

Appendix-A: Standard Specifications for 200V, 400V, 500V and 600V Series

200V series													
Power Source		200 ~ 240 VAC, 3-Phase, 3-Wire, 50/ 60 Hz											
Tolerance		Voltage tolerance: $\pm 10\%$, Frequency tolerance: $\pm 5\%$											
AMT-OT-XXX-2-X		015	018	022	030	037	045	055	075	076	090	091	110
Inline Rating	Max applicable motor (kW)	015	018	022	30	37	45	55	75	75	90	90	110
	Max applicable motor line current (A)	60	72	87	110	147	175	215	245	245	320	320	360
Inside Delta	Max applicable motor (kW)	22	30	37	45	55	75	90	132	132	132	132	200
	Max applicable motor line current (A)	104	124	150	190	254	303	372	424	424	554	554	623
AMT-OT-XXX-2-X		111	132	133	160	161	200	250	315	400	450	500	
Inline Rating	Max applicable motor (kW)	110	132	132	160	160	200	250	315	400	450	500	
	Max applicable motor line current (A)	360	470	470	590	590	720	800	880	950	1065	1200	
Inside Delta	Max applicable motor (kW)	200	200	200	250	250	315	450	585	710	800	875	
	Max applicable motor line current (A)	623	814	814	1021	1021	1247	1385	1524	1645	1844	2078	
400V series													
Power Source		380 ~ 480 VAC, 3-Phase, 3-Wire, 50/ 60 Hz											
Tolerance		Voltage tolerance: $\pm 10\%$, Frequency tolerance: $\pm 5\%$											
AMT-OT-XXX-4-X		030	037	045	055	075	090	110	132	133	160	161	200
Inline Rating	Max applicable motor (kW)	30	37	45	55	75	90	110	132	132	160	160	200
	Max applicable motor line current (A)	60	72	87	110	147	175	215	245	245	320	320	360
Inside Delta	Max applicable motor (kW)	45	55	75	90	132	132	200	200	200	250	250	315
	Max applicable motor line current (A)	104	124	150	190	254	303	372	424	424	554	554	653
AMT-OT-XXX-4-X		201	250	251	315	316	400	450	500	585	630	710	
Inline Rating	Max applicable motor (kW)	200	250	250	315	315	400	450	500	585	630	710	
	Max applicable motor line current (A)	360	470	470	590	590	720	800	880	950	1065	1200	
Inside Delta	Max applicable motor (kW)	315	450	450	585	585	710	800	875	940	1060	1190	
	Max applicable motor line current (A)	653	814	814	1021	1021	1247	1385	1524	1645	1844	2078	



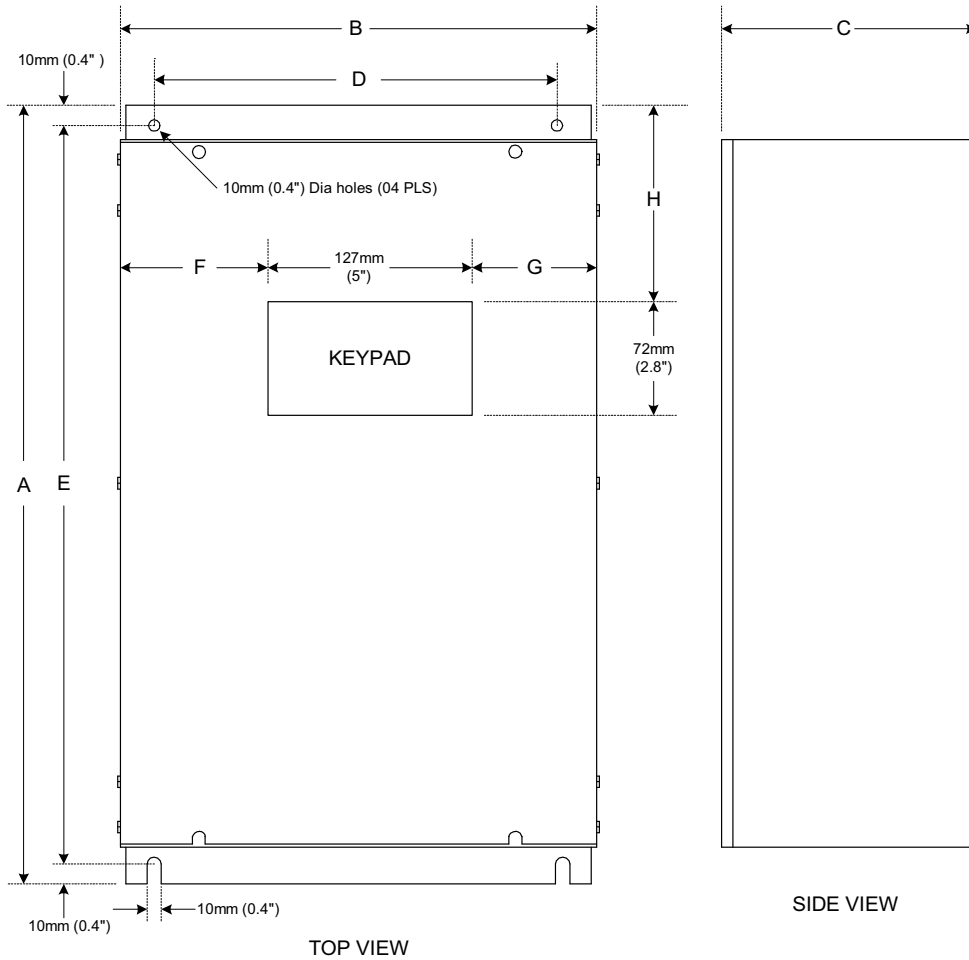
500V series													
Power Source		500 ~ 575 VAC, 3-Phase, 3-Wire, 50/ 60 Hz											
Tolerance		Voltage tolerance: ±10%, Frequency tolerance: ±5%											
AMT-OT-XXX-5-X		037	045	055	075	090	110	132	160	161	200	201	250
Inline Rating	Max applicable motor (kW)	37	45	55	75	90	110	132	160	160	200	200	250
	Max applicable motor line current (A)	60	72	87	110	147	175	215	245	245	320	320	360
Inside Delta	Max applicable motor (kW)	55	75	90	132	132	200	200	250	250	315	315	450
	Max applicable motor line current (A)	104	124	150	190	254	303	372	424	424	554	554	623
AMT-OT-XXX-5-X		251	315	316	400	401	450	500	585	630	710	800	
Inline Rating	Max applicable motor (kW)	250	315	315	400	400	450	500	585	630	710	800	
	Max applicable motor line current (A)	360	470	470	590	590	720	800	880	950	1065	1200	
Inside Delta	Max applicable motor (kW)	450	585	585	710	710	800	875	940	1060	1190	1400	
	Max applicable motor line current (A)	623	814	814	1021	1021	1247	1385	1524	1645	1844	2078	
600V series													
Power Source		600 ~ 690 VAC, 3-Phase, 3-Wire, 50/ 60 Hz											
Tolerance		Voltage tolerance: ±10%, Frequency tolerance: ±5%											
AMT-OT-XXX-6-X		045	055	075	090	110	132	160	200	201	250	251	315
Inline Rating	Max applicable motor (kW)	45	55	75	90	110	132	160	200	200	250	250	315
	Max applicable motor line current (A)	60	72	87	110	147	175	215	245	245	320	320	360
Inside Delta	Max applicable motor (kW)	75	90	132	132	200	200	250	315	315	450	450	585
	Max applicable motor line current (A)	104	124	150	190	254	303	372	424	424	554	554	623
AMT-OT-XXX-6-X		316	400	401	450	451	500	585	630	710	800	900	
Inline Rating	Max applicable motor (kW)	315	400	400	450	450	500	585	630	710	800	900	
	Max applicable motor line current (A)	360	470	470	590	590	720	800	880	950	1065	1200	
Inside Delta	Max applicable motor (kW)	585	710	710	800	800	875	940	1060	1190	1400	1700	
	Max applicable motor line current (A)	623	814	814	1021	1021	1247	1385	1524	1645	1844	2078	

Control	Control system	Digital 32-bit Digital Signal Processor		
	+24V supply	Max. Total current drain from terminal = 100 mA		
	Serial port	Supports RS 485		
	External supply for control & cooling fan	External 230/115 VAC, 1-phase supplies to be provided by the user. Capacity varies as per the rating. Refer Instruction Manual Chapter-2 for more detail.		
Operation Specifications	Current feed back & Thermal OLR	Motor current: Adjustable up to 0.3 x Unit Current Rating		
		I-Low Level: 0 ~ 100% of full load motor current		
		I-Limit Level: 100 ~ 500% of full load motor current		
		I-Trip Level: 100 ~ 550% of full load motor current		
		I-Low Time: 0 ~ 20 minutes		
		I-Limit Time: 10 ~ 60 seconds		
	Digital Inputs	8-Programmable Sequence Inputs, Sink / Source changeable, max 5 mA each		
		Programmable between 24 different options: Not Used, Terminal, Jogging, External Flt (NO), Fault Reset, Bypass Cont Flt, Main Cont Flt, Emergency Stop (NO), Ramp Hold, Rev cont Flt, PID Bypass, PID Disable, Emergency Stop (NC), External Flt (NC), RUN, STOP, PLC input 1 ~ 8		
	Digital Outputs	4 Programmable digital outputs, Open collector type, max 30V, 50mA		
		Programmable between 20 different options: Not Used, Ready, Run, Top Of Ramp, Terminal, Fault Alarm, I-Limit Alarm, Low Current Alarm, High Current Alarm, Temp Alarm, Rev Cont, PID Up Limit, PID Low Limit, PLC Output 1 ~ 7		
	Potential Free Contacts	3-Programmable relays:	1-NO, 1-NC for 2A @ 240 VAC	
		Programmable between 20 different options same as digital outputs		
	Programmable Analog Outputs	2-Programmable analog voltage outputs VO1 & VO2: 0~10 VDC, 12-bit		
		2-Programmable analog current outputs IO1 & IO2: 4~20 mA, 12-bit		
		Programmable between 12 different options: Output Voltage, Output Current, Active Power, Reactive Power, Power factor, PID Output, Motor torque, Heat sink temperature, PLC Analog output 1 ~ 4		
	Start Mode	V-Ramp Start	Dual Ramp Selection	
			V-Ramp Up Time1: 1 ~ 240 sec	
Pedestal-1: 25 ~ 90%				
Kick Time: 0 ~ 2.0 sec				
Kick Voltage: 0 ~ 90%				
Target: 25 ~ 100%				
I-Ramp Start		I-Ramp Up Time: 1 ~ 60 sec		
		Initial Current: 100 ~ 300%		
		I-Proportional Gain: 0.01 ~ 2.00		
		I-Integral Time: 0.01 ~ 100.00		
T-Ramp Start		T-Ramp Up Time: 1 ~ 240 sec		
		Initial Torque: 1 ~ 250%		
		Torque Limit: 1 ~ 250%		
		T-Proportional Gain: 0.1 ~ 2.0		
		T-Integral Time: 0.01 ~ 100.00		



Operation Specifications	Stop Mode	V-Ramp Stop	V-Ramp Down Time: 1 ~ 240 sec Initial Voltage: 100 ~ 25% Final voltage: 70 ~ 25%	
		Brake Stop	Brake Ramp Time: 0.1 ~ 20.0 sec Brake Voltage: 25 ~ 100% Brake Time: 1 ~ 240 sec	
			T-Ramp stop	T- Ramp Down Time: 1 ~ 240 sec End Torque: 1 ~ 100%
			Coast to stop	
	Control Mode	Local (Digital Operation Panel)		
		Terminal		
		Serial		
PID Controller	Inbuilt PID can be used as stand alone PID Controller			
Display	Display and Keypad module	80-Character, 4-Line LCD panel, 8-Key keypad, 3-Status indicating LED for Run, Stop and Fault		
Start Duty	Ten equally spaced starts per hour at 300% current, each of 30 seconds duration, separated by periods of 100% current, or one start at 300% current of 60 seconds duration, followed by 100% current indefinitely (In 200V series for models 200~500 kW, 6 equal starts, in 400V series for models 400~710 kW, 6 equal starts, in 500V series for models 450~800 kW, 6 equal starts, in 600V for series models 500~900 kW, 6 equal starts)			
Protection	Transient Protection	RC Snubber across thyristor		
		MOV across input power supply		
	Last ten faults with status and four operational parameters like Input voltage (V _{ry}), Output current (%), Total conductive time (Hrs) and Heat sink temperature (°C).			
	* Over current fault	* Temperature fault		
	* Over load fault	* Phase direction fault		
	* Ground fault	* I-Unbalance fault		
	* Phase Loss fault	* Firing fault		
	* Over voltage fault	* Over frequency fault		
* Under voltage fault	* Under frequency fault			
Environment	Installation Location	Indoor		
	Ambient Temperature	0°C (32°F) ~ 50°C (122°F)		
	Storage Temperature	-20°C (-4°F) ~70°C (158°F)		
	Altitude (above sea level)	1000m (3300 ft) without derating, above this derate 5% per 305m (1000 ft)		
	Humidity	0~95% max non condensing		
	Enclosure	IP00		

Appendix-B: Outline Dimensions



Model	Dimensions in mm (inch)								Weight in kg (lb)
	A	B	C	D	E	F	G	H	
AMT-OT-015-2-X , AMT-OT-018-2-X , AMT-OT-022-2-X , AMT-OT-030-2-X AMT-OT-030-4-X , AMT-OT-037-4-X , AMT-OT-045-4-X , AMT-OT-055-4-X AMT-OT-037-5-X , AMT-OT-045-5-X , AMT-OT-055-5-X , AMT-OT-075-5-X AMT-OT-045-6-X , AMT-OT-055-6-X , AMT-OT-075-6-X , AMT-OT-090-6-X	445 (17.5)	213 (8.4)	260 (10.2)	170 (6.7)	423 (16.7)	43 (1.7)	43 (1.7)	77 3.0	13 (28.7)
AMT-OT-037-2-X , AMT-OT-045-2-X , AMT-OT-055-2-X AMT-OT-075-4-X , AMT-OT-090-4-X , AMT-OT-110-4-X AMT-OT-090-5-X , AMT-OT-110-5-X , AMT-OT-132-5-X AMT-OT-110-6-X , AMT-OT-132-6-X , AMT-OT-160-6-X	460 (18.1)	213 (8.4)	277 (10.9)	170 (6.7)	438 (17.2)	43 (1.7)	43 (1.7)	92 (3.6)	20 (44.1)
AMT-OT-075-2-X , AMT-OT-090-2-X AMT-OT-132-4-X , AMT-OT-160-4-X AMT-OT-160-5-X , AMT-OT-200-5-X AMT-OT-250-6-X , AMT-OT-315-6-X	420 (16.5)	328 (12.9)	315 (12.4)	224 (8.8)	400 (15.8)	102 (4.0)	98 (3.9)	227 (8.9)	29 (64)

Model	Dimensions in mm (inch)								Weight in kg (lb)
	A	B	C	D	E	F	G	H	
AMT-OT-110-2-X, AMT-OT-132-2-X, AMT-OT-160-2-X AMT-OT-200-4-X, AMT-OT-250-4-X, AMT-OT-315-4-X AMT-OT-250-5-X, AMT-OT-315-5-X, AMT-OT-400-5-X AMT-OT-315-6-X, AMT-OT-400-6-X, AMT-OT-450-6-X	600 (23.6)	547 (21.5)	326 (12.8)	442 (17.4)	570 (22.4)	210 (8.27)	210 (8.27)	385 (15.2)	60 (132.3)
AMT-OT-200-2-X, AMT-OT-250-2-X, AMT-OT-315-2-X, AMT-OT-400-2-X, AMT-OT-450-2-X AMT-OT-400-4-X, AMT-OT-450-4-X, AMT-OT-500-4-X, AMT-OT-585-4-X, AMT-OT-630-4-X AMT-OT-450-5-X, AMT-OT-500-5-X, AMT-OT-585-5-X, AMT-OT-630-5-X, AMT-OT-710-5-X AMT-OT-500-6-X, AMT-OT-585-6-X, AMT-OT-630-6-X, AMT-OT-710-6-X, AMT-OT-800-6-X	740 (29.1)	597 (23.5)	326 (12.8)	492 (19.4)	710 (28)	235 (9.3)	235 (9.3)	525 (20.7)	78 (172)
AMT-OT-076-2-X, AMT-OT-091-2-X, AMT-OT-111-2-X, AMT-OT-133-2-X, AMT-OT-161-2-X AMT-OT-133-4-X, AMT-OT-161-4-X, AMT-OT-201-4-X, AMT-OT-251-4-X, AMT-OT-316-4-X AMT-OT-161-5-X, AMT-OT-201-5-X, AMT-OT-251-5-X, AMT-OT-316-5-X, AMT-OT-401-5-X AMT-OT-201-6-X, AMT-OT-251-6-X, AMT-OT-316-6-X, AMT-OT-401-6-X, AMT-OT-451-6-X	600 (23.6)	453 (17.8)	326 (12.8)	398 (15.7)	570 (22.4)	163 (6.4)	163 (6.4)	385 (15.2)	49 (108)
AMT-OT-500-2-X AMT-OT-710-4-X AMT-OT-800-5-X AMT-OT-900-6-X	Consult factory for the dimensions								