

BALDOR® • RELIANCE 

Product Information Packet

VECP3581T-4

1HP,1765RPM,3PH,60HZ,143TC,0524M,TEFC,F1

| Part Detail | | | | | | | |
|-------------|--------|-------------|------------|-------------|--------|---------------|------------|
| Revision: | R | Status: | PRD/A | Change #: | | Proprietary: | No |
| Type: | AC | Elec. Spec: | 05WGW751 | CD Diagram: | CD0006 | Mfg Plant: | |
| Mech. Spec: | 05F006 | Layout: | 05LYF006 | Poles: | 04 | Created Date: | 02-20-2011 |
| Base: | N | Eff. Date: | 02-12-2019 | Leads: | 3#18 | | |

| Specs | | | |
|---------------------------------|-------------------------|--------------------------------|------------------------------|
| Catalog Number: | VECP3581T-4 | Insulation Class: | F |
| Enclosure: | TEFC | Inverter Code: | Inverter Ready |
| Frame: | 143TC | KVA Code: | N |
| Frame Material: | Iron | Lifting Lugs: | Standard Lifting Lugs |
| Output @ Frequency: | 1.000 HP @ 60 HZ | Locked Bearing Indicator: | Locked Bearing |
| Synchronous Speed @ Frequency: | 1800 RPM @ 60 HZ | Motor Lead Quantity/Wire Size: | 3 @ 18 AWG |
| Voltage @ Frequency: | 460.0 V @ 60 HZ | Motor Lead Exit: | Ko Box |
| XP Class and Group: | CLI GP A,B,C,D | Motor Lead Termination: | Flying Leads |
| XP Division: | Division II | Motor Type: | 0524M |
| Agency Approvals: | CSA EEV | Mounting Arrangement: | F1 |
| | UR | Power Factor: | 70 |
| | CSA | Product Family: | Chemical Processing (Not DC) |
| | CCSA US | Pulley End Bearing Type: | Ball |
| Auxillary Box: | No Auxillary Box | Pulley Face Code: | C-Face |
| Auxillary Box Lead Termination: | None | Pulley Shaft Indicator: | Standard |
| Base Indicator: | No Mounting | Rodent Screen: | None |
| Bearing Grease Type: | Polyrex EM (-20F +300F) | Shaft Extension Location: | Pulley End |
| Blower: | None | Shaft Ground Indicator: | No Shaft Grounding |

| | | | |
|---------------------------------------|---------------------------|------------------------------------|---------------------|
| Constant Torque Speed Range: | 1.2 | Shaft Rotation: | Reversible |
| Current @ Voltage: | 1.500 A @ 460.0 V | Shaft Slinger Indicator: | Shaft Slinger |
| Design Code: | B | Speed Code: | Single Speed |
| Drip Cover: | Drip Cover | Motor Standards: | NEMA |
| Duty Rating: | CONT | Starting Method: | Direct on line |
| Electrically Isolated Bearing: | Not Electrically Isolated | Thermal Device - Bearing: | None |
| Feedback Device: | NO FEEDBACK | Thermal Device - Winding: | None |
| Front Face Code: | Standard | Vibration Sensor Indicator: | No Vibration Sensor |
| Front Shaft Indicator: | None | Winding Thermal 1: | None |
| Heater Indicator: | No Heater | Winding Thermal 2: | None |
| | | XP Temp Code: | T4 |

Nameplate NP3258E

| | | | |
|---------------------|--------------|-------------|------|
| CAT.NO. | VECP3581T-4 | | |
| SPEC. | 05F006W751G1 | | |
| HP | 1 | TE | |
| VOLTS | 460 | | |
| AMP | 1.5 | | |
| RPM | 1765 | | |
| FRAME | 143TC | HZ | 60 |
| SER.F. | 1.15 | CODE | N |
| RATING | 40C AMB-CONT | | |
| SN | | | |
| DE | 6205 | ODE | 6205 |
| NEMA-NOM-EFF | 87.5 | PF | 70 |
| G.MIN.EFF | 85.5 | CC | 010A |
| T. CODE | T4 | T= | 135 |
| | | PH | 3 |
| | | CL | F |

| | |
|--------------------------|--------------------------------|
| Nameplate NP3261E | |
| SPEC. | 05F006W751G1 |
| D.E. BRG. | 25BC02XP30X |
| O.D.E. BRG. | 25BC02XP30X |
| GREASE | POLYREX EM |
| RPM MAX | 2700 |
| | MAX. KVAR N/A |
| BLANK | |
| INV. TYPE | PWM |
| T= | 135 |
| C HP FR | 60 |
| CT HZ FROM | 1.2 |
| VT HZ FROM | 0- |
| HTR-VOLTS | |
| HTR-WATTS | |
| C HP TO | 90 |
| CT HZ TO | 60 |
| VT HZ TO | 60 |
| HTR-AMPS | |
| | MAX. SPACE HEATER TEMP. |

| Parts List | | |
|--------------|--|----------|
| Part Number | Description | Quantity |
| SA217860 | SA 05F006W751G1 | 1.000 EA |
| RA205039 | RA 05F006W751G1 | 1.000 EA |
| 34FN3002B01 | EXTERNAL FAN, PLASTIC, .637/.639 HUB W/ | 1.000 EA |
| HW3201A05 | 3/8-16 EYEBOLT | 1.000 EA |
| 06CB1000A02G | CONDUIT BOX, MACH GRAY | 1.000 EA |
| RM1016 | LEAD SEPARATOR GASKET - 305/306 C.P.MOTO | 1.000 EA |
| 51XW2520A12 | SCREW, HEX SER SLT HD, ZN, 1/4-20 X .75 | 2.000 EA |
| 11XW1032G06 | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 EA |
| HW3001B01 | BRASS CUP WASHER, FOR #10 SCREW | 1.000 EA |
| 10XN2520S06 | 1/4 20X3/8 HX HD CAP S.S. | 2.000 EA |
| WD1000B16 | T&B CX70TN OR L70P TERMINAL LUG | 1.000 EA |
| 35EP1102B03G | FREP TEFC 205 BRG,GRSR,RLF,.125 NPT DRAI | 1.000 EA |
| HW4500A19 | 1/4-28X1/4 SLOTTED PLUG F/S | 1.000 EA |
| HW4500A17 | 317400 ALEMITE GREASE RELIEF | 1.000 EA |
| HA4054 | SHORT T-DRAIN FITTING, .125" N.P.T. | 1.000 EA |
| HW5100A05 | WVY WSHR F/205 & 304 BRGS | 1.000 EA |
| 35EP1329A16G | PUEP ENCL 143-5TC 205 BRG,GRSR,RLF,NPT D | 1.000 EA |
| HW4500A19 | 1/4-28X1/4 SLOTTED PLUG F/S | 1.000 EA |
| HW4500A17 | 317400 ALEMITE GREASE RELIEF | 1.000 EA |
| HA4054 | SHORT T-DRAIN FITTING, .125" N.P.T. | 1.000 EA |
| 51XN1032A20 | 10-32 X 1 1/4 HX WS SL SR | 2.000 EA |
| 06CB1502G | LIPPED CONDUIT BOX LID CAST, GRAY EPOXY | 1.000 EA |
| HA3100A28 | THRUBOLT 10-32 X 8.187 | 4.000 EA |
| 51XB1214A16 | 12-14X1.00 HXWSSLD SERTYB | 1.000 EA |

| Parts List (continued) | | |
|------------------------|--|----------|
| Part Number | Description | Quantity |
| 35FH1000A04G | FAN COVER 35FH1000 - (GRAY) | 1.000 EA |
| 10XN2520A18 | 1/4-20 X 1-1/8 HEX CAP SCREW. | 3.000 EA |
| HW1001A25 | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 3.000 EA |
| HW4600B32SP | V-RING SLINGER 1.000 X 1.540 X .24 VITON | 1.000 EA |
| WD4100A03 | DE-750 HEYCO PLUG 62MP0750 MICRO PLASTIC | 1.000 EA |
| 35FH4500A01 | DRIP COVER, STAMPED X - W/PRIMED | 1.000 EA |
| HA2001A13 | 35-10103 SPACER WELKER | 3.000 EA |
| 51XN1032A20 | 10-32 X 1 1/4 HX WS SL SR | 3.000 EA |
| 06GS1003 | GASKET, KOBX LID, 1/8" THICK BLACK NEOPR | 1.000 EA |
| 10XN2520A12 | 1/4-20 X 3/4 HEX HEAD CAP | 2.000 EA |
| HW1001A25 | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 2.000 EA |
| HA1005A03SP | SLINGER, OD 1.750, ID .938, 205 BRG | 1.000 EA |
| HW2501D13 | KEY, 3/16 SQ X 1.375 | 1.000 EA |
| HA7000A01 | KEY RETAINER 7/8" DIA SHAFT | 1.000 EA |
| LB1115N | LABEL,LIFTING DEVICE (ON ROLLS) | 1.000 EA |
| MJ5001A27 | 32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL | 0.001 QT |
| 85XU0407S04 | 4X1/4 U DRIVE PIN STAINLESS | 2.000 EA |
| LB1002N | LABEL,MARINE DUTY (ON ROLLS) | 1.000 EA |
| MJ1000A02 | GREASE, MOBIL POLYREX EM - 124047 | 0.050 LB |
| MG1025N19 | WILKOFASST, 778.50, RELIANCE BLUE-GREEN | 0.022 GA |
| LB1119N | WARNING LABEL | 1.000 EA |
| LC0006 | CONNECTION LABEL | 1.000 EA |
| LB1449 | DIV-2/NEC WARNING LABEL | 1.000 EA |
| NP3258E | SS CP SUPER-E DIV-2 UL CSA-C US EEV CC | 1.000 EA |

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| | | |
|-------------|---|----------|
| NP3261E | SS CP SUPER-E AUX DATA INFORMATION | 1.000 EA |
| 85XU0407S04 | 4X1/4 U DRIVE PIN STAINLESS | 2.000 EA |
| 36PA1000 | PKG GRP, PRINT PK1016A06 | 1.000 EA |
| PK3082 | STYROFOAM CRADLE | 1.000 EA |
| MN416A01 | TAG-INSTAL-MAINT no wire (1200/bx) 3/19 | 1.000 EA |

AC Induction Motor Performance Data

Record # 61030 - Typical performance - not guaranteed values

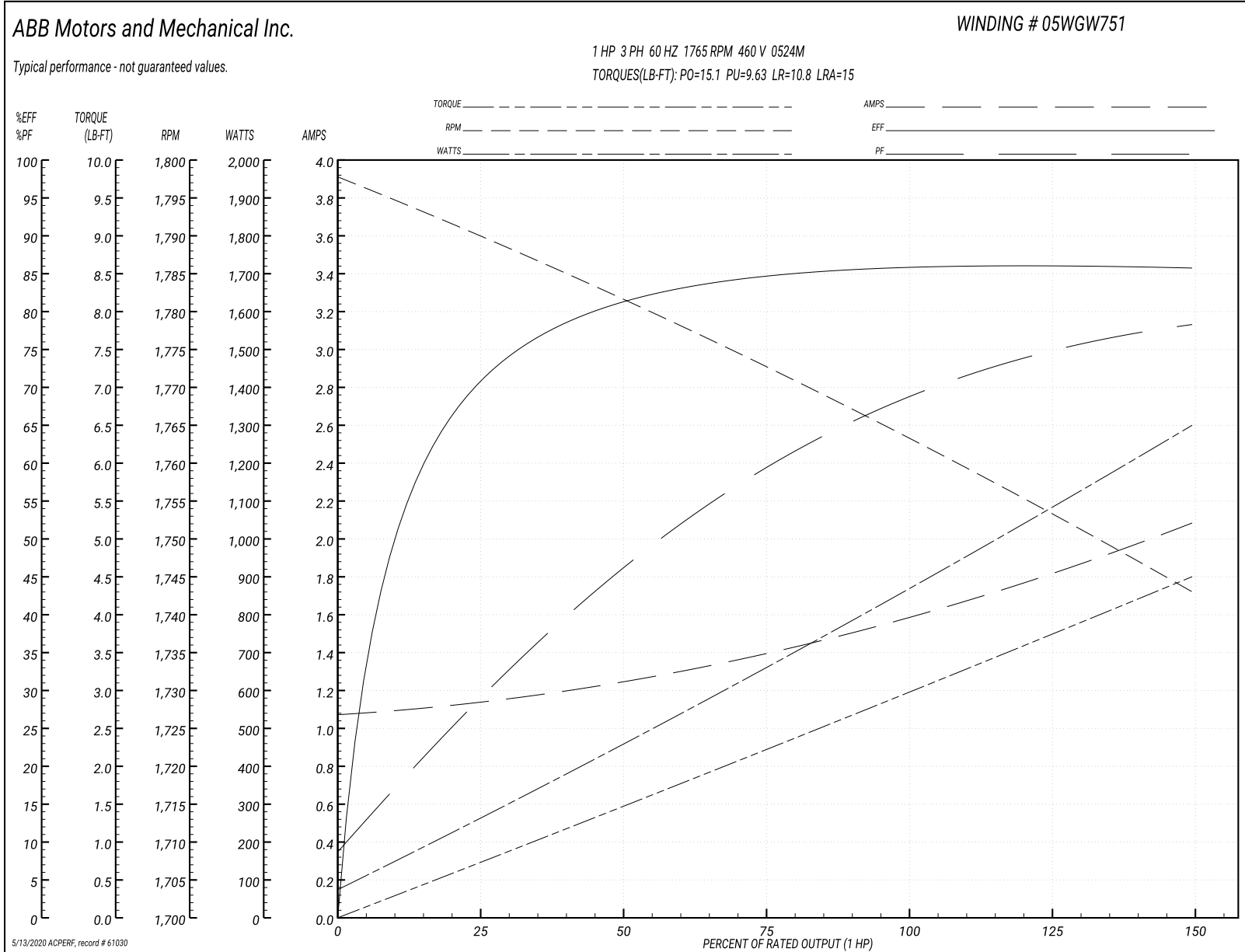
| | | |
|-------------------------------|--------------------|------------------------|
| Winding: 05WGW751-R098 | Type: 0524M | Enclosure: TENV |
|-------------------------------|--------------------|------------------------|

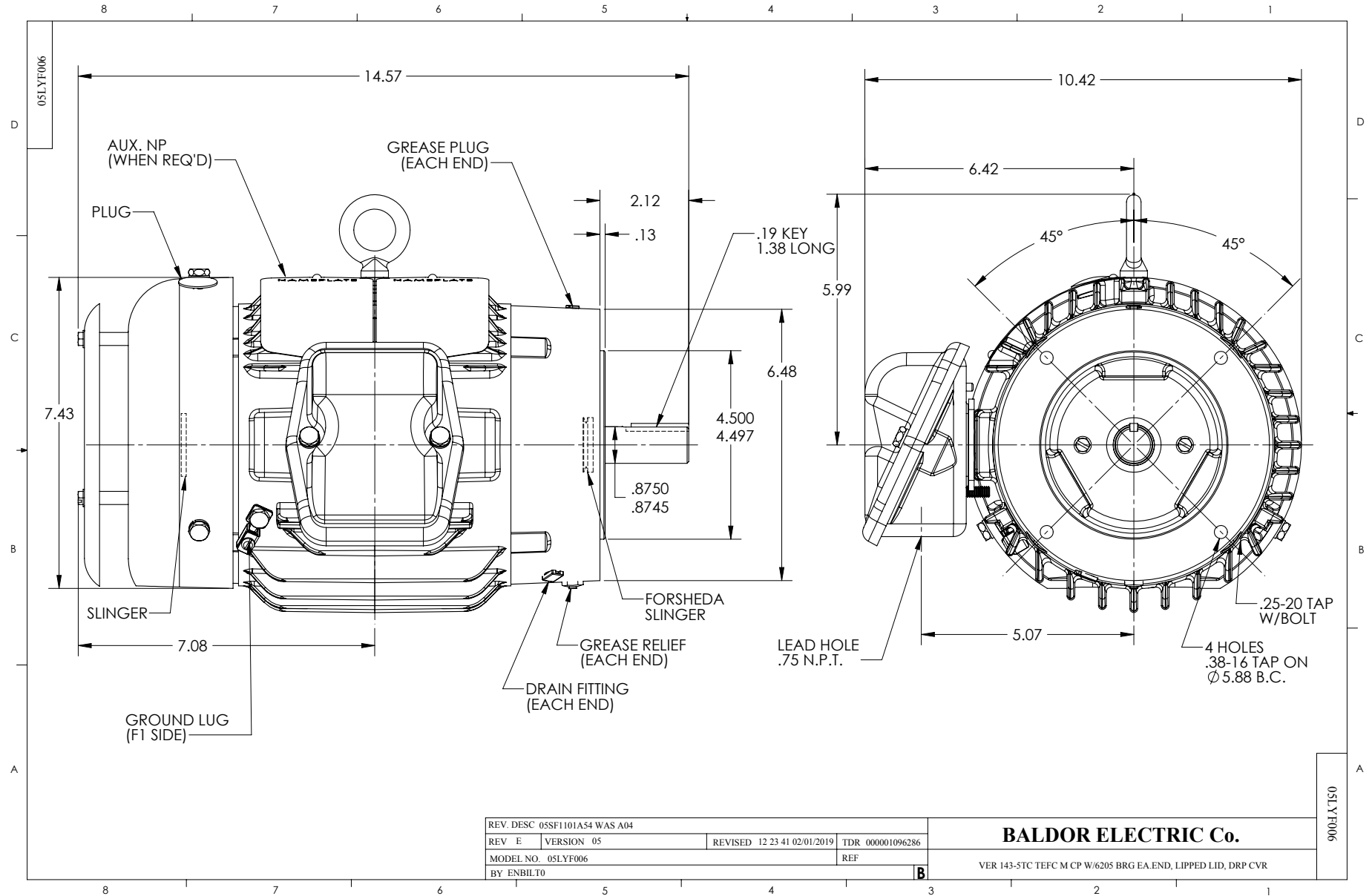
| Nameplate Data | | | | 460 V, 60 Hz: Single Voltage Motor | |
|-----------------------|--------------|--------------|----|---------------------------------------|----------------|
| Rated Output (HP) | 1 | | | Full Load Torque | 2.983 LB-FT |
| Volts | 460 | | | Start Configuration | direct on line |
| Full Load Amps | 1.5 | | | Breakdown Torque | 15.1 LB-FT |
| R.P.M. | 1765 | | | Pull-up Torque | 9.63 LB-FT |
| Hz | 60 | Phase | 3 | Locked-rotor Torque | 10.8 LB-FT |
| NEMA Design Code | B | KVA Code | N | Starting Current | 15 A |
| Service Factor (S.F.) | 1.15 | | | No-load Current | 1.08 A |
| NEMA Nom. Eff. | 87.5 | Power Factor | 70 | Line-line Res. @ 25°C | 11.599 Ω |
| Rating - Duty | 40C AMB-CONT | | | Temp. Rise @ Rated Load | 59°C |
| S.F. Amps | | | | Temp. Rise @ S.F. Load | 66°C |
| | | | | Locked-rotor Power Factor | 48.9 |

Load Characteristics 460 V, 60 Hz, 1 HP

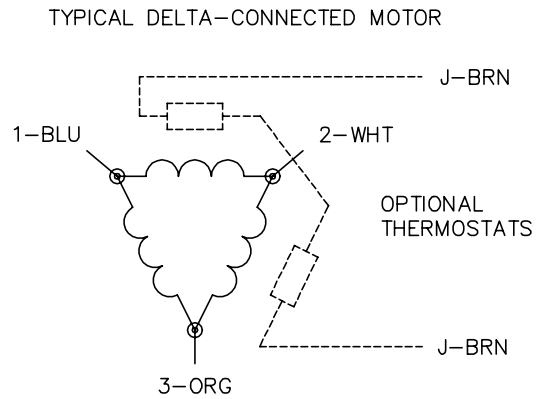
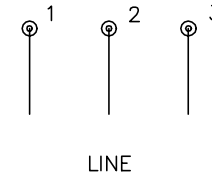
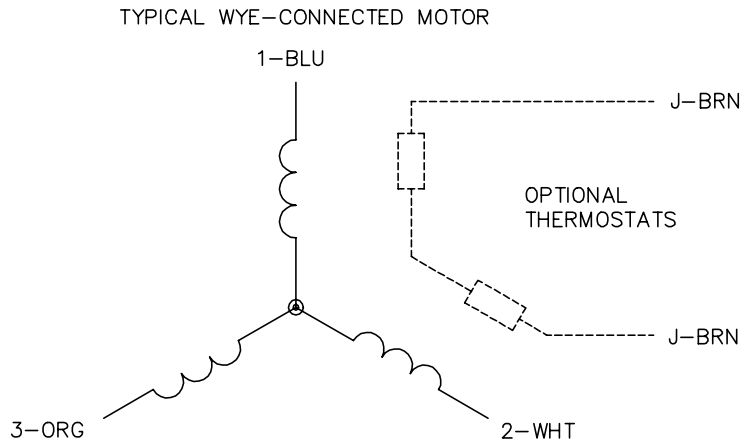
| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-----------------|--------|--------|--------|--------|--------|--------|------|
| Power Factor | 30 | 47 | 59 | 68 | 75 | 79 | 72 |
| Efficiency | 70.8 | 81.2 | 84.6 | 85.9 | 86.2 | 85.7 | 86.1 |
| Speed | 1789.8 | 1781.4 | 1773.1 | 1763.3 | 1753.7 | 1742.9 | 1758 |
| Line amperes | 1.13 | 1.24 | 1.39 | 1.6 | 1.81 | 2.08 | 1.73 |

Performance Graph at 460V, 60Hz, 1.0HP Typical performance - Not guaranteed values





CD0006



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

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|-----------------------------------|------------------------------|-------------------|
| REV. DESC: ADD CLASS CONN00000007 | | |
| REV. LTR: E | VERSION: 01 | TDR: 000001099922 |
| FILE: \AAA\00005\141 | REVISED: 10:24:49 02/19/2019 | BY: ENBRIRO |
| MTL: - | © □ | |

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3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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