

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 286TTFNA6076

Catalog No: E238

20 HP General Purpose Motor, 3 phase, 1200 RPM, 230/460 V, 286T Frame, TEFC
General Purpose Motors



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RegalRexnord

Nameplate Specifications

| | | | |
|------------------------|-------------|----------------------------|-----------------------------|
| Output HP | 20 Hp | Output KW | 14.9 kW |
| Frequency | 60 Hz | Voltage | 230/460 V |
| Current | 53.5/26.8 A | Speed | 1175 rpm |
| Service Factor | 1.15 | Phase | 3 |
| Efficiency | 91.7 % | Power Factor | 76 |
| Duty | Continuous | Insulation Class | F |
| Design Code | B | KVA Code | G |
| Frame | 286T | Enclosure | Totally Enclosed Fan Cooled |
| Thermal Protection | No | Ambient Temperature | 40 °C |
| Drive End Bearing Size | 6311 | Opp Drive End Bearing Size | 6210 |
| UL | Recognized | CSA | Y |
| CE | Y | IP Code | 43 |
| Number of Speeds | 1 | | |

Technical Specifications

| | | | |
|-----------------------|-----------------------------|-----------------------|-----------------|
| Electrical Type | Squirrel Cage Induction Run | Starting Method | Across The Line |
| Poles | 6 | Rotation | Reversible |
| Resistance Main | .385 Ohms | Mounting | Rigid Base |
| Motor Orientation | Horizontal | Drive End Bearing | Ball |
| Opp Drive End Bearing | Ball | Frame Material | Cast Iron |
| Shaft Type | T | Overall Length | 28.16 in |
| Frame Length | 14.25 in | Shaft Diameter | 1.875 in |
| Shaft Extension | 4.82 in | Assembly/Box Mounting | F1/F2 Capable |
| Outline Drawing | B-SS311111-1425 | Connection Drawing | A-EE7308K |

4

3

Uncontrolled Copy

2

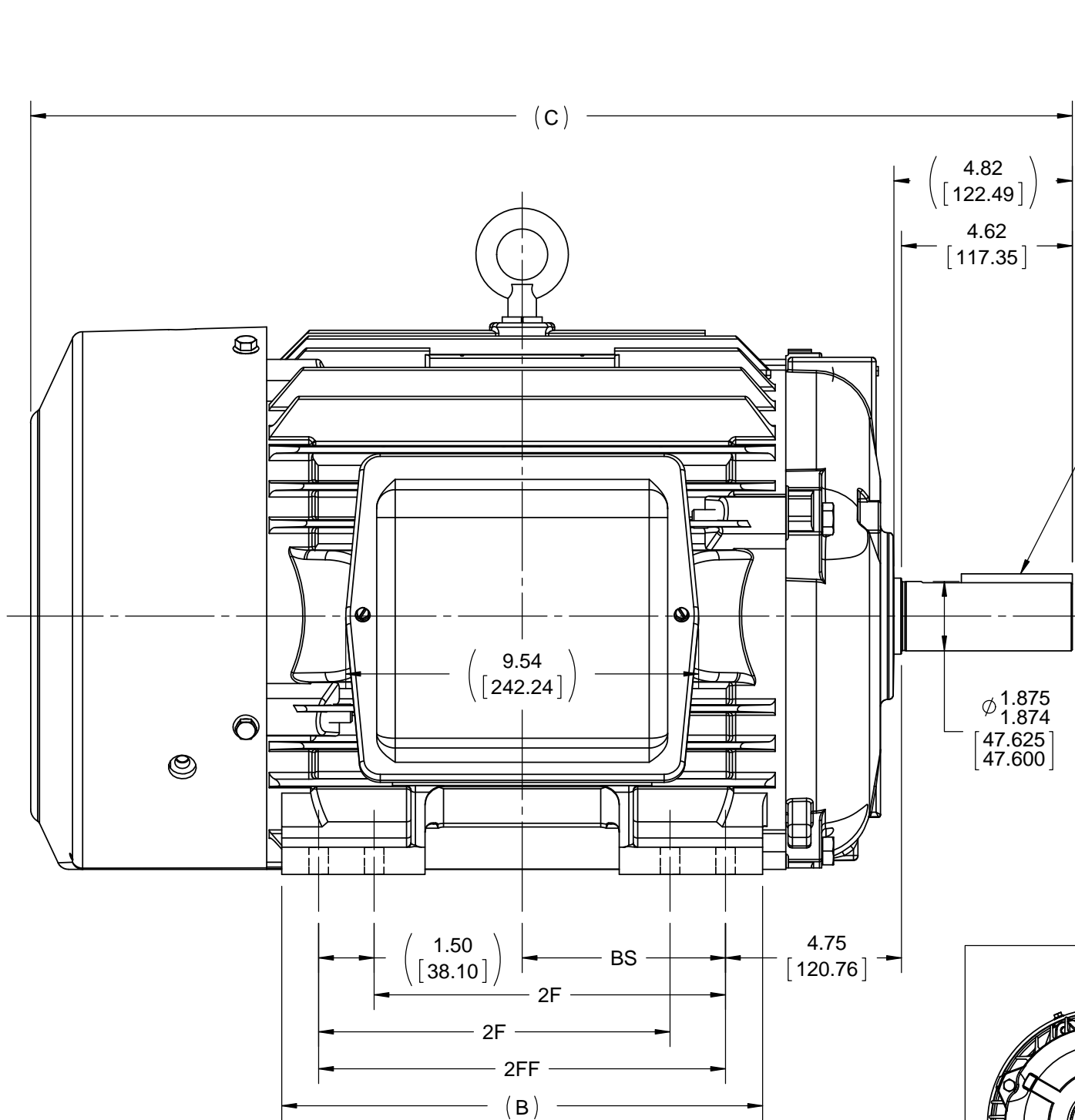
1

B

B

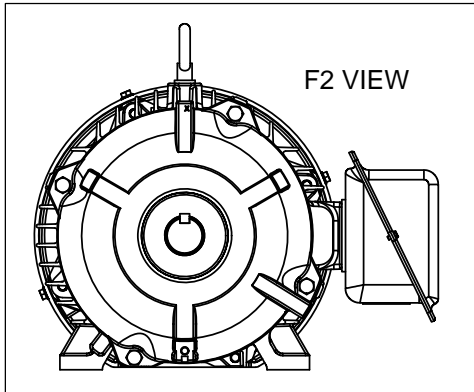
A

A



.500x.500x3.25
[12.700x12.700x82.55]
KEY

Ø1.875
1.874
[47.625]
[47.600]



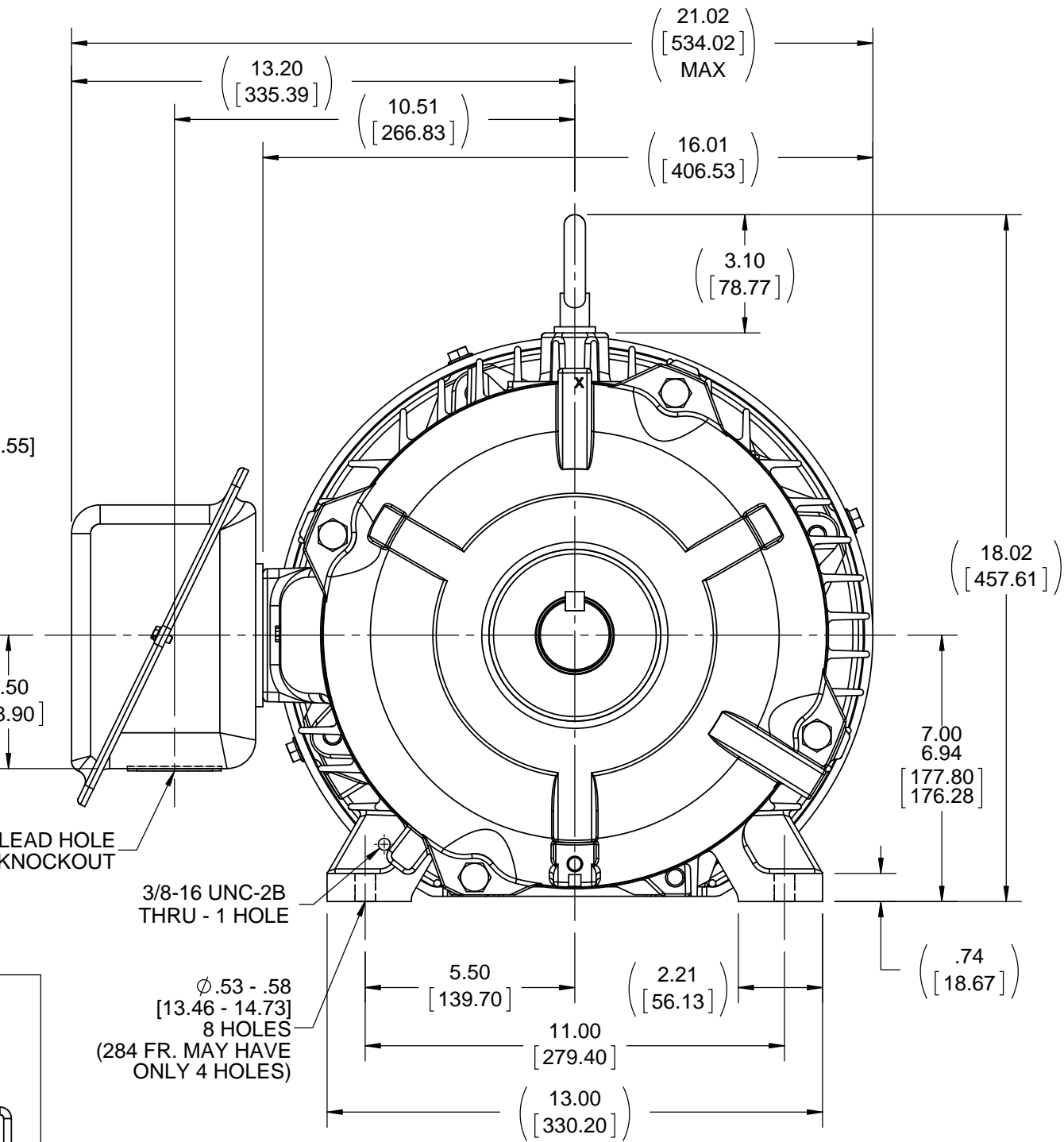
F2 VIEW

3.50
[88.90]

Ø2.00" LEAD HOLE
Ø2.50" KNOCKOUT

3/8-16 UNC-2B
THRU - 1 HOLE

Ø.53 - .58
[13.46 - 14.73]
8 HOLES
(284 FR. MAY HAVE
ONLY 4 HOLES)



- NOTES:
1. CONDUIT BOX CAN BE ROTATED CLOCKWISE UP TO 270° FROM ITS ORIGINAL POSITION.
 2. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.
 3. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.

| DASH | FRAME | B | C | 2F | 2FF | BS |
|------|-----------|-------------------|-------------------|------------------|-------------------|------------------|
| 1275 | 284T | 12.50 [317.50] | 26.66 [677.16] | --- | 9.50 [241.30] | 4.75 [120.65] |
| 1425 | 284/ 286T | 13.00 [330.20] | 28.16 [715.26] | 9.50 [241.30] | 11.00 [279.40] | 5.50 [139.70] |

| | | |
|--|----------------------------|--------------------|
| DRAWING REVISION D | REVISION BY M GERTSCHEN | DATE 12-05-2016 |
| ECO ECO-0113979 | APPROVED BY T VUE | DATE 12-05-2016 |
| ECO DESCRIPTION ADDED F2 VIEW | | |
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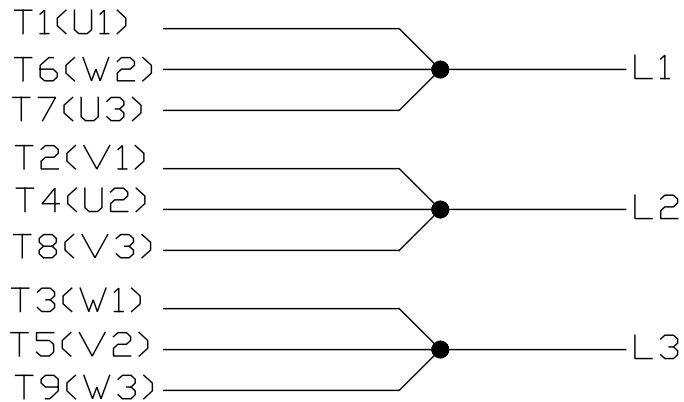
| | | | |
|---|---------|-----------|---------|
| TOLERANCES UNLESS OTHERWISE SPECIFIED: | | | |
| DEC. | INCH | mm | ANGLE |
| .X | ±0.1 | [±2.5] | ±7° 30" |
| .XX | ±0.03 | [±0.76] | |
| .XXX | ±0.005 | [±0.127] | |
| .XXXX | ±0.0005 | [±0.0127] | |
| REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [0.076/.381] CORNER FILLETS: .02 [0.51] MACHINED SURFACES: 200 INCH 5.1 mm | | | |
| mm SHOWN IN [BRACKETS] | | | |

| | |
|---------------------------|--------------------|
| DRAWN BY CAV | DATE 01-31-2001 |
| APPROVED BY DD | DATE 01-31-2001 |
| REFERENCE | |
| THIRD ANGLE PROJECTION | |

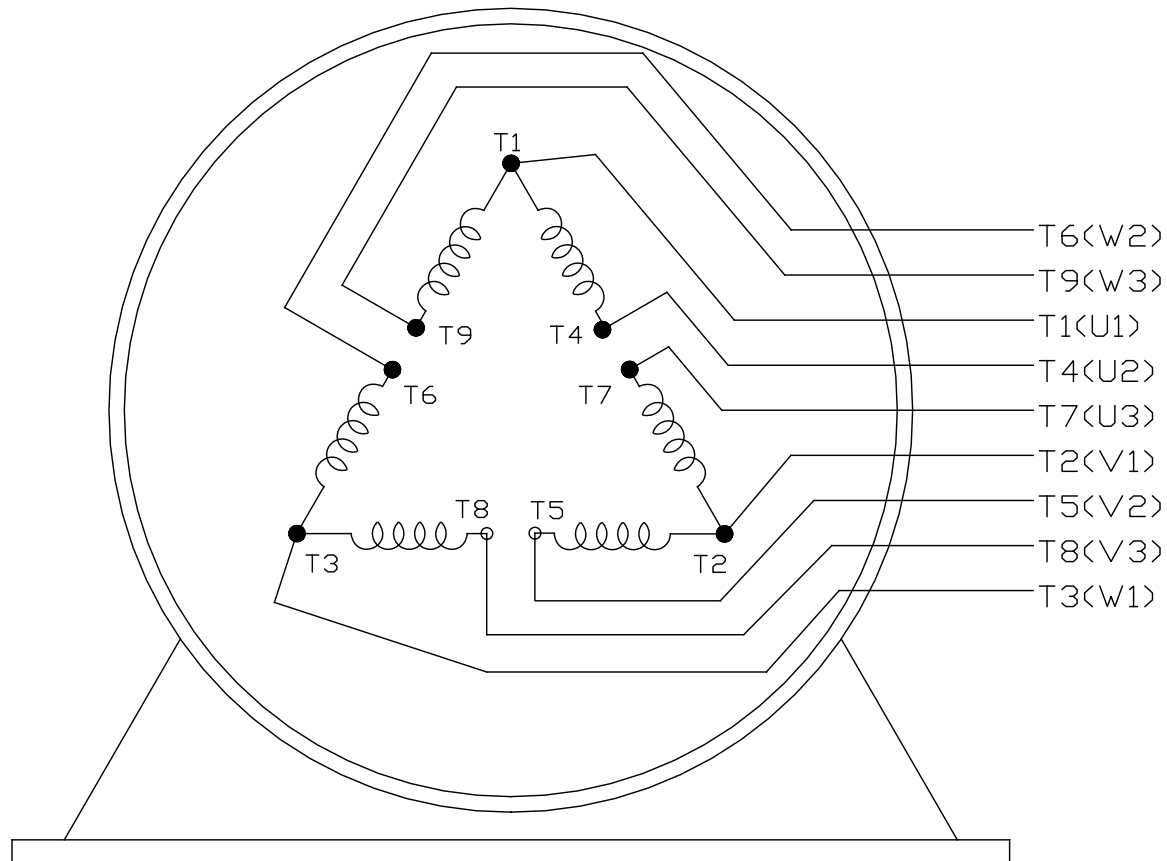
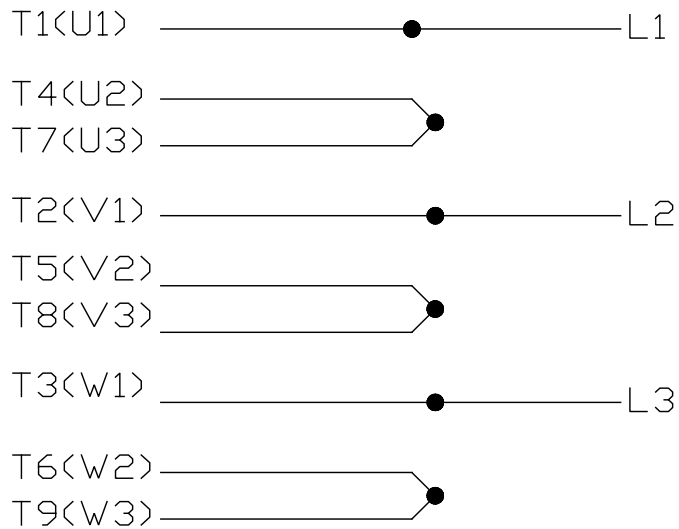
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|--|----------------------------|
| REGAL™ Regal Beloit America, Inc. | |
| DESCRIPTION OUTLINE 280T FR. - TEFC - 12.50 LAM. | |
| MATERIAL | PROCESS/FINISH |
| SIZE B | DRAWING NUMBER SS311111 |
| SHEET 1 OF 1 | |

LOW VOLTAGE


EE7308K



HIGH VOLTAGE



VIEW OF TERMINAL END

| | | | | | | | | | |
|--|--|----------------|------|--------------------------------|------------------|---|-----------|----------------------|-------------------|
| | | | | TOLERANCES UNLESS SPECIFIED | |  REGAL - BELOIT CORPORATION | | DRAWN PGK 06-04-1997 | |
| E | CORRECTED IEC MARKINGS ECD-0111208 | WGJ 01-23-2017 | EMH | DEC. | INCHES | | | CHK | ML 06-05-1997 |
| D | RE-DRAWN WITH REGAL LOGO ECD-0110493 | WGJ 09-30-2016 | EMH | .X | ±.1 | | | APPD | GK 06-15-1997 |
| 8 | ADDED IEC DESIGNATIONS MU95020 | TJW 4/30/2010 | MJS | .XX | ±.02 | TITLE CONNECTION DIAGRAM DELTA CON. - 3Ø - 9 LEADS | | SCALE | |
| 7 | REVISED HIGH VOLTAGE L2 WAS L3 CN52600-354 | MRB 09-21-1998 | | .XXX | ±.005 | | | REF | |
| 6 | REDRAWN ON CADD | PGK 06-05-1997 | | .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 | | CAD FILE EE7308K | | SIZE A | DRAWING NO. EE7308K | PAGE OF REV. E |
| | | | DIST | | | | | | |

CERTIFICATION DATA SHEET

Model#: 286TTFNA6076 BA
CONN. DIAGRAM: A-EE7308K
OUTLINE: B-SS311111-1425

WINDING#: 286654 NONE 6
ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

| HP | KW | SYNC. RPM | F.L. RPM | FRAME | ENCLOSURE | KVA CODE | DESIGN |
|----|------|-----------|----------|-------|-----------|----------|--------|
| 20 | 14.9 | 1200 | 1175 | 286T | TEFC | G | B |

| PH | Hz | VOLTS | FL AMPS | START TYPE | DUTY | INSL | S.F | AMB°C | ELEVATION |
|----|----|---------|-----------|-----------------|------------|------|------|-------|-----------|
| 3 | 60 | 230/460 | 53.5/26.8 | ACROSS THE LINE | CONTINUOUS | F3 | 1.15 | 40 | 3300 |

| | | | | | |
|---------------------|--------------------|--------------------|----------|-----------------|--------------|
| FULL LOAD EFF: 91.7 | 3/4 LOAD EFF: 91.7 | 1/2 LOAD EFF: 91.7 | GTD. EFF | ELEC. TYPE | NO LOAD AMPS |
| FULL LOAD PF: 76 | 3/4 LOAD PF: 70.5 | 1/2 LOAD PF: 59.5 | 91 | SQ CAGE IND RUN | 25 / 12.5 |

| | | | | |
|-------------|-------------------|---------------|---------------|-------------|
| F.L. TORQUE | LOCKED ROTOR AMPS | L.R. TORQUE | B.D. TORQUE | F.L. RISE°C |
| 89 LB-FT | 290 / 145 | 157 LB-FT 176 | 238 LB-FT 267 | 60 |

| | | | | | | |
|------------------------|-------------|-------------|-------------|-----------------|--------------|-------------------|
| SOUND PRESSURE @ 3 FT. | SOUND POWER | ROTOR WK^2 | MAX. WK^2 | SAFE STALL TIME | STARTS /HOUR | APPROX. MOTOR WGT |
| 56 dBA | 66 dBA | 4.8 LB-FT^2 | 350 LB-FT^2 | 20 SEC. | 2 | 550 LBS. |

*** SUPPLEMENTAL INFORMATION ***

| DE BRACKET TYPE | ODE BRACKET TYPE | MOUNT TYPE | ORIENTATION | SEVERE DUTY | HAZARDOUS LOCATION | DRIP COVER | SCREENS | PAINT |
|-----------------|------------------|------------|-------------|-------------|--------------------|------------|---------|---------------|
| STANDARD | STANDARD | RIGID | HORIZONTAL | FALSE | NONE | FALSE | NONE | BLUE (ENAMEL) |

| BEARINGS | | GREASE | SHAFT TYPE | SPECIAL DE | SPECIAL ODE | SHAFT MATERIAL | FRAME MATERIAL |
|----------|------|------------|------------|------------|-------------|-------------------------|----------------|
| DE | OPE | | | | | | |
| BALL | BALL | | | | | | |
| 6311 | 6210 | POLYREX EM | T | NONE | NONE | 1045 HOT ROLLED (C-204) | CAST IRON |

| THERMO-PROTECTORS | | | | THERMISTORS | CONTROL | SPACE /n HEATERS |
|-------------------|------------|----------|----------|-------------|---------|------------------|
| THERMOSTATS | PROTECTORS | WDG RTDs | BRG RTDs | | | |
| NONE | NOT | NONE | NONE | NONE | FALSE | NONE VOLTS |

If Inverter equals NONE, contact factory for further information

| | | | |
|---------------------------------|---------------------------|--------|---------|
| * N O T E S * | INVERTER TORQUE: NONE | | |
| | INV. HP SPEED RANGE: NONE | | |
| | ENCODER: NONE | | |
| | NONE NONE | | |
| | NONE NONE PPR | | |
| | BRAKE: NONE NONE | | |
| | NONE P/N NONE | | |
| | NONE NONE | | |
| | - FT-LB | NONE V | NONE Hz |

DATE: 06/21/2017 10:41:38 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

