Easy Setting

0:General

Para	Description	Unit	Value
P00.00	Def para Sel	-	1
P00.01	Ctrl Mode	-	5
P00.02	Cmd Channel Sel	-	1
P00.03	Spd Channel Sel	-	1
P00.04	M-Rated Cur	A	18
P00.05	M-Rated Freq	Hz	50
P00.06	M-Rated Speed	rpm	1460
P00.07	M-Rated Voltage	V	380
P00.08	M-Rated Slip	Hz	1.40
P00.09	M-No load Current	%	32.00
P00.10	M-Poles Num	-	4
P00.11	M-Rated Power	kw	7.5
P00.12	Motor Type	-	0(IM)
P00.13	Encoder Type	-	0(ABZ)
P00.14	Encoder Pulses	ppr	1024
P00.15	Enc Pos Angle	Deg	0.0
P00.16	Enc Filter Time	ms	0
P00.17	Enc Dir	-	1
P00.18	Power AuTn	-	0
P00.19	Motor I Gain	%	260
P00.20	Password	-	0
P00.21	Password	-	0

1:Spd References

Para	Description	Unit	Value
P01.00	Spd Reference1	Hz	5
P01.01	Spd Reference 2	Hz	0
P01.02	Spd Reference 3	Hz	12.5
P01.03	Spd Reference 4	Hz	50
P01.04	Spd Reference 5	Hz	0
P01.05	Spd Reference 6	Hz	0
P01.06	Spd Reference 7	Hz	0

2:PID

Para	Description	Unit	Value
P02.00	ASR Kp(Zero)	-	100.00
P02.01	ASR Ki(Zero)	-	120.00
P02.02	ASR Kd(Zero)	-	0.50
P02.03	ASR Kp(Low)	-	70.00
P02.04	ASR Ki(Low)	-	30.00
P02.05	ASR Kd(Low)	-	0.50
P02.06	ASR Kp(Middle)	-	120.00
P02.07	ASR Ki(Middle)	-	25.00
P02.08	ASR Kd(Middle)	-	0.20
P02.09	ASR Kp(High)	-	140.00
P02.10	ASR Ki(High)	-	5.00
P02.11	ASR Kd(High)	-	0.1
P02.12	L-M Sw- Freq	%	1.0
P02.13	M-H Sw- Freq	%	60.0
P02.14	Spd Loop	ms	1
P02.15	ACR Kp	-	1.40
P02.16	ACR Ki	-	1.00
P02.17	ACR Kd	-	0.00

3: Acc&Dec Ramp

Para	Description	Unit	Value
P03.00	Acc Time Ta0	s	3.00
P03.01	Dec Time Td0	s	2.00
P03.02	Acc Corner Ts0	s	3.20
P03.03	Acc Corner Ts1	s	2.20
P03.04	Dec Corner Ts2	s	1.20
P03.05	Dec Corner Ts2	s	1.80
P03.06	Slow Stop Sel	-	0.00
P03.07	Stop Sel	-	0.00
P03.08	Dec Time Td1	s	5.00
P03.09	Inspection Spd	-	0.00
P03.10	Dec Time Td3	s	1.00

4: Start&Stop

Para	Description	Unit	Value
P04.00	Magnetic Time	s	0.4
P04.01	Zero Servo Time	s	0.8
P04.02	Cur Slow Dec Time	s	0.00
P04.03	MC On delay	s	0.8
P04.04	Brake On Delay	s	0.4
P04.05	MC Off Delay	s	0.5
P04.06	Brake Off Delay	s	0.1
P04.07	PWM Off Delay	s	0.6
P04.08	Zero Spd Thred	Hz	0.20
P04.09	Decel Stop	-	1

5: DI&DO

Para	Description	Unit	Value
P05.00	Di0 Func	-	0
P05.01	Di1 Func	-	16
P05.02	Di2 Func	-	3
P05.03	Di3 Func	-	4
P05.04	Di4 Func	-	5
P05.05	Di5 Func	-	135
P05.06	Di6 Func	-	7
P05.07	Di7 Func	-	8
P05.08	K0 Func	-	18
P05.09	K1 Func	-	17
P05.10	Y0 Func	-	3
P05.11	Y1 Func	-	102
P05.12	Y2 Func	-	14
P05.13	Y3 Func	-	0
P05.14	K0 On Delay	s	0.0
P05.15	K0 Off Delay	s	0.5
P05.16	K1 On Delay	s	0.0
P05.17	K1 Off Delay	s	0.0

6: AI&AO

Para	Description	Unit	Value
P06.00	AI0 Func	-	0
P06.01	AI1 Func	-	0
P06.02	M0Func	-	1
P06.03	M1 Func	-	2

7: Emergency Mode

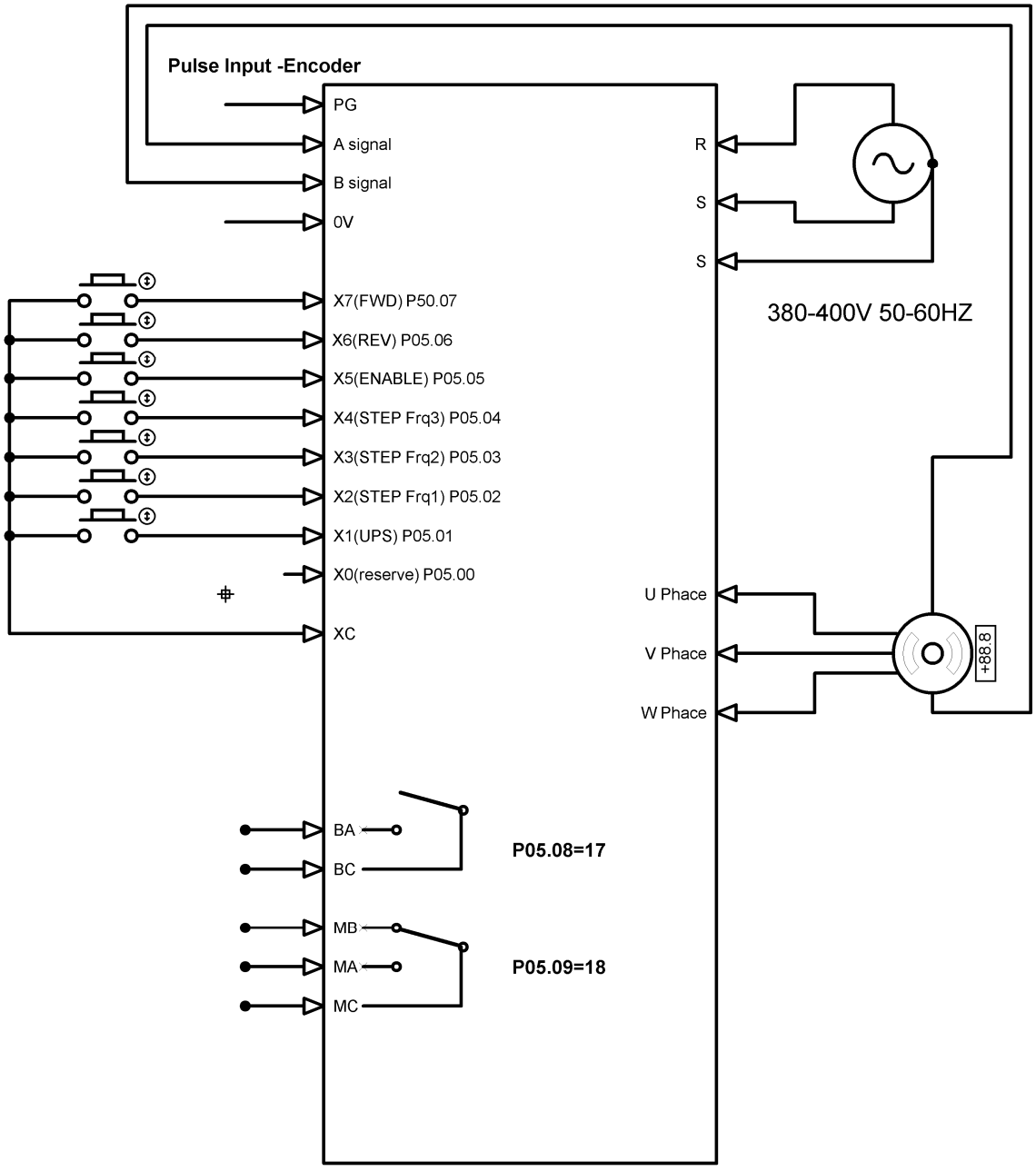
Para	Description	Unit	Value
P07.00	Battery Voltage	V	48
P07.01	Emerg Speed Ref	Hz	3.00

8: Limit&Protect

Para	Description	Unit	Value
P08.00	Freq max	Hz	50.00
P08.01	Freq Min	Hz	0.00
P08.02	Torq Max	%	185
P08.03	Acc OC Threshold	%	180
P08.04	OC Value Low Spd	%	150.0
P08.05	OC Time Low Spd	s	10.0
P08.06	OC Value High Spd	%	150.0
P08.07	OC Time High Spd	s	10.0
P08.08	PWM Carrier Freq	kHz	8
P08.09	Door Zone Freq	Hz	0.0

9: Information

Para	Description	Unit	Value
P09.00	Inv Rated Power	kW	7.5
P09.01	Inv Rated Cur	-	18.0
P09.02	IGBT Module	A	50
P09.03	Fault Rst Time	s	10.0
P09.04	Num Auto Rst	-	3
P09.05	Max Temp	C	0
P09.06	Software Ver	-	108.04
P09.07	Power-On Time	h	0
P09.08	Total Run Time	h	0


Pulse Input -Encoder
PG
A signal
B signal
0V
R
S
S
380-400V 50-60HZ
X7(FWD) P50.07
X6(REV) P05.06
X5(ENABLE) P05.05
X4(STEP Frq3) P05.04
X3(STEP Frq2) P05.03
X2(STEP Frq1) P05.02
X1(UPS) P05.01
X0(reserve) P05.00
XC
U Phace
V Phace
W Phace
BA
BC
P05.08=17
MB
MA
MC
P05.09=18

Fault code	Fault display	Possible reason	Solution
1	Module over-current protection	Too high voltage at DC terminal	Check network power for fast stop under high inertia load, no dynamic braking
		Possible short connection to peripheral circuit	Check any short circuit between motor and output connection, grounding
		The power circuit components overheat due to	Check the cooling fan. Check whether the cooling fan power is blocked by dirt or foreign object.
		Losing output phase	Check any loose connection for motor and output
		Encoder fault	Check encoder or its wiring
		Hardware poor contact or damage	Need maintenance by professional technician
		Internal component loose	Need maintenance by professional technician
		Warning: The inverter must started only after eliminating the malfunction causes, avoiding the damage to IGBTs	
2	ADC fault	Current sensor damaged	Replace current sensor
		Problem of current sampling loop	Replace control board
3	Heatsink overheat	Ambient temperature too high	Reduce ambient temperature, increase ventilation. Keep the surrounding temperature below 40 ℃ or according to this character to test the capacity of the inverter.
		The cooling fan damaged or foreign object entered into the cooling system.	Check whether the fan power cable is well connected, or replace the same model fan or remove the foreign objects.
		Cooling fan is abnormal	Check the cooling fan. Check whether the cooling fan power is correct and whether there is any foreign object blocking the fan.
		Temperature detect circuit fault	Need maintenance by professional technician
4	Braking unit failure	Braking unit damaged	Replace related driving module or control circuit board
		External braking resistor circuit short	Replace the resistance or the wiring connection
5	Blown fuse failure	Fuse blown by high current	Check the fuse circuit connection, or looseness of connectors
		Too low input voltage	Check input power supply

6	Over torque output	Motor stop rotating or abrupt loading change	Prevent motor stopping, reduce abrupt loading change
		Encoder failure	Check encoder or its wiring
		Missing output phase	Check the loose connection of motor and output wiring
7	Speed deviation	Too short acceleration time	Extend acceleration time
		Too high load	Reduce load
		Too low current limit	Increase current limit under allowed range
8	Bus over voltage protection (in acceleration running)	Abnormal input voltage	Check input power supply
		Re-rapid starting during motor in high speed rotating	Wait till motor stop rotating, and re-start

	Bus over voltage protection (in deceleration running	Too high load rotational inertia	Select proper energy consumed braking component
		Too short deceleration time	Extend deceleration time
		Too high braking resistance or no resistor	Connect proper braking resistor
	Bus over voltage protection (running at constant speed)	Abnormal input power	Check input power supply
		Too large load rotational inertia	Select proper energy consumed braking component
		Too high braking resistance or no resistor	Connect proper braking resistor
9	Bus undervoltage	Power voltage lower than minimum equipment working voltage	Check input power supply
		Instantaneous power off	Check input power supply, reset and restart after input power back to normal
		Too high fluctuation of input power voltage	
		Loose power connection block	Check input wiring
		Internal switch power abnormal	Need maintenance by professional technician
		A large starting current load existing in the same power supply system	Alter power system to conform the specification

10	Loss of output phase	Abnormal wiring at inverter output, missing or breaking connection	Check wiring at inverter output side based on operation procedure, eliminate missing, breaking connection
		Loose output terminal block	
		Insufficient motor power, less than 1/20 of maximum applicable inverter motor capacity	Adjust the capacity of inverter or motor
		Unbalanced three phase output	Check the motor wiring
			Check the consistency of characteristic of inverter output side and DC side terminals
11	Motor over current at low speed (during acceleration)	Low network voltage	Check input power supply
		Improper motor parameter setting	Set proper motor parameters
		Rapid start during motor running	Restart after motor stop running
		The acceleration time for load inertia (GD2) is too short.	Extend the acceleration time
	Motor over current at low speed (during deceleration)	Low network voltage	Check input power supply
		Too large load rotational inertia	Select proper energy consumed braking component
		Improper motor parameter setting	Set proper motor parameters
		Too short deceleration time	Extend deceleration time
		The deceleration time for load inertia (GD2) is too short	Prolong the slowdown time
	Motor over current at low speed (during constant speed)	Abrupt load change in running	Reduce frequency and amplitude of abrupt load change
		Improper motor parameter setting	Set proper motor parameters
		Incorrect encoder connection	Correct wiring encoder
		Encoder no signal output	Check encoder and power supply

12	Encoder failure	Encoder wire disconnected	Re-connect
		Abnormal function code setting	Ensure the proper encoder function code setting
13	Current detected at stopping	Current keep on flowing while motor stops	Slip happens by synchronous motor
			Need maintenance by professional technician
14	Reversed speed during operation	Reversed speed during operation	Check the abrupt change of external load
		Phase differed between encoder and motor	Change motor or phase order
		Motor reversed by starting, current reaches the limit	Current limitation is too low or motor unmatched
15	Speed detected at stopping	Elevator slip due to loose brake	Check brake
		Encoder interfered or loose	Tighten encoder, eliminate interference
16	Wrong motor phase	Motor reversed connected	Correct connection or adjust parameter

17	Over speed in the same direction (in maximum allowed speed)	Synchronous motor over speed by loss of excitation	Check motor
		Wrong angle self-learning for synchronous motor	Re-do the self-learning
		Wrong encoder parameter or interference	Check encoder circuit
		Too large positive load or abrupt load change	Check the reason for abrupt load change
18	Over speed in opposite direction (in maximum allowed speed)	Synchronous motor over speed by loss of excitation	Check motor
		Wrong angle self-learning for synchronous motor	Re-do the self-learning
		Wrong encoder parameter or interference	Check encoder circuit
		Too large reversed load or abrupt load change	Check the reason for abrupt load change
19	UVW encoder wrong phase order	Incorrect encoder connection or wrong parameter	Check connection or change parameter

20	Encoder communication fault	Encoder fault	Check encoder wiring and re-do encoder self-learning
21	abc over current (3 phase instantaneous value)	Motor single phase shorted to earth	Check motor and output circuit
		Encoder fault	Check encoder and correct wiring
		Test loop of drive board fault	Replace drive board
22	Brake detection fault	Inactive output relay	Check relay control loop
		Relay triggered, brake not released	Check the brake power string for loosening or breaks
		No signal detected by feedback component	Tune feedback component
23	Input over-voltage	Too high input voltage	Check whether input voltage matches inverter rating
		Problem by detection loop of switch voltage	Need maintenance by professional technician
24	UVW encoder wire broken	Encoder wiring fault	Wiring block loose or wire broken in connection
25	Reserved for future use		

26	Encoder no self-learning	Encoder angle not learned by synchronous motor	Do an encoder self-learning
27	Output over current (valid value)	Too long time operation under overload status. The larger the load, the shorter the time is.	Stop for a while, if problem occurs again after re-operation, check to ensure the load in allowed range.
		Motor blocked	Check motor or brake
		Motor coil short	Check motor
		Output short	Check wiring or motor
28	SIN/COS encoder fault	Damaged encoder or wrong wiring	Check encoder and its wiring
		Abnormal voltage at input side	

29	Loss input phase	Loss input voltage phase	Check grid voltage
		Input terminal block loose	Check input terminal wiring
30	Over speed protection (exceed maximum protected speed limit)	Wrong encoder parameter set or interference	Check encoder circuit
		Abrupt load change	Check the external reason for abrupt load change
		Wrong parameter for over speed protection	Check parameter
31	Over current at motor high speed	Power grid voltage too low	Check input power supply
		Abrupt load in operation	Reduce frequency and amplitude of abrupt load change
		Incorrect motor parameter	Set motor parameter correctly
		Wrong encoder parameter or interference	Check encoder circuit
32	Grounding protection	Wrong wiring	Refer to user manual, correct the wrong wiring
		Abnormal motor	Replace motor, to have a grounding isolation test first
		Large drain current to earth at inverter output side	Need maintenance by professional technician
33	Capacitor aged	Inverter capacitor aged	Need maintenance by professional technician

34	External fault	External fault signal input	Check the reason for external fault
35	Unbalance output	Abnormal wiring at inverter output side, missing or broking connection	Check inverter output side wiring follow the operation procedure, eliminate possible missing, broking connection
		Motor three phase unbalance	Check motor
36	Wrong parameter setting	Wrong parameter setting	Modify inverter parameter
37	Current sensor fault	Drive board hardware fault	Need maintenance by professional technician
38	Brake resistor short	Connection of external brake resistor short	Check the wiring of brake resistor
39	Too high instantaneous current	Three phase instantaneous current over and alarm while Ia, Ib and Ic not in operation	Need maintenance by professional technician

40	KMY detection fault	KMY detect contactor signal and KMY control signal don't match	Check the contactor of KMY control and KMY detection
41	Brake switch detection fault	Brake switch detect contactor signal and its control signal don't match	Check brake switch
42	IGBT short circuit protection	She cause is the same as Fualt 1.	Check short circuit for motor and output wiring, grounding
44	The input power supply is abnormal		
		1. The input power supply changes a lot 2. Input contactor abnormally connected 3. Temporary electricity	1. Check the power supply 2. Check input contactor
45	I2t instantaneous over current protection	Same as fault 21,27	Same as fault 21,27
46	I2t valid over current protection		