

PRODUCT INFORMATION PACKET

Model No: 056H17F2021
Catalog No: Y364
1,1800,TEFC,56C,3/60/230/460
1000:1 Speed Ratio



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Nameplate Specifications

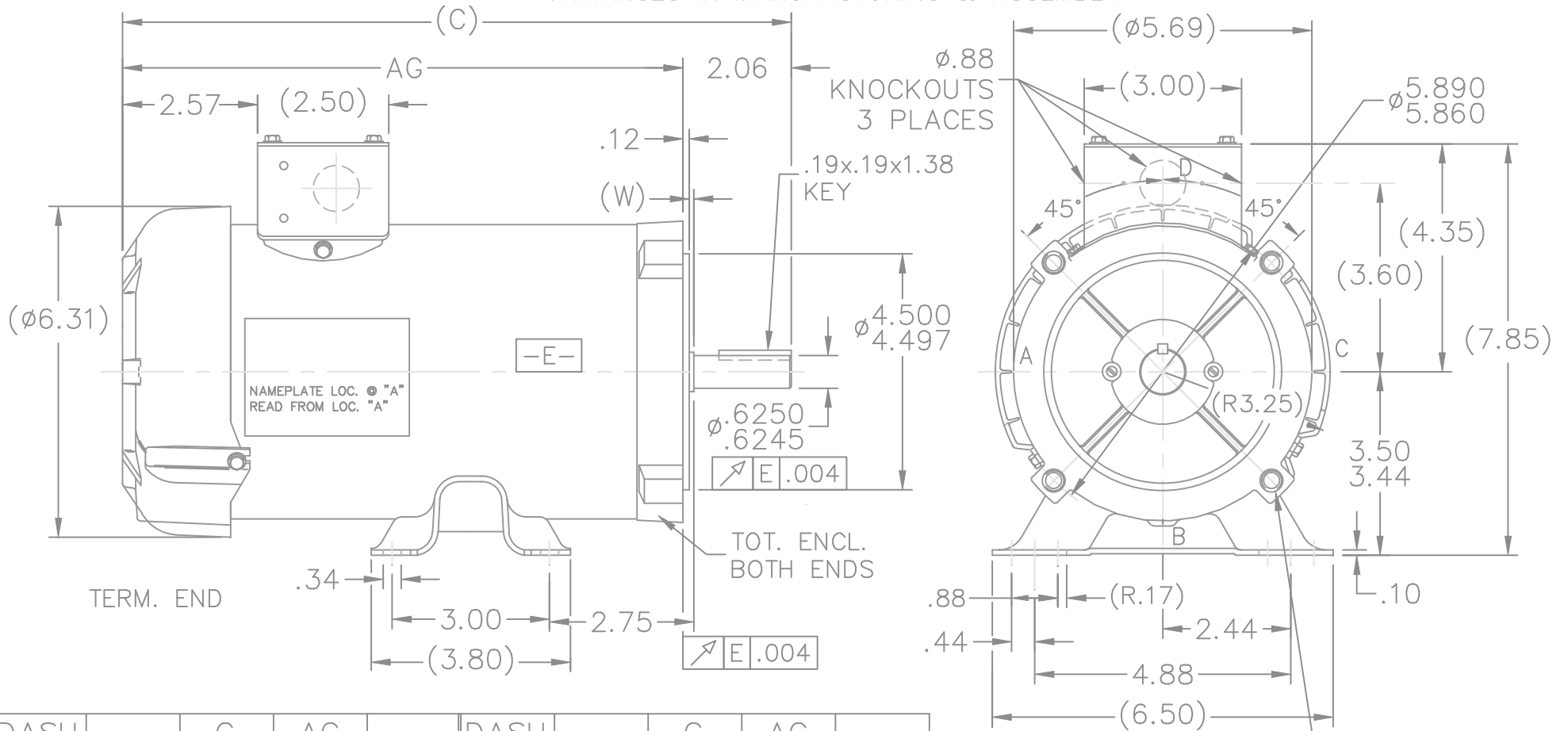
| | | | |
|----------------------------|------------------------------------|------------------------|-------------------|
| Output HP | 1 Hp | Output KW | 0.75 kW |
| Frequency | 60 Hz | Voltage | 230/460 V |
| Current | 3.2/1.6 A | Speed | 1725 rpm |
| Service Factor | 1 | Phase | 3 |
| Efficiency | 78.5 % | Duty | Continuous |
| Insulation Class | H | Design Code | INV |
| KVA Code | K | Frame | 56C |
| Enclosure | Totally Enclosed Fan Cooled | Overload Protector | No |
| Ambient Temperature | 40 °C | Drive End Bearing Size | 6203 |
| Opp Drive End Bearing Size | 6203 | UL | Recognized |
| CSA | Y | CE | Y |
| IP Code | 43 | | |

Technical Specifications

| | | | |
|-----------------------|------------------------------------|-----------------------|----------------------|
| Electrical Type | Squirrel Cage Inverter Duty | Starting Method | Inverter Only |
| Poles | 4 | Rotation | Reversible |
| Mounting | Rigid base | Motor Orientation | Horizontal |
| Drive End Bearing | Ball | Opp Drive End Bearing | Ball |
| Frame Material | Rolled Steel | Shaft Type | NEMA 56 |
| Overall Length | 12.44 in | Frame Length | 7.50 in |
| Shaft Diameter | 0.625 in | Shaft Extension | 2.06 in |
| Assembly/Box Mounting | F3 | | |
| Outline Drawing | A-SS75928-750 | Connection Diagram | A-EE7308 |

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'W' = CLEARANCE ALLOWED FOR ALL
VARIANCES IN MANUFACTURING & ASSEMBLY



| DASH | C | AG | DASH | C | AG |
|------|-------|------|------|-------|-------|
| 500 | 9.94 | 7.88 | 625 | 11.19 | 9.13 |
| 525 | 10.19 | 8.13 | 750 | 12.44 | 10.38 |
| 575 | 10.69 | 8.63 | | | |

| NO. | REVISION | BY & DATE | TOLERANCES UNLESS SPECIFIED | |
|-----|---|----------------|-----------------------------|------------|
| | | | DEC. | INCHES |
| 5 | UPDATED DRAWING | TJW 04/20/2007 | .X | ±.1 |
| 4 | CHANGED TO LEESON CONDUIT BOX PER CN39440-2 | TJW | .XX | ±.03 |
| 3 | REDRAWN IN AUTOCAD | TAT 07-06-2004 | .XXX | ±.005 |
| 2 | REVISED NAMEPLATE LOCATION CN 34681 | NJS 02-19-2002 | .XXXX | ±.0005 |
| 1 | NEW DRAWING 4069675 | NJS 02-19-2002 | CHK | ANG ±7'30" |

05-17-2000

3/8-16 UNC-2B
.56 MIN. FULL THD.
4 HOLES

MARATHON ELECTRIC

TITLE OUTLINE

MAT'L.

FINISH

DRAWN DD 08-27-1993
CHK ML 08-30-1993
APPD JAY 08-31-1993
SCALE 11=32
REF
FMF
PREV

| RFP | CAD FILE | SIZE | DRAWING NO. | PAGE | OF | REV. |
|---------|----------|------|-------------|------|----|------|
| DIST WP | ss75928 | A | SS75928 | | | 5 |

EE7308

THREE PHASE
DUAL VOLTAGE MOTOR



VIEW OF TERMINAL END

REF.
WINDING DIAGRAM

T8Y, T2Y, T2BL, T4BX, T2EC, T2G
T6BZ, T2B, T6BL, T4AV, T6B, T4B

OPTIONAL CORD
CONNECTION

L1 — WHITE
L2 — RED
L3 — BLACK

| NO. | REVISION | BY & DATE | CHK | ANG | TOLERANCES UNLESS SPECIFIED | | FINISH | DRAWN RM 11/20/1990 | | | | |
|--|--|----------------|-----|-------|--------------------------------|--------|---|---------------------|--------|--------------------|-----------|--------|
| | | | | | DEC. | INCHES | | | | | | |
| 5 | CHG TO REGAL LOGO | SL 09/10/2015 | AB | | | | | CHK ML 11/21/1990 | | | | |
| 4 | REVISED IEC NOTATIONS | MSG 11/15/2011 | CMN | .X | ±.1 | | | APPD SAS 04/24/2003 | | | | |
| 3 | ADDED IEC NOTATIONS... (U1), (V1) ETC. MU95194 | MSG 5/10/2010 | MJS | .XX | ±.02 | | | SCALE 1=1 | | | | |
| 2 | ADDED THE OPTIONAL CORD CONNECTION MU46318 | RDH 04/24/2003 | DRS | .XXX | ±.005 | | TITLE CONNECTION DIAGRAM 3Ø - DUAL VOLTAGE MOTOR | REF | | | | |
| 1 | REDRAWN | RM 11/20/1990 | | .XXXX | ±.0005 | | MAT'L. | FMF | | | | |
| | | | | | ±7'30" | | | 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 ee7308 | SIZE A | DRAWING NO. EE7308 | PAGE OF 5 | REV. 5 |
| | | | | | | | DIST WP | | | | | |



CERTIFICATION DATA SHEET

Model#: 56H17F2021 A **WINDING#:** TE48421 R1 3
CONN. DIAGRAM: A-EE7308 **ASSEMBLY:** F3
OUTLINE: A-SS75928-750

TYPICAL MOTOR PERFORMANCE DATA

| HP | KW | SYNC. RPM | F.L. RPM | FRAME | ENCLOSURE | KVA CODE | DESIGN |
|----|-----|-----------|----------|-------|-----------|----------|--------|
| 1 | .75 | 1800 | 1725 | 56C | TEFC | K | INV |

| PH | Hz | VOLTS | FL AMPS | START TYPE | DUTY | INSL | S.F | AMB°C | ELEVATION |
|----|----|---------|---------|---------------|------------|------|-----|-------|-----------|
| 3 | 60 | 230/460 | 3.2/1.6 | INVERTER ONLY | CONTINUOUS | H1 | 1.0 | 40 | 3300 |

| FULL LOAD EFF: 78.5 | 3/4 LOAD EFF: 76.5 | 1/2 LOAD EFF: 72.5 | GTD. EFF | ELEC. TYPE | NO LOAD AMPS |
|---------------------|--------------------|--------------------|----------|------------------|--------------|
| FULL LOAD PF: 77.5 | 3/4 LOAD PF: 71 | 1/2 LOAD PF: 60 | 75.5 | SO CAGE INV DUTY | 1.8 / .9 |

| F.L. TORQUE | LOCKED ROTOR AMPS | L.R. TORQUE | B.D. TORQUE | F.L. RISE°C |
|-------------|-------------------|----------------|--------------|-------------|
| 3 LB-FT | 23 / 11.5 | 12.5 LB-FT 417 | 12 LB-FT 400 | 65 |

| SOUND PRESSURE @ 3 FT. | SOUND POWER | ROTOR WK^2 | MAX. WK^2 | SAFE STALL TIME | STARTS /HOUR | APPROX. MOTOR WGT |
|------------------------|-------------|--------------|-----------|-----------------|--------------|-------------------|
| 60 dBA | 70 dBA | 0.09 LB-FT^2 | 0 LB-FT^2 | 0 SEC. | 0 | - LBS. |

EQUIVALENT WYE CKT.PARAMETERS (OHMS PER PHASE)

| R1 | R2 | X1 | X2 | XM |
|---------|--------|--------|--------|--------|
| 10.8204 | 10.934 | 12.354 | 7.4692 | 292.52 |

| RM | ZREF | XR | TD | TD0 |
|------|------|------|--------|-------|
| 9514 | 284 | 1.43 | 0.0036 | 0.073 |

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

| DE BRACKET TYPE | ODE BRACKET TYPE | MOUNT TYPE | ORIENTATION | SEVERE DUTY | HAZARDOUS LOCATION | DRIP COVER | SCREENS | PAINT |
|-----------------|------------------|------------|-------------|-------------|--------------------|------------|---------|----------------|
| C-FACE | STANDARD | RIGID | HORIZONTAL | FALSE | NONE | FALSE | NONE | BLACK (POWDER) |

| BEARINGS | | GREASE | SHAFT TYPE | SPECIAL DE | SPECIAL ODE | SHAFT MATERIAL | FRAME MATERIAL |
|----------|------|------------|-------------|------------|-------------|--------------------------|----------------|
| DE | OPE | | | | | | |
| BALL | BALL | POLYREX EM | STANDARD 56 | NONE | NONE | 1144 STRESSPROOF (C-223) | ROLLED STEEL |
| 6203 | 6203 | | | | | | |

| 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

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| |
|---------------------------------------|
| INVERTER TORQUE: CONSTANT 20:1 |
| INV. HP SPEED RANGE: 2.0 X BASE SPEED |
| ENCODER: NONE |
| NONE NONE |
| NONE NONE PPR |
| BRAKE: NONE NONE |

| | | | |
|------------|-----|--------|---------|
| NONE | P/N | NONE | |
| NONE | | NONE | |
| NONE FT-LB | | NONE V | NONE Hz |

DATE: 06/28/2017 01:05:58 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

Data Sheet

56H17F2021



Submission
Data @ 460 V

Date: 11/30/2017
Customer: EARL BABBITTS
Attention: EARL BABBITTS
Submitted by:

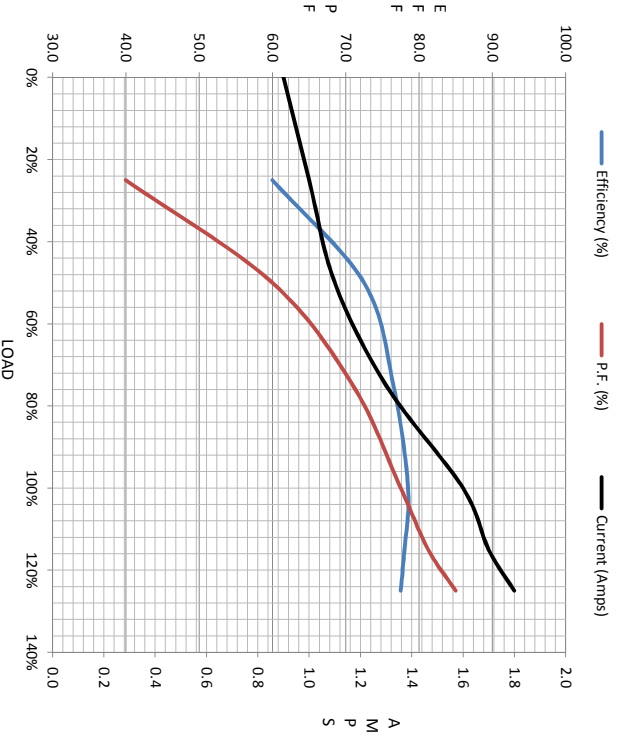
| Load | Motor Load Data | | | | | | | |
|----------------|-----------------|------|------|------|------|------|------|------|
| | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR |
| Current (Amps) | 0.90 | 1.00 | 1.10 | 1.30 | 1.60 | 1.70 | 1.80 | 11.5 |
| Torque (ft-lb) | 0.00 | 0.74 | 1.50 | 2.30 | 3.0 | 3.5 | 4.0 | 12.5 |
| RPM | 1800 | 1780 | 1760 | 1740 | 1725 | 1715 | 1700 | 0 |
| Efficiency (%) | | 60.0 | 72.5 | 76.5 | 78.5 | 78.0 | 77.5 | |
| P.F. (%) | 16.0 | 40.0 | 60.0 | 71.0 | 77.5 | 81.3 | 85.0 | 75.0 |

Motor Speed Data

| | LR | Pull-Up | BD | Rated | Idle |
|----------------|------|---------|------|-------|------|
| Speed (rpm) | 0 | 900 | 1650 | 1725 | 1800 |
| Current (Amps) | 11.5 | 10.5 | 7.6 | 1.60 | 0.90 |
| Torque (ft-lb) | 12.5 | 11.3 | 12.0 | 3.0 | 0.00 |

Information Block

| | | | | |
|----------------------------|---------------|---------|--------|----------|
| HP | 1.0 | | | |
| Sync. RPM | 1800 | | | |
| Frame | 48 | | | |
| Enclosure | TEFC | | | |
| Construction | TFR | | | |
| Voltage | 230/460 V | | | |
| Frequency | 60 Hz | | | |
| Design | B | | | |
| LR Code letter | K | | | |
| Service Factor | 1.0 | | | |
| Temp Rise @ FL | 62 °C | | | |
| Duty | CONT | | | |
| Ambient | 40 °C | | | |
| Elevation | 1,000 feet | | | |
| Motor/Shaft wkt | 0.09 Lb-Fe | | | |
| Ret Wdg | TEA8421 R1 | | | |
| Sound Pressure @ 1M | 60 dBA | | | |
| VFD Rating | CONSTANT 20:1 | | | |
| Outline Dwg | A-SS75928-750 | | | |
| Conn. Diag | A-EE7308 | | | |
| Additional Specifications: | | | | |
| 0 | | | | |
| EQUIV CKT (OHMS / PHASE) | | | | |
| R1 | R2 | X1 | X2 | Xm |
| 10.8200 | 10.9340 | 12.3540 | 7.4690 | 292.5200 |



Speed - Torque Curve

