

# PRODUCT INFORMATION PACKET

Model No: 286TTFNA14085

Catalog No: M894A

20 HP Vertical Solid Shaft P-Base Motor, 3 phase, 1200 RPM, 230/460 V, 286HPV Frame, TEFC  
Vertical Solid Shaft P-Base Motors



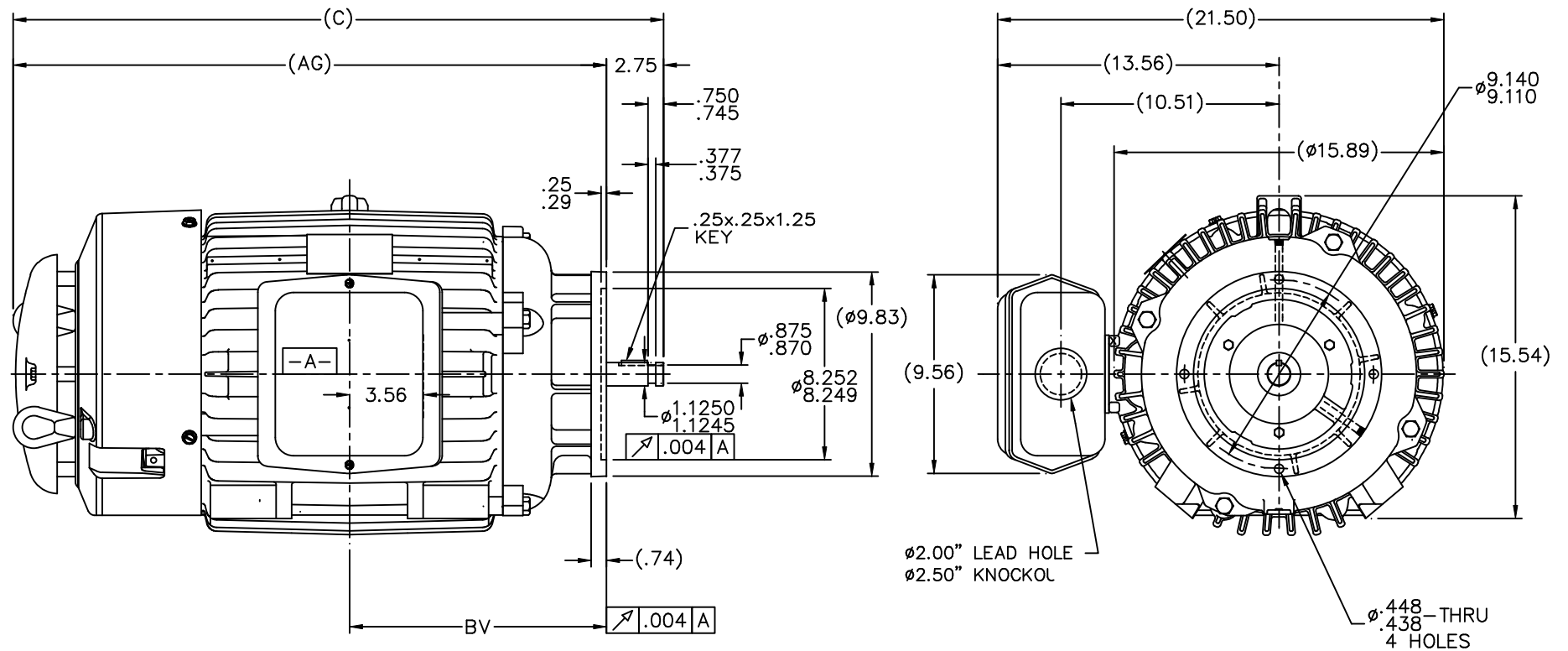
### Nameplate Specifications

|                        |             |                            |                             |
|------------------------|-------------|----------------------------|-----------------------------|
| Output HP              | 20 Hp       | Output KW                  | 14.9 kW                     |
| Frequency              | 60 Hz       | Voltage                    | 230/460 V                   |
| Current                | 54.0/27.0 A | Speed                      | 1170 rpm                    |
| Service Factor         | 1.15        | Phase                      | 3                           |
| Efficiency             | 90.2 %      | Power Factor               | 78.4                        |
| Duty                   | Continuous  | Insulation Class           | F                           |
| Design Code            | B           | KVA Code                   | G                           |
| Frame                  | 286HPV      | 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                          |

### Technical Specifications

|                       |                             |                       |                 |
|-----------------------|-----------------------------|-----------------------|-----------------|
| Electrical Type       | Squirrel Cage Induction Run | Starting Method       | Across The Line |
| Poles                 | 6                           | Rotation              | Reversible      |
| Resistance Main       | .435 Ohms                   | Mounting              | Round           |
| Motor Orientation     | Shaft Down                  | Drive End Bearing     | Ball            |
| Opp Drive End Bearing | Ball                        | Frame Material        | Cast Iron       |
| Shaft Type            | HP                          | Overall Length        | 30.84 in        |
| Frame Length          | 14.25 in                    | Shaft Diameter        | 1.875 in        |
| Shaft Extension       | 2.75 in                     | Assembly/Box Mounting | F1/F2 CAPABLE   |

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- NOTES:  
 1. BOX CAN ONLY BE ROTATED CLOCKWISE UP TO 270° FROM ITS ORIGINAL POSITION.  
 2. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

|      |           |  |       |       |  |       | TOLERANCES UNLESS SPECIFIED  |   | MARATHON ELECTRIC |            | DRAWN DRS 03-30-2000 |               |        |                   |                                  |             |      |    |      |
|------|-----------|--|-------|-------|--|-------|--|---|-------------------|------------|----------------------|---------------|--------|-------------------|----------------------------------|-------------|------|----|------|
|      |           |  |       |       |  |       | DEC.   | INCHES                                  |                   |            | CHK                  | ML 04-06-2000 |        |                   |                                  |             |      |    |      |
|      |           |  |       |       |  |       | .X   | ±.1                                     |                   |            | APPD                 | GK 04-06-2000 |        |                   |                                  |             |      |    |      |
|      |           |  |       |       |  |       | 3  | REDRAW ON AUTOCAD                       | HLB               | 09-07-2004 | ML                   | .XX           | ±.03   | TITLE             | OUTLINE - TEFC - TGN             | SCALE       | 1=5  |    |      |
|      |           |  |       |       |  |       | 2  | CORRECTED C'BOX HOLE NOTE CN 29200-1454 | HLB               | 02-16-2001 |                      | .XXX          | ±.005  |                   | 280HP FR. - BB - STD - 12.50 LAM | REF         |      |    |      |
|      |           |  |       |       |  |       | 1  | NEW DRAWING MU25722                     | DRS               | 04-06-2000 |                      | .XXXX         | ±.0005 | MATL              |                                  | 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 ss311022 | SIZE                             | DRAWING NO. | PAGE | OF | REV. |
| DASH | FRAME     |  | AG    | C     |  | BV    |  |   |                   |            |                      |               | B      | SS311022          | 3                                |             |      |    |      |
| 1425 | 284/286HP |  | 28.09 | 30.84 |  | 12.13 |  |   |                   |            |                      |               |        |                   |                                  |             |      |    |      |
| 1475 | 284/286HP |  | 28.59 | 31.34 |  | 12.38 |  |   |                   |            |                      |               |        |                   |                                  |             |      |    |      |

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  | DRAWING NO.   | PAGE OF    | REV.               |           |
|--|--|----------------|-----|-------|-----------------------------|--------|---------|---|------------|--------------------|-----------|
|  |  |                |     |       | DEC.                        | INCHES |         |   |            |                    |           |
| 5  | CHG TO REGAL LOGO                              | SL 09/10/2015  | AB  |       |                             |        |         | EE7308  | 11/20/1990 |                    |           |
| 4  | REVISED IEC NOTATIONS                          | MSG 11/15/2011 | CMN | .X    | ±.1                         |        |         |   | 11/21/1990 |                    |           |
| 3  | ADDED IEC NOTATIONS... (U1), (V1) ETC. MU95194 | MSG 5/10/2010  | MJS | .XX   | ±.02                        |        |         |   | 04/24/2003 |                    |           |
| 2  | ADDED THE OPTIONAL CORD CONNECTION MU46318     | RDH 04/24/2003 | DRS | .XXX  | ±.005                       |        |         | TITLE CONNECTION DIAGRAM<br>3Ø - DUAL VOLTAGE MOTOR |            | SCALE 1=1          |           |
| 1  | REDRAWN  | RM 11/20/1990  |     | .XXXX | ±.0005                      |        |         |   |            | REF                |           |
|  |  |                |     |       | ±7'30"                      |        |         |   |            | FMF                |           |
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|  |  |                |     |       |                             |        | DIST WP |   |            |                    |           |

