

ABB Motors and
Mechanical Inc. DATA TRANSMITTAL AND CERTIFICATION

| | | | | | | | |
|---|--|----------------------------|--------------------------|---|-----------------------|----------------------------|---------------------------|
| Sales Order Number | | Customer Number | | Customer Order Number | | P.O. Date | |
| 1210347902-10 | | 940002 | | BMX-SULZER | | 11/16/2022 | |
| Sold To: ABB Mexico S.A. de C.V. Avenida Central 310 San Luis Potosi, SLP 78395 Mexico | | | | DATA PROVIDED WITH THIS TRANSMITTAL AND CERTIFICATIONS IS: <input checked="" type="checkbox"/> PRELIMINARY, DATA FOR CUSTOMER APPROVAL: The associated documents requested on this order are submitted for approval. Please reply promptly or the order could be delayed. <input type="checkbox"/> FINAL, APPROVED FOR CONSTRUCTION OR INSTALLATION. | | | |
| Ship To: ABB MX - DM SLP Avenida Central 310 San Luis Potosi, SLP 78395 Mexico | | | | Data Source: ISSUED BY: Robin Brown 11/16/2022 Baldor-Reliance Athens | | | |
| Application Centrifugal Pump | | | Quantity 3.000 | | Frame 444TS | | Motor / Gen. D.S.: |
| Elec Type 100 HP | | Phs 3 | | Hertz 60 | | Motor / Gen. C.D.: | |
| <----- RPM -----> 3600 | | Enclosure TEFC | | Time CONT | | Leads Location | |
| Rotation Bi-directional | | DC Field Excitation | | Pwr Cd | | Winding Type F-1 | |
| Insulation F | | Mtg F-1 | | Drive | | Model Number | |
| Type | | Torque | | Enclosure | | Insulation | |
| Phs | | Hertz | | Volts | | FL Amps | |

Additional Specifications:

BASIC CONFIGURATION

Partial Motor Design No
Frame Band 318
Customer Application Centrifugal Pump
Industry Spec IEEE-841
Division Div. 2

Hazardous Location Group Code A
Hazardous Location Group Code B
Hazardous Location Group Code D
Hazardous Location Group Code C
Temp Code T3C

ELECTRICAL

Ambient Minimum -25C
Winding Type Random
Starting Method Voltage Dip (Reduced Voltage)
Start % of Full Load Voltage 80
Motor Space Heater Yes
Space Heater Rated for 1 Ph/60Hz/100-125V/200-240V

Certified
ISO 9001

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Space Heater Operating Voltage 120/240
Maximum Sheath Temperature Low Temp(128 Deg C)
Space Heater Qty 1
Space Heater To Main Cbox No
ACB Space Heater Placement Auxillary Conduit Box 1

MOUNTING

Mounting Position F-1
Frame Mounting Foot (Dual Mounting Hole)
Foot Planarity Standard (0.005 IN/FT)
Drive Method Coupled
Mounting Orientation Horizontal
Dowel Provisions Yes
Dowel Provisions Qty 4
Vertical Jacking Provisions Yes
Shaft - Special Material No
Shaft Extension TS

BEARINGS

Drive End Seal Inpro
Opposite Drive End Seal Inpro
Lube Type Grease
Grease Type Exxon Polyrex EM
Grease Fittings Rqd Yes
Grease Fitting Type Alemite 1610 or equal
Grease Relief Fittings Rqd Yes
Relief Fitting Type Alemite

MECHANICAL

Balance Ultra-Standard (0.08 in/sec)
Rotation Facing ODE Bi-directional
Stainless Steel Hardware Yes
Stainless Steel Hardware Type 300 Series Stainless
Fan Material Standard
Ingress Protection IP56
Paint System Prime Only no Finish Paint
Frame Grounding Required Yes
Ground Pad Type Drilled & Tapped Hole in Frame
Ground Pad Location Frame - same side as main CB
Auto Drain Type "T" Drain - Stainless Steel

MONITORING DEVICES

Bearing RTD Yes
Bearing RTD Type 100 Ohm (Platinum .00385 TCR)
Bearing RTD Wires 3
Bearing RTD Quantity 1 Total - DE Bearing Only
Winding RTD Yes
Winding RTD Type 100 Ohm (Platinum .00385 TCR)

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Winding RTD Wires 2
Winding RTD Element Single
Winding RTD Qty 6 Total - Two per Phase
Wdg RTD To Main Cbox No
ACB Winding RTD Placement Auxillary Conduit Box 2

CONDUIT BOX

Main Conduit Box Required
Main Conduit Box Location Standard (side)
Main Conduit Box Material Cast Iron
Main Conduit Box Size One Size Larger than Oversize
Terminal Panel No
Lead Entry Location Toward Feet - Down
Lugs Yes
Grounding Yes
Terminal Blocks - Main Leads Yes
Auxiliary Conduit Box Required Conduit Box Required
How many Aux Conduit Boxes 2
Auxiliary Conduit Box 1 Size Std (180-3/4)
Auxiliary Conduit Box 1 Loc ODE - Opposite Side as Main CB
Auxiliary Conduit Box 2 Size Std (180-3/4)
Auxiliary Conduit Box 2 Loc DE - Opposite Side as Main CB

NAMEPLATE / LABELS

Nameplate Language English
Nameplate Material Stainless Steel
Customer Part Number Marks Yes
Customer Part Number MACCUSTOMMOTOR
Unit Nameplate Markings Yes
Unit Nameplate Markings 1 18-P-1812M
Unit Nameplate Markings 2 18-P-1880 AM
Unit Nameplate Markings 3 18-P-1880 BM
Additional Haz Loc Marks Yes
Additional Haz Loc Text CL I, ZONE 2, GP IIC IIB IIA,
Grease Type Nameplate Marking Yes
Grease Markings EXXON POLYREX EM
Space Heater Nameplate Yes
Additional heater Markings No
Label "Heater Energized" Yes
Heater Energized Message Energized Message
Space Heater Text SPACE HEATERS MAY BE ENERGIZED
Special Nameplate Rqd Yes
Direction Arrow Nameplate Rqd Yes
Label CSA Yes
Label UR Yes
Efficiency Marking DOE CC Mark Required

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PACKAGING

Packaging Type Open/Hog Crate

TESTING

IEEE841 Factory Test Non-witnessed

DOCUMENTATION

Document Unit of Measure US

Certified Dimension Sheet Yes

Performance Data/Curves Yes

Standard Connection Diagram Yes

Motor Instruction Manual Yes

Renewal Parts List Yes

Nameplate Data Yes

Center of Gravity Yes

Custom Document Requirement "2D CAD drawings DWG format"

***** VERY IMPORTANT, DO NOT OMIT *****

Motor Foot Dimensions: Length, thick & width shall be reflected in the drawing per foot.

Indicate main box, auxiliaries boxes and specify the name of the accessories included in each box.

Total weight of motor need to be reflected in the drawing.

Grounding lugs need to be indicated in motor drawing main terminal box and base plate.

Main, tag's, direction of rotation and Auxiliary plates, shall be made in stainless steel.

Tag need to be in special separated plate for this purpose.

Labels are not allow

Indicate in Motor drawing terminal box routable in steps of 90° when applicable.

Documentation Format PDF

SPECIAL ITEMS

Custom Requirements Yes


Custom Requirements Oversized to meet SF. 1.15, T3C

COMMERCIAL COMMENTS

Estimated Lead Time
Estimated Lead Time is based on plant loading at the time of quotation and is intended to be used as a guide for our customers. This estimation includes the Engineering and Manufacturing time only. It DOES NOT include shipping time. Please contact your ABB Motors and Mechanical Inc. representative if specific delivery requirements are needed.

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Engineered Motors

| S/O | FRAME | HP | TYPE | PHASE/ HERTZ | RPM | VOLTS |
|--|--------------|---|-----------------------|--|----------------|--|
| | 444 | 100 | P | 3/60 | 3565 | 460 |
| AMPS | DUTY | AMB °C/ INSUL | S.F. | NEMA DESIGN | CODE LETTER | ENCLOSURE |
| 110 | CONT | 40/F | 1.15 | B | F | TEFC |
| E/S | ROTOR | TEST S.O. | TEST DATE | STATOR RES. @25 °C OHMS (BETWEEN LINES) | | |
| - | 418143-14-CE | --- | --- | .0398 | | |
| PERFORMANCE | | | | | | |
| LOAD | HP | AMPERES | RPM | % POWER FACTOR | % EFFICIENCY | |
| NO LOAD | 0 | 25.0 | 3600 | 11.8 | 0 | |
| 1/4 | 25.0 | 36.8 | 3592 | 72.1 | 88.3 | |
| 2/4 | 50.1 | 58.1 | 3585 | 86.8 | 92.9 | |
| 3/4 | 75.0 | 83.3 | 3578 | 89.6 | 94.1 | |
| 4/4 | 100 | 110 | 3570 | 90.0 | 94.4 | |
| 5/4 | 125 | 138 | 3561 | 90.2 | 94.3 | |
| | | | | | | |
| SPEED TORQUE | | | | | | |
| | | RPM | TORQUE % FULL LOAD | TORQUE LB.-FT. | AMPERES | |
| LOCKED ROTOR | | 0 | 166 | 244 | 690 | |
| PULL UP | | 1800 | 139 | 205 | 578 | |
| BREAKDOWN | | 3440 | 249 | 367 | 435 | |
| FULL LOAD | | 3570 | 100 | 147 | 110 | |
| AMPERES SHOWN FOR 460 VOLT CONNECTION. IF OTHER CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE. | | | | | | |
| TYPICAL DATA XE MOTOR-TYPICAL DATA-NEMA NOM. EFF. 94.1 PCT. | | | | | | |
|  | | DRAWN BY: J. P. TSAO CHECKED BY: W. L. SMITH APPROVED BY: W. L. SMITH DATE: 01/21/19 | | AC MOTOR PERFORMANCE DATA | | A44WG5675-R001 DATE ISSUED 12/01/20 |

