

**BALDOR® • RELIANCE** 

**Product Information Packet**

**FPM2551TS**

**75//60HP,1770//1470RPM,3PH,60//50HZ,365T**

Part Detail							
Revision:	A	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	42WGW977	CD Diagram:	CD0104	Mfg Plant:	
Mech. Spec:	42E360	Layout:	42LYE360	Poles:	04	Created Date:	03-20-2017
Base:	RG	Eff. Date:	08-22-2018	Leads:	12#8		

Specs			
Catalog Number:	FPM2551TS	Heater Indicator:	No Heater
Enclosure:	OPSB	Insulation Class:	F
Frame:	365TS	Inverter Code:	Not Inverter
Frame Material:	Steel	KVA Code:	F
Output @ Frequency:	60.000 HP @ 50 HZ	Lifting Lugs:	Standard Lifting Lugs
	75.000 HP @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Synchronous Speed @ Frequency:	1500 RPM @ 50 HZ	Motor Lead Quantity/Wire Size:	12 @ 8 AWG
Voltage @ Frequency:	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:	4272M
	190.0 V @ 50 HZ	Mounting Arrangement:	F1
Agency Approvals:	CSA EEV	Power Factor:	86
	UL	Product Family:	Fire Pump Motor
Auxillary Box:	No Auxillary Box	Pulley End Bearing Type:	Ball
Auxillary Box Lead Termination:	None	Pulley Face Code:	Standard
Base Indicator:	Rigid	Pulley Shaft Indicator:	Standard
Bearing Grease Type:	Polyrex EM (-20F +300F)	Rodent Screen:	None
Blower:	None	Shaft Extension Location:	Pulley End

<b>Current @ Voltage:</b>	87.000 A @ 460.0 V	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
	84.000 A @ 380.0 V	<b>Shaft Rotation:</b>	Reversible
	174.000 A @ 230.0 V	<b>Shaft Slinger Indicator:</b>	No Slinger
	168.000 A @ 190.0 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 (OLD)
<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>Front Shaft Indicator:</b>	None	<b>Winding Thermal 2:</b>	None

Nameplate NP3454L											
CAT.NO.	FPM2551TS			CUST P/N				I.P.	23		
SPEC.	42E360W977H2			SER.NO.				FRAME	365TS		
HZ	60	HP	75	RPM	1770	HZ	50	HP	60	RPM	1470
VOLTS	230/460			CODE	F	VOLTS	190/380			CODE	F
AMPS	174/87			DES	B	AMPS	168/84			DES	B
EFF	94.1	SER.F.	1.15	PF	86	EFF	93.6	SER.F.	1.15	PF	86
RATING	40C AMB-CONT			DE BRG	6313			GREASE	POLYREX EM		
BLANK				ODE BRG	6311			MTR. WT.	573		
				CLASS	F						
				ENCL	OPSB						
								PH	3		
								CC	010A		
HTR-VOLTS		HTR-AMPS		HTR-WATTS							

Parts List		
Part Number	Description	Quantity
SA336191	SA 42E360W977H2	1.000 EA
RA324424	RA 42E360W977H2	1.000 EA
HA6360	LIFTING LUG FOR 42 FRAME MOTORS.	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
12CB1002A48	CONDUIT BOX, W/3.62 DIA. LEAD HOLE	1.000 EA
19XW3118A16	.31-18 HEX WASHER HEAD TAPTITE II 1.00 L	4.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 EA
WD1000B53	TERMINAL BURNDY KPA34	1.000 EA
10XN5013K10	1/2-13 X .625 HEX HD, GRADE 5	1.000 EA
HW1001A50	LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I	1.000 EA
42EP3200A01	FR ENDPLATE, MACH	1.000 EA
HW5100A13	W4627-047 WVY WSHER	1.000 EA
42EP1202A01	STD PU ENDPLATE MODEL 42 313 BRG.	1.000 EA
10XN3816K44	3/8-16 X 2.75 HEX HD CAP SCREW, GRADE 5	4.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
XY5013A12	NUT,1/2-13,HEX,STEEL,ZINCPLATED	8.000 EA
18CB1501A01	CONDUIT BOX LID, MODEL 318 OPEN	1.000 EA
10XN3118K16	5/16-18 X 1' GRADE #5, STL, ZINC PLATE	4.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	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

Parts List (continued)		
Part Number	Description	Quantity
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	1.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON (USe 4824-15A)	0.030 LB
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
MG1025R44	WILKOFAS, 784.109, CARMINE RED #3002	0.050 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
42AD2001A01	BAFFLE PLATE 42 OPEN, SLOTTED BAND MTRS	1.000 EA
42AD2001A01	BAFFLE PLATE 42 OPEN, SLOTTED BAND MTRS	1.000 EA
HA3151A09	THRUBOLT STUD 1/2-13 X 22.000	4.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0104A01	CONNECTION DIAGRAM	1.000 EA
NP3454L	ALUM FIRE PUMP MOTOR(LEGACY/BALDOR ONLY)	1.000 EA
42PA1000	PACKAGING GROUP PRINT PK1024A06	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 5/18	1.000 EA
PE-0000013	ZRTG PE ASSEMBLY	1.000 EA

**AC Induction Motor Performance Data**

Record # 54269 - Typical performance - not guaranteed values

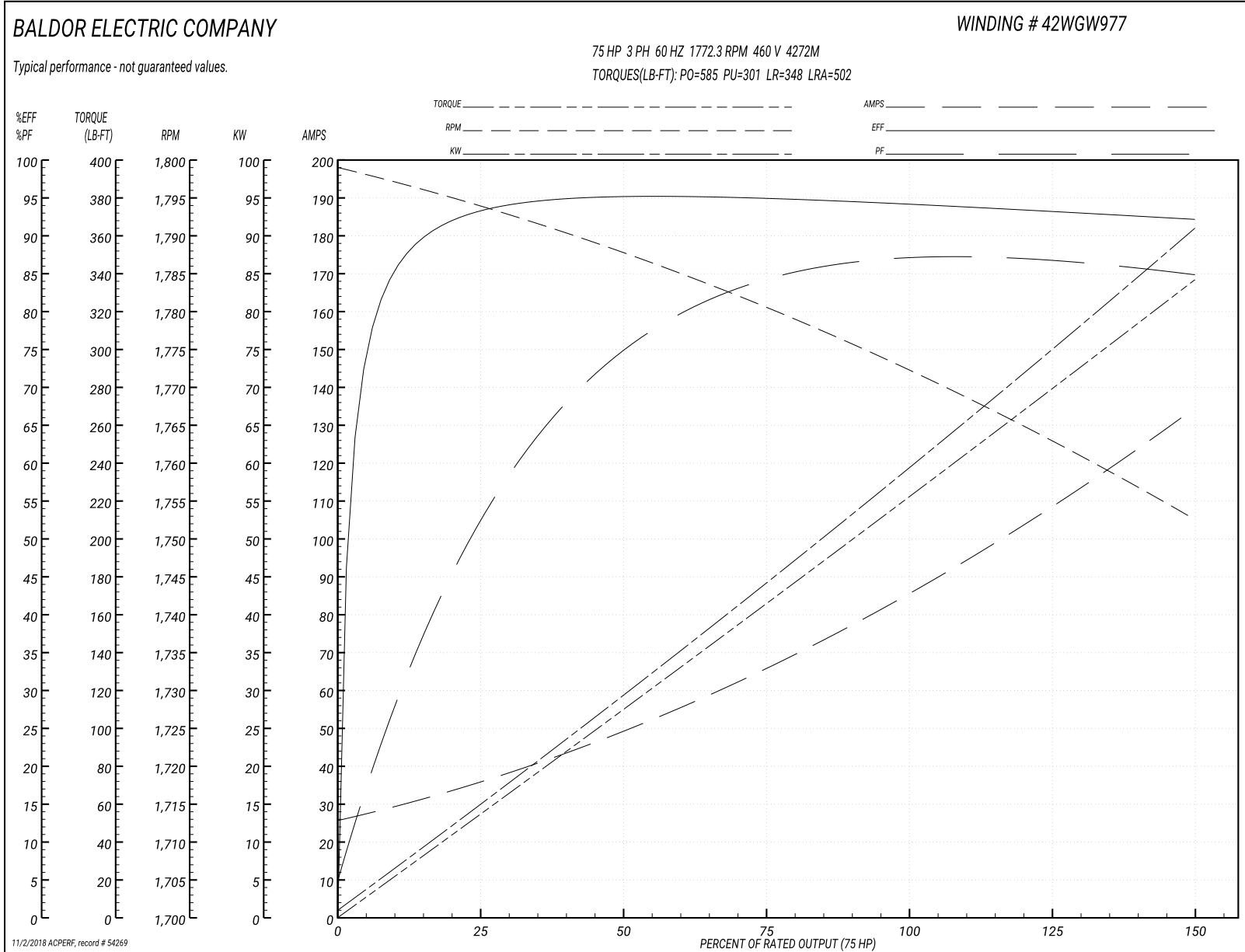
<b>Winding:</b> 42WGW977-R001	<b>Type:</b> 4272M	<b>Enclosure:</b> OPSB
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	75//60			Full Load Torque	222 LB-FT
Volts	230/460//190/380			Start Configuration	direct on line
Full Load Amps	174/87//168/84			Breakdown Torque	585 LB-FT
R.P.M.	1770//1470			Pull-up Torque	301 LB-FT
Hz	60//50	Phase	3	Locked-rotor Torque	348 LB-FT
NEMA Design Code	B	KVA Code	F	Starting Current	502 A
Service Factor (S.F.)	1.15			No-load Current	27.1 A
NEMA Nom. Eff.	94.1	Power Factor	86	Line-line Res. @ 25°C	0.37298 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	60°C
S.F. Amps				Temp. Rise @ S.F. Load	77°C

Load Characteristics 460 V, 60 Hz, 75 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	56	76	83	86	86	86	86
Efficiency	93	94.9	94.9	94.3	93.3	92.1	93.7
Speed	1794.3	1787.6	1780.4	1772.3	1763.3	1752.3	1767
Line amperes	33.9	48.4	66.4	86.5	109	134	100

Performance Graph at 460V, 60Hz, 75.0HP Typical performance - Not guaranteed values





**AC Induction Motor Performance Data**

Record # 54270 - Typical performance - not guaranteed values

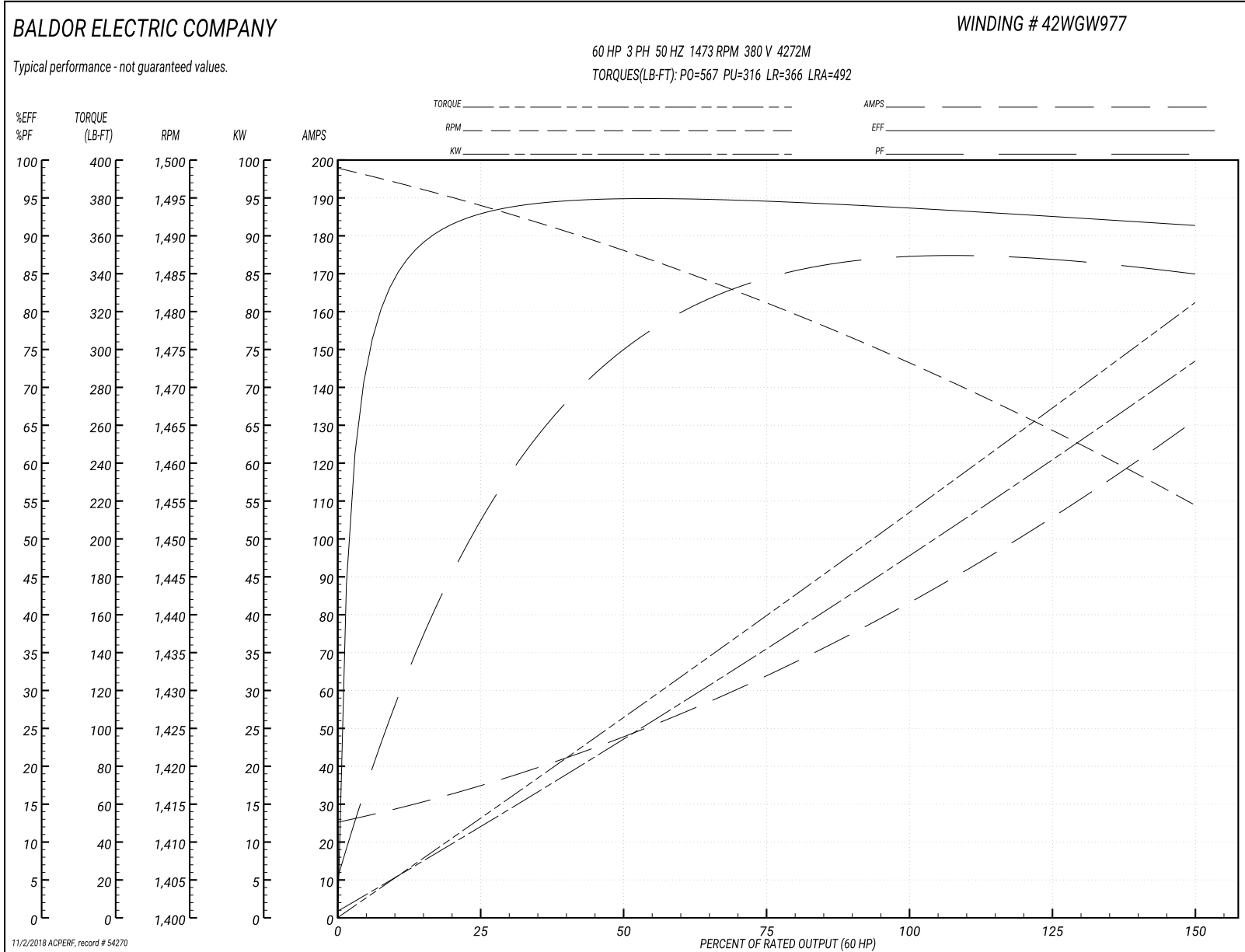
<b>Winding:</b> 42WGW977-R001	<b>Type:</b> 4272M	<b>Enclosure:</b> OPSB
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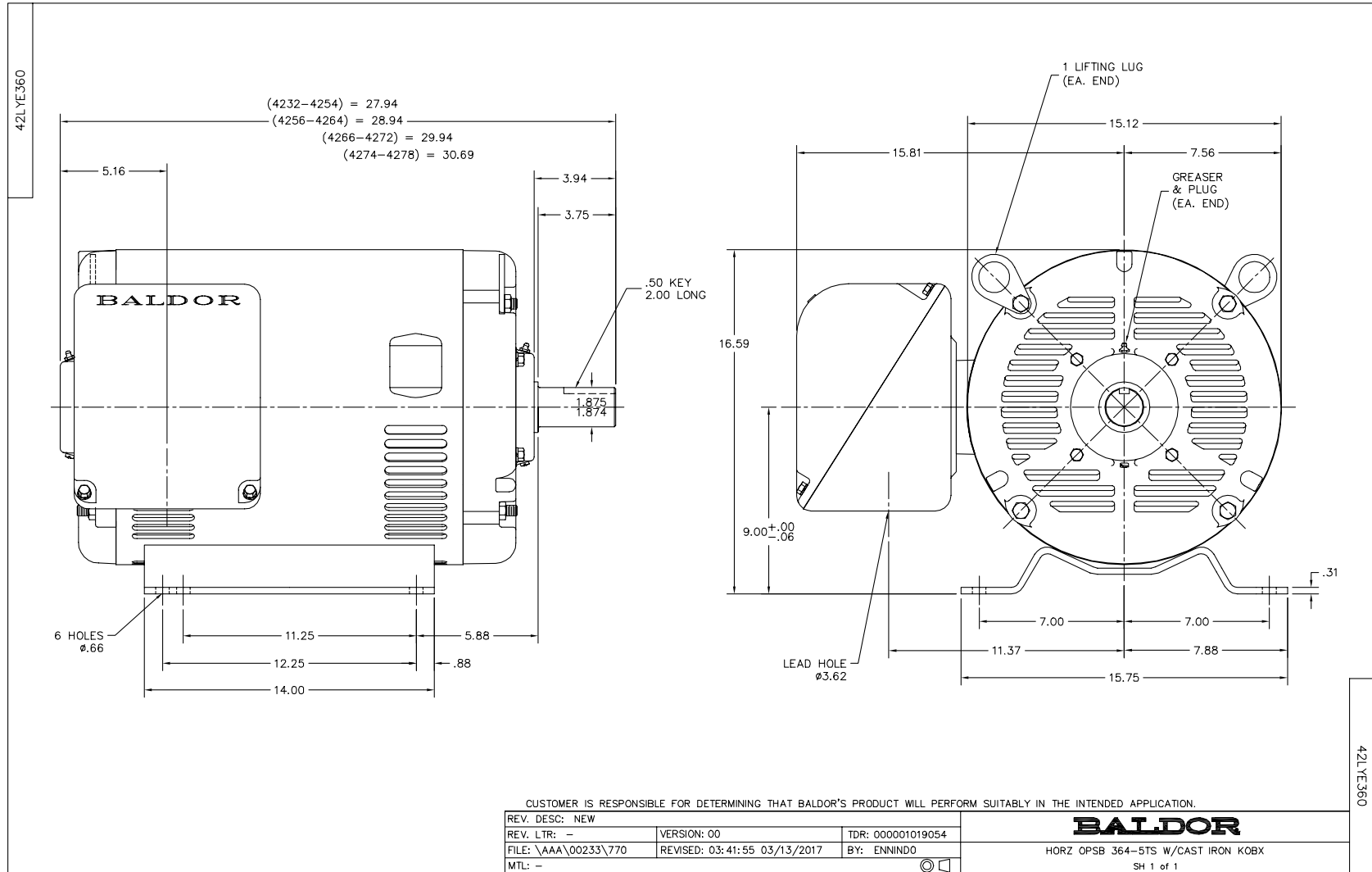
Nameplate Data				380 V, 50 Hz: High Voltage Connection	
Rated Output (HP)	75//60			Full Load Torque	214 LB-FT
Volts	230/460//190/380			Start Configuration	direct on line
Full Load Amps	174/87//168/84			Breakdown Torque	567 LB-FT
R.P.M.	1770//1470			Pull-up Torque	316 LB-FT
Hz	60//50	Phase	3	Locked-rotor Torque	366 LB-FT
NEMA Design Code	B	KVA Code	F	Starting Current	492 A
Service Factor (S.F.)	1.15			No-load Current	26.5 A
NEMA Nom. Eff.	94.1	Power Factor	86	Line-line Res. @ 25°C	0.0893 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	58°C
S.F. Amps				Temp. Rise @ S.F. Load	73°C
				Locked-rotor Power Factor	29.4
				Rotor inertia	9.59 LB-FT <sup>2</sup>

**Load Characteristics 380 V, 50 Hz, 60 HP**

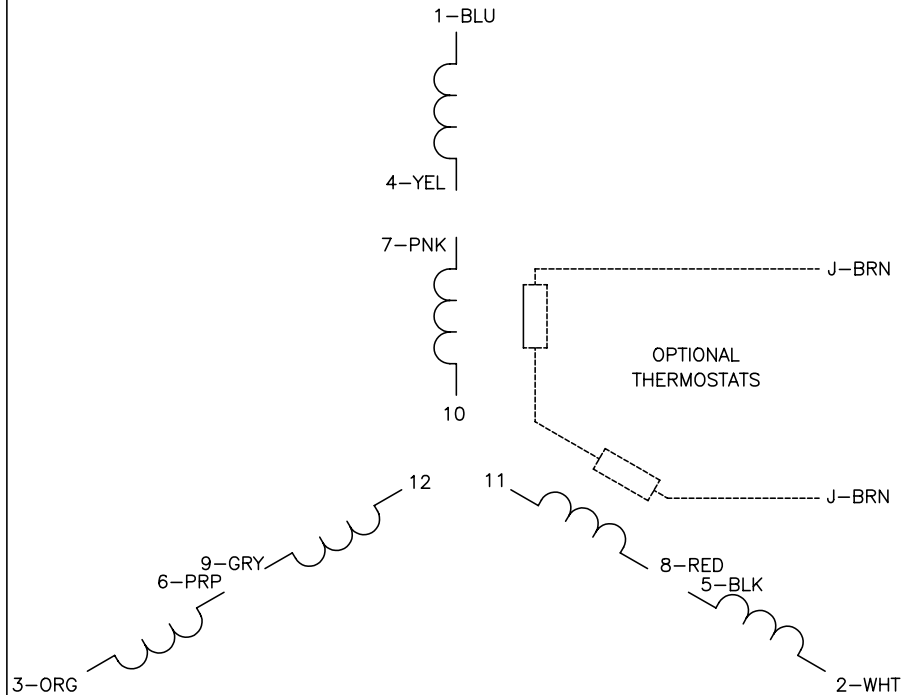
% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	56	76	83	86	87	85	87
Efficiency	92.4	94.5	94.4	93.8	92.9	91.2	93.3
Speed	1494	1488	1481	1473	1465	1454	1468
Line amperes	33.1	47.1	64.6	84.2	106	131	97.3

Performance Graph at 380V, 50Hz, 60.0HP Typical performance - Not guaranteed values





CD0104



**LOW VOLTAGE**

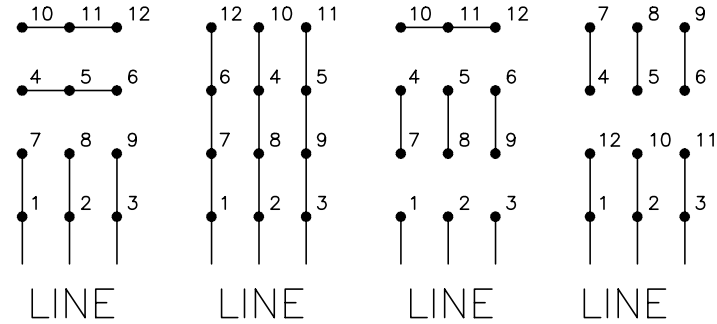
START (2Y)

RUN (2D)

**HIGH VOLTAGE**

START (1Y)

RUN (1D)



**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
401000		FILE: AAA00008377	MDL: -
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**BALDOR ELECTRIC Co.**

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

CD0104

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