25ºC	0.0235 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	36°C
S.F. Amps				Temp. Rise @ S.F. Load	43°C
				Locked-rotor Power Factor	27
				Rotor inertia	7.46 LB-FT2

Load Characteristics 200 V, 60 Hz, 50 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	47	70	80	87	86	86	86
Efficiency	90	93.6	94.4	94.5	94.1	94	94.3
Speed	1795	1790	1785	1779	1774	1768	1776
Line amperes	64	83	108	132	166	200	152.4

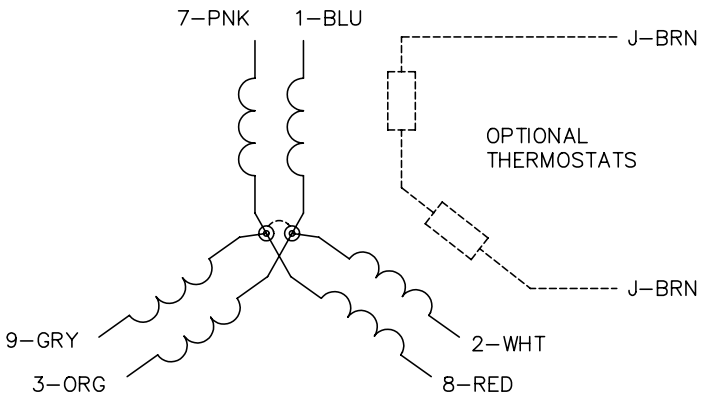
Performance Graph at 200V, 60Hz, 50.0HP Typical performance - Not guaranteed values



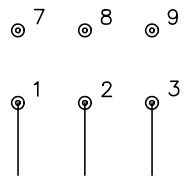

42LYF056
(4232 – 4254) = 26.69
(4256 – 4264) = 27.69
(4266 – 4272) = 28.69
(4274 – 4278) = 29.44
5.16
5.57
5.25
SUPER–E NAMEPLATE
.50 KEY
3.88 LONG
2.125
2.124
GREASER & PLUG
(EA. END)
8 HOLES
ø.66
10.50
10.50
12.00
13.50
.75
5.25
1 LIFTING LUG
(EA. END)
DIAGONALLY SPACED
15.19
13.22
7.63
15.56
8.00 +.00 −.06
.31
LEAD HOLE
ø2.50
6.25
6.25
10.71
7.02
14.04
CAST DRAIN
HOLE
42LYF056
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.
REV. DESC: UPDATED DESCRIPTION
REV. LTR: H
VERSION: 04
TDR: 000000855149
FILE: \AAA\00036\859
REVISED: 10:09:06 05/23/2014
BY: ENNINDO
MTL: –
BALDOR
HORZ OPSB 324–6T, SUPER–E
SH 1 of 1

CD0695

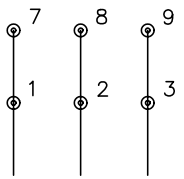
TYPICAL WYE–CONNECTED MOTOR



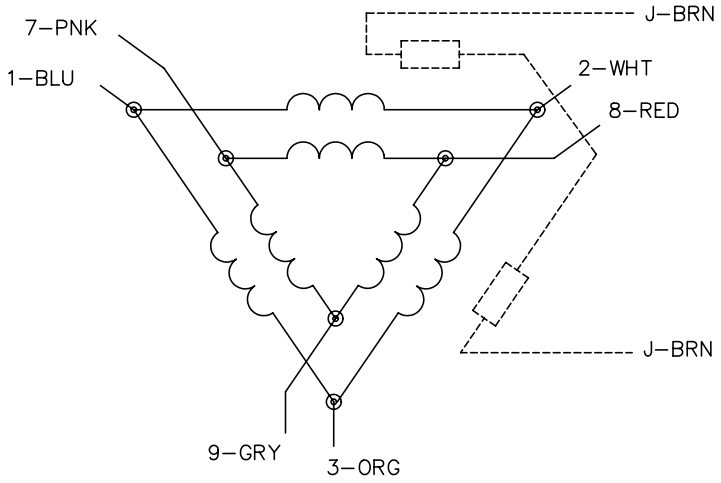
START CONNECTION



RUN CONNECTION



TYPICAL DELTA–CONNECTED MOTOR



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
CD0695		FILE: AAA00005151	MDL: –
		MTL: –	

BALDOR ELECTRIC Co.

3PH, SV, 6 LEADS, PART WINDING START

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