

# PRODUCT INFORMATION PACKET

Model No: 182TTGN6569  
Catalog No: C364A  
3,1800,EPFC,182TC,3/60/230/460  
Explosion Proof



Regal and Marathon are trademarks of Regal Beloit Corporation or one of its affiliated companies.  
©2018 Regal Beloit Corporation, All Rights Reserved. MC017097E



### Nameplate Specifications

|                            |                                   |                        |                   |
|----------------------------|-----------------------------------|------------------------|-------------------|
| Output HP                  | <b>3 Hp</b>                       | Output KW              | <b>2.2 kW</b>     |
| Frequency                  | <b>60 Hz</b>                      | Voltage                | <b>230/460 V</b>  |
| Current                    | <b>8.0/4.0 A</b>                  | Speed                  | <b>1765 rpm</b>   |
| Service Factor             | <b>1.15</b>                       | Phase                  | <b>3</b>          |
| Efficiency                 | <b>90.2 %</b>                     | Duty                   | <b>Continuous</b> |
| Insulation Class           | <b>F</b>                          | Design Code            | <b>B</b>          |
| KVA Code                   | <b>K</b>                          | Frame                  | <b>182TC</b>      |
| Enclosure                  | <b>Explosion Proof Fan cooled</b> | Overload Protector     | <b>No</b>         |
| Ambient Temperature        | <b>40 °C</b>                      | Drive End Bearing Size | <b>6207</b>       |
| Opp Drive End Bearing Size | <b>6206</b>                       | UL                     | <b>No</b>         |
| CSA                        | <b>N</b>                          | CE                     | <b>N</b>          |
| IP Code                    | <b>54</b>                         |                        |                   |

### Technical Specifications

|                       |                                     |                       |                         |
|-----------------------|-------------------------------------|-----------------------|-------------------------|
| Electrical Type       | <b>Squirrel Cage Inverter Rated</b> | Starting Method       | <b>Line Or Inverter</b> |
| Poles                 | <b>4</b>                            | Rotation              | <b>Reversible</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>Cast Iron</b>                    | Shaft Type            | <b>T</b>                |
| Overall Length        | <b>16.62 in</b>                     | Frame Length          | <b>8.00 in</b>          |
| Shaft Diameter        | <b>1.125 in</b>                     | Shaft Extension       | <b>2.62 in</b>          |
| Assembly/Box Mounting | <b>F1 Only</b>                      |                       |                         |
| Outline Drawing       | <b>035673-800</b>                   | Connection Diagram    | <b>A-EE7308T</b>        |

This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created: 06/29/2018



## HIGH VOLTAGE



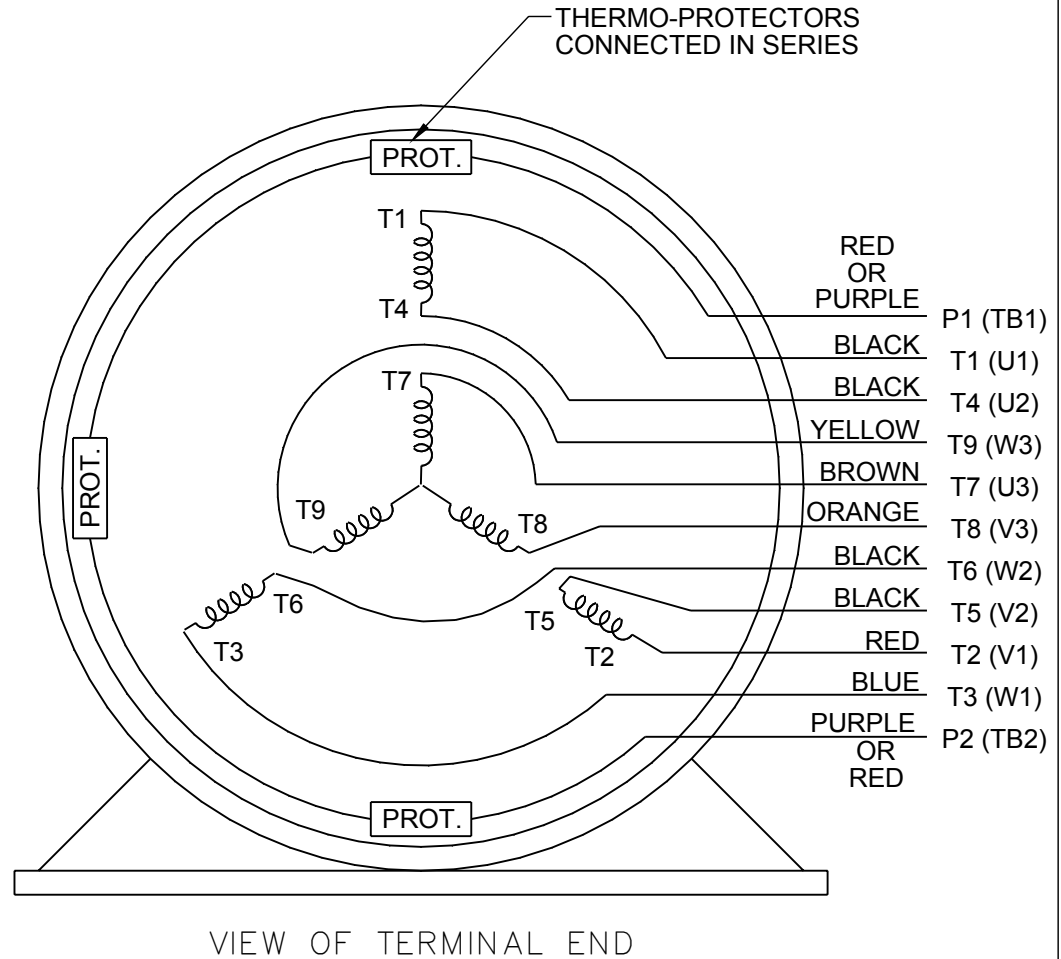
**NOTE FOR FACTORY USE ONLY:  
 TO SURGE TEST FOR COMMON CONNECT:  
 HIGH VOLT: CONNECT P1 TO T1  
 THEN P2 TO L1  
 LOW VOLT: CONNECT P1 TO T1 & T7,  
 THEN P2 TO L1**

## LOW VOLTAGE



**NOTE: LEAD'S COLOR CAN BE YELLOW OR WHITE FOR MT2 PLANT**

## THREE PHASE DUAL VOLTAGE MOTOR



|   |                              |                           |                                   |                           |   |                        |
|---|------------------------------|---------------------------|-----------------------------------|---------------------------|---|------------------------|
| DRAWING REVISION<br><b>R</b>  | REVISION BY<br><b>AJW</b>    | DATE<br><b>07-17-2015</b> |                                   | DRAWN BY<br><b>SMC</b>    | <b>Regal Beloit America, Inc.</b>   |                        |
| ECO<br><b>ECO-0081632</b>   | APPROVED BY<br><b>T. VUE</b> | DATE<br><b>07-17-2015</b> |                                   | DATE<br><b>05-13-1992</b> |   |                        |
| ECO DESCRIPTION<br><b>REV'D IEC NOTATIONS PER IEC 60034-8</b>   |                              |                           |                                   | APPROVED BY<br><b>TB</b>  | DESCRIPTION<br><b>CONN DIAGRAM-INTERNAL</b><br>3 PHASE - DUAL VOLTAGE MOTOR |                        |
| <small>COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED.<br/>                 PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF<br/>                 REGAL BELOIT AMERICA, INC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY<br/>                 INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED,<br/>                 BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED<br/>                 TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT<br/>                 AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL<br/>                 BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN<br/>                 RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.</small> |                              |                           |                                   | DATE<br><b>05-13-1992</b> | MATERIAL  | PROCESS/FINISH         |
|   |                              |                           | REFERENCE<br><b>EE7308/EE7300</b> | SIZE<br><b>A</b>          | DRAWING NUMBER<br><b>EE7308T</b>  | SHEET<br><b>1 OF 1</b> |
|   |                              |                           | THIRD ANGLE<br>PROJECTION         |                           |   |                        |

CERTIFICATION DATA SHEET

Model#: 182TTGN6569 AB WINDING#: K1824116 R1 1  
 CONN. DIAGRAM: A-EE7308T ASSEMBLY: F1 ONLY  
 OUTLINE: 035673-800

TYPICAL MOTOR PERFORMANCE DATA

| HP  | KW        | SYNC. RPM | F.L. RPM  | FRAME | ENCLOSURE | KVA CODE | DESIGN |
|-----|-----------|-----------|-----------|-------|-----------|----------|--------|
| 3&2 | 2.24&1.49 | 1800      | 1765&1470 | 182TC | EPFC      | K        | B      |

| PH | Hz    | VOLTS               | FL AMPS     | START TYPE          | DUTY           | INSL | S.F       | AMB°C | ELEVATION |
|----|-------|---------------------|-------------|---------------------|----------------|------|-----------|-------|-----------|
| 3  | 60/50 | 230/460#190/<br>380 | 8/4&6.8/3.4 | LINE OR<br>INVERTER | CONTINUOU<br>S | F3   | 1.15/1.15 | 40    | 3300      |

| FULL LOAD EFF:<br>90.2&88.5 | 3/4 LOAD EFF: 90.2 | 1/2 LOAD EFF: 89.5 | GTD. EFF | ELEC. TYPE        | NO LOAD AMPS |
|-----------------------------|--------------------|--------------------|----------|-------------------|--------------|
| FULL LOAD PF: 80&76         | 3/4 LOAD PF: 75    | 1/2 LOAD PF: 63    | 89.5     | SQ CAGE INV RATED | 3.8 / 1.9    |

| F.L. TORQUE | LOCKED ROTOR AMPS | L.R. TORQUE    | B.D. TORQUE  | F.L. RISE°C |
|-------------|-------------------|----------------|--------------|-------------|
| 9 LB-FT     | 64 / 32           | 22.5 LB-FT 250 | 35 LB-FT 389 | 30          |

| SOUND PRESSURE<br>@ 3 FT. | SOUND POWER | ROTOR WK^2  | MAX. WK^2  | SAFE STALL TIME | STARTS<br>/HOUR | APPROX. MOTOR<br>WGT |
|---------------------------|-------------|-------------|------------|-----------------|-----------------|----------------------|
| 62 dBA                    | 72 dBA      | 0.4 LB-FT^2 | 40 LB-FT^2 | 25 SEC.         | 2               | 95 LBS.              |

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

| DE BRACKET<br>TYPE | ODE BRACKET<br>TYPE | MOUNT<br>TYPE | ORIENTATION | SEVERE<br>DUTY | HAZARDOUS<br>LOCATION                      | DRIP<br>COVER | SCREENS | PAINT        |
|--------------------|---------------------|---------------|-------------|----------------|--|---------------|---------|--------------|
| C-FACE             | STANDARD            | RIGID         | HORIZONTAL  | TRUE           | EXP PROOF CL<br>I GR D CL II GR<br>F&G T3B | FALSE         | NONE    | BLUE (EPOXY) |

| BEARINGS |      | GREASE     | SHAFT TYPE | SPECIAL DE | SPECIAL ODE | SHAFT<br>MATERIAL          | FRAME<br>MATERIAL |
|----------|------|------------|------------|------------|-------------|----------------------------|-------------------|
| DE       | OPE  |            |            |            |             |                            |                   |
| BALL     | BALL | POLYREX EM | T          | NONE       | NONE        | 1045 HOT<br>ROLLED (C-204) | CAST IRON         |
| 6207     | 6206 |            |            |            |             |                            |                   |

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

If Inverter equals NONE, contact factory for further information

|                                |
|--------------------------------|
| INVERTER TORQUE: CONSTANT 10:1 |
| INV. HP SPEED RANGE: NONE      |
| ENCODER: NONE                  |
| NONE NONE                      |
| NONE NONE PPR                  |
| BRAKE: NONE NONE               |
| NONE P/N NONE                  |
| NONE NONE                      |
| NONE FT-LB NONE V NONE Hz      |

\*  
N  
O  
T  
E  
S  
\*

DATE: 06/27/2017 03:43:12 AM  
 FORM 3531 REV.3 02/07/99

\*\* Subject to change without notice.

Data Sheet

Date: 15-06-2017  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: FAREEDA DUDEKULA



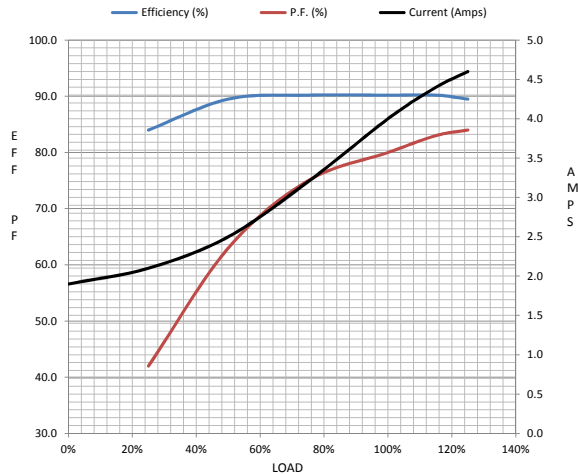
182TTGN6569

Submittal

Data @ 460 V

| Motor Load Data |      |      |      |      |      |       |      |      |  |
|-----------------|------|------|------|------|------|-------|------|------|--|
| Load            | 0%   | 25%  | 50%  | 75%  | 100% | 115%  | 125% | LR   |  |
| Current (Amps)  | 1.90 | 2.10 | 2.50 | 3.2  | 4.0  | 4.4   | 4.6  | 32.0 |  |
| Torque (ft-lb)  | 0.00 | 2.20 | 4.4  | 6.7  | 9.0  | 10.4  | 11.2 | 22.5 |  |
| RPM             | 1800 | 1790 | 1785 | 1775 | 1765 | 1,760 | 1755 | 0    |  |
| Efficiency (%)  |      | 84.0 | 89.5 | 90.2 | 90.2 | 89.2  | 89.5 |      |  |
| P.F. (%)        | 6.5  | 42.0 | 63.0 | 75.0 | 80.0 | 83.0  | 84.0 | 47.0 |  |

| Motor Speed Data |      |         |      |       |      | Information Block   |                |
|------------------|------|---------|------|-------|------|---------------------|----------------|
|                  | LR   | Pull-Up | BD   | Rated | Idle |                     |                |
| Speed (RPM)      | 0    | 750     | 1500 | 1765  | 1800 | HP                  | 3.0            |
| Current (Amps)   | 32.0 | 30.0    | 23.0 | 4.0   | 1.90 | Sync. RPM           | 1800           |
| Torque (ft-lb)   | 22.5 | 20.0    | 35.0 | 9.0   | 0.00 | Frame               | 182            |
|                  |      |         |      |       |      | Enclosure           | TEFC           |
|                  |      |         |      |       |      | Construction        | TFS            |
|                  |      |         |      |       |      | Voltage             | 30/460#190/38V |
|                  |      |         |      |       |      | Frequency           | 60 Hz          |
|                  |      |         |      |       |      | Design              | B              |
|                  |      |         |      |       |      | LR Code letter      | K              |
|                  |      |         |      |       |      | Service Factor      | 1.15           |
|                  |      |         |      |       |      | Temp Rise @ FL      | 30 ° C         |
|                  |      |         |      |       |      | Duty                | CONT           |
|                  |      |         |      |       |      | Ambient             | 40 ° C         |
|                  |      |         |      |       |      | Elevation           | 1,000 feet     |
|                  |      |         |      |       |      | Rotor/Shaft wk²     | 0.40 Lb-Ft²    |
|                  |      |         |      |       |      | Ref Wdg             | K1824116 R1    |
|                  |      |         |      |       |      | Sound Pressure @ 1M | 62 dBA         |
|                  |      |         |      |       |      | VFD Rating          | CONSTANT 10:1  |
|                  |      |         |      |       |      | Outline Dwg         | 035673-800     |
|                  |      |         |      |       |      | Conn. Diag          | A-EE7308T      |



|                            |                |        |        |          |
|----------------------------|----------------|--------|--------|----------|
| HP                         | 3.0            |        |        |          |
| Sync. RPM                  | 1800           |        |        |          |
| Frame                      | 182            |        |        |          |
| Enclosure                  | TEFC           |        |        |          |
| Construction               | TFS            |        |        |          |
| Voltage                    | 30/460#190/38V |        |        |          |
| Frequency                  | 60 Hz          |        |        |          |
| Design                     | B              |        |        |          |
| LR Code letter             | K              |        |        |          |
| Service Factor             | 1.15           |        |        |          |
| Temp Rise @ FL             | 30 ° C         |        |        |          |
| Duty                       | CONT           |        |        |          |
| Ambient                    | 40 ° C         |        |        |          |
| Elevation                  | 1,000 feet     |        |        |          |
| Rotor/Shaft wk²            | 0.40 Lb-Ft²    |        |        |          |
| Ref Wdg                    | K1824116 R1    |        |        |          |
| Sound Pressure @ 1M        | 62 dBA         |        |        |          |
| VFD Rating                 | CONSTANT 10:1  |        |        |          |
| Outline Dwg                | 035673-800     |        |        |          |
| Conn. Diag                 | A-EE7308T      |        |        |          |
| Additional Specifications: |                |        |        |          |
| 0                          |                |        |        |          |
| 365THFS8036                |                |        |        |          |
| EQUIV CKT (OHMS / PHASE)   |                |        |        |          |
| R1                         | R2             | X1     | X2     | Xm       |
| 2.3530                     | 1.6160         | 5.0840 | 7.9000 | 130.4100 |

