

**BALDOR® • RELIANCE** 

**Product Information Packet**

**VEM7170T**

**10//7.5HP,1760//1465RPM,3PH,60//50HZ,215**

Part Detail							
Revision:	C	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	07WGY179	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	07H273	Layout:	07LYH273	Poles:	04	Created Date:	09-30-2015
Base:	N	Eff. Date:	01-24-2018	Leads:	9#14		

Specs			
Catalog Number:	VEM7170T	Front Shaft Indicator:	None
Enclosure:	XPFC	Heater Indicator:	No Heater
Frame:	215TC	Insulation Class:	B
Frame Material:	Iron	Inverter Code:	Not Inverter
Output @ Frequency:	10.000 HP @ 60 HZ	KVA Code:	H
	7.500 HP @ 50 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:	0748M
XP Class and Group:	CLI GP D; CLII GP F,G	Mounting Arrangement:	F1
XP Division:	Division I	Power Factor:	83
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>	No Mounting	<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>	26.500 A @ 208.0 V	<b>Shaft Rotation:</b>	Reversible
	24.400 A @ 230.0 V	<b>Shaft Slinger Indicator:</b>	No Slinger
	22.600 A @ 190.0 V	<b>Speed Code:</b>	Single Speed
	12.200 A @ 460.0 V	<b>Motor Standards:</b>	NEMA
	11.300 A @ 380.0 V	<b>Starting Method:</b>	Direct on line
<b>Design Code:</b>	B	<b>Thermal Device - Bearing:</b>	NONE (OLD)
<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.	[ ] CC 010A
SER.	[ ]
SPEC.	07H273Y179G1
CAT.NO.	VEM7170T
HP	10//7.5 T. CODE T3C
VOLTS	230/460//190/380
AMPS	24.4/12.2//22.6/11.3
RPM	1760//1465
HZ	60//50 PH 3 CL B
SER.F.	1.00 DES B CODE H
RATING	40C AMB-CONT
FRAME	215TC NEMA-NOM-EFF 91.7
USABLE AT 208V	26.5 PF 83
BLANK	[ ]

Parts List		
Part Number	Description	Quantity
SA308548	SA 07H273Y179G1	1.000 EA
RA295880	RA 07H273Y179G1	1.000 EA
37FN3002C01	EXFN, PLASTIC, 6.00 OD, 1.155 ID	1.000 EA
HA3210E08	.250X 7/8 PIN 312-57	1.000 EA
HW3201A05	3/8-16 EYEBOLT	1.000 EA
07CB1000A01	CONDUIT BOX MACH	1.000 EA
10XN3118A16	5/16-18X1 HEX HD CAP	4.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT .591 OD, .319 I	4.000 EA
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 EA
WD1000B17	T&B CX35TN TERMINAL	1.000 EA
07EP1707A01	STD FRONT ENDPLATE EXPLOSION PROOF	1.000 EA
HW4500A19	1/4-28X1/4 SLOTTED PLUG F/S	2.000 EA
10XN3816K28	3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5	4.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 EA
07EP1708A01	STANDARD FACE MOUNTED ENDPLATE EXPLOSEIO	1.000 EA
HW4500A19	1/4-28X1/4 SLOTTED PLUG F/S	2.000 EA
10XN3816K28	3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5	4.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
10XN2520A32	1/4 X 2 HEX HEAD CAP SCR, GRADE 2	4.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 EA
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 EA
07FH1003A05	FAN HOUSING 307 EXPLOSION PROOF W/ GREAS	1.000 EA
10XN2520A12	O1/4-20X 3/4 HEX HEAD CAP	4.000 EA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
07CB1500A01	CONDUIT BOX LID MACH	1.000 EA
10XN2520A16	1/4-20 X 1 HEX HEAD CAP SCR, ZINC PLATED	4.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	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
LB1081F	ALUM XP CAUTION LABEL (FS PLANT ONLY-	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON (USe 4824-15A)	0.050 LB
MG1025N19	WILKOFASST, 778.50, RELIANCE BLUE-GREEN	0.036 GA
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
07PA1011	PKG GRP, 07 CAST IRON PK1181	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 5/18	1.000 EA

**AC Induction Motor Performance Data**

Record # 61300 - Typical performance - not guaranteed values

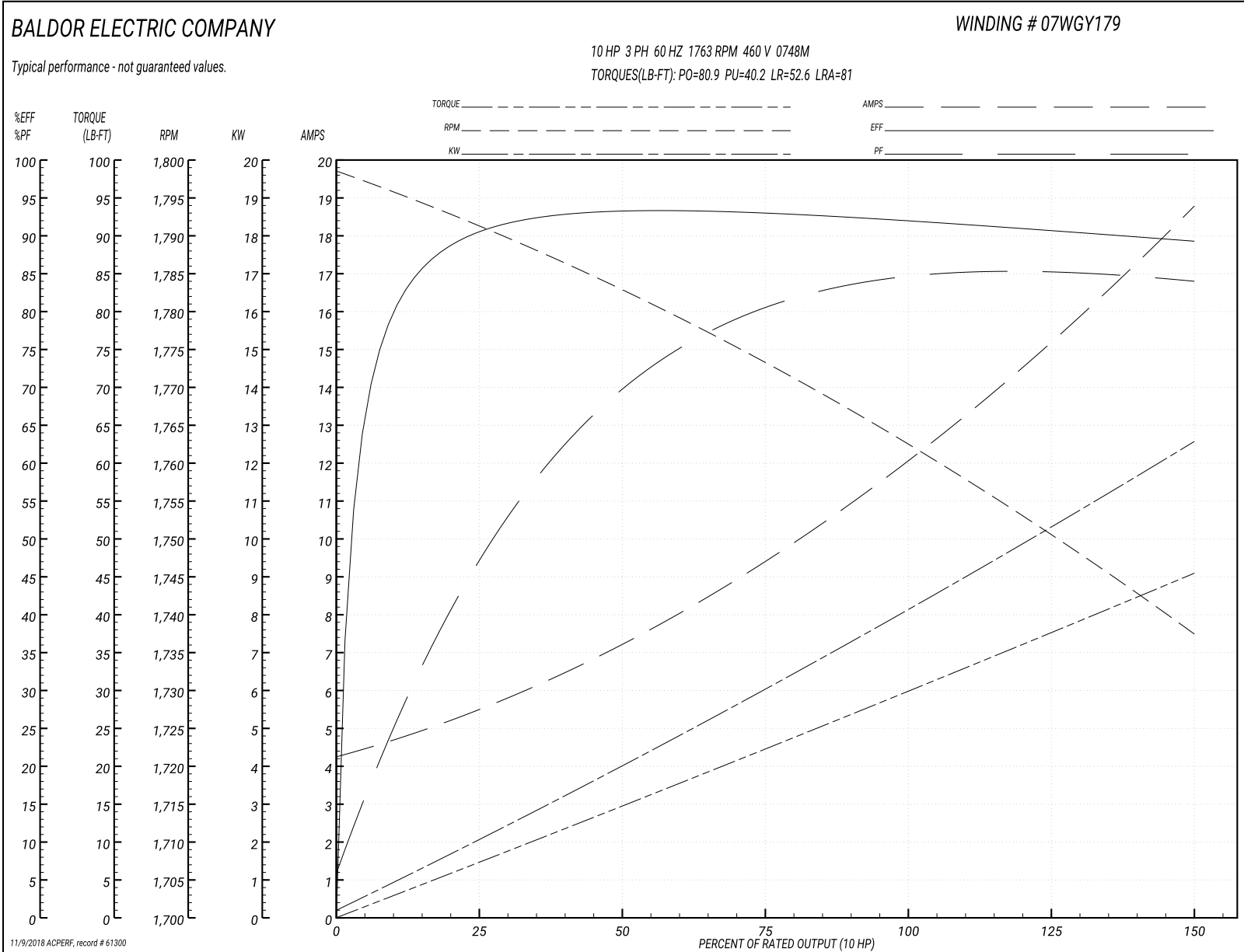
<b>Winding:</b> 07WGY179-R054	<b>Type:</b> 0748M	<b>Enclosure:</b> XPFC
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	10//7.5			Full Load Torque	29.8 LB-FT
Volts	230/460//190/380			Start Configuration	direct on line
Full Load Amps	24.4/12.2//22.6/11.3			Breakdown Torque	80.9 LB-FT
R.P.M.	1760//1465			Pull-up Torque	40.2 LB-FT
Hz	60//50	Phase	3	Locked-rotor Torque	52.6 LB-FT
NEMA Design Code	B	KVA Code	H	Starting Current	81 A
Service Factor (S.F.)	1			No-load Current	4.44 A
NEMA Nom. Eff.	91.7	Power Factor	83	Line-line Res. @ 25°C	1.08 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	64°C
				Locked-rotor Power Factor	35.1
				Rotor inertia	1.18 LB-FT <sup>2</sup>

Load Characteristics 460 V, 60 Hz, 10 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	50	71	80	83	85	85
Efficiency	90.4	92.5	92.9	92.3	90.9	89.1
Speed	1791	1782	1774	1763	1751	1737
Line amperes	5.24	7.1	9.42	12.2	15.2	18.7

Performance Graph at 460V, 60Hz, 10.0HP Typical performance - Not guaranteed values





**AC Induction Motor Performance Data**

Record # 61301 - Typical performance - not guaranteed values

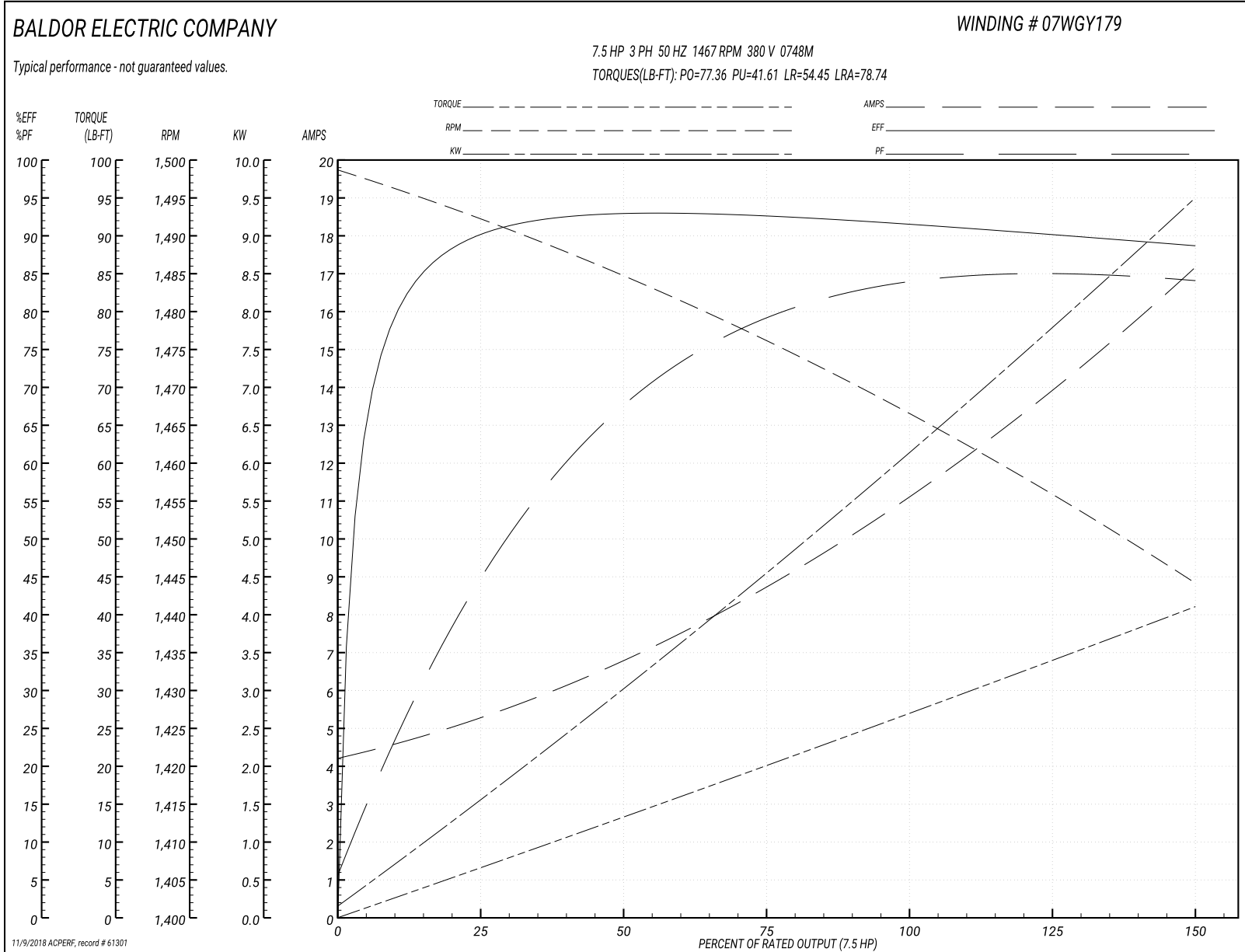
<b>Winding:</b> 07WGY179-R054	<b>Type:</b> 0748M	<b>Enclosure:</b> XPFC
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Nameplate Data				380 V, 50 Hz: High Speed Connection	
Rated Output (HP)	10//7.5			Full Load Torque	26.84 LB-FT
Volts	230/460//190/380			Start Configuration	direct on line
Full Load Amps	24.4/12.2//22.6/11.3			Breakdown Torque	77.36 LB-FT
R.P.M.	1760//1465			Pull-up Torque	41.61 LB-FT
Hz	60//50	Phase	3	Locked-rotor Torque	54.45 LB-FT
NEMA Design Code	B	KVA Code	H	Starting Current	78.74 A
Service Factor (S.F.)	1			No-load Current	4.38 A
NEMA Nom. Eff.	91.7	Power Factor	83	Line-line Res. @ 25°C	1.08 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	57°C
				Locked-rotor Power Factor	39.1
				Rotor inertia	1.18 LB-FT <sup>2</sup>

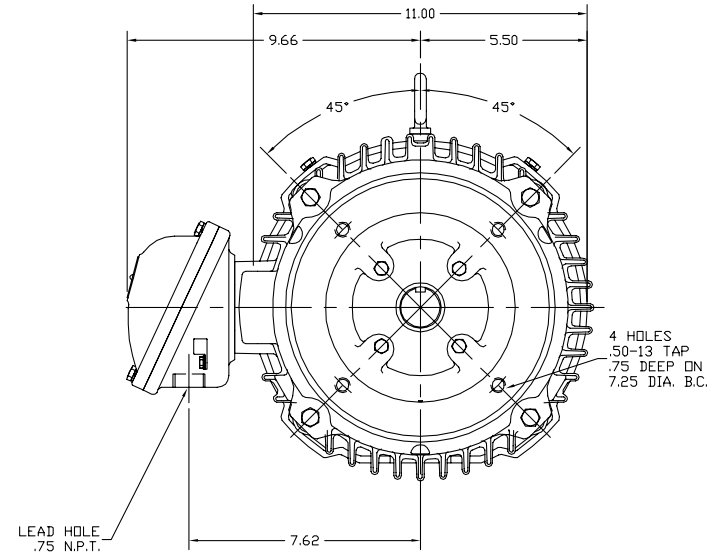
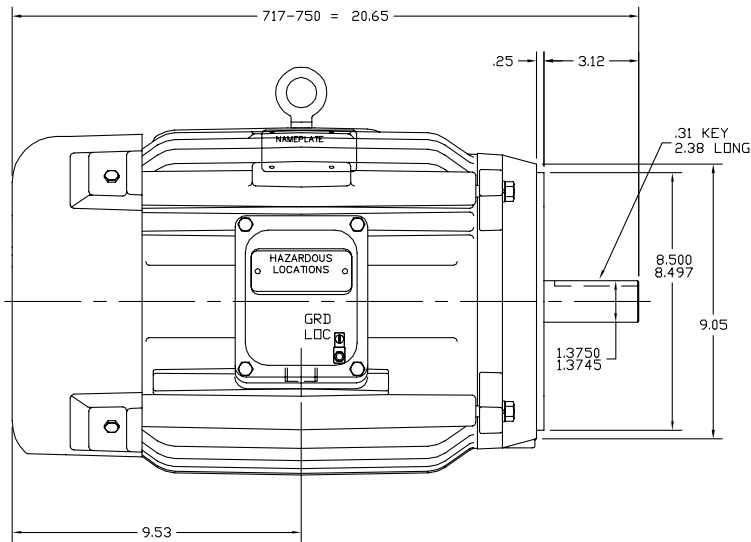
Load Characteristics 380 V, 50 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	47	69	79	82	85	85
Efficiency	90.1	92.1	92.6	91.9	90.4	88.5
Speed	1492	1484	1477	1467	1456	1444
Line amperes	5.06	6.67	8.74	11.22	13.91	17.09

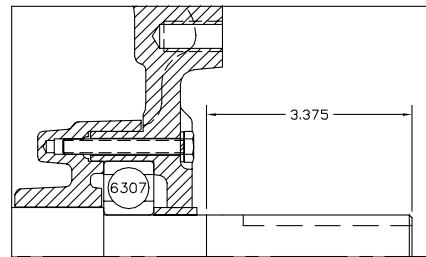
Performance Graph at 380V, 50Hz, 7.5HP Typical performance - Not guaranteed values



07LYH273



PULLEY END DETAIL



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

REV. DESC: REVISED DESCRIPTION		
REV. LTR: A	VERSION: 01	TDR: 000000493746
FILE: \AAA\00006\009	REVISED: 14:32:35 03/16/2009	BY: ENBRAMO
MTL: -		

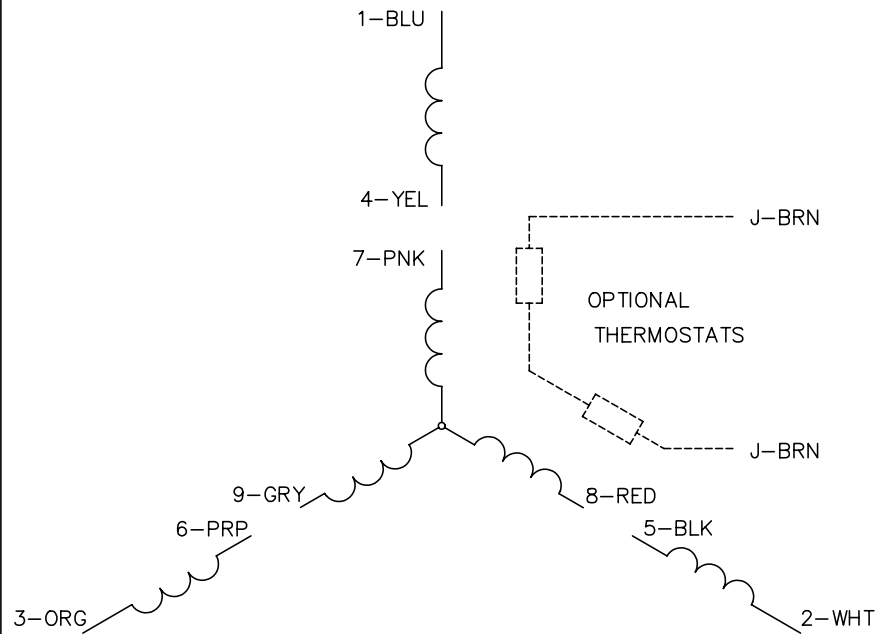
**BALDOR • DODGE • RELIANCE**

STD VERT 213-5TC XPFC X307M CL I-GP D, CL II-GP F&G

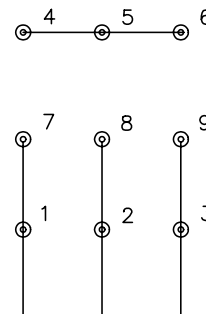
SH 1 of 1

07LYH273

CD0005

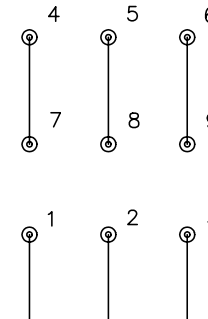


LOW VOLTAGE  
(2Y)



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