


Function code	Name	Description	Range	Default
P48.02	Encoder type display	0: Invalid 1: Incremental encoder 2: Resolver-type encoder 3: Sin/Cos encoder 4: Endat absolute encoder 5: Incremental encoder with UVW	0-5	0
P48.03	Encoder pulse count (pulse-per-revolution)	0-60000	0-60000	1024
P48.66	Handling mode of PG card disconnection fault	0: Fault 1: Alarm (Used during open/closed loop switchover) 2: Ignore	0-2	0

X3 terminal	Terminal definition	Description	Specifications
X3-6	PWR	Encoder power	Voltage: 5V \pm 5% Max. output current: 150mA
X3-5	GND		Encoder power ground
X3-4	KTY84/PTA	KTY84/PT100 temperature sensor interface	When the KTY84 or PT100 two-wire system is used, short circuit PTB and PTC. (They are short connected by default.) When the PT100 two-wire system is used, PTB and PTC do not need to be shorted.
X3-3	PTB	PT100 temperature sensor interface	
X3-2	PTC	PT100 temperature sensor interface	
X3-1	PE	Grounding terminal	

X4	Terminals	Specifications
X4-6	IA+	Encoder interface: Eight-core shielded twisted-pair cable is recommended.
X4-5	IA-	
X4-4	IB+	
X4-3	IB-	
X4-2	IZ+	
X4-1	IZ-	

Interface definition	X1 frequency-divided output interface pin	X2 pulse reference interface pin
	X1-1: OA+	X2-1: IA1+
	X1-2: OA-	X2-2: IA1-
	X1-3: OB+	X2-3: IB1+
	X1-4: OZ+	X2-4: IZ1+
	X1-5: OZ-	X2-5: IZ1-
	X1-6: OB-	X2-6: IB1-
	X1-7: GND	X2-7: GND
	X1-8: n/c	X2-8: +5V

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graph TD
    Start([Start]) --> Step1[Confirm the slot position of the PG module.]
    Step1 --> Step2[Confirm that the encoder interface cable is correctly connected.]
    Step2 --> Step3[Power on the control box.]
    Step3 --> Step4[Set the function code P48.00 to 0-8 according to the slot position.]
    Step4 --> Decision1{Check P48.02 to confirm whether the encoder type is 1: incremental encoder.}
    Decision1 -- N --> Step1
    Decision1 -- Y --> Decision2{Check P48.01 to confirm whether the encoder status is 1: online.}
    Decision2 -- N --> Step1
    Decision2 -- Y --> Step5[Check P48.03 (encoder pulse count).]
    Step5 --> Decision3{Check whether the STATUS indicator is green (flashing).}
    Decision3 -- N --> Step1
    Decision3 -- Y --> End([End])
  
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Function code	Name	Description	Range	Default
P48.00	Module slot enabling	0: SLOT1 1: SLOT2 2: SLOT3 3: SLOT2-1 4: SLOT2-2 5: SLOT2-3 6: SLOT3-1 7: SLOT3-2 8: SLOT3-3 9: Invalid	0-9	9
P48.01	Module online status	Bit0- Bit8 Module online status of expansion slot 1 0: Offline 1: Online	0-1	0x000

