



# MTS Washdown 3-phase Motors

## Features

- 1/3-20 HP, 3600 and 1800 RPM
- 1/2-5 HP, 1200 RPM
- 208-230/460 volt, 60 Hz
- Fan Cooled (TEFC) or Non Ventilated (TENV) Enclosure
- IP69K Protection
- 1.15 SF
- Class F Insulation with Class B Temperature Rise
- C-Face with Rigid Base and Round Body (Footless)
- Premium Efficiency (EISA Compliant)
- NEMA Design B
- Continuous Duty
- 304 Stainless Steel Frame, End Bracket, Junction Box, and Hardware
- Stainless Steel Shaft and Key
- F1 Junction Box Location
- Horizontal or Vertical Mounting
- Lip Seal on DE and ODE
- Round Welded Junction Box with Epoxy Potted Leads
- Double Sealed Bearings Pre-Packed with Mobil Polyrex EM Grease
- Inverter Duty – 10:1 Constant Torque (CT) / 20:1 Variable Torque (VT)
- Class 1 Division 2 Groups A, B, C, D – Temperature Code T2B
- Ambient -20°C to +40°C, Altitude up to 3300 Feet Above Sea Level (FASL)
- Bi-directional Rotation
- Bakery Equipment Assessment Group (BEAG) certified (Previously BISSC)
- In Accordance with NEMA, CSA, UR, and CE



**MTSP-P33-3BD18**



**MTSP-P33-3BD18R**

## Applications

Ideal for use in food and chemical processing plants, pharmaceutical applications, and other environments where corrosion-resistant, watertight motors are required.

Motor Specifications – 3-phase											
Part Number	Price	HP*	Base RPM *	Volts*	Encl.	NEMA Frame	Service Factor*	F.L. Amps*	Sound Power (dB)	Weight (lb)	Drawing Links
<b>C-face With Rigid Base - 1800 RPM</b>											
<a href="#">MTSN-P33-3BD18</a>	\$434.00	1/3 (1/4)	1800 (1500)	208-230/460 VAC (190/380)	TENV	56C	1.15 (1.15)	1.5-1.4/0.7 (1.5-1.4/0.7)	58 dB(A)	28	<a href="#">PDF</a>
<a href="#">MTSP-P33-3BD18</a>	\$434.00				TEFC			1.4-1.2/0.6 (1.4-1.2/0.6)	60 dB(A)		<a href="#">PDF</a>
<a href="#">MTSN-P50-3BD18</a>	\$443.00	1/2 (1/3)			TENV			1.8-1.6/0.8 (1.8-1.6/0.8)	58 dB(A)	30	<a href="#">PDF</a>
<a href="#">MTSP-P50-3BD18</a>	\$443.00				TEFC				60 dB(A)		<a href="#">PDF</a>
<a href="#">MTSN-P75-3BD18</a>	\$480.00	3/4 (1/2)			TENV			2.6-2.4/1.2 (2.6-2.4/1.2)	58 dB(A)	33	<a href="#">PDF</a>
<a href="#">MTSP-P75-3BD18</a>	\$480.00				TEFC			2.5-2.4/1.2 (2.5-2.4/1.2)	60 dB(A)		<a href="#">PDF</a>
<a href="#">MTSN-001-3BD18</a>	\$619.00	1 (3/4)			TENV			3.3-3.1/1.55 (3.3-3.1/1.55)	59 dB(A)	42	<a href="#">PDF</a>
<a href="#">MTSP-001-3BD18</a>	\$548.00				TEFC			3.1-2.8/1.45 (3.1-2.8/1.45)	61 dB(A)		<a href="#">PDF</a>
<a href="#">MTSN-1P5-3BD18</a>	\$677.00	1 1/2 (1)			TENV			4.8-4.4/2.2 (4.8-4.4/2.2)	60 dB(A)	51	<a href="#">PDF</a>
<a href="#">MTSN-1P5-3BD18-14</a>	\$694.00				145TC			<a href="#">PDF</a>			
<a href="#">MTSP-1P5-3BD18</a>	\$617.00				56C			<a href="#">PDF</a>			
<a href="#">MTSP-1P5-3BD18-14</a>	\$634.00				145TC			<a href="#">PDF</a>			
<a href="#">MTSN-002-3BD18</a>	\$1,160.00	2 (1 1/2)	TENV	6-5.4/2.7 (6-5.4/2.7)	60 dB(A)	65	<a href="#">PDF</a>				
<a href="#">MTSN-002-3BD18-14</a>	\$1,173.00		145TC	<a href="#">PDF</a>							
<a href="#">MTSP-002-3BD18</a>	\$668.00		56C	<a href="#">PDF</a>							
<a href="#">MTSP-002-3BD18-14</a>	\$685.00		145TC	<a href="#">PDF</a>							
<a href="#">MTSN-003-3BD18-18</a>	\$1,619.00	3 (2)	TENV	8.3-7.6/3.8 (8.3-7.6/3.8)	62 dB(A)	99	<a href="#">PDF</a>				
<a href="#">MTSP-003-3BD18-18</a>	\$1,351.00		182TC	<a href="#">PDF</a>							
<a href="#">MTSP-005-3BD18</a>	\$1,513.00	5 (3)	TEFC	184TC	64 dB(A)	100	<a href="#">PDF</a>				
<a href="#">MTSP-7P5-3BD18</a>	\$2,148.00	7 1/2 (5)		213TC	180		<a href="#">PDF</a>				
<a href="#">MTSP-010-3BD18</a>	\$2,343.00	10 (7 1/2)		215TC	210		<a href="#">PDF</a>				
<a href="#">MTSP-015-3BD18</a>	\$5,097.00	15 (10)		254TC	370		<a href="#">PDF</a>				
<a href="#">MTSP-020-3BD18</a>	\$5,550.00	20 (15)		256TC	436		<a href="#">PDF</a>				
					53-49/24.5 (53-49/24.5)		69 dB(A)				

\*@ 60Hz (@ 50Hz)



# MTS Washdown 3-phase Motors

Motor Specifications – 3-phase														
Part Number	Price	HP*	Base RPM *	Volts*	Encl.	NEMA Frame	Service Factor*	F.L. Amps*	Sound Power (dB)	Weight (lb)	Drawing Links			
<b>C-face With Rigid Base - 1200 RPM</b>														
<a href="#">MTSP-P50-3BD12</a>	\$505.00	1/2 (1/3)	1200 (1000)	208-230/460 VAC (190/380)	TEFC	56C	1.15 (1.15)	1.9-1.8/0.9 (1.9-1.8/0.9)	55 dB(A)	30	<a href="#">PDF</a>			
<a href="#">MTSP-P75-3BD12</a>	\$548.00	3/4 (1/2)						3.8-3.7/1.85 (3.8-3.7/1.85)						
<a href="#">MTSP-001-3BD12</a>	\$648.00	1 (3/4)						4.2-4.0/2.0 (4.2-4.0/2.0)						
<a href="#">MTSP-1P5-3BD12</a>	\$1,101.00	1 1/2 (1)						5.3-4.9/2.45 (5.3-4.9/2.45)	57 dB(A)	82	<a href="#">PDF</a>			
<a href="#">MTSP-002-3BD12</a>	\$1,200.00	2 (1 1/2)						6.6-6.1/3.05 (6.6-6.1/3.05)						
<a href="#">MTSP-003-3BD12</a>	\$1,877.00	3 (2)						10-9.2/4.6 (10-9.2/4.6)						
<a href="#">MTSP-005-3BD12</a>	\$2,209.00	5 (3)						15-14.0/7.0 (15-14.0/7.0)	61 dB(A)	170	<a href="#">PDF</a>			
													200	
<b>C-face With Rigid Base - 3600 RPM</b>														
<a href="#">MTSN-P33-3BD36</a>	\$418.00	1/3 (1/4)	3600 (3000)	208-230/460 VAC (190/380)	TENV	56C	1.15 (1.15)	1.2-1.1/0.55 (1.2-1.1/0.55)	73 dB(A)	26	<a href="#">PDF</a>			
<a href="#">MTSP-P33-3BD36</a>	\$418.00				TEFC				75 dB(A)					
<a href="#">MTSN-P50-3BD36</a>	\$432.00	1/2 (1/3)			TENV			1.6-1.5/0.75 (1.6-1.5/0.75)	73 dB(A)	29	<a href="#">PDF</a>			
<a href="#">MTSP-P50-3BD36</a>	\$432.00				TEFC				75 dB(A)					
<a href="#">MTSN-P75-3BD36</a>	\$497.00	3/4 (1/2)			TENV			2.3-2.2/1.1 (2.3-2.2/1.1)	73 dB(A)	33	<a href="#">PDF</a>			
<a href="#">MTSP-P75-3BD36</a>	\$497.00				TEFC				75 dB(A)					
<a href="#">MTSN-001-3BD36</a>	\$601.00	1 (3/4)			TENV			3-2.8/1.4 (3-2.8/1.4)	74 dB(A)	39	<a href="#">PDF</a>			
<a href="#">MTSP-001-3BD36</a>	\$548.00				TEFC				76 dB(A)					
<a href="#">MTSN-1P5-3BD36</a>	\$660.00	1 1/2 (1)			TENV			4-3.7/1.85 (4-3.7/1.85)	74 dB(A)	46	<a href="#">PDF</a>			
<a href="#">MTSN-1P5-3BD36-14</a>	\$680.00				TEFC				74 dB(A)					
<a href="#">MTSP-1P5-3BD36</a>	\$600.00				56C				4.2-4.0/2.0 (4.2-4.0/2.0)			76 dB(A)	39	<a href="#">PDF</a>
<a href="#">MTSP-1P5-3BD36-14</a>	\$617.00				143TC									
<a href="#">MTSN-002-3BD36</a>	\$1,039.00	2 (1 1/2)			TENV			5.5-5/2.5 (5.5-5/2.5)	75 dB(A)	60	<a href="#">PDF</a>			
<a href="#">MTSN-002-3BD36-14</a>	\$1,052.00				TEFC				75 dB(A)					
<a href="#">MTSP-002-3BD36</a>	\$651.00				56C				4.9-4.8/2.4 (4.9-4.8/2.4)			76 dB(A)	46	<a href="#">PDF</a>
<a href="#">MTSP-002-3BD36-14</a>	\$671.00				145TC									
<a href="#">MTSN-003-3BD36-18</a>	\$1,567.00	3 (2)			TENV			8-7.2/3.6 (8-7.2/3.6)	95	<a href="#">PDF</a>				
<a href="#">MTSP-003-3BD36-18</a>	\$1,334.00				TEFC						81			
<a href="#">MTSP-005-3BD36</a>	\$1,465.00		184TC	78 dB(A)	95	<a href="#">PDF</a>								
			TEFC	184TC										

\*@ 60Hz (@ 50Hz)



# MTS Washdown 3-phase Motors

Performance Data - 3-phase																	
Part Number	HP*	F.L. RPM*	NEMA Design	F.L. Effic. %	Current			Torque				F.L. Power Factor	Moment of Inertia (lb-ft <sup>2</sup> )				
					Full Load Amps	Locked Rotor Amps	No Load Current	Full Load (lb-ft)	Locked Rotor	Breakdown	Pull Up			% of F.L. Torque			
<b>C-face With Rigid Base - 1800 RPM</b>																	
<a href="#"><u>MTSN-P33-3BD18</u></a>	1/3 (1/4)	1760 (1455)	B	74.0	1.5-1.4/0.7	6.5	1-1.1/0.55	1.00	300	400	300	62.00	0.06200				
<a href="#"><u>MTSP-P33-3BD18</u></a>		1745 (1455)			1.4-1.2/0.6		1.23/0.65					71.00					
<a href="#"><u>MTSN-P50-3BD18</u></a>	1/2 (1/3)	1745 (1450)		78.5	1.8-1.6/0.8	10	1.2-1.3/0.65	1.50	285	300	250	70.00	0.06900				
<a href="#"><u>MTSP-P50-3BD18</u></a>							1.44-1.30/0.65					71.00					
<a href="#"><u>MTSN-P75-3BD18</u></a>	3/4 (1/2)	1755 (1460)		81.5	2.6-2.4/1.2	12.5	1.65-1.8/0.9	2.20		320		69.00	0.08400				
<a href="#"><u>MTSP-P75-3BD18</u></a>		1745 (1455)					2.5-2.4/1.2					2.10-1.90/0.95		71.00			
<a href="#"><u>MTSN-001-3BD18</u></a>	1 (3/4)	1755 (1460)		85.5	3.3-3.1/1.55	15	1.8-2/1	3.00	300	400	290	74.00	0.13800				
<a href="#"><u>MTSP-001-3BD18</u></a>		1750 (1460)					3.1-2.8/1.45					2.76-2.50/1.25		75.00			
<a href="#"><u>MTSN-1P5-3BD18</u></a>	1 1/2 (1)	1755 (1460)		86.5	4.8-4.4/2.2	20	2.55-2.8/1.4	4.40	300	400	250	74.00	0.18400				
<a href="#"><u>MTSN-1P5-3BD18-14</u></a>							1750 (1460)					4.1-4.0/2.0		3.32-3.00/1.50	285	300	75.00
<a href="#"><u>MTSP-1P5-3BD18</u></a>																	
<a href="#"><u>MTSP-1P5-3BD18-14</u></a>							1750 (1460)					6.2-6.0/3.0		3.87-3.50/1.75	285	300	78.00
<a href="#"><u>MTSN-002-3BD18</u></a>	2 (1 1/2)	1750 (1455)		89.5	8.3-7.6/3.8	32		3.2-3.5/1.75	8.80	240	310		200				
<a href="#"><u>MTSN-002-3BD18-14</u></a>							1750 (1470)	8.8-8.2/4.1				3.6-4/2		270	240	80.00	
<a href="#"><u>MTSP-002-3BD18</u></a>																	1750 (1465)
<a href="#"><u>MTSP-002-3BD18-14</u></a>							1750 (1470)	20-18.6/9.3				9.95-9.00/4.50		22.00	210	83.00	
<a href="#"><u>MTSN-003-3BD18-18</u></a>	3 (2)	1760 (1455)		89.5	8.3-7.6/3.8	32			3.2-3.5/1.75	8.80	240		310				240
<a href="#"><u>MTSP-003-3BD18-18</u></a>		1750 (1470)					8.8-8.2/4.1	3.6-4/2	270			240		80.00			
<a href="#"><u>MTSP-005-3BD18</u></a>	5 (3)	1765 (1465)	91.7	20-18.6/9.3	63.5	9.95-9.00/4.50	22.00	225	280	220	85.00	0.50000					
<a href="#"><u>MTSP-7P5-3BD18</u></a>	7 1/2 (5)	1755 (1470)	91.7	26-24.4/12.2	81	12.16-11.00/5.50	29.30	200	270	210	83.00	0.92700					
<a href="#"><u>MTSP-010-3BD18</u></a>	10 (7 1/2)	1760 (1470)	92.4	40-37/18.5	116	x-14.4/7.2	44.00	200	265	190	85.00	1.16000					
<a href="#"><u>MTSP-015-3BD18</u></a>	15 (10)	1765 (1470)	93.0	53-49/24.5	145	x-17.1/8.57	58.60		260			170	74.00	1.80000			
<a href="#"><u>MTSP-020-3BD18</u></a>	20 (15)		1765 (1470)	93.0	53-49/24.5	145	x-17.1/8.57	58.60	250	170	170	85.00	2.40000				
<b>C-face With Rigid Base - 1200 RPM</b>																	
<a href="#"><u>MTSP-P50-3BD12</u></a>	1/2 (1/3)	1155 (970)	B	75.5	1.9-1.8/0.9	10	x-1.8 / 0.9	2.20	255	270	220	63.00	0.08800				
<a href="#"><u>MTSP-P75-3BD12</u></a>	3/4 (1/2)	1155 (960)		81.5	3.8-3.7/1.85	12.5	x-1.7/0.85	3.30				280		65.00			
<a href="#"><u>MTSP-001-3BD12</u></a>	1 (3/4)	1165 (960)		82.5	4.2-4.0/2.0	15	x-2.5/1.25	4.40	270	220	220	68.00	0.14300				
<a href="#"><u>MTSP-1P5-3BD12</u></a>	1 1/2 (1)	1170 (980)		87.5	5.3-4.9/2.45	20	x-3.24/1.62	6.60				70.00					
<a href="#"><u>MTSP-002-3BD12</u></a>	2 (1 1/2)	1175 (980)		88.5	6.6-6.1/3.05	25	x-4.2/2.1	8.80	250	280	210	71.00	0.61000				
<a href="#"><u>MTSP-003-3BD12</u></a>	3 (2)			89.5	10-9.2/4.6	32	x-6.4/3.2	13.20				74.00					
<a href="#"><u>MTSP-005-3BD12</u></a>	5 (3)			1175 (980)	89.5	15-14.0/7.0	46	x-9.2/4.6	22.10	225	270	170	78.00	1.35600			

\*@ 60Hz (@ 50Hz)



# MTS Washdown 3-phase Motors

Performance Data - 3-phase																				
Part Number	HP*	F.L. RPM*	NEMA Design	F.L. Effic. %	Current			Torque				F.L. Power Factor	Moment of Inertia (lb-ft <sup>2</sup> )							
					Full Load Amps	Locked Rotor Amps	No Load Current	Full Load (lb-ft)	Locked Rotor	Breakdown	Pull Up			% of F.L. Torque						
<b>C-face With Rigid Base - 3600 RPM</b>																				
<a href="#">MTSN-P33-3BD36</a>	1/3 (1/4)	3500 (2890)	B	72.0	1.2-1.1/0.55	6.5	0.72-0.8/0.4	0.50	290	320	250	78.00	0.02700							
<a href="#">MTSP-P33-3BD36</a>							1.06/0.53					85.00								
<a href="#">MTSN-P50-3BD36</a>	1/2 (1/3)	3490 (2900)		74.0	1.6-1.5/0.75	10	0.9-0.95/0.475	0.70	285	300	250	83.00	0.03600							
<a href="#">MTSP-P50-3BD36</a>							1.06-0.96/0.48					87.00								
<a href="#">MTSN-P75-3BD36</a>	3/4 (1/2)	3500 (2890)		77.0	2.3-2.2/1.1	12.5	1-1.1/0.55	1.10	320	430	300	83.00	0.05000							
<a href="#">MTSP-P75-3BD36</a>							1.22-1.10/0.55					88.00								
<a href="#">MTSN-001-3BD36</a>	1 (3/4)	3530 (2915)		80.0	3-2.8/1.4	15	1.4-1.5/0.75	1.50	285	300	250	83.00	0.07200							
<a href="#">MTSP-001-3BD36</a>							1.55-1.40/0.70					90.00								
<a href="#">MTSN-1P5-3BD36</a>	1 1/2 (1)	3525 (2910)		84.0	4-3.7/1.85	20	1.3-1.4/0.7	2.30	285	300	250	89.00	0.09400							
<a href="#">MTSN-1P5-3BD36-14</a>							4.2-4.0/2.0					1.77-1.60/0.80		91.00						
<a href="#">MTSP-1P5-3BD36</a>														85.5	5.5-5/2.5	25	1.8-2/1	2.90	90.00	
<a href="#">MTSP-1P5-3BD36-14</a>							4.9-4.8/2.4					1.92-1.74/0.87							91.00	
<a href="#">MTSN-002-3BD36</a>	2 (1 1/2)	3520 (2915)	85.5	5.5-5/2.5	25	1.8-2/1	2.90	230	290	200	89.00	0.13000								
<a href="#">MTSN-002-3BD36-14</a>						4.9-4.8/2.4					1.92-1.74/0.87		86.5	8-7.2/3.6	32	2.35-2.6/1.3	4.40	270	240	85.00
<a href="#">MTSP-002-3BD36</a>																				88.5
<a href="#">MTSP-002-3BD36-14</a>																				
<a href="#">MTSN-003-3BD36-18</a>	3 (2)	3535 (2925)	86.5	8-7.2/3.6	32	2.35-2.6/1.3	4.40	230	290	200	89.00	0.26000								
<a href="#">MTSP-003-3BD36-18</a>											8.8-8.1/4.05		85.00							
<a href="#">MTSP-005-3BD36</a>	5 (3)	3525 (2930)	88.5	12.6-12.2/6.1	46	4.87-4.40/2.20	7.30	225	280	220	91.00	0.26000								

\*@ 60Hz (@ 50Hz)



# MTS Washdown 3-phase Motors

Motor Specifications – 3-phase												
Part Number	Price	HP*	Base RPM *	Volts*	Encl.	NEMA Frame	Service Factor*	F.L. Amps*	Sound Power (dB)	Weight (lb)	Drawing Links	
<b>C-face Only - 1800 RPM</b>												
<a href="#">MTSN-P33-3BD18R</a>	\$417.00	1/3 (1/4)	1800 (1500)	208–230/460 VAC (190/380)	TENV	56C	1.15 (1.15)	1.5-1.4/0.7 (1.5-1.4/0.7)	58 dB(A)	28	<a href="#">PDF</a>	
<a href="#">MTSP-P33-3BD18R</a>	\$415.00				TEFC			1.4-1.2/0.6 (1.4-1.2/0.6)	60 dB(A)	27	<a href="#">PDF</a>	
<a href="#">MTSN-P50-3BD18R</a>	\$427.00	1/2 (1/3)			TENV			1.8-1.6/0.8 (1.8-1.6/0.8)	58 dB(A)	30	<a href="#">PDF</a>	
<a href="#">MTSP-P50-3BD18R</a>	\$426.00				TEFC				60 dB(A)	29	<a href="#">PDF</a>	
<a href="#">MTSN-P75-3BD18R</a>	\$463.00	3/4 (1/2)			TENV			2.6-2.4/1.2 (2.6-2.4/1.2)	58 dB(A)	33	<a href="#">PDF</a>	
<a href="#">MTSP-P75-3BD18R</a>	\$459.00				TEFC				60 dB(A)	32	<a href="#">PDF</a>	
<a href="#">MTSN-001-3BD18R</a>	\$602.00	1 (3/4)			TENV			3.3-3.1/1.55 (3.3-3.1/1.55)	59 dB(A)	42	<a href="#">PDF</a>	
<a href="#">MTSP-001-3BD18R</a>	\$528.00				TEFC				61 dB(A)	35	<a href="#">PDF</a>	
<a href="#">MTSN-1P5-3BD18R</a>	\$660.00	1 1/2 (1)			TENV			4.8-4.4/2.2 (4.8-4.4/2.2)	60 dB(A)	51	<a href="#">PDF</a>	
<a href="#">MTSN-1P5-3BD18R-14</a>	\$678.00				145TC				<a href="#">PDF</a>			
<a href="#">MTSP-1P5-3BD18R</a>	\$596.00				56C				4.1-4.0/2.0 (4.1-4.0/2.0)	61 dB(A)	41	<a href="#">PDF</a>
<a href="#">MTSP-1P5-3BD18R-14</a>	\$610.00				145TC					<a href="#">PDF</a>		
<a href="#">MTSN-002-3BD18R</a>	\$1,126.00	2 (1 1/2)	TENV	6.5-4.2/2.7 (6-5.4/2.7)	60 dB(A)	65	<a href="#">PDF</a>					
<a href="#">MTSN-002-3BD18R-14</a>	\$1,139.00		145TC		<a href="#">PDF</a>							
<a href="#">MTSP-002-3BD18R</a>	\$647.00		56C		6.2-6.0/3.0 (6.2-6.0/3.0)	61 dB(A)	50	<a href="#">PDF</a>				
<a href="#">MTSP-002-3BD18R-14</a>	\$665.00		145TC			<a href="#">PDF</a>						
<b>C-face Only - 3600 RPM</b>												
<a href="#">MTSP-P33-3BD36R</a>	\$401.00	1/3 (1/4)	3600 (3000)	208–230/460 VAC (190/380)	TEFC	56C	1.15 (1.15)	1.2-1.1/0.55 (1.2-1.1/0.55)	75 dB(A)	25	<a href="#">PDF</a>	
<a href="#">MTSP-P50-3BD36R</a>	\$415.00	1/2 (1/3)						1.6-1.5/0.75 (1.6-1.5/0.75)		28	<a href="#">PDF</a>	
<a href="#">MTSP-P75-3BD36R</a>	\$480.00	3/4 (1/2)						2.3-2.2/1.1 (2.3-2.2/1.1)		32	<a href="#">PDF</a>	
<a href="#">MTSP-001-3BD36R</a>	\$531.00	1 (3/4)						2.9-2.8/1.4 (2.9-2.8/1.4)	34	<a href="#">PDF</a>		
<a href="#">MTSP-1P5-3BD36R</a>	\$582.00	1 1/2 (1)						4.2-4.0/2.0 (4.2-4.0/2.0)	76 dB(A)	38	<a href="#">PDF</a>	
<a href="#">MTSP-1P5-3BD36R-14</a>	\$600.00							143TC		<a href="#">PDF</a>		
<a href="#">MTSP-002-3BD36R</a>	\$630.00	2 (1 1/2)						56C	4.9-4.8/2.4 (4.9-4.8/2.4)	45	<a href="#">PDF</a>	
<a href="#">MTSP-002-3BD36R-14</a>	\$651.00							145TC		<a href="#">PDF</a>		

\*@ 60Hz (@ 50Hz)



# MTS Washdown 3-phase Motors

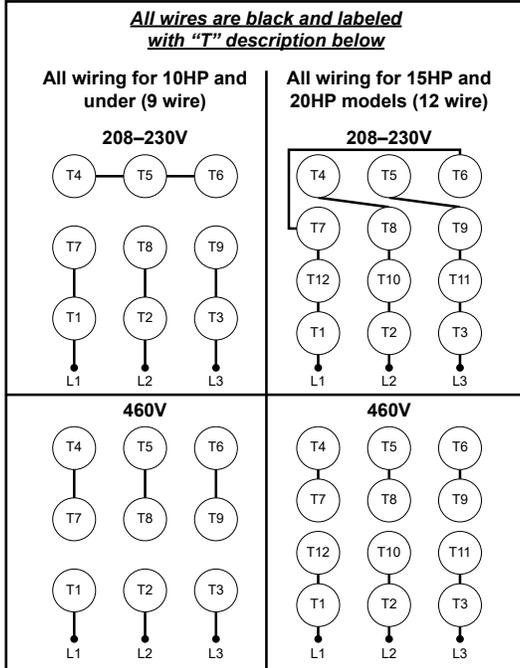
Performance Data - 3-phase																			
Part Number	HP*	F.L. RPM*	NEMA Design	F.L. Effic. %	Current			Torque			F.L. Power Factor	Moment of Inertia (lb-ft <sup>2</sup> )							
					Full Load Amps	Locked Rotor Amps	No Load Current	Full Load (lb-ft)	Locked Rotor	Breakdown			Pull Up						
C-face Only - 1800 RPM																			
<a href="#">MTSN-P33-3BD18R</a>	1/3 (1/4)	1760 (1455)	B	74.0	1.5-1.4/0.7	6.5	1-1.1/0.55	1.00	300	400	300	62.00	0.06200						
<a href="#">MTSP-P33-3BD18R</a>		1745 (1455)		82.5	1.4-1.2/0.6	8	x-0.78/0.39					71.00							
<a href="#">MTSN-P50-3BD18R</a>	1/2 (1/3)	1745 (1450)		78.5	1.8-1.6/0.8	10	1.2-1.3/0.65	1.50	285	300	250	70.00	0.06900						
<a href="#">MTSP-P50-3BD18R</a>				82.5			1.44-1.30/0.65					78.00							
<a href="#">MTSN-P75-3BD18R</a>	3/4 (1/2)	1755 (1460)		81.5	2.6-2.4/1.2	12.5	1.65-1.8/0.9	2.20	285	320	250	69.00	0.08400						
<a href="#">MTSP-P75-3BD18R</a>		1745 (1455)		82.5	2.5-2.4/1.2		2.10-1.90/0.95					78.00							
<a href="#">MTSN-001-3BD18R</a>	1 (3/4)	1755 (1460)		85.5	3.3-3.1/1.55	15	1.8-2/1	3.00	300	400	290	74.00	0.13800						
<a href="#">MTSP-001-3BD18R</a>		1750 (1460)					3.1-2.8/1.45					2.76-2.50/1.25		285	300	75.00			
<a href="#">MTSN-1P5-3BD18R</a>	1 1/2 (1)	1755 (1460)		86.5	4.8-4.4/2.2	20	2.55-2.8/1.4	4.40	300	400	250	74.00	0.18400						
<a href="#">MTSN-1P5-3BD18R-14</a>							1750 (1460)					4.1-4.0/2.0		3.32-3.00/1.50	285	300	75.00		
<a href="#">MTSP-1P5-3BD18R</a>																	1750 (1460)	6-5.4/2.7	2.9-3.2/1.6
<a href="#">MTSP-1P5-3BD18R-14</a>	2 (1 1/2)	1750 (1455)		86.5	6.2-6.0/3.0	25	3.87-3.50/1.75	5.90	285	300	250	78.00	0.18400						
<a href="#">MTSN-002-3BD18R</a>							2 (1 1/2)					1750 (1455)		86.5	6-5.4/2.7	25	2.9-3.2/1.6	5.90	300
<a href="#">MTSN-002-3BD18R-14</a>	1750 (1455)	6.2-6.0/3.0		3.87-3.50/1.75	285	300		250	78.00										
<a href="#">MTSP-002-3BD18R</a>									1750 (1455)	6.2-6.0/3.0	3.87-3.50/1.75		285						
<a href="#">MTSP-002-3BD18R-14</a>	1750 (1455)	6.2-6.0/3.0		3.87-3.50/1.75	285	300		250											
C-face Only - 3600 RPM																			
<a href="#">MTSP-P33-3BD36R</a>	1/3 (1/4)	3500 (2890)	B	74.0	1.2-1.1/0.55	8	x-0.74/0.37	0.50	285	300	250	85.00	0.02700						
<a href="#">MTSP-P50-3BD36R</a>	1/2 (1/3)	3460 (2900)		77.0	1.6-1.5/0.75	10	1.06-0.96/0.48	0.70				88.00	0.03600						
<a href="#">MTSP-P75-3BD36R</a>	3/4 (1/2)	3500 (2890)		80.0	2.3-2.2/1.1	12.5	1.22-1.10/0.55	1.10				90.00	0.05000						
<a href="#">MTSP-001-3BD36R</a>	1 (3/4)	3470 (2890)		80.0	2.9-2.8/1.4	15	1.55-1.40/0.70	1.50				90.00	0.05400						
<a href="#">MTSP-1P5-3BD36R</a>	1 1/2 (1)	3480 (2900)		84.0	4.2-4.0/2.0	20	1.77-1.60/0.80	2.30				285	300	250	91.00	0.07200			
<a href="#">MTSP-1P5-3BD36R-14</a>				86.5												0.09400			
<a href="#">MTSP-002-3BD36R</a>	2 (1 1/2)	3480 (2900)		85.5	4.9-4.8/2.4	25	1.92-1.74/0.87	2.90				285	300	250	91.00	0.09400			
<a href="#">MTSP-002-3BD36R-14</a>				85.5												0.09400			

\*@ 60Hz (@ 50Hz)



# MTS Washdown 3-phase Motors

## Wiring Diagram



## Accessories



**MTAS-FAN-56**



**MTAS-SHROUD-56140**

MTSP Accessories		
Part Number	Price	Fits
<b>Replacement Fans</b>		
<b>MTAS-FAN-56</b>	\$29.00	1/3hp, 1/2hp and 3/4hp IronHorse MTS series TEFC motors
<b>MTAS-FAN-143180</b>	\$29.00	1hp 2- and 4-pole, 1-1/2hp 2-pole and 3hp and 5hp 4-pole IronHorse MTS series TEFC motors
<b>MTAS-FAN-145</b>	\$29.00	1-1/2hp 4-pole, 2hp 2- and 4-pole IronHorse MTS series TEFC motors
<b>MTAS-FAN-180-26</b>	\$32.00	1hp, 1-1/2hp and 2hp 6-pole and 3hp and 5hp 2-pole IronHorse MTS series TEFC motors
<b>MTAS-FAN-210-6</b>	\$36.00	3hp and 5hp 6-pole IronHorse MTS series TEFC motors
<b>MTAS-FAN-210</b>	\$36.00	7-1/2hp and 10hp IronHorse MTS series TEFC motors
<b>MTAS-FAN-250</b>	\$39.00	15hp and 20hp IronHorse MTS series TEFC motors
<b>Replacement Shrouds</b>		
<b>MTAS-SHROUD-56140</b>	\$97.00	56 and 140T frame IronHorse MTS series TEFC motors
<b>MTAS-SHROUD-180</b>	\$129.00	180T frame IronHorse MTS series TEFC motors
<b>MTAS-SHROUD-210</b>	\$162.00	210T frame IronHorse MTS series TEFC motors
<b>MTAS-SHROUD-250</b>	\$233.00	250T frame IronHorse MTS series TEFC motors

## Mounting

**MTSP/MTSN stainless-steel motors can be mounted in any orientation, horizontal or vertical. Ensure the T-drain plugs are installed as necessary for proper drainage.**

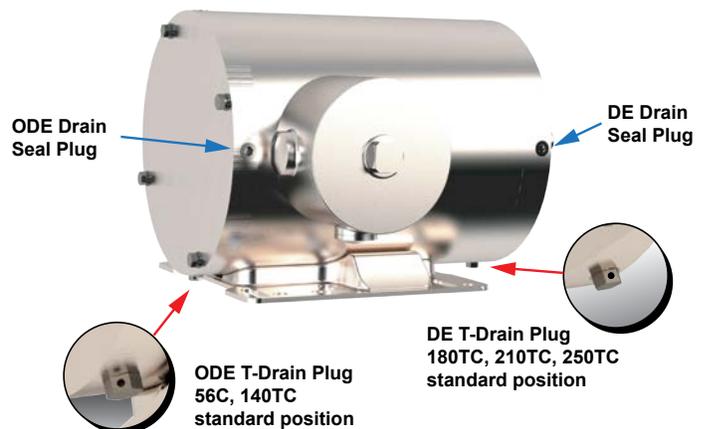
The motors have four drain holes in the 12:00, 3:00, 6:00, and 9:00 positions. Motors are shipped with one "T" shape drain plug installed as indicated below. Drain Seal plugs are installed in the other positions.

**For 56C and 140TC:**

- Drive End—No Drain Installed. Optional M10x1 T-Drain Plug ships with motor (install if front drain is needed).
- Opposite Drive End – M6 T-Drain Plug installed. Optional M6x1 Seal Drain Plug ships with motor (install if no drain needed).

**For 180TC, 210TC, 250TC:**

- Drive End—M10 x 1 T-Drain Plug installed. Optional M10 Seal Drain Plug ships with motor (install if no drain is needed).
- Opposite Drive End – No drain holes.





# AC Motor Selection – IronHorse<sup>®</sup> General Purpose Motors

IronHorse <sup>®</sup> 3-Phase Motor Selection					
Motor Series	MTR2/MTRP	MTRJ/MTRJP	MTDP	MTSP/MTSN	MTCP2
Paint Color	Black	Black	Blue	Stainless	Gray
Main Characteristics	General Purpose Rolled Steel	Jet Pump	Rolled Steel Open Drip Proof	Stainless Steel Premium Efficiency IP69K	Cast-Iron Hazardous Duty
Electrical Characteristics					
Horsepower range	1/3 - 3	1/3 - 3	1 - 50	1 - 20	1 - 300(T) 1 - 30(TC)
Base speed	1800; 3600	3600	1800; 3600	1200; 1800; 3600	1200; 1800; 3600
Standard Voltage	208-230/460 VAC; 230/460 VAC	208-230/460 VAC; 230/460 VAC	208-230/460 VAC	208-230/460 VAC	208-230/460 VAC; 460VAC
Phase / Base Frequency (Hz)	3-phase / 60 Hz				
Service Factor	1.15	1.15	1.15 (sine), 1.0 (drive)		1.25 (1-200) 1.15 (250-300) 1.0 (all w/ drive)
Design Code (NEMA)	B				
Insulation Class	Class F				
Insulation System	Dip and Bake	Dip and Bake Twice	VPI	Dip and Bake	Vacuum Impregnation
Duty Cycle	Continuous				
Thermal protection	None				
Hazard Classification	None			Class 1 / Div 2	
Mechanical Characteristics					
Frame size	56C or HC	56J	143T - 326T	56C - 256TC	143T/TC - 449T
Enclosure	TEFC	TEFC	ODP	TEFC / TENV	TEFC
Enclosure Rating	IP43		IP23	IP69K	IP55
Frame material	Rolled steel		Rolled steel	304 Stainless steel	Cast iron
End bracket material	Aluminum	Aluminum	≤256 frame- Aluminum >256- Cast iron	304 Stainless steel	Cast iron
Junction box material	Steel	Steel	Steel	304 Stainless steel	Cast iron
Fan guard material	Steel	Steel	N/a	304 Stainless steel	Steel
Fan material	Polypropylene plastic	Plastic	N/a	Heat-Resistant Polyethylene	Plastic
Lead termination	Junction Box				
standard mounting	C-face with removable rigid base		Rigid base	C-face round body and C-face with rigid base	Rigid base, c-face with rigid base (1-100 hp)
Drive end shaft slinger	Yes	Yes	None	Yes	Yes
Bearings	Ball				1-300 hp - 2p, 1-75 hp - 4p & 6p: Ball 100-300 hp - 4p & 6p: Roller
Grease	Mobil Polyrex EM		NS7 ENS	Mobil Polyrex EM	
Standard junction box assembly position	F1				F1 (field convertible F2)
Performance Characteristics					
Constant Torque speed range	4:1	4:1	10:1	10:1	10:1
Variable Torque speed range	10:1	10:1	20:1	20:1	20:1
Constant Horsepower speed range	1.5:1	1.5:1	1.5:1	1.5:1	1.5:1
Temperature rise	B				
Encoder provisions	None				
Other Characteristics					
Warranty*	2 years	2 years	2 years	1 year	2 years
Agency Approvals **	CSA, CE	CSA,CE	CSA	NEMA, CSA, UR, CE, BISCC	CSA, ISO9001, CE

\* See Terms and Conditions for motor warranty explanation.

1) For warranty on IronHorse motors below 50hp, warranty service can be arranged through AutomationDirect.

2) For warranty on IronHorse motors 50hp and above, motors must be inspected by a local EASA motor repair or service center; (see AutomationDirect Terms & Conditions).

\*\* To obtain the most current agency approval information, see the Agency Approval Checklist on the specific part number's web page.

\*\*\* 56HC motors are capable of 56C C-face mounting, and are also compatible with 56, 143T, and 145T foot mounting dimensions.