

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: ☒ 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. ☐ 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

