

ABB BALDOR RELIANCE III

Customer information packet

ECP84406TR-4

150HP, 1785RPM, 3PH, 60HZ, 445T, A4488M, TEFC

Class - CLI GP A,B,C,D

Division - Division II

Specifications

| | |
|--------------------------------------|-----------------------------|
| Enclosure | TEFC |
| Frame | 445T |
| Frame Material | Iron |
| Frequency | 60.00 Hz |
| Haz Area Class and Group | CLI GP A,B,C,D |
| Haz Area Division | Division II |
| Motor Letter Type | Three Phase |
| Output @ Frequency | 150.000 HP @ 60 HZ |
| Phase | 3 |
| Synchronous Speed @ Frequency | 1800 RPM @ 60 HZ |
| Voltage @ Frequency | 460.0 V @ 60 HZ |
| Agency Approvals | CCSA US CCSAUSEEV UR |
| Ambient Temperature | 40 °C |
| Auxiliary Box | NO AUXILLARY BOX |
| Base Indicator | Rigid |
| Bearing Grease Type | Mobil SHC 220 (Athens Only) |
| Constant Torque Speed Range | 15-60 |
| Current @ Voltage | 169.000 A @ 460.0 V |
| Design Code | B |
| Drip Cover | No Drip Cover |
| Duty Rating | CONT |
| Efficiency @ 100% Load | 95.8 % |
| Enclosure Modification | 841 |
| Feedback Device | NO FEEDBACK |
| Haz Area Temp Code | T3 |
| Heater Indicator | No Heater |
| High Voltage Full Load Amps | 169.0 a |
| Insulation Class | F |
| Inverter Code | Inverter Ready |
| KVA Code | F |

Part Detail

| | |
|---------------------|------------|
| Revision | A |
| Type | AC |
| Mech. spec. | |
| Base | |
| Status | PRD/A |
| Elec. spec. | A44WG3335 |
| Layout | 617434-733 |
| Eff. date | 12-11-2023 |
| CD Diagram | 416820-036 |
| Poles | 04 |
| Leads | 3#1/0 |
| Proprietary | False |
| Created date | 04-01-2021 |

| | |
|--------------------------------------|--------------------|
| Motor Lead Quantity/Wire Size | 3 @ 1/0 AWG |
| Motor Standards | NEMA |
| Motor Type | A4488M |
| Mounting Arrangement | F1 |
| No Load Current | 48.9 a |
| Number of Poles | 4 |
| Overall Length | 44.97 IN |
| Power Factor | 86 |
| Product Family | General Industrial |
| Pulley End Bearing Type | Roller |
| Pulley Face Code | Standard |
| Service Factor | 1.15 |
| Shaft Diameter | 3.375 IN |
| Shaft Ground Indicator | No Shaft Grounding |
| Shaft Rotation | Reversible |
| Shaft Slinger Indicator | No Slinger |
| Speed | 1785 rpm |
| Speed Code | Single Speed |
| Starting Method | Direct on line |
| Thermal Device - Bearing | None |
| Thermal Device - Winding | None |

Nameplate

NP2496L

MOBIL SHC -220 GREASE

000613007EX

| | | | | |
|------------------------|--------------|---------------------------------|---------------|-------------|
| CAT NO | ECP84406TR-4 | SPEC NO. | A44-9320-3335 | |
| NO. ROTOR BARS | 58 | GREASE TYPE | MOBIL SHC 220 | |
| NO. SLOTS | 72 | NL AMPS AT RATED VOLTAGE | | 48.9 |
| 5 YEAR WARRANTY | | WINDING RES @25 C | .0298 | OHMS |
| MFG. DATE | | SER.NO | | |

NP4566

| | | | | | | | | | |
|---------------------------|--------------|------------------------|---------------|----------------------------|-------------|------------------------------|------|--------------------|------|
| CAT NO | ECP84406TR-4 | SPEC NO. | A44-9320-3335 | | | | | | |
| HP | 150 | AMPS | 169 | VOLTS | 460 | DESIGN | B | | |
| FRAME SIZE | 445T | RPM | 1785 | HZ | 60 | AMB | 40 | SF | 1.15 |
| D.E. BRG.DATA | 6318 | O.D.E. BRG.DATA | NU222 | PH | 3 | DUTY | CONT | INSUL.CLASS | F |
| D.E. BRG. | 110RU02M30X | TYPE | ENCL | TEFC | CODE | F | | | |
| O.D.E. BRG. | 90BC03J30X | POWER FACTOR | 86 | NEMA-NOM-EFFICIENCY | 95.8 | | | | |
| 3/4 LOAD EFF. | 96.0 | IP | 56 | MAX CORR KVAR | 30 | GUARANTEED EFFICIENCY | 95 | | |
| TEMP CODE | T3 | TEMP = | 200 | | | | | | |
| CHP HZ | 60-90 | CT HZ | 15-60 | VT HZ | 0-60 | | | | |
| INVERTER-TEMP-CODE | T3 | | | | | | | | |
| SER.NO. | | MOTOR WEIGHT | | | | | | | |

| | | | | | | |
|-----------------------------|-----|--|-----------------|------|-------|--|
| CUSTOMER INFORMATION PACKET | | ECP84406TR-4 - 150HP, 1785RPM, 3PH, 60HZ, 445T, A4488M, TEFC | | | | |
| FRAME | HP | TYPE | PHASE/ HERTZ | RPM | VOLTS | |
| 445T | 150 | P | 3/60 | 1785 | 460 | |

| | | | | | | |
|------|------|------------------|------|----------------|----------------|-----------|
| AMPS | DUTY | AMB °C/ INSUL | S.F. | NEMA DESIGN | CODE LETTER | ENCLOSURE |
| 169 | CONT | 40/F | 1.15 | B | F | TEFC |

| | | | | | |
|--------|-------------|--------------|--------------|--|--|
| E/S | ROTOR | TEST S.O. | TEST DATE | STATOR RES. @25 °C OHMS (BETWEEN LINES) | |
| 498808 | 418143053AE | --- | --- | .0298 | |

PERFORMANCE


| LOAD | HP | AMPERES | RPM | % POWER FACTOR | % EFFICIENCY |
|---------|------|---------|------|----------------|--------------|
| NO LOAD | 0 | 48.9 | 1800 | 4.26 | 0 |
| 1/4 | 37.6 | 69.1 | 1796 | 54.3 | 93.6 |
| 2/4 | 75.0 | 97.1 | 1792 | 75.6 | 95.7 |
| 3/4 | 112 | 131 | 1788 | 83.4 | 96.0 |
| 4/4 | 150 | 169 | 1784 | 86.5 | 95.8 |
| 5/4 | 188 | 210 | 1779 | 87.6 | 95.3 |
| | | | | | |

SPEED TORQUE

| | RPM | TORQUE % FULL LOAD | TORQUE LB.-FT. | AMPERES |
|--------------|------|-----------------------|----------------|---------|
| LOCKED ROTOR | 0 | 130 | 572 | 1041 |
| PULL UP | 270 | 116 | 511 | 1020 |
| BREAKDOWN | 1729 | 280 | 1237 | 579 |
| FULL LOAD | 1784 | 100 | 442 | 169 |

AMPERES SHOWN FOR 460 VOLT CONNECTION. IF OTHER CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.

TYPICAL DATA
NEMA NOMINAL EFFICIENCY = 95.8 PCT.

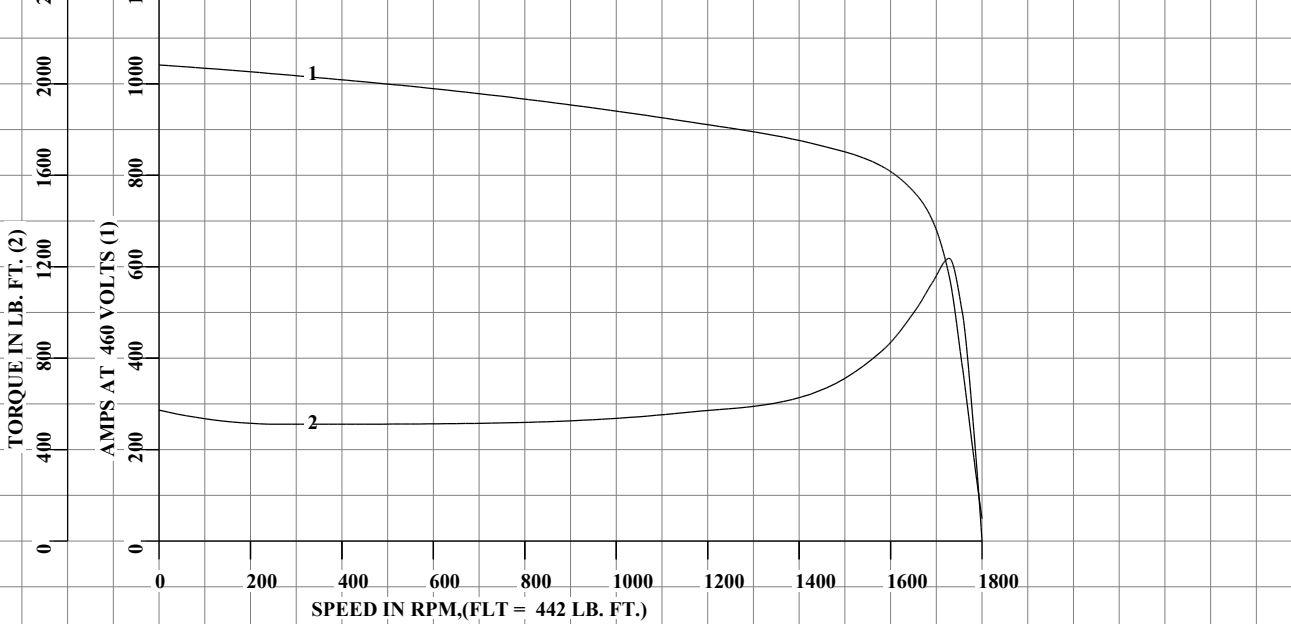
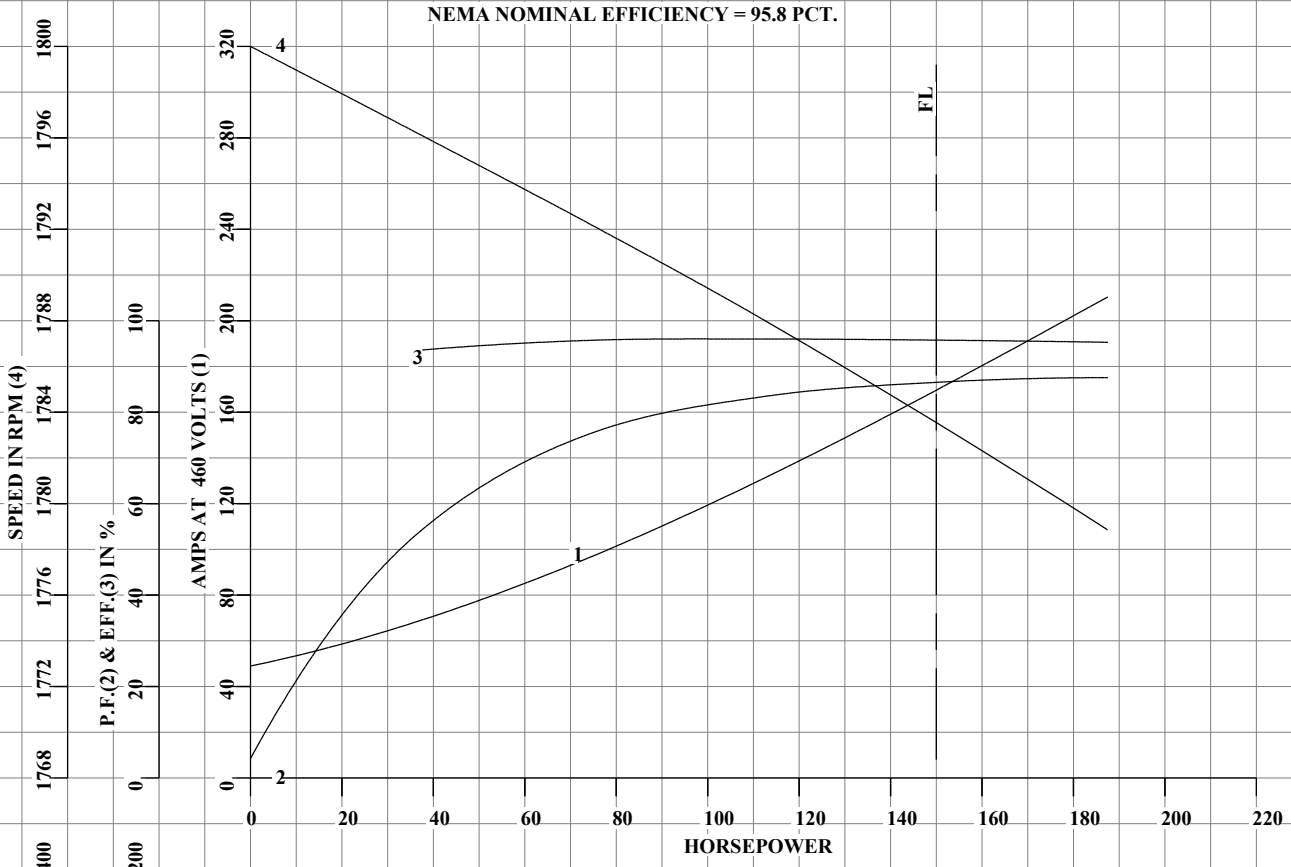
| | | | |
|---|--|---------------------------------|-----------------------|
|  | DRAWN BY: <u>C.B.ATANGANE</u> | AC MOTOR PERFORMANCE DATA | A44WG3335-R001 |
| | CHECKED BY: <u>C.E.JAMISON</u> APPROVED BY: <u>C.E.JAMISON</u> DATE: <u>10/16/23</u> | | |

FRAME 445T
HP 150
TYPE P
PHASE / HERTZ 3/60

RPM 1785
VOLTS 460
AMPS 169
DUTY CONT
AMB °C / INSUL 40/F

S.F. 1.15
NEMA DESIGN B
CODE LETTER F
ENCLOSURE TEFC
E/S 498808

ROTOR 418143053AE
TEST S.O. TYPICAL DATA
TEST DATE ---
STATOR RES. @ 25°C .0298
OHMS (BETWEEN LINES)



AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.



DRAWN BY: C.B.ATANGANE
 CHECKED BY: C.E.JAMISON
 APPROVED BY: C.E.JAMISON
 DATE: 10/16/23

AC MOTOR
PERFORMANCE
DATA

A44WG3335-R001

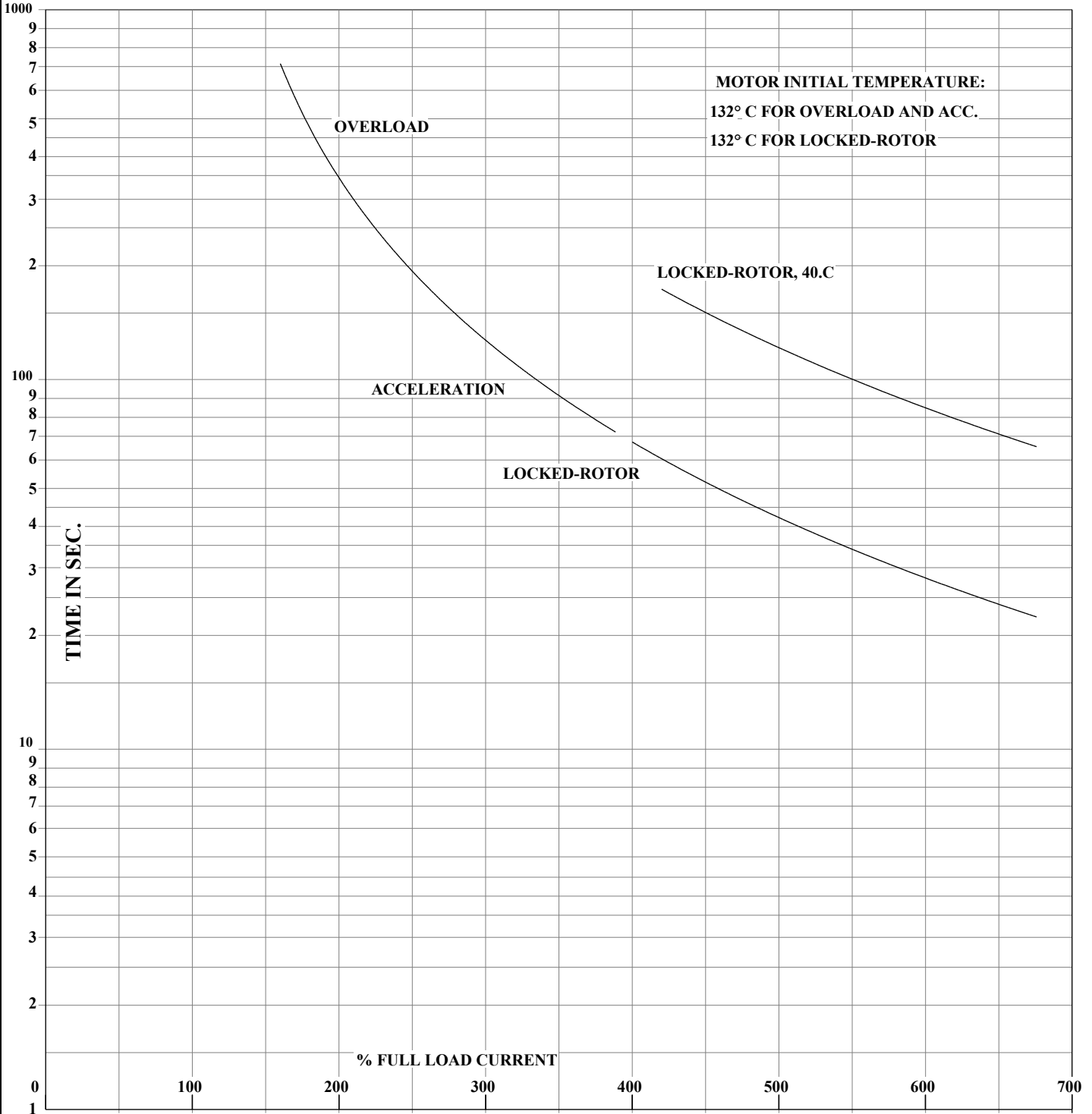
ISSUE DATE 02/03/25

FRAME 445T
HP 150
TYPE P
PHASE / HERTZ 3/60

RPM 1785
VOLTS 460
AMPS 169
DUTY CONT
AMB °C / INSUL 40/F

S.F. 1.15
NEMA DESIGN B
CODE LETTER F
ENCLOSURE TEFC
E/S 498808

TEST S.O. TYPICAL DATA
TEST DATE ---
STATOR RES. @ 25°C .0298
OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE
NEMA NOMINAL EFFICIENCY = 95.8 PCT.

AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.

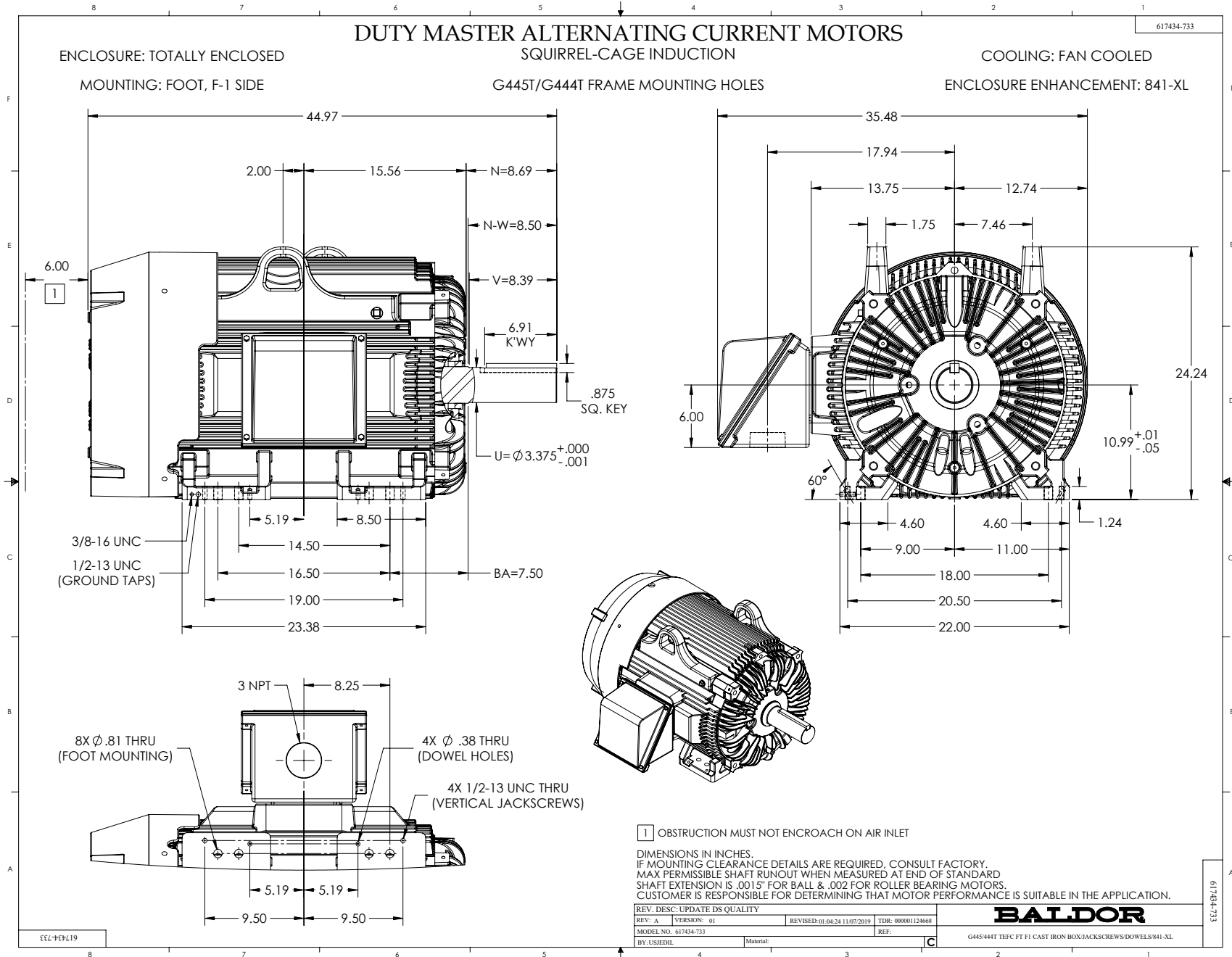


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**AC MOTOR
PERFORMANCE
DATA**

A44WG3335-R001

ISSUE DATE 02/03/25



416820-036

A-C MOTOR
CONNECTION DIAGRAM
STANDARD 3 LEAD CONNECTED



(N.P. 1575-BA)

REV. DESC: LOADED TO BUS, C/R 335225

REV. LTR: -

VERSION: 00

TDR: 00000538207

FILE: \MGA\00000\682

REVISED: 11:54:06 04/30/2010

MTL: -

BY: RAGRA

BALDOR

CONN DIAG - STANDARD 3 LEAD

SH 1 of 1

416820-036