

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 182TTFW16080

Catalog No: E2130

XRI® General Purpose General Purpose Motor, 1.50 HP, 3 Ph, 60 Hz, 575 V, 1200 RPM, 182T Frame, TEFC



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RegalRexnord

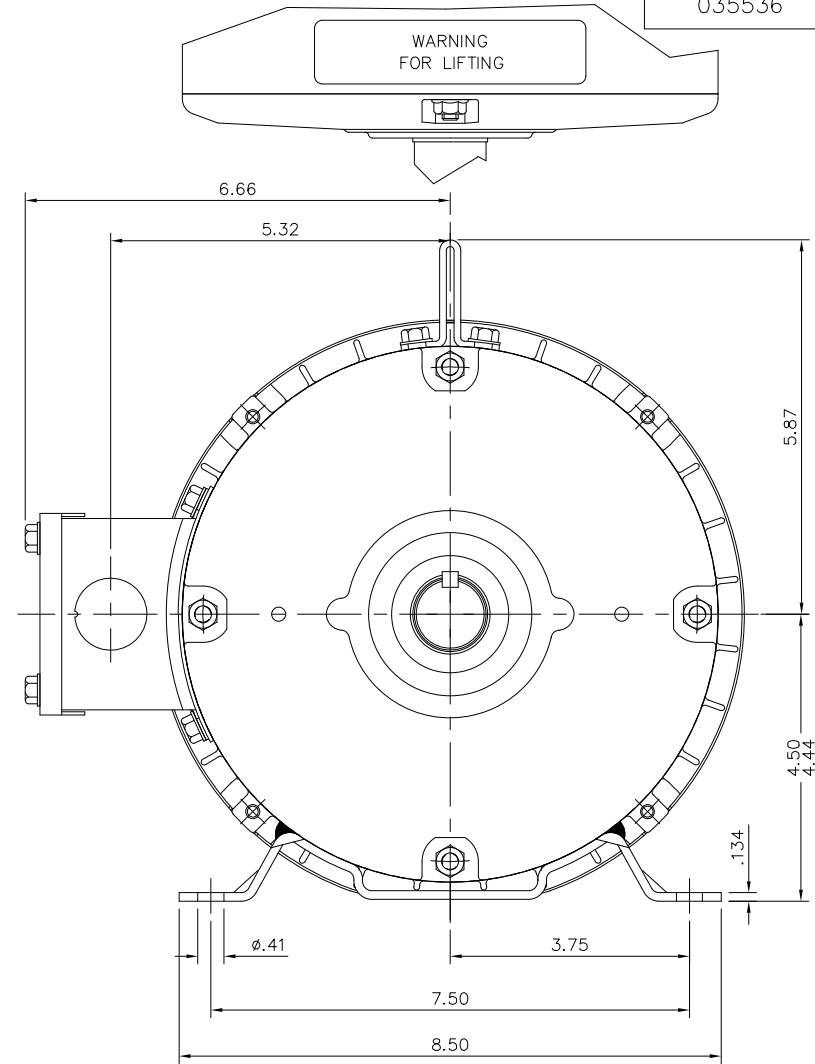
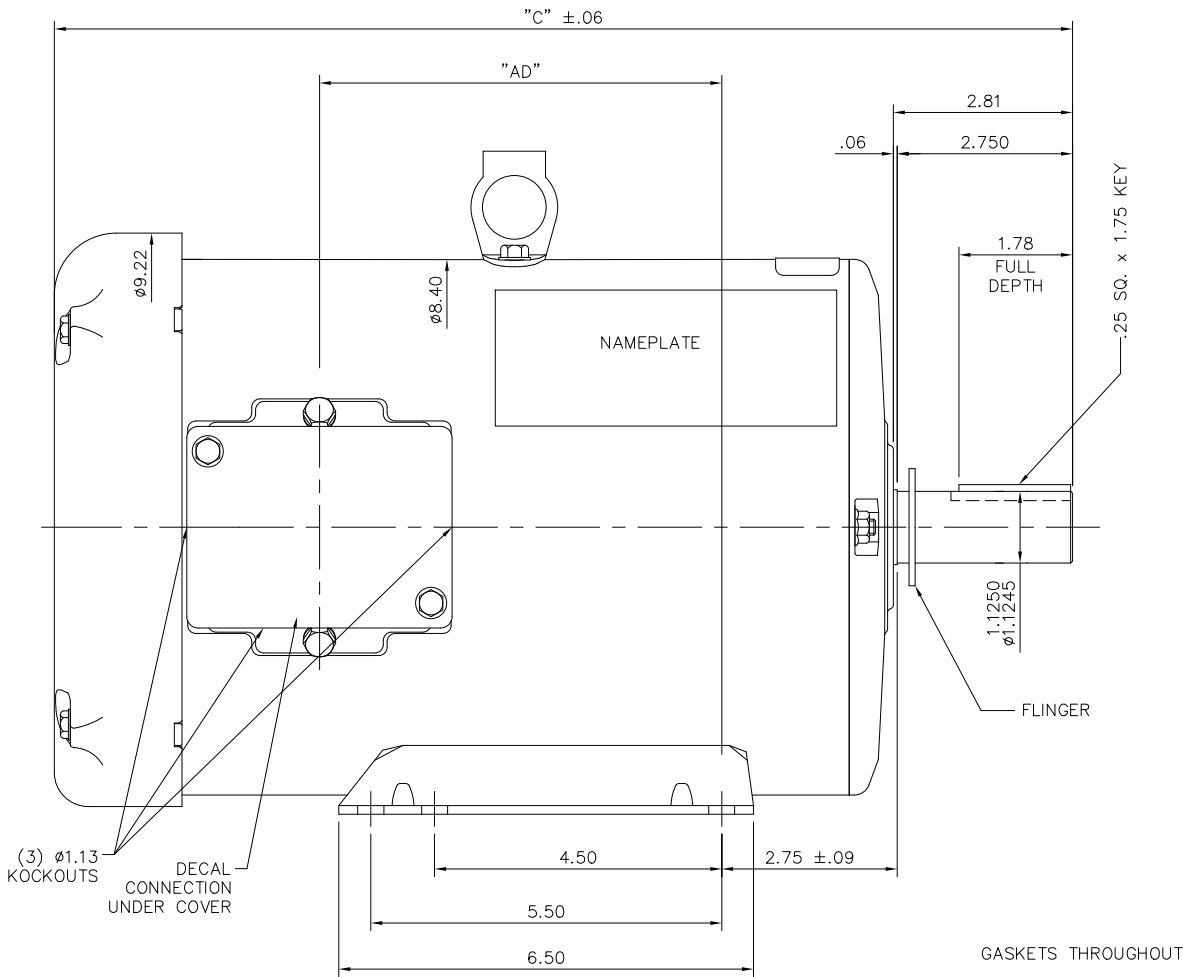
Nameplate Specifications

| | | | |
|------------------------|---------------|----------------------------|-----------------------------|
| Phase | 3 | Output HP | 1.50 Hp |
| Output KW | 1.1 kW | Voltage | 575 V |
| Speed | 1170 rpm | Service Factor | 1.15 |
| Frame | 182T | Enclosure | Totally Enclosed Fan Cooled |
| Thermal Protection | No Protection | Efficiency | 87.5 % |
| Ambient Temperature | 40 °C | Frequency | 60 Hz |
| Current | 2.4 A | Power Factor | 62 |
| Duty | Continuous | Insulation Class | F |
| Design Code | B | KVA Code | K |
| Drive End Bearing Size | 6206 | Opp Drive End Bearing Size | 6205 |
| 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 | 11.35 Ohms | Mounting | Rigid Base |
| Motor Orientation | Horizontal | Drive End Bearing | Ball |
| Opp Drive End Bearing | Ball | Frame Material | Rolled Steel |
| Shaft Type | T | Overall Length | 14.47 in |
| Frame Length | 9.00 in | Shaft Diameter | 1.125 in |
| Shaft Extension | 2.81 in | Assembly/Box Mounting | F1/F2 Capable |
| Connection Drawing | 005102.01ME | Outline Drawing | 035536-900 |

035536

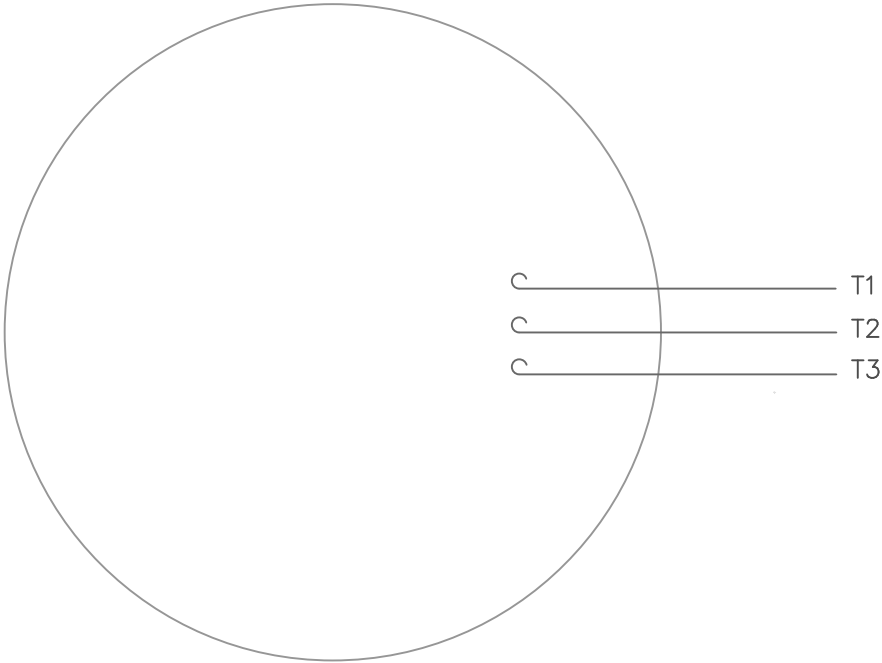


| DASH NO. | "C" | "AD" |
|----------|-------|------|
| 750 | 12.97 | 3.37 |
| 800 | 13.47 | 3.87 |
| 850 | 13.97 | 4.37 |
| 900 | 14.47 | 4.87 |
| 950 | 14.97 | 5.37 |
| 1000 | 15.47 | 5.87 |
| 1050 | 15.97 | 6.37 |
| 1100 | 16.47 | 6.87 |
| 1150 | 16.97 | 7.37 |

ORACLE REV
003


| | | | | TOLERANCES UNLESS SPECIFIED | |  | DRAWN VV 07/02/07 | |
|-----|--------------------------------------|--------------|------|--------------------------------|--------|---|-------------------|--------------------|
| | | | | DEC. | INCHES | | CHK SV 07/02/07 | |
| 04 | Updated Nameplate location | JG 09/06/23 | TS | .X | ±.1 | TITLE OUTLINE- 180T FRAME TEFC- RIGID | APPD VS 07/02/07 | |
| 03 | ADDED FLINGER | PVR 02/10/15 | ST | .XX | ±.03 | | SCALE 1=2 | |
| 02 | WHEN REQD NOTE ADDED FOR 'XRI' DECAL | GR 02/07/13 | AK | .XXX | ±.005 | | REF | |
| 01 | UPDATED FRAME LENGTH TABLE | PVR 08/31/12 | JD | .XXXX | ±.0005 | | FMF | |
| NO. | REVISION | BY & DATE | CHK | ANG | ±1/2" | FINISH | PREV | |
| | | | RFP | | | CAD FILE 035536 | SIZE B | DRAWING NO. 035536 |
| | | | DIST | | | | | REV. 04 |

VIEW FROM OUTSIDE OF MOTOR AT SWITCH END.



CONNECT LEADS AS FOLLOWS
FOR FOUR CONDUCTOR CORD ()

| | | | | |
|-------|-------------|---------------|---------------|---------|
| CORD | L1 (RED) | L2 (WHITE) | L3 (BLACK) | (GREEN) |
| MOTOR | T1 | T2 | T3 | GROUND |

| | | | | | | | | | |
|--|----------|-----------|------|--------------------------------|---------------------|---|--|-------------|-------------|
| | | | | TOLERANCES UNLESS SPECIFIED | |  | DRAWN RDW 5/1/02 | | |
| | | | | DEC. | INCHES | | CHK | | |
| | | | | .X | ±.1 | | APPD | | |
| | | | | .XX | ±.01 | | TITLE EXTERNAL WIRING DIAGRAM TYPE "T" W/O PROTECTOR | SCALE 1=1 | |
| | | | | .XXX | ±.005 | | | REF | |
| | | | | .XXXX | ±.0005 | MAT'L. DECAL – 004169 | FMF | | |
| NO. | REVISION | BY & DATE | CHK | ANG | ±1/2° | 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 | 5/1/02 | CAD FILE 00510201ME | | SIZE | DRAWING NO. | REV. |
| | | | DIST | | | | | A | 005102–01ME |

CERTIFICATION DATA SHEET

Model#: 182TTFW16080 AA
 CONN. DIAGRAM: 005102.01ME
 OUTLINE: 035536-900

WINDING#: T8636 FR 4
 ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

| HP | KW | SYNC. RPM | F.L. RPM | FRAME | ENCLOSURE | KVA CODE | DESIGN |
|-------|------|-----------|----------|-------|-----------|----------|--------|
| 1 1/2 | 1.12 | 1200 | 1170 | 182T | TEFC | K | B |

| PH | Hz | VOLTS | FL AMPS | START TYPE | DUTY | INSL | S.F | AMB°C | ELEVATION |
|----|----|-------|---------|-----------------|------------|------|-----------|-------|-----------|
| 3 | 60 | 575 | 2.4 | ACROSS THE LINE | CONTINUOUS | F4 | 1.15/1.15 | 40 | 3300 |

| | | | | | |
|---------------------|--------------------|--------------------|----------|-----------------|--------------|
| FULL LOAD EFF: 87.5 | 3/4 LOAD EFF: 86.5 | 1/2 LOAD EFF: 83.3 | GTD. EFF | ELEC. TYPE | NO LOAD AMPS |
| FULL LOAD PF: 62 | 3/4 LOAD PF: 56 | 1/2 LOAD PF: 44 | 0 | SQ CAGE IND RUN | 1.3 |

| F.L. TORQUE | LOCKED ROTOR AMPS | L.R. TORQUE | B.D. TORQUE | F.L. RISE°C |
|-------------|-------------------|-----------------|-----------------|-------------|
| 6.68 LB-FT | 12.2 | 10.97 LB-FT 164 | 10.97 LB-FT 164 | - |

| SOUND PRESSURE @ 3 FT. | SOUND POWER | ROTOR WK^2 | MAX. WK^2 | SAFE STALL TIME | STARTS /HOUR | APPROX. MOTOR WGT |
|------------------------|-------------|--------------|-----------|-----------------|--------------|-------------------|
| - dBA | - dBA | 0.56 LB-FT^2 | - LB-FT^2 | 10 SEC. | - | 0 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 | | | | | | |
| 6206 | 6205 | POLYREX EM | T | NONE | NONE | 1144 STRESSPROOF (C-223) | ROLLED STEEL |

| 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: NONE |
| 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 |

DATE: 06/27/2017 03:34:21 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

Date: 6/19/2017

Customer: _____

Attention: _____

Submitted by: FAREEDA DUDEKULA



182TTFW16080

Submittal

Data @ 575 V

Motor Load Data

| Load | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR | |
|----------------|------|------|------|------|------|-------|------|------|--|
| Current (Amps) | 1.36 | 1.44 | 1.60 | 1.79 | 2.08 | 2.24 | 2.40 | 12.2 | |
| Torque (ft-lb) | 0.00 | 1.65 | 3.3 | 5.0 | 6.7 | 7.8 | 8.5 | 11.0 | |
| RPM | 1200 | 1195 | 1190 | 1185 | 1175 | 1,175 | 1170 | 0 | |
| Efficiency (%) | | 73.0 | 83.0 | 86.0 | 87.5 | 87.9 | 87.0 | | |
| P.F. (%) | 8.0 | 27.0 | 43.0 | 55.0 | 62.0 | 67.2 | 68.0 | 38.0 | |

Motor Speed Data

| | | | | | | | | | | |
|----------------|------|---------|------|-------|------|--|--|--|--|--|
| | LR | Pull-Up | BD | Rated | Idle | | | | | |
| Speed (RPM) | 0 | 600 | 1043 | 1175 | 1200 | | | | | |
| Current (Amps) | 12.2 | 11.9 | 5.9 | 2.08 | 1.36 | | | | | |
| Torque (ft-lb) | 11.0 | 10.8 | 22.5 | 6.7 | 0.00 | | | | | |

Efficiency (%)

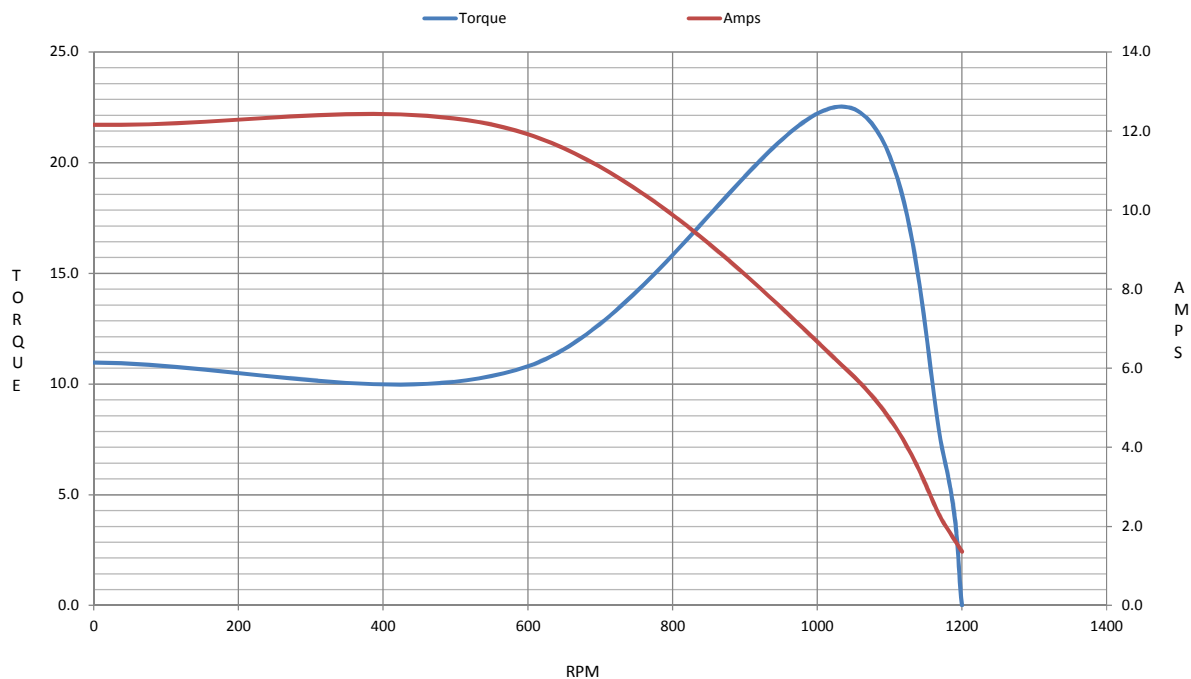
P.F. (%)

Current (Amps)

| LOAD | Efficiency (%) | P.F. (%) | Current (Amps) |
|------|----------------|----------|----------------|
| 0% | | 8 | 1.36 |
| 20% | 73 | 25 | 1.40 |
| 40% | 80 | 40 | 1.50 |
| 60% | 84 | 50 | 1.70 |
| 80% | 86 | 58 | 2.00 |
| 100% | 87 | 65 | 2.40 |
| 120% | 86 | 68 | 2.60 |

| | | | | |
|----------------------------|-------------|--------|--------|--------|
| HP | 1.5 | | | |
| Sync. RPM | 1200 | | | |
| Frame | 180 | | | |
| Enclosure | TEFC | | | |
| Construction | TFW | | | |
| Voltage | 575 V | | | |
| Frequency | 60 Hz | | | |
| Design | B | | | |
| LR Code letter | K | | | |
| Service Factor | 1.15 | | | |
| Temp Rise @ FL | 35 ° C | | | |
| Duty | CONT | | | |
| Ambient | 40 ° C | | | |
| Elevation | 1,000 feet | | | |
| Rotor/Shaft wk² | 0.56 Lb-Ft² | | | |
| Ref Wdg | T8636 FR | | | |
| Sound Pressure @ 1M | 0 dBA | | | |
| VFD Rating | NONE | | | |
| Outline Dwg | 035536-900 | | | |
| Conn. Diag | 005102.01ME | | | |
| Additional Specifications: | | | | |
| 0 | | | | |
| 0 | | | | |
| EQUIV CKT (OHMS / PHASE) | | | | |
| R1 | R2 | X1 | X2 | Xm |
| 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

Speed -Torque Curve



EC Declaration of Conformity

The undersigned representing
the manufacturer:

Regal Beloit America
100 East Randolph St.
Wausau, WI 54401

and the authorized representative
established within the Community:

Marathon Electric UK
6F Thistleton Road Ind. Estate
Market Overton
Oakham, Rutland LE15 7PP UK

are committed to providing customers with products that comply with applicable regulations and international protocols to which they are subject, including the requirements of the European Parliament Directive on the Harmonization of the laws relating to electrical equipment designed for use within certain voltage limits (2014/35/EU).

Regal Beloit America declares that the following product(s), to which this declaration relates, are in conformity with the relevant sections of the EC standards listed below.

This statement supersedes any statements previously issued pertaining to the product(s) listed below and is subject to change without notice.

Model No : 182TTFW16080

(Model No. may contain prefix and/or suffix characters)

Catalog No : E2130

Rework No : N/A

Directives :

Low Voltage Directive 2014/35/EU

Harmonized Standards Used :

EN 60034-1: 2010 (IEC 60034-1: 2010)

EN 60034-5: 2001/A1:2007 (IEC 60034-5: 2000/A1:2006)

Authorized Representative:



Michael A. Logsdon
Vice President, Technology

Authorized Representative in the Community:



Julian Clark
Marketing Engineer

Created on 10/21/2022

CE 22