



PHA8308300

ATV310L complete parameters list

ENGLISH

Reference mode		Monitoring parameter		Drive status		Maintenance menu		Detected fault codes	
402	External reference frequency	402	External reference frequency	00	Drive ready	900-	MAINTENANCE MENU	F000	Error menu
403	Speed Reference via local HMI	403	Speed Reference via local HMI	01	Drive running	901	State of logic inputs L11 to L14	F001	Precharge
801	Speed reference	801	Speed reference	02	Acceleration	902	State of the logic output LO1 and LO2	F002	Unknown drive rating
		802	Motor frequency	03	Deceleration	903	Display of high speed value	F003	Unknown or incompatible power board
		803	Motor current	04	DC injection braking in progress	904	Drive Power rating	F004	Internal serial link
		807	Mains voltage	05	Current limitation state		075	F005	Invalid industrialization zone
		808	Motor thermal state	06	Freewheel stop control or freewheel state		U15	F006	Current measurement circuit
		809	Drive thermal state	07	Auto-adapted deceleration		U22	F007	Internal thermal sensor
		810	Motor power	08	Controlled stop on mains phase loss		U30	F008	Internal CPU
		811	Drive status	09	Auto-tuning in progress		U40	F009	Overbraking
				10	Fast stop state		U55		
				11	No mains voltage				
				12	Drive in back state				
				13	Remote control mode				
				14	Local control mode				
				[FLT]	operating State "Fault"				

Detected fault codes (cont.)		Configuration mode	
F010	Overcurrent	711	AS-i mode
F011	Drive overheating		[SnGL] Single Mode
F012	Process overload	712	AS-i Address 1
F013	Motor overload		[DUAL] Dual Mode
F014	1 Output phase loss	713	AS-i Address 2
F015	3 Output phases loss		0 to 63 (0°)
F016	Supply mains overvoltage	714	AS-i Input/Output activation
F017	Input phase loss		16 bit word (0°)
F018	Motor short-circuit	100	Macro-configuration
F019	Ground short-circuit		[00] Start/stop
F020	IGBT short circuit		[17] Local Mode
F021	Load short circuit		[18] Remote Mode
F022	Communication interruption	402	External reference frequency
F024	HMI communication interruption		-400.0Hz to 400.0Hz (0.0 Hz*)
F025	Motor Overspeed	403	Speed Reference via local HMI
F027	IGBT overheating		0.0% to 100.0% (0.0%*)
F028	Autotuning	301	Standard motor frequency
F029	Process underload		[00] 50Hz IEC
F030	Supply mains undervoltage		[01] 60Hz NEMA
F031	Incorrect configuration	401	Reference channel
F032	Invalid configuration		[164] AS-i
F034	Download invalid configuration		[183] Local HMI
F035	Pre-charge resistor protection fault	501.0	Acceleration
F036	Brake overcurrent		0.0 s to 999.9s (3.0s*)
F037	AS-i communication	501.1	Deceleration
F038	Internal AS-i		0.0 s to 999.9s (3.0s*)
F039	Brake control	502.0	Type of stop
F040	Brake feedback contact		[00]* Ramp stop
			[01] Fast stop
			[02] Freewheel stop
		512.0	Low speed
			0.0Hz to High speed (0Hz*)
		512.2	High speed
			Low speed to max. frequency (mot. frequency*)
		302	Rated Motor Power
			NCV -5 to NCV +2 (according to drive rating*)
		305	Rated motor current
			(0.25-1.5In) (In*)

Customer Set.		Macro		Input/Output menu	
101	Store customer parameter set	100	Macro-configuration	206-	LOx CONFIGURATION MENU
	[00]* Disabled		[00] Start/stop	206.0	LO1 Assignment
	[01] Stores current configuration		[17] Local Mode		[00]* Not assigned
102	Factory / recall customer parameter set		[18] Remote Mode		[01] No error detected
	[00]* Disabled				[02] Drive run
	[02] Customer configuration				[04] Frequency threshold reached
	[64] Factory set configuration				[05] HSP reached
					[06] I threshold reached
					[07] Frequency reference reached
					[08] Motor thermal reached
					[21] Underload alarm
					[22] Overload alarm
					[L1H] L11 active High
					[L2H] L12 active High
					[L3H] L13 active High
					[L4H] L14 active High
				206.1	LO1 status (output active level)
					[00]* Positive : high activation level
					[01] Negative : low activation level
				206.2	LO2 Assignment
					Same as LO1 assignment
				206.3	LO2 status (output active level)
					[00]* Positive : high activation level
					[01] Negative : low activation level

Motor control menu		Control menu	
300-	MOTOR CONTROL MENU	400-	CONTROL MENU
301	Standard motor frequency	401	Reference channel
	[00]* 50Hz IEC		[164] AS-i
	[01] 60Hz NEMA		[183] Local HMI
302	Rated motor power	402	External reference frequency
	Drive power (-5 to +2) depending on drive rating		-400 to 400Hz (0Hz*)
303	Rated motor cos phi	403	Speed Reference via local HMI
	0.5 to 1 (depending on drive rating)		0 to 100% (0%*)
304	Rated motor voltage	404	Reverse inhibition
	360 to 460V (380V*)		[00]* No
305	Rated motor current		[01] Yes
	0.25 to 1.5In (depending on drive rating)	405	Stop key priority
306	Rated motor frequency		[00] No: Stop inactive
	10 to 400Hz (50Hz*)		[01]* Yes: Stop active
307	Rated motor speed	406	Channel configuration
	0 to 2400rpm (depending on drive rating)		[01]* Not separate mode
308	Maximum frequency		[02] Separate mode
	10 to 400Hz (60Hz*)		
309	Motor control type		
	[00] Performance: Vector control		
	[03]* Standard: U/F 2 points		
	[06] Quadratic load: U²/F		
310	IR compensation		
	25 to 200% (100%*)		
311	Slip compensation		
	0 to 150% (100%*)		
312	Frequency loop stability		
	0 to 100% (20%*)		
313	Frequency loop gain		
	0 to 100% (20%*)		
314	Flux Profile		
	0 to 100% (20%*)		
315	Switching frequency		
	2 to 12kHz (4kHz*)		
317	Motor noise reduction		
	[00]* No		
	[01] Yes		
318	Auto-tuning		
	[00]* No: When factory parameters of standard motors		
	[01] Yes: Launches auto-tuning		
	[02] Done: If auto-tuning has already been performed		
319	Motor parameter choice		
	[00]* Nominal motor power		
	[01] Nominal motor cos phi		
320	Vector control 2 points		
	[00]* No		
	[01] Yes		
321	Max voltage of constant power		
	360 to 460V (380V*)		
322	Max frequency of constant power		
	50 to 400Hz (50Hz*)		

Control menu (cont.)		Function / Ramp menu		Function / Stop configuration menu	
407	Command channel	501-	RAMP MENU	502-	STOP CONFIGURATION MENU
	[01]* Terminals	501.0	Acceleration ramp time	502.0	Type of stop
	[02] Local HMI		0.0 to 999.9s (3.0s*)		[00]* Ramp stop
	[10] AS-i	501.1	Deceleration ramp time		[01] Fast stop
			0.0 to 999.9s (3.0s*)		[02] Free wheel stop
408	Forced local assignment	501.2	Type of ramp	502.1	Freewheel stop assignment
	[00]* No: Function inactive		[00]* Linear		[00]* Not assigned
	[L1H] L11 active High		[01] S shape		[L1L] L11 active Low to stop
	[L2H] L12 active High		[02] U shape		[L2L] L12 active Low to stop
	[L3H] L13 active High				[L3L] L13 active Low to stop
	[L4H] L14 active High				[L4L] L14 active Low to stop
409	Forced local reference	501.3	Ramp switching assignment	502.2	Fast stop assignment
	[00]* Not assigned		[00]* Not assigned		[00]* Not assigned
	[183] Local HMI		[L1H] L11 active High		[L1L] L11 active Low to stop
			[L2H] L12 active High		[L2L] L12 active Low to stop
			[L3H] L13 active High		[L3L] L13 active Low to stop
			[L4H] L14 active High		[L4L] L14 active Low to stop
			[L1L] L11 active Low		
			[L2L] L12 active Low		
			[L3L] L13 active Low		
			[L4L] L14 active Low		
		501.4	Acceleration 2 ramp time		
			0.0 to 999.9s (5.0s*)		
		501.5	Deceleration 2 ramp time		
			0.0 to 999.9s (5.0s*)		
		501.6	Deceleration ramp adaptation		
			[00] Function deactivated		
			[08]* Function activated		
			[13] Motor brake		
		502-	STOP CONFIGURATION MENU		
		502.0	Type of stop		
			[00]* Ramp stop		
			[01] Fast stop		
			[02] Free wheel stop		
		502.1	Freewheel stop assignment		
			[00]* Not assigned		
			[L1L] L11 active Low to stop		
			[L2L] L12 active Low to stop		
			[L3L] L13 active Low to stop		
			[L4L] L14 active Low to stop		
		502.2	Fast stop assignment		
			[00]* Not assigned		
			[L1L] L11 active Low to stop		
			[L2L] L12 active Low to stop		
			[L3L] L13 active Low to stop		
			[L4L] L14 active Low to stop		
		502.3	Fast stop Ramp divider		
			1 to 10 (4*)		

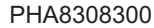
The (+) indicates a parameter factory setting.

ATV310L complete parameters list

	DC injection function	Motor potentiometer function	Preset Speed menu	Current limitation function
5504-	AUTO DC INJECTION MENU			
504.0	Automatic DC injection			
	[00]	Function inactive, no DC injected current		
	[01]*	Time limited DC injection		
	[02]	Continuous DC injection		
504.1	Automatic DC injection current			
	0 to 120% of nominal motor current (70%*)			
504.2	Automatic DC injection time			
	0.1 to 30s (0.5s*)			
506-	Speed up and down			
506.0	Up speed command			
	[00]*	Not assigned		
	[L1H]	L1 active High		
	[L2H]	L2 active High		
	[L3H]	L3 active High		
	[L4H]	L4 active High		
506.1	Down speed command			
	Same as Up speed command			
506.2	Store			
	[00]*	No		
	[01]	RAM		
	[02]	ROM		
506.3	Clear the function			
	[00]*	Not assigned		
	[L1H]	L1 active High		
	[L2H]	L2 active High		
	[L3H]	L3 active High		
	[L4H]	L4 active High		
	[159]	Acceleration and deceleration with command active high		
506.4	Reactivity of +/- speed around ref.			
	0 to 100% (0%*)			
507-	PRESET SPEED MENU			
507.0	2 Preset speeds			
	[00]*	Not assigned		
	[L1H]	L1 active High		
	[L2H]	L2 active High		
	[L3H]	L3 active High		
	[L4H]	L4 active High		
507.1	4 Preset speeds			
	Same as 2 Preset speeds			
507.2	8 Preset speeds			
	Same as 2 Preset speeds			
507.3	Preset speed 2			
	0 to 400Hz (10Hz*)			
507.4	Preset speed 3			
	0 to 400Hz (15Hz*)			
507.5	Preset speed 4			
	0 to 400Hz (20Hz*)			
507.6	Preset speed 5			
	0 to 400Hz (25Hz*)			
507.7	Preset speed 6			
	0 to 400Hz (30Hz*)			
507.8	Preset speed 7			
	0 to 400Hz (35Hz*)			
507.9	Preset speed 8			
	0 to 400Hz (40Hz*)			
511-	CURRENT LIMITATION MENU			
511.0	Current Limitation 2 assignment			
	[00]*	Not activated		
	[L1H]	L1 active High		
	[L2H]	L2 active High		
	[L3H]	L3 active High		
	[L4H]	L4 active High		
	[L1L]	L1 active Low		
	[L2L]	L2 active Low		
	[L3L]	L3 active Low		
	[L4L]	L4 active Low		
511.1	Current limitation			
	0.25 to 1.5In			
511.2	Current limitation 2			
	0.25 to 1.5In			

	Speed limitation function
512-	SPEED LIMIT MENU
512.0	Low speed
	0Hz to high speed (0Hz*)
512.1	Low speed operating time
	0.1 to 999.9s (0s*)
512.2	High speed
	Low speed to maximum frequency (50 or 60Hz according to standard motor frequency*)
512.3	2 High speed assignment
	[00]* Not assigned
	[L1H] L1 active High
	[L2H] L2 active High
	[L3H] L3 active High
	[L4H] L4 active High
512.4	4 High speed assignment
	[00]* Not assigned
	[L1H] L1 active High
	[L2H] L2 active High
	[L3H] L3 active High
	[L4H] L4 active High
512.5	High speed 2
	Low speed to Max frequency (50 or 60Hz*)
512.6	High speed 3
	Low speed to Max frequency (50 or 60Hz*)
512.7	High speed 4
	Low speed to Max frequency (50 or 60Hz*)
52-	BRAKE LOGIC CONTROL
52.00	Brake logic function activation
	[00]* Inactive function
	[01] Active function
52.01	Movement Type
	[00]* Horizontal
	[01] Vertical
52.02	Brake contact assignment
	[00]* Not assigned
	[L1H] L1 active High
	[L2H] L2 active High
	[L3H] L3 active High
	[L4H] L4 active High
52.03	Brake release pulse
	[00] No
	[01]* Yes
	[02] 2 brake release current
52.04	Brake release current
	0 to 1.36 In (0 A*)
52.05	Reverse Brake release current
	0 to 1.36 In (0 A*)
52.06	Brake release time
	0* to 5.00 s
52.07	Brake release frequency threshold
	[AUTO]* auto
	0 to 10.0Hz
52.08	Brake engage frequency threshold
	[AUTO]* auto
	0 to 10.0Hz
52.09	Brake engage delay
	0* to 5.00 s
52.10	Brake engage time
	0* to 5.00 s
504.1	Auto DC inj Level 1
	0 to 1.2 In (0.7 In*)
52.11	Brake Engage at reversal
	[00]* No
	[01] Yes
52.12	Jump at reversal
	[AUTO]* Auto
	0 to 10.0Hz
52.13	Time to restart
	0* to 15.00 s
52.14	Brake Hidden
	0* to 7
52.15	Current ramp time
	0* to 5.00 s

Detected fault reset	600-	ERROR DETECTION MANAGEMENT MENU		
	601	Detected fault reset assignment		
		[00]*	Not assigned	
		[L1H]	L1 active High	
		[L2H]	L2 active High	
		[L3H]	L3 active High	
		[L4H]	L4 active High	
	Catch on the fly	603	Catch on the fly	
			[00]*	Function inactive
		[01]	Function active	
Phase loss	605	Output Phase loss		
		[00]	Deactivated	
	[01]*	Tripping then freewheel stop		
IGBT	606	Input Phase loss		
		[00]	Detected error ignored	
Detet. fault		[01]*	Detected error with freewheel stop	
		[04]	Detected error with Fallback Speed	
Degr. line	608	IGBT test		
		[00]*	No test	
Reset power run		[01]	Starting test	
	610	Disable error detection assignment		
Automatic restart after a detected fault		[00]*	Function inactive	
		[L1H]	L1 active High	
Motor thermal Monitoring		[L2H]	L2 active High	
		[L3H]	L3 active High	
		[L4H]	L4 active High	
	611	Response to AS-i interruption		
		[00]*	Detected fault ignored	
		[01]	Freewheel stop	
		[04]	Fallback Speed	
	612	Degraded mains supply operation		
		[00]*	No	
		[01]	Yes	
	613	Time counter reset		
		[00]*	No	
		[03]	Reset drive running time	
		[04]	Reset power-on time	
		[07]	Reset fan operation time	
	614	Reset all previous detected error via Run key of HMI		
		[00]*	Deactivated	
		[01]	Active	
	602-	AUTOMATIC RESTART MENU		
	602.0	Automatic restart		
		[00]*	No	
		[01]	Yes	
	602.1	Max. automatic restart		
		[00]*	5 min	
		[01]	10 min	
		[02]	30 min	
		[03]	1 hour	
		[04]	2 hours	
		[05]	3 hours	
		[06]	Infinite	
	604-	MOTOR THERMAL MONITORING MENU		
	604.0	Motor thermal current		
		0.2-1.5In (In")		
	604.1	Motor thermal mode		
		[01]*	Self-ventilated	
		[02]	Motor-ventilated	
	604.2	Response to motor overtemp		
		[00]	Detected error ignored	
		[01]*	Free wheel stop	
		[04]	Fallback Speed	
	604.3	Motor thermal state memo		
		[00]*	thermal state not stored at power off	
		[01]	thermal state is stored at power off	



简体中文

(*) 表示参数的出厂设置。

ATV310L 完整参数列表

直流注入功能		速度限幅菜单		错误检测管理菜单		欠压菜单	
直流注入功能	504- 自动直流注入菜单	速度限幅菜单	512- 速度限幅菜单	错误检测管理菜单	欠压菜单	欠压菜单	
	504.0 自动直流注入		512.0 低速				
	[00]* 功能未激活, 无直流注入电流。		0Hz 至高速频率 (0Hz*)				
	[01]* 有限直流注入		512.1 低速运行时间				
电动机位功能	504.1 自动直流注入电流		0.1 至 999.9s (0s*)				
	电机额定电流的 0% 至 120% (70%*)		512.2 高速频率				
	504.2 自动直流注入时间		低速频率至最大频率 (50 或 60Hz, 取决于标准电机频率*)				
	0.1 至 30s (0.5s*)		512.3 2 个高速频率分配				
预设定速度菜单	506- 给定位置加速减速		[00]* 未分配				
	506.0 加速指令		[L1H] L11 高电平有效				
	[00]* 未分配		[L2H] L12 高电平有效				
	[L1H] L11 高电平有效		[L3H] L13 高电平有效				
电动机位功能	506.1 减速指令		[L4H] L14 高电平有效				
	与加速指令相同		512.4 4 个高速频率分配				
	506.2 保存变量		[00]* 未分配				
	[00]* No		[L1H] L11 高电平有效				
预设定速度菜单	506.3 功能清除分配		[L2H] L12 高电平有效				
	[00]* 未分配		[L3H] L13 高电平有效				
	[L1H] L11 高电平有效		[L4H] L14 高电平有效				
	[L2H] L12 高电平有效		512.5 高速频率 2				
预设定速度菜单	506.4 增量赋值		低速频率至最大频率 (50 或 60Hz*)				
	0 至 100% (0%*)		512.6 高速频率 3				
	507- 预置速度菜单		低速频率至最大频率 (50 或 60Hz*)				
	507.0 2 个预置速度		512.7 高速频率 4				
预设定速度菜单	[00]* 未分配		低速频率至最大频率 (50 或 60Hz*)				
	[L1H] L11 高电平有效		52- 制动逻辑控制				
	[L2H] L12 高电平有效		52.00 制动逻辑功能激活				
	[L3H] L13 高电平有效		[00]* 功能未激活				
预设定速度菜单	507.1 4 个预置速度		[01] 功能激活				
	与 2 个预置速度相同		52.01 移动类型				
	507.2 8 个预置速度		[00]* 水平				
	与 2 个预置速度相同		[01] 垂直				
预设定速度菜单	507.3- 预置速度 2		52.02 制动触点分配				
	0 至 400Hz (10Hz*)		[00]* 未分配				
	507.4- 预置速度 3		[L1H] L11 高电平有效				
	0 至 400Hz (15Hz*)		[L2H] L12 高电平有效				
预设定速度菜单	507.5- 预置速度 4		[L3H] L13 高电平有效				
	0 至 400Hz (20Hz*)		[L4H] L14 高电平有效				
	507.6- 预置速度 5		52.03 制动力方向				
	0 至 400Hz (25Hz*)		[00] 否				
预设定速度菜单	507.7- 预置速度 6		[01] 是				
	0 至 400Hz (30Hz*)		[02] 2 制动释放电流				
	507.8- 预置速度 7		52.04 制动释放电流				
	0 至 400Hz (35Hz*)		0 至 1.36 In (0 A*)				
预设定速度菜单	507.9- 预置速度 8		52.05 反向制动释放电流				
	0 至 400Hz (40Hz*)		0 至 1.36 In (0 A*)				
	511- 电流限幅菜单		52.06 制动释放时间				
	511.0 第 2 电流限幅分配		0* 至 5.00 s				
预设定速度菜单	[00]* 未激活		52.07 制动释放频率阈值				
	[L1H] L11 高电平有效		[AUTO]* 自动				
	[L2H] L12 高电平有效		0 到 10.0Hz				
	[L3H] L13 高电平有效		52.08 刹车抱紧频率阈值				
预设定速度菜单	[L4H] L14 高电平有效		[AUTO]* 自动				
	[L1L] L11 低电平有效		0 到 10.0Hz				
	[L2L] L12 低电平有效		52.09 刹车抱紧时间				
	[L3L] L13 低电平有效		0* 至 5.00 s				
预设定速度菜单	[L4L] L14 低电平有效		52.10 刹车机构抱紧时间				
	511.1 电流限幅		0* 至 5.00 s				
	0.25 至 1.5In		504.1 自动直流注入水平 1				
	511.2 电流限幅 2		0 至 1.2 In (0.7 In*)				
	0.25 至 1.5In		52.11 速度反转时抱闸				
			[00]* 否				
			[01] 是				
			52.12 变转向频率跳变值				
			[AUTO]* 自动				
			0 到 10.0Hz				
			52.13 重启等待时间				
			0* 至 15.00 s				
			52.14 制动隐藏				
			0* 至 7				
			52.15 电流斜坡时间				
			0* 至 5.00 s				
电动机热监控	600- 错误检测管理菜单	电动机热监控	602- 自动重启菜单		电动机热监控	电动机热监控	
	601 故障复位分配		602.0 自动重启				
	[00]* 未分配		[00]* 否				
	[L1H] L11 高电平有效		[01] 是				
电动机热监控	603 飞车重启动		602.1 最大自动重启时间				
	[00]* 功能未激活		[00]* 5 分钟				
	[01] 功能激活		[01] 10 分钟				
	605 输出缺相		[02] 30 分钟				
电动机热监控	[00] 功能未激活		[03] 1 小时				
	[01]* 跳闸并自由停车		[04] 2 小时				
	606 输入缺相		[05] 3 小时				
	[00] 忽略检测到的错误		[06] 无限制				
电动机热监控	[01]* 发生输入缺相时自由停车		604- 电机热监控菜单				
	[04] 检测到错误并使用回落速度		604.0 电机热电流				
	608 IGBT 测试		0.2-1.5In (In*)				
	[00]* 无测试		604.1 电机热保护类型				
电动机热监控	[01] 测试		[01]* 自通风				
	610 禁用错误检测分配		[02] 强制通风				
	[00]* 功能未激活		604.2 电机过热响应				
	[L1H] L11 高电平有效		[00] 忽略该故障				
电动机热监控	[L2H] L12 高电平有效		[01]* 自由停车				
	[L3H] L13 高电平有效		[04] 回落速度				
	[L4H] L14 高电平有效		604.3 电机热状态记忆				
	611 AS-i 中断后的响应		[00]* 断电时不存储电机热状态				
电动机热监控	[00] 忽略该故障		[01] 断电时存储电机热状态				
	[01] 自由停车						
	[04] 回落速度						
	612 电源降级运行						
电动机热监控	[00]* 否						
	[01] 是						
	613 时间计数器复位						
	[00] 否						
电动机热监控	[03] 变频器运行时间						
	[04] 变频器通电时间						
	[07] 风扇运行时间						
	614 通过 HMI 的“运行”键复位所有以前检测到的错误						
电动机热监控	[00]* 不激活						
	[01] 激活						
	602- 自动重启菜单						
	602.0 自动重启						
电动机热监控	[00]* 否						
	[01] 是						
	602.1 最大自动重启时间						
	[00]* 5 分钟						
电动机热监控	[01] 10 分钟						
	[02] 30 分钟						
	[03] 1 小时						
	[04] 2 小时						
电动机热监控	[05] 3 小时						
	[06] 无限制						
	604- 电机热监控菜单						
	604.0 电机热电流						
电动机热监控	0.2-1.5In (In*)						
	604.1 电机热保护类型						
	[01]* 自通风						
	[02] 强制通风						
电动机热监控	604.2 电机过热响应						
	[00] 忽略该故障						
	[01]* 自由停车						
	[04] 回落速度						
电动机热监控	604.3 电机热状态记忆						
	[00]* 断电时不存储电机热状态						
	[01] 断电时存储电机热状态						

(*) 表示参数的出厂设置。