

BALDOR® • RELIANCE 

Product Information Packet

VL3503-50

.5HP, 2850RPM, 1PH, 50HZ, 56C, 3420L, TEFC, F1

Part Detail							
Revision:	AD	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	34WG633	CD Diagram:	CD0001	Mfg Plant:	
Mech. Spec:	34K043	Layout:	34LYK043	Poles:	02	Created Date:	
Base:	N	Eff. Date:	07-09-2018	Leads:	6#18		

Specs			
Catalog Number:	VL3503-50	Insulation Class:	B
Enclosure:	TEFC	Inverter Code:	Not Inverter
Frame:	56C	KVA Code:	J
Frame Material:	Steel	Lifting Lugs:	No Lifting Lugs
Output @ Frequency:	.500 HP @ 50 HZ	Locked Bearing Indicator:	Locked Bearing
Synchronous Speed @ Frequency:	3000 RPM @ 50 HZ	Motor Lead Quantity/Wire Size:	6 @ 18 AWG
Voltage @ Frequency:	220.0 V @ 50 HZ	Motor Lead Exit:	Ko Box
	110.0 V @ 50 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	3420L
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	UR	Power Factor:	77
	WEEE	Product Family:	General Purpose
	CSA	Pulley End Bearing Type:	Ball
	CE	Pulley Face Code:	C-Face
Auxillary Box:	No Auxillary Box	Pulley Shaft Indicator:	Standard
Auxillary Box Lead Termination:	None	Rodent Screen:	None
Base Indicator:	No Mounting	RoHS Status:	ROHS COMPLIANT
Bearing Grease Type:	Polyrex EM (-20F +300F)	Shaft Extension Location:	Pulley End

Blower:	None	Shaft Ground Indicator:	No Shaft Grounding
Current @ Voltage:	3.300 A @ 220.0 V	Shaft Rotation:	Reversible
	6.600 A @ 110.0 V	Shaft Slinger Indicator:	No Slinger
Design Code:	N	Speed Code:	Single Speed
Drip Cover:	No Drip Cover	Motor Standards:	NEMA
Duty Rating:	CONT	Starting Method:	Direct on line
Electrically Isolated Bearing:	Not Electrically Isolated	Thermal Device - Bearing:	NONE (OLD)
Feedback Device:	NO FEEDBACK	Thermal Device - Winding:	None
Front Face Code:	Standard	Vibration Sensor Indicator:	No Vibration Sensor
Front Shaft Indicator:	None	Winding Thermal 1:	None
Heater Indicator:	No Heater	Winding Thermal 2:	None

Nameplate NP1372L										
CAT.NO.	VL3503-50									
SPEC.	34K43W633									
HP	.5									
VOLTS	110/220									
AMP	6.6/3.3									
RPM	2850 IP54									
FRAME	56C				HZ	50			PH	1
SER.F.	1.25		CODE	J	DES	N		CL	B	
NEMA-NOM-EFF	68		PF	77						
RATING	40C AMB-CONT									
CC									USABLE AT 208V	
DE	6203				ODE	6203				
ENCL	TEFC		SN							
	SFA 7.4/3.7									

Parts List		
Part Number	Description	Quantity
SA008173	SA 34K43W633	1.000 EA
RA004620	RA 34K43W633	1.000 EA
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 EA
34CB3002A	CB CAST W/.88 DIA HOLE	1.000 EA
34GS1029A01	GASKET, CONDUIT BOX	1.000 EA
51XB1016A07	10-16 X 7/16 HXWSSLD SERTYB	2.000 EA
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 EA
34EP3102A01SP	FR ENDPLATE, MACH	1.000 EA
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	2.000 EA
51XB1016A05	10-16X5/16HX WA SL SR TYB (F/S)	2.000 EA
HW5100A03	WAVY WASHER (W1543-017)	1.000 EA
34EP3300A24SP	PU ENDPLATE, MACH	1.000 EA
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 EA
34FN3002A01SP	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 EA
34FH4002A01SP	IEC FH NO GREASER PRIMED	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 EA
34CB4517	CB LID 4 MTG HOLES .22 DIA STAMPED, FOR	1.000 EA
34GS1031A01	GASKET, FLAT CONDUIT BOX LID (LEXIDE)	1.000 EA
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 EA
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 EA
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 EA
MG1000G27	MED CHARCOAL METALLIC GREY 400-0096	0.014 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
EC1324A03	ELEC CAP, 324-389 MFD, 125V, 1.81D X 3.	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
33CB4800A01	CAPACITOR COVER, STAMPED	1.000 EA
35GS3001A01	GASKET, CAPACITOR COVER	1.000 EA
SP5051B16	MDL 34 TORQ STAT SW,TYPE L , STD F1 & F2	1.000 EA
HA3100A12	THRUBOLT 10-32 X 7.375	4.000 EA
HA4067A01	PUSH IN DRAIN FITTING (BLACK)	1.000 EA
HA4067A01	PUSH IN DRAIN FITTING (BLACK)	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 5/18	1.000 EA
LC0001	CONN LABEL TYPE L, 6 LEAD, DUAL VOLTS, R	1.000 EA
LB1119N	WARNING LABEL	1.000 EA
NP1372L	ALUM UL CSA CE CC	1.000 EA
34PA1002	PKG GRP, PRINT PK1001A01	1.000 EA
PK3083T	STYROFOAM PACKING CRADLE	1.000 EA
PK3088	MICROFOAM, 8"X"8 PERF. SHEETS 5,400/RL	1.000 EA

AC Induction Motor Performance Data

Record # 7038 - Typical performance - not guaranteed values

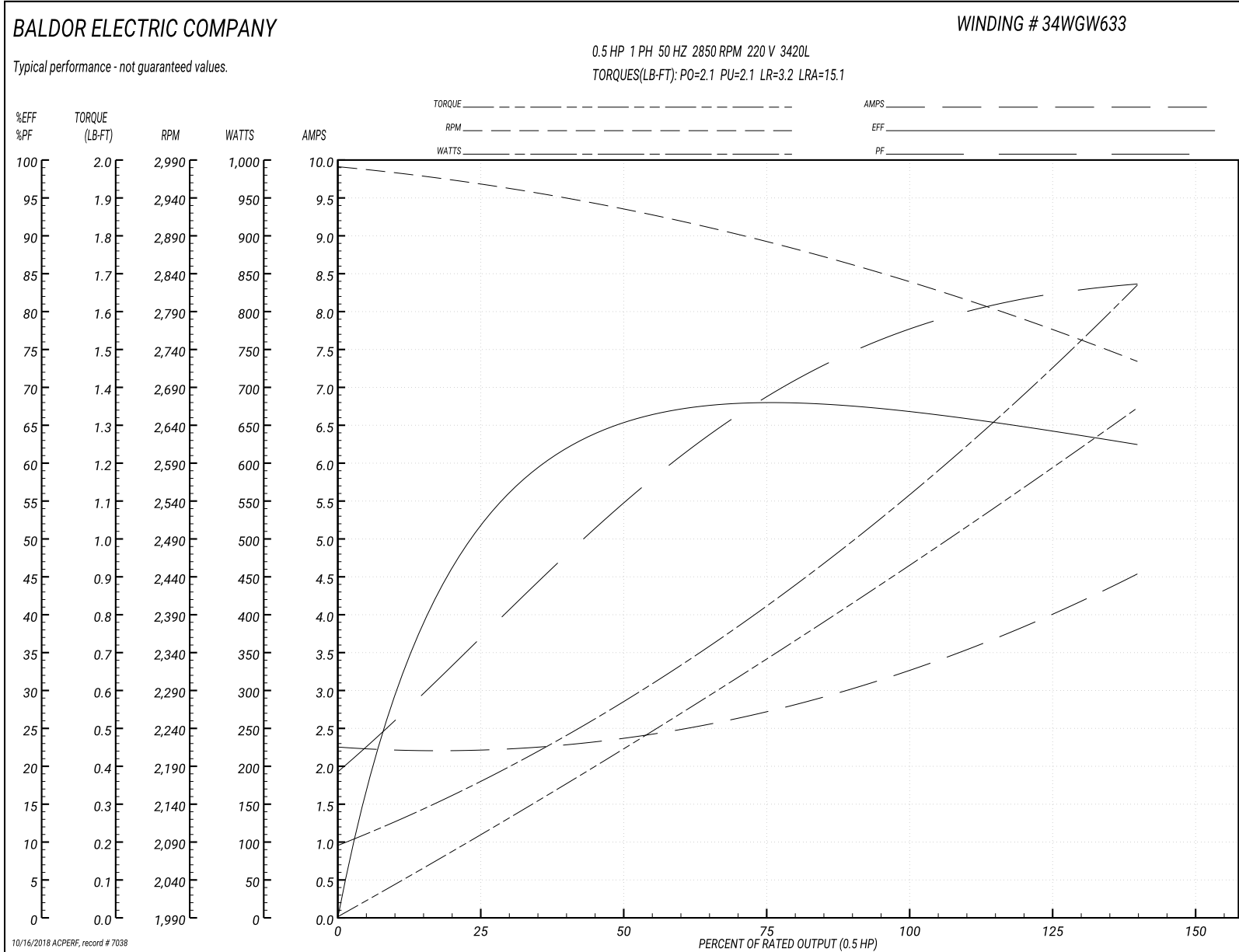
Winding: 34WGW633-R001	Type: 3420L	Enclosure: TEFC
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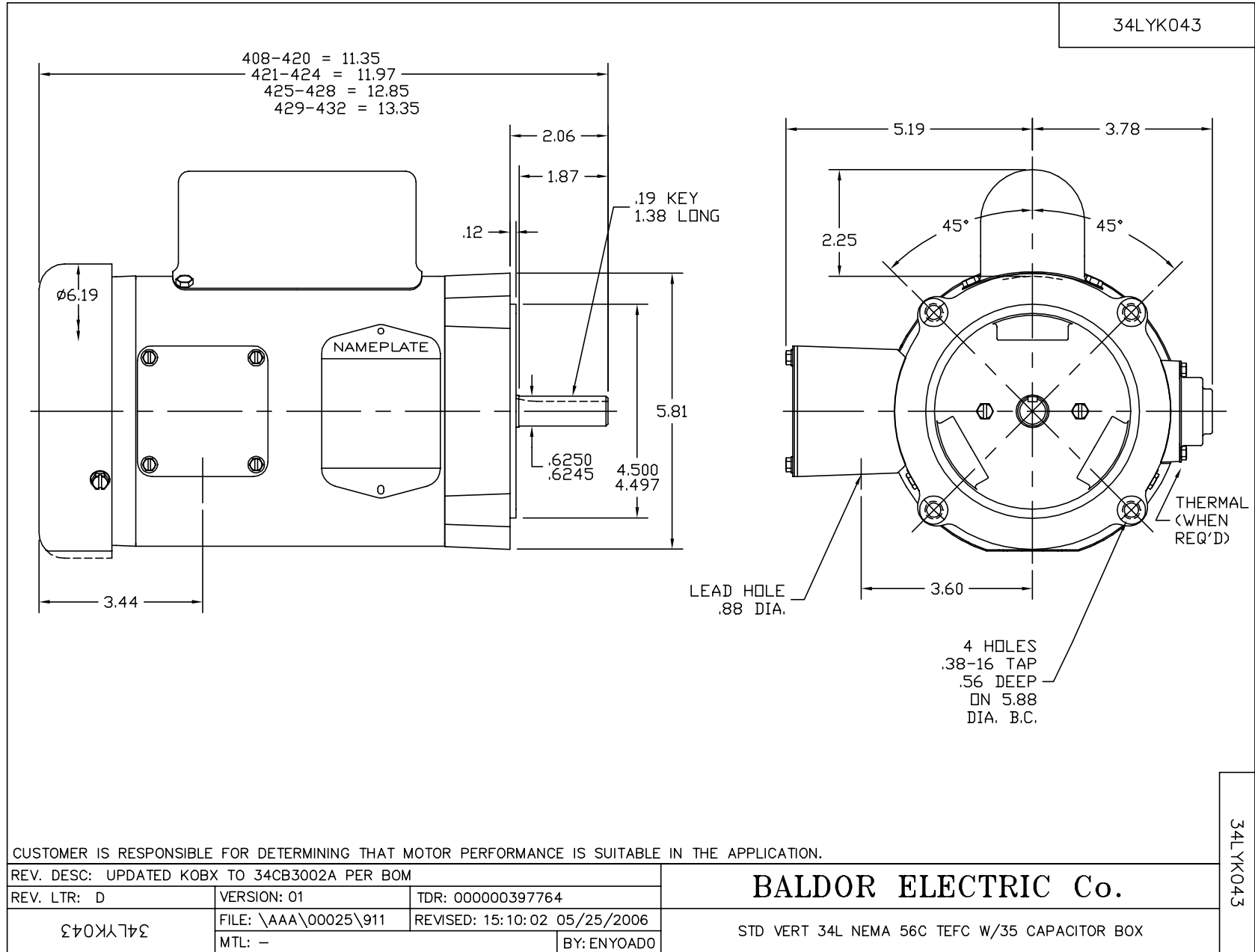
Nameplate Data				220 V, 50 Hz: High Voltage Connection	
Rated Output (HP)	.5			Full Load Torque	0.9 LB-FT
Volts	110/220			Start Configuration	direct on line
Full Load Amps	6.6/3.3			Breakdown Torque	2.1 LB-FT
R.P.M.	2850			Pull-up Torque	2.1 LB-FT
Hz	50	Phase	1	Locked-rotor Torque	3.2 LB-FT
NEMA Design Code	N	KVA Code	J	Starting Current	15.1 A
Service Factor (S.F.)	1.25			No-load Current	2.2 A
NEMA Nom. Eff.	68	Power Factor	77	Line-line Res. @ 25°C	4.2 Ω A Ph 3.18 Ω B Ph
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	67°C
S.F. Amps	7.4/3.7			Temp. Rise @ S.F. Load	92°C

Load Characteristics 220 V, 50 Hz, 0.5 HP

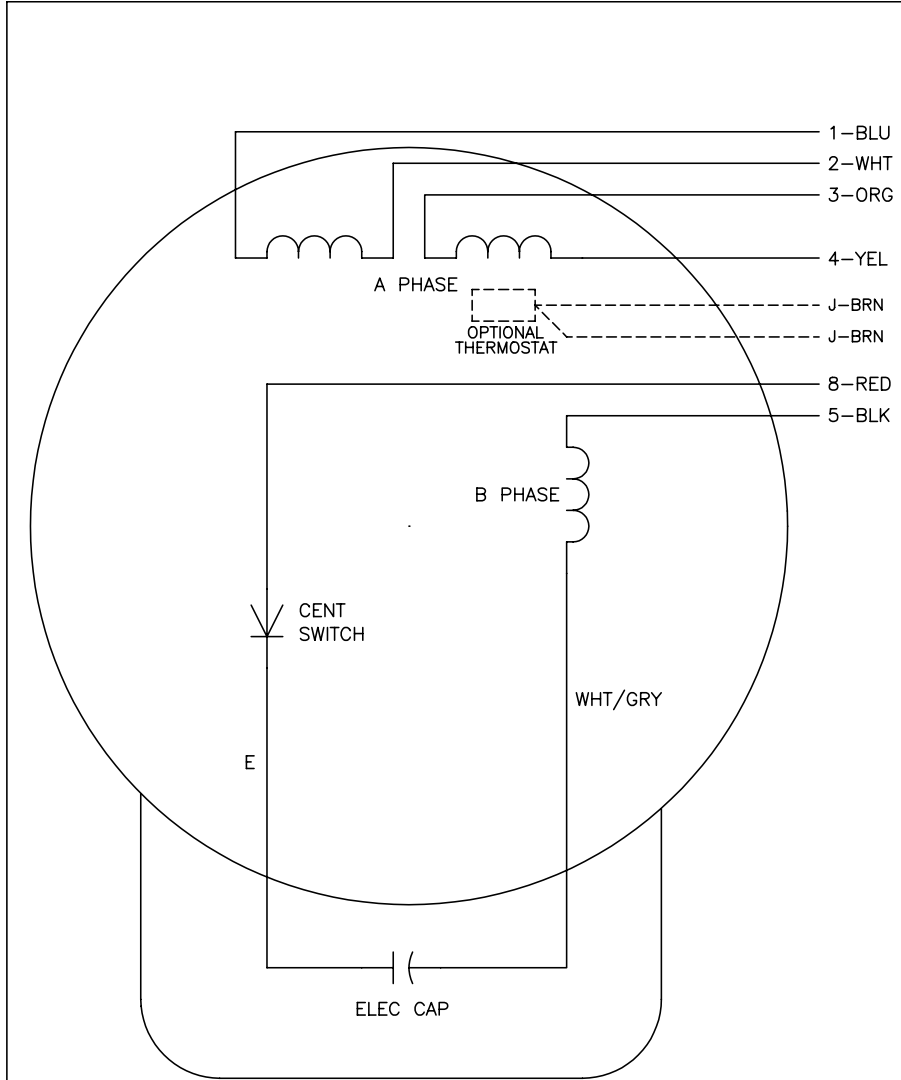
% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	46	56	66	77	81	85	0
Efficiency	56.1	61.8	66.6	68.1	66.4	61.6	0
Speed	2954	2921	2885	2840	2785	2720	0
Line amperes	2.3	2.4	2.6	3.3	3.7	4.6	3.7

Performance Graph at 220V, 50Hz, 0.5HP Typical performance - Not guaranteed values





CD0001



	LINE A	LINE B	JOIN
HIGH STD	1	4,5	2,3,8
HIGH OPP	1	4,8	2,3,5
LOW STD	1,3,8	2,4,5	-
LOW OPP	1,3,5	2,4,8	-

- NOTES:
1. STANDARD ROTATION IS CCW FACING END OPPOSITE SHAFT EXTENSION.
 2. OPTIONAL THERMOSTAT IS PROVIDED WHEN SPECIFIED.
 3. MULTIPLE CAPACITORS ARE CONNECTED IN PARALLEL UNLESS OTHERWISE SPECIFIED.
 4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: D	BY: JLP	REVISED: 04/08/99 1:16	TDR: 0178636
100000		FILE: AAA00007405	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

TYPE L, DV, REV, 6 LEADS

CD0001