

BALDOR® • RELIANCE

Product Information Packet

CEM3770T-5

7.5HP, 1770RPM, 3PH, 60HZ, 213TC, 0735M, TEFC

Part Detail							
Revision:	L	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Prod. Type:	0735M	Elec. Spec:	07WGX817	CD Diagram:	CD0006
Enclosure:	TEFC	Mfg Plant:		Mech. Spec:	07H058	Layout:	07LYH058
Frame:	213TC	Mounting:	F1	Poles:	04	Created Date:	03-20-2009
Base:	RG	Rotation:	R	Insulation:	F	Eff. Date:	10-16-2015
Leads:	3#14					Replaced By:	
Literature:		Elec. Diagram:					

Nameplate NP3441L							
CAT.NO.	CEM3770T-5						
SPEC.	07H058X817						
HP	7.5						
VOLTS	575						
AMP	7.5						
RPM	1770						
FRAME	213TC	HZ	60	PH	3		
SER.F.	1.15	CODE	J	DES	A	CL	F
NEMA-NOM-EFF	91.7	PF	81				
RATING	40C AMB-CONT						
CC	010A	USABLE AT 208V					
DE	6307	ODE	6206				
ENCL	TEFC	SN					
VPWM INVERTER READY							
CT6-60H(10:1)VT3-60H(20:1)							

Parts List		
Part Number	Description	Quantity
SA180779	SA 07H058X817	1.000 EA
RA168731	RA 07H058X817	1.000 EA
37FN3002C01	EXFN, PLASTIC, 6.00 OD, 1.155 ID	1.000 EA
S/P107-000-001	SUPER E PROC'S-FS, WS & CK PLTS	1.000 EA
HW3201A05	3/8-16 EYEBOLT	1.000 EA
09CB3002SP	CB W/1.38 LEAD HOLE FOR 37, 39, 307 & 30	1.000 EA
09GS1000SP	GASKET-CONDUIT BOX, 1/16 THICK LEXIDE	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
HW3001B02	1RASS CUP WASHER W/GROUND SYMBOL TAB,	1.000 EA
37FE1100A41	FR ENDPLATE ASSEMBLY FOR ROUTING	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 EA
37PE1300A10	PUEP E-COATING ASSEMBLY FOR ROUTING	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
10XN2520A30	HEX HD CAP SCREW-STD THD-.25 X 20 THD PE	4.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 EA
XY3118A12	5/16-18 HEX NUT DIRECTIONAL SERRATION	4.000 EA
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 EA
07FH4007SP	IEC FH W/GRSR, NOTCH @ 6:00 & 3 FAN CVR	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 EA
09CB3501SP	CONDUIT BOX LID FOR 09CB3001 & 09CB3002	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
09GS1013SP	09 GS FOR 09CB3501 LID - LEXIDE	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 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
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
MJ1000A75	GREASE, POLYREX EM EXXON (USe 4824-15A)	0.050 LB
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.036 GA
HA3104A32	THRUBOLT- 5/16-18 X12.750	4.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0006	CONNECTION LABEL	1.000 EA
NP3441L	ALUM SUPER-E VPWM INVERTER READY UL	1.000 EA
07PA1011	PKG GRP, 07 CAST IRON PK1181	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 11/14	1.000 EA

AC Induction Motor Performance Data

Record # 26661 - Typical performance - not guaranteed values

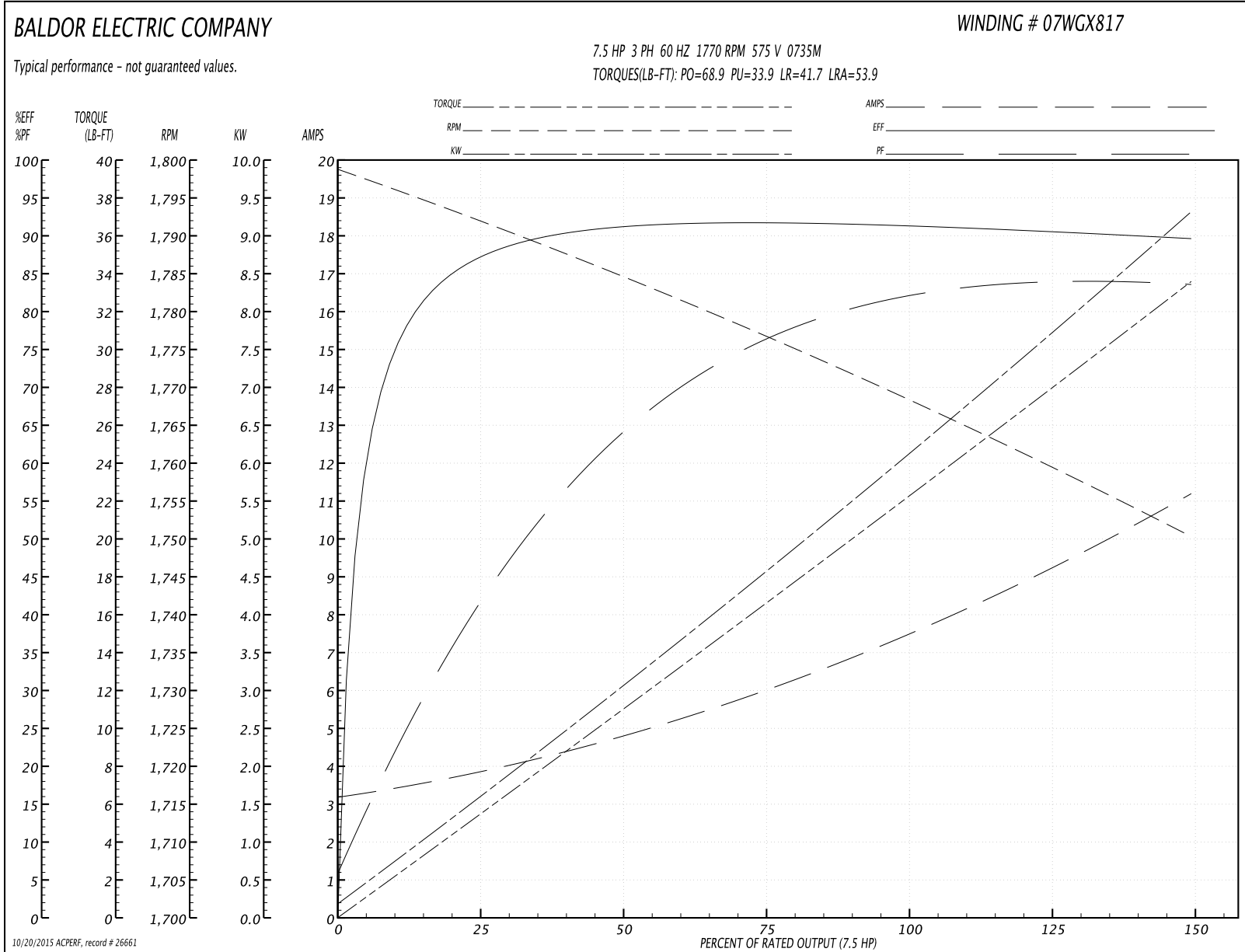
Winding: 07WGX817-R001	Type: 0735M	Enclosure: TEFC
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Nameplate Data				575 V, 60 Hz: Single Voltage Motor	
Rated Output (HP)	7.5			Full Load Torque	22.1 LB-FT
Volts	575			Start Configuration	direct on line
Full Load Amps	7.5			Breakdown Torque	68.9 LB-FT
R.P.M.	1770			Pull-up Torque	33.9 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	41.7 LB-FT
NEMA Design Code	A	KVA Code	J	Starting Current	53.9 A
Service Factor (S.F.)	1.15			No-load Current	3.3 A
NEMA Nom. Eff.	91.7	Power Factor	81	Line-line Res. @ 25°C	2.32 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	43°C
S.F. Amps				Temp. Rise @ S.F. Load	53°C
				Rotor inertia	0.861 LB-FT ²

Load Characteristics 575 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	43	65	76	81	83	84	82
Efficiency	86.8	91.2	91.8	91.3	90.7	89.6	90.9
Speed	1792	1784	1777	1769	1760	1750	1764
Line amperes	3.71	4.71	6	7.54	9.27	11.1	8.58

Performance Graph at 575V, 60Hz, 7.5HP Typical performance - Not guaranteed values



AC Induction Motor Performance Data

Record # 44991 - Typical performance - not guaranteed values

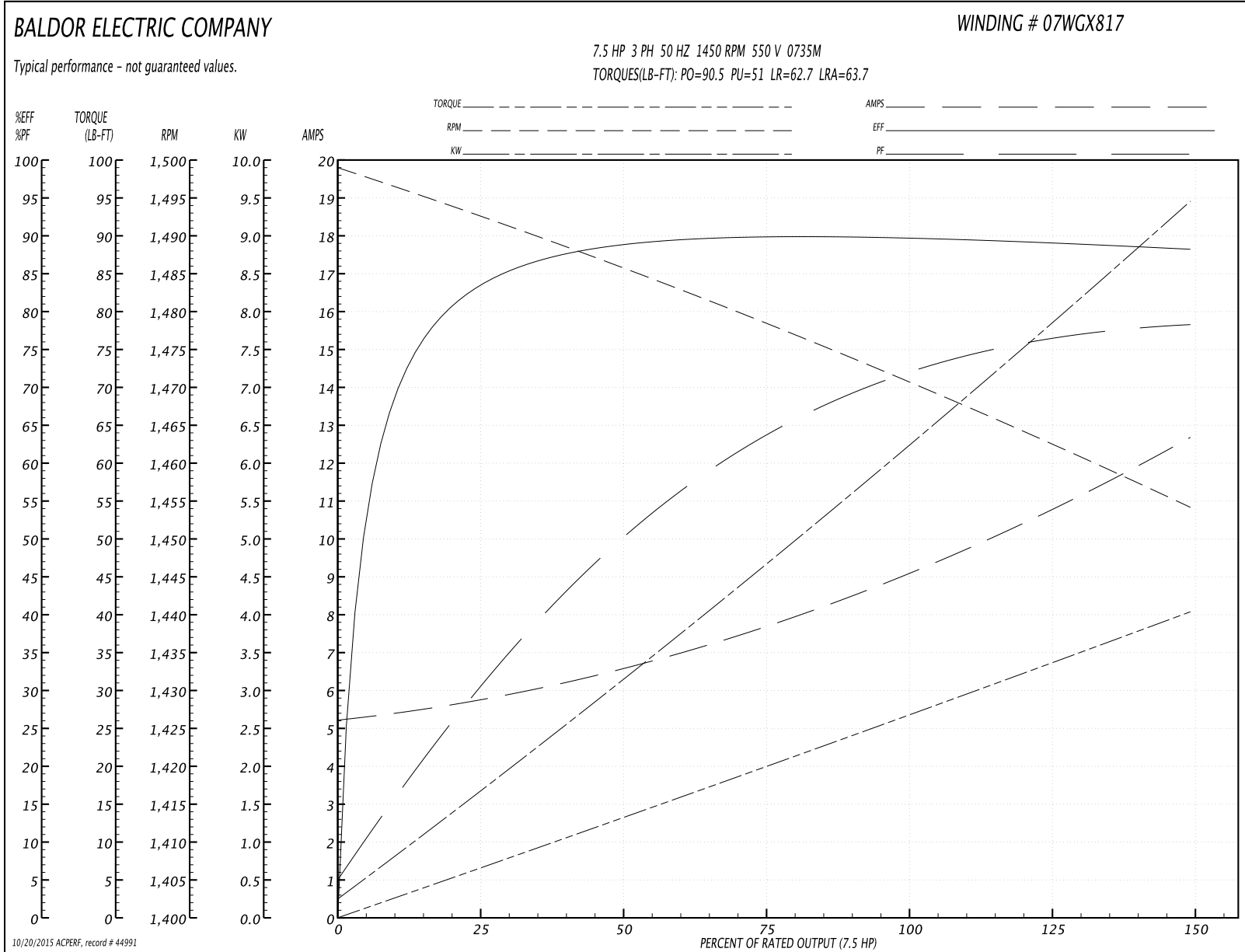
Winding: 07WGX817-R001	Type: 0735M	Enclosure: TEFC
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Nameplate Data				550 V, 50 Hz: Single Voltage Motor	
Rated Output (HP)	7.5			Full Load Torque	26.6 LB-FT
Volts	550			Start Configuration	direct on line
Full Load Amps	9.1			Breakdown Torque	90.5 LB-FT
R.P.M.	1450			Pull-up Torque	51 LB-FT
Hz	50	Phase	3	Locked-rotor Torque	62.7 LB-FT
NEMA Design Code	A	KVA Code	K	Starting Current	63.7 A
Service Factor (S.F.)	1.15			No-load Current	5.31 A
NEMA Nom. Eff.	89.5	Power Factor	71	Line-line Res. @ 25°C	2.31 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	58°C
S.F. Amps				Temp. Rise @ S.F. Load	70°C
				Rotor inertia	0.861 LB-FT ²

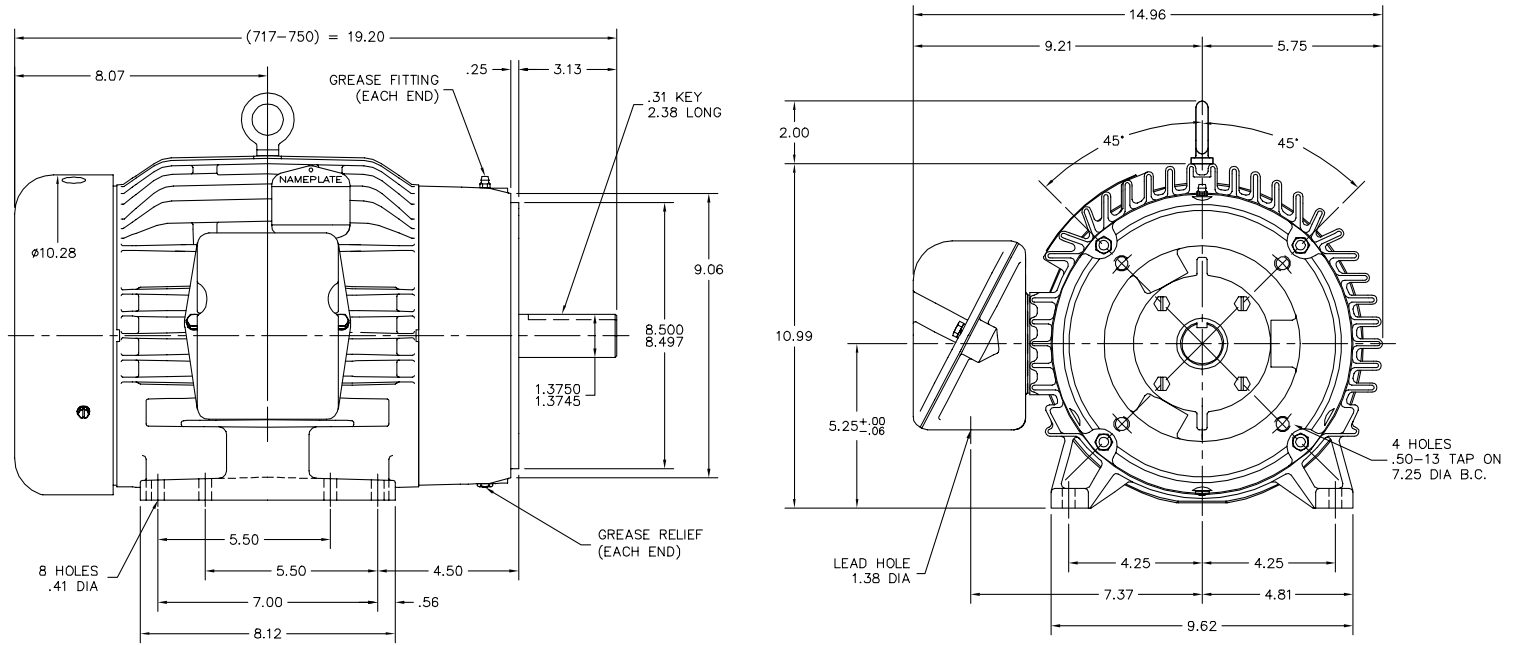
Load Characteristics 550 V, 50 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	31	51	63	71	76	79	74
Efficiency	83	88.8	89.8	89.8	89.2	88.2	89.4
Speed	1493	1485	1479	1471	1463	1454	1466
Line amperes	5.64	6.51	7.67	9.11	10.8	12.6	10.1

Performance Graph at 550V, 50Hz, 7.5HP Typical performance - Not guaranteed values



07LYH058



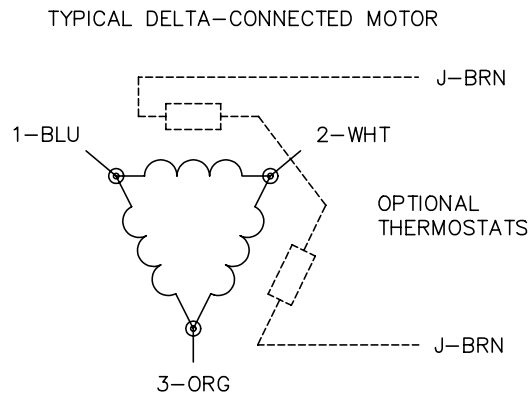
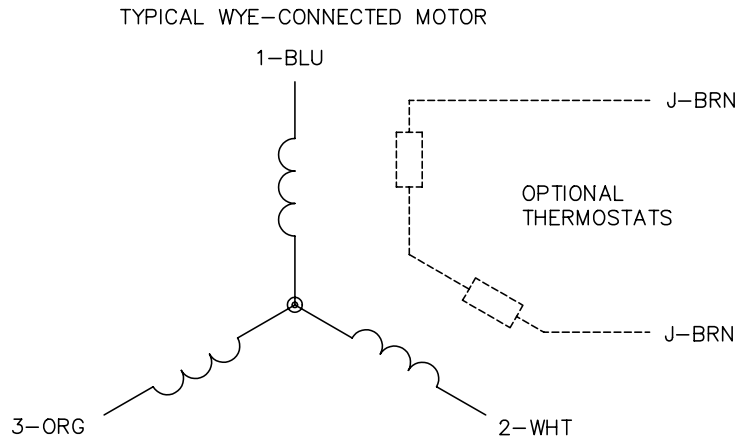
07LYH058

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

REV. DESC: OMIT GROUND LUG FROM LAYOUT		
REV. LTR: M	VERSION: 03	TDR: 000000569767
FILE: \AAA\00016\842	REVISED: 08:57:45 12/03/2010	BY: ENMATRO
MTL: -		

BALDOR
 HORZ 213-5TC TEFC 307M SUPER-E
 SH 1 of 1

CD0006



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER 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 BE NUMBERED AS SHOWN.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: D	BY: JLP	REVISED: 01/21/99 4:02	TDR: 0171435
9000D		FILE: AAA00005141	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

CD0006