BALDOR • RELIANCE

Customer information packet

FPM2551TS

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

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Specifications

Enclosure	OPSB
Frame	365TS
Frame Material	Steel
Frequency	50.00 Hz
	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	75.000 HP @ 60 HZ
	60.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1500 RPM @ 50 HZ
Voltage @ Frequency	190.0 V @ 50 HZ
	230.0 V @ 60 HZ
	380.0 V @ 50 HZ
	460.0 V @ 60 HZ
Agency Approvals	CSA EEV
	UL
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	87.000 A @ 460.0 V
	84.000 A @ 380.0 V
	174.000 A @ 230.0 V
	168.000 A @ 190.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.1 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK

Part detail

Revision	C
Type	AC
Mech. spec.	42E360
Base	
Status	PRD/A
Elec. spec.	42WGW977
Layout	42LYE360
Eff. date	07-24-2023
CD Diagram	CD0104
Poles	04
Leads	12#8
Proprietary	False
Created date	03-20-2017

Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	84.0 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	4272M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	29.94 IN
Power Factor	86
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.	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.**	570			
				CLASS	F	**PH**	3					
				ENCL	OPSB	**CC**	010A					
HTR-VOLTS		**HTR-AMPS**		**HTR-WATTS**								

AC Induction Motor Performance Data
Record # 54269
Typical performance - not guaranteed values

Winding: 42WGW977-R001	**Type:** 4272M	**Enclosure:** OPSB

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. @ 25ºC**	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

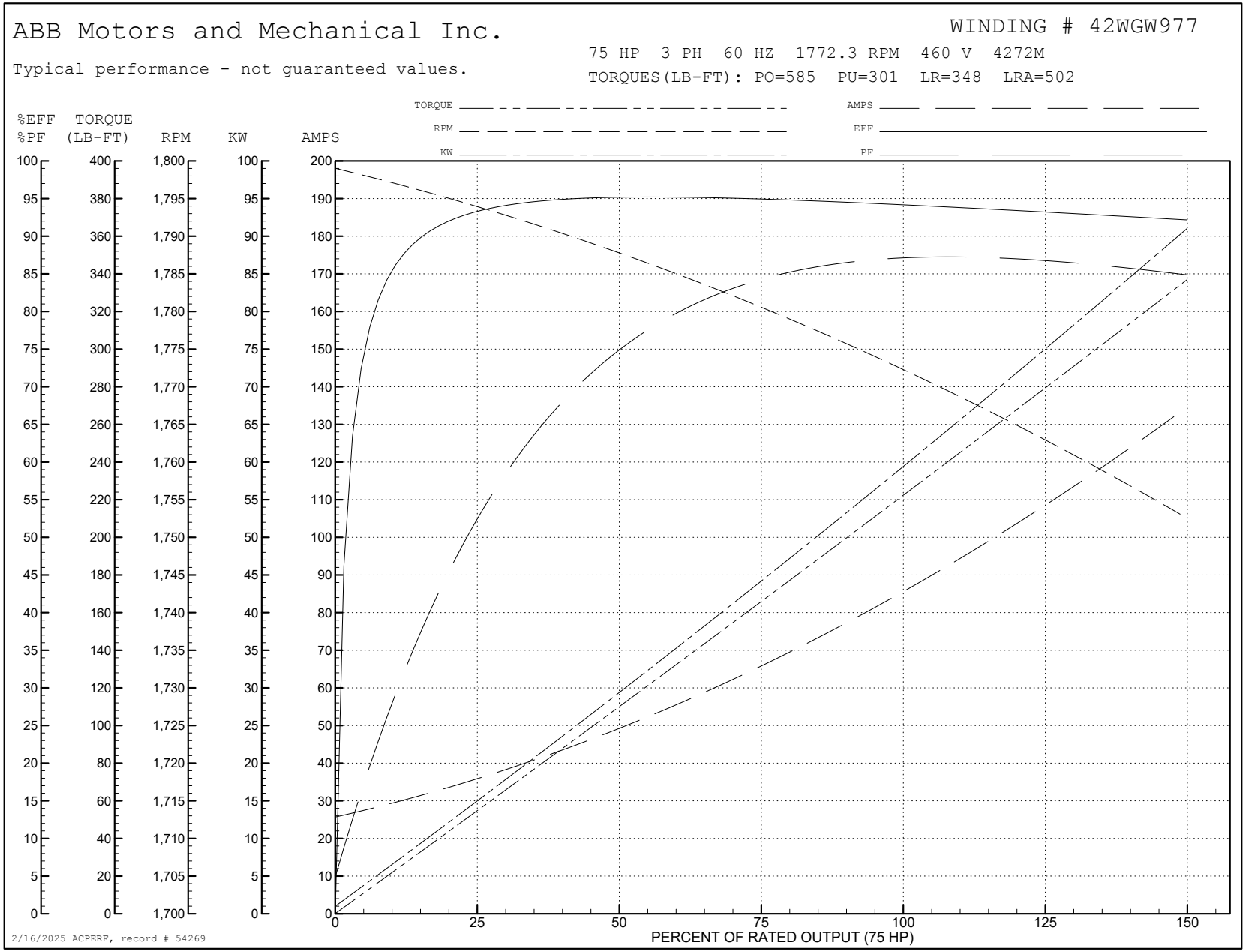


ABB Motors and Mechanical Inc.
WINDING # 42WGW977
Typical performance - not guaranteed values.
75 HP 3 PH 60 HZ 1772.3 RPM 460 V 4272M
TORQUES(LB-FT): PO=585 PU=301 LR=348 LRA=502
TORQUE
RPM
KW
AMPS
EFF
PF
%EFF
%PF
TORQUE (LB-FT)
RPM
KW
AMPS
2/16/2025 ACPERF, record # 54269
PERCENT OF RATED OUTPUT (75 HP)

AC Induction Motor Performance Data
Record # 54270
Typical performance - not guaranteed values

Winding: 42WGW977-R001	**Type:** 4272M	**Enclosure:** OPSB

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. @ 25ºC**	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-FT2

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

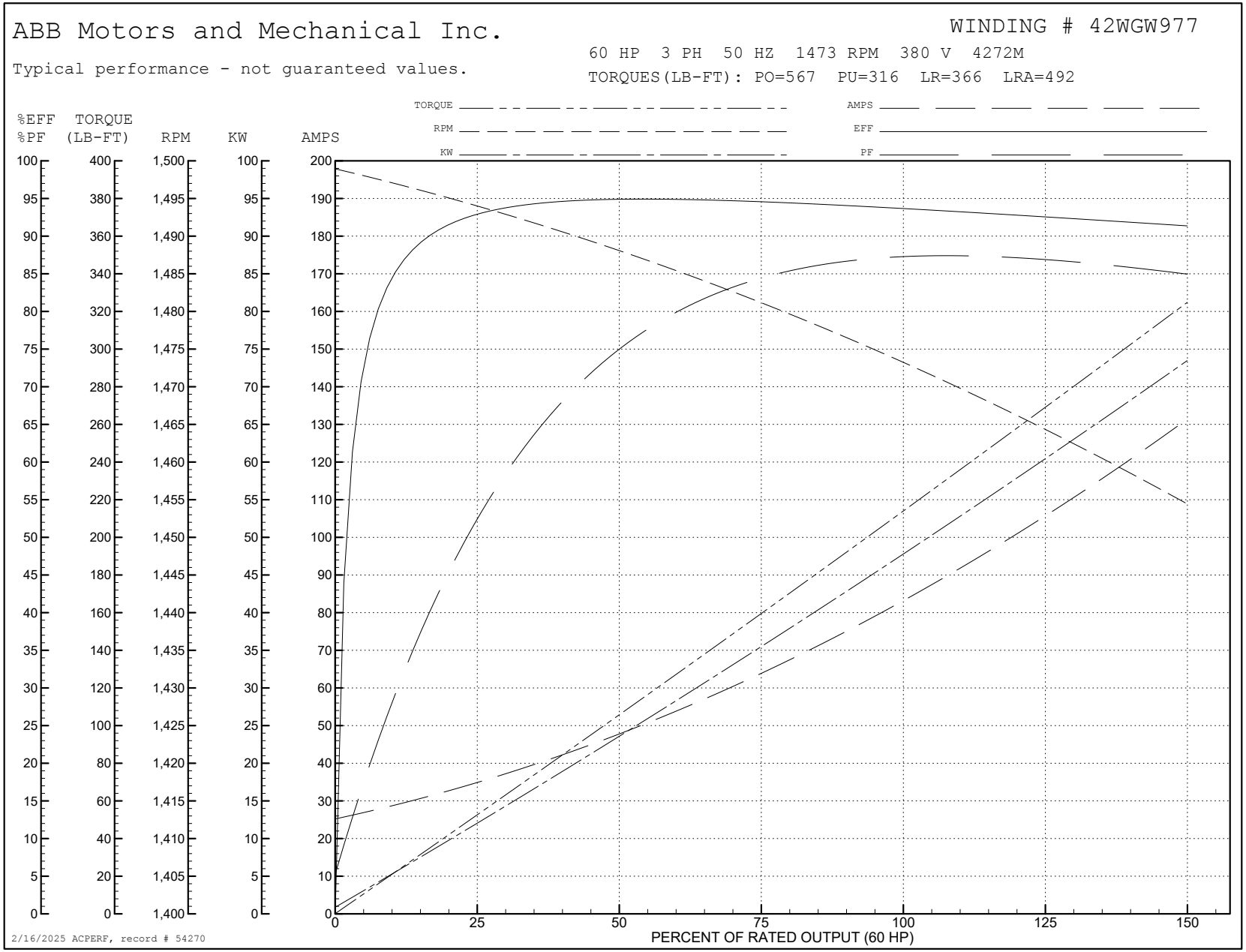
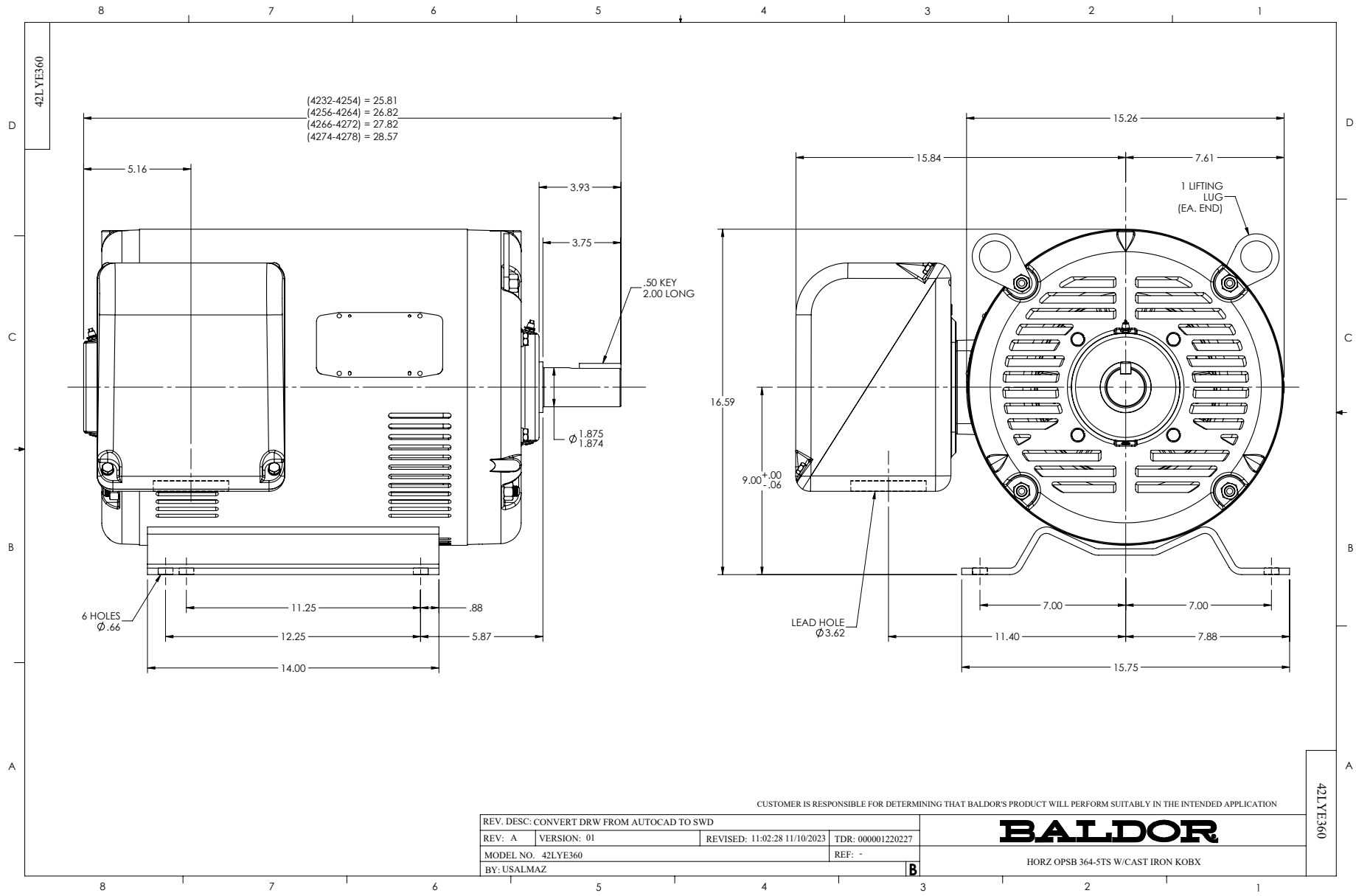
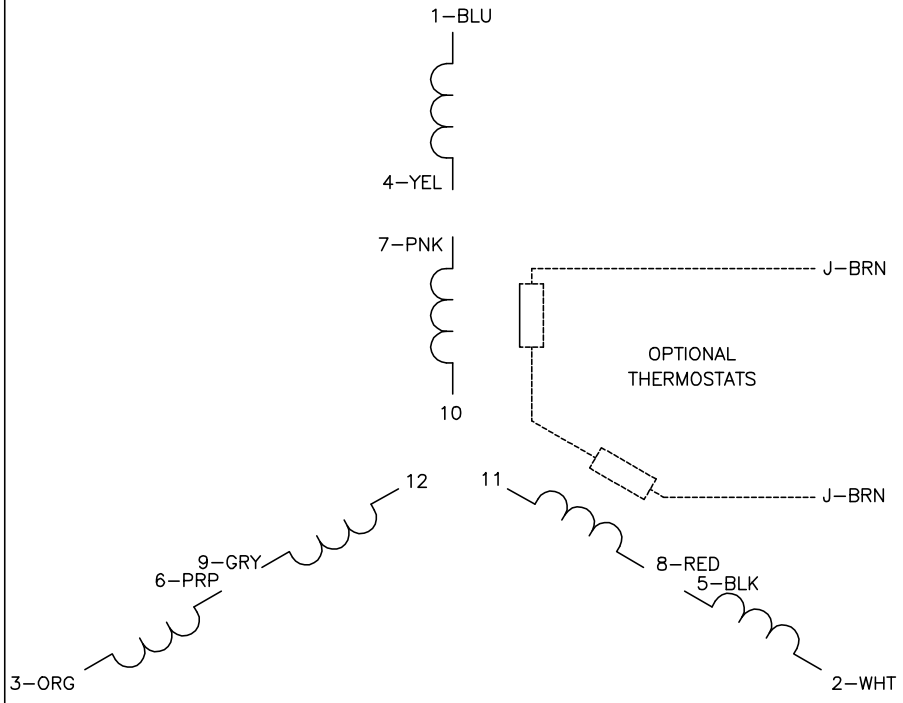
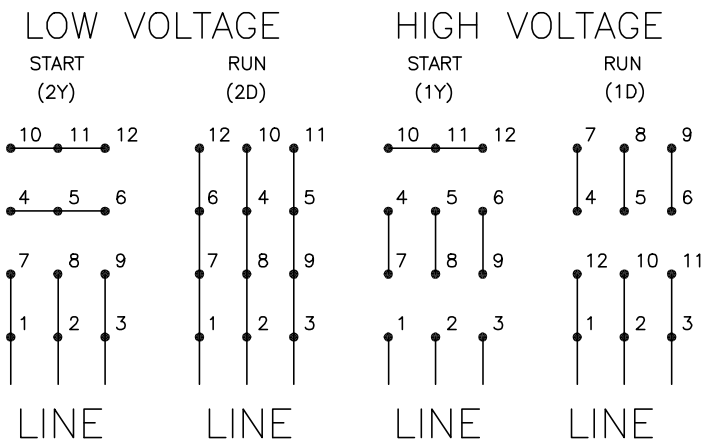


ABB Motors and Mechanical Inc.
WINDING # 42WGW977
60 HP 3 PH 50 HZ 1473 RPM 380 V 4272M
Typical performance - not guaranteed values.
TORQUES(LB-FT): PO=567 PU=316 LR=366 LRA=492
TORQUE
RPM
KW
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
KW
AMPS
PERCENT OF RATED OUTPUT (60 HP)
2/16/2025 ACPERF, record # 54270


42LYE360
(4232-4254) = 25.81
(4256-4264) = 26.82
(4266-4272) = 27.82
(4274-4278) = 28.57
5.16
3.93
3.75
.50 KEY
2.00 LONG
Ø1.875
1.874
6 HOLES
Ø.66
11.25
.88
12.25
5.87
14.00
15.26
15.84
7.61
1 LIFTING
LUG
(EA. END)
16.59
9.00 +.00 -.06
LEAD HOLE
Ø3.62
7.00
7.00
11.40
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: A
VERSION: 01
REVISED: 11:02:28 11/10/2023
TDR: 000001220227
MODEL NO. 42LYE360
REF: -
BY: USALMAZ
B
BALDOR
HORZ OPSB 364-5TS W/CAST IRON KOBX
42LYE360

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: –		

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

SH 1 of 1