

# DATA SHEET

Premium Efficiency Motor: **MTSP-P50-3BD18**

**60 Hz**

Document Generated: 9-Nov-2020  
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Customer:

## MOTOR INFORMATION

HP	1/2
RPM	1800
Phase	3
Frequency	60
Voltage	230/460
Frame Size	56C
Enclosure	TEFC
Degree of Protection	IP69
Service Factor	1.15
Poles	4
Full Load Speed	1745
Insulation Class	F
Temp Rise	80°C
NEMA Code Letter	R
Duty Cycle	S1
Slip	3.06%
NEMA Design	B
Moment of Inertia	0.069 lb.ft.^2
Locked Rotor Time (Hot)	12 seconds
Sound Pressure Level	60 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%	78.5 %	0.71
75%	76.0 %	0.62
50%	71.0 %	0.52

## TORQUE

FULL LOAD	LRT	BDT
1.5 lb.ft.	285 %	300 %

## AMPERAGE INFORMATION

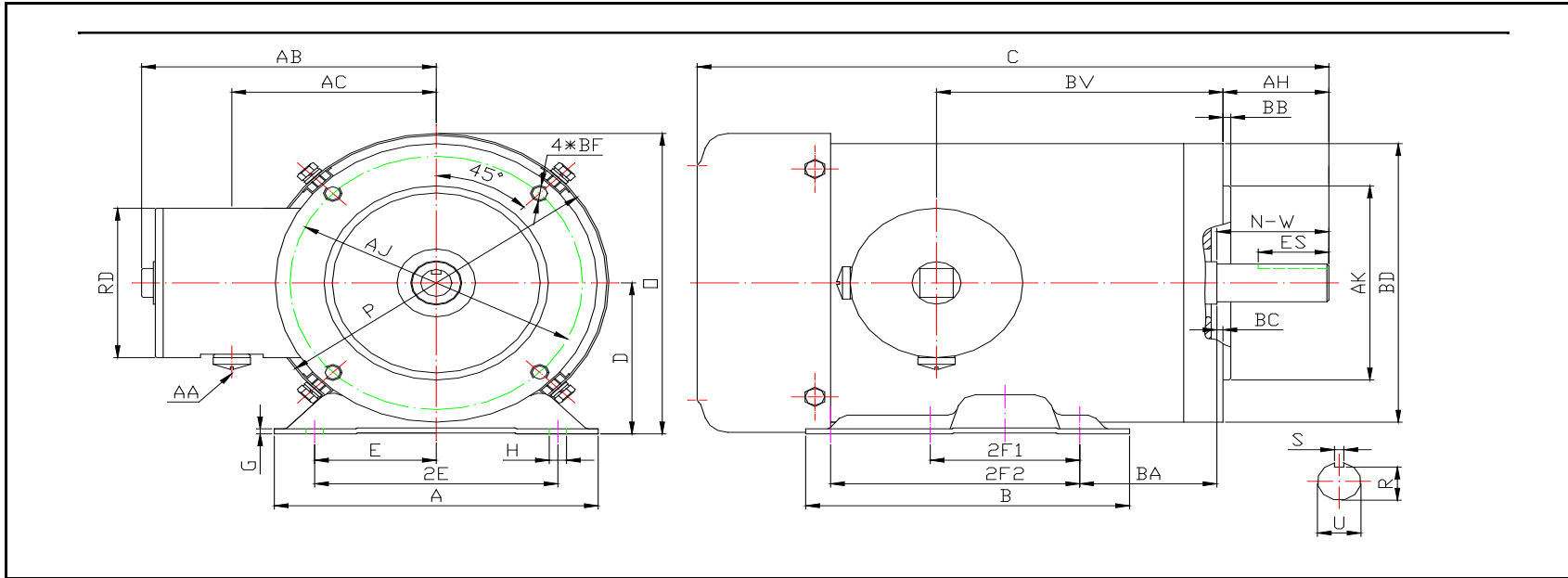
	230V	460V
Full Load Amps	1.6A	0.8
Locked Rotor Amps	20A	10A
No Load Current	1.36A	0.68A
Usable at 208V	1.8 A	

## BEARING INFORMATION

DE Bearing	6205 2RS
ODE Bearing	6205 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	9 Lead 2Y/Y
Approximate Weight	30 lbs.



**DIMENSION - INCHES**

MOUNTING						A	B	C	D	G	P	O	T
E	2E	2F1	2F2	H	BA								
2.44	4.88	3	N/A	1.22*0.34	2.75	6.5	5	11.59	3.5	0.118	6.95	6.98	N/A

AB	BC	KEY		KEYSET	SHAFT			TERMINAL BOX				
		S	ES	R	AH	N-W	U	AA	AB	AC	RD	BV
5.95	-0.19	0.188	1.41	0.517	2.06	1.88	0.625	1/2	5.95	4.5	3.45	4.75

FLANGE				
AJ	AK	BB	BD	BF
5.875	4.5	0.16	6.45	4*3/8-16

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

# PERFORMANCE CURVES

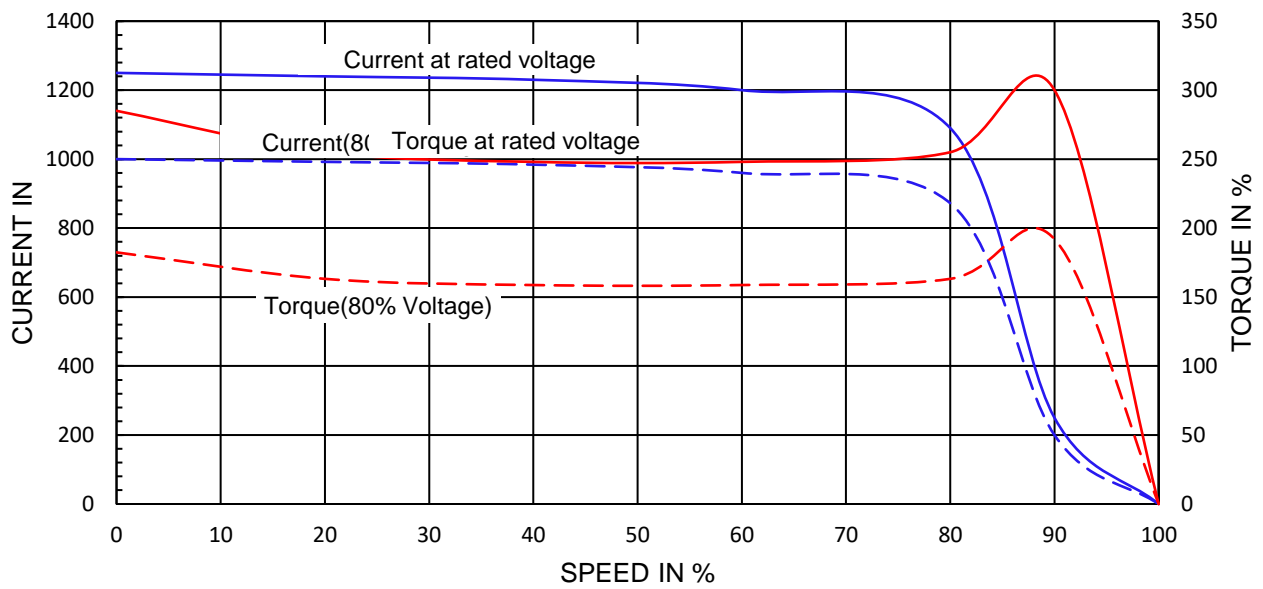
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Motor Type	MTS		FL Speed	1745	
Output Rating (HP)	1/2		LRT (%FLT)	285	460 volt FLA 0.8
Full Load Torque	1.5 lb.ft		BDT (%FLT)	300	230 volt FLA 1.6A
Rotor Wk <sup>2</sup>	0.069 lb-ft <sup>2</sup>				

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F. & CURRENT CURVE

