

分类	名称	说明	备注
控制器	Controller	最大相电流(A) Max phase current(A)	控制器最大相电流, 例如E2-A48400, 可设置最大相电流为400A It's maximum phase current. For example, E2-A48400, which can set a maximum phase current of 400A
	最大转速 (rpm)	Max rotor speed(rpm)	电机最高转速, 控制器支持最高电气转速为90000rpm, 可设置最大转速应满足: 最大转速*极对数≤90000 It's maximum rotor speed. This controller supports a maximum electrical speed of 90,000 rpm. It should meet requirement: Maximum rotational speed * number of pole-pairs ≤ 90,000
	最大母线电流(A)	Max bus current(A)	控制器最大母线电流, 例如E2-A48400, 可设置最大母线电流=最大相电流/2-200A It's maximum bus current. For example, E2-A48400, which can set the maximum bus current = the maximum phase current / 2-200A
	峰值电流持续时间(s)	Peak current duration(s)	最大相电流持续超过此时间控制器会限流, 并过载报警。如果频繁出现过载报警, 说明匹配控制器功率小, 应更换更大功率控制器 After the maximum phase current lasts beyond this duration, the controller will limit the current and alarm "overload". If this alarm occurs frequently, it means this controller has less power, it should be replaced with a higher power controller
	控制模式	Control mode	扭矩控制: 油门控制扭矩 速度控制: 油门控制转速 功率控制: 预留 位置控制: 预留 Torque control: the throttle controls the torque Speed control: the throttle controls the speed Power control: reserved Position control: reserved
	工作模式	Work mode	可选: 两象限(预留)、四象限 Optional: 1-Two quadrants (reserved) 2-Four quadrants
	相电流比例增益Kp	Phase current Kp	用于调节电流的感应时间, 根据经验值做调整, 需要在厂家指导下设置, 不建议用户修改 经验值, 无法具体量化, 需要整车的工况, 做对应的微调; PID参数整定 It's recommended to set it up under the guidance of the manufacturer. User modification is not recommended
	相电流积分增益Ki	Phase current Ki	用于调节电流的感应时间, 根据经验值做调整, 需要在厂家指导下设置, 不建议用户修改 经验值, 无法具体量化, 需要整车的工况, 做对应的微调; PID参数整定 It's recommended to set it up under the guidance of the manufacturer. User modification is not recommended
	转速比例增益Kp	Rotor speed Kp	用于调节转速的感应时间, 根据经验值做调整, 需要在厂家指导下设置, 不建议用户修改 经验值, 无法具体量化, 需要整车的工况, 做对应的微调; PID参数整定 It's recommended to set it up under the guidance of the manufacturer. User modification is not recommended
	转速积分增益Ki	Rotor speed Ki	用于调节转速的感应时间, 根据经验值做调整, 需要在厂家指导下设置, 不建议用户修改 经验值, 无法具体量化, 需要整车的工况, 做对应的微调; PID参数整定 It's recommended to set it up under the guidance of the manufacturer. User modification is not recommended
	母线电流比例增益Kp	Bus current Kp	用于调节母线电流的感应时间, 根据经验值做调整, 需要在厂家指导下设置, 不建议用户修改 经验值, 无法具体量化, 需要整车的工况, 做对应的微调; PID参数整定 It's recommended to set it up under the guidance of the manufacturer. User modification is not recommended
	母线电流积分增益Ki	Bus current Ki	用于调节母线电流的感应时间, 根据经验值做调整, 需要在厂家指导下设置, 不建议用户修改 经验值, 无法具体量化, 需要整车的工况, 做对应的微调; PID参数整定 It's recommended to set it up under the guidance of the manufacturer. User modification is not recommended
	弱磁比例增益Kp	Flux weakening Kp	当电机有弱磁控制时, 用于调节弱磁的感应时间, 根据经验值做调整, 需要在厂家指导下设置, 不建议用户修改 经验值, 无法具体量化, 需要整车的工况, 做对应的微调; PID参数整定 It's recommended to set it up under the guidance of the manufacturer. User modification is not recommended
	弱磁积分增益Ki	Flux weakening Ki	当电机有弱磁控制时, 用于调节弱磁的感应时间, 根据经验值做调整, 需要在厂家指导下设置, 不建议用户修改 经验值, 无法具体量化, 需要整车的工况, 做对应的微调; PID参数整定 It's recommended to set it up under the guidance of the manufacturer. User modification is not recommended
电池	Battery	过压关断阈值(V) Over voltage shutdown threshold(V)	控制器最大工作电压, 超过此电压会过压关断 The maximum operating voltage of the controller, if over this voltage, the controller will be shutdown
	欠压限流阈值(V)	Under voltage limit threshold(V)	低于此电压, 控制器开始限流 Below this voltage, the controller starts to limit the current

		欠压关断阈值(V)	Under voltage shutdown threshold(V)	低于此电压, 控制器会停止工作。 欠压限流和欠压关断之间为线性限流, 电压越低电流越小	Below this voltage, the controller will be shutdown. It's linear current limit between under voltage limit and under voltage shutdown, the lower the voltage, the smaller the current
电机	Motor	电机类型	Motor type	BLCM: 方波 PMSM: 正弦波 ACIM: 预留	BLCM: square wave PMSM: sine wave ACIM: reserved
		额定转速(rpm)	Rated rotor speed(rpm)	预留 当打开弱磁功能时, 此转速为弱磁介入转速, 譬如设置为1600RPM, 当电机转速大于1600时, 弱磁功能开始运作。	Reserved
		极对数	Number of pole-pairs	控制器支持最高电气转速为9000rpm, 可设置极对数应满足: 最大转速*极对数≤9000	This controller supports a maximum electrical speed of 90,000 rpm. It should meet requirement: Maximum rotational speed * number of pole-pairs ≤ 90,000
		BEMF常数	BEMF constant	电机反电动势系数, 可自主学习识别	The back electromotive force coefficient of the motor, can be identified by self-learning
		Lq常数	Lq constant	预留	Reserved
		Ld常数	Ld constant	预留	Reserved
		主传感器类型	Main SPF sensor type	None: 无 Hall: 霍尔传感器 Encoder: 增量式编码器 (预留) Encoder/PWM: 带PWM信号的增量式编码器 (预留)	None: NA Hall: Hall sensor Encoder: Incremental encoder (reserved) Encoder/PWM: Incremental encoder with PWM signal (reserved)
		主传感器霍尔类型	Main SPF sensor placement	霍尔传感器类型: 60°、120°	Hall sensor type: 60°, 120°
		主传感器相移量(°)	Main SPF sensor phase shift(°)	传感器角度偏移量, 可自主学习识别	Sensor angle offset, can be identified by self-learning
		主传感器分辨率(PPR)	Main SPF sensor pulses per revolution(PPR)	编码器分辨率 (预留)	Encoder resolution (reserved)
		主传感器AB信号反向	Main SPF sensor revert A B signal	编码器AB信号反向 (预留)	Encoder AB signal inverted (reserved)
		主传感器滤波系数	Main SPF sensor input capture filter	传感器滤波系数: 0~15	Sensor filter coefficient: 0~15
		辅传感器类型	Aux SPF sensor type	None: 无 Hall: 霍尔传感器 Encoder: 增量式编码器 Encoder/PWM: 带PWM信号的增量式编码器	None: NA Hall: Hall sensor Encoder: Incremental encoder Encoder/PWM: Incremental encoder with PWM signal
		辅传感器霍尔类型	Aux SPF sensor placement	霍尔传感器类型: 60°、120° (预留)	Hall sensor type: 60°, 120° (reserved)
		辅传感器相移量(°)	Aux SPF sensor phase shift(°)	传感器角度偏移量, 可自主学习识别 (预留)	Sensor angle offset, can be identified by self-learning (reserved)
辅传感器分辨率(PPR)	Aux SPF sensor pulses per revolution(PPR)	编码器分辨率 (预留)	Encoder resolution (reserved)		
辅传感器AB信号反向	Aux SPF sensor revert A B signal	编码器AB信号反向 (预留)	Encoder AB signal inverted (reserved)		
辅传感器滤波系数	Aux SPF sensor input capture filter	传感器滤波系数: 0~15 (预留)	Sensor filter coefficient: 0~15 (reserved)		
PWM信号反向	SPF sensor invert PWM signal	带PWM信号的增量式编码器, PWM信号反向 (预留)	Incremental encoder with PWM signal, PWM signal inverted (reserved)		
电机温度传感器型号	Motor temperature sensor type	可选: None (无)、KTY84-130/150、PT1000、230K/B4537	Optional: None, KTY84-130/150, PT1000, 230K/B4537		
电机过温限流阈值(°C)	Motor over temperature limit threshold(°C)	电机高于此温度, 控制器开始限流	When the motor temperature is higher than this value, the controller starts to limit the current		
电机过温关断阈值(°C)	Motor over temperature shutdown threshold(°C)	电机高于此温度, 控制器停止工作。 过温限流和过温关断之间为线性限流, 温度越高电流越小	When the motor temperature is higher than this value, the controller will be shutdown. It's linear current limit between over temperature current limit and over temperature shutdown, the higher the temperature, the smaller the current		
加速器	Throttle	加速器类型	Throttle type	常规: 适用于常规加速器 单轴操纵杆: 适用于单轴操纵杆加速器 双轴操纵杆: 预留	Regular: for regular throttles Single-axis joystick: for single-axis joystick throttle Two-axis joystick: reserved
		加速器模式	Throttle mode	油门加速曲线: 线性、舒适、运动	Throttle acceleration curve: linear, comfortable, sports
		上电防飞车使能	Throttle not reset check enable	使能时, 上电油门加速器信号有效, 控制器不工作, 防止飞车	When enabled, if the throttle signal is valid when the power is on, the controller does not work to prevent danger
		主加速器最小故障阈值(mV)	Main throttle min fault threshold(mV)	油门加速器输出电压低于此阈值时报主加速器故障	When throttle output voltage is lower than this threshold, the main throttle failure will be reported
		主加速器最小有效阈值(mV)	Main throttle min reference threshold(mV)	油门加速器有效电压起始值	Throttle valid voltage starting value
		主加速器最大有效阈值(mV)	Main throttle max reference threshold(mV)	油门加速器有效电压终止值	Throttle valid voltage end value
		主加速器最大故障阈值(mV)	Main throttle max fault threshold(mV)	油门加速器输出电压高于此阈值时报主加速器故障	When throttle output voltage is higher than this threshold, the main throttle failure will be reported
		辅助加速器最小故障阈值(mV)	Aux throttle min fault threshold(mV)	线性刹车输出电压低于此阈值时报辅助加速器故障 (预留)	When the linear brake output voltage is lower than this threshold, auxiliary throttle failure will be reported (reserved)
		辅助加速器最小有效阈值(mV)	Aux throttle min reference threshold(mV)	线性刹车有效电压起始值 (预留)	Linear brake valid voltage starting value (reserved)
		辅助加速器最大有效阈值(mV)	Aux throttle max reference threshold(mV)	线性刹车有效电压终止值 (预留)	Linear brake valid voltage end value (reserved)
辅助加速器最大故障阈值(mV)	Aux throttle max fault threshold(mV)	线性刹车输出电压高于此阈值时报辅助加速器故障 (预留)	When the linear brake output voltage is higher than this threshold, auxiliary throttle failure will be reported (reserved)		
档位	Gear	方向正反	Direction positive or negative	档位和实际前进倒车方向相反时, 选择反切换	When the gear position is opposite to the actual forward and reverse direction, select reverse shift
		N档使能	Neutral gear enable	禁止: 倒车线和GND断开为前进, 短接为倒车使能; 前进线和GND短接同时倒车线和GND断开为前进; 前进线和GND断开同时倒车线和GND短接为倒车; 前进线、倒车线和GND同时断开空挡	Disable: Disconnect reverse line and GND to move forward, and connect to reverse. Enable: Connect forward line and GND while disconnect reverse line and GND to move forward; Disconnect forward line and GND while connect reverse line and GND to reverse; Disconnect forward line, reverse line and GND at the same time for neutral
		三速模式	Gear mode	换挡: 高速线和GND短接同时低速线和GND断开为高速档; 高速线和GND断开同时低速线和GND短接为低速档; 高速线、低速线和GND同时断开为中速档 点动: 高速线和GND接弹性开关, 每按一次开关挡位加一, 挡位在低速、中速、高速循环 加速: 高速线和GND接弹性开关, 每按一次开关挡位加一, 最高加到高速档不变; 减速: 低速线和GND接弹性开关, 每按一次开关挡位减一, 最高减到低速档不变	Shift gear: Connect high-speed line and GND while disconnect low-speed line and GND for high-speed gear; Disconnect high-speed line and GND while connect low-speed line and GND for low-speed gear; Disconnect high-speed line, low-speed line and GND at the same time for middle-speed gear Jogging: Connect high-speed line and GND by elastic switch, each time the switch is pressed, the gear will increase by one, and the gear is cycled between low speed, middle speed and high speed Increase & decrease: Connect high-speed line and GND by elastic switch, each time the switch is pressed, the gear will increase by one, and the maximum increase to high-speed gear then remain unchanged; Connect low-speed line and GND by elastic switch, each time the switch is pressed, the gear will decrease by one, and the maximum decrease to low-speed gear then remain unchanged
三速默认档位	Default gear	三速模式为点动或加速时, 控制器上电时的默认档位	The default gear when the controller is powered on when the gear mode is jogging or increase & decrease		
		P档模式	Parking gear mode	P档线和GND接弹性开关, P档使能时, 按P档开关开启或解除P档; P档有效时控制器不工作 禁止: P档禁止 上电无效: P档使能, 上电时P档无效 上电有效: P档使能, 上电时P档有效, 按P档解除P档 上电刹车解锁: P档使能, 上电时P档有效, 刹车解除P档	Connect P gear line and GND by elastic switch, when P gear function is enabled, press the switch to activate or release P gear, the controller does not work when P gear is valid Disable: P gear is disabled Power-on invalid: P gear is enabled, P gear is invalid when power on. Power-on valid: P gear is enabled, P gear is valid when power is on, press the switch to release the P gear Power-on brake unlock: P gear is enabled, P gear is valid when power is on, and the brake releases the P gear
		S档相电流比例(%)	Sport gear phase current ratio(%)	S档对应最大相电流百分比	Percentage of the maximum phase current at sport gear
		高速档相电流比例(%)	High gear phase current ratio(%)	高速档对应最大相电流百分比	Percentage of the maximum phase current at high gear
		中速档相电流比例(%)	Middle gear phase current ratio(%)	中速档对应最大相电流百分比	Percentage of the maximum phase current at middle gear
		低速档相电流比例(%)	Low gear phase current ratio(%)	低速档对应最大相电流百分比	Percentage of the maximum phase current at low speed
		倒车档相电流比例(%)	Reverse gear phase current ratio(%)	倒车档对应最大相电流百分比	Percentage of the maximum phase current at reverse gear
		S档转速比例(%)	Sport gear rotor speed ratio(%)	S档对应最大转速百分比	Percentage of the maximum rotor speed at sport gear
		高速档转速比例(%)	High gear rotor speed ratio(%)	高速档对应最大转速百分比	Percentage of the maximum rotor speed at high gear
		中速档转速比例(%)	Middle gear rotor speed ratio(%)	中速档对应最大转速百分比	Percentage of the maximum rotor speed at middle gear
		低速档转速比例(%)	Low gear rotor speed ratio(%)	低速档对应最大转速百分比	Percentage of the maximum rotor speed at low gear
		倒车档转速比例(%)	Reverse gear rotor speed ratio(%)	倒车档对应最大转速百分比	Percentage of the maximum rotor speed at reverse gear
		S档母线电流比例(%)	Sport gear bus current ratio(%)	S档对应最大母线电流百分比	Percentage of the maximum bus current at sport gear
		高速档母线电流比例(%)	High gear bus current ratio(%)	高速档对应最大母线电流百分比	Percentage of the maximum bus current at high gear
		中速档母线电流比例(%)	Middle gear bus current ratio(%)	中速档对应最大母线电流百分比	Percentage of the maximum bus current at middle gear
		低速档母线电流比例(%)	Low gear bus current ratio(%)	低速档对应最大母线电流百分比	Percentage of the maximum bus current at low gear
倒车档母线电流比例(%)	Reverse gear bus current ratio(%)	倒车档对应最大母线电流百分比	Percentage of the maximum bus current at reverse gear		
弱磁	Flux Weakening	弱磁电流	Flux weakening current(A)	弱磁电流	Weak magnetic current
		弱磁参考比例(%)	Flux weakening reference ratio(%)	弱磁介入比例	The proportion of weak magnetic intervention
EBS	EBS	EBS电流(A)	EBS reference current(A)	EBS最大电流, 电流越大刹车越厉害	EBS maximum current, the bigger the current, the more powerful the brake
		EBS电压(V)	EBS max voltage(V)	EBS最高电压, 高于此电压会停止EBS	EBS maximum voltage, higher than this voltage will stop EBS
		EBS转速(rpm)	EBS min rotor speed(rpm)	EBS最低转速, 低于此转速会停止EBS	EBS minimum speed, below this speed will stop EBS
		EBS自动模式使能	EBS auto mode enable	使能时, 松油门自动开启EBS	When enabled, releasing the throttle will automatically turn on EBS
驻车	Hold	驻车电流(A)	Hold current(A)	预留	Reserved
		防滑坡使能	ARB enable	预留	Reserved

自学习	Self-learning	自学习参考值D	Self-learning reference D	D轴自学习参数	D-axis self-learning parameters
		自学习参考值Q	Self-learning reference Q	Q轴自学习参数	Q-axis self-learning parameters
仪表	Meter	仪表类型	Meter type	可选：一线通、霍尔	Optional: One Line, Hall
		转速脉冲数 (PPR)	Rotor speed pulses per revolution(PPR)	霍尔仪表模式时，电机转一圈输出的脉冲数	In the Hall meter mode, the number of pulses output by the motor for one revolution
		轮胎直径(cm)	Tire diameter(cm)	用于计算上位机显示速度	Used to calculate the speed displayed on upper computer
		速比(%)	Transmitting ratio(%)	变速箱速比，用于计算上位机显示速度	Transmission speed ratio, used to calculate the speed displayed on upper computer
		速度单位	Speed unit	可选：km/h、mph；上位机显示速度单位	Optional: km/h, mph, unit of speed displayed on upper computer
		速度校正系数(%)	Speed factor(%)	用于速度校准	For speed calibration
通信	Communication	蓝牙使能	Bluetooth enable	预留	Reserved
		蓝牙登录密码	Bluetooth login password	默认串号SN后11位	可修改密码 The last 11 digits of SN by default
		RS485通信协议	RS485 communication protocol	1: MODBUS	1: MODBUS
		CAN通信协议	CAN communication protocol	1: 控制器与仪表CAN通信协议 2: 控制器与整车控制器CAN通信协议	根据客户实际需求，选择对应的通信协议 则需要选择对应的1或者2 1: CAN communication protocol between controller and meter 2: CAN communication protocol between controller and the vehicle controller
直流接触器	Line contactor	控制器编号	Part number	设置控制器ID	Set up the controller ID
		直流接触器模式	Contactor mode	LCOM: 直流接触器模式 RCOM: 倒车挡接触器吸合 控制器过温接触器吸合 电机过温接触器吸合 控制器或电机过温接触器吸合	如字面意思 LCOM: line contactor mode RCOM: reverse gear contactor on controller over temperature contactor on motor over temperature contactor on controller or motor over temperature contactor on
		线圈电压(V)	Contactor coil voltage(V)	直流接触器线圈电压	默认是电池额定电压 Line contactor coil voltage
		控制器过温吸合阈值(°C)	Controller over temperature threshold contactor on(°C)	控制器过温接触器吸合温度阈值	当接触器作为控制器的类似温度传感器使用 Controller over temperature contactor on temperature threshold
		电机过温吸合阈值(°C)	Motor over temperature threshold contactor on(°C)	电机过温接触器吸合温度阈值	当接触器作为电机的类似温度传感器使用 Motor over temperature contactor on temperature threshold
		蜂鸣器	Buzzer	蜂鸣器使能	Buzzer enable
厂家参数	Factory settings			厂家参数，用户不能修改	Factory parameters, cannot be modified by users

YTK CO.,LTD.
info@ytk-group.co.jp
Http://www.ytk-group.co.jp