

**BALDOR® • RELIANCE** 

**Product Information Packet**

**FPM2547TS**

**60//50HP,1770//1470RPM,3PH,60//50HZ,364T**

Part Detail							
Revision:	H	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	42WGW980	CD Diagram:	CD0104	Mfg Plant:	
Mech. Spec:	42F98	Layout:	42LYF098	Poles:	04	Created Date:	11-02-2015
Base:	RG	Eff. Date:	08-22-2018	Leads:	12#8		

Specs			
Catalog Number:	FPM2547TS	Front Shaft Indicator:	None
Enclosure:	ODP	Heater Indicator:	No Heater
Frame:	364TS	Insulation Class:	F
Frame Material:	Steel	Inverter Code:	Not Inverter
Output @ Frequency:	50.000 HP @ 50 HZ	KVA Code:	F
	60.000 HP @ 60 HZ	Lifting Lugs:	Standard Lifting Lugs
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Quantity/Wire Size:	12 @ 8 AWG
	380.0 V @ 50 HZ	Motor Lead Exit:	Ko Box
	230.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
	190.0 V @ 50 HZ	Motor Type:	4252M
Agency Approvals:	CSA	Mounting Arrangement:	F1
	CSA EEV	Power Factor:	84
	UL	Product Family:	Fire Pump Motor
	UR	Pulley End Bearing Type:	Ball
Auxillary Box:	No Auxillary Box	Pulley Face Code:	Standard
Auxillary Box Lead Termination:	None	Pulley Shaft Indicator:	Standard
Base Indicator:	Rigid	Rodent Screen:	None

<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>	72.000 A @ 460.0 V	<b>Shaft Rotation:</b>	Reversible
	72.000 A @ 380.0 V	<b>Shaft Slinger Indicator:</b>	No Slinger
	144.000 A @ 230.0 V	<b>Speed Code:</b>	Single Speed
	144.000 A @ 190.0 V	<b>Motor Standards:</b>	NEMA
<b>Design Code:</b>	B	<b>Starting Method:</b>	Wye Start - Delta Run
<b>Drip Cover:</b>	No Drip Cover	<b>Thermal Device - Bearing:</b>	NONE (OLD)
<b>Duty Rating:</b>	CONT	<b>Thermal Device - Winding:</b>	None
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Feedback Device:</b>	NO FEEDBACK	<b>Winding Thermal 1:</b>	None
<b>Front Face Code:</b>	Standard	<b>Winding Thermal 2:</b>	None

Nameplate NP3454L											
CAT.NO.	FPM2547TS				CUST P/N					I.P.	23
SPEC.	42F098W980H2				SER.NO.					FRAME	364TS
HZ	60	HP	60	RPM	1770	HZ	50	HP	50	RPM	1470
VOLTS	230/460			CODE	F	VOLTS	190/380			CODE	F
AMPS	144/72			DES	B	AMPS	144/72			DES	B
EFF	93.6	SER.F.	1.15	PF	84	EFF	93	SER.F.	1.15	PF	84
RATING	40C AMB-CONT				DE BRG	6313				GREASE	POLYREX EM
BLANK					ODE BRG	6311				MTR. WT.	485
					CLASS	F		PH	3		
					ENCL	ODP		CC	010A		
HTR-VOLTS		HTR-AMPS		HTR-WATTS							

Parts List		
Part Number	Description	Quantity
SA309804	SA 42F098W980H2	1.000 EA
RA297173	RA 42F098W980H2	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
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
10CB3002	CONDUIT BOX CAST W/3.625 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
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
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
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

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
MG1025R44	WILKOFAS, 784.109, CARMINE RED #3002	0.050 GA
MJ1000A02	GREASE, POLYREX EM EXXON (USe 4824-15A)	0.030 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
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
HA3151A07	THRUBOLT STUD 1/2-13 X 20.000	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 # 54369 - Typical performance - not guaranteed values

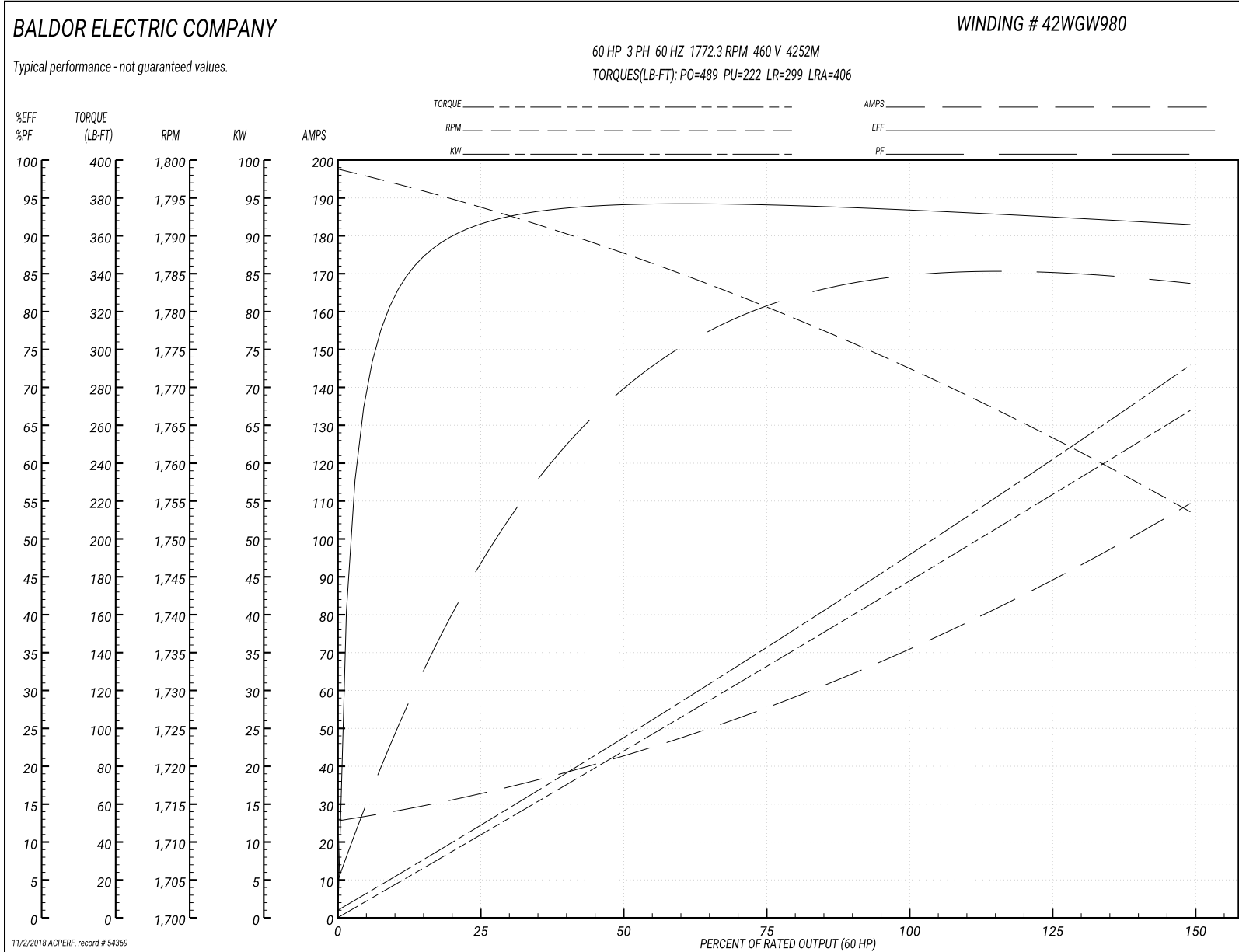
<b>Winding:</b> 42WGW980-R001	<b>Type:</b> 4252M	<b>Enclosure:</b> OPSB
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	60//50			Full Load Torque	178 LB-FT
Volts	230/460//190/380			Start Configuration	direct on line
Full Load Amps	144/72			Breakdown Torque	489 LB-FT
R.P.M.	1770//1470			Pull-up Torque	222 LB-FT
Hz	60//50	Phase	3	Locked-rotor Torque	299 LB-FT
NEMA Design Code	B	KVA Code	F	Starting Current	406 A
Service Factor (S.F.)	1.15			No-load Current	26.6 A
NEMA Nom. Eff.	93.6	Power Factor	83	Line-line Res. @ 25°C	0.13192 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	54°C
S.F. Amps				Temp. Rise @ S.F. Load	67°C
				Locked-rotor Power Factor	27.7

Load Characteristics 460 V, 60 Hz, 60 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	49	70	80	84	85	84	85
Efficiency	91.3	93.9	94.2	93.6	92.8	91.5	93.1
Speed	1794	1787.2	1780.6	1772.3	1764.4	1753	1768
Line amperes	31.4	42	56.1	71.8	89	109	82.1

Performance Graph at 460V, 60Hz, 60.0HP Typical performance - Not guaranteed values





**AC Induction Motor Performance Data**

Record # 54370 - Typical performance - not guaranteed values

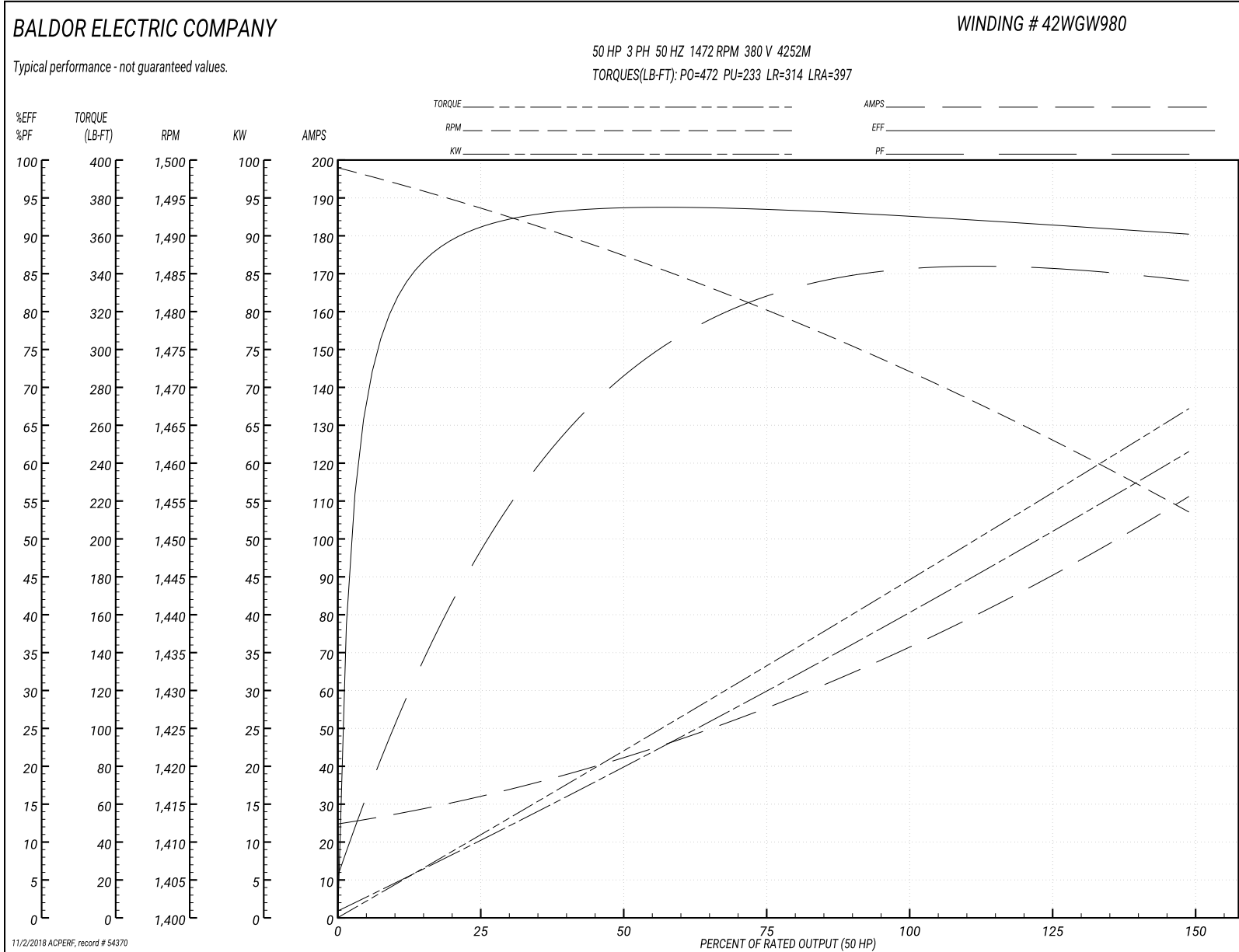
<b>Winding:</b> 42WGW980-R001	<b>Type:</b> 4252M	<b>Enclosure:</b> OPSB
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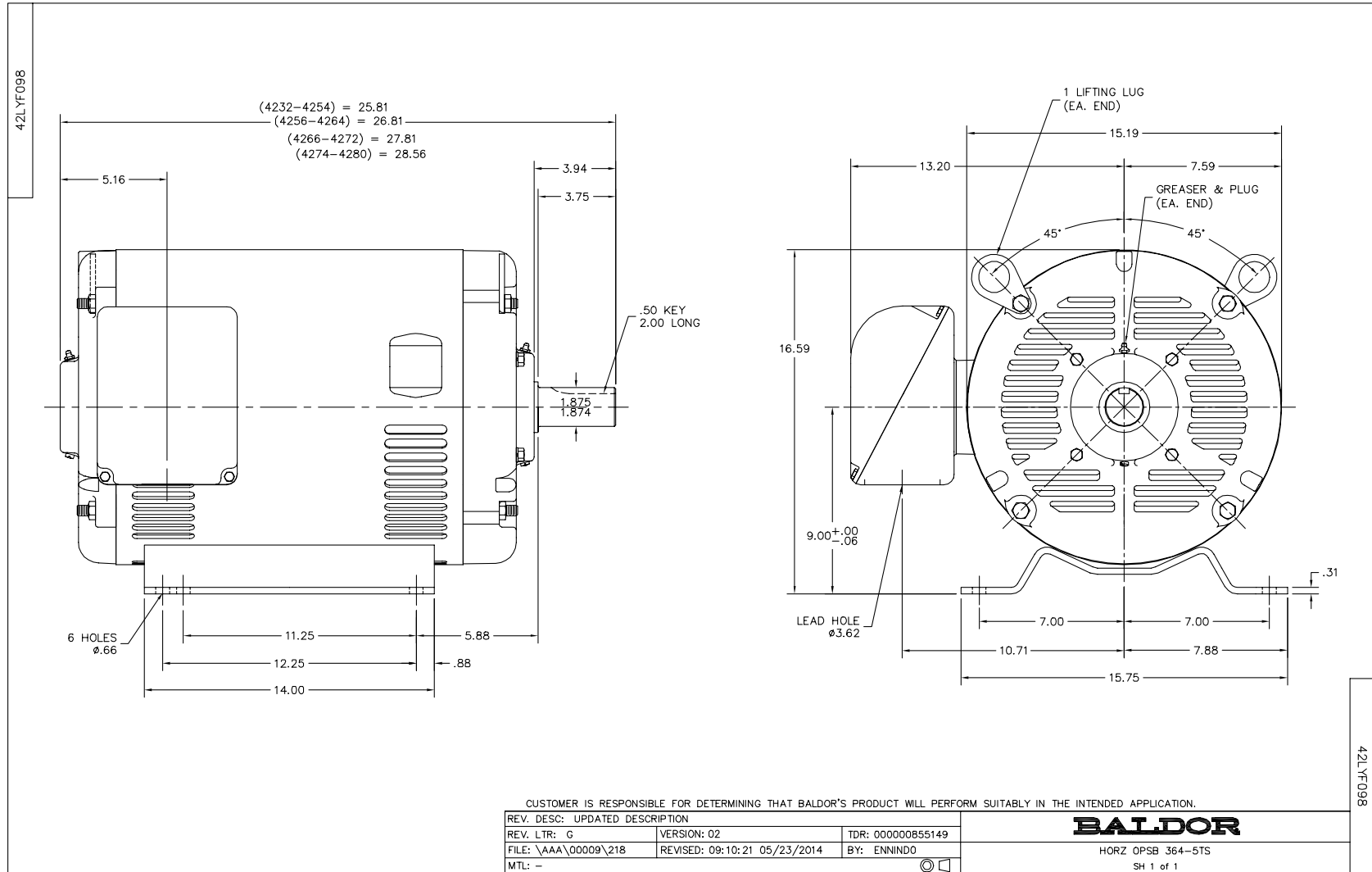
Nameplate Data				380 V, 50 Hz: High Voltage Connection	
Rated Output (HP)	60//50			Full Load Torque	179 LB-FT
Volts	230/460//190/380			Start Configuration	direct on line
Full Load Amps	144/72			Breakdown Torque	472 LB-FT
R.P.M.	1770//1470			Pull-up Torque	233 LB-FT
Hz	60//50	Phase	3	Locked-rotor Torque	314 LB-FT
NEMA Design Code	B	KVA Code	F	Starting Current	397 A
Service Factor (S.F.)	1.15			No-load Current	25.7 A
NEMA Nom. Eff.	93.6	Power Factor	83	Line-line Res. @ 25°C	0.13 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	55°C
S.F. Amps				Temp. Rise @ S.F. Load	69°C
				Locked-rotor Power Factor	30.9
				Rotor inertia	6.93 LB-FT <sup>2</sup>

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

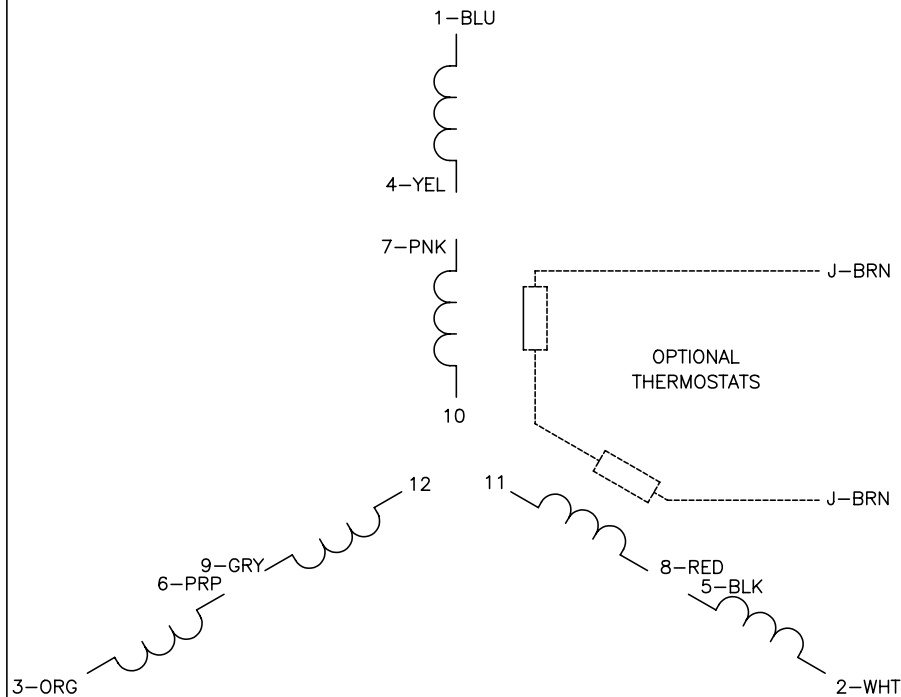
% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	51	72	81	85	86	84	86
Efficiency	90.8	93.3	93	93.1	91.7	90	92.3
Speed	1494	1487	1480	1472	1464	1453	1467
Line amperes	30.7	41.6	56.1	72.3	90.1	111	83

Performance Graph at 380V, 50Hz, 50.0HP Typical performance - Not guaranteed values





CD0104



**LOW VOLTAGE**

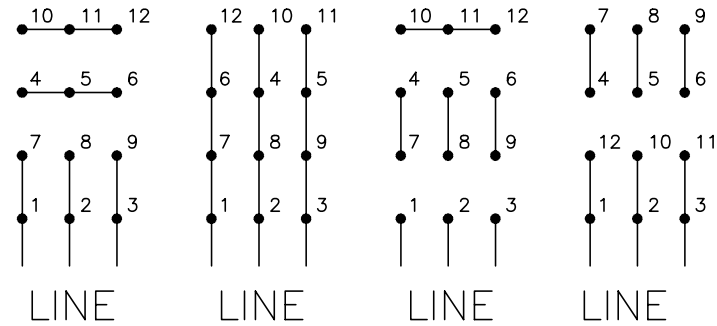
START (2Y)

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
CD0104		FILE: AAA00008377	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

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

CD0104

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