

Sektion	Parameter	Neuer Wert	Default-Wert	Einheit
Motor parameter	Motor type		SPM	
	Sensor type		HALL	
	Phase sequence type of HALL sensor		Hall 120°	
	Phase shift angle of position sensor		-60	°
	Rs		80,0	m Ohm
	Ld		97,0	µH
	Lq		124,0	µH
	Back EMF constant (line voltage)		77,0	Vrms/krpm
	Maximum RPM		1000	rpm
	Maximum RPM		24	
	Motor phase line connection strimg		Y-G-B	
	Motor HALL connection setup		Y-G-B	
	Motor Reserved		false	
	Motor encoder A/B timing setting		A-LEAD-B	
	Motor encoder SC60370 positiv direction setting		DIR_0	
Control mode	Control mode		torque control mode	
Voltage parameter	Battery voltage selection		72,0	V
	Over voltage threshold		92,0	V
	Exit over voltage threshold		90,0	V
	Undervoltage thresholds		60,0	V
	Exit under voltage threshold		62,0	V
	Minimum operating voltage (power-off)		52,0	V
Optional battery voltage parameter	Battery voltage selection		60,0	V
	Over voltage threshold		80,0	V
	Exit over voltage threshold		78,0	V
	Undervoltage thresholds		45,0	V
	Exit under voltage threshold		47,0	V
	Minimum operating voltage (power-off)		40,0	V
Current parameter	Maximum phase current	200	300	A
	Default battery current limiting value	80,0	100	A
Controller temperature control parameters	Overtemperature Protection temperature		120	°C
	Overtemperature Protection exit temperature		110	°C
	Temperature Control starting temperature		75	°C
	Temperature Control end temperature		105	°C
	Temperature control terminal output ratio		30	%
Motor temperature control parameters	Motor temperature control enabled		false	
	Overtempetature Protection temperature		150	°C
	Overtempetature Protection exit temperature		130	°C

	Temperature Control starting temperature	120	°C
	Temperature Control end temperature	140	°C
	Temperature control terminal output ratio	30	%
Throttle parameters	Throttle starting voltage	1,2	V
	Throttle ending voltage	3,3	V
	Throttle upper fault voltage threshold	4,0	V
	Throttle lower fault voltage threshold	0,2	V
	Hysteresis to rest the throttle fault	0,2	V
	Directional throttle enable	false	
	Effective starting voltage of reverse throttle	1,8	V
	Effective terminal voltage of reverse throttle	0,8	V
	The type of throttle curve	Linear	
	Cusomized curve 1# parameter V1	15	%
	Cusomized curve 1# parameter V2	30	%
	Cusomized curve 1# parameter V3	50	%
	Cusomized curve 1# parameter V4	70	%
	Cusomized curve 1# parameter V5	85	%
	Cusomized curve 1# parameter P1	10	%
	Cusomized curve 1# parameter P2	25	%
	Cusomized curve 1# parameter P3	60	%
	Cusomized curve 1# parameter P4	80	%
	Cusomized curve 1# parameter P5	95	%
	Cusomized curve 2# parameter V1	15	%
	Cusomized curve 2# parameter V2	30	%
	Cusomized curve 2# parameter V3	50	%
	Cusomized curve 2# parameter V4	70	%
	Cusomized curve 2# parameter V5	85	%
	Cusomized curve 2# parameter P1	10	%
	Cusomized curve 2# parameter P2	25	%
	Cusomized curve 2# parameter P3	60	%
	Cusomized curve 2# parameter P4	80	%
	Cusomized curve 2# parameter P5	95	%
	Cusomized curve 3# parameter V1	15	%
	Cusomized curve 3# parameter V2	30	%
	Cusomized curve 3# parameter V3	50	%
	Cusomized curve 3# parameter V4	70	%
	Cusomized curve 3# parameter V5	85	%
	Cusomized curve 3# parameter P1	10	%
	Cusomized curve 3# parameter P2	25	%

	Cusomized curve 3# parameter P3		60	%
	Cusomized curve 3# parameter P4		80	%
	Cusomized curve 3# parameter P5		95	%
	Cusomized curve 4# parameter V1		15	%
	Cusomized curve 4# parameter V2		30	%
	Cusomized curve 4# parameter V3		50	%
	Cusomized curve 4# parameter V4		70	%
	Cusomized curve 4# parameter V5		85	%
	Cusomized curve 4# parameter P1		10	%
	Cusomized curve 4# parameter P2		25	%
	Cusomized curve 4# parameter P3		60	%
	Cusomized curve 4# parameter P4		80	%
	Cusomized curve 4# parameter P5		95	%
	Cusomized curve 5# parameter V1		15	%
	Cusomized curve 5# parameter V2		30	%
	Cusomized curve 5# parameter V3		50	%
	Cusomized curve 5# parameter V4		70	%
	Cusomized curve 5# parameter V5		85	%
	Cusomized curve 5# parameter P1		10	%
	Cusomized curve 5# parameter P2		25	%
	Cusomized curve 5# parameter P3		60	%
	Cusomized curve 5# parameter P4		80	%
	Cusomized curve 5# parameter P5		95	%
Throttle acceleration parameters	Output set point STP1		10	%
	Output set point STP2		50	%
	Output set point STP3		75	%
	Acceleration time T1	300	100	ms
	Acceleration time T2		100	ms
	Acceleration time T3		100	ms
	Acceleration time T4		100	ms
Throttle decelearation parameters	Output set point STP1		10	%
	Output set point STP2		50	%
	Output set point STP3		75	%
	Decelearation time T1		200	ms
	Decelearation time T2		200	ms
	Decelearation time T3		200	ms
	Decelearation time T4		200	ms
Triple speed function	Triple-speed mode function enabled	false	true	
	Triple-speed mode selection		Mode 1	

	GPIO 1 choice	FUNC IN NONE	FUNC 3	
	GPIO 2 choice	FUNC IN NONE	FUNC 4	
	Mode 1 switch sequence defenition		M_H_L	
	Trip-speed display function enabled		true	
	Low speed ratio		60	%
	CurrentLimit value of low speed bus		100%	%
	Low speed flux-weakening current		0,0	A
	Medium speed ratio		80	%
	CurrentLimit value of medium speed bus		100	%
	Medium speed flux-weakening current		0,0	A
	High speed ratio		100	%
	CurrentLimit value of High speed bus		100	%
	High speed flux-weakening current		-15,0	A
	Optional battery low speed ratio		60	%
	Optional battery low speed bus current limit		60	%
	Optional battery low speed low flux-weakening current		0,0	A
	Optional battery medium speed ratio		100	%
	Optional battery medium speed bus current limit		100	%
	Optional battery low speed medium flux-weakening current		0,0	A
	Optional battery high speed ratio		100	%
	Optional battery high speed bus current limit		100	%
	Optional battery low speed high flux-weakening current		0,0	A
Automatic flux-weaking function	Automatic flux-weakening function enabled	false	true	
	Automatic flux-weakening phase voltage reference value ratio		95,0	%
	Flux-weakening current Default value		-18,00	A
Reserve function	Reverse function enabled		true	
	GPIO of the reverse button selected		FUNC 8	
	Maximum output ratio for reversing		20	%
	Minimum speed threshold to allow reversing		20	RPM
	Speed mode		true	
	Maximum speed ratio when speed mode is enabled		20	%
	Accelerator curve selection		0	
FUNC_Inx/FUNC_AD/BKHeffective level	FUNC_IN1		Low voltage active	
	FUNC_IN2		Low voltage active	
	FUNC_IN3		Low voltage active	
	FUNC_IN4		Low voltage active	
	FUNC_IN5		Low voltage active	
	FUNC_IN6		Low voltage active	
	FUNC_IN7		Low voltage active	

	FUNC_IN8		Low voltage active
	FUNC_IN9		Low voltage active
	BKH		Low voltage active
EBS function	ESB function enable		true
	Select an ESB activation mode	EBS automatically enabled	Permanently open
	If ESB is enabled by GPIO, select GPIO		
	Brake GPIO option		BHK
	ESB brake torque control type	Linear torque	Fixed torque
	Maximum brake torque ratio		40 %
	Maximum ESB charging current		-20,0 A
	ESB DC BUS voltage limit		86,0 V
	Maximum ESB charging current for optional batteries		-20,0 A
	Optional battery EBS DC BUS voltage limit		70,0 V
	ESB entry_speed threshold		90 rpm
	EBS exit_speed threshold		60 rpm
Speed limit function	Speed limit enabled	false	true
	Limiting speed activation mode selection		Switch speed limit
	When speed limiting is switched, GPIO selects		
	Three-speed active when speed limit		true
	Speed limit ratio		35 %
	Backup battery speed limit ratio		35 %
	Bus current limiting value		50 %
Cruise function	The cruise function enabled	false	true
	Automatic cruise enabled		false
	Enabling mode of automatic cruise		Permanently open
	When GPIO on, off automatic cruise, GPIO selects		
	Response time (ms) when automatic cruise is activated		8000
	Button Manual cruise enabled	false	true
	When the button is manually cruise, GPIO is selected		FUNC 2
	When cruising, the three-speed mode switch enabled		true
	When cruising, speed mode enabled		true
	Cruising into the minimum Throttle ratio		10 %
	Cruising into the maximum speed ratio		10 %