

PRODUCT INFORMATION PACKET

Model No: TCA0553AE231GAA009

Catalog No: R859

Cast Iron Motor, 75 HP, 3 Ph, 60 Hz, 230/460 V, 1200 RPM, 280M Frame, TEFC



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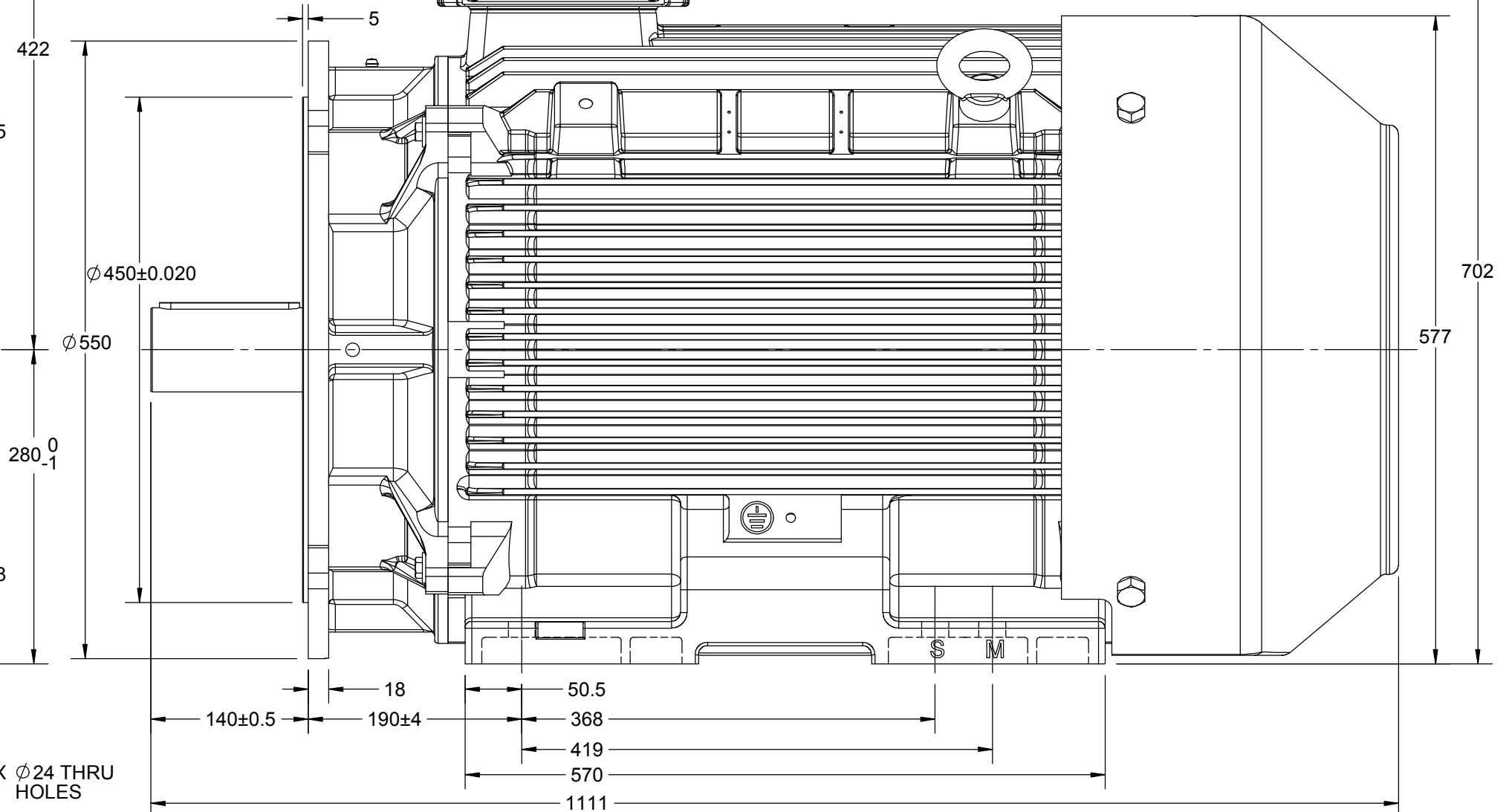
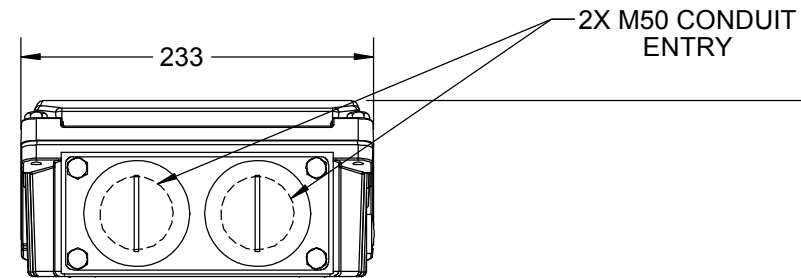
Nameplate Specifications



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|------------------------|---------------|----------------------------|-----------------------------|
| Output HP | 75 Hp | Output KW | 55.0 kW |
| Frequency | 60 Hz | Voltage | 230/460 V |
| Current | 174.0/87.0 A | Speed | 1190 rpm |
| Service Factor | 1.15 | Phase | 3 |
| Efficiency | 94.5 % | Power Factor | 84 |
| Duty | Continuous | Insulation Class | F |
| Design Code | N (IEC) | KVA Code | G |
| Frame | 280M | Enclosure | Totally Enclosed Fan Cooled |
| Thermal Protection | No Protection | Ambient Temperature | 40 °C |
| Drive End Bearing Size | 6317 | Opp Drive End Bearing Size | 6317 |
| UL | Recognized | CSA | N |
| CE | Y | IP Code | 55 |
| Number of Speeds | 1 | Efficiency Class | IE3 |

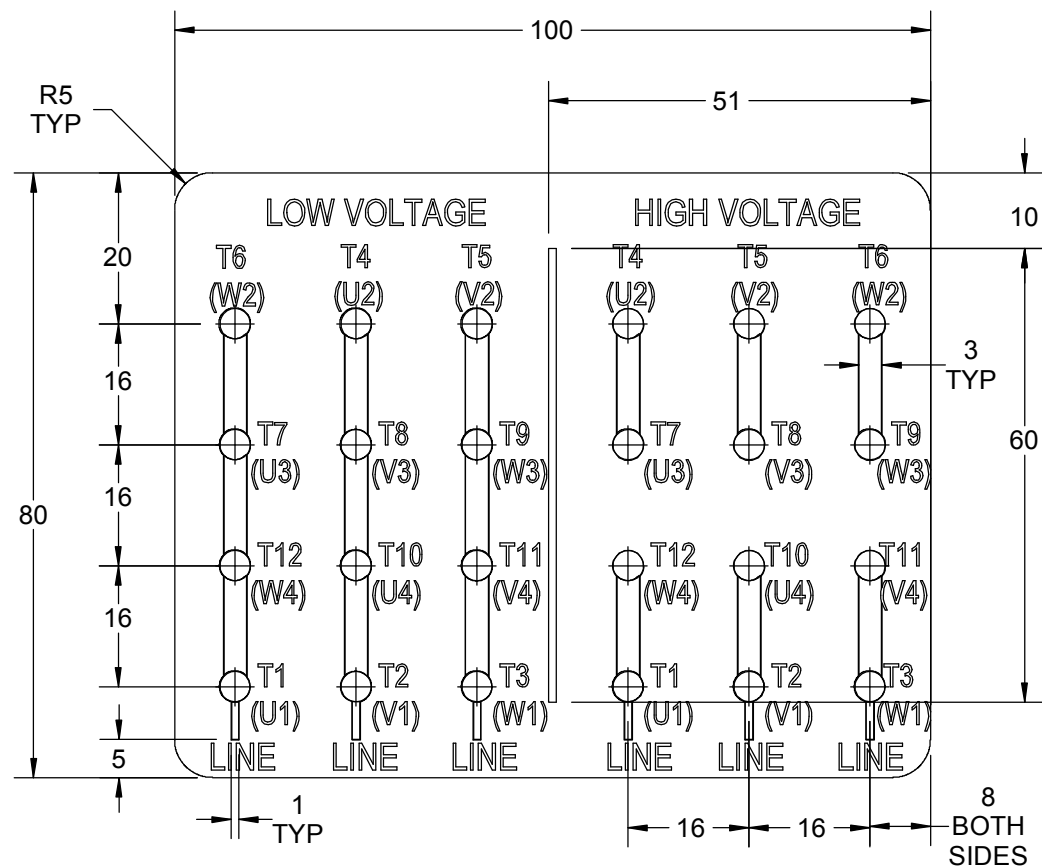
Technical Specifications

| | | | |
|-----------------------|------------------------------|--------------------|----------------------------|
| Electrical Type | Squirrel Cage Inverter Rated | Starting Method | Line Or Inverter |
| Poles | 6 | Rotation | Reversible |
| Resistance Main | .07 Ohms | Mounting | B3 |
| Motor Orientation | Horizontal | Drive End Bearing | Ball |
| Opp Drive End Bearing | Ball | Frame Material | Cast Iron |
| Shaft Type | IEC | Shaft Diameter | 75.000 in |
| Assembly/Box Mounting | F3 | Inverter Load | CONSTANT 2:1/VARIABLE 10:1 |
| Outline Drawing | SS620889 | Connection Drawing | 8442000677 |

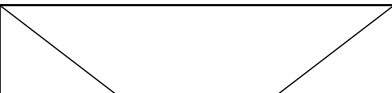

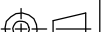
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| | | | |
|--|-----------|---|-----------------|
| DRAWN BY MSH | |  | |
| DATE 25/01/2019 | | | |
| APPROVED BY JAY | | DESCRIPTION <h1>OUTLINE</h1> IEC-280M-4P-B35, MOTOR TYPE: NA-TEFC-CAST IRON | |
| DATE 25/01/2019 | | | |
| REFERENCE | | MATERIAL | PROCESS/FINISH |
| THIRD ANGLE PROJECTION  | SIZE B | DRAWING NUMBER SS620889 | SHEET 1 OF 1 |



1. PRESSURE-SENSITIVE ADHESIVE TAPE COATED WITH ANTI-ADHESIVE.
2. YELLOW COLOR BACK GROUND LETTERS WILL BE BLACK.
3. THE TOLERANCE OF THE LINEAR SIZE OF THE TOLERANCE WITHOUT THE TOLERANCE BY THE TABLE.
4. LEAD TERMINAL MARKINGS FONT SIZE : T1-T12 & U1-U4,V1-V4& W1-W4 OF ARIAL WITH 3mm SIZE
5. OTHER LETTER FONT SIZE SHOULD BE 3.5mm.

| | | | | | | | | | | | | | | | |
|--|--|--------------------|--|--------------------|--|--|--------------------|---|--|-----------|--|------------------------------|-----------|-----------------|----------|
| DRAWING REVISION C | | REVISION BY NIV | | DATE 05/03/2019 | |  | DRAWN BY NIV | |  Regal Beloit America, Inc. | | | | | | |
| ECO ECO-0162986 | | APPROVED BY JAY | | DATE 05/03/2019 | | | DATE 29/01/2019 | | | | | | | | |
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| | | | | | | | DATE 29/01/2019 | | | | | | | | |
| | | | | | | | | | | | | | REFERENCE | | MATERIAL |
| | | | | | | THIRD ANGLE PROJECTION | |  | | SIZE A | | DRAWING NUMBER 8442000677 | | SHEET 1 OF 1 | |



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

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER: _____
ORDER #: _____
CONN. DIAGRAM: 8442000677
OUTLINE: SS620889
WINDING: IE3L2806202 NONE 1
SPEED: _____

CUSTOMER P.O. #: _____
REFERENCE MODEL #: TCA0553AE231GAA009
CAT #: R859
CUSTOMER PART #: _____
MOUNTING: F3

TYPICAL MOTOR PERFORMANCE DATA

| HP | KW | SYNC RPM | FL RPM | FRAME | ENCLOSURE | TYPE | KVA CODE | DESIGN |
|----|-------|----------|--------|-------|-----------|-------------|----------|--------|
| 75 | 55.00 | 1200 | 1190 | 280M | TEFC | TCA 280MA06 | G | N |

| PH | HZ | VOLTS | AMPS | START TYPE | DUTY | INSL | S.F. | AMB (* C) | ELEV.(Ft.) |
|----|-------|-----------------|---------------|------------------|------|------|------|-----------|------------|
| 3 | 60/50 | 230/460#200/400 | 174/87&166/83 | LINE OR INVERTER | CONT | F | 1.15 | 40 | 3300 |

| | | | | | | | |
|----------|------|------------|------|------------|------|---------|-------------------|
| F.L. EFF | 94.5 | 3/4 LD EFF | 94.5 | 1/2 LD EFF | 93.3 | GTD EFF | ELECT. TYPE |
| F.L. PF | 84.0 | 3/4 LD PF | 81.0 | 1/2 LD PF | 73.0 | 93.7 | SQ CAGE INV RATED |

| | | | | |
|-------------|-----------------|----------------|----------------|-----------------|
| F.L. TORQUE | LR AMPS @ 460 V | L.R. TORQUE | B.D. TORQUE | F.L. RISE (* C) |
| 331 LB-FT | 549 | 583 LB-FT 176% | 792 LB-FT 239% | 80 |

| | | | | | | | | |
|------------------------|--------|-------|-------------------------|---------------------------|-----------------|-------------|--------|-----------|
| SOUND PRESSURE @ 3 FT. | SOUND | POWER | ROTOR WK ² | MAX. LOAD WK ² | SAFE STALL TIME | STARTS/HOUR | APROX. | MOTOR WGT |
| 68 dBA | 77 dBA | | 63.5 LB-FT ² | 63.5 LB-FT ² | 15 SEC. | 2 | 699 | KG. |

*** SUPPLEMENTAL INFORMATION ***

| | | | | | | | | |
|-----------------|------------------|------------|-------------------|-------------|--------------------|------------|---------|---------------|
| DE BRACKET TYPE | ODE BRACKET TYPE | MOUNT TYPE | MOTOR ORIENTATION | SEVERE DUTY | HAZARDOUS LOCATION | DRIP COVER | SCREENS | PAINT |
| FF-FLANGE-500 | STANDARD | B3 | HORIZONTAL | NO | NONE | NO | NONE | BLUE (ENAMEL) |

| | | | | | | | |
|-----------|------------|--------------|------------|-------------|-------------------------|----------|----------------|
| BEARINGS | GREASE | SHAFT TYPE | SPECIAL DE | SPECIAL ODE | SHAFT | MATERIAL | FRAME MATERIAL |
| DE ODE | | | | | | | |
| BALL BALL | SG S5-V100 | STANDARD IEC | NONE | NONE | 1045 HOT ROLLED (C-204) | | CAST IRON |
| 6314 6314 | | | | | | | |

| | | | | | | | |
|-------------|------------|-----------|-----------|-------------|---------|-------|---------|
| 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 |
| 0.042 | 0.030 | 0.284 | 0.416 | 8.596 | 0.150 | ODE |

| | | |
|---------------------------------|--|--|
| * N O T E S * | | INVERTER TORQUE: CONSTANT 2:1/VARIABLE 10:1 INV. HP SPEED RANGE: NONE |
| | | ENCODER: NONE NONE NONE PPR |

| | | |
|--|---|-----------|
| PREPARED BY: _____ DATE: 11/27/2020 | BRAKE: NONE NONE NONE FT-LB: NA VOLTAGE: NONE UL: V - LI,ME-INS,CONST UL REC | HZ: _____ |
|--|---|-----------|

FORM: 3531 REV_4 2/27/06

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