

BALDOR® • RELIANCE 

Product Information Packet

FPM2546T

60//50HP,3520//2920RPM,3PH,60//50HZ,326T

| Part Detail | | | | | | | |
|-------------|-------|-------------|------------|-------------|--------|---------------|------------|
| Revision: | L | Status: | PRD/A | Change #: | | Proprietary: | No |
| Type: | AC | Elec. Spec: | 40WGX318 | CD Diagram: | CD0104 | Mfg Plant: | |
| Mech. Spec: | 40H07 | Layout: | 40LYH007 | Poles: | 02 | Created Date: | 09-16-2015 |
| Base: | RG | Eff. Date: | 08-22-2018 | Leads: | 12#8 | | |

| Specs | | | |
|---------------------------------|-------------------|--------------------------------|-----------------------|
| Catalog Number: | FPM2546T | Front Shaft Indicator: | None |
| Enclosure: | ODP | Heater Indicator: | No Heater |
| Frame: | 326TS | Insulation Class: | F |
| Frame Material: | Steel | Inverter Code: | Not Inverter |
| Output @ Frequency: | 50.000 HP @ 50 HZ | KVA Code: | G |
| | 60.000 HP @ 60 HZ | Lifting Lugs: | Standard Lifting Lugs |
| Synchronous Speed @ Frequency: | 3600 RPM @ 60 HZ | Locked Bearing Indicator: | No 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: | 4062M |
| Agency Approvals: | CSA | Mounting Arrangement: | F1 |
| | CSA EEV | Power Factor: | 89 |
| | 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 |

| | | | |
|---------------------------------------|---------------------------|------------------------------------|-----------------------|
| Bearing Grease Type: | Polyrex EM (-20F +300F) | Shaft Extension Location: | Pulley End |
| Blower: | None | Shaft Ground Indicator: | No Shaft Grounding |
| Current @ Voltage: | 69.000 A @ 380.0 V | Shaft Rotation: | Reversible |
| | 68.000 A @ 460.0 V | Shaft Slinger Indicator: | No Slinger |
| | 138.000 A @ 190.0 V | Speed Code: | Single Speed |
| | 136.000 A @ 230.0 V | Motor Standards: | NEMA |
| Design Code: | B | Starting Method: | Wye Start - Delta Run |
| Drip Cover: | No Drip Cover | Thermal Device - Bearing: | None |
| Duty Rating: | CONT | Thermal Device - Winding: | None |
| Electrically Isolated Bearing: | Not Electrically Isolated | Vibration Sensor Indicator: | No Vibration Sensor |
| Feedback Device: | NO FEEDBACK | Winding Thermal 1: | None |
| Front Face Code: | Standard | Winding Thermal 2: | None |

| Nameplate NP3454L | | | | | | | | | | | |
|-------------------|--------------|----------|------|-----------|------|-------|---------|----------|------------|------|------|
| CAT.NO. | FPM2546T | | | CUST P/N | | | | I.P. | 23 | | |
| SPEC. | 40H007X318H2 | | | SER.NO. | | | | FRAME | 326TS | | |
| HZ | 60 | HP | 60 | RPM | 3520 | HZ | 50 | HP | 50 | RPM | 2920 |
| VOLTS | 230/460 | | | CODE | G | VOLTS | 190/380 | | | CODE | F |
| AMPS | 136/68 | | | DES | B | AMPS | 138/69 | | | DES | B |
| EFF | 93 | SER.F. | 1.15 | PF | 89 | EFF | 91.7 | SER.F. | 1.15 | PF | 89 |
| RATING | 40C AMB-CONT | | | DE BRG | 6312 | | | GREASE | POLYREX EM | | |
| BLANK | | | | ODE BRG | 6309 | | | MTR. WT. | 390 | | |
| | | | | CLASS | F | | | PH | 3 | | |
| | | | | ENCL | ODP | | | CC | 010A | | |
| HTR-VOLTS | | HTR-AMPS | | HTR-WATTS | | | | | | | |

| Parts List | | |
|-------------|--|----------|
| Part Number | Description | Quantity |
| SA307335 | SA 40H007X318H2 | 1.000 EA |
| RA294636 | RA 40H007X318H2 | 1.000 EA |
| HA6361A01 | LIFTING LUG FOR 37, 39 & 40 FRAME ZINC | 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 |
| 10CB3001 | CONDUIT BOX CAST W/2.500 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 |
| 40EP3200A02 | STD FREP OPEN 309 BRG | 1.000 EA |
| HA4051A00 | PLASTIC CAP FOR GREASE FITTING | 1.000 EA |
| HA3159A08 | THRUBOLT- .38-16 X 20.00 LONG STUD | 4.000 EA |
| MG1025R44 | WILKOFAS, 784.109, CARMINE RED #3002 | 0.050 GA |
| HW5100A11 | W3917-042 WVY WSHR (WB) | 1.000 EA |
| 40EP3201A01 | PU ENDPLATE, MACH - OPEN - FOR 312 BRG | 1.000 EA |
| HA4051A00 | PLASTIC CAP FOR GREASE FITTING | 1.000 EA |
| XY3816A12 | 3/8-16 FINISHED NUT | 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 |
| 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, MOBIL POLYREX EM - 124047 | 0.050 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 |
| 40AD2002B01 | LEXAN BAFFLE 40 FR OPEN | 1.000 EA |
| 40AD2002B01 | LEXAN BAFFLE 40 FR OPEN | 1.000 EA |
| LB1119N | WARNING LABEL | 1.000 EA |
| LC0104A01 | CONNECTION DIAGRAM | 1.000 EA |
| NP3454L | ALUM FIRE PUMP MOTOR(LEGACY/BALDOR ONLY) | 1.000 EA |
| 40PA1000 | PACKAGING GROUP | 1.000 EA |

AC Induction Motor Performance Data

Record # 55052 - Typical performance - not guaranteed values

| | | |
|-------------------------------|--------------------|------------------------|
| Winding: 40WGX318-R001 | Type: 4062M | Enclosure: OPSB |
|-------------------------------|--------------------|------------------------|

| Nameplate Data | | | | 460 V, 60 Hz: High Voltage Connection | |
|-----------------------|------------------|--------------|----|--|----------------|
| Rated Output (HP) | 60//50 | | | Full Load Torque | 89.6 LB-FT |
| Volts | 230/460//190/380 | | | Start Configuration | direct on line |
| Full Load Amps | 136/68//138/69 | | | Breakdown Torque | 205 LB-FT |
| R.P.M. | 3520//2920 | | | Pull-up Torque | 115 LB-FT |
| Hz | 60//50 | Phase | 3 | Locked-rotor Torque | 150 LB-FT |
| NEMA Design Code | B | KVA Code | G | Starting Current | 431 A |
| Service Factor (S.F.) | 1.15 | | | No-load Current | 16.9 A |
| NEMA Nom. Eff. | 93 | Power Factor | 89 | Line-line Res. @ 25°C | 0.11624 Ω |
| Rating - Duty | 40C AMB-CONT | | | Temp. Rise @ Rated Load | 47°C |
| S.F. Amps | | | | Temp. Rise @ S.F. Load | 60°C |
| | | | | Locked-rotor Power Factor | 22.2 |

Load Characteristics 460 V, 60 Hz, 60 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-----------------|--------|------|--------|--------|--------|--------|------|
| Power Factor | 65 | 83 | 88 | 89 | 90 | 89 | 90 |
| Efficiency | 92.1 | 94.1 | 93.9 | 93.1 | 92 | 90.6 | 92.4 |
| Speed | 3581.9 | 3565 | 3545.4 | 3523.9 | 3501.1 | 3473.4 | 3510 |
| Line amperes | 23.8 | 36.1 | 50.8 | 67.6 | 85.1 | 104 | 78.1 |

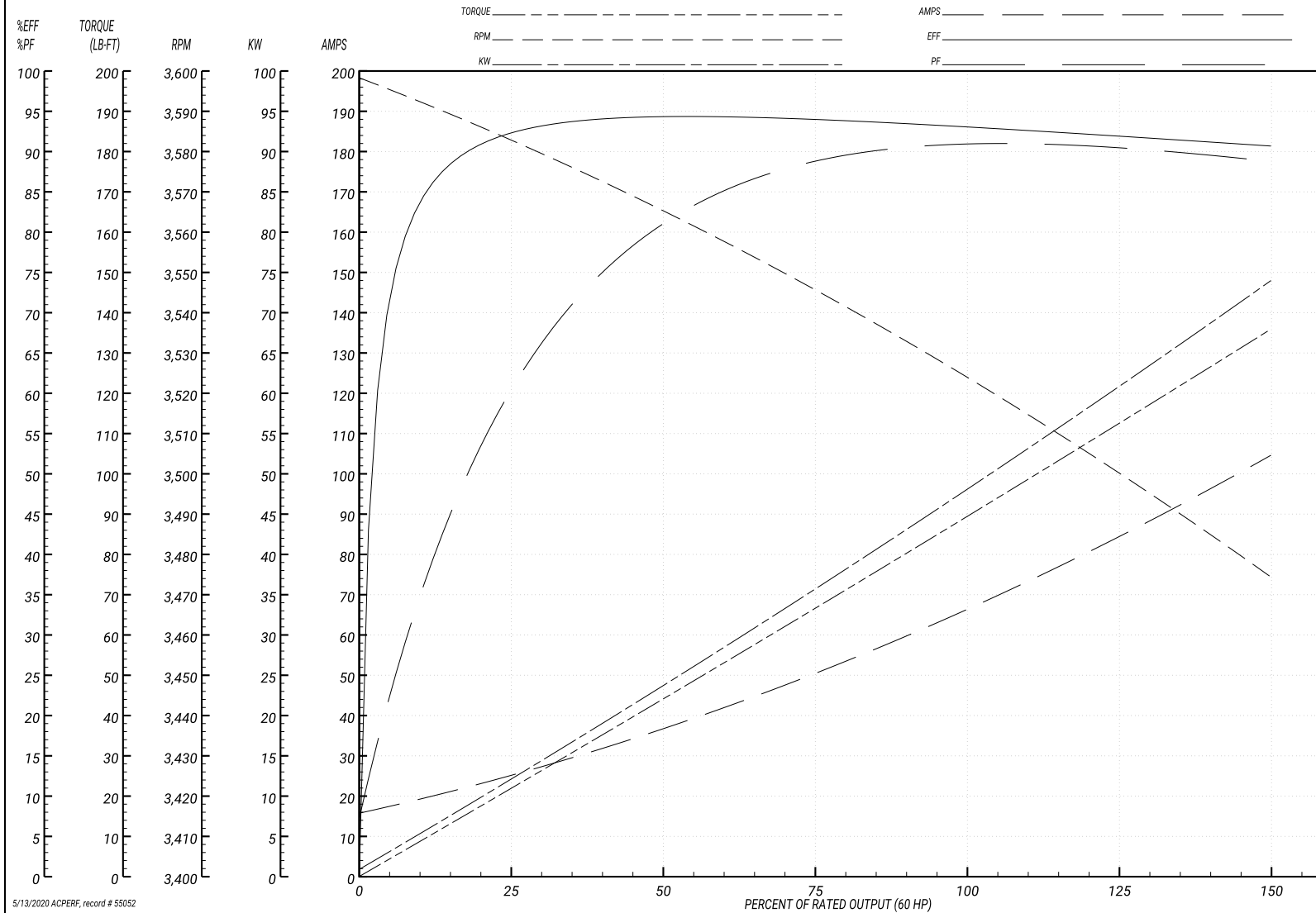
Performance Graph at 460V, 60Hz, 60.0HP Typical performance - Not guaranteed values

ABB Motors and Mechanical Inc.

WINDING # 40WGX318

Typical performance - not guaranteed values.

60 HP 3 PH 60 HZ 3523.9 RPM 460 V 4062M
 TORQUES(LB-FT): PO=205 PU=115 LR=150 LRA=431



AC Induction Motor Performance Data

Record # 55053 - Typical performance - not guaranteed values

| | | |
|-------------------------------|--------------------|------------------------|
| Winding: 40WGX318-R001 | Type: 4062M | Enclosure: OPSB |
|-------------------------------|--------------------|------------------------|

| Nameplate Data | | | | 380 V, 50 Hz: High Voltage Connection | |
|-----------------------|------------------|--------------|----|--|-------------------------|
| Rated Output (HP) | 60//50 | | | Full Load Torque | 89.9 LB-FT |
| Volts | 230/460//190/380 | | | Start Configuration | direct on line |
| Full Load Amps | 136/68//138/69 | | | Breakdown Torque | 198 LB-FT |
| R.P.M. | 3520//2920 | | | Pull-up Torque | 122 LB-FT |
| Hz | 60//50 | Phase | 3 | Locked-rotor Torque | 159 LB-FT |
| NEMA Design Code | B | KVA Code | G | Starting Current | 422 A |
| Service Factor (S.F.) | 1.15 | | | No-load Current | 16.5 A |
| NEMA Nom. Eff. | 93 | Power Factor | 89 | Line-line Res. @ 25°C | 0.115 Ω |
| Rating - Duty | 40C AMB-CONT | | | Temp. Rise @ Rated Load | 48°C |
| S.F. Amps | | | | Temp. Rise @ S.F. Load | 61°C |
| | | | | Locked-rotor Power Factor | 24.9 |
| | | | | Rotor inertia | 2.66 LB-FT ² |

Load Characteristics 380 V, 50 Hz, 50 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor | 67 | 84 | 89 | 90 | 90 | 89 | 90 |
| Efficiency | 91 | 93.3 | 93.1 | 92.2 | 91.5 | 89.2 | 91.8 |
| Speed | 2982 | 2965 | 2946 | 2925 | 2902 | 2875 | 2911 |
| Line amperes | 23.7 | 36.3 | 51.4 | 68.6 | 86.8 | 107 | 79.5 |

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

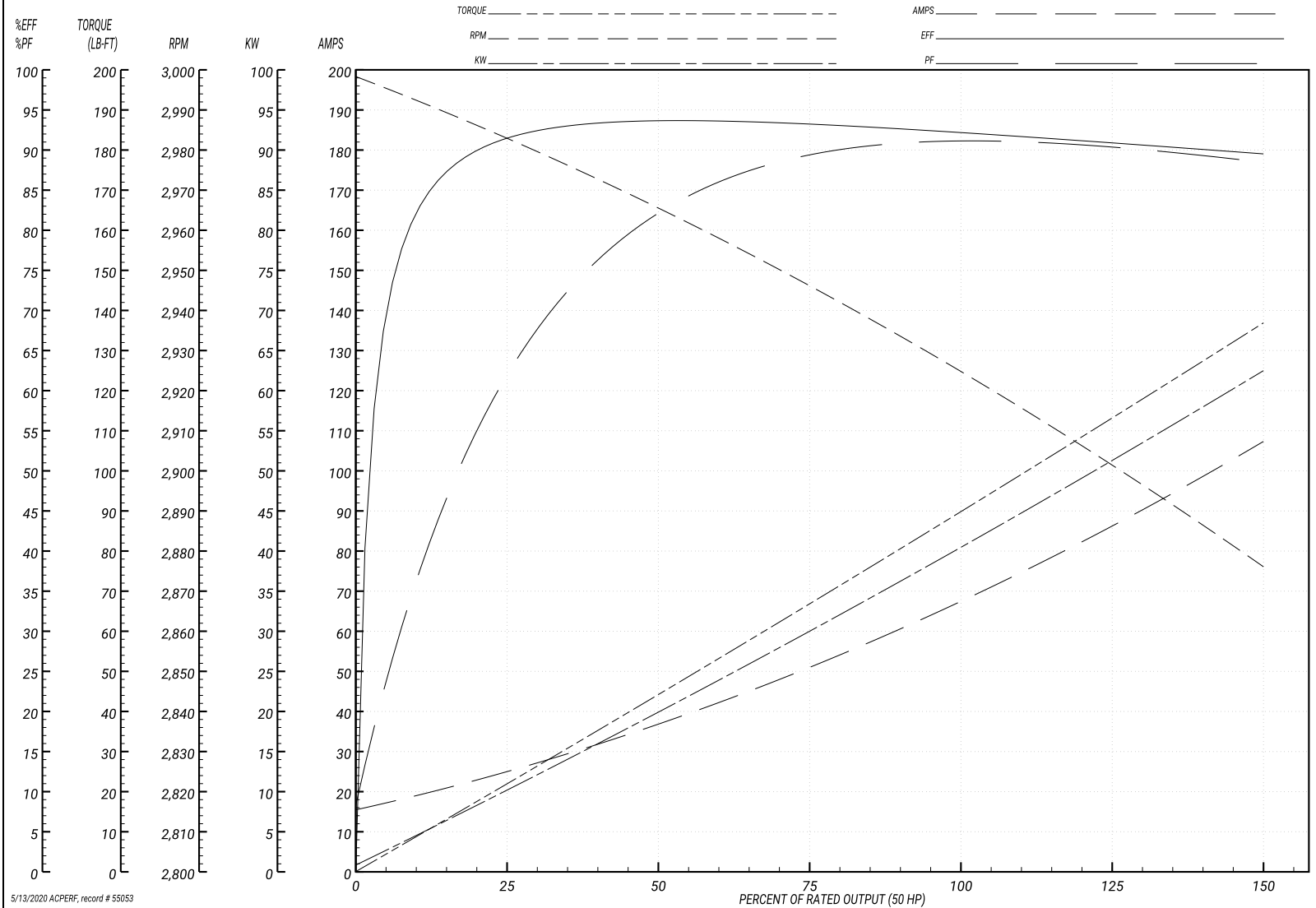
ABB Motors and Mechanical Inc.

WINDING # 40WGX318

Typical performance - not guaranteed values.

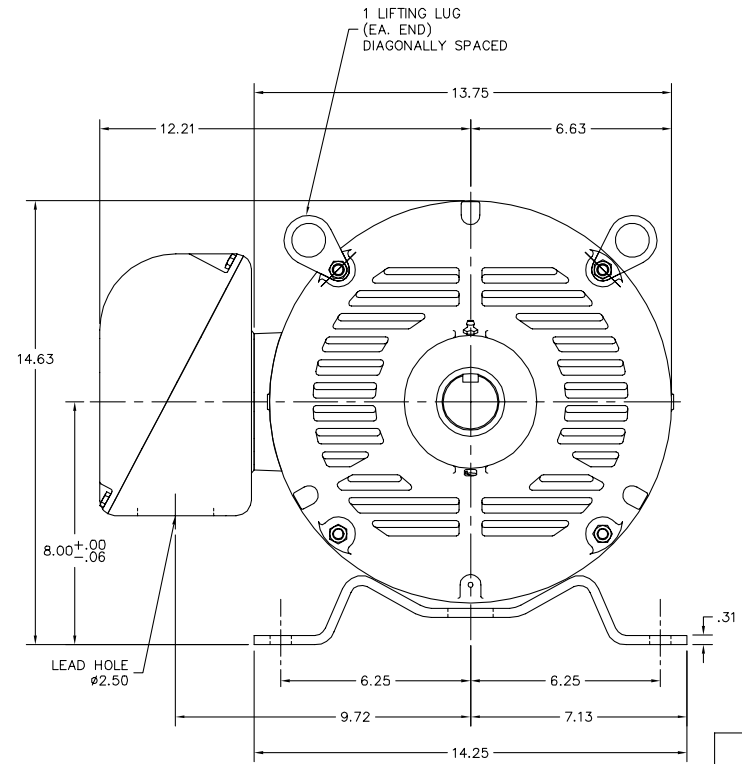
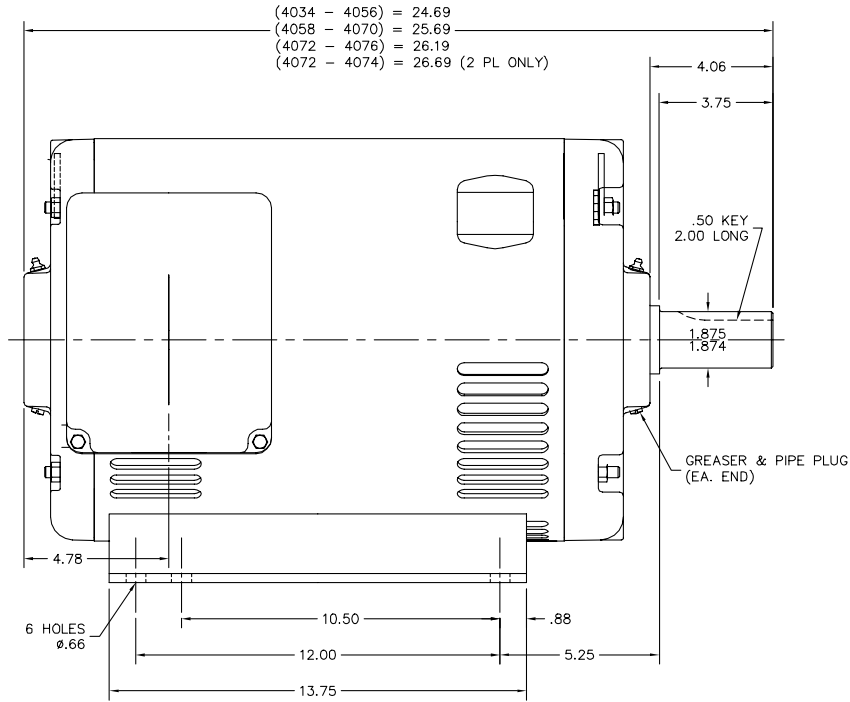
50 HP 3 PH 50 HZ 2925 RPM 380 V 4062M

TORQUES(LB-FT): PO=198 PU=122 LR=159 LRA=422



5/13/2020 ACPERF, record # 55053

40LYH007



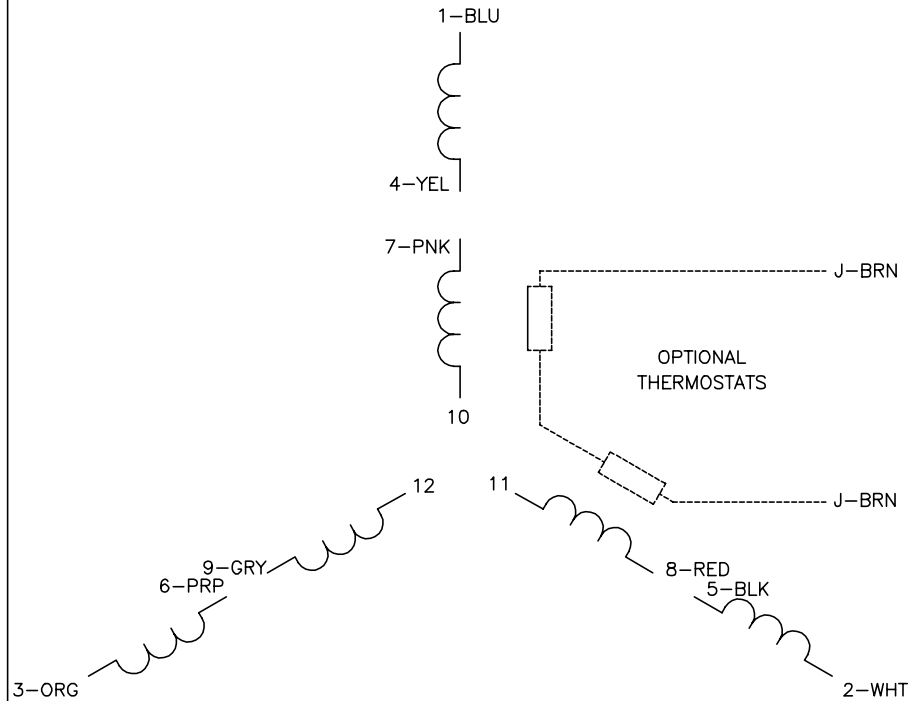
40LYH007

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

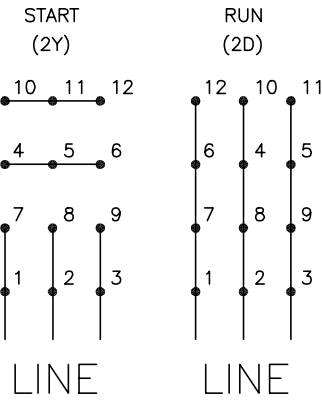
| | | |
|--------------------------------|------------------------------|-------------------|
| REV. DESC: UPDATED DESCRIPTION | | |
| REV. LTR: M | VERSION: 06 | TDR: 000000855149 |
| FILE: \AAA\00008\628 | REVISED: 11:27:19 05/23/2014 | BY: ENNINDO |
| MTL: - | | |

BALDOR
 HORZ OPSB 324-6TS
 SH 1 of 1

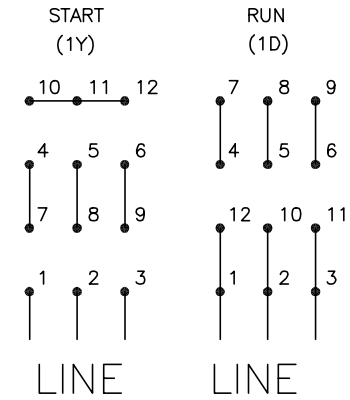
CD0104



LOW VOLTAGE



HIGH VOLTAGE



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: ENBRIRO |
| MTL: - | © □ | |

BALDOR - RELIANCE®

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

SH 1 of 1