

# PRODUCT INFORMATION PACKET

Model No: LM03425

Catalog No: LM03425

Encoder Motors, TEBC - Axial, 75 HP, 3 Ph, 60 Hz, 230/460 V, 1785 RPM, 365T Frame



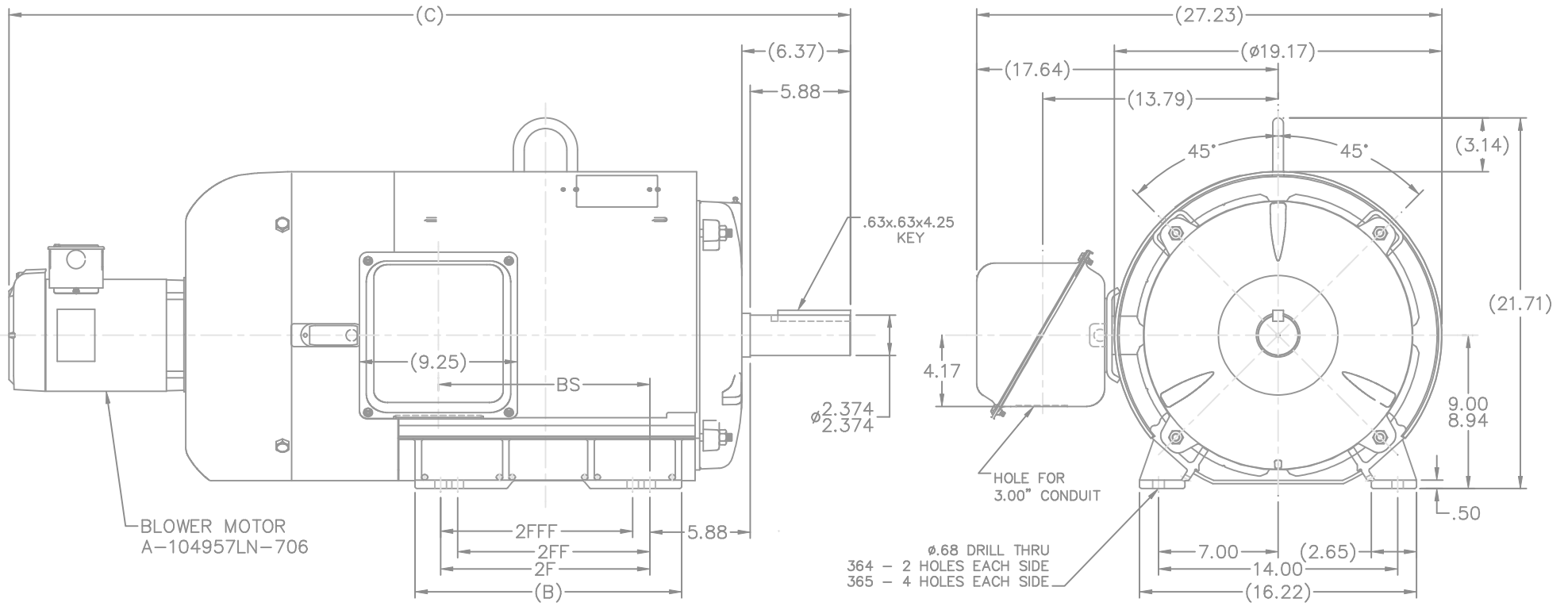
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### Nameplate Specifications

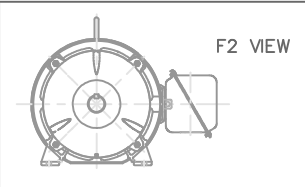
|                        |                      |                            |   |
|------------------------|----------------------|----------------------------|---|
| Output HP              | <b>75 Hp</b>         | Output KW                  | <b>56.0 kW</b>                                |
| Frequency              | <b>60 Hz</b>         | Voltage                    | <b>230/460 V</b>                              |
| Current                | <b>180.0/90.0 A</b>  | Speed                      | <b>1785 rpm</b>                               |
| Service Factor         | <b>1</b>             | Phase                      | <b>3</b>                                      |
| Efficiency             | <b>94.1 %</b>        | Power Factor               | <b>83</b>                                     |
| Duty                   | <b>Continuous</b>    | Insulation Class           | <b>F</b>                                      |
| Design Code            | <b>INV</b>           | KVA Code                   | <b>H</b>                                      |
| Frame                  | <b>365T</b>          | Enclosure                  | <b>Totally Enclosed Blower cooled - Axial</b> |
| Thermal Protection     | <b>No Protection</b> | Ambient Temperature        | <b>40 °C</b>                                  |
| Drive End Bearing Size | <b>313</b>           | Opp Drive End Bearing Size | <b>311</b>                                    |
| UL                     | <b>No</b>            | CSA                        | <b>Y</b>                                      |
| CE                     | <b>Y</b>             | IP Code                    | <b>43</b>                                     |
| Number of Speeds       | <b>1</b>             |                            |   |

### Technical Specifications

|                       |                                    |                       |                       |
|-----------------------|------------------------------------|-----------------------|-----------------------|
| Electrical Type       | <b>Squirrel Cage Inverter Duty</b> | Starting Method       | <b>Inverter Only</b>  |
| Poles                 | <b>4</b>                           | Rotation              | <b>Reversible</b>     |
| Resistance Main       | <b>.088 Ohms</b>                   | Mounting              | <b>Rigid Base</b>     |
| Motor Orientation     | <b>Horizontal</b>                  | Drive End Bearing     | <b>Ball</b>           |
| Opp Drive End Bearing | <b>Ball</b>                        | Frame Material        | <b>Rolled Steel</b>   |
| Shaft Type            | <b>T</b>                           | Overall Length        | <b>49.29 in</b>       |
| Frame Length          | <b>17.70 in</b>                    | Shaft Diameter        | <b>2.375 in</b>       |
| Shaft Extension       | <b>5.88 in</b>                     | Assembly/Box Mounting | <b>F1 ONLY</b>        |
| Connection Drawing    | <b>3A217-15</b>                    | Outline Drawing       | <b>XH2B1SS1J-1770</b> |



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



|  |       |       |       |       |       |       |       | TOLERANCES UNLESS SPECIFIED       |                | REGAL-BELOIT Motor Technologies Group |          | DRAWN CTO 10-31-2002 |        |            |             |      |    |      |
|--|-------|-------|-------|-------|-------|-------|-------|-----------------------------------|----------------|---------------------------------------|----------|----------------------|--------|------------|-------------|------|----|------|
|  |       |       |       |       |       |       |       | DEC.                              | INCHES         |                                       |          | CHK                  | ML     | 11-01-2002 |             |      |    |      |
|  |       |       |       |       |       |       |       | .X                                | ±.1            |                                       |          | APPD                 | HNH    | 11-04-2002 |             |      |    |      |
|  |       |       |       |       |       |       |       | .XX                               | ±.03           | TITLE OUTLINE NEMA MOTORS             |          | SCALE                | 1=5.75 |            |             |      |    |      |
|  |       |       |       |       |       |       |       | .XXX                              | ±.005          | 360T FR. - TEBC UE1                   |          | REF                  |        |            |             |      |    |      |
|  |       |       |       |       |       |       |       | .XXXX                             | ±.0005         | MAT'L                                 |          | FMF                  |        |            |             |      |    |      |
|  |       |       |       |       |       |       |       | CHK                               | ANG            | ±7'30"                                |          | PREV                 |        |            |             |      |    |      |
|  |       |       |       |       |       |       |       | RFP                               |                |                                       | CAD FILE | xh2b1ss1j            |        | SIZE       | DRAWING NO. | PAGE | OF | REV. |
|  |       |       |       |       |       |       |       | DIST                              | BY             |                                       | B        | XH2B1SS1J            |        | 2          |             |      |    |      |
| DASH   | FRAME | C     | BS    | B     | 2F    | 2FF   | 2FFF  |                                   |                |                                       |          |                      |        |            |             |      |    |      |
| 1670   | 364T  | 48.29 | 11.56 | 14.61 | 11.25 |       |       |                                   |                |                                       |          |                      |        |            |             |      |    |      |
| 1770   | 365T  | 49.29 | 12.56 | 15.61 | 12.25 | 11.25 | 11.25 |                                   |                |                                       |          |                      |        |            |             |      |    |      |
| 2  |       |       |       |       |       |       |       | REVISED BLOWER MOTOR PER CN 31970 | CTO 01-28-2003 | HNH                                   | .XXX     | ±.005                |        |            |             |      |    |      |
| 1  |       |       |       |       |       |       |       | NEW DRAWING                       | MU44106        | CTO 11-04-2002                        | HNH      | .XXXX                | ±.0005 |            |             |      |    |      |
| NO.  |       |       |       |       |       |       |       | REVISION                          | BY & DATE      |                                       | CHK      | ANG                  | ±7'30" |            |             |      |    |      |
| 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 |       |       |       |       |       |       |       |                                   |                |                                       |          |                      |        |            |             |      |    |      |



**CERTIFICATION DATA SHEET**

**2100 WASHINGTON ST.  
GRAFTON, WI  
PH. 262-277-8810**

**CONN. DIAGRAM:** 3A217-15

**OUTLINE:** XH2B1SS1J-1770

**CATALOG :** LM03425

**WINDING #:** C3654015 1

**MOUNTING:** F1 ONLY

**TYPICAL MOTOR PERFORMANCE DATA**

| HP | kW   | SYNC. RPM | F.L. RPM | FRAME | ENCLOSURE  | KVA CODE | DESIGN |
|----|------|-----------|----------|-------|------------|----------|--------|
| 75 | 56.0 | 1800      | 1785     | 365T  | TEBC-AXIAL | H        | INV    |

| PH | Hz | VOLTS   | AMPS   | START TYPE    | DUTY       | INSL | S.F. | AMB°C |
|----|----|---------|--------|---------------|------------|------|------|-------|
| 3  | 60 | 230/460 | 180/90 | INVERTER ONLY | CONTINUOUS | F4   | 1.0  | 40    |

| FULL LOAD EFF: | 94.1 | 3/4 LOAD EFF: | 94.1 | 1/2 LOAD EFF: | 93   | GTD. EFF |  | ELEC. TYPE       |  |
|----------------|------|---------------|------|---------------|------|----------|--|------------------|--|
| FULL LOAD PF:  | 83   | 3/4 LOAD PF:  | 78   | 1/2 LOAD PF:  | 67.5 | 93       |  | SQ CAGE INV DUTY |  |

| F.L. TORQUE | LOCKED ROTOR AMPS | L.R. TORQUE     | B.D. TORQUE     | F.L. RISE°C |
|-------------|-------------------|-----------------|-----------------|-------------|
| 221 LB-FT   | 1290 / 645        | 300 LB-FT 136 % | 650 LB-FT 294 % | 65          |

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

**\*\*\* SUPPLEMENTAL INFORMATION \*\*\***

| DE BRACKET TYPE | ODE BRACKET TYPE | MOUNT TYPE | ORIENTATION | SEVERE DUTY | HAZARDOUS LOCATION | DRIP COVER | SCREENS | PAINT          |
|-----------------|------------------|------------|-------------|-------------|--------------------|------------|---------|----------------|
| STANDARD        | ENCODER          | RIGID      | HORIZONTAL  | FALSE       | NONE               | FALSE      | NONE    | GRAY - LINCOLN |

| BEARINGS |      | GREASE     | SHAFT TYPE | SPECIAL DE | SPECIAL ODE | SHAFT MATERIAL          | FRAME MATERIAL |
|----------|------|------------|------------|------------|-------------|-------------------------|----------------|
| DE       | ODE  |            |            |            |             |                         |                |
| BALL     | BALL | POLYREX EM | T          | NONE       | NONE        | 1045 HOT ROLLED (C-204) | ROLLED STEEL   |
| 313      | 311  |            |            |            |             |                         |                |

| THERMO-PROTECTORS |            |          |          | THERMISTORS | CONTROL | SPACE HEATERS |
|-------------------|------------|----------|----------|-------------|---------|---------------|
| THERMOSTATS       | PROTECTORS | WDG RTDs | BRG RTDs |             |         |               |
| TSTATS (N/C)      | NOT        | NONE     | NONE     | NONE        | FALSE   | NONE VOLTS    |

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| <b>INVERTER TORQUE:</b> CONSTANT 4:1         |
| <b>INV. HP SPEED RANGE:</b> 1.5 X BASE SPEED |
| <b>ENCODER:</b> REGAL SUPPLIED - REGAL MOUNT |
| DYNAPAR HS35R                                |
| PIGTAIL 18 INCH CABLE 1024 PPR               |
| <b>BRAKE:</b> NONE NONE                      |
| NONE P/N NONE                                |
| NONE NONE                                    |
| NONE FT-LB NONE V NONE Hz                    |

Data Sheet

Date: 1/31/2018

LM03425



Data @ **460 V**

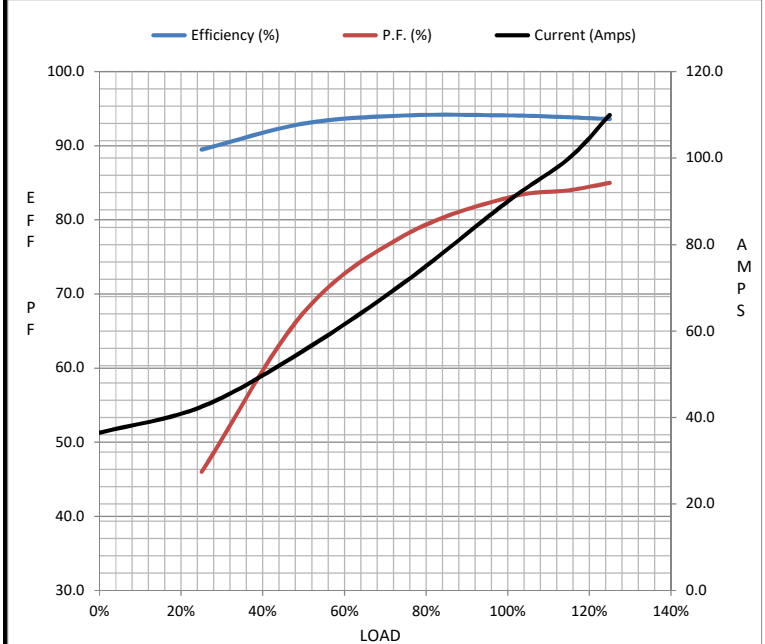
Motor Load Data

| Load           | 0%   | 25%  | 50%  | 75%  | 100% | 115%  | 125% | LR   |
|----------------|------|------|------|------|------|-------|------|------|
| Current (Amps) | 36.5 | 42.5 | 55.5 | 71.5 | 90.0 | 100   | 110  | 645  |
| Torque (ft-lb) | 0.00 | 55.0 | 110  | 165  | 221  | 249   | 276  | 300  |
| RPM            | 1800 | 1797 | 1793 | 1790 | 1785 | 1.784 | 1783 | 0    |
| Efficiency (%) |      | 89.5 | 93.0 | 94.1 | 94.1 | 93.9  | 93.6 |      |
| P.F. (%)       | 4.5  | 46.0 | 67.5 | 78.0 | 83.0 | 84.0  | 85.0 | 25.5 |

Motor Speed Data

|                | LR  | Pull-Up | BD   | Rated | Idle |
|----------------|-----|---------|------|-------|------|
| Speed (RPM)    | 0   | 900     | 1700 | 1785  | 1800 |
| Current (Amps) | 645 | 575     | 425  | 90.0  | 36.5 |
| Torque (ft-lb) | 300 | 270     | 650  | 221   | 0.00 |

| Information Block           |                         |        |        |        |
|-----------------------------|-------------------------|--------|--------|--------|
| HP                          | 75.0                    |        |        |        |
| Sync. RPM                   | 1800                    |        |        |        |
| Frame                       | 365                     |        |        |        |
| Enclosure                   | TEBC                    |        |        |        |
| Construction                | TBR                     |        |        |        |
| Voltage                     | 230/460 V               |        |        |        |
| Frequency                   | 60 Hz                   |        |        |        |
| Design                      | A                       |        |        |        |
| LR Code letter              | H                       |        |        |        |
| Service Factor              | 1.15                    |        |        |        |
| Temp Rise @ FL              | 65 °C                   |        |        |        |
| Duty                        | CONT                    |        |        |        |
| Ambient                     | 40 °C                   |        |        |        |
| Elevation                   | 1,000 feet              |        |        |        |
| Rotor/Shaft wk <sup>2</sup> | 0.00 Lb-Ft <sup>2</sup> |        |        |        |
| Ref Wdg                     | C3654015 NONE           |        |        |        |
| Sound Pressure @ 1M         | 999 dBA                 |        |        |        |
| VFD Rating                  | CONSTANT 4:1            |        |        |        |
| Outline Dwg                 | XH2B1SS1J-1770          |        |        |        |
| Conn. Diag                  | 3A217-15                |        |        |        |
| Additional Specifications:  |                         |        |        |        |
| 0                           |                         |        |        |        |
| 0                           |                         |        |        |        |
| EQUIV CKT (OHMS / PHASE)    |                         |        |        |        |
| R1                          | R2                      | X1     | X2     | Xm     |
| 0.0600                      | 0.0230                  | 0.3020 | 0.3330 | 7.3330 |



Speed - Torque Curve

