



ACCU-Torq® Vector Duty 3-Phase AC Motors

56C – 215TC Frame – 1/4HP to 10HP

U.S. MOTORS® ACCU-Torq® series AC motors offer a solution to applications requiring accurate positioning or precise speed control without the rapid acceleration dynamics of a servomotor. ACCU-Torq motors are designed to be used with inverters and vector drives in applications requiring up to a 5000:1 constant torque speed range.

Standard Features

- 230/460 VAC
- Rated output: 1/4 - 10 HP
- 1800 RPM
- Class F insulation (155° C), inverter duty NEMA MG1 Part 31
- Constant torque operation; zero to base speed on vector drives
- Constant horsepower operation to twice base speed
- Optimized for operation with IGBT and intelligent power module drives (NEMA®+ Design A)
- F-1 Standard, field convertible to F-2 for 180 frame and above
- Normally closed thermostats standard
- Horizontal or Vertical mounting
- Continuous duty at 40°C ambient
- Compatible with encoder installation

Applications

- Packaging machinery
- Extruders
- Material handling
- Indexing and positioning
- Positive displacement pumps
- DC Motor Replacements



UN5T2BC



Motor Specifications – 3-phase											
Part Number	Price	HP*	Base RPM	Volts	Encl.	NEMA Frame	Service Factor	NEMA Design	Weight (lb)	Data Pack Links	Drawing Links
Rigid Base With C-face - 1800 RPM											
UN14T2BC	\$370.00	1/4	1800	230/460 VAC	TENV	56C	1.0	A	35.1	PDF	PDF
UN12T2BC	\$448.00	1/2				42.3			PDF	PDF	
UN1T2BC	\$530.00	1				143TC			43.1	PDF	PDF
UN1T2BFC	\$530.00					56C			43.3	PDF	PDF
UN32T2BC	\$651.00	1 1/2				145TC			49.7	PDF	PDF
UN2T2BC	\$697.00	2				182TC			57.3	PDF	PDF
UN3T2BC	\$781.00	3				184TC			65.2	PDF	PDF
UN5T2BC	\$908.00	5				213TC			85.3	PDF	PDF
UN7T2BC	\$1,241.00	7 1/2				215TC			135	PDF	PDF
UN10T2BC	\$1,499.00	10							178	PDF	PDF

*See Motor Data Pack for additional specifications

Performance Data – 3-phase																	
Part Number	HP*	Full Load RPM*	Volts*	Current			Torque			Resistance Main		Torque Speed Rating		Full Load Effic. %	Full Load Power Factor	Moment of Inertia (lb-ft ²)	
				No Load Current	Full Load Amps	Locked Rotor Amps	Full Load (lb-ft)	Locked Rotor	Breakdown	% of Full Load Torque	230V	460V	Constant				Variable
Rigid Base With C-face - 1800 RPM																	
UN14T2BC	1/4	1765	230/460 VAC	0.8/0.4	1/0.5	8.2/4.1	0.70	419	586	12.42	49.69	5000:1	5000:1	77.0	61.1	0.026	
UN12T2BC	1/2	1750		1/0.5	1.5/0.8	12.1/6	1.50	335	457	6.47	25.87			74.2	0.039		
UN1T2BC	1	1755		2.2/1.1	3.2/1.6	31/15.5	3.00	473	595	2.72	10.88			84.0	0.04		
UN1T2BFC					3.2/1.6	31/15.6		476	600	2.66	10.64						
UN32T2BC	1 1/2	1760		3.2/1.6	4.7/2.3	52/25.9	4.50	518	665	1.55	6.18			86.5	69.7	0.052	
UN2T2BC	2	1750		3.3/1.7	5.6/2.8	56/28	6.00	425	543	1.37	5.46			76.8	0.065		
UN3T2BC	3	1770		7.9/4	10.1/5	92/46	8.90	400	573	0.77	3.08			87.5	63.6	0.117	
UN5T2BC	5			8.8/4.4	13.9/7	142/71	14.80	367	531	0.46	1.84			90.2	74.5	0.176	
UN7T2BC	7 1/2	1775		9/4.5	18.8/9.4	178/89	22.20	349	445	0.21	0.84			92.4	80.7	0.359	
UN10T2BC	10			12.9/6.4	25.3/12.7	275/138	29.60	416	519	0.13	0.53			93.0	79.6	0.494	

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