BALDOR • RELIANCE

Product Information Packet

EM3710T-G

7.5HP,1770RPM,3PH,60HZ,213T,3738M,TEFC,F

Part Detail

Revision:	-	**Status:**	PRD/A	**Change #:**		**Proprietary:**	No
Type:	AC	**Elec. Spec:**	37WGL864	**CD Diagram:**	CD0005	**Mfg Plant:**	
Mech. Spec:	37J838	**Layout:**	37LYJ838	**Poles:**	04	**Created Date:**	11-11-2020
Base:	RG	**Eff. Date:**	11-20-2020	**Leads:**	9#14		

Specs

Catalog Number:	EM3710T-G	**Heater Indicator:**	No Heater
Product Complexity Level:	Standard	**Insulation Class:**	H
Enclosure:	TEFC	**Inverter Code:**	Inverter Ready
Frame:	213T	**KVA Code:**	J
Frame Material:	Steel	**Lifting Lugs:**	Standard Lifting Lugs
Output @ Frequency:	7.500 HP @ 60 HZ	**Locked Bearing Indicator:**	Locked Bearing
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	**Motor Lead Quantity/Wire Size:**	9 @ 14 AWG
Voltage @ Frequency:	460.0 V @ 60 HZ	**Motor Lead Exit:**	Ko Box
	230.0 V @ 60 HZ	**Motor Lead Termination:**	Flying Leads
XP Class and Group:	None	**Motor Type:**	3738M
XP Division:	Not Applicable	**Mounting Arrangement:**	F1
Agency Approvals:	UR	**Power Factor:**	80
	CSA EEV	**Product Family:**	General Purpose
	CSA	**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)	**RoHS Status:**	ROHS COMPLIANT

Blower:	None
Current @ Voltage:	19.000 A @ 230.0 V
	20.000 A @ 208.0 V
	9.500 A @ 460.0 V
Design Code:	A
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

Shaft Extension Location:	Pulley End
Shaft Ground Indicator:	Shaft Grounding
Shaft Rotation:	Reversible
Shaft Slinger Indicator:	No Slinger
Speed Code:	Single Speed
Motor Standards:	NEMA
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 NP3441LUA

CAT.NO.	EM3710T-G							
SPEC	37J838L864G1							
HP	7.5							
VOLTS	230/460							
AMPS	19/9.5							
RPM	1770							
FRAME	213T	**HZ**	60			**PH**	3	
SF	1.15	**CODE**	J	**DES**	A	**CLASS**	H	
NEMA NOM. EFF	91.7	**PF**	80					
RATING	40C AMB-CONT							
CC	010A	**USABLE AT 208V**	20					
ENCL	TEFC	**SER**						
DE	6307	**ODE**	6206					
VPWM INVERTER READY								
CT6-60H(10:1)VT3-60H(20:1								
	50HZ 7.5HP 190/380V 22.4/11.2A							SF1.0

Parts List

Part Number	Description	Quantity
SA387934	SA 37J838L864G1	1.000 EA
RA378274	RA 37J838L864G1	1.000 EA
37FN3002C01	EXFN, PLASTIC, 6.00 OD, 1.155 ID	1.000 EA
HW3200A01	3/8-16X3/4 I-BLT WELDED F/S	1.000 EA
37CB3006	37 CB CASTING W/1.38 LEAD HOLE @ 6:00	1.000 EA
37GS1000SP	GASKET, CONDUIT BOX STD., .06 THICK LEXI	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 EA
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 EA
37EP3101A01	FR ENDPLATE, FOR ROUTING PURPOSES	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 EA
37EP3100B06	PU EP 307 LOCK BRG,GRSR,DRAIN,2 RET HLS	1.000 EA
10XN2520A28	1/4-20X 1 3/4 HEX HD	4.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
XY3118A12	5/16-18 HEX NUT DIRECTIONAL SERRATION	4.000 EA
07FH4007SP	PRIMED	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 EA
37CB4516	LIPPED LID FOR 37 FRAME NEC KOBX	1.000 EA
37GS1008	37 GS FOR CB LID - LEXIDE	1.000 EA
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 EA
HW2501F21	KEY, 5/16 SQ X 2.375	1.000 EA
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	1.000 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA

Parts List (continued)

Part Number	Description	Quantity
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
LB1459	AEGIS SGR LABEL "AEGISLBL-100"	1.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 EA
HA3104A17	5/16-18X13.250 T-BLT/OHIO	4.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.028 GA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
NP3441LUA	ALUM SUPER-E VPWM INV READY UL CSA-EEV C	1.000 EA
37PA1074	PALLET PACK GRP, PRINT BOX PK1026A06	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 1/21	1.000 EA
LB1350	BAR CODE LABEL FOR YORK	1.000 EA

AC Induction Motor Performance Data
Record # 86486
Preliminary Data Sheet

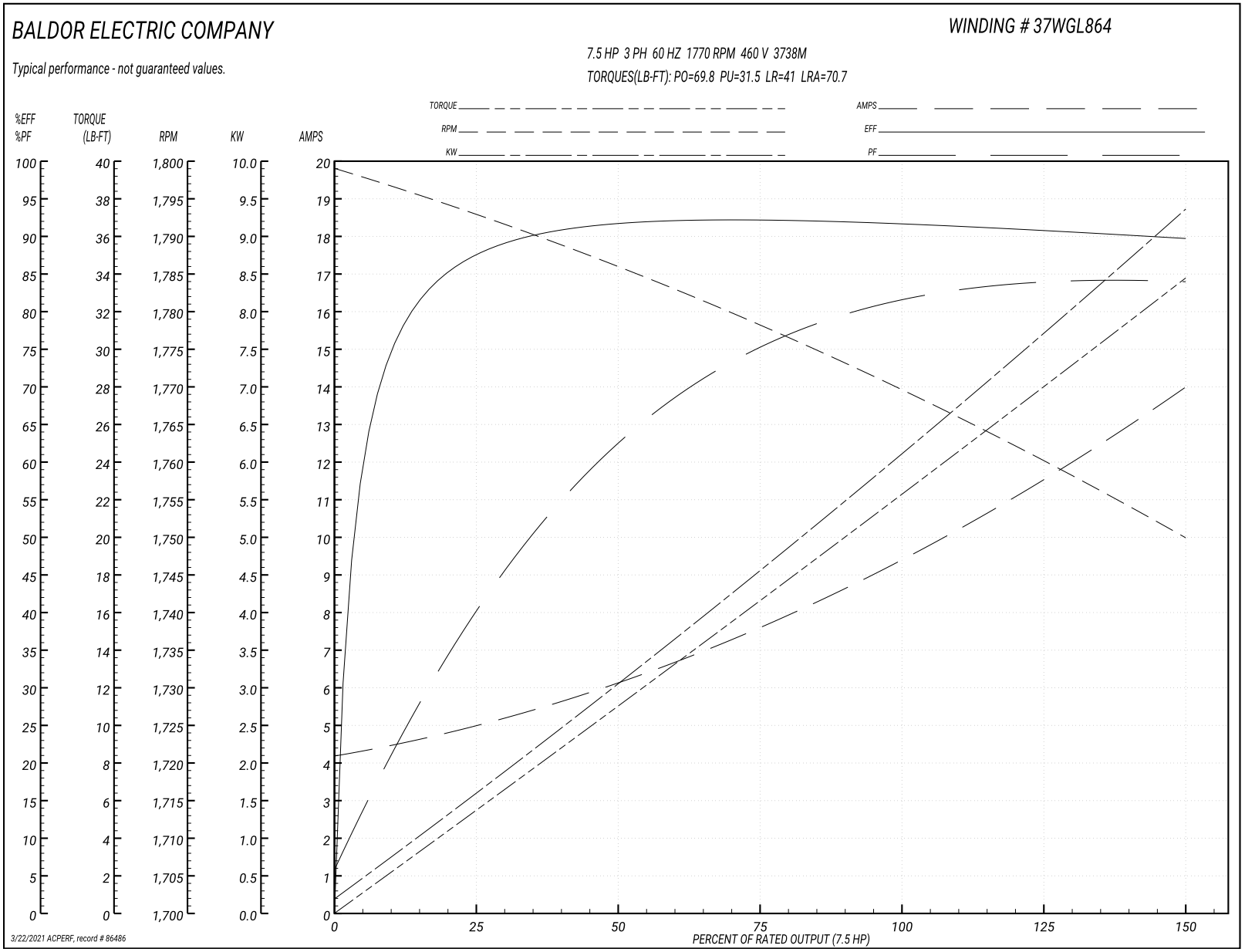
Winding: 37WGL864-R002	**Type:** 3738M	**Enclosure:** TEFC

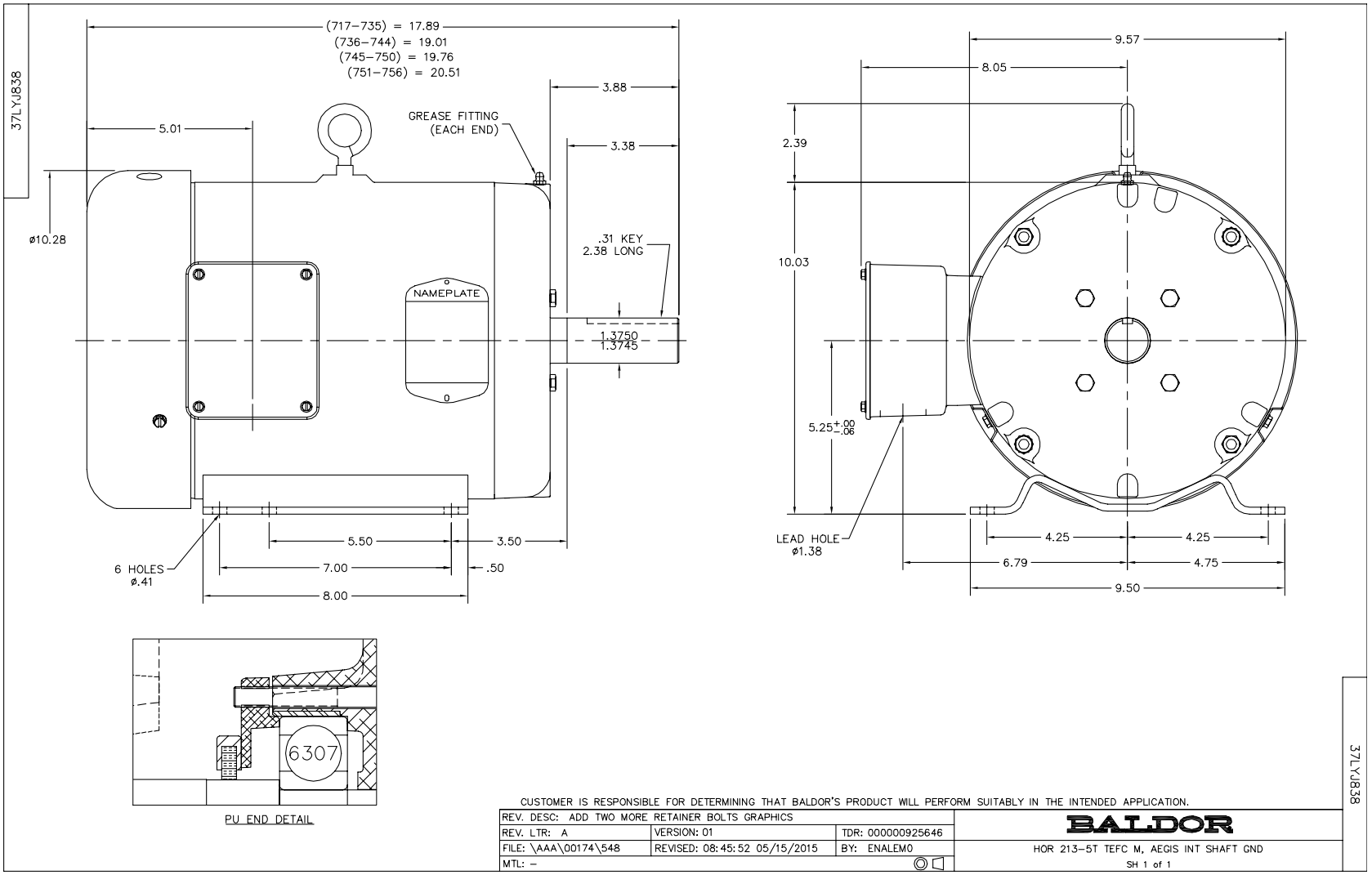
Nameplate Data			**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)		7.5	**Full Load Torque**	22.2 LB-FT
Volts		230/460	**Start Configuration**	direct on line
Full Load Amps		19.0/9.5	**Breakdown Torque**	69.8 LB-FT
R.P.M.		1770	**Pull-up Torque**	31.5 LB-FT
Hz	60 **Phase**	3	**Locked-rotor Torque**	41 LB-FT
NEMA Design Code	A **KVA Code**	J	**Starting Current**	70.7 A
Service Factor (S.F.)		1.15	**No-load Current**	4.32 A
NEMA Nom. Eff.	91.7 **Power Factor**	80	**Line-line Res. @ 25ºC**	1.48 Ω
Rating - Duty		40C AMB-CONT	**Temp. Rise @ Rated Load**	64°C
S.F. Amps		21.4/10.7	**Temp. Rise @ S.F. Load**	84°C
			Locked-rotor Power Factor	41.9
			Rotor inertia	0.934 lb-ft²

Load Characteristics 460 V, 60 Hz, 7.5 HP

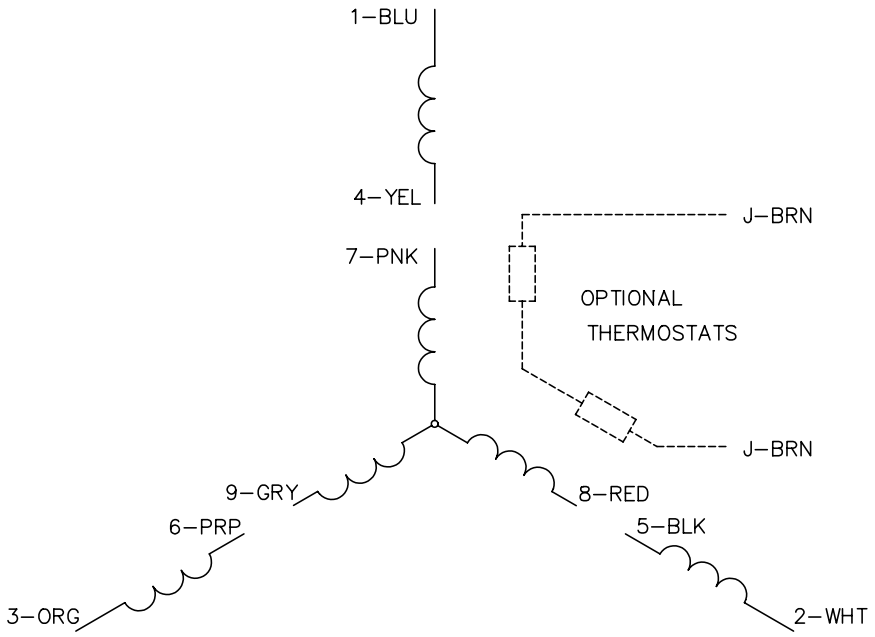
% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	42	64	75	80	83	84	83
Efficiency	87.1	91.4	92	91.7	90.7	89.6	90.7
Speed	1793	1786	1778	1770	1760	1750	1761
Line amperes	4.83	6.03	7.64	9.5	11.6	13.9	10.7

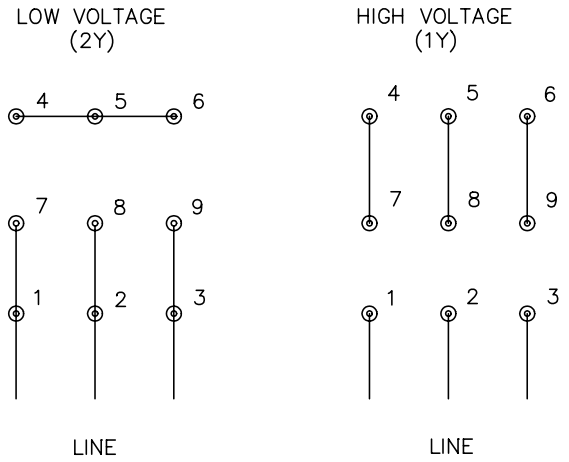
Performance Graph at 460V, 60Hz, 7.5HP Typical performance - Not guaranteed values




37LYJ838
(717–735) = 17.89
(736–744) = 19.01
(745–750) = 19.76
(751–756) = 20.51
3.88
5.01
GREASE FITTING
(EACH END)
3.38
ø10.28
.31 KEY
2.38 LONG
NAMEPLATE
1.3750
1.3745
5.50
3.50
6 HOLES
ø.41
7.00
.50
8.00
9.57
8.05
2.39
10.03
5.25 +.00 −.06
LEAD HOLE
ø1.38
4.25
4.25
6.79
4.75
9.50
6307
PU END DETAIL
37LYJ838
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.
REV. DESC: ADD TWO MORE RETAINER BOLTS GRAPHICS
REV. LTR: A
VERSION: 01
TDR: 000000925646
FILE: \AAA\00174\548
REVISED: 08:45:52 05/15/2015
BY: ENALEM0
MTL: –
BALDOR
HOR 213–5T TEFC M, AEGIS INT SHAFT GND
SH 1 of 1

CD0005





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			BALDOR ELECTRIC Co.
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
CD0005		FILE: AAA00005140	MDL: –
		MTL: –	3PH, DV, 9 LEADS