BALDOR • RELIANCE

Customer information packet

FPM2547TS

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

2/16/2025 10:41:00 PM

Specifications

Enclosure	ODP
Frame	364TS
Frame Material	Steel
Frequency	50.00 Hz
	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	60.000 HP @ 60 HZ
	50.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
	190.0 V @ 50 HZ
	460.0 V @ 60 HZ
	380.0 V @ 50 HZ
Agency Approvals	CSA EEV
	UL
	UR
	CSA
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	72.000 A @ 460.0 V
	72.000 A @ 380.0 V
	144.000 A @ 230.0 V
	144.000 A @ 190.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.6 %

Part detail

Revision	K
Type	AC
Mech. spec.	42F98
Base	
Status	PRD/A
Elec. spec.	42WGW980
Layout	42LYF098
Eff. date	07-24-2023
CD Diagram	CD0104
Poles	04
Leads	12#8
Proprietary	False
Created date	11-02-2015

Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	72.0 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	F
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	12 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4252M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	25.81 IN
Power Factor	84
Product Family	Fire Pump Motor
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1470 rpm
	1770 rpm
Speed Code	Single Speed

Starting Method	Wye Start - Delta Run
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	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.**	475				
				CLASS	F	**PH**	3						
				ENCL	ODP	**CC**	010A						
HTR-VOLTS		**HTR-AMPS**		**HTR-WATTS**									

AC Induction Motor Performance Data
Record # 54369
Typical performance - not guaranteed values

Winding: 42WGW980-R001	**Type:** 4252M	**Enclosure:** OPSB

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. @ 25ºC**	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

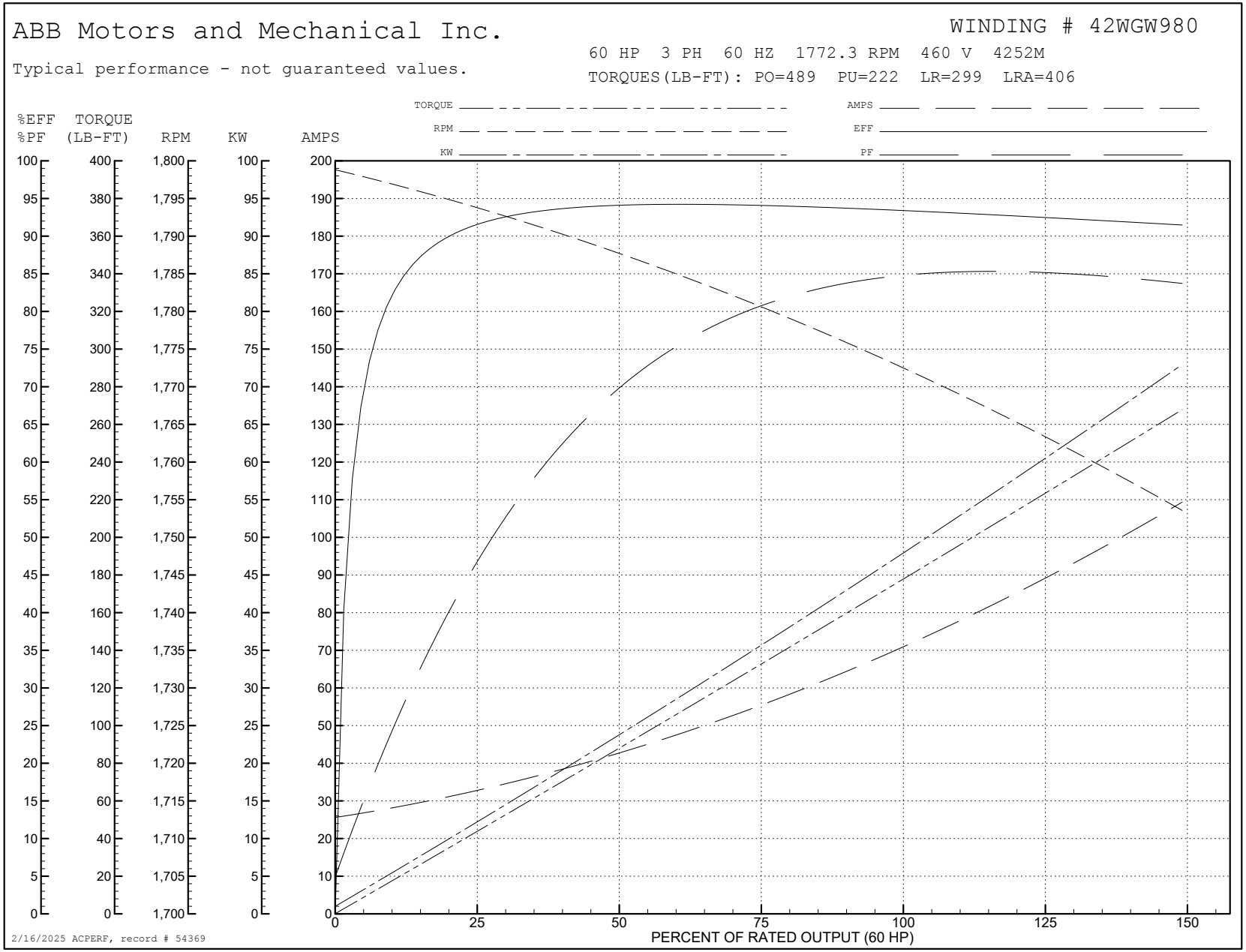


ABB Motors and Mechanical Inc.
WINDING # 42WGW980
Typical performance - not guaranteed values.
60 HP 3 PH 60 HZ 1772.3 RPM 460 V 4252M
TORQUES(LB-FT): PO=489 PU=222 LR=299 LRA=406
TORQUE
RPM
KW
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
KW
AMPS
PERCENT OF RATED OUTPUT (60 HP)
2/16/2025 ACPERF, record # 54369

AC Induction Motor Performance Data
Record # 54370
Typical performance - not guaranteed values

Winding: 42WGW980-R001	**Type:** 4252M	**Enclosure:** OPSB

Nameplate Data			
Rated Output (HP)			60//50
Volts			230/460//190/380
Full Load Amps			144/72
R.P.M.			1770//1470
Hz	60//50	**Phase**	3
NEMA Design Code	B	**KVA Code**	F
Service Factor (S.F.)			1.15
NEMA Nom. Eff.	93.6	**Power Factor**	83
Rating - Duty			40C AMB-CONT
S.F. Amps			

380 V, 50 Hz: High Voltage Connection	
Full Load Torque	179 LB-FT
Start Configuration	direct on line
Breakdown Torque	472 LB-FT
Pull-up Torque	233 LB-FT
Locked-rotor Torque	314 LB-FT
Starting Current	397 A
No-load Current	25.7 A
Line-line Res. @ 25ºC	0.13 Ω
Temp. Rise @ Rated Load	55°C
Temp. Rise @ S.F. Load	69°C
Locked-rotor Power Factor	30.9
Rotor inertia	6.93 LB-FT2

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

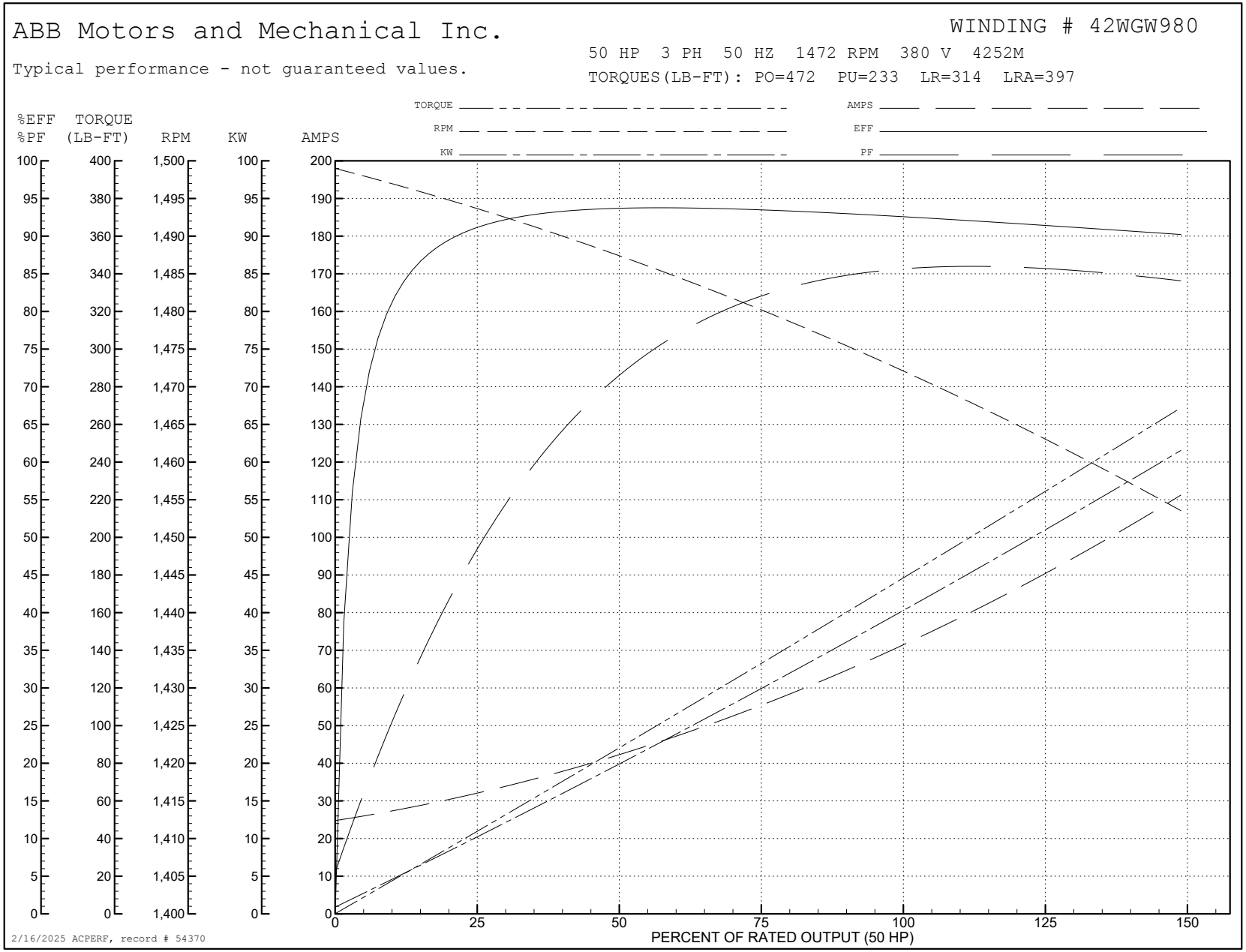
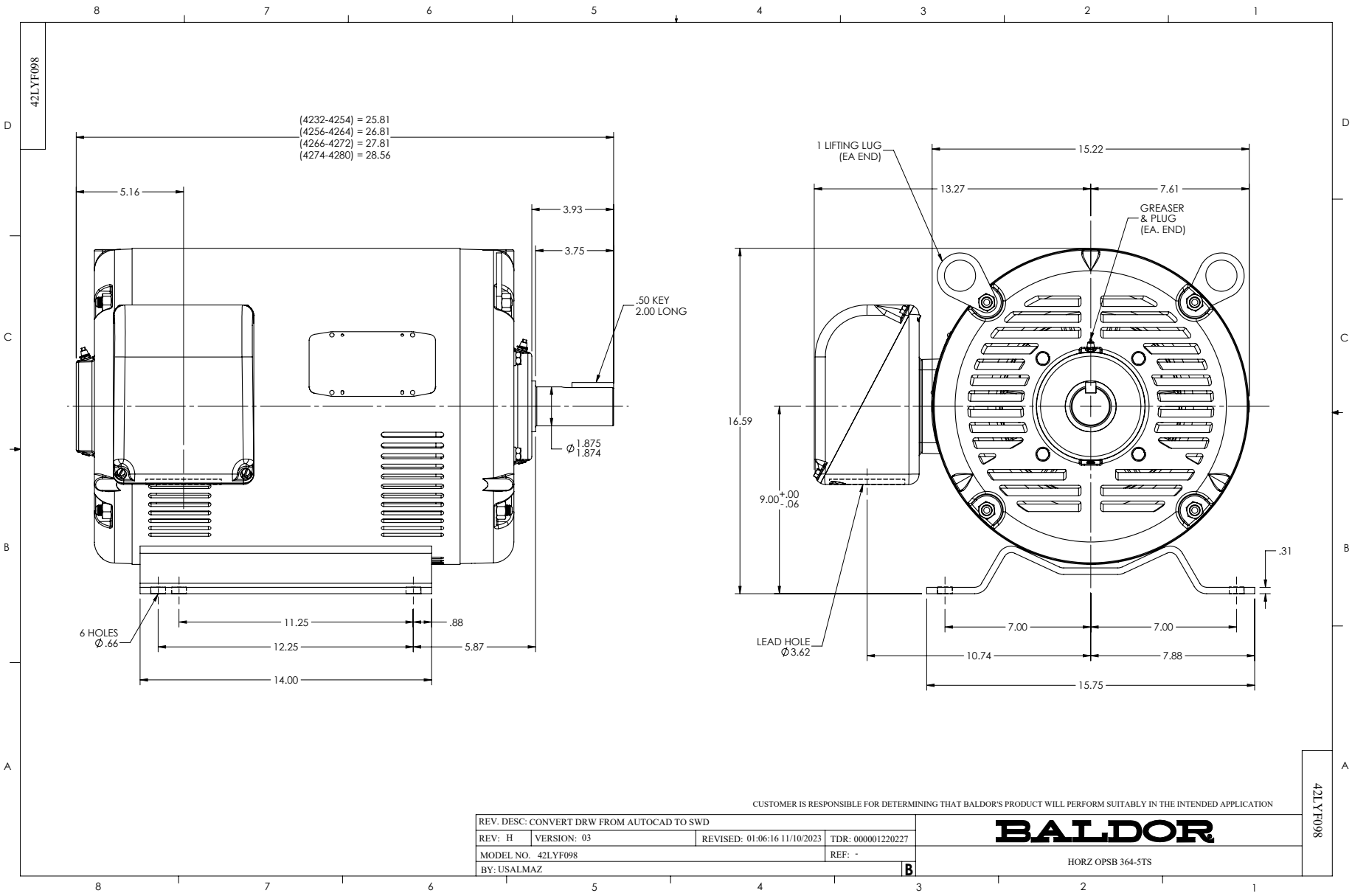
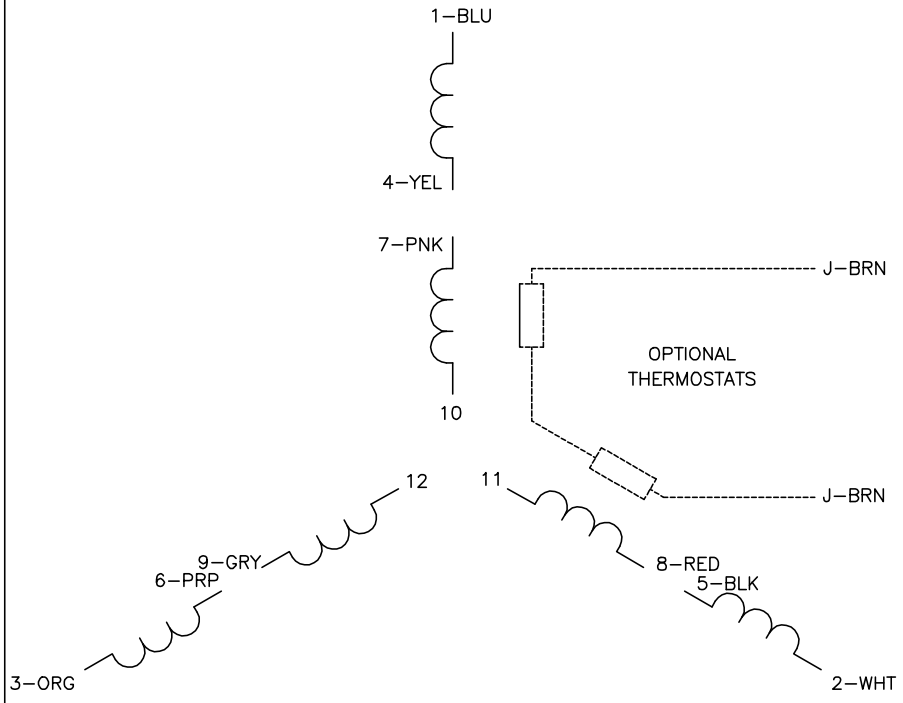
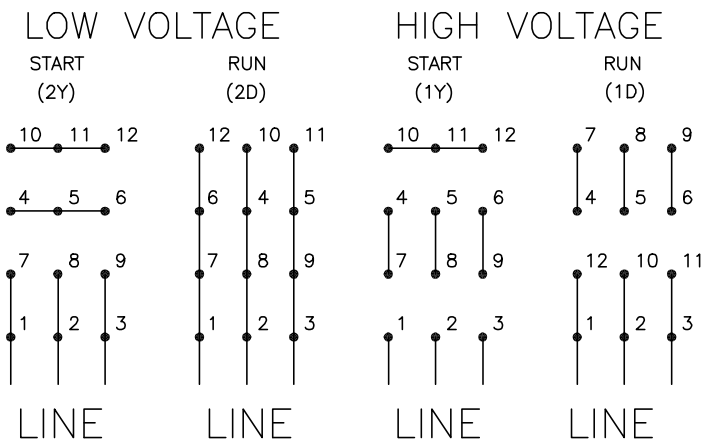


ABB Motors and Mechanical Inc.
WINDING # 42WGW980
50 HP 3 PH 50 HZ 1472 RPM 380 V 4252M
Typical performance - not guaranteed values.
TORQUES(LB-FT): PO=472 PU=233 LR=314 LRA=397
TORQUE
RPM
KW
AMPS
EFF
PF
%EFF
%PF
TORQUE (LB-FT)
RPM
KW
AMPS
PERCENT OF RATED OUTPUT (50 HP)
2/16/2025 ACPERF, record # 54370


42LYF098
(4232-4254) = 25.81
(4256-4264) = 26.81
(4266-4272) = 27.81
(4274-4280) = 28.56
5.16
3.93
3.75
.50 KEY
2.00 LONG
Ø 1.875
1.874
6 HOLES
Ø .66
11.25
.88
12.25
5.87
14.00
1 LIFTING LUG
(EA END)
15.22
13.27
7.61
GREASER
& PLUG
(EA. END)
16.59
9.00 +.00 -.06
.31
LEAD HOLE
Ø 3.62
7.00
7.00
10.74
7.88
15.75
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CONVERT DRW FROM AUTOCAD TO SWD
REV: H
VERSION: 03
REVISED: 01:06:16 11/10/2023
TDR: 000001220227
MODEL NO. 42LYF098
REF: -
BY: USALMAZ
B
BALDOR
HORZ OPSB 364-5TS
42LYF098

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.

CD0104

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: D	VERSION: 01	TDR: 000001099922
FILE: \AAA\00008\377	REVISED: 09:02:55 02/19/2019	BY: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

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

SH 1 of 1