

BALDOR® • RELIANCE 

Product Information Packet

ZDM2333T-5

15HP, 1765RPM, 3PH, 60HZ, 256TC, 0944M, TEBC, F

| Part Detail | | | | | | | |
|-------------|--------|-------------|------------|-------------|--------|---------------|------------|
| Revision: | F | Status: | PRD/A | Change #: | | Proprietary: | No |
| Type: | AC | Elec. Spec: | 09WGT124 | CD Diagram: | CD0006 | Mfg Plant: | |
| Mech. Spec: | 09F280 | Layout: | 09LYF280 | Poles: | 04 | Created Date: | 02-17-2016 |
| Base: | RG | Eff. Date: | 09-05-2017 | Leads: | 3#12 | | |

| Specs | | | |
|---------------------------------|-------------------------|--------------------------------|-----------------------|
| Catalog Number: | ZDM2333T-5 | Inverter Code: | Inverter Duty |
| Enclosure: | TEBC | KVA Code: | H |
| Frame: | 256TC | Lifting Lugs: | Standard Lifting Lugs |
| Frame Material: | Iron | Locked Bearing Indicator: | Locked Bearing |
| Output @ Frequency: | 15.000 HP @ 60 HZ | Motor Lead Quantity/Wire Size: | 3 @ 12 AWG |
| Synchronous Speed @ Frequency: | 1800 RPM @ 60 HZ | Motor Lead Exit: | Ko Box |
| Voltage @ Frequency: | 575.0 V @ 60 HZ | Motor Lead Termination: | Flying Leads |
| XP Class and Group: | None | Motor Type: | 0944M |
| XP Division: | Not Applicable | Mounting Arrangement: | F1 |
| Agency Approvals: | UR | Power Factor: | 83 |
| | CSA | Product Family: | General Purpose |
| Auxillary Box: | No Auxillary Box | Pulley End Bearing Type: | Ball |
| Auxillary Box Lead Termination: | None | Pulley Face Code: | C-Face |
| Base Indicator: | Rigid | Pulley Shaft Indicator: | Standard |
| Bearing Grease Type: | Polyrex EM (-20F +300F) | Rodent Screen: | None |
| Blower: | SPL Volts EXT | Shaft Extension Location: | Pulley End |
| Current @ Voltage: | 14.600 A @ 575.0 V | Shaft Ground Indicator: | No Shaft Grounding |
| Design Code: | A | Shaft Rotation: | Reversible |

| | | | |
|---------------------------------------|---------------------------|------------------------------------|----------------------------|
| Drip Cover: | No Drip Cover | Shaft Slinger Indicator: | Shaft Slinger |
| Duty Rating: | CONT | Speed Code: | Single Speed |
| Electrically Isolated Bearing: | Not Electrically Isolated | Motor Standards: | NEMA |
| Feedback Device: | ENCODER | Starting Method: | Direct on line |
| Front Face Code: | Encoder/Feedback Device | Thermal Device - Bearing: | None |
| Front Shaft Indicator: | None | Thermal Device - Winding: | Normally Closed Thermostat |
| Heater Indicator: | No Heater | Vibration Sensor Indicator: | No Vibration Sensor |
| Insulation Class: | H | Winding Thermal 1: | None |
| | | Winding Thermal 2: | None |

| Nameplate NP1168L | |
|-------------------|----------------------|
| CAT NO | ZDM2333T-5 |
| SPEC. | 09F280T124Z1 |
| FRAME | 256TC HP 15 TE |
| VOLTS | 575 |
| MAG CUR | 6.1 FLA 14.6 |
| RPM | 1765 RPM MAX 5000 |
| HZ | 60 PH 3 CLASS H |
| SER.F. | 1.00 DES A SL HZ 1.2 |
| NEMA-NOM-EFF | 92.4 WK2 1.93 |
| BLWR V | PH HZ A |
| RATING | 40C AMB-CONT |
| DE BRG | 6309 ODE BRG 6208 |
| CC | SER.NO |

| Parts List | | |
|-------------|--|----------|
| Part Number | Description | Quantity |
| SA315589 | SA 09F280T124Z1 | 1.000 EA |
| RA303124 | RA 09F280T124Z1 | 1.000 EA |
| HW1002A63 | 0ASHER, 5/8 HI-COLLAR SPRLCKWASHER | 1.000 EA |
| 09CB3002SP | CB W/1.38 LEAD HOLE FOR 37, 39, 307 & 30 | 1.000 EA |
| 09GS1000SP | GASKET-CONDUIT BOX, 1/16 THICK LEXIDE | 1.000 EA |
| 10XN2520K12 | 1/4-20 X.75 GRD 5 | 2.000 EA |
| HW1001A25 | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 2.000 EA |
| WD1000B16 | T&B CX70TN TERMINAL | 1.000 EA |
| 59XW2520G07 | .25-20X.44,HEX SER WSHR,TAPTITE 2,GREEN | 1.000 EA |
| 09EP1100A74 | FR. E.P. TEBC/TENV W/THRU SHAFT ENCODER | 1.000 EA |
| HA4051A00 | PLASTIC CAP FOR GREASE FITTING | 1.000 EA |
| XY3816A12 | 3/8-16 FINISHED NUT | 4.000 EA |
| HW1001A38 | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 4.000 EA |
| HA1005A12 | SLINGER, OD 2.50, ID 1.433, 208 BRG | 1.000 EA |
| 10XN2520K12 | 1/4-20 X.75 GRD 5 | 1.000 EA |
| HW1001A25 | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 1.000 EA |
| HW5100A08 | W3118-035 WVY WSHR (WB) | 1.000 EA |
| 10XN2520K28 | 1/4-20 X 1.75" HX HD SCRWGRADE 5, ZINC P | 2.000 EA |
| HW1001A25 | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 2.000 EA |
| 10XN2520K36 | 1/4-20 X 2.25" HX HD SCRWGRADE 5, ZINC P | 4.000 EA |
| HW1001A25 | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 4.000 EA |
| 09EP1300A12 | ENDPLATE, MACH | 1.000 EA |
| HA4051A00 | PLASTIC CAP FOR GREASE FITTING | 1.000 EA |
| HW4600B44 | V-RING SLINGER 1.500 X 1.810 X .28 VITON | 1.000 EA |

| Parts List (continued) | | |
|------------------------|--|----------|
| Part Number | Description | Quantity |
| HA3113A01 | THRUBOLT 3/8-16X14.875 | 4.000 EA |
| HW1001A38 | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 4.000 EA |
| 51XW2520A12 | .25-20 X .75, TAPTITE II, HEX WSHR SLTD | 4.000 EA |
| 09FH4002 | FAN HSG TEBC 309 MTR F1 & F2 AB | 1.000 EA |
| HA6353A01 | MTG. BRACKET 309 FRAME FAN HOUSING | 4.000 EA |
| 10XN3118K08 | 5/16-18 X .50 GRADE #5, STL, ZINC PLATE | 4.000 EA |
| HW1001A31 | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I | 4.000 EA |
| 33CB3002 | CONDUIT BOX, CAST | 1.000 EA |
| 34CB4500SP | CONDUIT BOX LID, STAMPED | 1.000 EA |
| 34GS1001 | GASKET, STD CONDUIT BOX LID (LEXIDE) | 1.000 EA |
| 51XW0832A07 | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 4.000 EA |
| RM1022A02 | GROMMET .875 ID 1.00 OD .12 WALL,VENDOR# | 1.000 EA |
| 51XN0832A12 | 8-32 HEX SLOT WSHR HD MACH SC GRADE 2, Z | 2.000 EA |
| HW1001A08 | WASHER, #8 SPLT LK, ZN | 4.000 EA |
| XY0832A02 | 8-32 HEX NUT | 2.000 EA |
| WD4101A09 | STIMPSON D3560, .875 DIA. HOLE PLUG | 1.000 EA |
| 09CB3501SP | CONDUIT BOX LID FOR 09CB3001 & 09CB3002 | 1.000 EA |
| 09GS1013SP | 09 GS FOR 09CB3501 LID - LEXIDE | 1.000 EA |
| 51XW2520A12 | .25-20 X .75, TAPTITE II, HEX WSHR SLTD | 2.000 EA |
| HW2501G25 | KEY, 3/8 SQ X 2.875 | 1.000 EA |
| LB1115N | LABEL,LIFTING DEVICE (ON ROLLS) | 1.000 EA |
| LB1009N | LABEL,ROTATION DIRECTION (ON ROLLS) | 1.000 EA |
| HW4500A05 | 1669B ALEM/UNIV860 GR FTG X | 1.000 EA |
| HW4500A17 | 317400 ALEMITE GREASE RELIEF | 1.000 EA |

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|-------------|--|----------|
| HA4054 | SHORT T-DRAIN FITTING, .125" N.P.T. | 1.000 EA |
| MJ1000A02 | GREASE, POLYREX EM EXXON (USe 4824-15A) | 0.080 LB |
| HW4500A03 | GREASE FITTING, .125 NPT 1610(ALEMITE) 8 | 1.000 EA |
| HW4500A17 | 317400 ALEMITE GREASE RELIEF | 1.000 EA |
| HA4054 | SHORT T-DRAIN FITTING, .125" N.P.T. | 1.000 EA |
| EF5005 | VENTURI/GRILLE KIT FOR 307/309 TEBC W/CA | 1.000 EA |
| MG1000G27 | MED CHARCOAL METALLIC GREY 400-0096 | 0.050 GA |
| 85XU0407S04 | 4X1/4 U DRIVE PIN STAINLESS | 2.000 EA |
| WD4101A08 | STIMPSON #D3557,1.188 DIA. HOLE PLUG | 1.000 EA |
| ENC02BC-B2 | ENCDR KIT TEBC W/OEHS35A09 W/BLIND SHAFT | 1.000 EA |
| LB1119N | WARNING LABEL | 1.000 EA |
| LC0006 | CONNECTION LABEL | 1.000 EA |
| NP1168L | ALUM VEC UL CSA CC | 1.000 EA |
| 42PA1010 | PACKAGING GROUP, PRINT PK1151A06 | 1.000 EA |
| MN416A01 | TAG-INSTAL-MAINT no wire (1200/bx) 5/18 | 1.000 EA |

| | | | | | | | |
|------------|------|---------------------------------------|------|---|-------|----|--------|
| NP VOLTS | 575 | MAX SAFE RPM | 5000 | WYE CONN EQ.CKT OHMS PER PHASE (BASE RATING, 200) | | | |
| NP AMPS | 14.6 | Base Volt | 575 | R1 | 0.457 | X1 | 1.770 |
| HP | 15HP | NL AMPS | 6.1 | R2 | 0.372 | X2 | 2.090 |
| BASE SPEED | 1765 | Slips (Hz) | 1.17 | | | XM | 52.900 |
| PHASE/HZ | 3/60 | WK ² (lb-ft ²) | 1.92 | | | | |

Rated Full Load Data


| | RPM | HP | Torque | Volts | Freq-Hz | Amps |
|------------|------|------|--------|-------|---------|------|
| Base Speed | 1765 | 15.0 | 44.5 | 575 | 60 | 14.6 |
| Max Speed | 2646 | 15.0 | 29.7 | 575 | 90 | 13.9 |
| Min Speed | 0 | 0.0 | 44.5 | 32.31 | 1.17 | 14.6 |

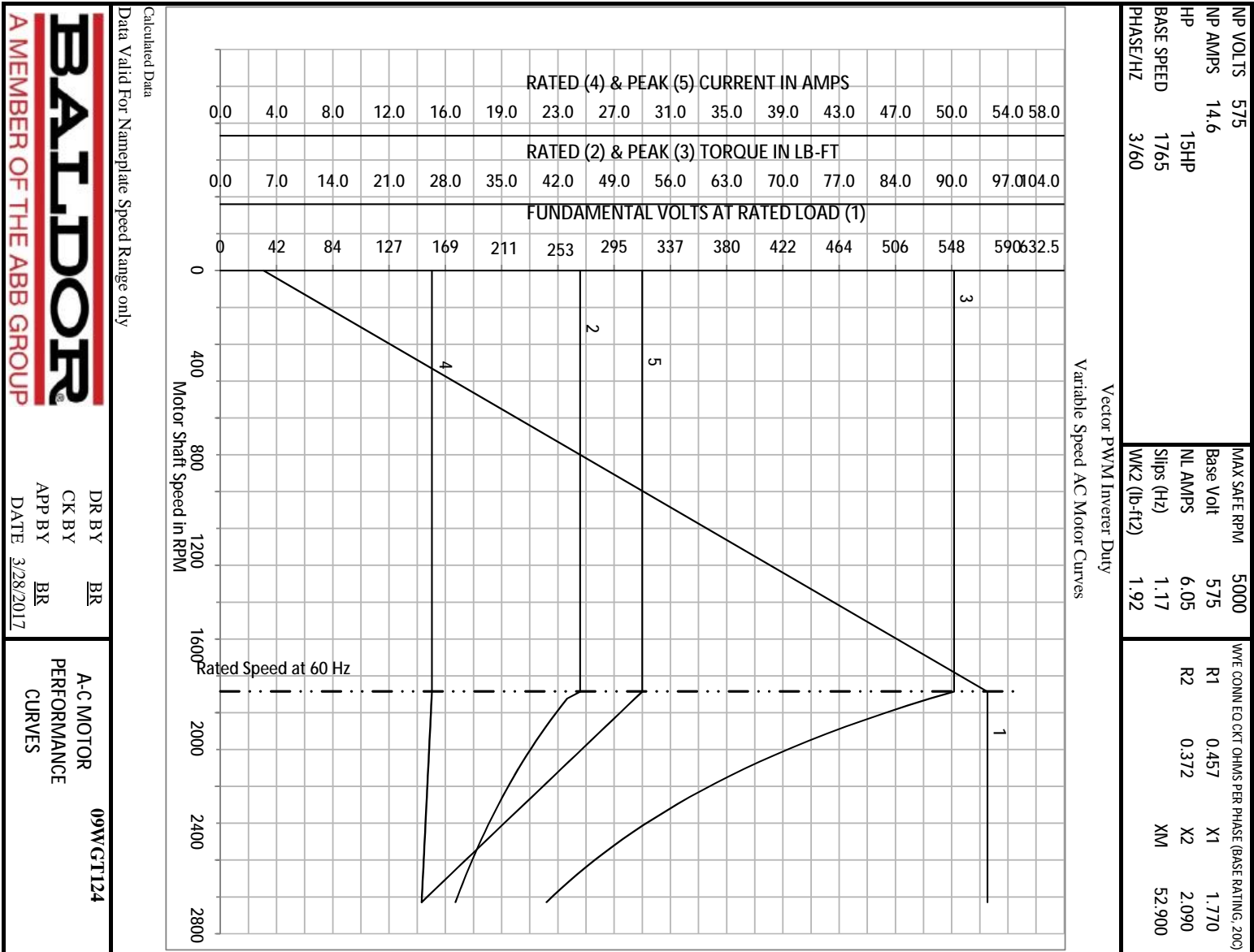
Load Performance at Base Speed

| | RPM | HP | Torque | Volts | Freq-Hz | Amps |
|-----------|------|------|--------|-------|---------|------|
| No Load | 1799 | 0.0 | 0.0 | 575 | 60 | 6.1 |
| 1/4 | 1791 | 3.7 | 10.8 | 575 | 60 | 6.9 |
| 1/2 | 1783 | 7.5 | 22.1 | 575 | 60 | 8.8 |
| 3/4 | 1774 | 11.3 | 33.3 | 575 | 60 | 11.6 |
| Full Load | 1765 | 15.0 | 44.5 | 575 | 60 | 14.6 |
| O/L | 1730 | 29.9 | 90.8 | 575 | 60 | 29.1 |

| Blower Data | Volts | Pn/Hz | FL Amps | LR Amps | Frame | CFM |
|-------------|-------|-------|---------|---------|-------|-----|
| | | | | | | |

Remarks: Calculated Data
Vector PWM Inverter Duty

| | | | |
|--|--------|-----------|------------------------------------|
|  A MEMBER OF THE ABB GROUP | DR BY | BR | A-C MOTOR PERFORMANCE CURVES |
| | CK BY | BR | |
| | APP BY | BR | 09WGT124 |
| | DATE | 3/28/2017 | |



Calculated Data
Data Valid For Nameplate Speed Range only

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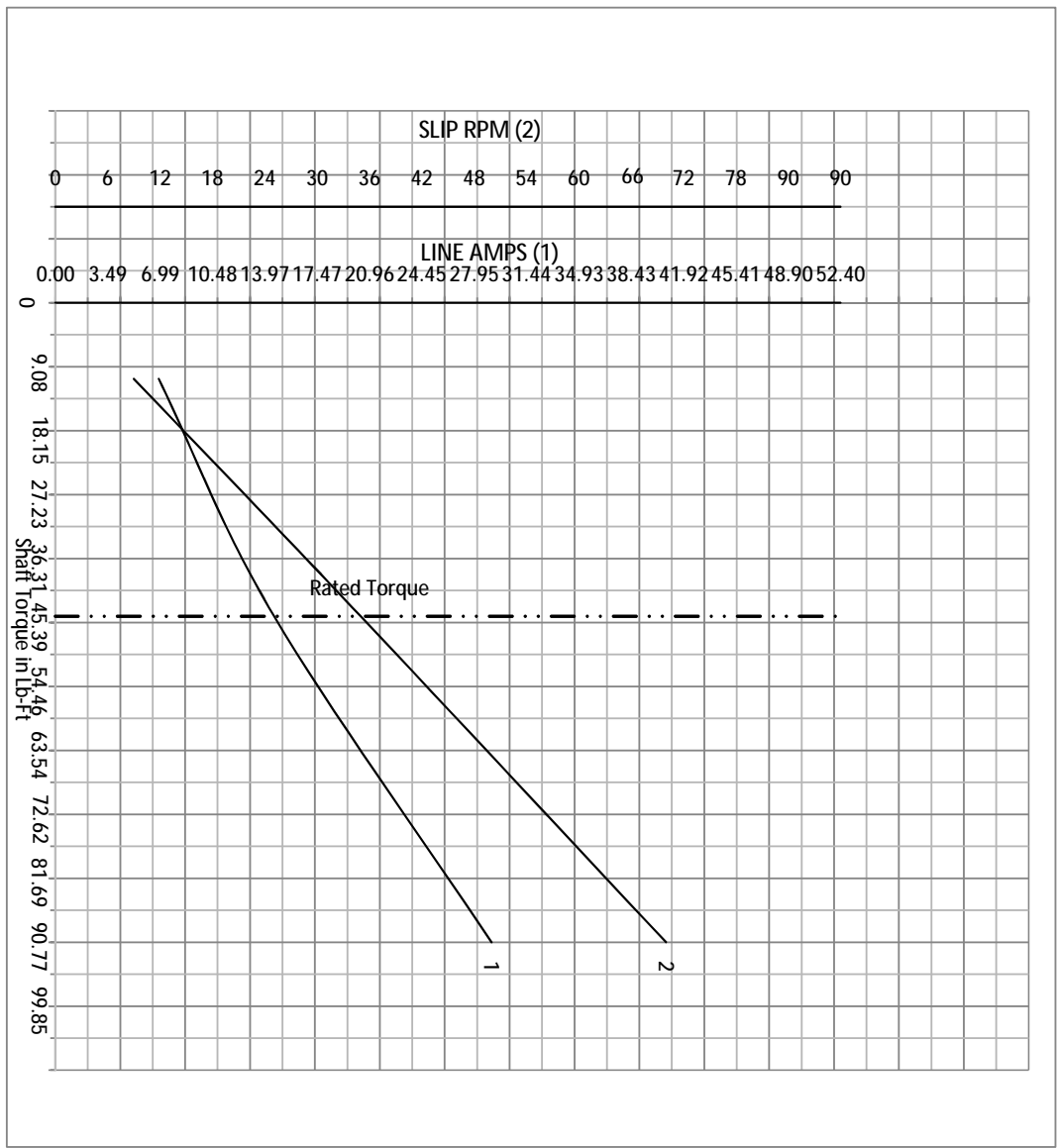
DR BY BR
CK BY BR
APP BY BR
DATE 3/28/2017

A-C MOTOR PERFORMANCE CURVES

09WGT124

| | | | | | | | |
|------------|------|---------------------------|------|---|-------|----|--------|
| NP VOLTS | 575 | MAX SAFE RPM | 5000 | WYE CONN EQ.CKT OHMS PER PHASE (BASE RATING, 200) | | | |
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| HP | 15HP | NL AMPS | 6.05 | R2 | 0.372 | X2 | 2.090 |
| BASE SPEED | 1765 | Slips (Hz) | 1.17 | | | XM | 52.900 |
| PHASE/HZ | 3/60 | WK2 (lb-ft ²) | 1.92 | | | | |

Vector PWM Inverter Duty
Variable Speed AC Motor Curves



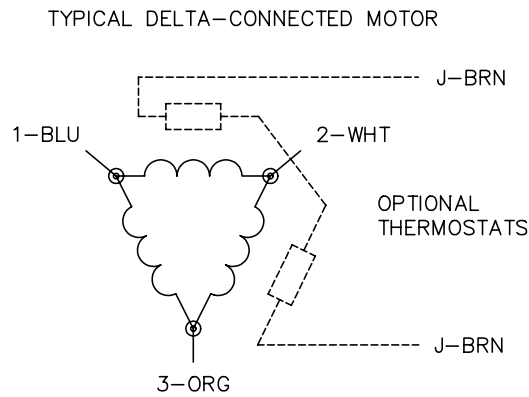
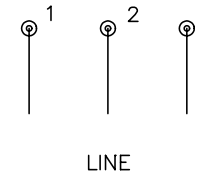
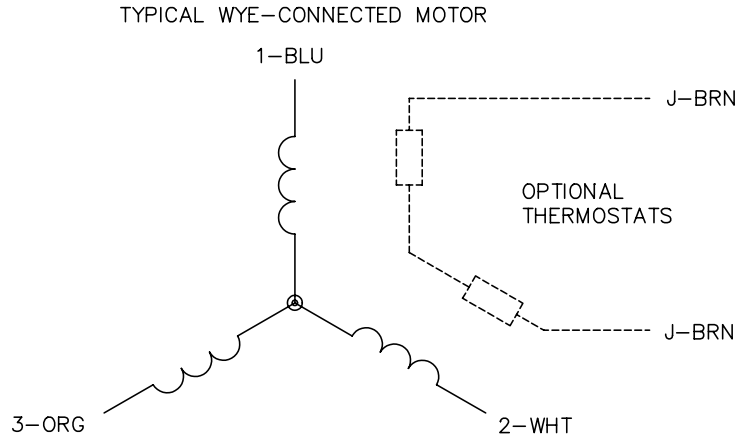
Calculated Data

Data Valid For Nameplate Speed Range only

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|--------|-----------|-------------|----------|
| DR BY | BR | A-C MOTOR | 09WG1124 |
| CK BY | | PERFORMANCE | |
| APP BY | BR | CURVES | |
| DATE | 3/28/2017 | | |

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.

| | | | |
|---|---------|------------------------|--------------|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS | | | |
| REV. LTR: D | BY: JLP | REVISED: 01/21/99 4:02 | TDR: 0171435 |
| 9000D | | FILE: AAA00005141 | MDL: - |
| | | MTL: - | |

BALDOR ELECTRIC Co.

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

CD0006

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