

BALDOR® • RELIANCE 

Product Information Packet

VEM7045T

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

Part Detail							
Revision:	A	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	37WGR224	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	37R015	Layout:	37LYR015	Poles:	02	Created Date:	09-30-2015
Base:	N	Eff. Date:	02-23-2017	Leads:	9#14		

Specs			
Catalog Number:	VEM7045T	Front Shaft Indicator:	None
Enclosure:	XPFC	Heater Indicator:	No Heater
Frame:	213TC	Insulation Class:	B
Frame Material:	Steel	Inverter Code:	Not Inverter
Output @ Frequency:	5.000 HP @ 50 HZ	KVA Code:	J
	7.500 HP @ 60 HZ	Lifting Lugs:	No Lifting Lugs
Synchronous Speed @ Frequency:	3600 RPM @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Voltage @ Frequency:	230.0 V @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 14 AWG
	190.0 V @ 50 HZ	Motor Lead Exit:	Ko Box
	460.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
	380.0 V @ 50 HZ	Motor Type:	3728M
XP Class and Group:	CLI GP D; CLII GP F,G	Mounting Arrangement:	F1
XP Division:	Division I	Power Factor:	84
Agency Approvals:	CSA	Product Family:	General Purpose
	CSA EEV	Pulley End Bearing Type:	Ball
	UR	Pulley Face Code:	C-Face
Auxillary Box:	No Auxillary Box	Pulley Shaft Indicator:	Standard
Auxillary Box Lead Termination:	None	Rodent Screen:	None

Base Indicator:	No Mounting	RoHS Status:	ROHS COMPLIANT
Bearing Grease Type:	Polyrex EM (-20F +300F)	Shaft Extension Location:	Pulley End
Blower:	None	Shaft Ground Indicator:	No Shaft Grounding
Current @ Voltage:	9.000 A @ 460.0 V	Shaft Rotation:	Reversible
	7.700 A @ 380.0 V	Shaft Slinger Indicator:	No Slinger
	19.400 A @ 208.0 V	Speed Code:	Single Speed
	18.000 A @ 230.0 V	Motor Standards:	NEMA
	15.400 A @ 190.0 V	Starting Method:	Direct on line
Design Code:	A	Thermal Device - Bearing:	NONE (OLD)
Drip Cover:	No Drip Cover	Thermal Device - Winding:	Normally Closed Thermostat
Duty Rating:	CONT	Vibration Sensor Indicator:	No Vibration Sensor
Electrically Isolated Bearing:	Not Electrically Isolated	Winding Thermal 1:	None
Feedback Device:	NO FEEDBACK	Winding Thermal 2:	None
Front Face Code:	Standard	XP Temp Code:	T3C

Nameplate NP1426XPSLEV	
NO.	[] CC 010A []
SER.	[]
SPEC.	37R015R224G1
CAT.NO.	VEM7045T
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
SA308546	SA 37R015R224G1	1.000 EA
RA295878	RA 37R015R224G1	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
12XN2520A26	HX HD .25-20X1.625 ZN PLT	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	O1/4-20X 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
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
NP0018F	ALUM UL XP CONDUIT BOX NAMEPLATE	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
MJ1000A02	GREASE, POLYREX EM EXXON (USe 4824-15A)	0.050 LB
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 EA
XY2520A12	1/4-20 HEX NUT, DIRECTIONAL SERRATIONS	1.000 EA
MG1025G29	WILKOFASST, 789.229, DARK CHARCOAL GRAY	0.028 GA
HA3106A02	THRUBOLT- 1/2-13 X 10.750	4.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0145B01	CONNECTION LABEL	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 5/18	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
PK3082	STYROFOAM CRADLE	1.000 EA

AC Induction Motor Performance Data

Record # 38347 - Typical performance - not guaranteed values

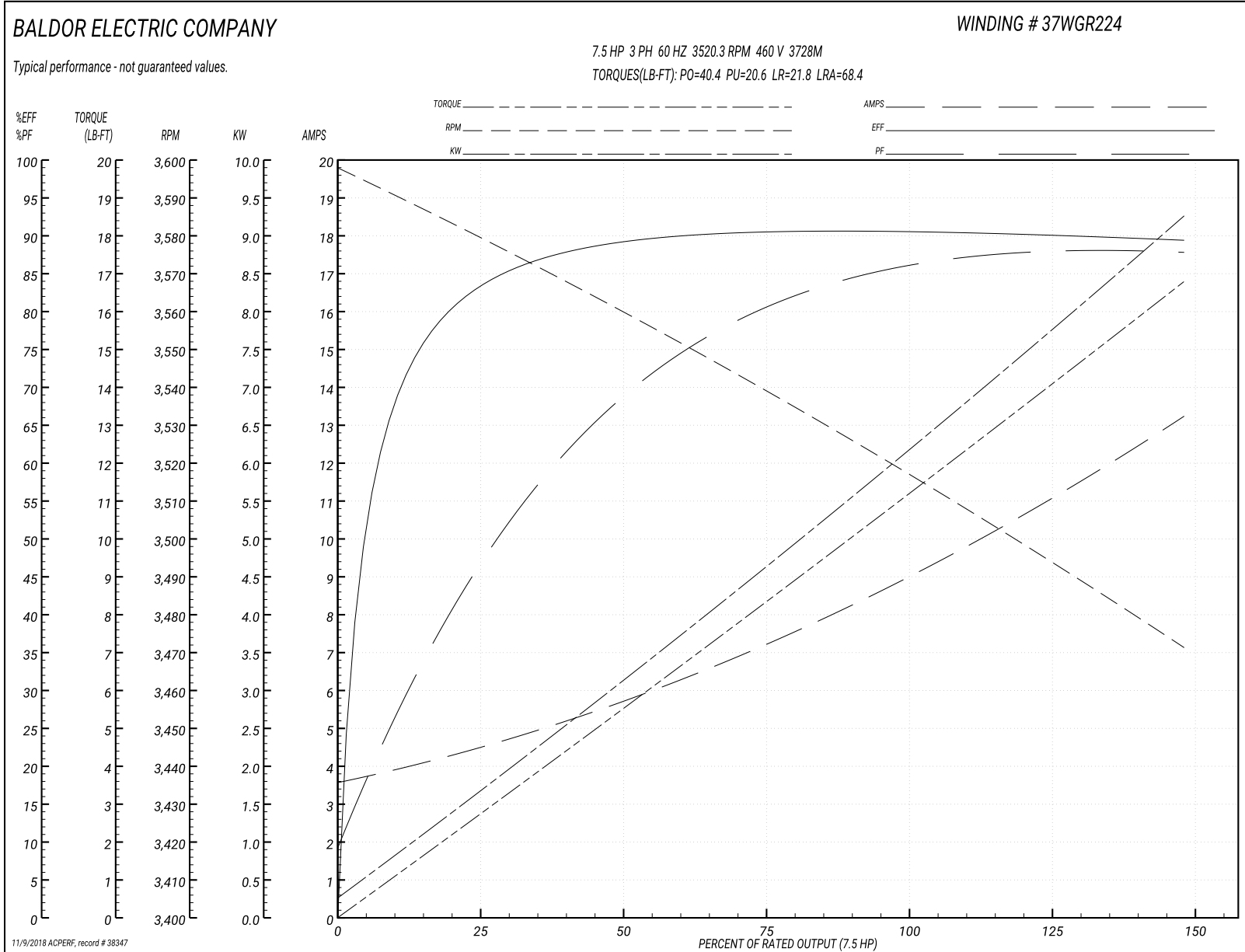
Winding: 37WGR224-R004	Type: 3728M	Enclosure: XPFC
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	7.5//5			Full Load Torque	10.9 LB-FT
Volts	208-230/460//190/380			Start Configuration	direct on line
Full Load Amps	19.4-18/9//15.4/7.7			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



AC Induction Motor Performance Data

Record # 38349 - Typical performance - not guaranteed values

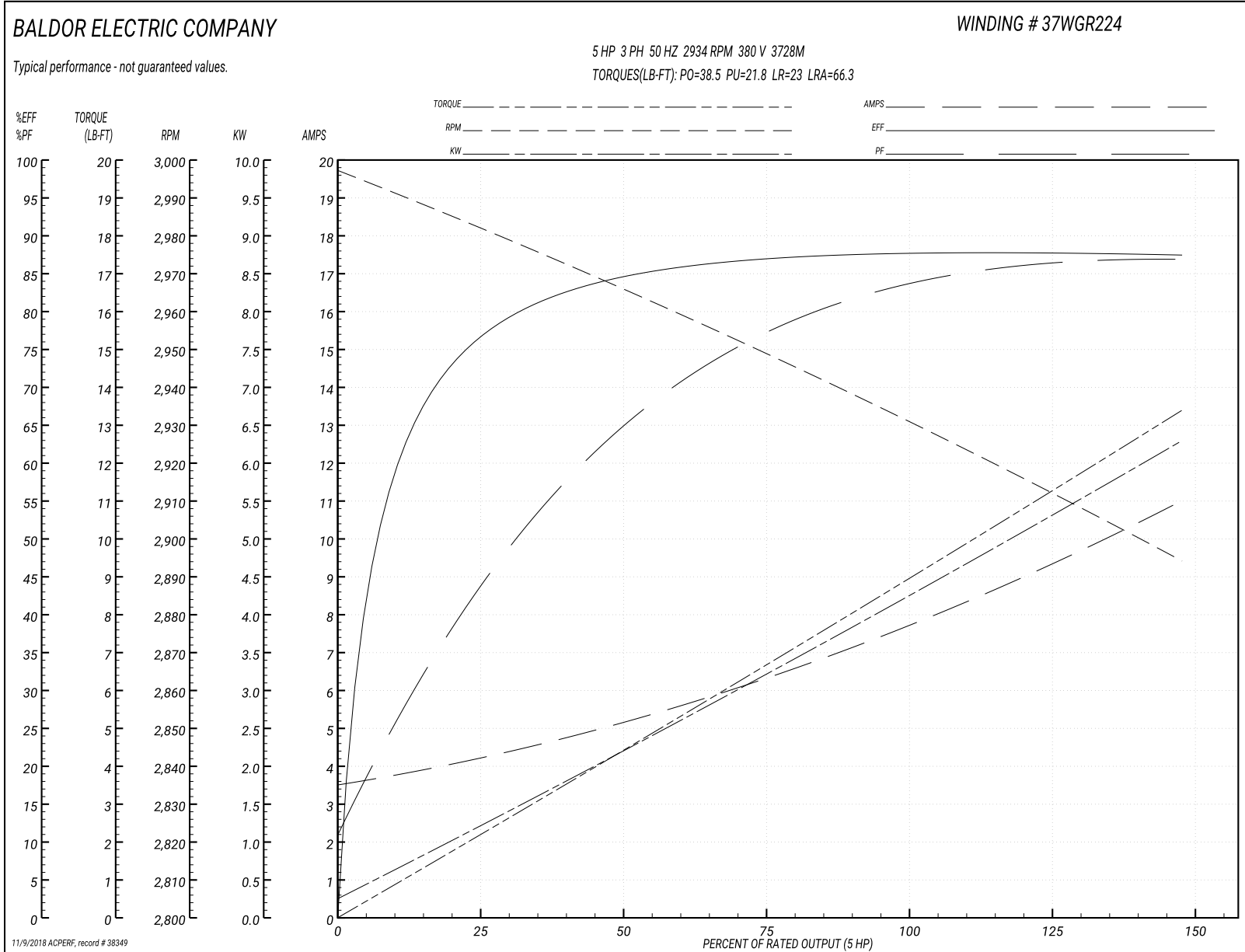
Winding: 37WGR224-R004	Type: 3728M	Enclosure: XPFC
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Nameplate Data				380 V, 50 Hz: High Voltage Connection	
Rated Output (HP)	7.5//5			Full Load Torque	8.71 LB-FT
Volts	208-230/460//190/380			Start Configuration	direct on line
Full Load Amps	19.4-18/9//15.4/7.7			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

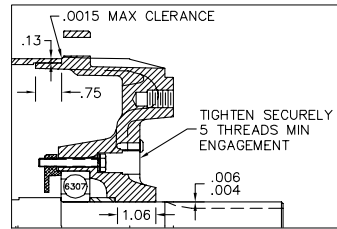
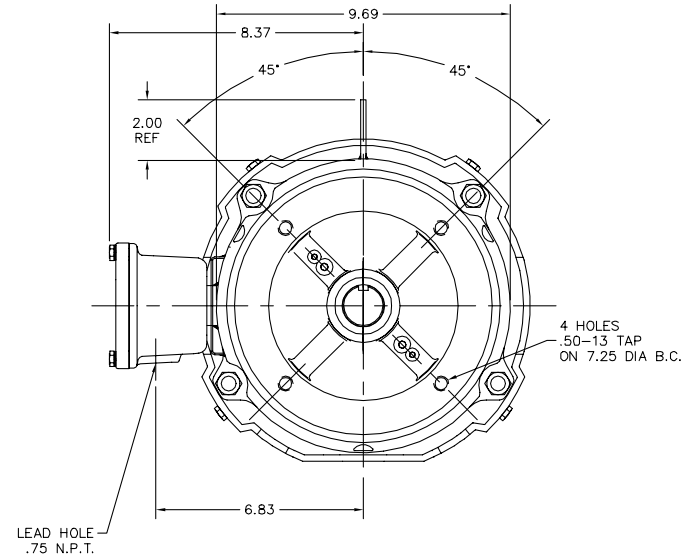
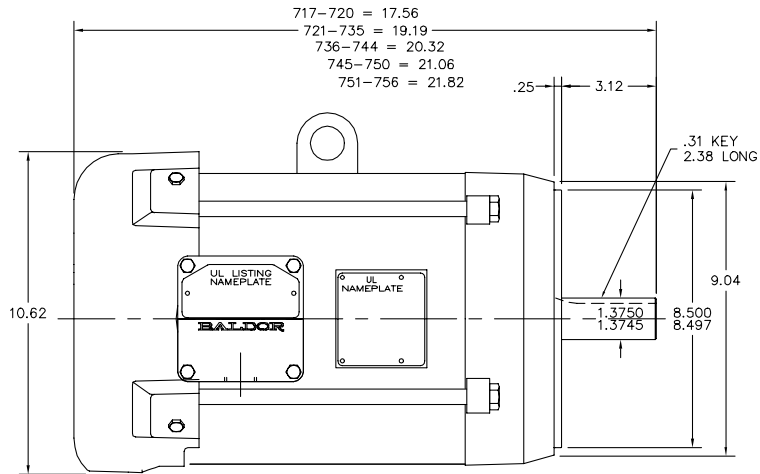
Load Characteristics 380 V, 50 Hz, 5 HP

% 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



37LYR015



PULLEY END DETAIL

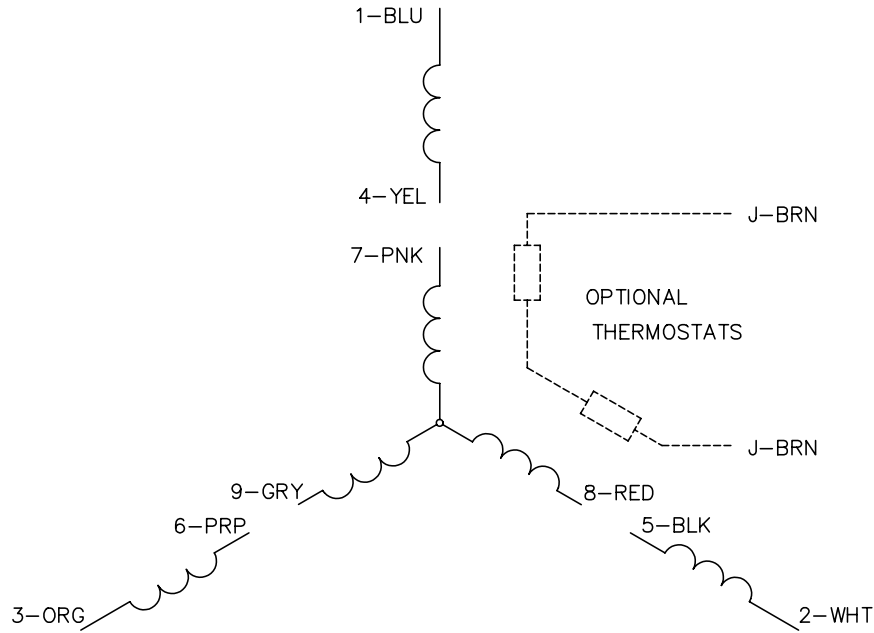
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: CORRECTED OVERALL LENGTHS		
REV. LTR: K	VERSION: 01	TDR: 000000820450
FILE: \AAA\00019\794	REVISED: 09:16:53 10/02/2013	BY: ENSTES0
MTL: -		

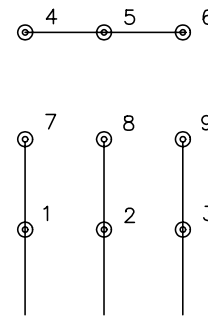
BALDOR
 STD VER 213-5TC XPFC 37M DUAL CLASS W/T*STATS
 SH 1 of 1

37LYR015

CD0005

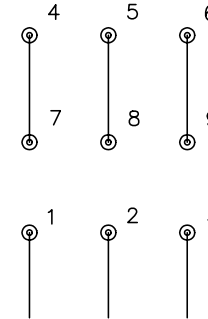


LOW VOLTAGE
(2Y)



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