

BALDOR • RELIANCE

Customer information packet

EM2539T-BG

40HP, 1770RPM, 3PH, 60HZ, 324T, 4064M, OPSB, F1

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11/28/2024 12:50:23 AM

Specifications

Enclosure	OPSB
Frame	324T
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	40.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA CSA EEV UR
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	98.000 A @ 230.0 V 99.000 A @ 208.0 V 49.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.1 %
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	49.0 a

Part detail

Revision	Q
Type	AC
Mech. spec.	40E331
Base	
Status	PRD/A
Elec. spec.	40WGX166
Layout	40LYE331
Eff. date	06-27-2024
CD Diagram	CD0005
Poles	04
Leads	9#8
Proprietary	False
Created date	10-08-2013

Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4064M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	27.19 IN
Power Factor	82
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	2.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1770 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3554LUA

CAT.NO.	EM2539T-BG	P/N		ENCL	OPSB
SPEC.	40E331X166G1	CC	010A	FRAME	324T
HP	40	CLASS	H	HZ	60
RPM	1770	PH	3	DES	A
VOLTS	230/460	CODE	H	ODE BRG	6309
AMPS	98/49	DE BRG			6312
RATING	40C AMB-CONT	NEMA-NOM-EFF	94.1	GREASE	POLYREX EM
PF	82	SER.F.	1.15	CT30-60(2:1) VT3-60(20:1)	
USABLE AT	50HZ 40HP 190/380V 114/57A		SF1.0		
HTR-VOLTS	HTR-AMPS	MAX. SPACE HEATER TEMP.			

Parts list

Part number	Description	Quantity
SA270435	SA 40E331X166G1	1.000 ea
RA257070	RA 40E331X166G1	1.000 ea
HA6361A01	LIFTING LUG FOR 37, 39 & 40 FRAME ZINC	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
40EP3200A02	STD FREP OPEN 309 BRG	1.000 ea
HW5100A11	W3917-042 WVY WSHR (WB)	1.000 ea
10XN3118K40	5/16-18 X 2.50" HEX HD, GRADE 5	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
40EP3201A04	PUEP, MACH - OPEN - FOR 312 BRG W/RET. R	1.000 ea
XY3816A12	3/8-16 FINISHED NUT W/SERRATIONS	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
MN416A01	TAG-INSTAL-MAINT no wire (2500bx)4/22	1.000 ea
LB1508	LABEL "SHAFT GROUNDING BRUSH" 1.50 X .81	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	0.050 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
HA3159A08	THRUBOLT- .38-16 X 20.00 LONG STUD	4.000 ea
MG1050Y01	CELEROL BALDOR GOLD *** NLA IN 5 GALLON	0.030 ga

85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 ea
40AD2002A01	LEXAN BAFFLE 40 FR OPEN	1.000 ea
40AD2002A01	LEXAN BAFFLE 40 FR OPEN	1.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
NP3554LUA	SS SUPER-E VPWM INV READY,CURUS-EEV,PREM	1.000 ea
40PA1000	PACKAGING GROUP	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea

AC Induction Motor Performance Data

Record # 35574

Typical performance - not guaranteed values

Winding: 40WGX166-R003		Type: 4064M		Enclosure: OPSB	
Nameplate Data			460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)	40	Full Load Torque	119 LB-FT		
Volts	230/460	Start Configuration	direct on line		
Full Load Amps	98/49	Breakdown Torque	427 LB-FT		
R.P.M.	1770	Pull-up Torque	187 LB-FT		
Hz	60 Phase	3	Locked-rotor Torque	246 LB-FT	
NEMA Design Code	A KVA Code	H	Starting Current	330 A	
Service Factor (S.F.)	1.15		No-load Current	21.1 A	
NEMA Nom. Eff.	94.1	Power Factor	82	Line-line Res. @ 25°C	0.16236 Ω
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load	41°C	
S.F. Amps			Temp. Rise @ S.F. Load	51°C	
			Locked-rotor Power Factor	32	
			Rotor inertia	5.09 LB-FT ²	

Load Characteristics 460 V, 60 Hz, 40 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	43	65	76	82	85	85	84
Efficiency	91.1	94	94.5	94.2	93.6	92.8	93.8
Speed	1792.4	1785	1777.8	1770.2	1762.1	1752.8	1765
Line amperes	24.1	30.7	39.2	48.7	59.3	71.3	55.1

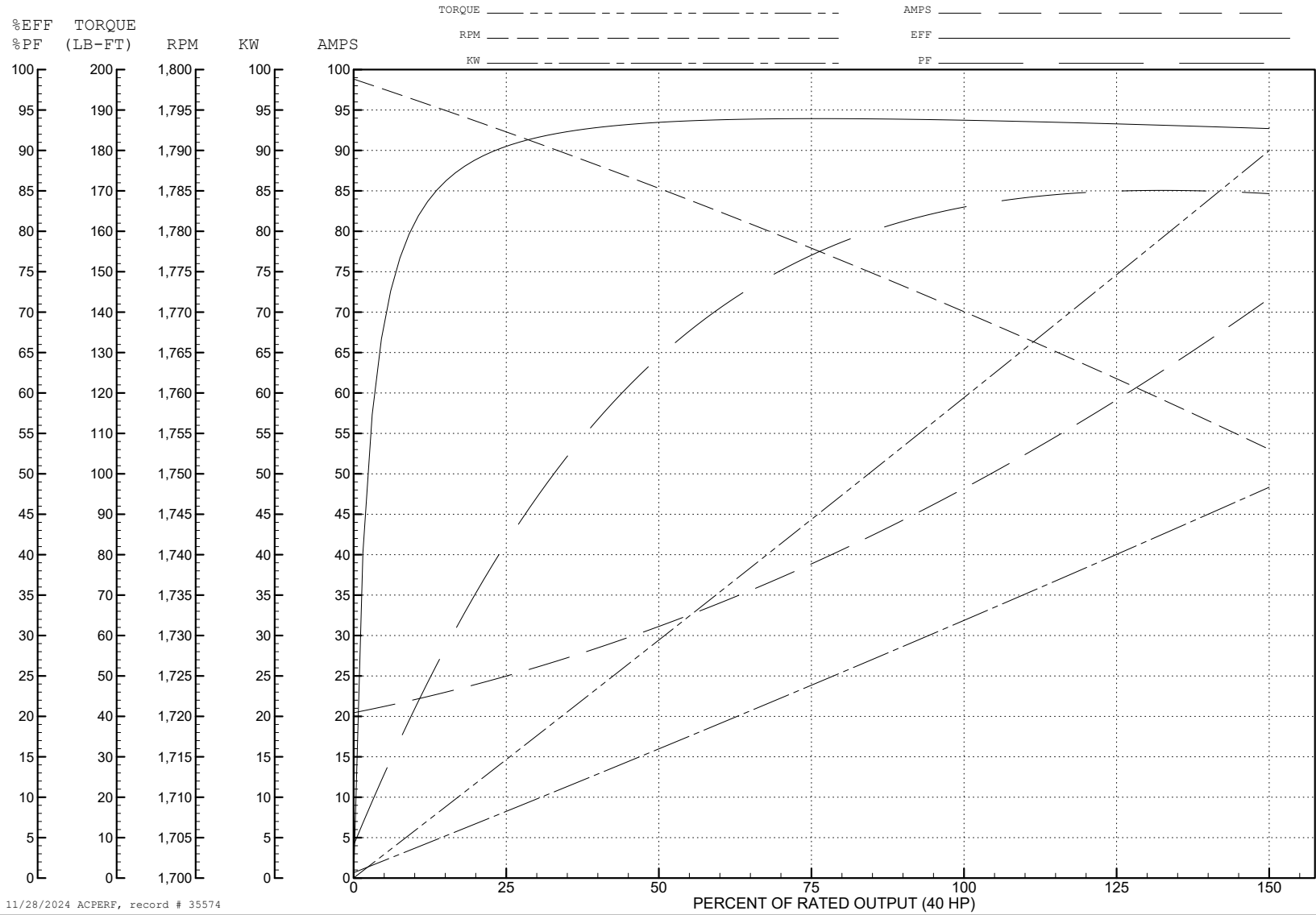
ABB Motors and Mechanical Inc.

WINDING # 40WGx166

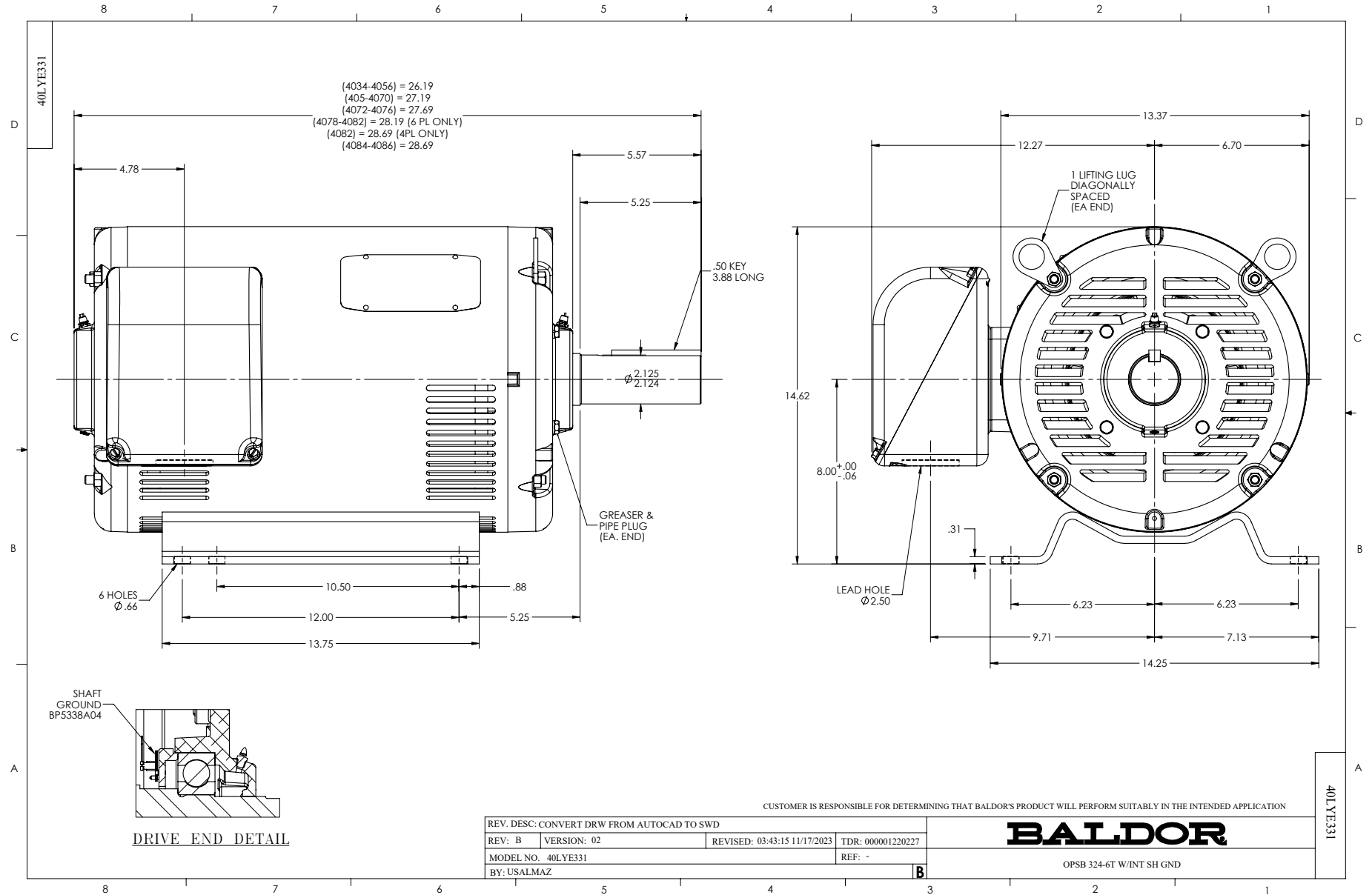
40 HP 3 PH 60 HZ 1770 RPM 460 V 4064M

Typical performance - not guaranteed values.

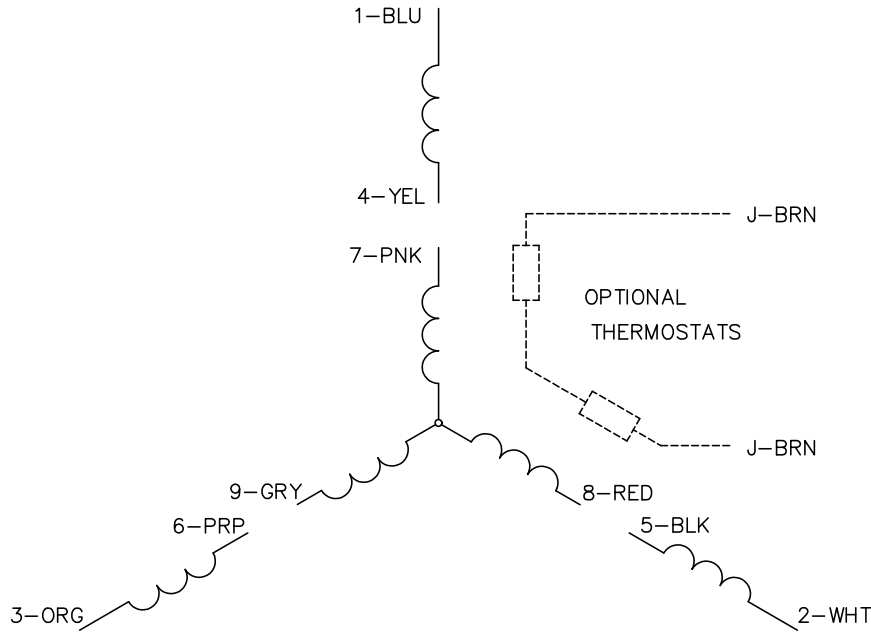
TORQUES (LB-FT): PO=427 PU=187 LR=246 LRA=330



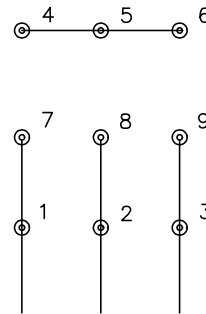
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CD0005

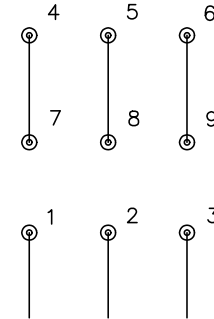


LOW VOLTAGE
(2Y)



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.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
S00000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS