

**BALDOR® • RELIANCE** 

**Product Information Packet**

**FPM2539TS**

**40//30HP,1770//1470RPM,3PH,60//50HZ,324T**

Part Detail							
Revision:	F	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	40WGW486	CD Diagram:	CD0104	Mfg Plant:	
Mech. Spec:	40H07	Layout:	40LYH007	Poles:	04	Created Date:	09-17-2015
Base:	RG	Eff. Date:	08-22-2018	Leads:	12#10		

Specs			
Catalog Number:	FPM2539TS	Front Shaft Indicator:	None
Enclosure:	ODP	Heater Indicator:	No Heater
Frame:	324TS	Insulation Class:	F
Frame Material:	Steel	Inverter Code:	Not Inverter
Output @ Frequency:	30.000 HP @ 50 HZ	KVA Code:	G
	40.000 HP @ 60 HZ	Lifting Lugs:	Standard Lifting Lugs
Synchronous Speed @ Frequency:	1500 RPM @ 50 HZ	Locked Bearing Indicator:	No Locked Bearing
Voltage @ Frequency:	190.0 V @ 50 HZ	Motor Lead Quantity/Wire Size:	12 @ 10 AWG
	460.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
	380.0 V @ 50 HZ	Motor Lead Termination:	Flying Leads
	230.0 V @ 60 HZ	Motor Type:	4052M
Agency Approvals:	UL	Mounting Arrangement:	F1
	CSA EEV	Power Factor:	83
Auxillary Box:	No Auxillary Box	Product Family:	Fire Pump Motor
Auxillary Box Lead Termination:	None	Pulley End Bearing Type:	Ball
Base Indicator:	Rigid	Pulley Face Code:	Standard
Bearing Grease Type:	Polyrex EM (-20F +300F)	Pulley Shaft Indicator:	Standard
Blower:	None	Rodent Screen:	None

<b>Current @ Voltage:</b>	98.000 A @ 230.0 V	<b>Shaft Extension Location:</b>	Pulley End
	90.000 A @ 190.0 V	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
	49.000 A @ 460.0 V	<b>Shaft Rotation:</b>	Reversible
	45.000 A @ 380.0 V	<b>Shaft Slinger Indicator:</b>	No Slinger
	104.000 A @ 208.0 V	<b>Speed Code:</b>	Single Speed
<b>Design Code:</b>	B	<b>Motor Standards:</b>	NEMA
<b>Drip Cover:</b>	No Drip Cover	<b>Starting Method:</b>	Wye Start - Delta Run
<b>Duty Rating:</b>	CONT	<b>Thermal Device - Bearing:</b>	None
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Thermal Device - Winding:</b>	None
<b>Feedback Device:</b>	NO FEEDBACK	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Front Face Code:</b>	Standard	<b>Winding Thermal 1:</b>	None
		<b>Winding Thermal 2:</b>	None

Nameplate NP3454L											
CAT.NO.	FPM2539TS			CUST P/N				I.P.	23		
SPEC.	40H007W486H2			SER.NO.				FRAME	324TS		
HZ	60	HP	40	RPM	1770	HZ	50	HP	30	RPM	1470
VOLTS	230/460			CODE	G			VOLTS	190/380		
AMPS	98/49			DES	B			AMPS	90/45		
EFF	93	SER.F.	1.15	PF	83	EFF	92.4	SER.F.	1.15	PF	82
RATING	40C AMB-CONT			DE BRG	6312			GREASE	POLYREX EM		
BLANK				ODE BRG	6309			MTR. WT.	400		
				CLASS	F			PH	3		
				ENCL	ODP			CC	010A		
HTR-VOLTS		HTR-AMPS		HTR-WATTS							

Parts List		
Part Number	Description	Quantity
SA311887	SA 40H007W486H2	1.000 EA
RA299323	RA 40H007W486H2	1.000 EA
HA6361A01	LIFTING LUG FOR 37, 39 & 40 FRAME ZINC	2.000 EA
HA6017	CAST ADAPTER, 40,42 KOBX	1.000 EA
19XW3118A12	.31-18 X .75 HEX WASHER HEAD TAPTITE II	2.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	2.000 EA
WD1000B25	GND LUG, BURNDY L125HP OR T&B L125HP-BB	1.000 EA
19XW3118G08	.31-18X.50,HEX WSHR HD,TAPTITE 2,GREEN	1.000 EA
10CB3001	CONDUIT BOX CAST W/2.500 LEAD HOLE	1.000 EA
19XW3118A12	.31-18 X .75 HEX WASHER HEAD TAPTITE II	4.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 EA
40EP3200A02	STD FREP OPEN 309 BRG	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HW5100A11	W3917-042 WVY WSHR (WB)	1.000 EA
40EP3201A01	PU ENDPLATE, MACH - OPEN - FOR 312 BRG	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
XY3816A12	3/8-16 FINISHED NUT	8.000 EA
10CB3500SP	CONDUIT BOX LID, CAST	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 EA
HW2501H18	KEY, 1/2 SQ X 2.000	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	1.000 EA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
MJ1000A02	GREASE, POLYREX EM EXXON (USe 4824-15A)	0.050 LB
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HA3154A04	THRUBOLT STUD 3/8-16 X 18.750	4.000 EA
MG1025R44	WILKOFEST, 784.109, CARMINE RED #3002	0.050 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
40AD2002A01	LEXAN BAFFLE 40 FR OPEN	1.000 EA
40AD2002A01	LEXAN BAFFLE 40 FR OPEN	1.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0104A01	CONNECTION DIAGRAM	1.000 EA
NP3454L	ALUM FIRE PUMP MOTOR(LEGACY/BALDOR ONLY)	1.000 EA
40PA1000	PACKAGING GROUP	1.000 EA

**AC Induction Motor Performance Data**

Record # 52878 - Typical performance - not guaranteed values

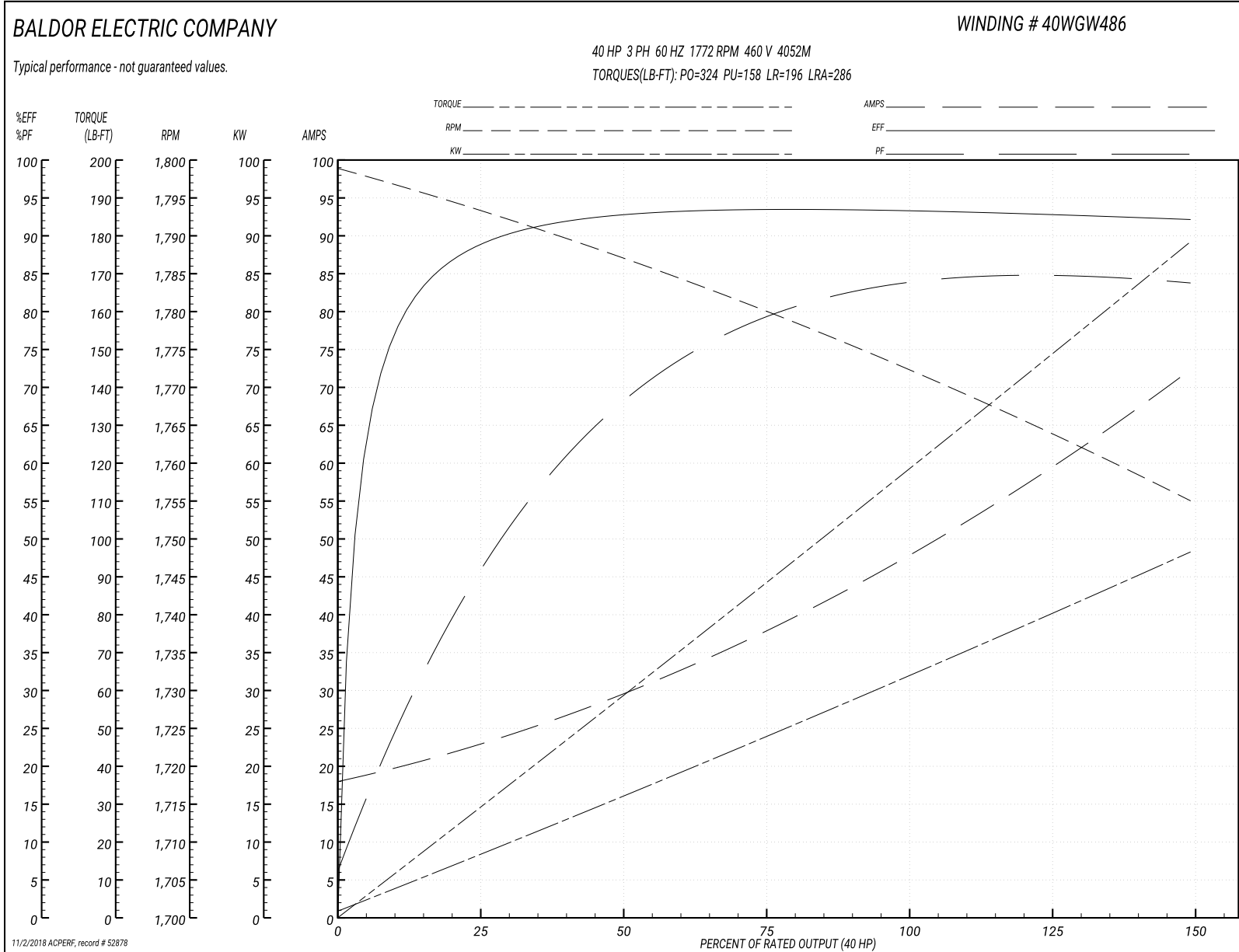
<b>Winding:</b> 40WGW486-R005	<b>Type:</b> 4052M	<b>Enclosure:</b> OPSB
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	40//30			Full Load Torque	119 LB-FT
Volts	230/460//190/380			Start Configuration	direct on line
Full Load Amps	98/49//90/45			Breakdown Torque	324 LB-FT
R.P.M.	1770//1470			Pull-up Torque	158 LB-FT
Hz	60//50	Phase	3	Locked-rotor Torque	196 LB-FT
NEMA Design Code	B	KVA Code	G	Starting Current	286 A
Service Factor (S.F.)	1.15			No-load Current	18.4 A
NEMA Nom. Eff.	93	Power Factor	83	Line-line Res. @ 25°C	0.19 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	41°C
S.F. Amps				Temp. Rise @ S.F. Load	54°C
				Locked-rotor Power Factor	32
				Rotor inertia	4.13 LB-FT <sup>2</sup>

Load Characteristics 460 V, 60 Hz, 40 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	47	69	79	83	84	85	84
Efficiency	89	92.8	93.4	93.3	92.9	92.1	93.1
Speed	1793	1787	1780	1772	1764	1755	1767
Line amperes	22.6	29.3	38.2	48.5	59.7	72	55.2

Performance Graph at 460V, 60Hz, 40.0HP Typical performance - Not guaranteed values





**AC Induction Motor Performance Data**

Record # 52879 - Typical performance - not guaranteed values

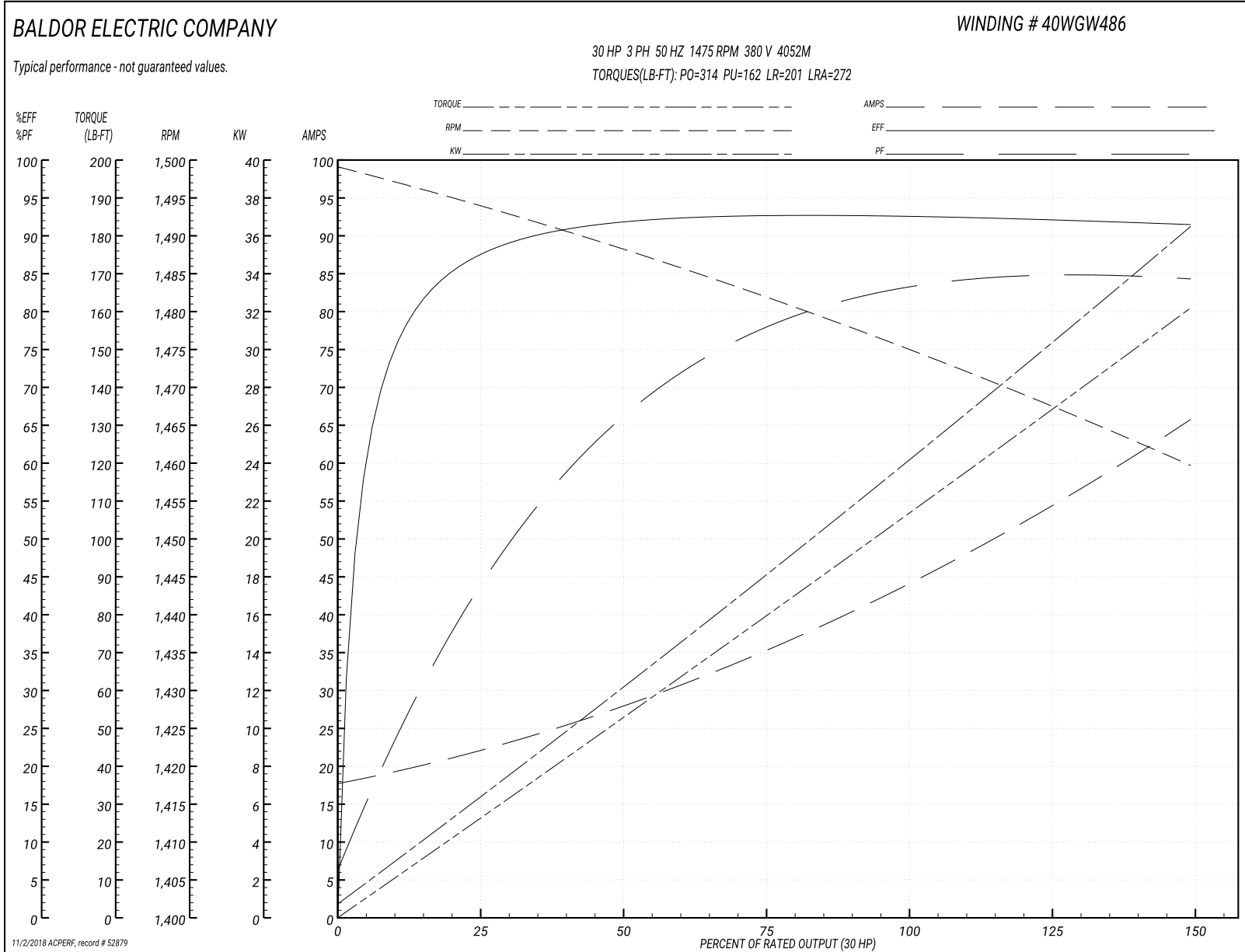
<b>Winding:</b> 40WGW486-R005	<b>Type:</b> 4052M	<b>Enclosure:</b> OPSB
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Nameplate Data				380 V, 50 Hz: High Voltage Connection	
Rated Output (HP)	40//30			Full Load Torque	107 LB-FT
Volts	230/460//190/380			Start Configuration	direct on line
Full Load Amps	98/49//90/45			Breakdown Torque	314 LB-FT
R.P.M.	1770//1470			Pull-up Torque	162 LB-FT
Hz	60//50	Phase	3	Locked-rotor Torque	201 LB-FT
NEMA Design Code	B	KVA Code	G	Starting Current	272 A
Service Factor (S.F.)	1.15			No-load Current	18.1 A
NEMA Nom. Eff.	93	Power Factor	83	Line-line Res. @ 25°C	0.185 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	36°C
S.F. Amps				Temp. Rise @ S.F. Load	43°C
				Locked-rotor Power Factor	35.1
				Rotor inertia	4.13 LB-FT <sup>2</sup>

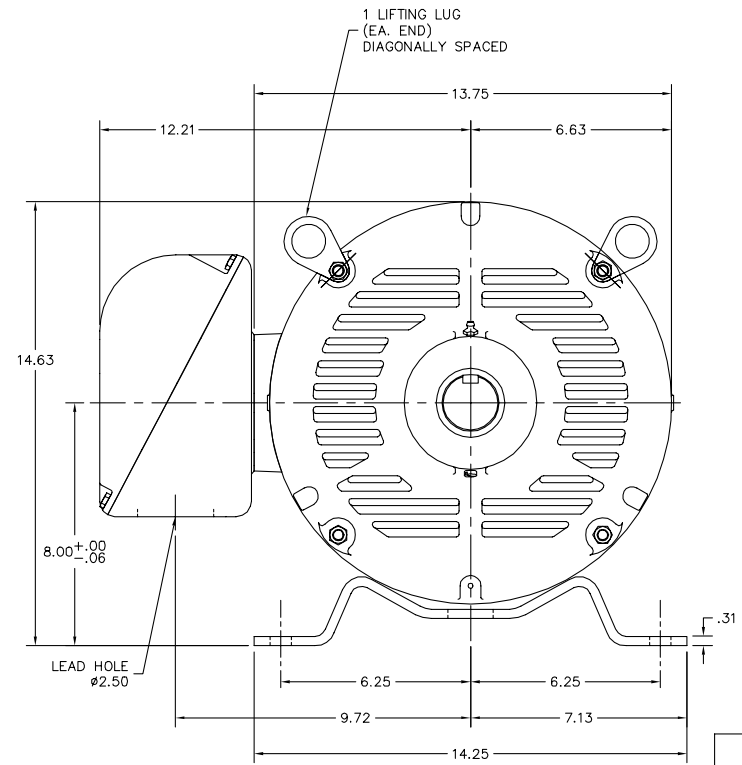
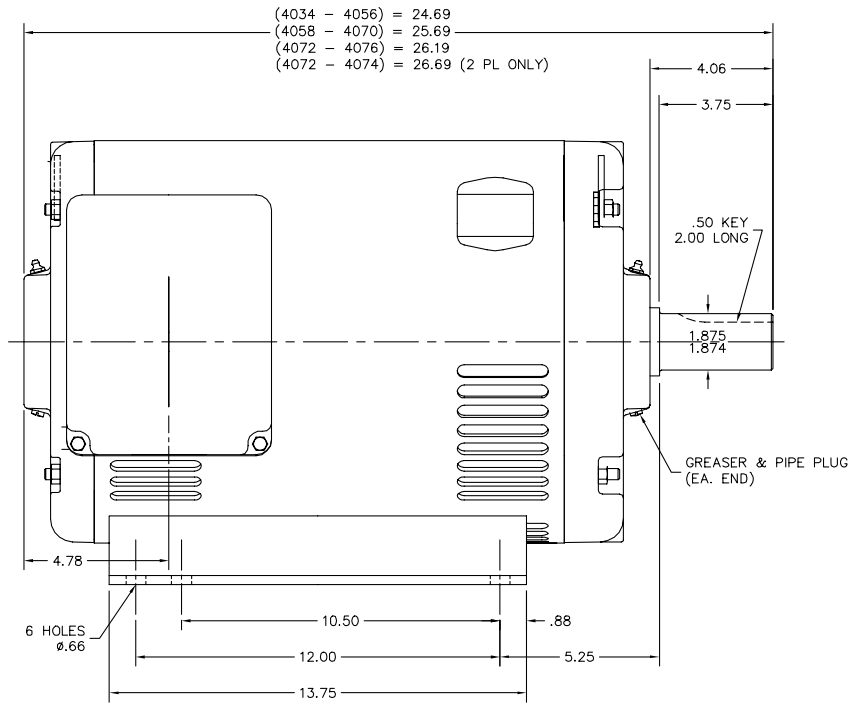
**Load Characteristics 380 V, 50 Hz, 30 HP**

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	45	68	78	82	84	85	83
Efficiency	87.8	92	92.8	92.5	92.1	91.5	92.3
Speed	1494	1488	1482	1475	1467	1460	1470
Line amperes	21.8	27.7	35.5	44.7	54.6	65.4	50.6

Performance Graph at 380V, 50Hz, 30.0HP Typical performance - Not guaranteed values



40LYH007



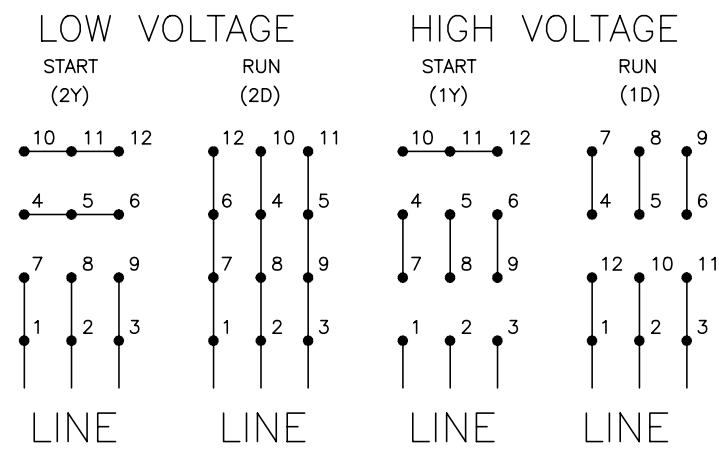
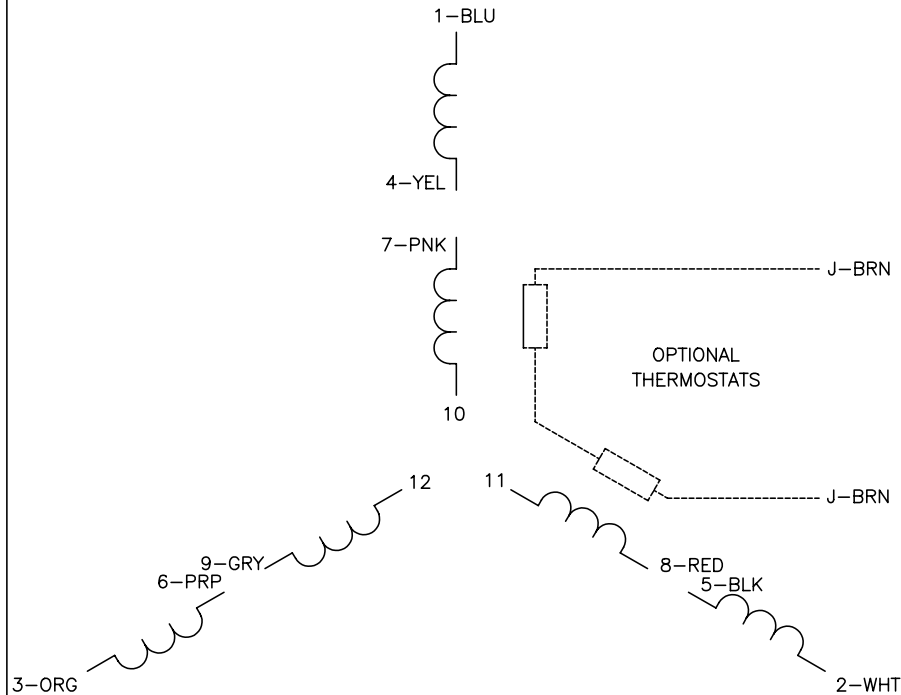
40LYH007

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

REV. DESC: UPDATED DESCRIPTION		
REV. LTR: M	VERSION: 06	TDR: 000000855149
FILE: \AAA\00008\628	REVISED: 11:27:19 05/23/2014	BY: ENNINDO
MTL: -		

**BALDOR**  
 HORZ OPSB 324-6TS  
 SH 1 of 1

CD0104



- 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: C	BY: JLP	REVISED: 01/19/99 4:24	TDR: 0171435
CD0104		FILE: AAA00008377	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 12 LEADS, Y START/D RUN

CD0104