

# DATA SHEET

Premium Efficiency Motor: **MTSP-020-3BD18**

**60 Hz**

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Customer:

## MOTOR INFORMATION

HP	20
RPM	1800
Phase	3
Frequency	60
Voltage	230/460
Frame Size	256TC
Enclosure	TEFC
Degree of Protection	IP69
Service Factor	1.15
Poles	4
Full Load Speed	1765
Insulation Class	F
Temp Rise	80°C
NEMA Code Letter	G
Duty Cycle	S1
Slip	1.94%
NEMA Design	B
Moment of Inertia	2.4 lb.ft.^2
Locked Rotor Time (Hot)	12 seconds
Sound Pressure Level	69 dB(A)
Number of Starts	12
Max Ambient Temperature	40° C
Max Elevation	1000 m.a.s.l (3300 f.a.s.l)
Mounting	F1
Rotation	Bidirectional
Area of Classification	Div.2 Class I, Gr. A,B,C&D T2B
Inverter Rating	10:1 CT/20:1 VT
Standard	NEMA MG1, UL1004
Approvals	CSA,UL,CE

## EFFICIENCY/POWER FACTOR

LOAD	EFF	P. F.
100%	93.0 %	0.85
75%	92.5 %	0.75
50%	92.0 %	0.63

## TORQUE

FULL LOAD	LRT	BDT
58.6 lb.ft.	200 %	250 %

## AMPERAGE INFORMATION

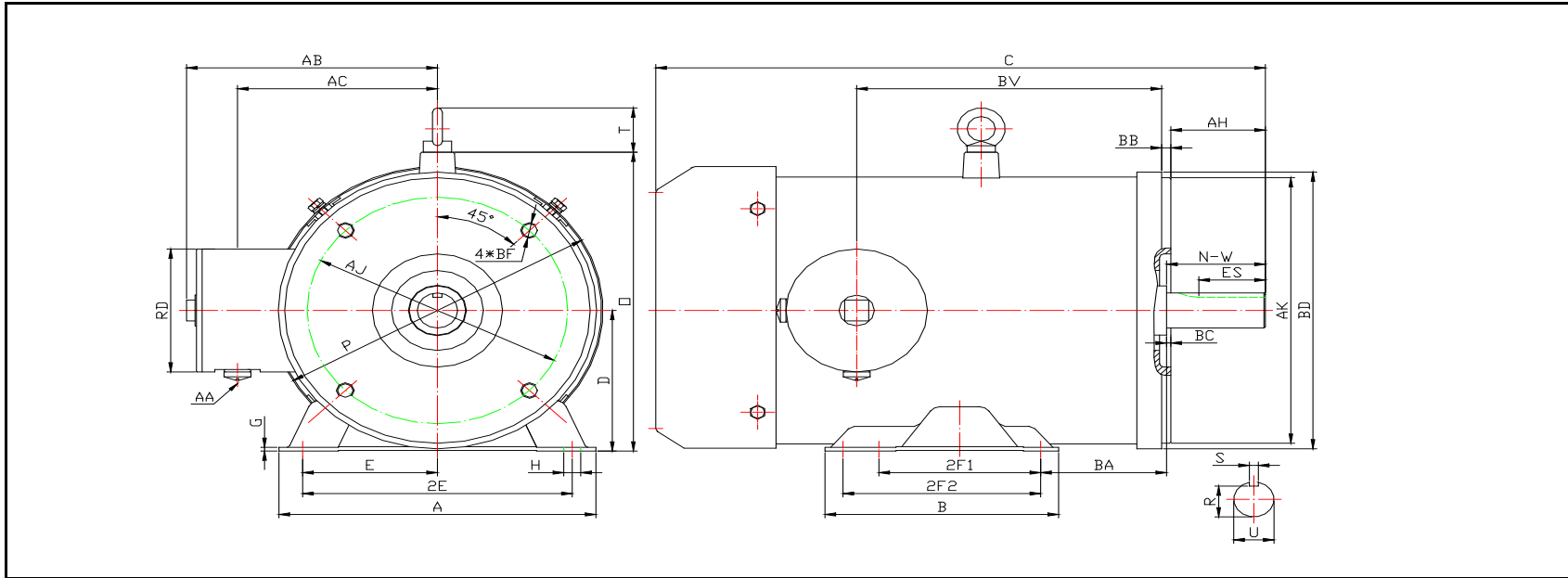
	230V	460V
Full Load Amps	49A	24.5
Locked Rotor Amps	290A	145A
No Load Current	22A	11A
Usable at 208V	53 A	

## BEARING INFORMATION

DE Bearing	6309 2RS
ODE Bearing	6309 2RS
Grease Type	Mobil Polyrex EM
DE Regreasing Interval	-- Hours
ODE Regreasing Interval	-- Hours
Grease Quantity	--

## ADDITIONAL DATA

F2 Suitable	No
Shaft Material	304 Stainless Steel
Connection Diagram	12 Lead 2Δ/Δ
Approximate Weight	436 lbs.



**DIMENSION - INCHES**

MOUNTING						A	B	C	D	G	P	O	T
E	2E	2F1	2F2	H	BA								
5	10	8.25	N/A	0.53	4.75	11.2	9.5	23.2	6.25	0.47	12.6	12.89	2.05

AB	BC	KEY		KEYSET	SHAFT			TERMINAL BOX				
		S	ES	R	AH	N-W	U	AA	AB	AC	RD	BV
8.9	0.25	0.375	2.91	1.416	3.75	4	1.625	3/4	8.9	7.25	5.12	12.65

FLANGE				
AJ	AK	BB	BD	BF
7.25	8.5	0.25	11.72	4/1/2-13

REV.	SUMMARY OF MODIFICATIONS	DATE
0		10/21/2020

# PERFORMANCE CURVES

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Motor Type	MTS		FL Speed	1765	
Output Rating (HP)	20		LRT (%FLT)	200	
Full Load Torque	58.6	lb.ft	460 volt FLA	24.5	
Rotor Wk <sup>2</sup>	2.4	lb-ft <sup>2</sup>	230 volt FLA	49A	
			BDT (%FLT)	250	

