

**BALDOR® • RELIANCE** 

**Product Information Packet**

**CEM7047T**

**7.5//5HP, 1770//1475RPM, 3PH, 60//50HZ, 213T**

Part Detail							
Revision:	E	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	37WGR872	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	37H238	Layout:	37LYH238	Poles:	04	Created Date:	12-03-2015
Base:	RG	Eff. Date:	09-19-2019	Leads:	9#14		

Specs			
Catalog Number:	CEM7047T	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:	Standard Lifting Lugs
Synchronous Speed @ Frequency:	1800 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:	X3738M
XP Class and Group:	CLI GP D; CLII GP F,G	Mounting Arrangement:	F1
XP Division:	Division I	Power Factor:	80
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

<b>Base Indicator:</b>	Rigid	<b>RoHS Status:</b>	ROHS COMPLIANT
<b>Bearing Grease Type:</b>	Polyrex EM (-20F +300F)	<b>Shaft Extension Location:</b>	Pulley End
<b>Blower:</b>	None	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
<b>Current @ Voltage:</b>	9.500 A @ 460.0 V	<b>Shaft Rotation:</b>	Reversible
	8.100 A @ 380.0 V	<b>Shaft Slinger Indicator:</b>	No Slinger
	20.000 A @ 208.0 V	<b>Speed Code:</b>	Single Speed
	19.000 A @ 230.0 V	<b>Motor Standards:</b>	NEMA
	16.200 A @ 190.0 V	<b>Starting Method:</b>	Direct on line
<b>Design Code:</b>	A	<b>Thermal Device - Bearing:</b>	None
<b>Drip Cover:</b>	No Drip Cover	<b>Thermal Device - Winding:</b>	Normally Closed Thermostat
<b>Duty Rating:</b>	CONT	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Winding Thermal 1:</b>	None
<b>Feedback Device:</b>	NO FEEDBACK	<b>Winding Thermal 2:</b>	None
<b>Front Face Code:</b>	Standard	<b>XP Temp Code:</b>	T3C

Nameplate NP1426XPSLEV	
NO.	<input type="text"/> CC 010A
SER.	<input type="text"/>
SPEC.	37H238R872G1
CAT.NO.	CEM7047T
HP	7.5//5 T. CODE T3C
VOLTS	230/460//190/380
AMPS	19/9.5//16.2/8.1
RPM	1770//1475
HZ	60//50 PH 3 CL B
SER.F.	1.00 DES A CODE J
RATING	40C AMB-CONT
FRAME	213TC NEMA-NOM-EFF 91.7
USABLE AT 208V	20 PF 80
BLANK	<input type="text"/>

Parts List		
Part Number	Description	Quantity
SA311315	SA 37H238R872G1	1.000 EA
RA298738	RA 37H238R872G1	1.000 EA
37FN3002C01	EXFN, PLASTIC, 6.00 OD, 1.155 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

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 EA
MG1500Y02	WILKOPON (use 004824003CAH)	0.028 GA
MG1025N19	WILKOFAS, 778.50, RELIANCE BLUE-GREEN	0.028 GA
HA3106A04	THRUBOLT- 1/2-13 X 12.625	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 # 54306 - Typical performance - not guaranteed values

<b>Winding:</b> 37WGR872-R003	<b>Type:</b> 3738M	<b>Enclosure:</b> XPFC
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	7.5//5			Full Load Torque	22.2 LB-FT
Volts	230/460//190/380			Start Configuration	direct on line
Full Load Amps	19/9.5//16.2/8.1			Breakdown Torque	70.9 LB-FT
R.P.M.	1770//1475			Pull-up Torque	32.6 LB-FT
Hz	60//50	Phase	3	Locked-rotor Torque	43 LB-FT
NEMA Design Code	A	KVA Code	J	Starting Current	70.9 A
Service Factor (S.F.)	1			No-load Current	4.31 A
NEMA Nom. Eff.	91.7	Power Factor	80	Line-line Res. @ 25°C	1.41 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	63°C
				Locked-rotor Power Factor	37.2
				Rotor inertia	0.934 LB-FT <sup>2</sup>

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	42	64	75	80	83	84
Efficiency	87.1	91.6	92	92	91.1	89.8
Speed	1793	1786	1778	1770	1760	1750
Line amperes	4.83	6.02	7.6	9.5	11.6	13.9

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

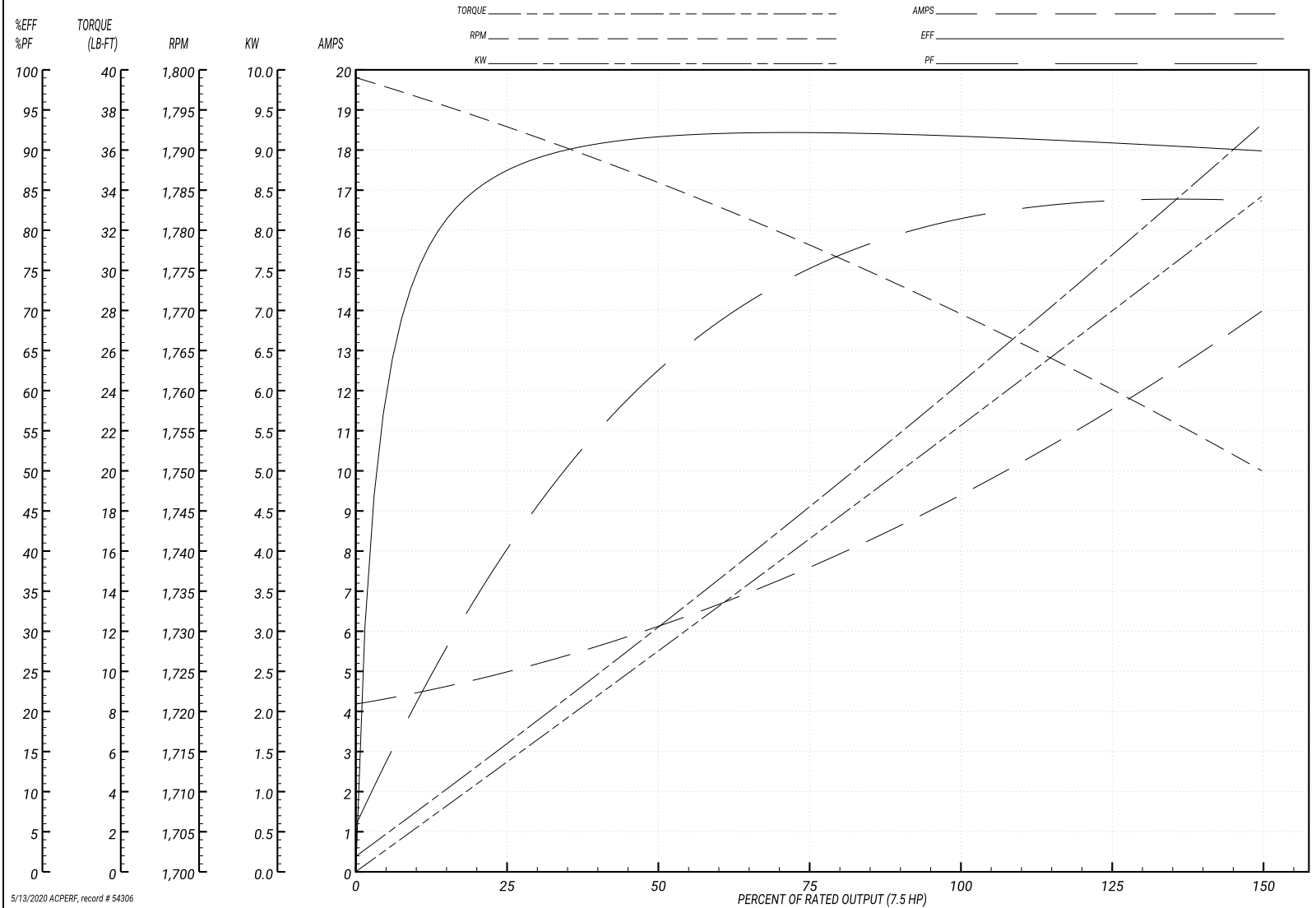
ABB Motors and Mechanical Inc.

WINDING # 37WGR872

Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 1770 RPM 460 V 3738M

TORQUES(LB-FT): PO=70.9 PU=32.6 LR=43 LRA=70.9



5/13/2020 ACPERF, record # 54306

**AC Induction Motor Performance Data**

Record # 54307 - Typical performance - not guaranteed values

<b>Winding:</b> 37WGR872-R003	<b>Type:</b> 3738M	<b>Enclosure:</b> XPFC
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Nameplate Data				380 V, 50 Hz: High Voltage Connection	
Rated Output (HP)	7.5//5			Full Load Torque	17.7 LB-FT
Volts	230/460//190/380			Start Configuration	direct on line
Full Load Amps	19/9.5//16.2/8.1			Breakdown Torque	67.4 LB-FT
R.P.M.	1770//1475			Pull-up Torque	33.6 LB-FT
Hz	60//50	Phase	3	Locked-rotor Torque	44.3 LB-FT
NEMA Design Code	A	KVA Code	J	Starting Current	68.6 A
Service Factor (S.F.)	1			No-load Current	4.23 A
NEMA Nom. Eff.	91.7	Power Factor	80	Line-line Res. @ 25°C	1.41 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	49°C
				Locked-rotor Power Factor	41.5
				Rotor inertia	0.934 LB-FT <sup>2</sup>

Load Characteristics 380 V, 50 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	36	58	70	77	81	83
Efficiency	85.3	90.6	91.4	91.3	90.9	89.6
Speed	1494	1488	1482	1476	1468	1460
Line amperes	4.58	5.44	6.59	8.03	9.64	11.4

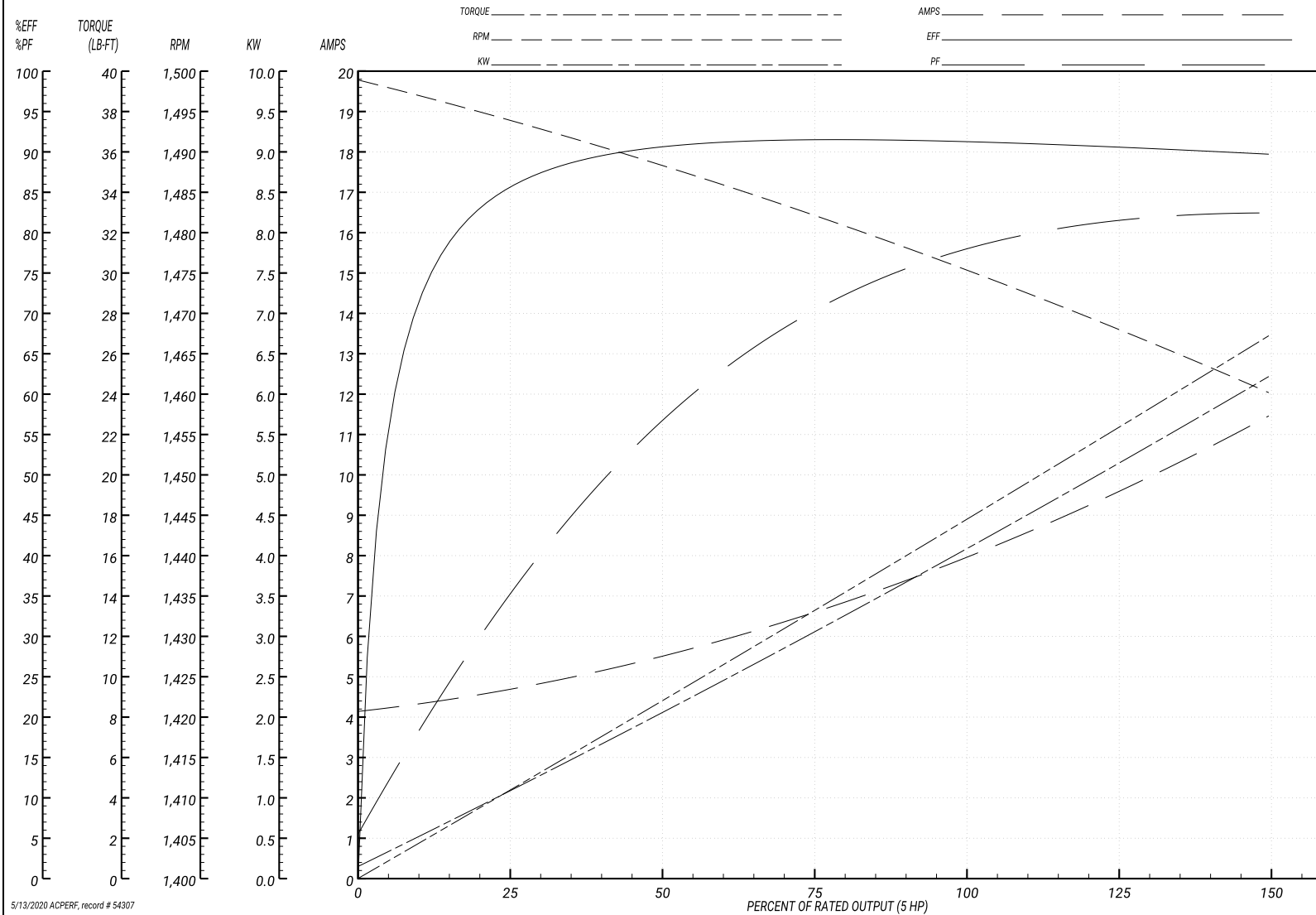
Performance Graph at 380V, 50Hz, 5.0HP Typical performance - Not guaranteed values

ABB Motors and Mechanical Inc.

WINDING # 37WGR872

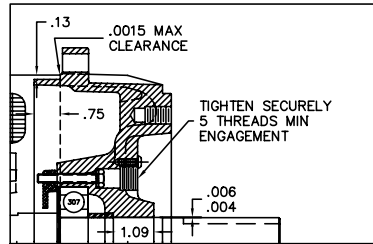
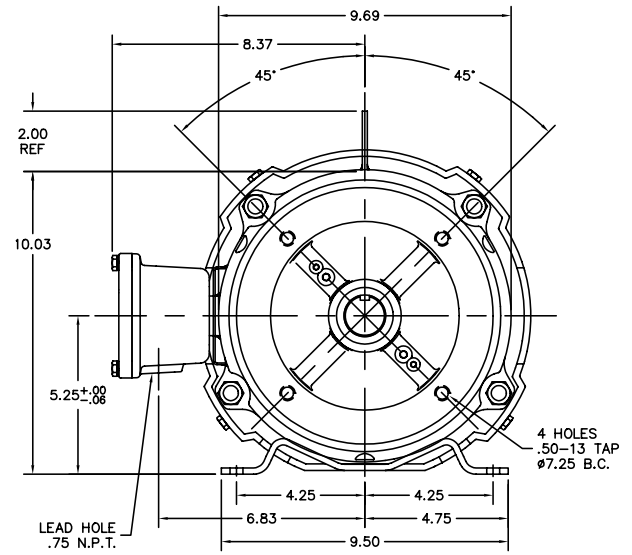
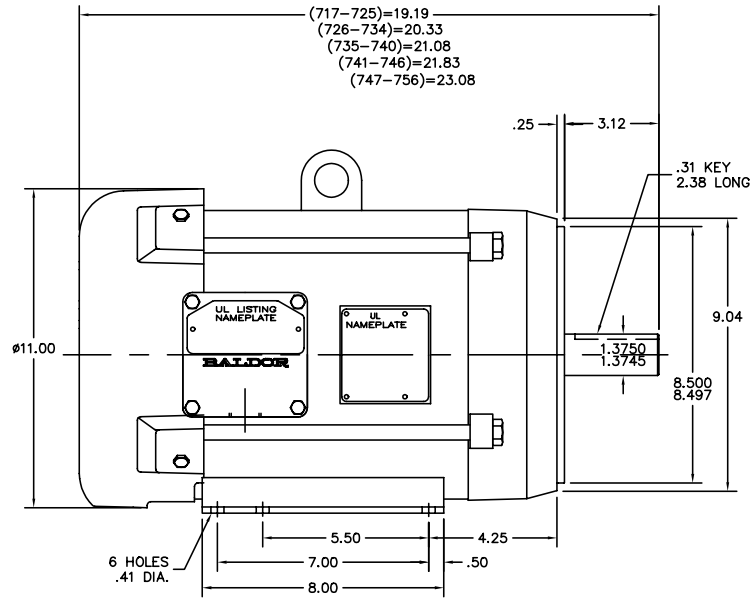
Typical performance - not guaranteed values.

5 HP 3 PH 50 HZ 1476 RPM 380 V 3738M  
 TORQUES(LB-FT): PO=67.4 PU=33.6 LR=44.3 LRA=68.6



5/13/2020 ACPERF, record # 54307

37L YH238



PULLEY END DETAIL

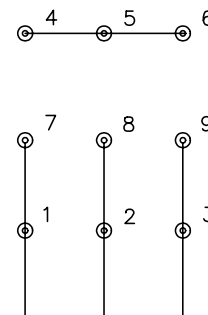
CUST. NAME	CUST. P.O.	CERTIFIED BY	MODEL	INSUL	AMB
H.P.	MTG	TYPE	R.P.M.	VOLTS	ENCL PHASE FREQ FRAME
REV. DESC: NEW			BALDOR ELECTRIC Co.		
REV. LTR: -	BY: SLK	REVISED: 09/13/99 9:57	TDR: 0189040	HOR 213-5TC XPFC M EPACK STACKS, DUAL CLASS	
FILE: AAA00068137	MDL: -				
MTL: -					

37L YH238

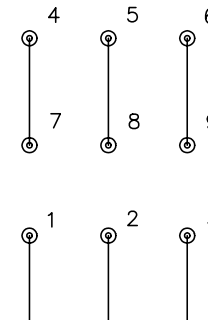
CD0005



LOW VOLTAGE  
(2Y)



HIGH VOLTAGE  
(1Y)



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