

PRODUCT INFORMATION PACKET

Model No: 449THFS9036

Catalog No: W635

Severe Duty Motors, TEFC, 350 HP, 3 Ph, 60 Hz, 460 V, 1785 RPM, 449T Frame



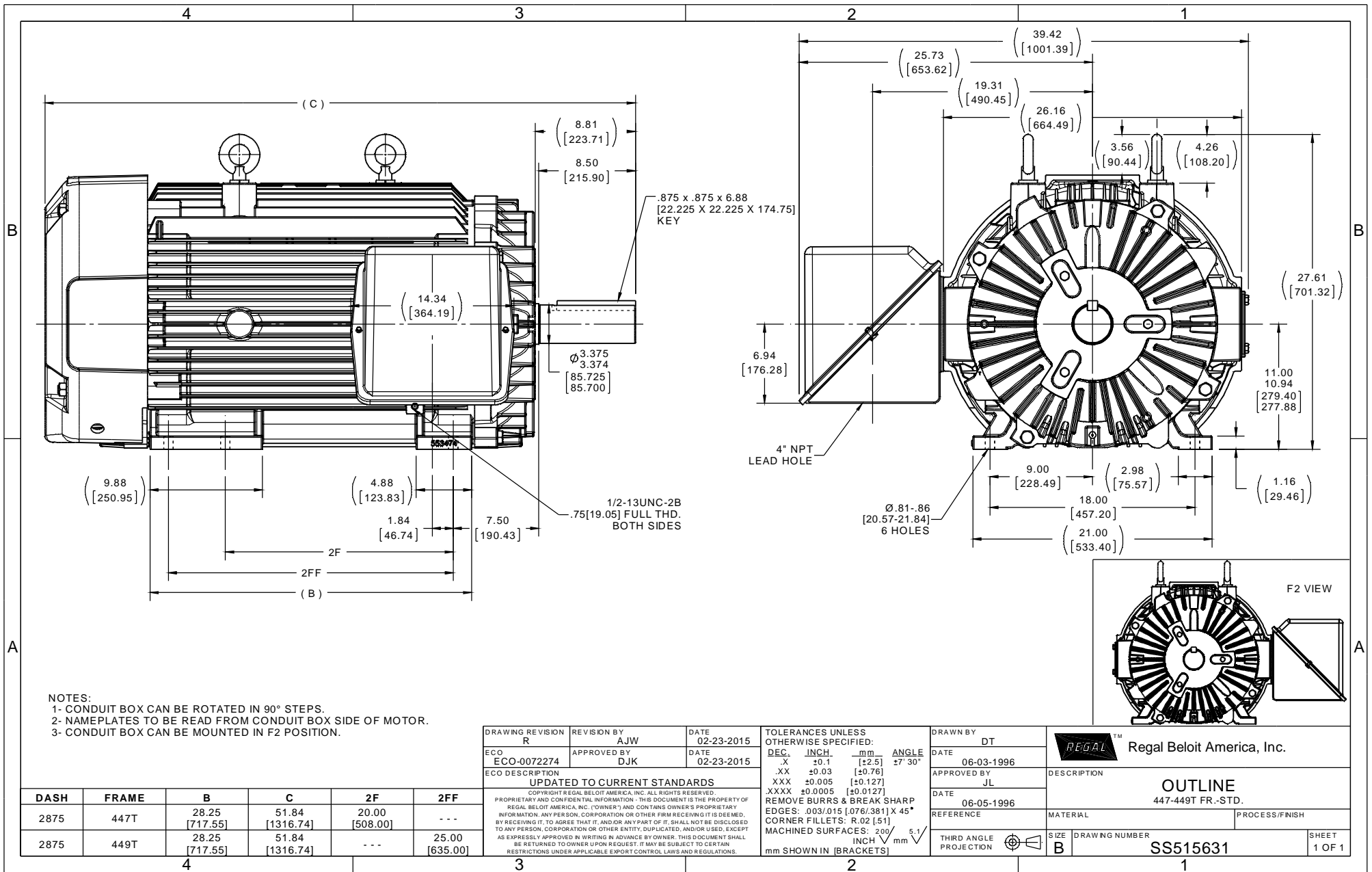
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Nameplate Specifications

| | | | |
|------------------------|-----------------------|----------------------------|------------------------------------|
| Output HP | 350 Hp | Output KW | 260.0 kW |
| Frequency | 60 Hz | Voltage | 460 V |
| Current | 395.0 A | Speed | 1785 rpm |
| Service Factor | 1.15 | Phase | 3 |
| Efficiency | 96.2 % | Power Factor | 86.5 |
| Duty | Continuous | Insulation Class | F |
| Design Code | B | KVA Code | G |
| Frame | 449T | Enclosure | Totally Enclosed Fan Cooled |
| Thermal Protection | No Protection | Ambient Temperature | 40 °C |
| Drive End Bearing Size | NU319 | Opp Drive End Bearing Size | 6318 |
| UL | Recognized | CSA | Y |
| CE | Y | IP Code | 56 |
| Hazardous Location | DIVISION 2 T2B | Number of Speeds | 1 |

Technical Specifications

| | | | |
|-----------------------|-------------------------------------|-----------------------|---|
| Electrical Type | Squirrel Cage Inverter Rated | Starting Method | Part Wdg Start & Wye Start Delta Run Or Inverter |
| Poles | 4 | Rotation | Reversible |
| Resistance Main | .0075 Ohms | Mounting | Rigid Base |
| Motor Orientation | Horizontal | Drive End Bearing | Roller |
| Opp Drive End Bearing | Ball | Frame Material | Cast Iron |
| Shaft Type | T | Overall Length | 51.84 in |
| Frame Length | 28.77 in | Shaft Diameter | 3.375 in |
| Shaft Extension | 8.812 in | Assembly/Box Mounting | F1/F2 CAPABLE |
| Connection Drawing | A-EE7300BH | Outline Drawing | B-SS515631-2875 |



NOTES:
 1- CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
 2- NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.
 3- CONDUIT BOX CAN BE MOUNTED IN F2 POSITION.

| DASH | FRAME | B | C | 2F | 2FF |
|------|-------|-------------------|--------------------|-------------------|-------------------|
| 2875 | 447T | 28.25 [717.55] | 51.84 [1316.74] | 20.00 [508.00] | --- |
| 2875 | 449T | 28.25 [717.55] | 51.84 [1316.74] | --- | 25.00 [635.00] |

| DRAWING REVISION | REVISION BY | DATE | TOLERANCES UNLESS OTHERWISE SPECIFIED: |
|--|-------------|------------|--|
| R | AJW | 02-23-2015 | DEC. INCH. mm ANGLE |
| ECO-0072274 | DJK | 02-23-2015 | .X ±0.1 [±2.5] 27° 30' |
| ECO DESCRIPTION | | | .XX ±0.03 [±0.76] |
| UPDATED TO CURRENT STANDARDS | | | XXX ±0.005 [±0.127] |
| COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED. | | | XXXX ±0.0005 [±0.0127] |
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| | | | CORNER FILLETS: R.02 [51] |
| | | | MACHINED SURFACES: 200 / INCH 5.1 / mm |
| | | | mm SHOWN IN [BRACKETS] |

| DRAWN BY | DT | REGAL™ | Regal Beloit America, Inc. |
|------------------------|------------|------------------------------|----------------------------|
| DATE | 06-03-1996 | DESCRIPTION | |
| APPROVED BY | JL | | |
| DATE | 06-05-1996 | OUTLINE 447-449T FR.-STD. | |
| REFERENCE | | | |
| THIRD ANGLE PROJECTION | SIZE B | DRAWING NUMBER | SS515631 |
| | | PROCESS/FINISH | SHEET 1 OF 1 |



VIEW OF TERMINAL END

| | | | | TOLERANCES UNLESS SPECIFIED | | REGAL REGAL - BELOIT CORPORATION | DRAWN RJW 02-11-2005 | | | | |
|--|------------------------------|-------------|----------------|-----------------------------|--------------|----------------------------------|----------------------|--------|----------------------|---------|--------|
| | | | | DEC. | INCHES | | CHK | ML | 02-11-2005 | | |
| | | | | .X | ±.1 | | APPD | GK | 02-11-2005 | | |
| | | | | .XX | ±.02 | TITLE CONNECTION DIAGRAM | | SCALE | | | |
| D | CHANGED TO REGAL TITLE BLOCK | ECO-0108299 | WGJ 08/22/2016 | EMH | .XXX ±.005 | 12 LEAD- SINGLE VOLTAGE | | REF | | | |
| 1 | ADDED IEC TERMINAL MARKINGS | CN 41429 | JJB 05/24/2007 | ML | .XXXX ±.0005 | MAT'L. | | FMF | | | |
| NO. | REVISION | BY & DATE | CHK | ANG | ±7'30" | FINISH | | PREV | | | |
| THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED THIS IS AN ELECTRONICALLY GENERATED DOCUMENT - DO NOT SCALE THIS PRINT | | | | | | RFP 02-11-2005 | CAD FILE ee7300bh | SIZE A | DRAWING NO. EE7300BH | PAGE OF | REV. C |
| | | | | | | DIST LB | | | | | |



P.O. BOX 8003
WAUSAU, WI 54401-8003
PH. 715-675-3311

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER: _____ CUSTOMER P.O. #: _____
 ORDER #: _____ REFERENCE MODEL #: 449THFS9036
 CONN. DIAGRAM: A-EE7300BH CAT #: W635
 OUTLINE: B-SS515631-2875 CUSTOMER PART #: _____
 WINDING: T4494123 NONE 1 MOUNTING: F1/F2 CAPABLE
 SPEED: _____

TYPICAL MOTOR PERFORMANCE DATA

| HP | KW | SYNC RPM | FL RPM | FRAME | ENCLOSURE | TYPE | KVA CODE | DESIGN |
|-----|-----|----------|--------|----------|-----------|------|----------|--------|
| 350 | 261 | 1800 | 1785 | 447/449T | TEFC | TFN | G | BC |

| PH | HZ | VOLTS | AMPS | START TYPE | DUTY | INSL | S.F. | AMB | ELEV. |
|----|----|-------|------|--------------------|------|------|------|-----|-------|
| 3 | 60 | 460 | 395 | PWS & YDRUN OR INV | CONT | F | 1.15 | 40 | 3300 |

| F.L. EFF | 96.2 | 3/4 LD EFF | 96.2 | 1/2 LD EFF | 95.4 | GTD EFF | ELECT. TYPE |
|----------|------|------------|------|------------|------|---------|-------------------|
| F.L. PF | 86.5 | 3/4 LD PF | 84.0 | 1/2 LD PF | 77.5 | 95.8 | SQ CAGE INV RATED |

| F.L. TORQUE | LR AMPS @ 460 V | L.R. TORQUE | B.D. TORQUE | F.L. RISE (° C) |
|-------------|-----------------|------------------|------------------|-----------------|
| 1,030 LB-FT | 2,550 | 2,075 LB-FT 201% | 2,400 LB-FT 233% | 80 |

| @ 3 FT. | POWER | ROTOR WK ² | MAX. LOAD WK ² | SAFE STALL TIME | STARTS/HOUR | MOTOR WGT |
|---------|--------|-------------------------|---------------------------|-----------------|-------------|-----------|
| 85 dBA | 94 dBA | 98.0 LB-FT ² | 2900 LB-FT ² | 25 SEC. | 1 | 3100 LB. |

***** SUPPLEMENTAL INFORMATION *****

| DE BRACKET TYPE | ODE BRACKET TYPE | MOUNT TYPE | MOTOR ORIENTATION | SEVERE DUTY | HAZARDOUS LOCATION | DRIP COVER | SCREENS | PAINT |
|-----------------|------------------|------------|-------------------|-------------|--------------------|------------|---------|--------------|
| STANDARD | STANDARD | RIGID | HORIZONTAL | UM SEVERE | DIVISION 2 T2B | NO | NONE | BLUE (EPOXY) |

| BEARINGS | | GREASE | SHAFT TYPE | SPECIAL DE | SPECIAL ODE | SHAFT MATERIAL | FRAME MATERIAL |
|----------|------|-----------------|------------|------------|-------------|-------------------------|----------------|
| DE | ODE | | | | | | |
| ROLLER | BALL | SHC-100/POLYREX | T | NONE | NONE | 1045 HOT ROLLED (C-204) | CAST IRON |
| NU319 | 6318 | | | | | | |

| THERMOSTATS | PROTECTORS | WDG RTD's | BRG RTD's | THERMISTORS | CONTROL | SPACE HEATERS |
|-------------|------------|-----------|-----------|-------------|---------|---------------|
| NONE | NOT | NONE | NONE | NONE | FALSE | NA |

| R1 (ohms/ph) | R2 (ohms/ph) | X1 (ohms/ph) | X2 (ohms/ph) | Xm (ohms/ph) | VIBRATION (in/sec) | FLOAT |
|--------------|--------------|--------------|--------------|--------------|--------------------|-------|
| 0.007 | 0.005 | 0.066 | 0.1 | 2.311 | 0.080 | NONE |

| | | | | | | |
|---------------------------------|--|--|--|--|--|--|
| * N O T E S * | INVERTER TORQUE: CONSTANT 2:1 INV. HP SPEED RANGE: NONE | | | | | |
| | ENCODER: NONE NONE NONE NONE PPR | | | | | |

| | |
|----------------------------|-------------------------|
| PREPARED BY: EARL BABBITTS | BRAKE: NONE |
| DATE: 13-07-17 | NONE NONE |
| | FT-LB: NA |
| | VOLTAGE: NONE HZ: |
| FORM: 3531 REV_4 2/27/06 | UL: V-INS, CONST UL REC |

Data Sheet

Date: 1/28/2019
 Customer: _____
 Attention: _____
 Submitted by: DINESH SUDDULA



449THFS9036

Submittal

Data @ 460 V

Motor Load Data

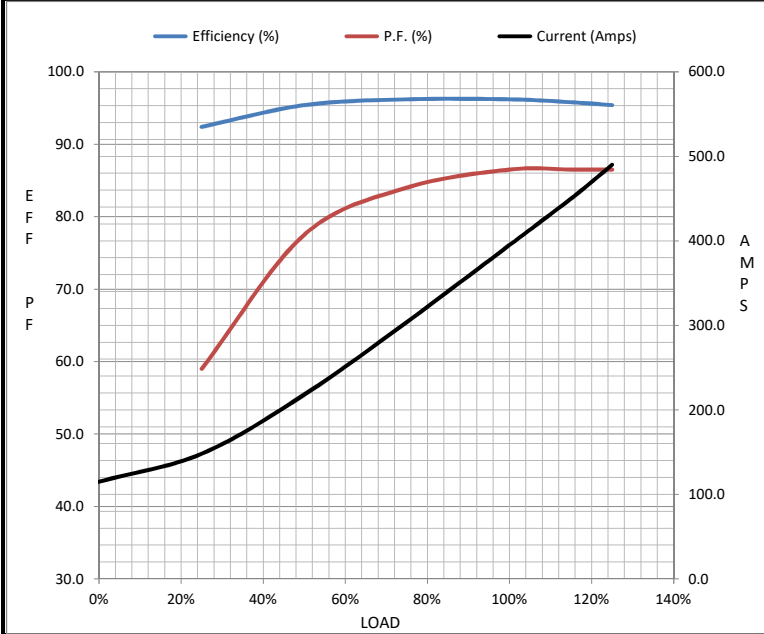
| Load | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR |
|----------------|------|------|------|------|-------|-------|-------|-------|
| Current (Amps) | 115 | 148 | 218 | 304 | 395 | 450 | 490 | 2,550 |
| Torque (ft-lb) | 0.00 | 256 | 512 | 770 | 1,030 | 1,185 | 1,290 | 2,075 |
| RPM | 1800 | 1796 | 1794 | 1790 | 1785 | 1,782 | 1780 | 0 |
| Efficiency (%) | | 92.4 | 95.4 | 96.2 | 96.2 | 95.8 | 95.4 | |
| P.F. (%) | 5.5 | 59.0 | 77.5 | 84.0 | 86.5 | 86.5 | 86.5 | 31.0 |

Motor Speed Data

| | LR | Pull-Up | BD | Rated | Idle |
|----------------|-------|---------|-------|-------|------|
| Speed (RPM) | 0 | 900 | 1725 | 1785 | 1800 |
| Current (Amps) | 2,550 | 2,250 | 1,350 | 395 | 115 |
| Torque (ft-lb) | 2,075 | 1,950 | 2,400 | 1,030 | 0.00 |

Information Block

| | | | | |
|-----------------------------|-------------------------|--------|--------|--------|
| HP | 350.0 | | | |
| Sync. RPM | 1800 | | | |
| Frame | 449 | | | |
| Enclosure | TEFC | | | |
| Construction | TFS | | | |
| Voltage | 460 V | | | |
| Frequency | 60 Hz | | | |
| Design | B | | | |
| LR Code letter | G | | | |
| Service Factor | 1.15 | | | |
| Temp Rise @ FL | 80 °C | | | |
| Duty | CONT | | | |
| Ambient | 40 °C | | | |
| Elevation | 3,300 feet | | | |
| Rotor/Shaft wk ² | 98.0 Lb-Ft ² | | | |
| Ref Wdg | T4494123 NONE | | | |
| Sound Pressure @ 1M | 85 dBA | | | |
| VFD Rating | CONSTANT 2:1 | | | |
| Outline Dwg | B-SS515631-2875 | | | |
| Conn. Diag | A-EE7300BH | | | |
| Additional Specifications: | | | | |
| 0 | | | | |
| 0 | | | | |
| EQUIV CKT (OHMS / PHASE) | | | | |
| R1 | R2 | X1 | X2 | Xm |
| 0.0070 | 0.0050 | 0.0660 | 0.1000 | 2.3110 |



Speed - Torque Curve

