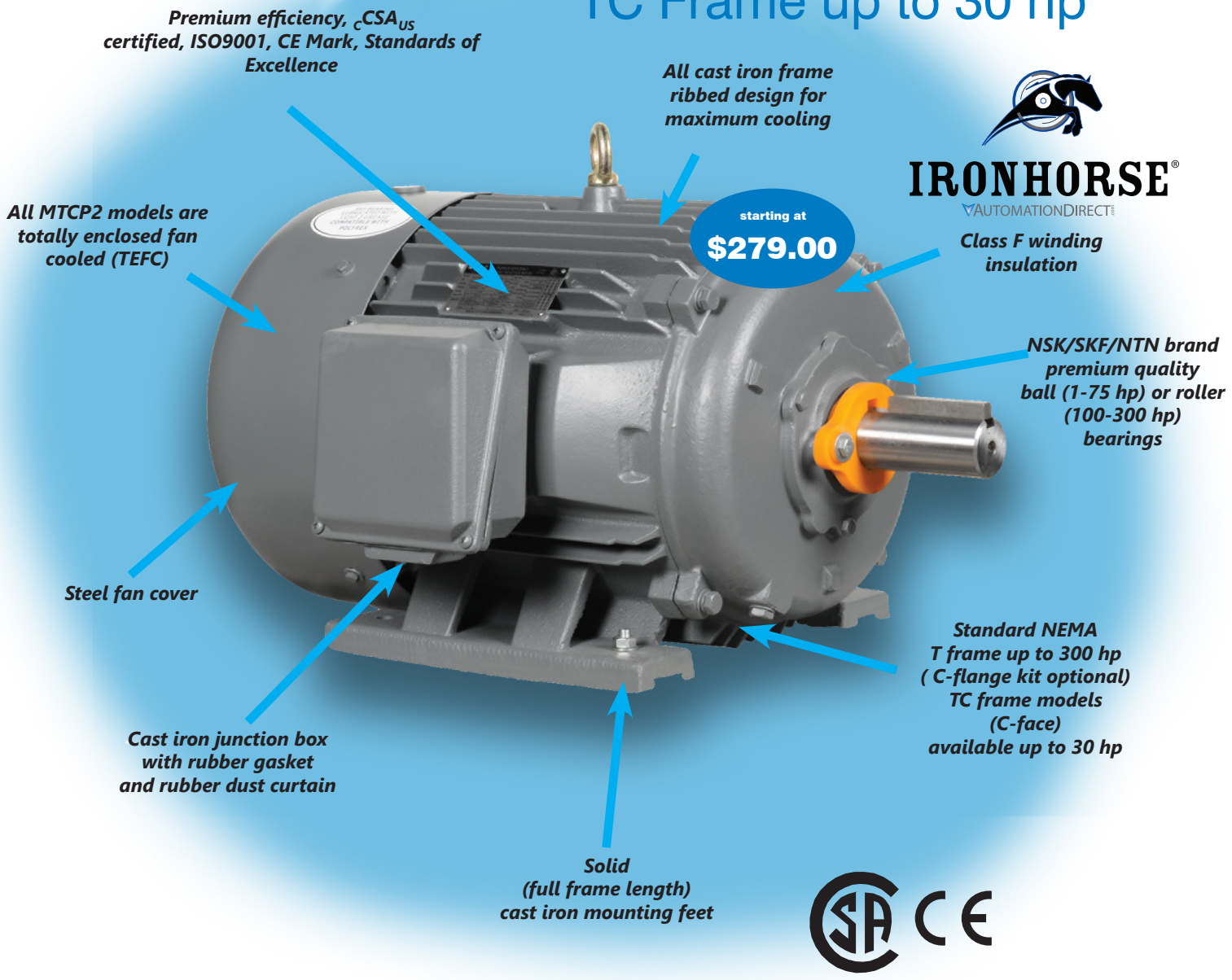
Premium efficiency motors for energy conservation

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



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

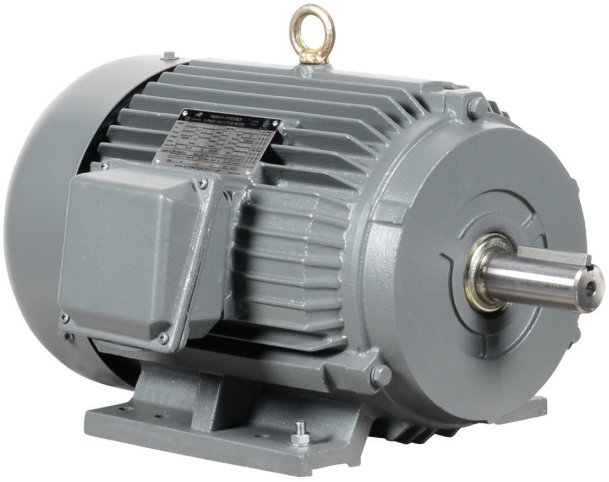
- Premium Efficiency
- Premium grade quality
- All cast iron frames
- Drive-end ball bearings (1-75 hp) or roller bearings (100-300 hp) are installed in all MTCP2 motors
- Electrically reversible
- C-flange kits for C-face mounting are available
- C-face models available up to 30 hp

IRONHORSE®

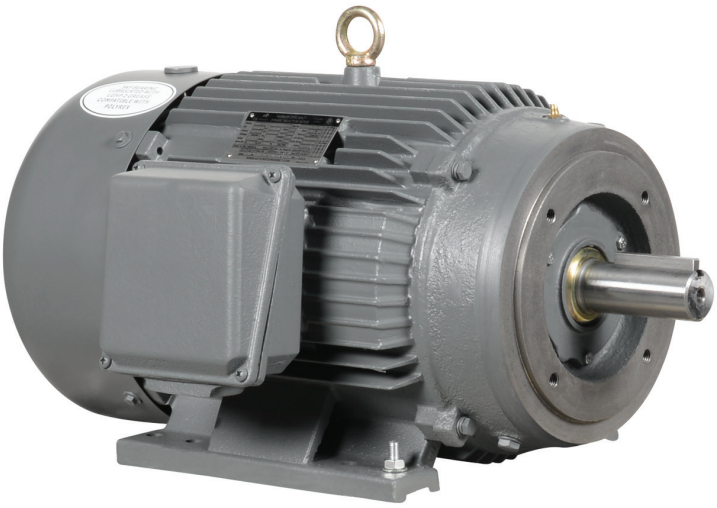
MTCP2 Premium-Efficiency Cast-Iron 3-phase AC Motors

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



Premium Efficiency
3-phase Cast-iron TC-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
- $_{c}CSA_{us}$ 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

IRONHORSE®

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	$279.00	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	$291.00						143TC						PDF
MTCP2-1P5-3BD18	$352.00	1.5					145T		4		4.92-4.45 / 2.22	56	PDF
MTCP2-1P5-3BD18C	$362.00						145TC						PDF
MTCP2-002-3BD18	$381.00	2					145T		4		6.56-5.93 / 2.97	58.5	PDF
MTCP2-002-3BD18C	$393.00						145TC						PDF
MTCP2-003-3BD18	$660.00	3					182T		2		9.01-8.16 / 4.08	86	PDF
MTCP2-003-3BD18C	$679.00						182TC						PDF
MTCP2-005-3BD18	$684.00	5					184T	F1	4		13.9-12.6 / 6.3	104	PDF
MTCP2-005-3BD18C	$705.00						184TC						PDF
MTCP2-7P5-3BD18	$1,062.00	7.5					213T	F1(F2)	2		20.4-18.5 / 9.23	172	PDF
MTCP2-7P5-3BD18C	$1,093.00						213TC						PDF
MTCP2-010-3BD18	$1,173.00	10					215T		4		26.9-24.3 / 12.2	193	PDF
MTCP2-010-3BD18C	$1,207.00						215TC						PDF
MTCP2-015-3BD18	$1,616.00	15					254T		2		40.0-36.2 / 18.1	265	PDF
MTCP2-015-3BD18C	$1,665.00						254TC						PDF
MTCP2-020-3BD18	$1,885.00	20					256T		4		52.4-47.4 / 23.7	304	PDF
MTCP2-020-3BD18C	$1,941.00						256TC						PDF
MTCP2-025-3BD18	$2,604.00	25					284T		2		65.1-58.8 / 29.4	385	PDF
MTCP2-025-3BD18C	$2,781.00						284TC						PDF
MTCP2-030-3BD18	$2,758.00	30					286T		4		78.1-70.6 / 35.3	430	PDF
MTCP2-030-3BD18C	$2,943.00						286TC						PDF
MTCP2-040-3BD18	$3,394.00	40					324T		2		104-93.7 / 46.8	531	PDF
MTCP2-050-3BD18	$3,843.00	50					326T		4		127-115 / 57.6	578	PDF
MTCP2-060-3BD18	$5,105.00	60					364T	F1	2		158-142 / 71.2	769	PDF
MTCP2-075-3BD18	$5,517.00	75					365T		4		196-177 / 88.7	858	PDF
MTCP2-100-3BD18	$6,969.00	100					405T		4		252-228 / 114	1131	PDF
MTCP2-125-3BD18	$8,504.00	125					444T	F1(F2)	2		323-292 / 146	1429	PDF
MTCP2-150-3BD18	$10,124.00	150					445T		4		386-349 / 175	1625	PDF
MTCP2-200-3BD18	$11,581.00	200					445/7T		4		506-458 / 229	2033	PDF
MTCP2-250-3D18	$16,962.00	250			460V		449T	F1	2	1.15	2805	2508	PDF
MTCP2-300-3D18	$22,007.00	300					449T		2		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

IRONHORSE®

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	$364.00	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	$579.00	1.5					182T		2		5.22-4.72 / 2.36	91.5	PDF
MTCP2-002-3BD12	$624.00	2					184T		4		6.59-5.96 / 2.98	100	PDF
MTCP2-003-3BD12	$800.00	3					213T		2		9.92-8.97 / 4.48	166	PDF
MTCP2-005-3BD12	$910.00	5					215T		4		16.1-14.5 / 7.27	179	PDF
MTCP2-7P5-3BD12	$1,471.00	7.5					254T		2		20.8-18.8 / 9.41	247	PDF
MTCP2-010-3BD12	$1,615.00	10					256T		4		27.8-25.1 / 12.5	258	PDF
MTCP2-015-3BD12	$2,050.00	15					284T		2		42.9-38.8 / 19.4	366	PDF
MTCP2-020-3BD12	$2,258.00	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	$313.00	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	$335.00	2					145T		4		6.05-5.48 / 2.74	50.7	PDF
MTCP2-003-3BD36	$471.00	3					182T	F1	2		6.45-7.64 / 3.82	80.5	PDF
MTCP2-005-3BD36	$543.00	5					184T		4		13.3-12.0 / 6.01	96	PDF
MTCP2-7P5-3BD36	$856.00	7.5					213T	F1(F2)	2		20.9-18.9 / 9.45	160	PDF
MTCP2-010-3BD36	$847.00	10					215T		4		27.0-24.4 / 12.2	180	PDF
MTCP2-015-3BD36	$1,597.00	15					254T		2		38.8-35.1 / 17.5	261	PDF
MTCP2-020-3BD36	$1,754.00	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

IRONHORSE®

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		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			3485	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	2		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)			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		1180	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			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	5		1180	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)			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		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			3515	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	10		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)			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			3520	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		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			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	20		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)			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		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		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		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		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		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		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		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		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		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		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		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		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)

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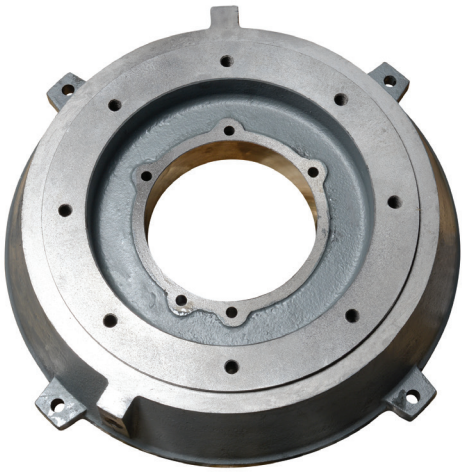
MTCP2 Premium-Efficiency Cast-Iron 3-phase AC Motors

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)
MTAP2-CFACE-140TC	$35.00	143T & 145T	MTCP2-001-3BD12 MTCP2-001-3BD18 MTCP2-1P5-3BD18 MTCP2-1P5-3BD36 MTCP2-002-3BD18 MTCP2-002-3BD36	1 1 1-1/2 1-1/2 2 2	5.62
MTAP2-CFACE-180TC	$47.00	182T & 184T	MTCP2-1P5-3BD12 MTCP2-002-3BD12 MTCP2-003-3BD18 MTCP2-003-3BD36 MTCP2-005-3BD18 MTCP2-005-3BD36	1-1/2 2 3 3 5 5	10.36
MTAP2-CFACE-210TC	$65.00	213T & 215T	MTCP2-003-3BD12 MTCP2-005-3BD12 MTCP2-7P5-3BD18 MTCP2-7P5-3BD36 MTCP2-010-3BD18 MTCP2-010-3BD36	3 5 7-1/2 7-1/2 10 10	12.68
MTAP2-CFACE-250TC	$96.00	254T & 256T	MTCP2-7P5-3BD12 MTCP2-010-3BD12 MTCP2-015-3BD18 MTCP2-015-3BD36 MTCP2-020-3BD18 MTCP2-020-3BD36	7-1/2 10 15 15 20 20	31.20
MTAP2-CFACE-280TC	$122.00	284T & 286T	MTCP2-015-3BD12 MTCP2-020-3BD12 MTCP2-025-3BD18 MTCP2-030-3BD18	15 20 25 30	31.20
MTAP2-CFACE-320TC	$168.00	324T & 326T	MTCP2-040-3BD18 MTCP2-050-3BD18	40 50	47.40
MTAP2-CFACE-360TC	$239.00	364T & 365T	MTCP2-060-3BD18 MTCP2-075-3BD18	60 75	48.70
MTAP2-CFACE-400TC	$366.00	405T	MTCP2-100-3BD18	100	132.17
MTAP2-CFACE-444TC	$389.00	444T & 445T	MTCP2-125-3BD18 MTCP2-150-3BD18	125 150	137.44
MTAP2-CFACE-447TC	$389.00	445/7T	MTCP2-200-3BD18	200	134.83
MTAP2-CFACE-449TC	$839.00	449T	MTCP2-250-3D18 MTCP2-300-3D18	250 300	162.50

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

IRONHORSE®

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	$38.00	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	$55.00	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	$55.00	Replacement Fan Shroud		MTCP2-7P5-3BD18(C)	7-1/2	4.98
MTAP2-JBOX-210	$55.00	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	$91.00	Replacement Fan Shroud		MTCP2-015-3BD18(C)	15	8.27
MTAP2-JBOX-250	$91.00	Replacement Junction Box		MTCP2-020-3BD18(C)	20	8.16
MTAP2-FAN-280	$99.00	Replacement Fan	284 & 286	MTCP2-015-3BD12	15	0.090
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.

TOSHIBA

SD (Severe Duty) 3-Phase Motors

56-404 Frame Motors – 1/2HP to 100HP

Standard Features

- 230/460 VAC
- Rated output: 1/2 - 100 hp
- 1800, 3600, 1200 rpm
- Class F insulation (155° C), inverter duty, exceeds NEMA MG1 Part 31
- IP55
- Constant torque speed ratings 20:1 on 4 and 6 pole, 10:1 on 2 pole
- Frame sizes: NEMA 56 to 405
- Rigid base or C-face footed mount
- Enclosure: TEFC (1/2HP TENV only)
- Stamped steel fan cover
- Certified Class I, Div 2, Groups A,B,C,D
- Multiple drain provisions for horizontal and vertical mounting
- 100% no-load commercial test per IEEE 112 on all motors
- Non-sparking, non-corrosive fan
- Lead cable rating 125°C
- Lead terminal lugs: 284 frame & larger

Advanced Features

- Oversized 300 series bearings provides extended motor life
- Grade 25 cast iron frame, bearing brackets, and conduit box
- Heavy duty durable construction includes increased ribbing on the end bells, maximum surface area at connection points, and deep bearing pockets
- Manufactured to run at lower vibration levels, preserving the mechanical integrity of the motor and bearings
- High torque output meets or exceeds NEMA B
- Class H (180C) Insulation on many components

Applications

- Severe duty or general purpose
- Higher ambient temperature or higher elevation locations
- Pumps
- Fans
- Compressors
- Conveyors
- Mixers
- Material handling



0106SDSR41A-P



0104SDSR42A-P

Motor Specifications – 3-phase

Part Number	Price	hp*	Base rpm	Volts	Encl.	NEMA Frame	Service Factor	NEMA Design	Weight (lb)	Drawing Links
Rigid Base - 1800 rpm										
1-24FNSR31H-P	$488.00	1/2	1800	230/460 VAC	TENV	56	1.25	B	57	PDF
3-44SDSR31H-P	$513.00	3/4							57	PDF
0014SDSR41A-P	$444.00	1			TEFC	143T	1.15		57	PDF
Y154SDSR41A-P	$487.00	1 1/2				145T			57	PDF
0024SDSR41A-P	$528.00	2							57	PDF
0034SDSR41A-P	$606.00	3				182T			95	PDF
0054SDSR41A-P	$692.00	5				184T			101	PDF
Y754SDSR41A-P	$990.00	7 1/2				213T			187	PDF
0104SDSR41A-P	$1,205.00	10				215T			198	PDF
0154SDSR41A-P	$1,627.00	15				254T			317	PDF
0204SDSR41A-P	$2,008.00	20				256T			355	PDF
0254SDSR41A-P	$2,436.00	25				284T			481	PDF
0304SDSR41A-P	$2,930.00	30				286T			496	PDF
0404SDSR41A-P	$3,789.00	40				324T			642	PDF
0504SDSR41A-P	$4,620.00	50				326T			701	PDF
0604SDSR41A-P	$6,512.00	60				364T			873	PDF
0754SDSR41A-P	$8,018.00	75				365T			932	PDF
1004SDSR41A-PR	$11,391.00	100				405T			1418	PDF
Rigid Base With C-face - 1800 rpm										
1-24FNSR32H-P	$523.00	1/2	1800	230/460 VAC	TENV	56C	1.25	B	57	PDF
3-44SDSR32H-P	$547.00	3/4							57	PDF
0014SDSR42A-P	$571.00	1			TEFC	143TC	1.15		60	PDF
0014SDSR42H-P	$652.00					56C			75	PDF
Y154SDSR42A-P	$616.00	1 1/2				145TC			64	PDF
0024SDSR42A-P	$661.00	2							60	PDF
0034SDSR42A-P	$764.00	3				182TC			104	PDF
0054SDSR42A-P	$854.00	5				184TC			112	PDF
Y754SDSR42A-P	$1,158.00	7 1/2				213TC			192	PDF
0104SDSR42A-P	$1,373.00	10				215TC			198	PDF
0154SDSR42A-P	$1,877.00	15				254TC			324	PDF
0204SDSR42A-P	$2,259.00	20				256TC			353	PDF
0254SDSR42A-P	$2,855.00	25				284TC			496	PDF
0304SDSR42A-P	$3,348.00	30				286TC			509	PDF
0404SDSR42A-P	$4,258.00	40				324TC			670	PDF
0504SDSR42A-P	$5,090.00	50				326TC			711	PDF

***See Motor Data Pack for 50Hz specifications**

SD (Severe Duty) 3-Phase Motors

Motor Specifications – 3-phase										
Part Number	Price	hp*	Base rpm	Volts	Encl.	NEMA Frame	Service Factor	NEMA Design	Weight (lb)	Drawing Links
Rigid Base - 3600 rpm										
3-42SDSR31H-P	$469.00	3/4	3600	230/460 VAC	TEFC	56	1.25	B	53	PDF
0012SDSR41H-P	$558.00	1							53	PDF
Y152SDSR41A-P	$481.00	1 1/2				143T	1.15		57	PDF
0022SDSR41A-P	$583.00	2				145T			57	PDF
0032SDSR41A-P	$617.00	3				182T			86	PDF
0052SDSR41A-P	$764.00	5				184T			99	PDF
Y752SDSR41A-P	$990.00	7 1/2				213T			168	PDF
0102SDSR41A-P	$1,187.00	10				215T			183	PDF
0152SDSR41A-P	$1,634.00	15				254T			295	PDF
0202SDSR41A-P	$2,117.00	20				256T			313	PDF
0302SDSR41B-P	$2,986.00	30				286TS			474	PDF
0402SDSR41B-P	$3,760.00	40				324TS			622	PDF
0502SDSR41B-P	$5,215.00	50				326TS			655	PDF
Rigid Base With C-face - 3600 rpm										
3-42SDSR32H-P	$513.00	3/4	3600	230/460 VAC	TEFC	56C	1.25	B	53	PDF
0012SDSR42H-P	$615.00	1							57	PDF
Y152SDSR42A-P	$610.00	1 1/2				143TC	1.15		62	PDF
0022SDSR42A-P	$718.00	2				145TC			62	PDF
0032SDSR42A-P	$775.00	3				182TC			93	PDF
0052SDSR42A-P	$930.00	5				184TC			106	PDF
Y752SDSR42A-P	$1,158.00	7 1/2				213TC			174	PDF
0102SDSR42A-P	$1,355.00	10				215TC			192	PDF
0152SDSR42A-P	$1,886.00	15				254TC			304	PDF
Rigid Base - 1200 rpm										
1-26SDSR31H-P	$518.00	1/2	1200	230/460 VAC	TEFC	56	1.25	B	57	PDF
3-46SDSR31H-P	$520.00	3/4							57	PDF
0016SDSR41A-P	$550.00	1				145T	1.15		60	PDF
Y156SDSR41A-P	$585.00	1 1/2				182T			99	PDF
0036SDSR41A-P	$864.00	3				213T			163	PDF
0056SDSR41A-P	$1,269.00	5				215T			176	PDF
Y756SDSR41A-P	$1,687.00	7 1/2				254T			278	PDF
0106SDSR41A-P	$2,059.00	10				256T			291	PDF
0156SDSR41A-P	$2,887.00	15				284T			441	PDF
0206SDSR41A-P	$3,383.00	20				286T			457	PDF
0256SDSR41A-P	$4,106.00	25				324T			590	PDF
0306SDSR41A-P	$5,014.00	30				326T			613	PDF
0406SDSR41A-P	$6,559.00	40				364T			766	PDF
0506SDSR41A-P	$7,320.00	50				365T			814	PDF
Rigid Base With C-face - 1200 rpm										
1-26SDSR32H-P	$570.00	1/2	1200	230/460 VAC	TEFC	56C	1.25	B	57	PDF
Y156SDSR42A-P	$743.00	1 1/2				182TC	1.15		109	PDF
0036SDSR42A-P	$1,076.00	3				213TC			165	PDF
0056SDSR42A-P	$1,504.00	5				215TC			179	PDF
Y756SDSR42A-P	$1,937.00	7 1/2				254TC			282	PDF

*See Motor Data Pack for 50Hz specifications

TOSHIBA

SD (Severe Duty) 3-Phase Motors

Performance Data – 3-phase

Part Number	hp*	Full Load rpm*	Volts*	Current			Torque				Torque Speed Rating		Full Load Effic. %	Full Load Power Factor	Moment of Inertia (lb·ft2)
				No Load Current	Full Load Amps	Locked Rotor Amps	Full Load (lb·ft)	Locked Rotor	Breakdown	Pull Up	Constant	Variable			
								% of Full Load Torque							
Rigid Base - 1800 rpm															
1-24FNSR31H-P	1/2	1755	230/460 VAC	0.4	2.8/1.4	5.6	1.50	245	355	195	20:1	60:1	84.0	74.90	0.11
3-44SDSR31H-P	3/4	1765		0.8	11.6/5.8	10.3	2.23	320	455	245				67.30	
0014SDSR41A-P	1	1760		1.1	2.8/1.4	13.8	2.98	340	490	295			85.5	67.50	
Y154SDSR41A-P	1 1/2	1755		1.3	210/105	17.1	4.49	260	365	325			86.5	73.10	0.12
0024SDSR41A-P	2	1750		1.6	5.2/2.6	24.0	6.00	255	390	225				84.80	0.13
0034SDSR41A-P	3	1760		1.8	7.4/3.7	32.0	8.95	270		225			89.5	79.60	0.37
0054SDSR41A-P	5	1750		2.7	11.6/5.8	46.0	15.00	255	370	240				81.20	0.5
Y754SDSR41A-P	7 1/2	1760		4.4	210/105	63.0	22.40	270	340	215			91.7	79.90	1.15
0104SDSR41A-P	10			5.7	24/11.8	81.0	29.80	260	330	225				80.20	1.34
0154SDSR41A-P	15	1770		7.5	36/18	113.0	44.50	240	265	185			92.4	81.00	2.33
0204SDSR41A-P	20			9.8	48/24	145.0	59.30	260	280	215			93.0	81.00	3.18
0254SDSR41A-P	25			11	64/32	182.0	74.20	190	295	165			93.6	83.50	5.23
0304SDSR41A-P	30			12.7	70/35	217.0	89.00	185	290	165				83.60	5.7
0404SDSR41A-P	40	1775		15.6	94/47	289.0	118.00	180	275	155			94.1	85.40	9.8
0504SDSR41A-P	50			18.7	116/58	363.0	148.00	175	265	145			94.5	85.70	11.6
0604SDSR41A-P	60			20	138/69	435.0	178.00	160	270	135			95.0	87.30	16.8
0754SDSR41A-P	75	1780		24	170/85	543.0	221.00			135			95.4	87.40	20.46
1004SDSR41A-PR	100	1775		38.8	210/105	725.0	296.00	215	310	175				84.60	25.95
Rigid Base With C-face - 1800 rpm															
1-24FNSR32H-P	1/2	1755	230/460 VAC	0.4	11.6/5.8	5.6	1.50	245	355	195	20:1	60:1	84.0	74.90	0.11
3-44SDSR32H-P	3/4	1765		0.8	210/105	9.3	1.79	320	455	245				62.10	
0014SDSR42A-P	1	1760		1.1	3.2/1.6	13.8	2.98	340	490	295			85.5	67.50	
0014SDSR42H-P		1765			2.8/1.4	13.6	2.98	320	480	260				66.40	
Y154SDSR42A-P	1 1/2	1755		1.3	210/105	17.1	4.49	260	365	325			86.5	73.10	0.12
0024SDSR42A-P	2	1750		1.6	5.2/2.6	24.0	6.00	255	390	225				84.80	0.13
0034SDSR42A-P	3	1760		1.8	7.4/3.7	32.0	8.95	270		225			89.5	79.60	0.37
0054SDSR42A-P	5	1750		2.7	11.6/5.8	46.0	15.00	255	370	240				81.20	0.5
Y754SDSR42A-P	7 1/2	1760		4.4	210/105	63.0	22.40	270	340	215			91.7	79.90	1.15
0104SDSR42A-P	10			5.7	24/11.8	81.0	29.80	260	330	225				80.20	1.34
0154SDSR42A-P	15	1770		7.5	36/18	113.0	44.50	240	265	185			92.4	81.00	2.33
0204SDSR42A-P	20			9.8	50/25	145.0	59.30	260	280	215			93.0	81.00	3.18
0254SDSR42A-P	25			11	64/32	182.0	74.20	190	295	165			93.6	83.50	5.23
0304SDSR42A-P	30			12.7	72/36	217.0	89.00	185	290	165				83.60	5.7
0404SDSR42A-P	40	1775		15.6	96/48	289.0	118.00	180	275	155			94.1	85.40	9.8
0504SDSR42A-P	50			18.7	120/60	362.0	148.00	175	265	145			94.5	85.70	11.6

***See Motor Data Pack for 50Hz specifications**

TOSHIBA

SD (Severe Duty) 3-Phase Motors

Performance Data – 3-phase

Part Number	hp*	Full Load rpm*	Volts*	Current			Torque				Torque Speed Rating		Full Load Effic. %	Full Load Power Factor	Moment of Inertia (lb·ft2)
				No Load Current	Full Load Amps	Locked Rotor Amps	Full Load (lb·ft)	Locked Rotor	Breakdown	Pull Up	Constant	Variable			
								% of Full Load Torque							
Rigid Base - 3600 rpm															
3-42SDSR31H-P	3/4	3510	230/460 VAC	0.5	210/105	7.4	1.12	220	275	170	10:1	60:1	84.0	78.70	0.04
0012SDSR41H-P	1	3480		0.7	2.8/1.4	9.0	1.51	225	335	170			77.0	79.00	
Y152SDSR41A-P	1 1/2	3490		1	210/105	18.0	2.26	265	360	225			84.0	75.80	0.05
0022SDSR41A-P	2			1.2	5.2/2.6	24.0	3.01	275		245			85.5	84.40	0.06
0032SDSR41A-P	3	3500			7.4/3.7	29.0	4.50	195	335	175			86.5	88.80	0.13
0052SDSR41A-P	5			1.4	11.6/5.8	46.0	7.50	215	340	185			88.5	91.80	0.2
Y752SDSR41A-P	7 1/2			2.4	210/105	60.0	11.30	230	320	215			89.5	88.50	0.46
0102SDSR41A-P	10	3510		3.6	24/11.8	80.0	15.00	265	355	235			90.2	88.20	0.62
0152SDSR41A-P	15	3530		5.5	36/18	116.0	22.30	230	280	195			91.0	86.60	1.19
0202SDSR41A-P	20	3520		6.1	48/24	143.0	29.80	215	255	195				87.70	1.38
0302SDSR41B-P	30	3540		9.2	70/35	217.0	44.50		265	195			91.7	88.90	3.58
0402SDSR41B-P	40			12	94/47	290.0	59.30	265	275	225			92.4	87.70	5.74
0502SDSR41B-P	50			13.7	116/58	362.0	74.20	250	260	215			93.0	88.20	6.39
Rigid Base With C-face - 3600 rpm															
3-42SDSR32H-P	3/4	3510	230/460 VAC	0.5	210/105	7.4	1.12	220	275	170	10:1	60:1	84.0	78.70	0.04
0012SDSR42H-P	1	3480		0.7	2.8/1.4	9.0	1.51	225	335	170			77.0	79.00	
Y152SDSR42A-P	1 1/2	3490		1	210/105	18.0	2.26	265	360	225			84.0	83.20	0.05
0022SDSR42A-P	2			1.2	5.2/2.6	24.0	3.01	275		245			85.5	84.40	0.06
0032SDSR42A-P	3	3500			7.4/3.7	29.0	4.50	195	335	175			86.5	88.80	0.13
0052SDSR42A-P	5			1.4	11.6/5.8	46.0	7.50	215	340	185			88.5	91.80	0.2
Y752SDSR42A-P	7 1/2			2.4	210/105	60.0	11.30	230	320	215			89.5	88.50	0.46
0102SDSR42A-P	10	3510		3.6	24/11.8	80.0	15.00	265	355	235			90.2	88.20	0.62
0152SDSR42A-P	15	3530		5.5	36/18	116.0	22.30	230	280	195			91.0	86.60	1.19
Rigid Base - 1200 rpm															
1-26SDSR31H-P	1/2	1170	230/460 VAC	0.6	1.4/0.7	5.7	2.24	235	310	180	20:1	60:1	80.0	65.50	0.15
3-46SDSR31H-P	3/4	1165		0.8	11.6/5.8	8.0	3.38	215	285	165			82.5	66.50	
0016SDSR41A-P	1	1170		1.2	2.8/1.4	12.5	4.49	240	350	175				65.60	0.18
Y156SDSR41A-P	1 1/2			1.5	210/105	20.0	6.73	245	420	185			87.5	65.40	0.43
0036SDSR41A-P	3			2.4	7.4/3.7	32.0	13.50	225	370	205			89.5	74.10	1.03
0056SDSR41A-P	5	1160		3.1	11.6/5.8	45.5	22.60	185	330	175				78.20	1.32
Y756SDSR41A-P	7 1/2	1170		4.6	210/105	63.8	33.70	255	310	240			91.0	78.40	2.16
0106SDSR41A-P	10			5.5	24/11.8	79.1	44.90	280	380	270				79.90	2.65
0156SDSR41A-P	15	3510		9.2	36/18	116.0	67.00	240	260	215			91.7	77.80	4.68
0206SDSR41A-P	20	1170		11.2	50/25	145.0	89.80	255	275	225				79.90	6.1
0256SDSR41A-P	25	1180		12.3	64/32	182.5	111.00	235		215			93.0	81.40	11.3
0306SDSR41A-P	30			14.7	72/36	217.0	134.00	220	265	155				81.00	12.34
0406SDSR41A-P	40			15.5	96/48	288.0	178.00	190	260	175			94.1	85.50	17.67
0506SDSR41A-P	50			18.2	120/60	360.0	223.00	185	250	165				85.20	20.06
Rigid Base With C-face - 1200 rpm															
1-26SDSR32H-P	1/2	1170	230/460 VAC	0.6	2.8/1.4	5.7	2.24	235	310	180	20:1	60:1	80.0	65.50	0.15
Y156SDSR42A-P	1 1/2			1.5	210/105	20.0	6.73	245	420	185			87.5	65.40	0.43
0036SDSR42A-P	3			2.4	7.4/3.7	32.0	13.50	225	370	205			89.5	74.10	1.03
0056SDSR42A-P	5	1160		3.1	11.6/5.8	45.5	22.60	185	330	175				78.20	1.32
Y756SDSR42A-P	7 1/2	1170		4.6	210/105	63.8	33.70	255	310	240			91.0	78.40	2.16

*See Motor Data Pack for 50Hz specifications