

Altivar™ 312 Drives

The Altivar 312 mid-featured AC drive is designed to make industrial and commercial machines more energy efficient while simplifying its integration into a single control system architecture.

With the highest overtorque and the only drive with a remote graphic keypad in its class, the Altivar 312 mini-drive is ideally suited to the needs of material handling, packaging, food and beverage, and other OEM machines. It also comes standard with integrated communications port for Modbus and CANopen networks, optional cards available for CANopen Daisy Chain, DeviceNet, and Profibus DP, and gateways can be used for Modbus TCP/IP and FIPIO.

Table 26.3: Altivar™ 312 Selection

Input Line Voltage	Three-Phase Motor Power ^[7]		Open Drives ^[8]	
	HP	kW	Continuous Output Current	Catalog Number
			A	
208/230 Vac Single-Phase	0.25	0.18	1.5	ATV312H018M2
	0.5	0.37	3.3	ATV312H037M2
	0.75	0.55	3.7	ATV312H055M2
	1	0.75	4.6	ATV312H075M2
	1.5	1.1	6.9	ATV312HU11M2
	2	1.5	8	ATV312HU15M2
	3	2.2	11	ATV312HU22M2
208/230 Vac Three-Phase	0.25	0.18	1.5	ATV312H018M3
	0.5	0.37	3.3	ATV312H037M3
	0.75	0.55	3.7	ATV312H055M3
	1	0.75	4.8	ATV312H075M3
	1.5	1.1	6.9	ATV312HU11M3
	2	1.5	8	ATV312HU15M3
	3	2.2	11	ATV312HU22M3
	4	3	13.7	ATV312HU30M3
	5	—	17.5	ATV312HU40M3
	7.5	5.5	27.5	ATV312HU55M3
	10	7.5	33	ATV312HU75M3
15	11	54	ATV312HD11M3	
20	15	66	ATV312HD15M3	
400/480 Vac Three-Phase	0.5	0.37	1.5	ATV312H037N4
	0.75	0.55	1.9	ATV312H055N4
	1	0.75	2.3	ATV312H075N4
	1.5	1.1	3	ATV312HU11N4
	2	1.5	4.1	ATV312HU15N4
	3	2.2	5.5	ATV312HU22N4
	4	3	7.1	ATV312HU30N4
	5	—	9.5	ATV312HU40N4
	7.5	5.5	14.3	ATV312HU55N4
	10	7.5	17	ATV312HU75N4
	15	11	27.7	ATV312HD11N4
20	15	33	ATV312HD15N4	
575/600 Vac Three-Phase ^[9]	1	0.75	1.7	ATV312H075S6
	2	1.5	2.7	ATV312HU15S6
	3	2.2	3.9	ATV312HU22S6
	5	3.7/4.0	6.1	ATV312HU40S6
	7.5	5.5	9	ATV312HU55S6
	10	7.5	11	ATV312HU75S6
	15	11	17	ATV312HD11S6
	20	15	22	ATV312HD15S6



[7] These horsepower, wattage, and continuous ampere ratings apply to 4 kHz switching frequency and maximum 50 °C ambient. Refer to the installation manual for derating curves as a function of switching frequency, ambient temperature, and mounting conditions.

[8] Open type Altivar 312 Drives can be installed as UL Type 1 with optional conduit box when following instructions in the installation manual.

[9] A minimum 3% line reactor is required on all 575 V drive installations.

Altivar™ 312 Options and Accessories

Table 26.4: Altivar™ 312 Options and Accessories

Software	Description	For Use on Drives	Catalog Number
SoMove™	This software enables the user to configure, set, debug and organize maintenance task for the complete Altivar product line and the Altistart 22 and Altistart 48 soft starters. It can also be used to customize the integrated display terminal menus. It can be used with a direct connection or a Bluetooth® wireless connection. Free download www.schneider-electric.us		
User Interface Kits			
USB to RJ45 Adaptor Kit	For use in connecting to a PC with a USB port	Advantys™ OTB, Altistart™ motor starters, Altivar series incl. HMI, Altivar controller	TCSMCNAM3M002P
Remote Keypad Options and Accessories	Remote Keypad Display (IP54)	ATV312, ATV12	VW3A1006
	Remote Keypad Display (IP65)	ATV312, ATV12	VW3A1007
	Remote Keypad Display and Mounting Kit	ATV312	VW3A31101
	Remote Keypad Display	ATV312, ATV61, ATV71	VW3A1101 [10]
Cable for remote mounting LCD graphic keypad. RJ-45 connector on each end.	1 meter	Any ATV61, Any ATV71	VW3A1104R10
	3 meters	Any ATV61, Any ATV71	VW3A1104R30
	5 meters	Any ATV61, Any ATV71	VW3A1104R50
	10 meters	Any ATV61, Any ATV71	VW3A1104R100
Communication Options	Profibus	ATV312	VW3A31207
	CANopen Daisy Chain	ATV312	VW3A31208
	DeviceNet	ATV312	VW3A31209
Potentiometer	Operator, mounting collar, 2.5 kilohm, ½ watt potentiometer	Altivar 312	ATVPOT25K

NOTE: Refer to Catalog MKTED211041EN-US for communication cables.

Table 26.5: Configuration Tools

Description	Part Number	For Use on Drives
Altivar and Altistart Programming Cable: For use with the iPad Configuration App. 30-Pin Mobile to RS-485 Converter Cable	VW3A8151R20U	Altivar 12, 312, 212, SFLEX, Altistart 22, 48
Universal Bluetooth Interface	TCSWAAC13FB	All
Simple Loader: to transfer configuration between like drives. For use with the Altivar product line.	VW3A8120	ATV12, ATV312, ATV32, ATV61 and ATV71
Multi-loader: to copy a configuration from a drive or from SoMove via an SD card, and transferring to another drive or to a PC	VW3A8121	ATV12, ATV312, ATV212, ATV32, ATV61, ATV71 and ATS22

Table 26.6: Options—Field Installed Kits

Description	For Use on Drives	Catalog Number		
DIN Rail Mount Kit	ATV312H018M2, ATV312H037M2, ATV312H055M2, ATV312H075M2, ATV312H018M3, ATV312H037M3, ATV312H055M3, ATV312H075M3	VW3A9804		
	ATV312HU11M2, ATV312HU15M2, ATV312HU11M3, ATV312HU15M3, ATV312HU22M3, ATV312H037N4, ATV312H055N4, ATV312H075N4, ATV312HU11N4, ATV312HU15N4, ATV312H075S6, ATV312HU15S6	VW3A9805		
Conduit Entrance Kit	ATV312H018M2, ATV312H037M2, ATV312H055M2, ATV312H075M2	VW3A31812		
	ATV312H018M3, ATV312H037M3, ATV312H055M3, ATV312H075M3	VW3A31811		
	ATV312HU11M3, ATV312HU15M3	VW3A31813		
	ATV312HU11M2, ATV312HU15M2, ATV312HU22M3, ATV312H037N4, ATV312H055N4, ATV312H075N4, ATV312HU11N4, ATV312HU15N4, ATV312H075S6, ATV312HU15S6	VW3A31814		
	ATV312HU22M2, ATV312HU30M3, ATV312HU40M3, ATV312HU22N4, ATV312HU30N4, ATV312HU40N4, ATV312HU22S6, ATV312HU40S6	VW3A31815		
	ATV312HU55M3, ATV312HU75M3, ATV312HU55N4, ATV312HU75N4, ATV312HU55S6, ATV312HU75S6	VW3A31816		
	ATV312HD11M3, ATV312HD15M3, ATV312HD11N4, ATV312HD15N4, ATV312HD11S6, ATV312HD15S6	VW3A31817		
Line Reactors	230/460 V	See Price Guide 8800PL9701.		
	575 V	Open Style	ATV312H075S6	RL00202
			ATV312HU15S6	RL00403
			ATV312HU22S6	RL00803
			ATV312HU40S6	RL00802
			ATV312HU75S6	RL01202
			ATV312HD11S6	RL01802
			ATV312HD15S6	RL02502
	575 V	Enclosed (Type 1)	ATV312H075S6	RL00212
			ATV312HU15S6	RL00413
			ATV312HU22S6	RL00813
			ATV312HU40S6	RL00812
			ATV312HU55S6	RL01212
			ATV312HU75S6	RL01812
			ATV312HD11S6	RL02512
	Fan Kit	Installation of the fan kit enables the drive to operate in higher ambient temperatures. The fan mounts on the drive. Consult the product catalog for more information.		
		ATV61/71HD18M3X...HD22M3X, ATV61/71HD22N4	VW3A9404	
ATV61/71HD30N4...HD37N4		VW3A9405		
ATV61/71HD30M3X...HD45M3X		VW3A9406		
	ATV61/71HD45N4...HD75N4	VW3A9407		

[10] Refer to 26-14 for remote mounting kit and IP65 option for this keypad.