

# **BALDOR**® • *RELIANCE*

## **Product Information Packet**

# **EM3550T**

**1.5HP,3480RPM,3PH,60HZ,143T,3520M,TEFC,F**

Part Detail							
Revision:	P	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Prod. Type:	3520M	Elec. Spec:	35WGM760	CD Diagram:	CD0005
Enclosure:	TEFC	Mfg Plant:		Mech. Spec:	35T638	Layout:	35LYT638
Frame:	143T	Mounting:	F1	Poles:	02	Created Date:	04-28-2010
Base:	RG	Rotation:	R	Insulation:	F	Eff. Date:	12-19-2016
Leads:	9#18					Replaced By:	
Literature:		Elec. Diagram:					

<b>Nameplate NP3441LUA</b>									
<b>CAT.NO.</b>	EM3550T								
<b>SPEC.</b>	35T638M760G1								
<b>HP</b>	1.5								
<b>VOLTS</b>	230/460								
<b>AMP</b>	3.8/1.9								
<b>RPM</b>	3500								
<b>FRAME</b>	143T			<b>HZ</b>	60			<b>PH</b>	3
<b>SER.F.</b>	1.15		<b>CODE</b>	L		<b>DES</b>	B	<b>CL</b>	F
<b>NEMA-NOM-EFF</b>	84		<b>PF</b>	85					
<b>RATING</b>	40C AMB-CONT								
<b>CC</b>	010A					<b>USABLE AT 208V</b>	4		
<b>DE</b>	6205		<b>ODE</b>	6203					
<b>ENCL</b>	TEFC		<b>SN</b>						
<b>VPWM INVERTER READY</b>									
<b>CT6-60H(10:1)VT3-60H(20:1</b>									
50Hz 1.5HP 190/380V 4.6/2.3A									SF1.0

Parts List		
Part Number	Description	Quantity
SA194060	SA 35T638M760G1	1.000 EA
RA181653	RA 35T638M760G1	1.000 EA
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 EA
S/P107-000-001	SUPER E PROC'S-FS, WS & CK PLTS	1.000 EA
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 EA
35CB3007	35 CB CASTING W/.88 DIA. LEAD HOLE	1.000 EA
36GS1000SP	GASKET-CONDUIT BOX, .06 THICK #SV-330 LE	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
35EP3100M01	FREP TEFC 203 BRG W/GRSR (RAISED FH PADS	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
HW5100A03SP	WAVY WASHER (W1543-017)	1.000 EA
35EP3101A01SP	PUEP-ENCLOSED-205 BRG-W/GREASER	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 EA
35FH4005A84SP	IEC FH W/GRSR, NO DIMPLES PRIMED	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 EA
35CB4521	35 LIPPED CB LID (GALV & PHOSPH)	1.000 EA
35GS1030	35 GS FOR CB 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
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON (USe 4824-15A)	0.050 LB

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.017 GA
HA3100A15	THRUBOLT 10-32 X 8.375	4.000 EA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1000/bx) 11/14	1.000 EA
NP3441LUA	ALUM SUPER-E VPWM INV READY UL	1.000 EA
35PA1000	PKG GRP, PRINT PK1008A06	1.000 EA

<b>Accessories</b>		
<b>Part Number</b>	<b>Description</b>	<b>Multiplier</b>
35-8762	C FACE KIT	A8
35EP1506A01SP	D-FLANGE KIT	A8

**AC Induction Motor Performance Data**  
Record # 52482 - Typical performance - not guaranteed values

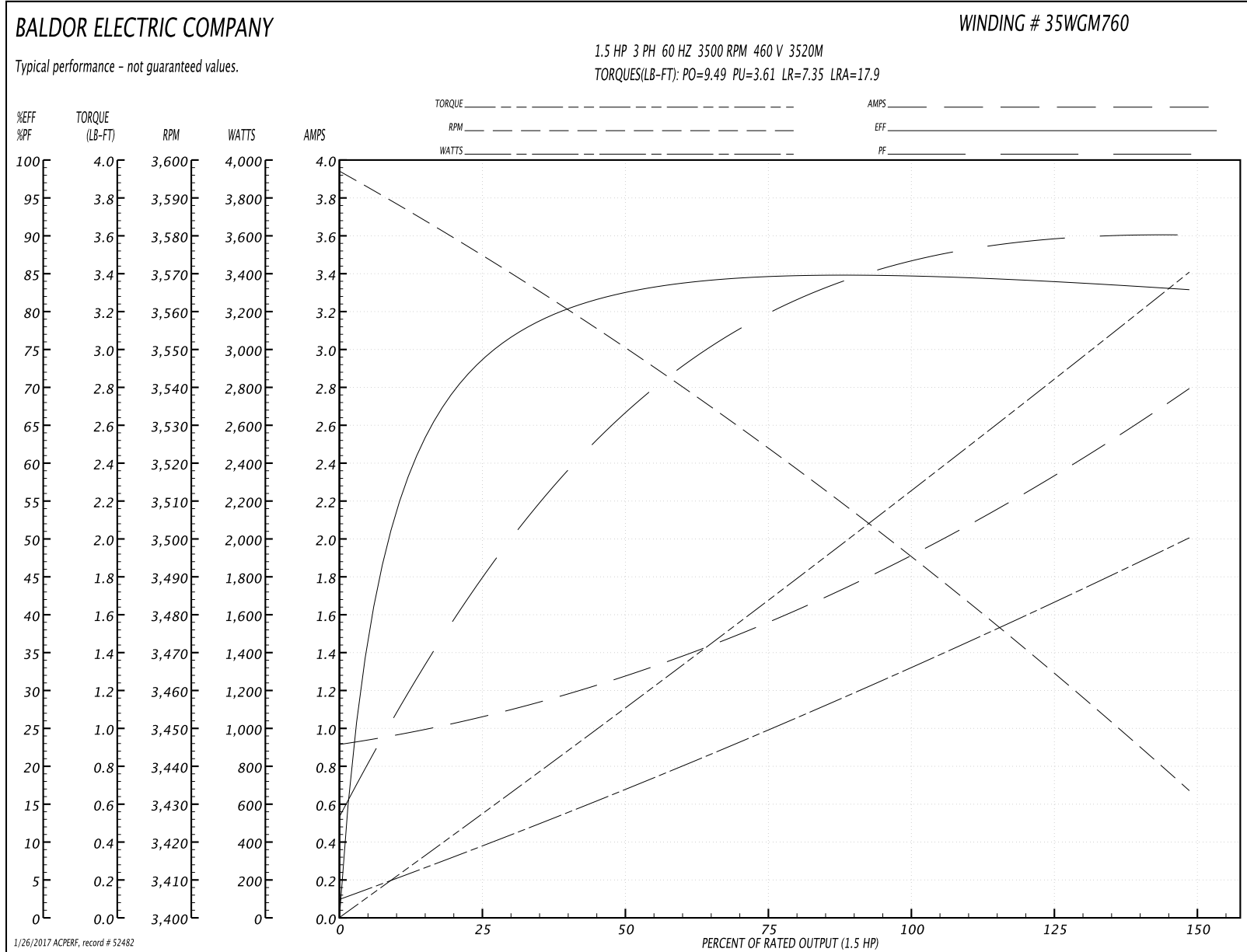
<b>Winding:</b> 35WGM760-R051	<b>Type:</b> 3520M	<b>Enclosure:</b> TEFC
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	1.5			Full Load Torque	2.22 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	3.8/1.9			Breakdown Torque	9.49 LB-FT
R.P.M.	3500			Pull-up Torque	3.61 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	7.35 LB-FT
NEMA Design Code	B	KVA Code	L	Starting Current	17.9 A
Service Factor (S.F.)	1.15			No-load Current	0.932 A
NEMA Nom. Eff.	84	Power Factor	85	Line-line Res. @ 25°C	12.2 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	43°C
S.F. Amps				Temp. Rise @ S.F. Load	50°C
				Locked-rotor Power Factor	60.1
				Rotor inertia	0.0553 LB-FT <sup>2</sup>

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	45	67	79	85	89	90	87
Efficiency	72.3	82.2	84.4	84.8	84.3	82.8	84.5
Speed	3575	3551	3526	3498	3466	3433	3479
Line amperes	1.03	1.25	1.55	1.91	2.31	2.79	2.15

Performance Graph at 460V, 60Hz, 1.5HP Typical performance - Not guaranteed values



**AC Induction Motor Performance Data**  
Record # 59170 - Typical performance - not guaranteed values

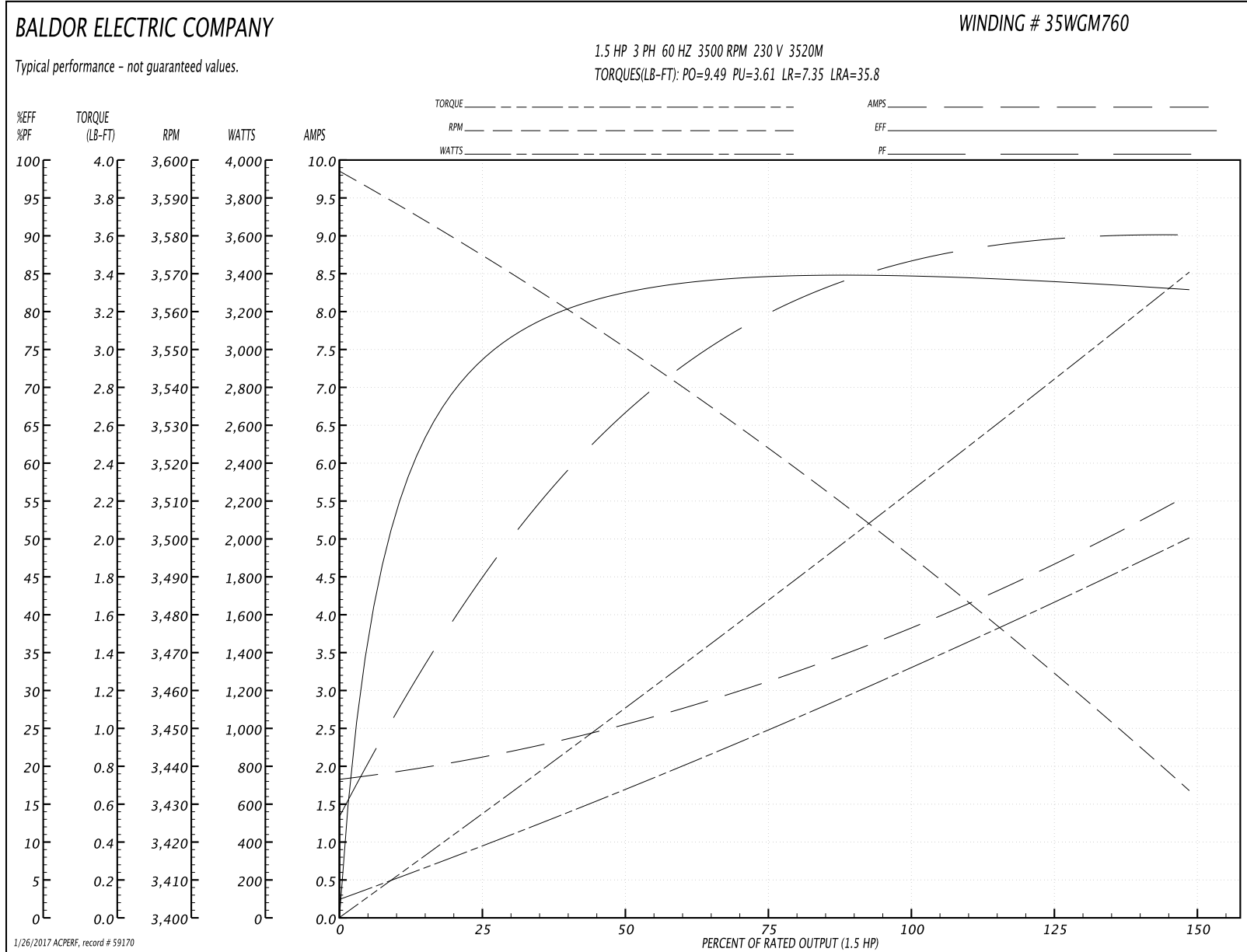
<b>Winding:</b> 35WGM760-R051	<b>Type:</b> 3520M	<b>Enclosure:</b> TEFC
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Nameplate Data				230 V, 60 Hz: Low Voltage Connection	
Rated Output (HP)	1.5			Full Load Torque	2.22 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	3.8/1.9			Breakdown Torque	9.49 LB-FT
R.P.M.	3500			Pull-up Torque	3.61 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	7.35 LB-FT
NEMA Design Code	B	KVA Code	L	Starting Current	35.8 A
Service Factor (S.F.)	1.15			No-load Current	1.86 A
NEMA Nom. Eff.	84	Power Factor	85	Line-line Res. @ 25°C	3.04 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	43°C
S.F. Amps				Temp. Rise @ S.F. Load	50°C
				Locked-rotor Power Factor	60.1
				Rotor inertia	0.0553 LB-FT <sup>2</sup>

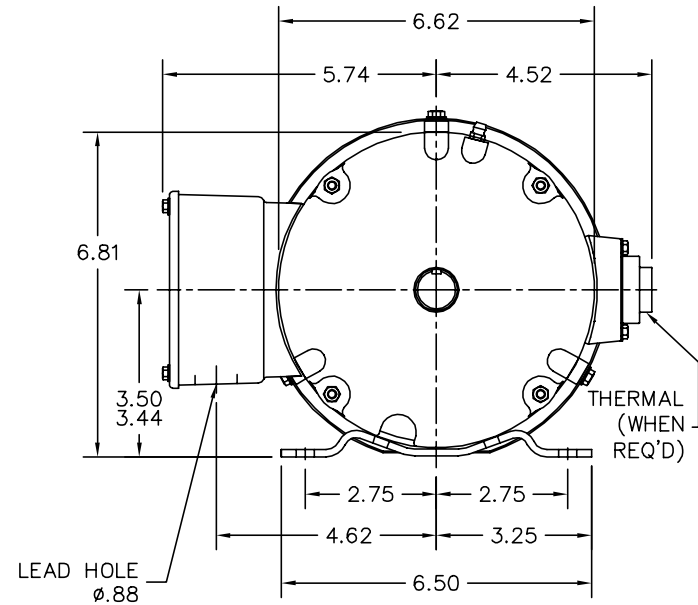
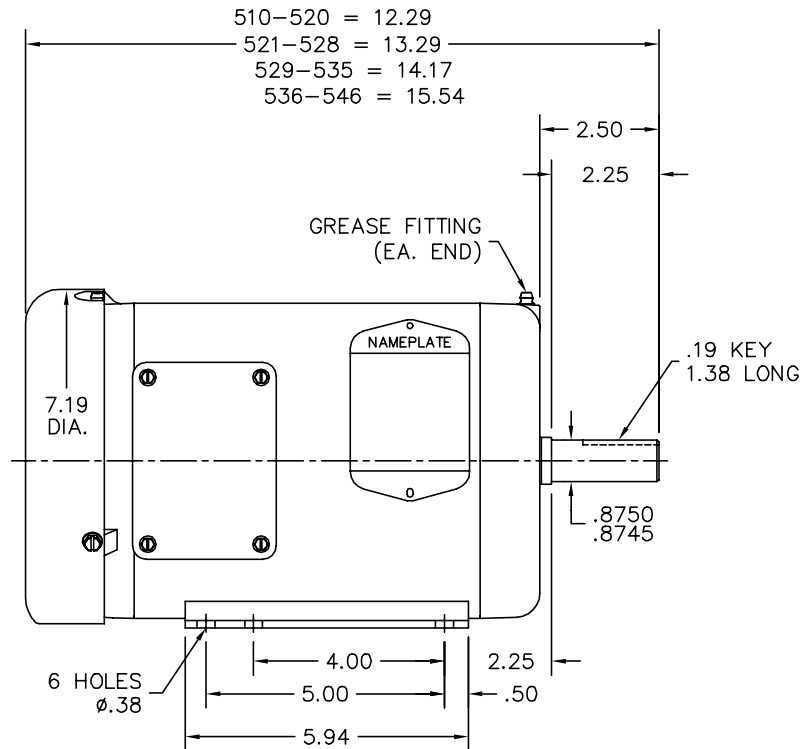
Load Characteristics 230 V, 60 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	45	67	79	85	89	90	87
Efficiency	72.3	82.2	84.4	84.8	84.3	82.8	84.5
Speed	3575	3551	3526	3498	3466	3433	3479
Line amperes	2.06	2.5	3.1	3.82	4.62	5.58	4.3

Performance Graph at 230V, 60Hz, 1.5HP Typical performance - Not guaranteed values



35LYT638



CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: UPDATE FREP AND FAN HOUSING (SEE ZTR02 NOTES)		
REV. LTR: C	VERSION: 03	TDR: 000000580046
FILE: \AAA\00106\650		REVISED: 08:51:08 02/11/2011
MTL: -		BY: ENBENBO

**BALDOR**

HOR 143-5T TEFC 35M 2 POLE "W" BASE (35BA4009)

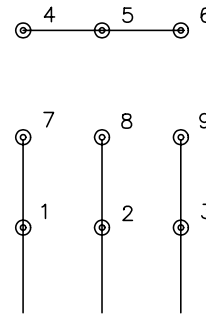
SH 1 of 1

35LYT638

CD0005

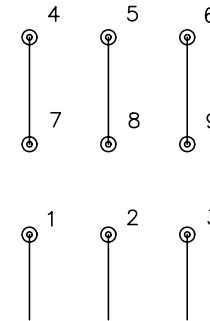


LOW VOLTAGE  
(2Y)



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.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS

REV. LTR: E BY: JLP

REVISED: 01/19/99 10:15

TDR: 0171435

90000

FILE: AAA00005140

MDL: -

MTL: -

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005