

BALDOR® • RELIANCE 

Product Information Packet

CEM7045T

7.5//5HP,3520//2930RPM,3PH,60//50HZ,213T

Part Detail							
Revision:	J	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	37WGR224	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	37H238	Layout:	37LYH238	Poles:	02	Created Date:	05-11-2012
Base:	RG	Eff. Date:	09-19-2019	Leads:	9#14		

Specs			
Catalog Number:	CEM7045T	Front Shaft Indicator:	None
Enclosure:	XPFC	Heater Indicator:	No Heater
Frame:	213TC	Insulation Class:	B
Frame Material:	Steel	Inverter Code:	Not Inverter
Output @ Frequency:	7.500 HP @ 60 HZ	KVA Code:	J
	5.000 HP @ 50 HZ	Lifting Lugs:	Standard Lifting Lugs
Synchronous Speed @ Frequency:	3600 RPM @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 14 AWG
	190.0 V @ 50 HZ	Motor Lead Exit:	Ko Box
	230.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
	380.0 V @ 50 HZ	Motor Type:	X3728M
XP Class and Group:	CLI GP D; CLII GP F,G	Mounting Arrangement:	F1
XP Division:	Division I	Power Factor:	84
Agency Approvals:	UL	Product Family:	General Purpose
	CSA	Pulley End Bearing Type:	Ball
Auxillary Box:	No Auxillary Box	Pulley Face Code:	C-Face
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	Shaft Extension Location:	Pulley End
Current @ Voltage:	15.400 A @ 190.0 V	Shaft Ground Indicator:	No Shaft Grounding
	18.000 A @ 230.0 V	Shaft Rotation:	Reversible
	19.400 A @ 208.0 V	Shaft Slinger Indicator:	No Slinger
	7.700 A @ 380.0 V	Speed Code:	Single Speed
	9.000 A @ 460.0 V	Motor Standards:	NEMA
Design Code:	A	Starting Method:	Direct on line
Drip Cover:	No Drip Cover	Thermal Device - Bearing:	None
Duty Rating:	CONT	Thermal Device - Winding:	Normally Closed Thermostat
Electrically Isolated Bearing:	Not Electrically Isolated	Vibration Sensor Indicator:	No Vibration Sensor
Feedback Device:	NO FEEDBACK	Winding Thermal 1:	None
Front Face Code:	Standard	Winding Thermal 2:	None
		XP Temp Code:	T3C

Nameplate NP1426XPSLEV	
NO.	[] CC 010A
SER.	[]
SPEC.	37H238R224G1
CAT.NO.	CEM7045T
HP	7.5//5 T. CODE T3C
VOLTS	230/460//190/380
AMPS	18/9//15.4/7.7
RPM	3520//2930
HZ	60//50 PH 3 CL B
SER.F.	1.00 DES A CODE J
RATING	40C AMB-CONT
FRAME	213TC NEMA-NOM-EFF 89.5
USABLE AT 208V	19.4 PF 84
BLANK	[]

Parts List		
Part Number	Description	Quantity
SA244918	SA 37H238R224G1	1.000 EA
RA231805	RA 37H238R224G1	1.000 EA
36FN3000B02	EXFN, PLASTIC, 6.00 OD, 1.175 ID	1.000 EA
35CB3001A02SP	EXPL PROOF CONDUIT BOX, 3/4"PIPE TAP LEA	1.000 EA
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 EA
HW3001B01	BRASS CUP WASHER, FOR #10 SCREW	1.000 EA
37EP1102A01	STD FR EP, XPFC	1.000 EA
HW4500A19	1/4-28X1/4 SLOTTED PLUG F/S	2.000 EA
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 EA
37EP1700A01	PU EP, XPFC, 213-5TC	1.000 EA
84XN2520J26	1/4 20X1 5/8 SOC HD CP SRBLK OX	2.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 EA
HW4001A02	3/8 HX SOC PIPE PLUG W/.75" TAPER (F/S)	2.000 EA
60XN1032A07	10-32 X .4375 TRUSS HEAD, TORX SERRATED	2.000 EA
37FH3001	FAN COVER, DIE CAST	1.000 EA
10XN2520A12	1/4-20 X 3/4 HEX HEAD CAP	4.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 EA
35CB3500A01SP	CONDUIT BOX LID, MACH	1.000 EA
51XN2520A16	SCREW, HEX WS SLT, ZN, 1/4-20 X 1.00	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	6.000 EA
NP0018F	ALUM UL XP CONDUIT BOX NAMEPLATE	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 EA
MG1025G29	WILKOFASST, 789.229, DARK CHARCOAL GRAY	0.028 GA
HA3106A03	THRUBOLT- 1/2-13 X 11.875 X	4.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0145B01	CONNECTION LABEL	1.000 EA
NP1426XPSLEV	SS XP UL CSA-EEV CC CL-I GP-D	1.000 EA
37PA1039	PALLET PACK GRP, PRINT PK1026A06	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 3/19	1.000 EA

AC Induction Motor Performance Data

Record # 38347 - Typical performance - not guaranteed values

Winding: 37WGR224-R004	Type: 3728M	Enclosure: XPFC
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	7.5//5			Full Load Torque	10.9 LB-FT
Volts	208-230/460//190/380			Start Configuration	direct on line
Full Load Amps	19.4-18/9//15.4/7.7			Breakdown Torque	40.4 LB-FT
R.P.M.	3520//2930			Pull-up Torque	20.6 LB-FT
Hz	60//50	Phase	3	Locked-rotor Torque	21.8 LB-FT
NEMA Design Code	A	KVA Code	J	Starting Current	68.4 A
Service Factor (S.F.)	1			No-load Current	3.73 A
NEMA Nom. Eff.	89.5	Power Factor	84	Line-line Res. @ 25°C	1.1531 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	45°C
				Locked-rotor Power Factor	33
				Rotor inertia	0.255 LB-FT ²

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	45	69	79	84	87	89
Efficiency	81.5	88.8	90.5	90.6	90.1	89.2
Speed	3580.5	3562.7	3541.6	3520.3	3496.3	3470.9
Line amperes	4.22	5.36	7.03	8.94	11	13.1

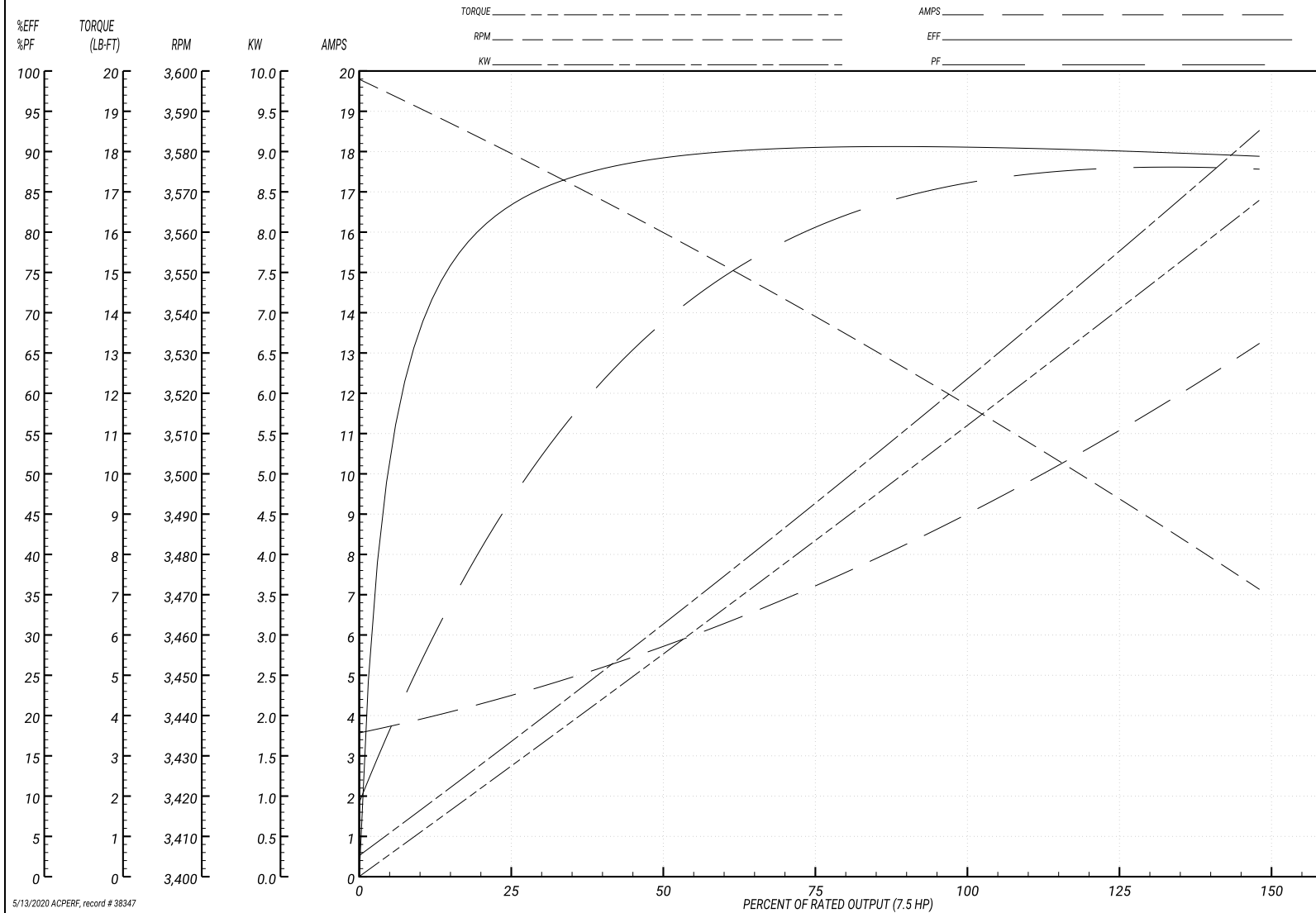
Performance Graph at 460V, 60Hz, 7.5HP Typical performance - Not guaranteed values

ABB Motors and Mechanical Inc.

WINDING # 37WGR224

Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 3520.3 RPM 460 V 3728M
 TORQUES(LB-FT): PO=40.4 PU=20.6 LR=21.8 LRA=68.4



5/13/2020 ACPERF, record # 38347

AC Induction Motor Performance Data

Record # 38349 - Typical performance - not guaranteed values

Winding: 37WGR224-R004	Type: 3728M	Enclosure: XPFC
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Nameplate Data				380 V, 50 Hz: High Voltage Connection	
Rated Output (HP)	7.5//5			Full Load Torque	8.71 LB-FT
Volts	208-230/460//190/380			Start Configuration	direct on line
Full Load Amps	19.4-18/9//15.4/7.7			Breakdown Torque	38.5 LB-FT
R.P.M.	3520//2930			Pull-up Torque	21.8 LB-FT
Hz	60//50	Phase	3	Locked-rotor Torque	23 LB-FT
NEMA Design Code	A	KVA Code	J	Starting Current	66.3 A
Service Factor (S.F.)	1			No-load Current	3.63 A
NEMA Nom. Eff.	89.5	Power Factor	84	Line-line Res. @ 25°C	1.1 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	35°C
				Locked-rotor Power Factor	37
				Rotor inertia	0.255 LB-FT ²

Load Characteristics 380 V, 50 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	42	65	76	82	85	88
Efficiency	73.7	83.9	86.9	87.9	87.7	87.5
Speed	2983	2968	2951	2934	2914	2894
Line amperes	4.01	4.88	6.18	7.66	9.26	10.9

Performance Graph at 380V, 50Hz, 5.0HP Typical performance - Not guaranteed values

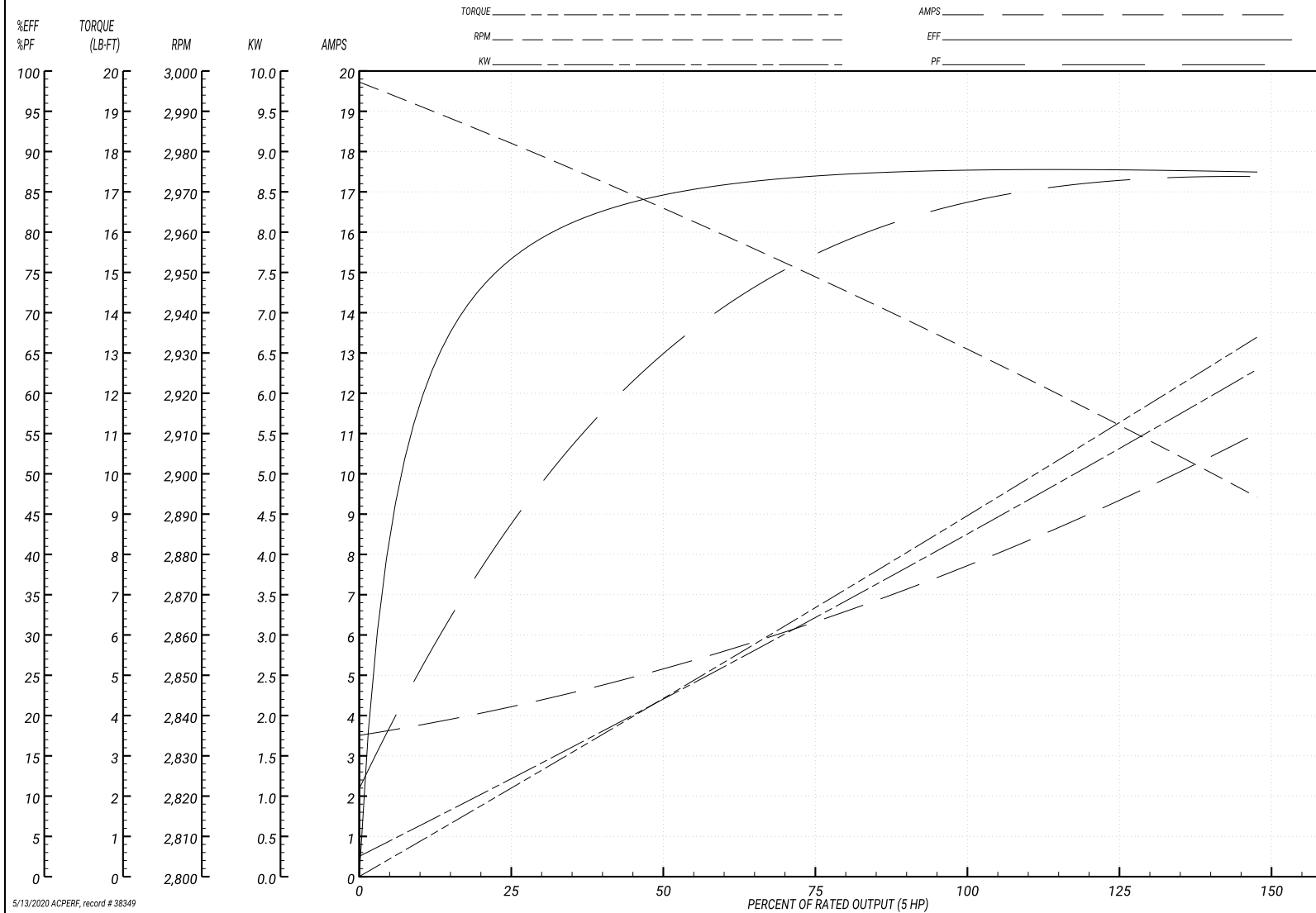
ABB Motors and Mechanical Inc.

WINDING # 37WGR224

Typical performance - not guaranteed values.

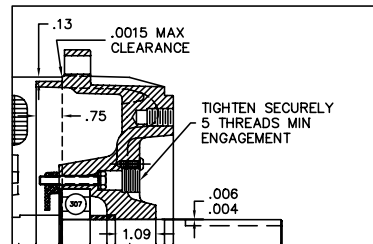
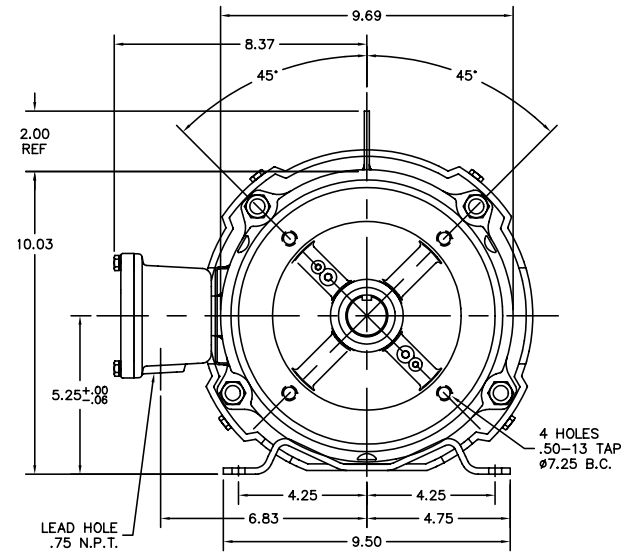
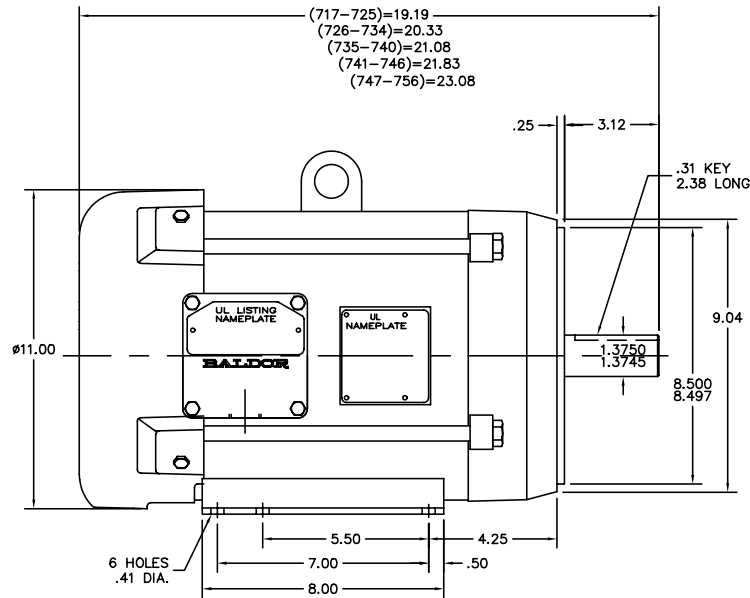
5 HP 3 PH 50 HZ 2934 RPM 380 V 3728M

TORQUES(LB-FT): PO=38.5 PU=21.8 LR=23 LRA=66.3



5/13/2020 ACPERF, record # 38349

37L YH238

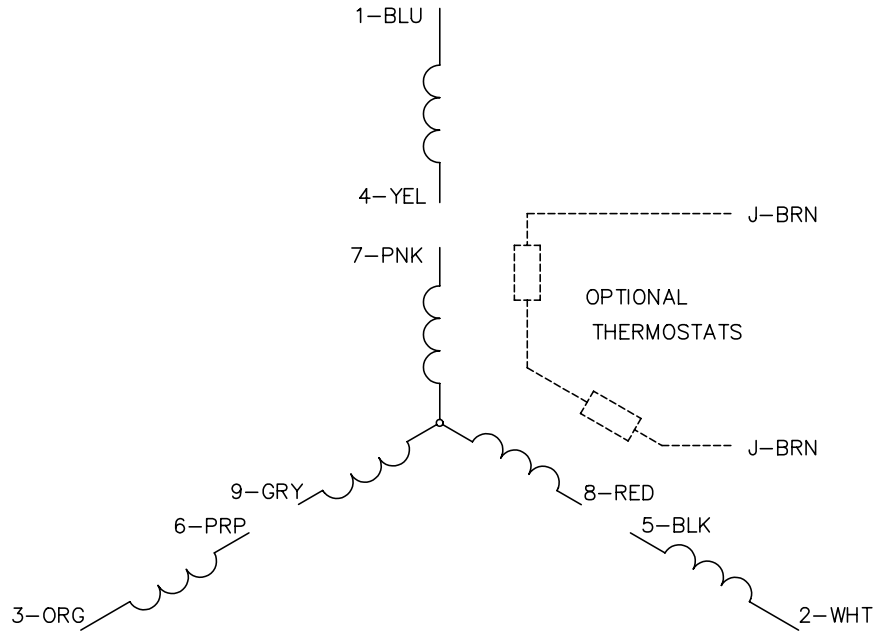


PULLEY END DETAIL

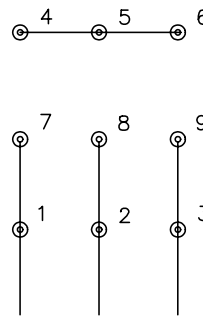
CUST. NAME	CUST. P.O.	CERTIFIED BY	MODEL	INSUL	AMB
H.P.	MTG	TYPE	R.P.M.	VOLTS	ENCL PHASE FREQ FRAME
REV. DESC: NEW					BALDOR ELECTRIC Co.
REV. LTR: -	BY: SLK	REVISED: 09/13/99 9:57	TDR: 0189040		
FILE: AAA00068137	MDL: -			HOR 213-5TC XPFC M EPACK STACKS, DUAL CLASS	
MTL: -					

37L YH238

CD0005

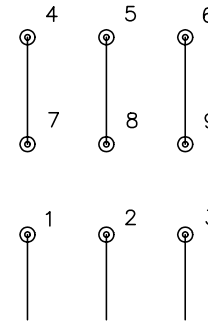


LOW VOLTAGE
(2Y)



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
900000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005