

**BALDOR • RELIANCE**

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# Customer information packet

## FPM2549T

75//60HP, 3535//2940RPM, 3PH, 60//50HZ, 364T

## Specifications

Enclosure	OPSB
Frame	364TS
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	3000 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	84.000 A @ 460.0 V 82.000 A @ 380.0 V 168.000 A @ 230.0 V 164.000 A @ 190.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
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.	42WGW976
Layout	42LYE360
Eff. date	07-24-2023
CD Diagram	CD0104
Poles	02
Leads	12#6
Proprietary	False
Created date	03-20-2017

Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	82.0 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 @ 6 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4250M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	27.94 IN
Power Factor	90
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	2940 rpm 3535 rpm
Speed Code	Single Speed
Starting Method	Wye Start - Delta Run
Thermal Device - Bearing	None

<b>Thermal Device - Winding</b>	None
<b>Vibration Sensor Indicator</b>	No Vibration Sensor
<b>Winding Thermal 1</b>	None
<b>Winding Thermal 2</b>	None

**Nameplate**

**NP3454L**

<b>CAT.NO.</b>	FPM2549T	<b>CUST P/N</b>		<b>I.P.</b>	23
<b>SPEC.</b>	42E360W976H2	<b>SER.NO.</b>		<b>FRAME</b>	364TS
<b>HZ</b>	60	<b>HP</b>	75	<b>RPM</b>	3535
				<b>HZ</b>	50
				<b>HP</b>	60
				<b>RPM</b>	2940
<b>VOLTS</b>	230/460	<b>CODE</b>	F	<b>VOLTS</b>	190/380
		<b>CODE</b>	F		
<b>AMPS</b>	168/84	<b>DES</b>	B	<b>AMPS</b>	164/82
		<b>DES</b>	B		
<b>EFF</b>	93	<b>SER.F.</b>	1.15	<b>PF</b>	90
				<b>EFF</b>	93
				<b>SER.F.</b>	1.15
				<b>PF</b>	90
<b>RATING</b>	40C AMB-CONT	<b>DE BRG</b>	6313	<b>GREASE</b>	POLYREX EM
<b>BLANK</b>		<b>ODE BRG</b>	6311	<b>MTR. WT.</b>	485
		<b>CLASS</b>	F	<b>PH</b>	3
		<b>ENCL</b>	OPSB	<b>CC</b>	010A
<b>HTR-VOLTS</b>		<b>HTR-AMPS</b>		<b>HTR-WATTS</b>	

**AC Induction Motor Performance Data**

Record # 54693

Typical performance - not guaranteed values

<b>Winding: 42WGW976-R001</b>		<b>Type: 4250M</b>		<b>Enclosure: OPSB</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	75//60		<b>Full Load Torque</b>	112 LB-FT	
<b>Volts</b>	230/460//190/380		<b>Start Configuration</b>	direct on line	
<b>Full Load Amps</b>	168/84//164/82		<b>Breakdown Torque</b>	381 LB-FT	
<b>R.P.M.</b>	3535//2940		<b>Pull-up Torque</b>	111 LB-FT	
<b>Hz</b>	60//50	<b>Phase</b>	3	<b>Locked-rotor Torque</b>	148 LB-FT
<b>NEMA Design Code</b>	<b>B KVA Code</b>		F	<b>Starting Current</b>	509 A
<b>Service Factor (S.F.)</b>			1.15	<b>No-load Current</b>	19.8 A
<b>NEMA Nom. Eff.</b>	93	<b>Power Factor</b>	90	<b>Line-line Res. @ 25°C</b>	0.092782 Ω
<b>Rating - Duty</b>			40C AMB-CONT	<b>Temp. Rise @ Rated Load</b>	41°C
<b>S.F. Amps</b>				<b>Temp. Rise @ S.F. Load</b>	52°C
				<b>Locked-rotor Power Factor</b>	21.3

**Load Characteristics 460 V, 60 Hz, 75 HP**

<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>S.F.</b>
<b>Power Factor</b>	67	84	89	90	90	89	90
<b>Efficiency</b>	92.4	94.5	94.5	93.8	92.8	91.5	93.2
<b>Speed</b>	3584.7	3571.7	3556.4	3538.6	3518	3495.6	3526
<b>Line amperes</b>	28.3	44.4	63	83.9	106	130	97.2

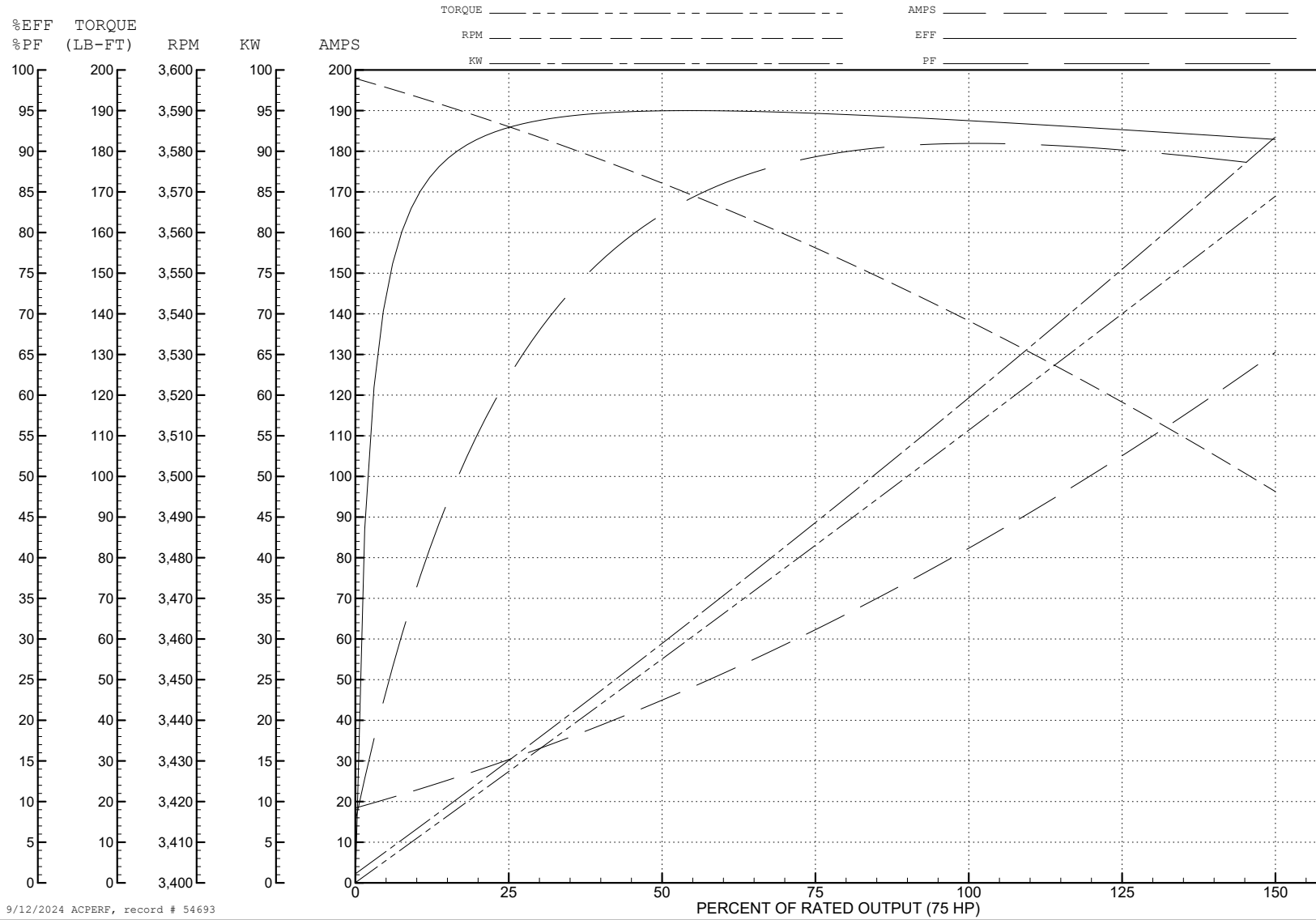
ABB Motors and Mechanical Inc.

WINDING # 42WGW976

Typical performance - not guaranteed values.

75 HP 3 PH 60 HZ 3538.6 RPM 460 V 4250M

TORQUES (LB-FT): PO=381 PU=111 LR=148 LRA=509



9/12/2024 ACPERF, record # 54693

**AC Induction Motor Performance Data**

Record # 54695

Typical performance - not guaranteed values

Winding: 42WGW976-R001		Type: 4250M	Enclosure: OPSB			
<b>Nameplate Data</b>			<b>380 V, 50 Hz: High Voltage Connection</b>			
Rated Output (HP)	75//60		Full Load Torque	108 LB-FT		
Volts	230/460//190/380		Start Configuration	direct on line		
Full Load Amps	168/84//164/82		Breakdown Torque	368 LB-FT		
R.P.M.	3535//2940		Pull-up Torque	118 LB-FT		
Hz	60//50	Phase	3	Locked-rotor Torque	157 LB-FT	
NEMA Design Code	B		KVA Code	F	Starting Current	498 A
Service Factor (S.F.)	1.15		No-load Current	19.2 A		
NEMA Nom. Eff.	93	Power Factor	90		Line-line Res. @ 25°C	0.0928 Ω
Rating - Duty	40C		AMB-CONT	Temp. Rise @ Rated Load	40°C	
S.F. Amps				Temp. Rise @ S.F. Load	50°C	
				Locked-rotor Power Factor	24	
				Rotor inertia	3.91 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	68	84	89	90	90	89	90
Efficiency	90.6	93.4	93.6	93.3	92.1	90.2	92.6
Speed	2985	2973	2958	2941	2922	2901	2930
Line amperes	27.6	43.3	61.5	81.8	103	127	94.5



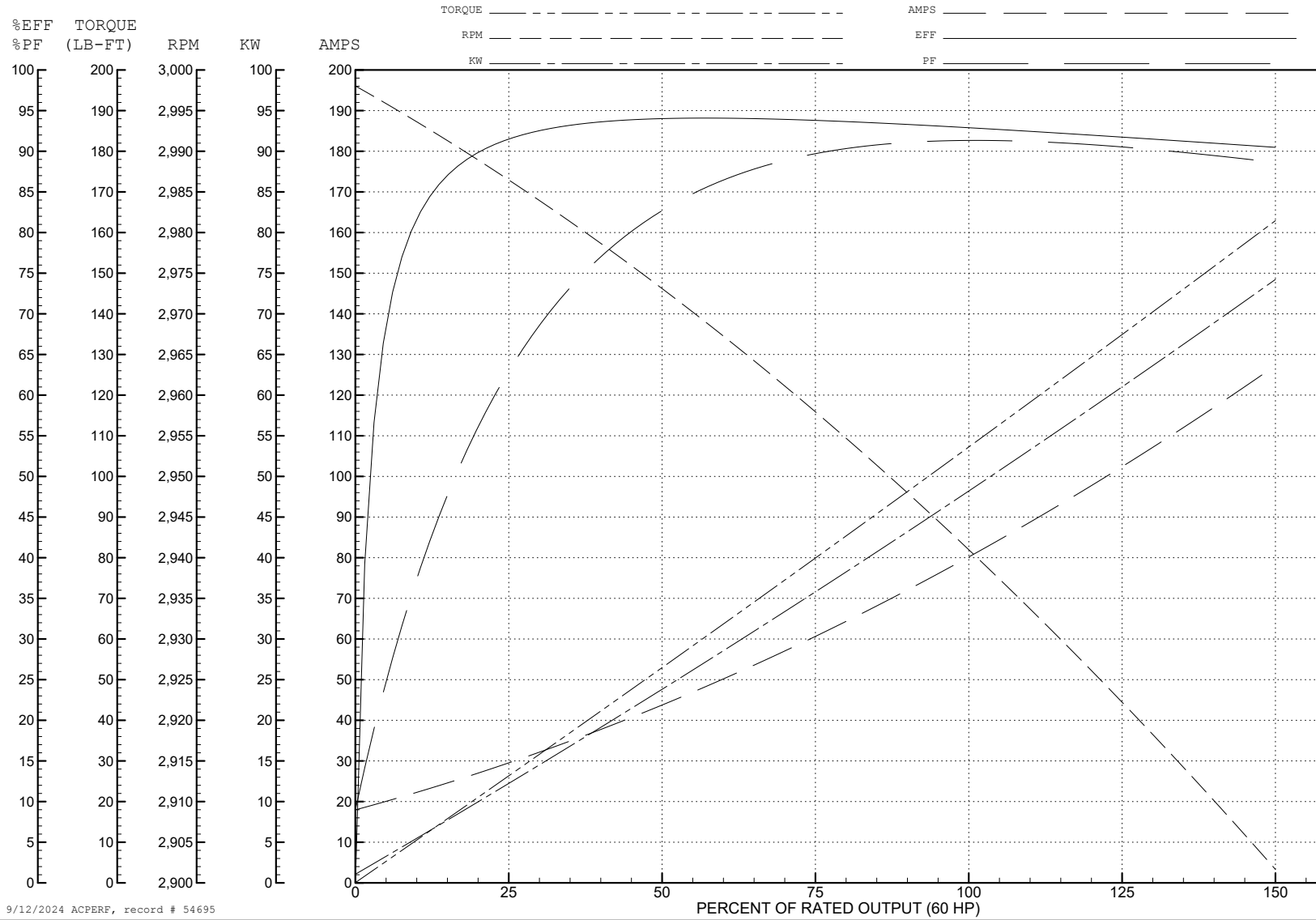
ABB Motors and Mechanical Inc.

WINDING # 42WGW976

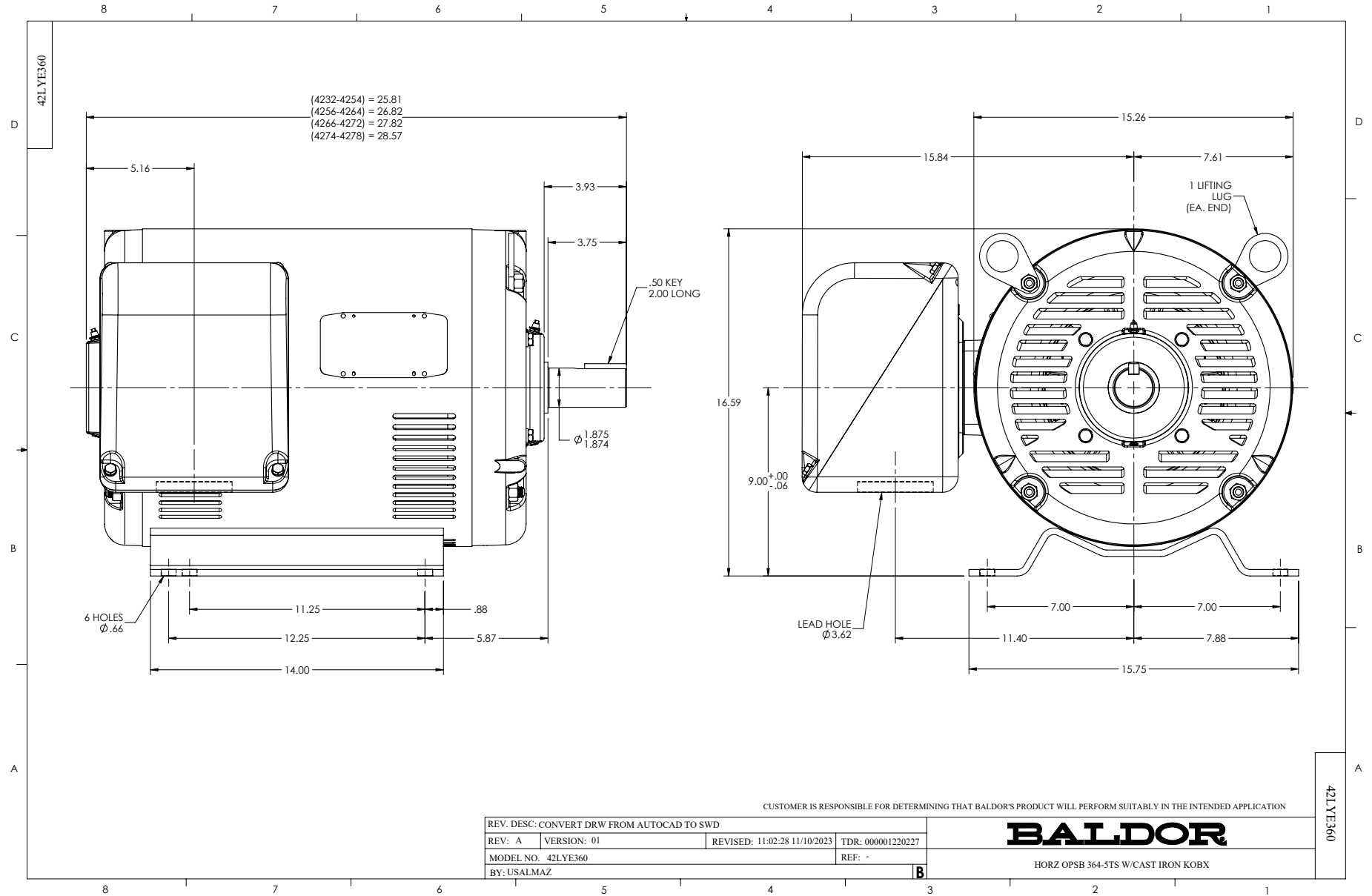
60 HP 3 PH 50 HZ 2941 RPM 380 V 4250M

Typical performance - not guaranteed values.

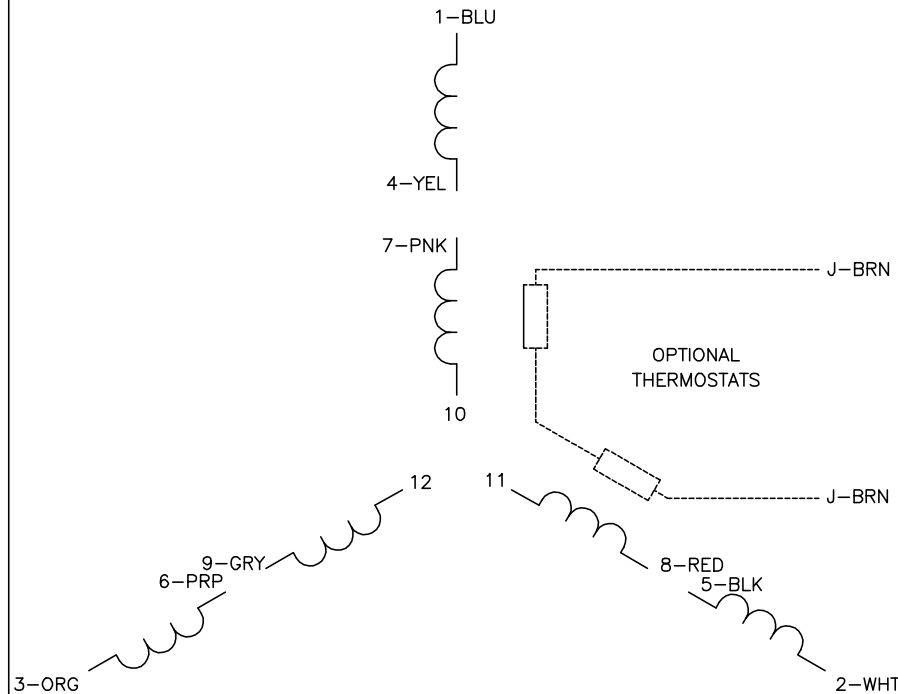
TORQUES (LB-FT): PO=368 PU=118 LR=157 LRA=498



9/12/2024 ACPERF, record # 54695

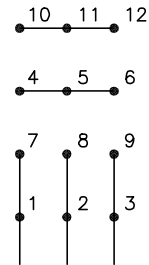


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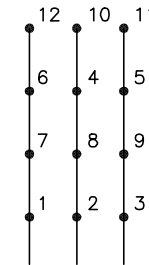
LOW VOLTAGE

START (2Y)



LINE

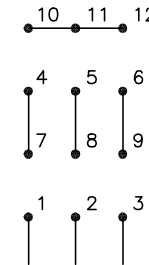
RUN (2D)



LINE

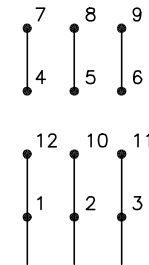
HIGH VOLTAGE

START (1Y)



LINE

RUN (1D)



LINE

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

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REV. LTR: D	VERSION: 01	TDR: 000001099922
FILE: \AAA\00008\377	REVISED: 09:02:55 02/19/2019	BY: ENBRIRO
MTL: -	© □	

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

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