ABB BALDOR RELIANCE

# Customer information packet

## ZDVSM4406T-4

150HP, 1790-2685RPM, 3PH, 60-90HZ, 444T, A440
Class - None
Division - Not Applicable

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11/1/2026 6:18:23 PM

## Specifications

| | |
|---|---|
| **Enclosure** | TEFC |
| **Frame** | 445T |
| **Frame Material** | Iron |
| **Frequency** | 60.00 Hz |
| | 90.00 Hz |
| **Haz Area Class and Group** | None |
| **Haz Area Division** | Not Applicable |
| **Motor Letter Type** | Three Phase |
| **Output @ Frequency** | 150.000 HP @ 90 HZ |
| | 150.000 HP @ 60 HZ |
| **Phase** | 3 |
| **Synchronous Speed @ Frequency** | 1800 RPM @ 60 HZ |
| **Voltage @ Frequency** | 460.0 V @ 60 HZ |
| | 460.0 V @ 90 HZ |
| **Agency Approvals** | CCSA US |
| **Ambient Temperature** | 40 °C |
| **Auxiliary Box** | NO AUXILLARY BOX |
| **Base Indicator** | Rigid |
| **Bearing Grease Type** | Polyrex EM (-20F +300F) |
| **Constant Torque Speed Range** | 1000:1 |
| **Current @ Voltage** | 165.000 A @ 460.0 V |
| | 177.000 A @ 460.0 V |
| **Design Code** | A |
| **Drip Cover** | No Drip Cover |
| **Duty Rating** | CONT |
| **Feedback Device** | ENCODER |
| **Heater Indicator** | No Heater |
| **High Voltage Full Load Amps** | 165.0 a |
| **Insulation Class** | F |
| **Inverter Code** | Inverter Duty |
| **KVA Code** | M |
| **Lifting Lugs** | Standard Lifting Lugs |

## Part Detail

| | |
|---|---|
| **Revision** | S |
| **Type** | AC |
| **Mech. spec.** | |
| **Base** | |
| **Status** | PRD/A |
| **Elec. spec.** | A44WG0183 |
| **Layout** | 617436-909 |
| **Eff. date** | 03-02-2026 |
| **CD Diagram** | 416820-036 |
| **Poles** | 04 |
| **Leads** | 3#2/0 |
| **Proprietary** | False |
| **Created date** | 08-24-2012 |

| | |
|---|---|
| **Max Speed** | 3600 rpm |
| **Motor Lead Quantity/Wire Size** | 3 @ 2/0 AWG |
| **Motor Standards** | NEMA |
| **Motor Type** | A44078M |
| **Mounting Arrangement** | F1 |
| **Number of Poles** | 4 |
| **Overall Length** | 49.07 IN |
| **Product Family** | Other |
| **Pulley End Bearing Type** | Ball |
| **Pulley Face Code** | Standard |
| **Service Factor** | 1.00 |
| **Shaft Ground Indicator** | No Shaft Grounding |
| **Shaft Rotation** | Reversible |
| **Shaft Slinger Indicator** | No Slinger |
| **Speed** | 1790 rpm |
| | 2685 rpm |
| **Speed Code** | Single Speed |
| **Starting Method** | Direct on line |
| **Thermal Device - Bearing** | None |
| **Thermal Device - Winding** | Normally Closed Thermostat |

**Nameplate**

**000613007HV**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **CAT NO** | ZDVSM4406T-4 | | **SPEC NO.** | P44G4014 | | | | | | | | |
| **SER.NO.** | | | **FRAME** | 445T | | | | | | | | |
| | **HP** | **RPM** | **VOLTS** | **AMPS** | **HZ** | **TYPE** | P | | | | | |
| **BASE** | 150 | 1790 | 460 | 177 | 60 | **SF** | 1.00 | | | | | |
| **MAX** | 150 | 2685 | 460 | 165 | 90 | **INSUL.CLASS** | F | | | | | |
| **DRIVE END BEARING** | 90BC03J30X | | **CONSTANT TORQUE** | | **DUTY** | CONT | **AMB** | 40 | | | | |
| **OPP D.E. BEARING** | 6318C3VL0241 | | 1000:1 | **ENCL** | TEFC | **PHASE** | 3 | | | | | |
| **DESIGN NO.** | A44WG0183-R001 | | **FLUX AMPS** | 66.6 | | **VPWM INVERTER READY** | | | | | | |
| **MAX SPEED/RPM** | 3600 | | **OVERTEMP PROT** | 2 | **WK2** | 51.57 | **POLES** | 4 | **WEIGHT** | | | |

**Parts List**

| Part number | Description | Quantity |
|---|---|---|
| SA254360 | SA P44G4014 | 1.000 ea |
| RA241168 | RA P44G4014 | 1.000 ea |
| 421948051 | LABEL, MYLAR | 1.000 ea |
| 000613006PU | N/P (RELEASE QTY 10,000) UL CSA LABEL | 1.000 ea |
| 000692000VD | LABEL WARNING | 1.000 ea |
| 000613007HV | N/P BALDOR VSMASTER, CURUS | 1.000 ea |
| 412118006A | DRAIN | 2.000 ea |
| 089490099A | G28 BRKT 089490098WCA KB | 1.000 ea |
| 415072001B | CLAMP | 1.000 ea |
| 083199082A | G28 Fan cover machining | 1.000 ea |
| 034180014DA | KEY 1/4X1/4X1-3/4 L | 1.000 ea |
| 702618004T | FAN KB 182/70 (112) 440 | 1.000 ea |
| 004824015A | GREASE POLYREX EM | 1.160 lb |
| 032018020FK | HHCS 3/4-10X2-1/2 PLTD. | 4.000 ea |
| 032018008CK | HHCS 3/8-16X1L PLATED | 4.000 ea |
| 032018030DK | HHCS 1/2-13X3-3/4 PLTD. | 3.000 ea |
| 032018030DK | HHCS 1/2-13X3-3/4 PLTD. | 3.000 ea |
| 415096002A | CPLG 1/8 HEX TYPE | 1.000 ea |
| 410700004A | WSHR | 1.000 ea |
| 034017014AB | LCKW 3/8 STD. PLATED | 4.000 ea |
| 034530072AB | P/NIP 1/8X9"L Threaded both ends | 1.000 ea |
| 089490099A | G28 BRKT 089490098WCA KB | 1.000 ea |
| 032018020FK | HHCS 3/4-10X2-1/2 PLTD. | 4.000 ea |
| 702658001A | CONDUIT BOX, E440 | 1.000 ea |
| 702658002A | +C/BOX CVR, PAINTED 440 | 1.000 ea |
| 415915007G | GASK, LAC | 1.000 ft |
| 406056008A | GASKET, TERBD 440 | 1.000 ea |
| 418153001A | GASK 440 | 1.000 ea |
| 032018008DK | HHCS 1/2-13X1 PLATED | 4.000 ea |
| 033512006LB | HHTTS 1/4-20X3/4 PLTD. | 8.000 ea |
| 406099000A | PLUG - FAN COVER 320-440 | 1.000 ea |

| | | |
|---|---|---|
| 611712053RY | TACH & HARDWARE KIT | 1.000 ea |
| 415000115H | T/LUG #2AWG-4/0AWG | 1.000 ea |
| 032018005DL | 1/2-13 X 5/8 SILICON BRONZE HHCS | 1.000 ea |
| 033775004EA | DRSCR #6-1/4 304 S.S. | 2.000 ea |
| 034180054KA | 7/8 SQ X 6.75 KEY | 1.000 ea |
| 035000001A | ALFTG 1/8" 1610-BL | 1.000 ea |
| 034690002AB | PPLG 1/4" PLTD. | 1.000 ea |
| 034690005AB | PPLG 3/4 PLATED | 2.000 ea |
| 032018004BK | HHCS 5/16-18X1/2 PLATED | 3.000 ea |
| 035000001A | ALFTG 1/8" 1610-BL | 1.000 ea |
| 415096002A | CPLG 1/8 HEX TYPE | 1.000 ea |
| 032018006BK | HHCS 5/16-18X3/4 PLATED | 3.000 ea |
| 702623013A | THERMAL BARRIER -- G28 -- BRACKET MTD | 1.000 ea |
| 034017013AB | LCKW 5/16 STD. PLATED | 3.000 ea |
| 034690002AB | PPLG 1/4" PLTD. | 1.000 ea |
| 034530044AB | P/NIP 1/8X5-1/2L GALV. | 1.000 ea |
| 032620016LA | SOCKET SET SCREW-449 | 3.000 ea |
| 000692000FF | N/P | 1.000 ea |
| 604797056 | 400-447 FRAME 60 X 42 | 1.000 ea |
| MG1025N19 | WILKO 778.50 BLUE GREEN - 55 GAL DRUMS | 0.440 ga |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| REL S.O. | – | VOLTS | 460 | ENCLOSURE | TEFC | WYE CONN EQ CKT OHMS PER PHASE | | | |
| FRAME | 445T | AMPS | 177 | MAX SAFE RPM | 3600 | (AT BASE RATING, 25 °C) | | | |
| HP | 150 | DUTY | CONT | IM (AMPS) | 66.6 | R1 | .0101 | X1 | .100 |
| BASE SPEED | 1790 | S.F. | 1.00 | P.F.@NL/FL | .071/.835 | R2 | .00736 | X2 | .0926 |
| PHASE/HERTZ | 3/60 | AMB °C/INSUL | 40/F | $WK^2$ ($Lb-Ft^2$) | 51.6 | | | XM | 3.14 |

## RATED FULL LOAD DATA

| | RPM | HP | TORQUE LB-FT | FUND VOLTS | FREQ-HZ | AMPS |
|---|---|---|---|---|---|---|
| BASE SPEED | 1790 | 150 | 440 | 460 | 60 | 177 |
| MAX SPEED | 2685 | 150 | 293 | 460 | 90 | 165 |
| MIN SPEED | 0 | 0 | 440 | 7.20 | .328 | 177 |

## LOAD PERFORMANCE AT BASE SPEED

| | RPM | HP | TORQUE LB-FT | FUND VOLTS | FREQ-HZ | AMPS |
|---|---|---|---|---|---|---|
| NO LOAD | 1800 | 0 | 0 | 460 | 60 | 66.6 |
| 1/4 | 1797 | 37.6 | 110 | 460 | 60 | 92.5 |
| 1/2 | 1795 | 75.1 | 220 | 460 | 60 | 115 |
| 3/4 | 1793 | 112 | 329 | 460 | 60 | 145 |
| FULL LOAD | 1790 | 150 | 440 | 460 | 60 | 177 |
| O/L | 1779 | 299 | 881 | 460 | 60 | 325 |

REMARKS: TYPICAL DATA
VECTOR PWM INVERTER DUTY

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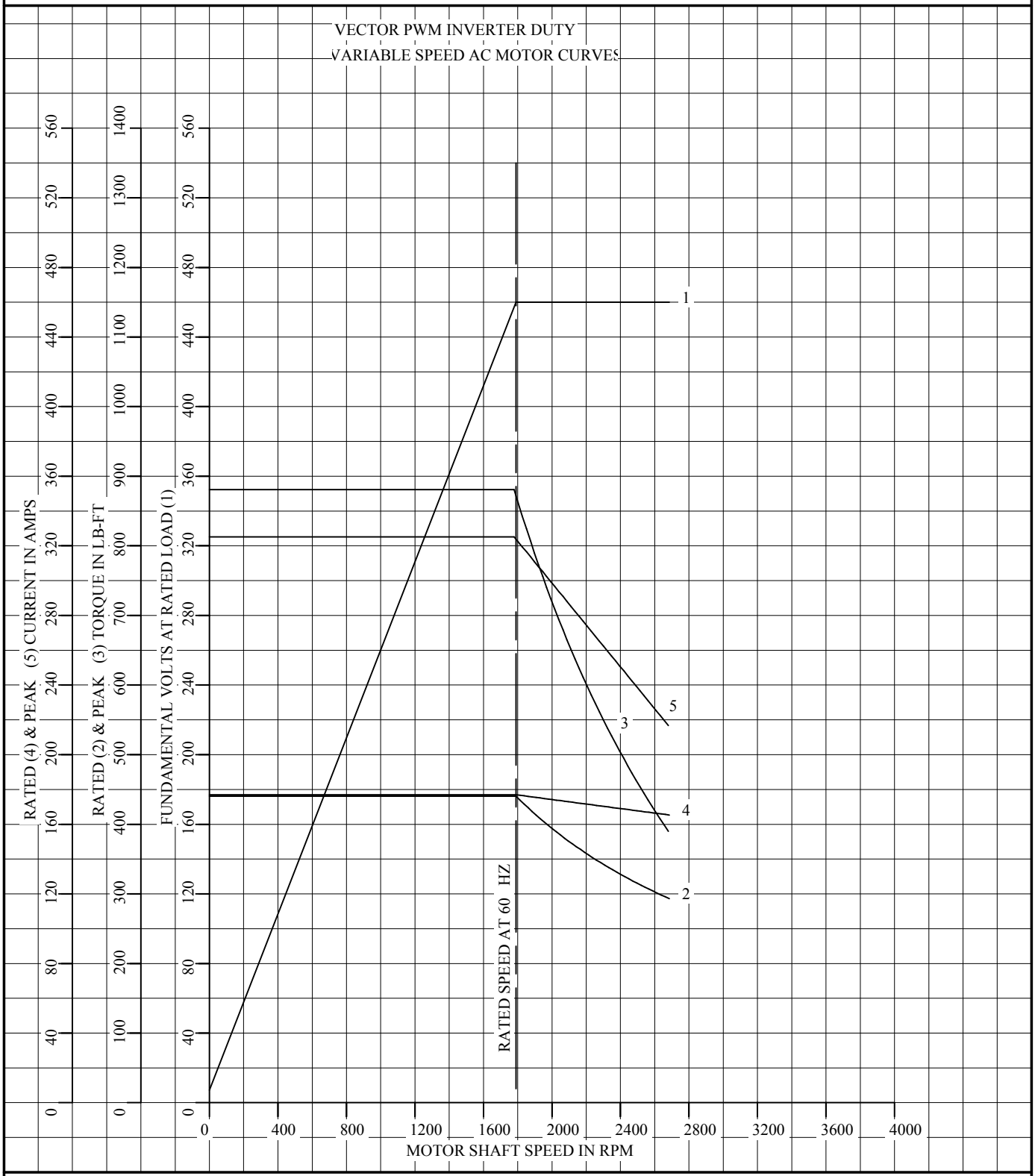
DR. BY M. ORDERS
CK. BY J. TSAO
APP. BY J. TSAO
DATE 10/27/00

A-C MOTOR PERFORMANCE DATA

A44WG0183-R001
ISSUE DATE 06/05/15

C/R 343668

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| REL S.O. | - | VOLTS | 460 | ENCLOSURE | TEFC | WYE CONN EQ CKT OHMS PER PHASE (AT BASE RATING, 25 ℃) | |
| FRAME | 445T | AMPS | 177 | MAX SAFE RPM | 3600 | | |
| HP | 150 | DUTY | CONT | IM (AMPS) | 66.6 | R1 .0101 | X1 .100 |
| BASE SPEED | 1790 | S.F. | 1.00 | P.F.@NL/FL | .071/.835 | R2 .00736 | X2 .0926 |
| PHASE/HERTZ | 3/60 | AMB ℃/INSUL | 40/F | WK$^2$ (Lb-Ft$^2$) | 51.6 | | XM 3.14 |




REMARKS: TYPICAL DATA
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY

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| | |
|---|---|
| DR. BY | M. ORDERS |
| CK. BY | J. TSAO |
| APP. BY | J. TSAO |
| DATE | 10/27/00 |

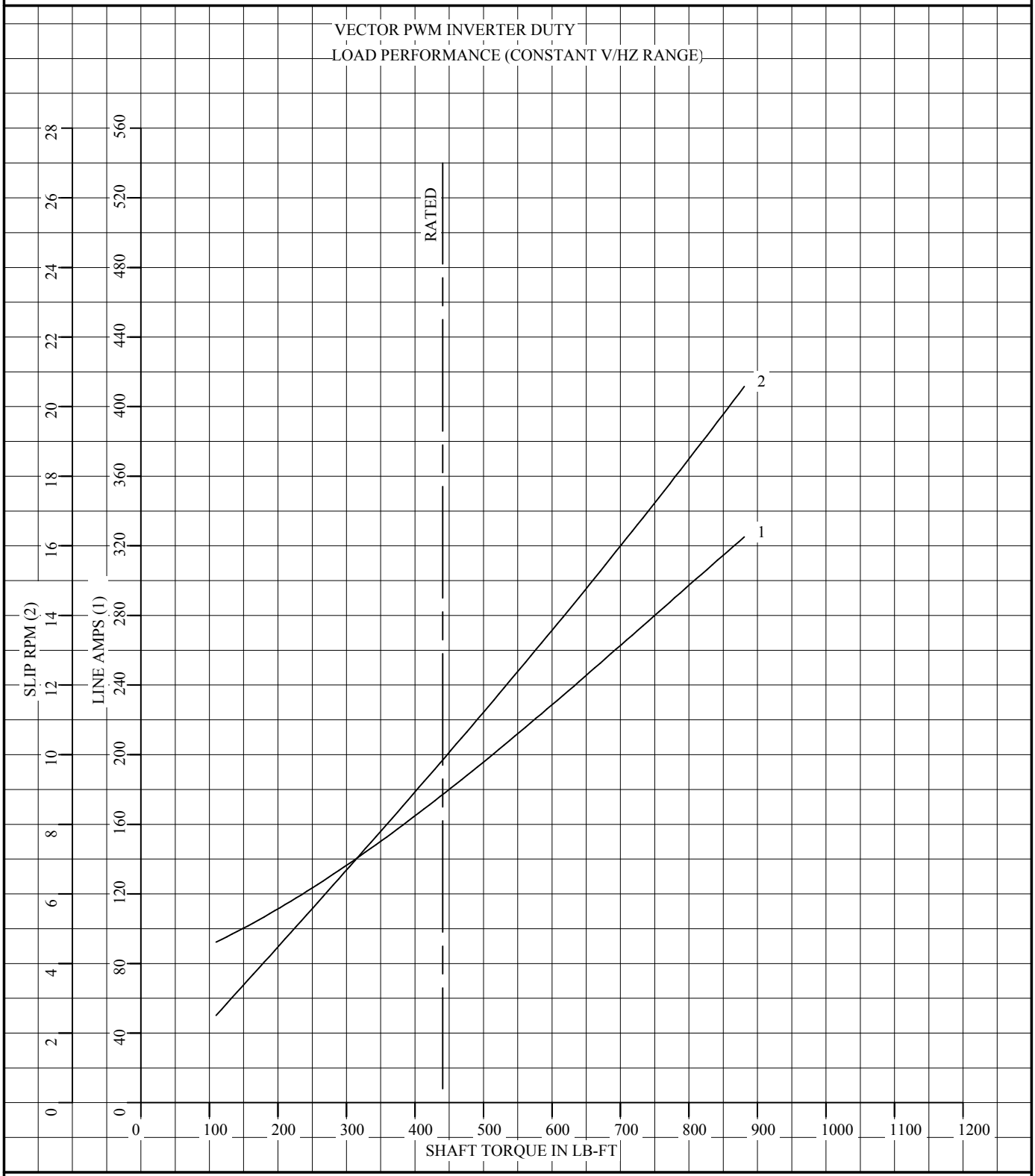
A-C MOTOR PERFORMANCE CURVES

A44WG0183-R001
SH 1 OF 2
ISSUE DATE 06/05/15



C/R 343668

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| REL S.O. | - | VOLTS | 460 | ENCLOSURE | TEFC | WYE CONN EQ CKT OHMS PER PHASE (AT BASE RATING, 25 ℃) | |
| FRAME | 445T | AMPS | 177 | MAX SAFE RPM | 3600 | | |
| HP | 150 | DUTY | CONT | IM (AMPS) | 66.6 | R1 .0101 | X1 .100 |
| BASE SPEED | 1790 | S.F. | 1.00 | P.F.@NL/FL | .071/.835 | R2 .00736 | X2 .0926 |
| PHASE/HERTZ | 3/60 | AMB ℃/INSUL | 40/F | WK$^2$ (Lb-Ft$^2$) | 51.6 | | XM 3.14 |




REMARKS: TYPICAL DATA
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY

BALDOR A MEMBER OF THE ABB GROUP

| | |
|---|---|
| DR. BY | M. ORDERS |
| CK. BY | J. TSAO |
| APP. BY | J. TSAO |
| DATE | 10/27/00 |

A-C MOTOR PERFORMANCE CURVES

A44WG0183-R001
SH 2 OF 2
ISSUE DATE 06/05/15



C/R 343668

# DUTY MASTER ALTERNATING CURRENT MOTORS

617436-909

ENCLOSURE: TOTALLY ENCLOSED

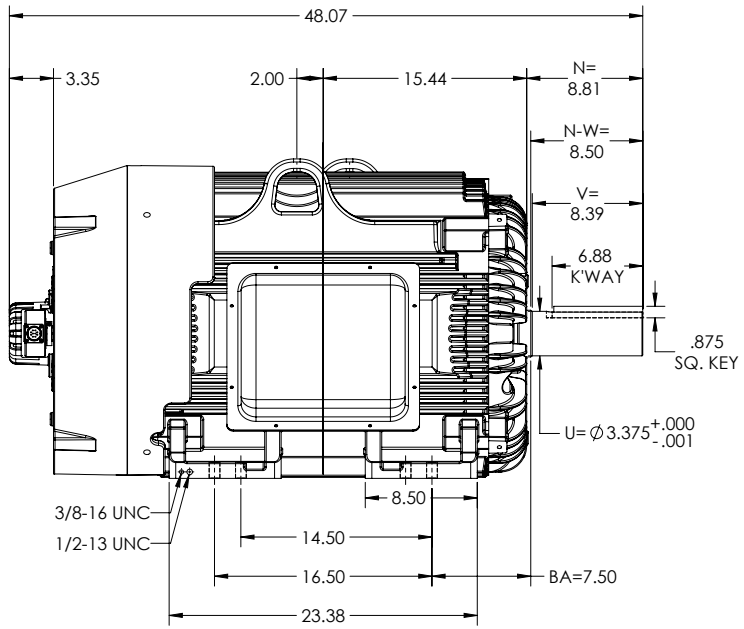
SQUIRREL-CAGE INDUCTION

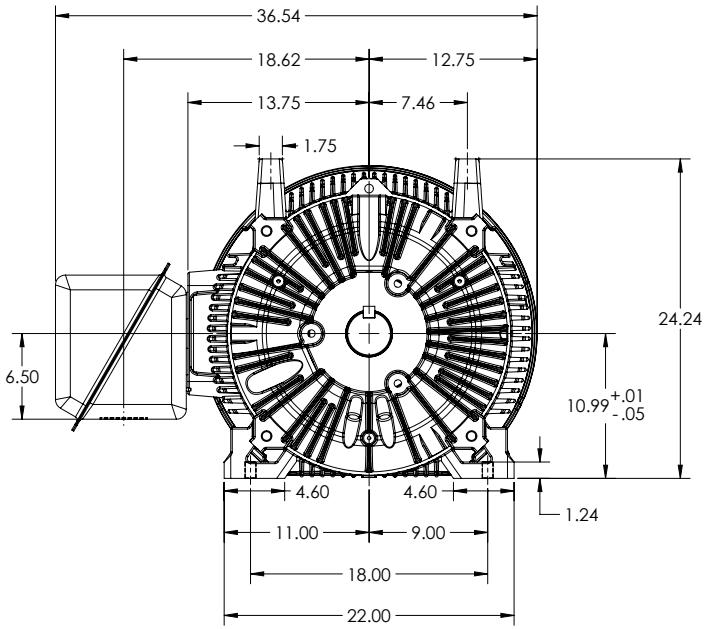
MOUNTING: FOOT, F-1

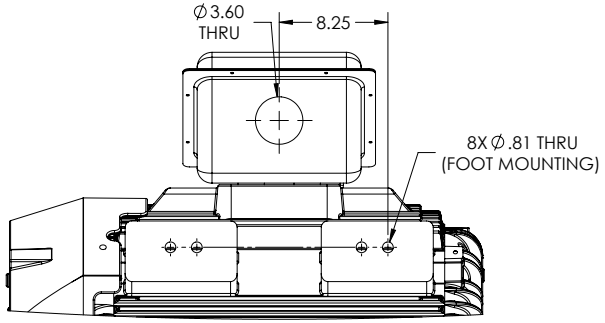
G445T/G444T FRAME FOOT MOUNTING HOLES

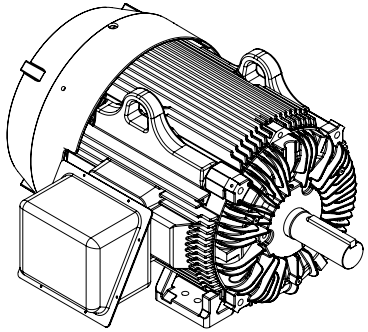
COOLING: FAN COOLED

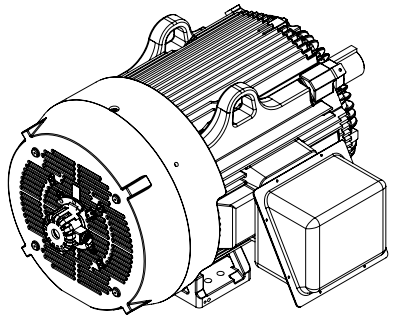
BEI HS35 ENCODER





DIMENSIONS ARE IN INCHES.
MOTOR WEIGHTS(LBS) = 2130 ± 15% DEPENDING ON RATING.
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

SHEET NUMBER 1 OF 1

617436-909

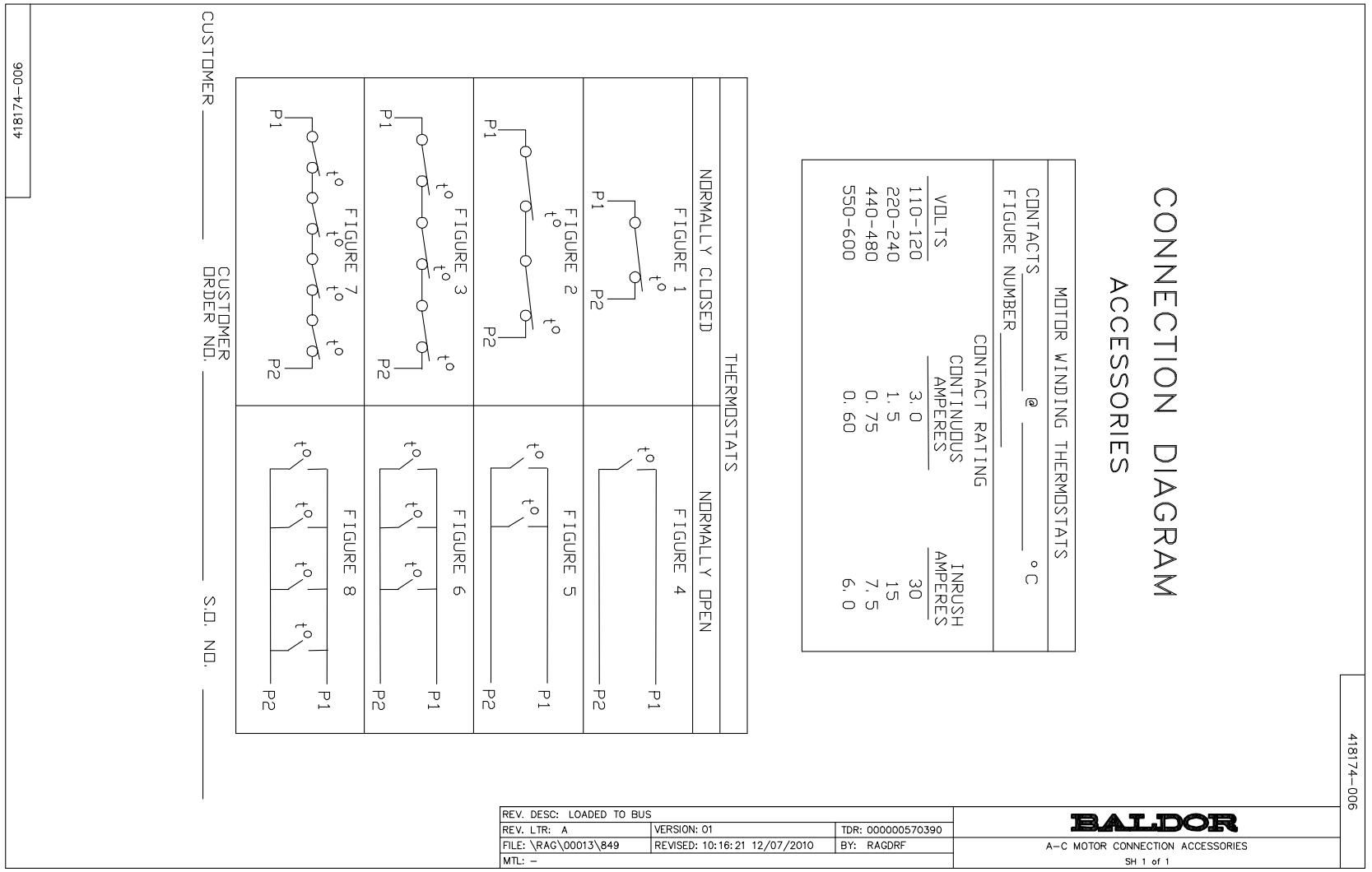
IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.
MAX PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF STANDARD SHAFT EXTENSION IS .003 T.I.R.

| | | | |
|---|---|---|---|
| REV. DESC: NEW DRW | | | |
| REV: - | VERSION: 00 | REVISED: 02:21:36 08/18/2021 | TDR: 000001175082 |
| MODEL NO. 617436-909 | | | REF: - |
| BY: USJEDIL | Material: _ | C | |

BALDOR

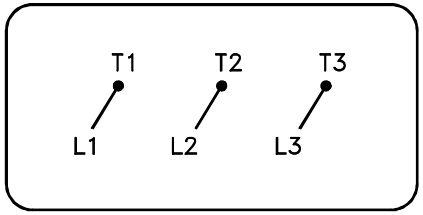
G445/444T TEFC F1 FOOT/STEEL BOX/BEI HS35 ENCODER

617436-909


CONNECTION DIAGRAM
ACCESSORIES
418174-006
MOTOR WINDING THERMOSTATS
CONTACTS @ °C
FIGURE NUMBER
CONTACT RATING
VOLTS
CONTINUOUS AMPERES
INRUSH AMPERES
110-120 3.0 30
220-240 1.5 15
440-480 0.75 7.5
550-600 0.60 6.0
THERMOSTATS
NORMALLY CLOSED
NORMALLY OPEN
FIGURE 1
FIGURE 2
FIGURE 3
FIGURE 4
FIGURE 5
FIGURE 6
FIGURE 7
FIGURE 8
P1
P2
t°
CUSTOMER
CUSTOMER ORDER NO.
S.O. NO.
418174-006
REV. DESC: LOADED TO BUS
REV. LTR: A
VERSION: 01
TDR: 000000570390
FILE: \RAG\00013\849
REVISED: 10:16:21 12/07/2010
BY: RAGDRF
MTL: -
BALDOR
A-C MOTOR CONNECTION ACCESSORIES
SH 1 of 1

416820–036

# A–C MOTOR
# CONNECTION DIAGRAM
## STANDARD 3 LEAD CONNECTED




(N.P. 1575–BA)

416820–036

| | | | |
|---|---|---|---|
| REV. DESC: LOADED TO BUS, C/R 335225 | | | BALDOR |
| REV. LTR: – | VERSION: 00 | TDR: 000000538207 | |
| FILE: \MGA\00000\682 | | REVISED: 11:54:06 04/30/2010 | CONN DIAG – STANDARD 3 LEAD |
| MTL: – | | BY: RAGRA | SH 1 of 1 |