

Premium efficiency motors for energy conservation

IronHorse® Premium Efficiency AC electric motors meet the requirements of the Energy Independence and Security Act of 2007. The MTCP2 Series gives you a low cost of entry so you get a quicker payback on your investment. All our Ironhorse motors are in stock and ready for same-day shipment; if your order is over \$49, you get free shipping too!

Cast Iron T Frame Motors 1 to 300 hp TC Frame up to 30 hp

Premium efficiency, CSA_{US} certified, ISO9001, CE Mark, Standards of Excellence

All cast iron frame ribbed design for maximum cooling

starting at \$226.00

IRONHORSE®
AUTOMATIONDIRECT®
Class F winding insulation

NSK/SKF/NTN brand premium quality ball (1-75 hp) or roller (100-300 hp) bearings

Standard NEMA T frame up to 300 hp (C-flange kit optional) TC frame models (C-face) available up to 30 hp

Solid (full frame length) cast iron mounting feet

Cast iron junction box with rubber gasket and rubber dust curtain

Steel fan cover

All MTCP2 models are totally enclosed fan cooled (TEFC)

SA CE

Three-phase - 208-230/460 Volt, T Frame - TEFC Enclosure, 1200,1800, 3600 RPM

- Premium Efficiency
- Premium grade quality
- All cast iron frames
- Drive-end ball bearings (1-75 hp) or roller bearings (100-300 hp) are installed in all MTCP2 motors
- Electrically reversible
- C-flange kits for C-face mounting are available
- C-face models available up to 30 hp



MTCP2 Premium-Efficiency Cast-Iron 3-phase AC Motors

T-Frame TEFC Motors – 3-phase Industrial Duty – 1 to 300 hp

TC-Frame (C-Face) TEFC Motors – 3-phase Industrial Duty – 1 to 30 hp



**Premium Efficiency
3-phase Cast-iron T-Frame**

Features

- Available in 1200, 1800, & 3600 rpm
- Totally Enclosed Fan Cooled (TEFC) enclosure
- NEMA TC-frame (C-face) and T-frame motors
- Horizontal or Vertical shaft down orientation
- Cast-iron frame with ribbed design for maximum cooling
- Solid full frame length cast-iron mounting feet
- Steel fan cover
- Cast-iron junction box with rubber gasket and rubber dust cover
- NSK/NTN/SKF brand premium quality ball (1-75 hp) or roller bearings (100-300 hp)
- Maintenance free bearings (10 hp and below)
- V-ring shaft seals on drive end and on opposite drive end
- Electrically reversible
- Class F winding insulation
- Service Factor: 1.25 (1-200 hp), 1.15 (250-300 hp), 1.0 with AC drive (ALL)
- Meets or exceeds Premium Efficiency standards
- Class I, Div 2 hazardous locations
- Inverter ratings: 20:1 (variable torque); 10:1 (constant torque)
- Two year warranty
- cCSA_{us} certified, ISO9001, CE

Accessories & Spare Parts Available

- STABLE motor slide bases for adjustable mounting
- C-flange kits (for converting T-frame motors to TC-frame)
- Replacement junction boxes
- Replacement fans
- Replacement fan shrouds

Applications

- Fans
- Conveyors
- Pumps
- Material Handling
- Metal Processing
- Textile Processing
- Test Stands



**Premium Efficiency
3-phase Cast-iron TC-Frame**



MTCP2 Premium-Efficiency Cast-Iron 3-phase AC Motors

T-Frame TEFC Motors – 3-Phase Industrial Duty – 1–300 hp – 1800 rpm

TC-Frame (C-Face) TEFC Motors – 3-Phase Industrial Duty – 1–30 hp – 1800 rpm

Motor Specifications – Premium-Efficiency MTCP2 Series 3-phase Motors – 1800 rpm															
Part Number (1)	Price	HP (2)	Base RPM @60Hz (50Hz)	Phase	Voltage	Housing	NEMA Frame	Mounting (3)	Holes / Foot	Service Factor(6) (@50Hz)	F.L. Amps @208-230V/460V	Approx Product Weight (lb) (4)	Drawing Links		
MTCP2-001-3BD18	\$226.00	1	1800 (1500)	3	208-230/460V	TEFC cast-iron	143T	F1(F2)	2	1.25 (1.0)	3.61-3.27 / 1.63	41	PDF		
MTCP2-001-3BD18C	\$237.00						143TC						PDF		
MTCP2-1P5-3BD18	\$286.00	1.5					145T		4		4.92-4.45 / 2.22	56	PDF		
MTCP2-1P5-3BD18C	\$295.00						145TC						PDF		
MTCP2-002-3BD18	\$310.00	2					145T	4	6.56-5.93 / 2.97		58.5	PDF			
MTCP2-002-3BD18C	\$320.00						145TC					PDF			
MTCP2-003-3BD18	\$538.00	3					182T	2	9.01-8.16 / 4.08		86	PDF			
MTCP2-003-3BD18C	\$554.00						182TC					PDF			
MTCP2-005-3BD18	\$558.00	5					184T	F1	13.9-12.6 / 6.3		104	PDF			
MTCP2-005-3BD18C	\$575.00						184TC					PDF			
MTCP2-7P5-3BD18	\$867.00	7.5					213T		20.4-18.5 / 9.23		172	PDF			
MTCP2-7P5-3BD18C	\$893.00						213TC					PDF			
MTCP2-010-3BD18	\$958.00	10					215T	4	26.9-24.3 / 12.2		193	PDF			
MTCP2-010-3BD18C	\$986.00						215TC					PDF			
MTCP2-015-3BD18	\$1,321.00	15					254T	2	40.0-36.2 / 18.1		265	PDF			
MTCP2-015-3BD18C	\$1,360.00						254TC					PDF			
MTCP2-020-3BD18	\$1,540.00	20					256T	F1(F2)	52.4-47.4 / 23.7		304	PDF			
MTCP2-020-3BD18C	\$1,586.00						256TC					PDF			
MTCP2-025-3BD18	\$2,128.00	25					284T	2	65.1-58.8 / 29.4		385	PDF			
MTCP2-025-3BD18C	\$2,273.00						284TC					PDF			
MTCP2-030-3BD18	\$2,253.00	30					286T	4	78.1-70.6 / 35.3		430	PDF			
MTCP2-030-3BD18C	\$2,406.00						286TC					PDF			
MTCP2-040-3BD18	\$2,774.00	40					324T	2	104-93.7 / 46.8		531	PDF			
MTCP2-050-3BD18	\$3,141.00	50					326T	4	127-115 / 57.6		578	PDF			
MTCP2-060-3BD18	\$4,172.00	60					364T	F1	158-142 / 71.2		769	PDF			
MTCP2-075-3BD18	\$4,510.00	75					365T		196-177 / 88.7		858	PDF			
MTCP2-100-3BD18	\$5,697.00	100					405T	4	252-228 / 114		1131	PDF			
MTCP2-125-3BD18	\$6,952.00	125					444T	F1(F2)	323-292 / 146		1429	PDF			
MTCP2-150-3BD18	\$8,276.00	150					445T		386-349 / 175		1625	PDF			
MTCP2-200-3BD18	\$9,468.00	200					445/7T	4	506-458 / 229		2033	PDF			
MTCP2-250-3D18	\$13,867.00	250			460V		449T	F1	2		1.15	2805	2508	PDF	
MTCP2-300-3D18	\$17,993.00	300					449T					3365	2728	PDF	

- 1) Please review the AutomationDirect Terms & Conditions for warranty and service on this product.
- 2) For warranty on motors 50 hp and above, motors must be inspected by an EASA motor repair or service center.
- 3) F1(F2) indicates F1 conduit box mounting location, field convertible to F2 (as shown on dimensional diagram).
- 4) Certain heavy and oversized items can be shipped only via LTL. Check our web site for current shipping method constraints by part number.
- 5) F.L. Amps @ 460V only.
- 6) The service factor changes from 1.25 to 1.0 under the following conditions:
 - When running the motor at 208VAC @ 60Hz
 - When running the motor at 200/400VAC @ 50Hz
 - When used with a VFD



MTCP2 Premium-Efficiency Cast-Iron 3-phase AC Motors

T-Frame TEFC Motors – 3-phase Industrial
Duty – 1–20 hp – 1200 & 3600 rpm

Motor Specifications – Premium-Efficiency MTCP2 Series 3-phase Motors – 1200 rpm

Part Number ⁽¹⁾	Price	HP	Base RPM @60Hz (50Hz)	Phase	Voltage	Housing	NEMA Frame	Mounting ⁽²⁾	Holes / Foot	Service Factor ⁽⁴⁾ (@50Hz)	F.L. Amps @208-230V/460V	Approx Product Weight (lb) ⁽³⁾	Drawing Links
MTCP2-001-3BD12	\$297.00	1	1200 (1000)	3	208-230/460V	TEFC cast-iron	145T	F1(F2)	4	1.25 (1.0)	3.86-3.49 / 1.75	53	PDF
MTCP2-1P5-3BD12	\$473.00	1.5					182T		2		5.22-4.72 / 2.36	91.5	PDF
MTCP2-002-3BD12	\$509.00	2					184T		4		6.59-5.96 / 2.98	100	PDF
MTCP2-003-3BD12	\$652.00	3					213T		2		9.92-8.97 / 4.48	166	PDF
MTCP2-005-3BD12	\$742.00	5					215T		4		16.1-14.5 / 7.27	179	PDF
MTCP2-7P5-3BD12	\$1,202.00	7.5					254T		2		20.8-18.8 / 9.41	247	PDF
MTCP2-010-3BD12	\$1,320.00	10					256T		4		27.8-25.1 / 12.5	258	PDF
MTCP2-015-3BD12	\$1,675.00	15					284T		2		42.9-38.8 / 19.4	366	PDF
MTCP2-020-3BD12	\$1,845.00	20					286T		4		56.5-51.1 / 25.5	419	PDF

1) Please review the AutomationDirect Terms & Conditions for warranty and service on this product.

2) F1(F2) indicates F1 conduit box mounting location, field convertible to F2 (as shown on dimensional diagram).

3) Certain heavy and oversized items can be shipped only via LTL. Check our web site for current shipping method constraints by part number.

4) The service factor changes from 1.25 to 1.0 under the following conditions:

- When running the motor at 208VAC @ 60Hz
- When running the motor at 200/400VAC @ 50Hz
- When used with a VFD

Motor Specifications – Premium-Efficiency MTCP2 Series 3-phase Motors – 3600 rpm

Part Number ⁽¹⁾	Price	HP	Base RPM @60Hz (50Hz)	Phase	Voltage	Housing	NEMA Frame	Mounting ⁽²⁾	Holes / Foot	Service Factor ⁽⁴⁾ (@50Hz)	F.L. Amps @208-230V/460V	Approx Product Weight (lb) ⁽³⁾	Drawing Links
MTCP2-1P5-3BD36	\$254.00	1.5	3600 (3000)	3	208-230/460V	TEFC cast-iron	143T	F1(F2)	2	1.25 (1.0)	4.62-4.18 / 2.09	45.2	PDF
MTCP2-002-3BD36	\$274.00	2					145T		4		6.05-5.48 / 2.74	50.7	PDF
MTCP2-003-3BD36	\$384.00	3					182T	F1	2		6.45-7.64 / 3.82	80.5	PDF
MTCP2-005-3BD36	\$442.00	5					184T		4		13.3-12.0 / 6.01	96	PDF
MTCP2-7P5-3BD36	\$699.00	7.5					213T	F1(F2)	2		20.9-18.9 / 9.45	160	PDF
MTCP2-010-3BD36	\$691.00	10					215T		4		27.0-24.4 / 12.2	180	PDF
MTCP2-015-3BD36	\$1,304.00	15					254T		2		38.8-35.1 / 17.5	261	PDF
MTCP2-020-3BD36	\$1,433.00	20					256T		4		51.1-46.2 / 23.1	297	PDF

1) Please review the AutomationDirect Terms & Conditions for warranty and service on this product.

2) F1(F2) indicates F1 conduit box mounting location, field convertible to F2 (as shown on dimensional diagram).

3) Certain heavy and oversized items can be shipped only via LTL. Check our web site for current shipping method constraints by part number.

4) The service factor changes from 1.25 to 1.0 under the following conditions:

- When running the motor at 208VAC @ 60Hz
- When running the motor at 200/400VAC @ 50Hz
- When used with a VFD



MTCP2 Premium-Efficiency Cast-Iron 3-phase AC Motors

T-Frame TEFC Motors – 3-phase Industrial Duty – 1–300 hp

TC-Frame (C-Face) TEFC Motors – 3-phase Industrial Duty – 1–30 hp

Performance Data – T & TC Frame 3-phase MTCP2 Motors (460 Volt except as indicated) – 1200, 1800, 3600 rpm

Part Number	HP	NEMA Design	FL RPM	Minimum Speed (rpm)		Current @ 230V/460V (Amps)			Torque (lb-ft)			Maximum Speed (rpm)		FL Efficiency (%)	F.L. Power Factor	Rotor Inertia (lb-ft ²)
				CT 10:1	VT 20:1	No Load	Full Load	Locked Rotor	Full Load	Locked Rotor	Break-down	CHP(1)	Safe			
MTCP2-001-3BD12	1	B	1160	116	58	2.3/1.5	3.49/1.75	30/15	4.53	8.15	12.00	1800	2400	82.5	0.65	0.118
MTCP2-001-3BD18(C)			1755	175.5	87.75	2.2/1.1	3.27/1.63	30/15	2.99	8.37	11.96	2700	3600	85.5	0.67	0.089
MTCP2-1P5-3BD12	1.5	B	1180	118	59	3.1/1.55	4.72/2.36	40/20	6.67	16.68	24.01	1800	2400	87.5	0.68	0.401
MTCP2-1P5-3BD18(C)			1755	175.5	87.75	2.9/1.45	4.45/2.22	40/20	4.49	12.57	17.51	2700	3600	86.5	0.73	0.105
MTCP2-1P5-3BD36	2	B	3490	348.5	174.25	2.1/1.05	4.18/2.09	40/20	2.26	4.97	7.01	5400	7200	84	0.80	0.043
MTCP2-002-3BD12			1175	118	59	3.7/1.85	5.96/2.98	50/25	8.9	20.47	29.37	1800	2400	88.5	0.71	0.462
MTCP2-002-3BD18(C)	2	B	1755	175.5	87.75	3.9/1.95	5.93/2.97	50/25	5.98	16.15	20.93	2700	3600	86.5	0.73	0.116
MTCP2-002-3BD36			3490	349	174.5	2.5/1.25	5.48/2.74	50/25	3.01	6.92	9.63	5400	7200	85.5	0.80	0.05
MTCP2-003-3BD12	3	B	1175	117.5	58.75	5/2.5	8.97/4.48	64/32	13.3	20.62	31.92	1800	2400	89.5	0.7	0.646
MTCP2-003-3BD18(C)			1755	175.5	87.75	4.6/2.3	8.16/4.08	64/32	9	19.80	28.80	2700	3600	89.5	0.77	0.23
MTCP2-003-3BD36	5	B	3490	350.5	175.25	3.52/1.7	7.64/3.82	64/32	4.49	9.43	15.72	5400	7200	86.5	0.85	0.133
MTCP2-005-3BD12			1175	117.5	58.75	7.1/3.55	14.5/7.27	92/46	22.2	35.52	53.28	1800	2400	89.5	0.72	0.946
MTCP2-005-3BD18(C)	5	B	1755	175.5	87.75	5.4/2.7	12.6/6.3	92/46	15	30.00	42.00	2700	3600	89.5	0.83	0.326
MTCP2-005-3BD36			3490	350.5	175.25	3.1/1.55	12.0/6.01	92/46	7.49	16.48	26.22	5400	7200	88.5	0.88	0.178
MTCP2-7P5-3BD12	7.5	B	1175	117.5	58.75	8.4/4.2	18.8/9.41	127/63.5	33.5	60.30	93.80	1800	2400	91	0.82	2.03
MTCP2-7P5-3BD18(C)			1760	176	88	8.0/4.0	18.5/9.23	127/63.5	22.3	41.26	60.21	2700	3600	91.7	0.83	0.689
MTCP2-7P5-3BD36	10	B	3505	350.5	175.25	6.4/3.2	18.9/9.45	127/63.5	11.2	17.92	33.60	5400	5400	89.5	0.83	11.2
MTCP2-010-3BD12			1175	117.5	58.75	11.6/5.8	25.1/12.5	162/81	44.7	80.46	125.16	1800	2400	91	0.82	2.27
MTCP2-010-3BD18(C)	10	B	1760	176	88	9.8/4.9	24.3/12.2	162/81	29.7	51.98	77.22	2700	3600	91.7	0.84	0.814
MTCP2-010-3BD36			3500	350	175	7.3/3.7	24.4/12.2	162/81	14.9	22.35	41.72	5400	5400	90.2	0.85	0.369
MTCP2-015-3BD12	15	B	1185	118.5	59.25	17/8.5	38.8/19.4	232/116	66.5	96.43	152.95	1800	2400	91.7	0.79	4.09
MTCP2-015-3BD18(C)			1765	176.5	88.25	15/7.5	36.2/18.1	232/116	44.6	84.74	120.42	2700	3600	92.4	0.84	1.89
MTCP2-015-3BD36	20	B	3540	354.5	177.25	9.8/4.9	35.1/17.5	232/116	22.2	37.74	55.50	5400	5400	91	0.88	1.06
MTCP2-020-3BD12			1185	118.5	59.25	49.2/24.6	51.1/25.5	290/145	88.6	124.04	194.92	1800	2400	91.7	0.80	5
MTCP2-020-3BD18(C)	20	B	1765	176.5	88.25	18/9	47.4/23.7	290/145	59.5	107.10	148.75	2700	3600	93	0.85	2.33
MTCP2-020-3BD36			3540	354	177	46.2/23.1	46.2/23.1	290/145	29.7	47.52	68.31	5400	5400	91	0.89	1.26
MTCP2-025-3BD18(C)	25	B	1770	177	88.5	21.2/10.6	58.8/29.4	365/182.5	74.2	111.30	178.08	2700	2700	93.6	0.85	3.36
MTCP2-030-3BD18(C)	30	B	1770	177	88.5	24/12	70.6/35.3	435/217.5	89	133.50	213.60	2700	2700	93.6	0.85	3.83
MTCP2-040-3BD18	40	B	1775	177.5	88.75	34/17	93.7/46.8	580/290	118	188.80	306.80	2700	2700	94.1	0.85	6.11
MTCP2-050-3BD18	50	B	1775	177.5	88.75	41/20.5	115/57.6	725/362.5	148	236.80	384.80	2700	2700	94.5	0.86	6.89
MTCP2-060-3BD18	60	B	1780	178	89	56/28	142/71.2	870/435	177	362.85	442.50	2700	2700	95	0.83	14.7
MTCP2-075-3BD18	75	B	1780	178	89	74/37	177/88.7	1085/542.5	221	397.80	508.30	2700	2700	95.4	0.83	17.5
MTCP2-100-3BD18	100	B	1785	178.5	89.25	70/35	228/114	1450/725	294	470.40	735.00	2700	2700	95.4	0.86	31.2
MTCP2-125-3BD18	125	B	1790	179	89.5	104/52	292/146	1815/907	367	587.20	880.80	2700	2700	95.4	0.84	40.1
MTCP2-150-3BD18	150	B	1790	179	89.5	113/56.5	349/175	2170/1085	440	704.00	1056.00	2700	2700	95.8	0.84	48.5
MTCP2-200-3BD18	200	B	1790	179	89.5	144/72	458/229	2900/1450	587	997.90	1467.50	2700	2250	96.2	0.85	64.3
MTCP2-250-3D18	250	B	1790	179	89.5	91.9 ²	280 ²	1825 ²	773	1546.00	2009.80	2700	2250	96.2	0.87	78.8
MTCP2-300-3D18	300	B	1790	179	89.5	103 ²	336 ²	2200 ²	880	1760.00	2200.00	2700	2250	96.2	0.87	94.1

1) Maximum Constant HP RPM is for direct coupled loads.

2) Current @460V (Amps)



MTCP2 Premium-Efficiency Cast-Iron 3-phase AC Motors

Premium Efficiency TEFC T-Frame 3-phase Motor C-Flange Kits – 1 to 300 hp

We stock Premium Efficiency NEMA cast-iron T-frame motors from 1–300 hp, and TC-frame motors from 1–30 hp.

We also offer IronHorse cast-iron C-flange kits which can be used for C-face mounting of our 1–300 hp IronHorse MTCP2 Premium Efficiency cast-iron T-frame motors.

C-faces must be installed by an EASA motor shop in order to maintain the motor warranty.



MTCP2 Premium-Efficiency T-frame 3-phase Motor C-Flange Kits					
Part Number (1)	Price	Fits Frame	Fits Motor Number	Motor HP	Product Weight (lb) (2)
<u>MTAP2-CFACE-140TC</u>	\$29.00	143T & 145T	<u>MTCP2-001-3BD12</u> <u>MTCP2-001-3BD18</u> <u>MTCP2-1P5-3BD18</u> <u>MTCP2-1P5-3BD36</u> <u>MTCP2-002-3BD18</u> <u>MTCP2-002-3BD36</u>	1 1 1-1/2 1-1/2 2 2	5.62
<u>MTAP2-CFACE-180TC</u>	\$40.00	182T & 184T	<u>MTCP2-1P5-3BD12</u> <u>MTCP2-002-3BD12</u> <u>MTCP2-003-3BD18</u> <u>MTCP2-003-3BD36</u> <u>MTCP2-005-3BD18</u> <u>MTCP2-005-3BD36</u>	1-1/2 2 3 3 5 5	10.36
<u>MTAP2-CFACE-210TC</u>	\$56.00	213T & 215T	<u>MTCP2-003-3BD12</u> <u>MTCP2-005-3BD12</u> <u>MTCP2-7P5-3BD18</u> <u>MTCP2-7P5-3BD36</u> <u>MTCP2-010-3BD18</u> <u>MTCP2-010-3BD36</u>	3 5 7-1/2 7-1/2 10 10	12.68
<u>MTAP2-CFACE-250TC</u>	\$96.00	254T & 256T	<u>MTCP2-7P5-3BD12</u> <u>MTCP2-010-3BD12</u> <u>MTCP2-015-3BD18</u> <u>MTCP2-015-3BD36</u> <u>MTCP2-020-3BD18</u> <u>MTCP2-020-3BD36</u>	7-1/2 10 15 15 20 20	31.20
<u>MTAP2-CFACE-280TC</u>	\$122.00	284T & 286T	<u>MTCP2-015-3BD12</u> <u>MTCP2-020-3BD12</u> <u>MTCP2-025-3BD18</u> <u>MTCP2-030-3BD18</u>	15 20 25 30	31.20
<u>MTAP2-CFACE-320TC</u>	\$168.00	324T & 326T	<u>MTCP2-040-3BD18</u> <u>MTCP2-050-3BD18</u>	40 50	47.40
<u>MTAP2-CFACE-360TC</u>	\$239.00	364T & 365T	<u>MTCP2-060-3BD18</u> <u>MTCP2-075-3BD18</u>	60 75	48.70
<u>MTAP2-CFACE-400TC</u>	\$366.00	405T	<u>MTCP2-100-3BD18</u>	100	132.17
<u>MTAP2-CFACE-444TC</u>	\$389.00	444T & 445T	<u>MTCP2-125-3BD18</u> <u>MTCP2-150-3BD18</u>	125 150	137.44
<u>MTAP2-CFACE-447TC</u>	\$389.00	445/7T	<u>MTCP2-200-3BD18</u>	200	134.83
<u>MTAP2-CFACE-449TC</u>	\$839.00	449T	<u>MTCP2-250-3D18</u> <u>MTCP2-300-3D18</u>	250 300	162.50

1) Please review the AutomationDirect Terms & Conditions for warranty and service on this product.

2) Certain heavy and oversized items can be shipped only via LTL.

Check our web site for current shipping method constraints by part number.



MTCP2 Premium-Efficiency Cast-Iron 3-phase AC Motors

Premium Efficiency TEFC 3-phase Motor Replacement Parts – 1 to 300 hp

We stock MTCP2 Premium Efficiency NEMA cast-iron T-frame motors from 1–300 hp, and TC-frame motors from 1–30 hp.

We also offer IronHorse junction boxes, TEFC fans, and TEFC fan shrouds as direct replacement parts for these MTCP2 motors.

These replacement parts are field installable. Instructions included.



MTCP2 Premium-Efficiency 3-phase Motor Replacement Parts						
Part Number ⁽¹⁾	Price	Description ⁽²⁾⁽³⁾⁽⁴⁾	Fits Frame	Fits PE Motor Number ⁽¹⁾	Motor HP	Product Wt. (lb)
MTAP2-FAN-140	\$40.00	Replacement Fan	143 & 145	MTCP2-001-3BD12	1	0.029
MTAP2-SHROUD-140	\$34.00	Replacement Fan Shroud		MTCP2-001-3BD18(C)	1	1.04
MTAP2-JBOX-140	\$34.00	Replacement Junction Box		MTCP2-1P5-3BD18(C)	1-1/2	2.54
				MTCP2-1P5-3BD36	1-1/2	
			MTCP2-002-3BD18(C)	2		
			MTCP2-002-3BD36	2		
MTAP2-FAN-180	\$40.00	Replacement Fan	182 & 184	MTCP2-1P5-3BD12	1-1/2	0.053
MTAP2-SHROUD-180	\$48.00	Replacement Fan Shroud		MTCP2-002-3BD12	2	2.23
MTAP2-JBOX-180	\$49.50	Replacement Junction Box		MTCP2-003-3BD18(C)	3	3.28
				MTCP2-003-3BD36	3	
				MTCP2-005-3BD18(C)	5	
			MTCP2-005-3BD36	5		
MTAP2-FAN-210-2	\$44.50	Replacement Fan (for 2-pole motors)	213 & 215	MTCP2-7P5-3BD36	7-1/2	0.075
		MTCP2-010-3BD36		10		
MTAP2-FAN-210	\$42.50	Replacement Fan (4&6-pole)		MTCP2-003-3BD12	3	0.075
				MTCP2-005-3BD12	5	
MTAP2-SHROUD-210	\$49.50	Replacement Fan Shroud	213 & 215	MTCP2-7P5-3BD18(C)	7-1/2	4.98
MTAP2-JBOX-210	\$49.50	Replacement Junction Box		MTCP2-010-3BD18(C)	10	3.28
MTAP2-FAN-250-2	\$72.00	Replacement Fan (for 2-pole motors)	254 & 256	MTCP2-015-3BD36	15	0.090
				MTCP2-020-3BD36	20	
MTAP2-FAN-250	\$72.00	Replacement Fan (4&6-pole)		MTCP2-7P5-3BD12	7-1/2	0.104
				MTCP2-010-3BD12	10	
MTAP2-SHROUD-250	\$83.00	Replacement Fan Shroud	254 & 256	MTCP2-015-3BD18(C)	15	8.27
MTAP2-JBOX-250	\$83.00	Replacement Junction Box		MTCP2-020-3BD18(C)	20	8.16
MTAP2-FAN-280	\$99.00	Replacement Fan		284 & 286	MTCP2-015-3BD12	15
MTAP2-SHROUD-280	\$123.00	Replacement Fan Shroud	MTCP2-020-3BD12		20	10.03
MTAP2-JBOX-280	\$149.00	Replacement Junction Box	MTCP2-025-3BD18(C)		25	8.16
			MTCP2-030-3BD18(C)		30	
MTAP2-FAN-320	\$137.00	Replacement Fan	324 & 326	MTCP2-040-3BD18(C)	40	0.126
MTAP2-SHROUD-320	\$149.00	Replacement Fan Shroud		MTCP2-050-3BD18(C)	50	12.50
MTAP2-JBOX-320	\$149.00	Replacement Junction Box				23.59
MTAP2-FAN-360	\$223.00	Replacement Fan	364 & 365	MTCP2-060-3BD18(C)	60	0.126
MTAP2-SHROUD-360	\$229.00	Replacement Fan Shroud		MTCP2-075-3BD18(C)	75	13.76
MTAP2-JBOX-360	\$280.00	Replacement Junction Box				21.05
MTAP2-FAN-400	\$261.00	Replacement Fan	405	MTCP2-100-3BD18(C)	100	0.150
MTAP2-SHROUD-400	\$280.00	Replacement Fan Shroud				16.67
MTAP2-JBOX-400	\$280.00	Replacement Junction Box				32.74
MTAP2-FAN-440	\$286.00	Replacement Fan	444 & 445 & 447	MTCP2-125-3BD18	125	0.150
MTAP2-SHROUD-440	\$313.00	Replacement Fan Shroud		MTCP2-150-3BD18	150	17.97
MTAP2-JBOX-440	\$313.00	Replacement Junction Box		MTCP2-200-3BD18	200	36.49
MTAP2-FAN-449	\$419.00	Replacement Fan	449	MTCP2-250-3D18	250	0.205
MTAP2-FAN-449-1	\$415.00	Replacement Fan		MTCP2-300-3D18	300	0.174
MTAP2-JBOX-449	\$555.00	Replacement Junction Box		MTCP2-250-3D18	250	22.27
MTAP2-SHROUD-449	\$580.00	Replacement Fan Shroud		MTCP2-300-3D18	300	36.49

1) These MTAP2 replacement components fit only MTCP2 Premium Efficiency motors.

2) Replacement Fans include fan and snap ring.

3) Replacement Fan Shrouds include shroud, bolts w/washers, and rubber plug.

4) Replacement Junction Boxes include gasketed base & cover assembly, base gasket, and base bolts.



AC Motor Selection – IronHorse® General Purpose Motors

IronHorse® 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 - 326T	56J	56C - 326T	56C - 256TC	143T/TC - 449T
Enclosure	ODP / TEFC	TEFC	ODP / TEFC	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 Polyethelene	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.