

GSK991/GSK992

Connection Manual

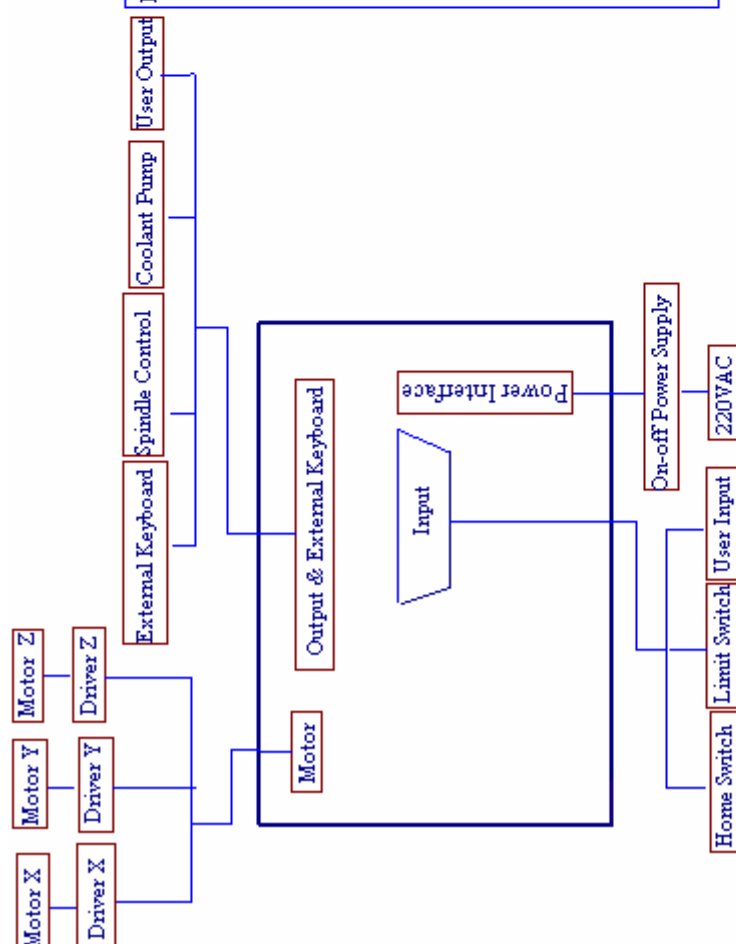
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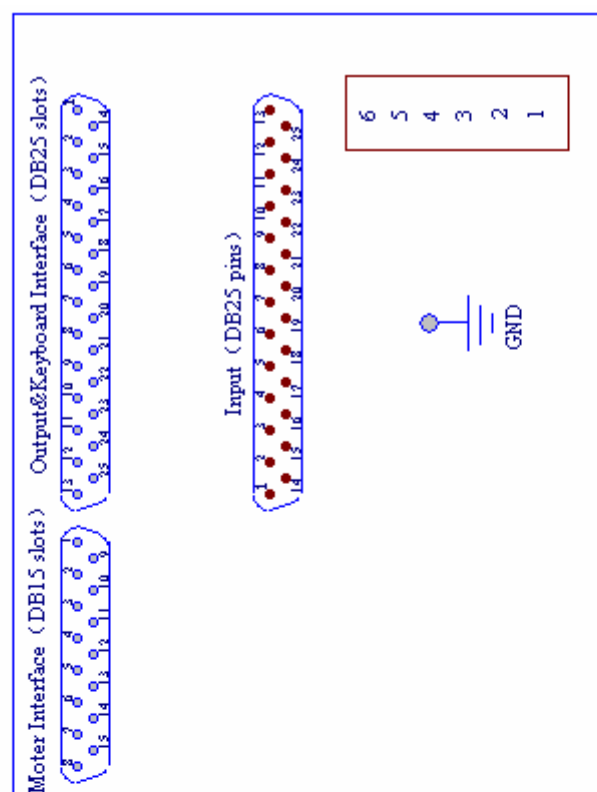
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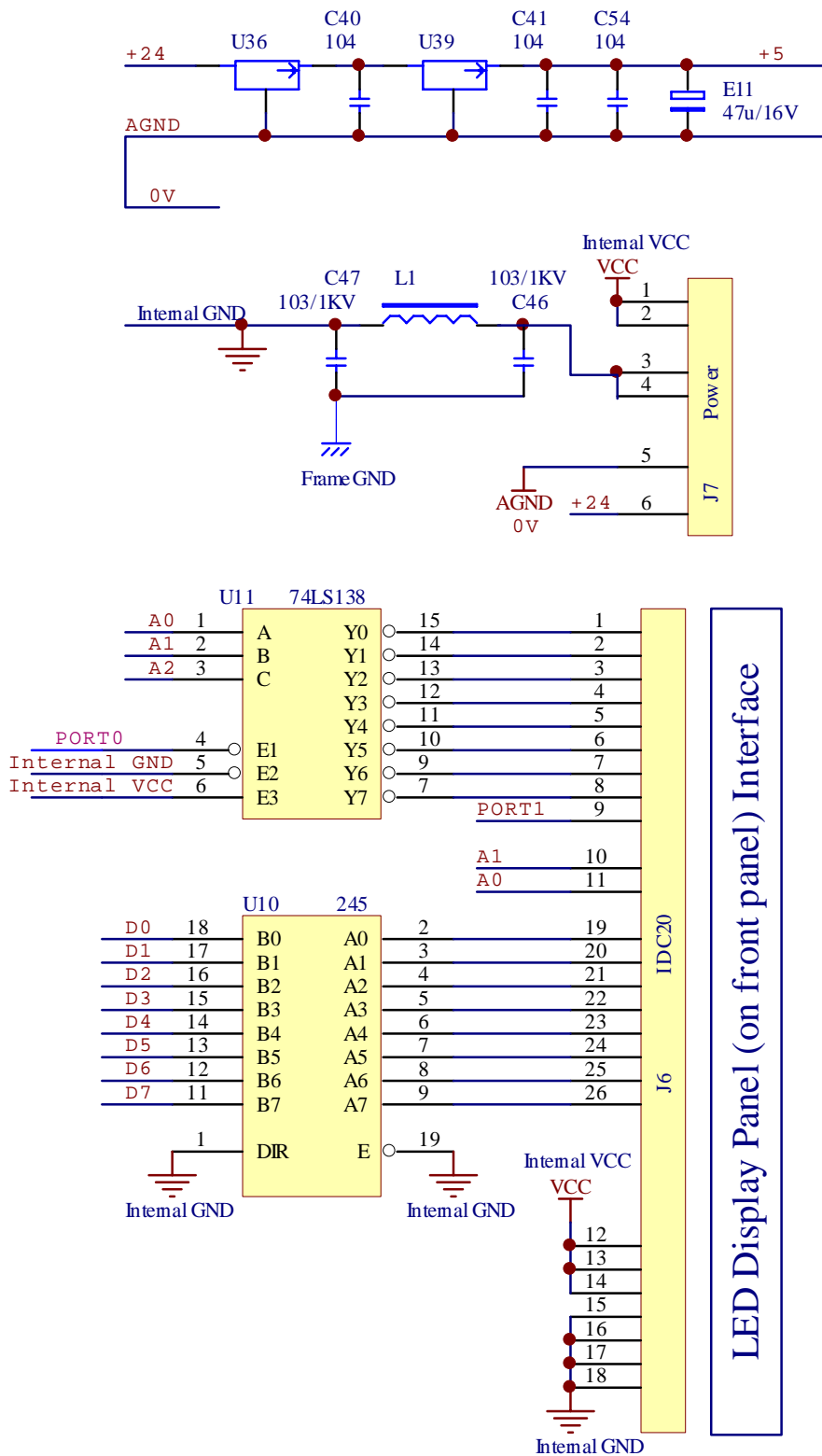
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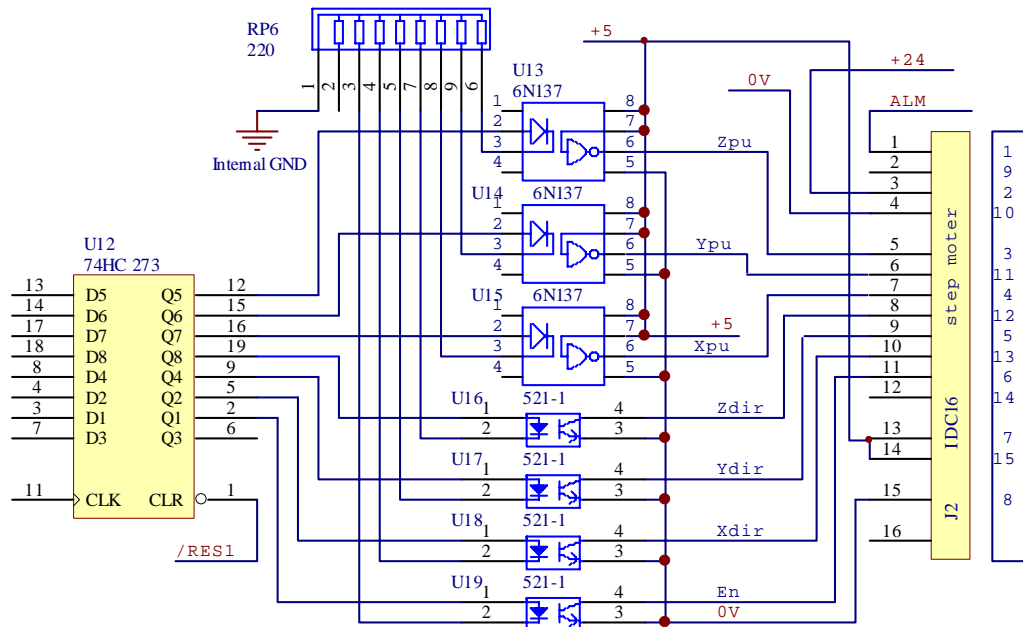
1--GSK991, 992 Connection Sketch



2--GSK991, GSK992 Interface Layout



3--LED Interface and Power Interface

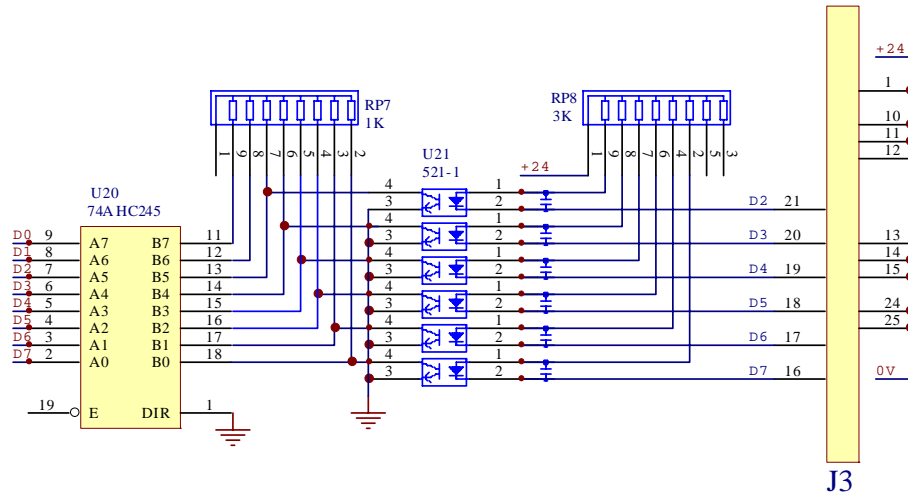


Driver Interface (DB 15 slots)

1	Alm	Driver Alarm	9	
2	+24V		10	0v
3	Zpu	Z Axis Pulse	11	Ypu Y Axis Pulse
4	Xpu	X Axis Pulse	12	Zdir Z Axis Direction
5	Ydir	Y Axis Direction	13	Xdir X Axis Direction
6	En	Power Amplifier	14	
7	+5v		15	+5V
8	0v			

Alm : Driver Alarm En: Power Amplifier (shared by three axes)

4--Driver Interface Schematic Diagram



All signals input are valid with low level , namely there has signal input when it making 0V signal

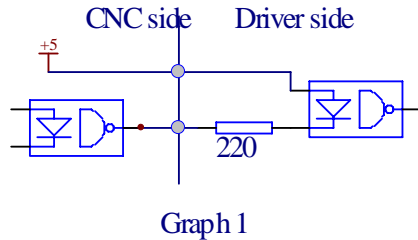
Signal Input Interface (DB 25 pins)

991		992		991		992	
1	+24			14			
2				15			
3				16			
4				17			
5				18	+24		
6	+24			19	+24		
7	0V			20	0V		
8	0V			21	(ALM) Driver alarm	(ALM) Driver alarm	
9	(PC) Speeddown reset	(-L) Negative limit		22	(-L) Negative limit	(+L) Positive limit	
10	(+L) Positive limit	(PCX) X Axis speeddown reset		23	(U2) No.2 User input	(PCY) Y Axis speeddown reset	
11	(U1) No.1 User input	(PCZ) Z Axis speeddown reset		24			
12				25	0V		
13	0V						

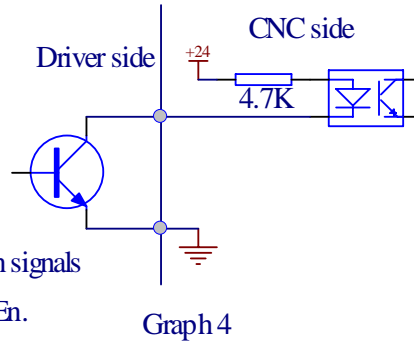
Alm driver alarm signal has been connected to the driver interface of motor

6--Signal Input Interface Schematic Diagram

The interface schematic of the axes motion signals Xpu, Ypu, Zpu .

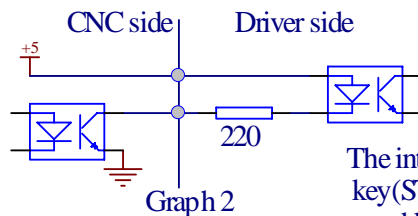


The interface schematic of driver alarm(Alm) (Its validity is defined by bit D4 of parameter P0) is showed by the graph 4

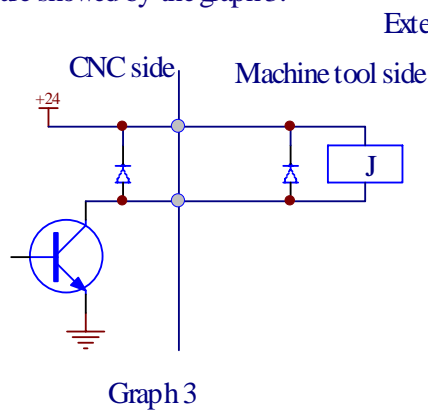


The interface schematic of axes motion direction signals

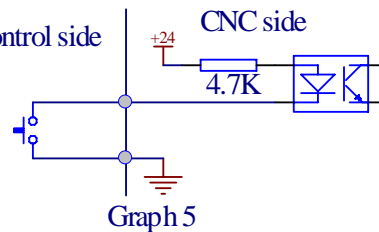
Xdir, Ydir, Zdir, Amplifier (enable) signals En.



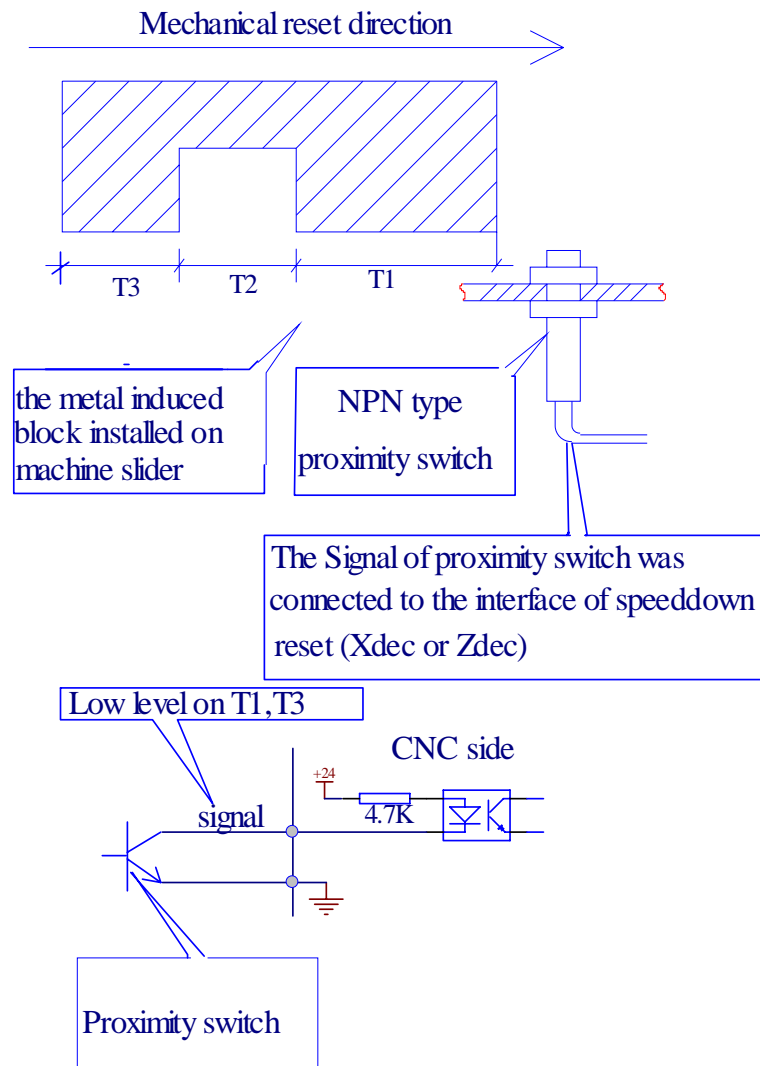
The interface schematic of user output UO1,UO2,coolant switch M8/M9, spindle switch(M3,M4, M5) are showed by the graph 3.



The interface schematic of external start key(ST), pause key(SP), mechanical limited speeddown reset, user input (switch-on is valid: external signal should be conneted to normal open contacts, when anyone of the contacts switches on, the correlative signal was sent)



7--GSK991,GSK992 Interface Schematic Diagram

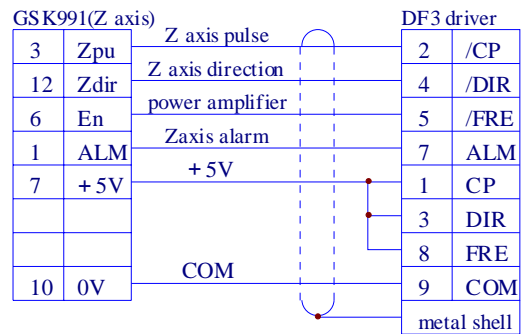


Description

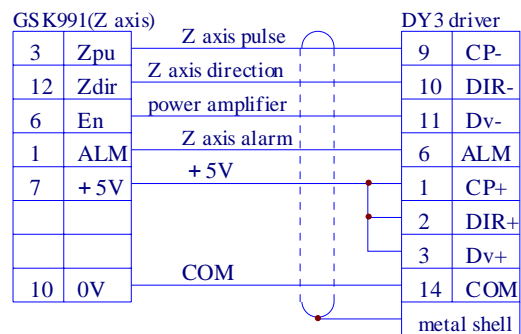
When Mechanical reset is executed, slider moves positively, the Proximity switch is turn on by T1 part of metal induced block. It must be paid attention to that the width of T1 should be not less than 25mm, to finish the speeddown reset; the mechanic point is looking for in T2 with the lowest speed. The width of T2 should be bigger than the measurement diameters of the proximity switch; T3 is the end of reset. It is valid at the front edge. The proximity switch is NPN type. It is turned on in T1, T3. It's turned off in T2 or others.

8--Mode of Returning Mechanical Zero for GSK991 and GSK992

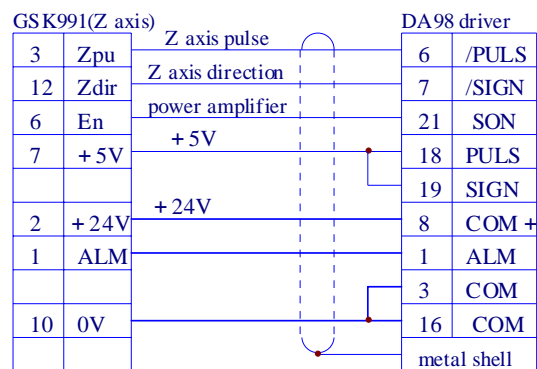
Connection between GSK991 and DF3 driver



Connection between GSK991 and DY3 driver



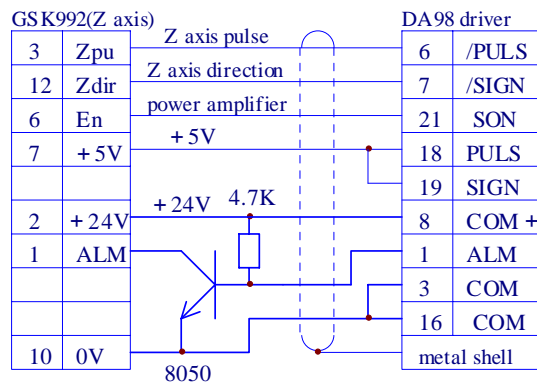
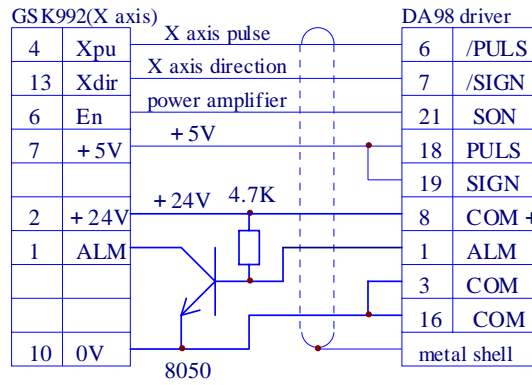
Connection between GSK991 and DA98 driver



(Caution: Bit D4 (Alarm level is defined by this bit) of parameter p0 should be 0.)

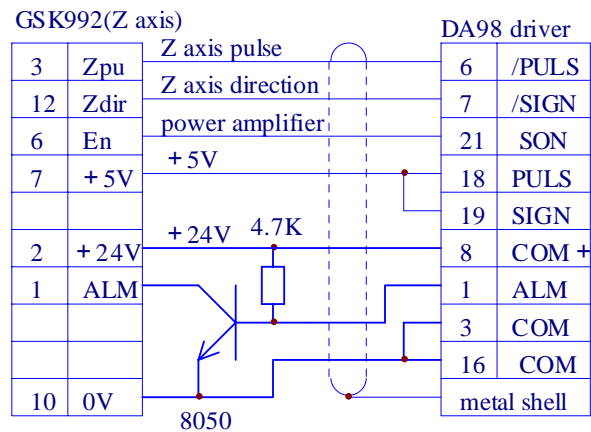
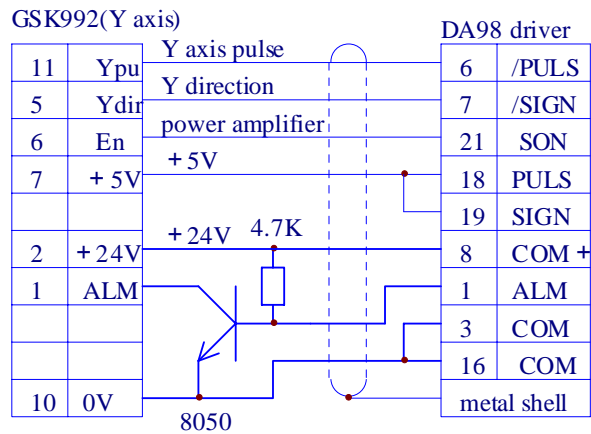
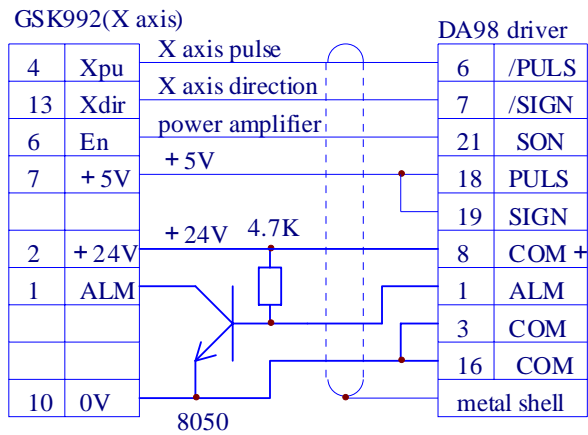
9--Connection between GSK991 and driver

Connection between GSK992 and DA98 driver



(Caution: Bit D4(Alarm level is defined by this bit) of parameter p0 should be 1.)

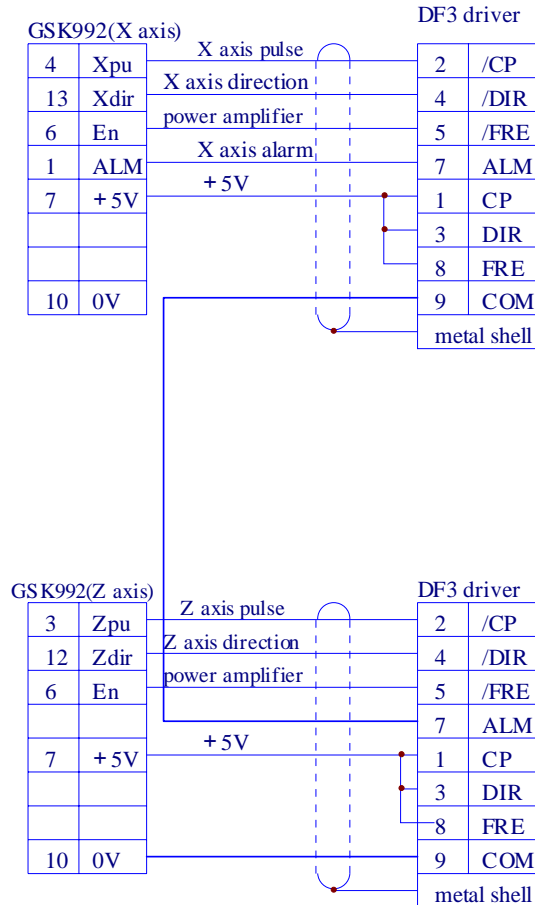
10--Connection Between GSK992 (two axes) and DA98



D4(Alarm level is defined by this bit) bit of parameter p0 should be 1

11--Connection Between GSK992 (three axes) and DA98

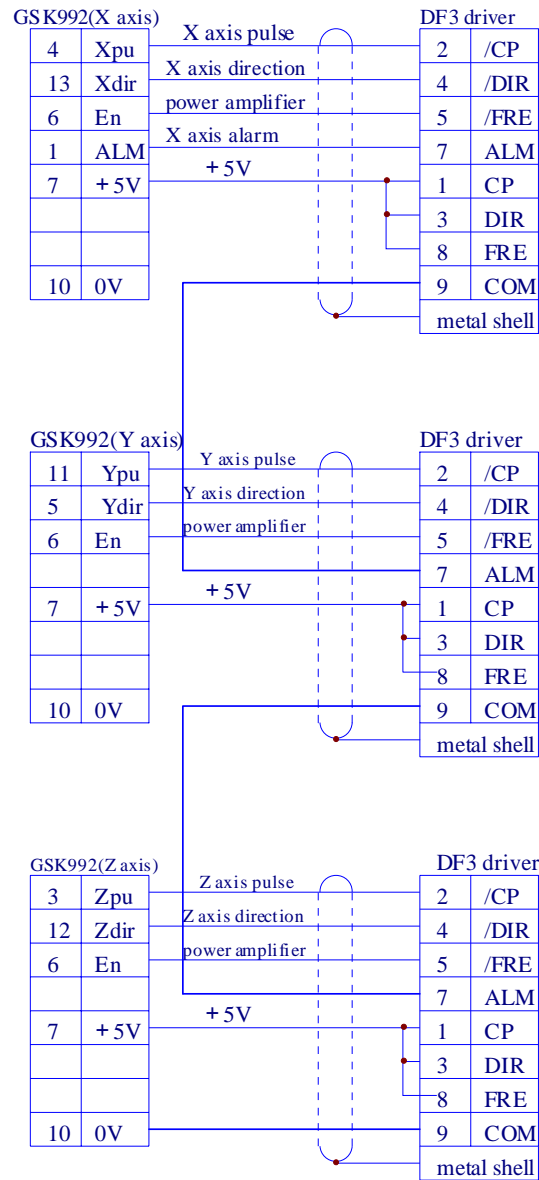
Connection between GSK992(two axes) and DF3 driver



(Caution: Bit D4(Alarm level is defined by this bit) of parameter p0 should be 0.)

12--Connection between GSK992(two axes) and DF3 driver

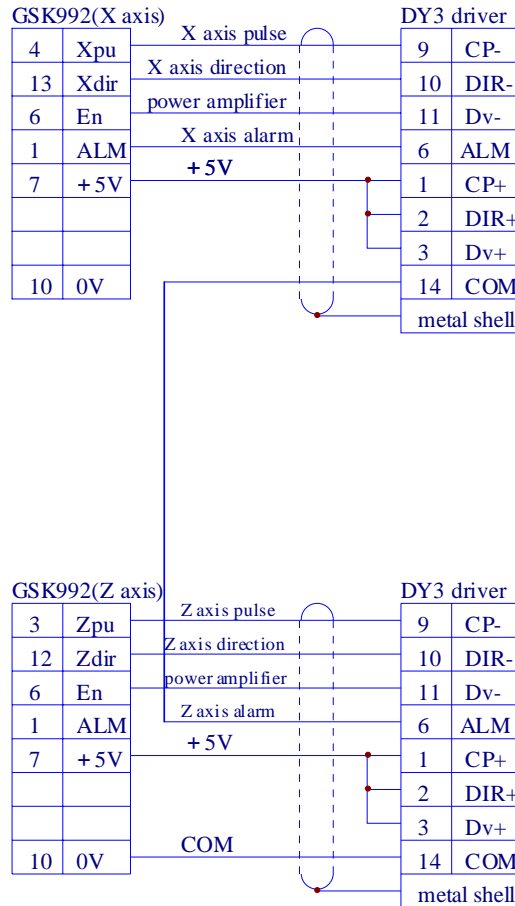
Connection between GSK992(three axes) and DF3 driver



(Caution: Bit D4(Alarm level is defined by this bit) of parameter p0 should be 0.)

13--Connection between GSK992(three axes) and DF3 driver

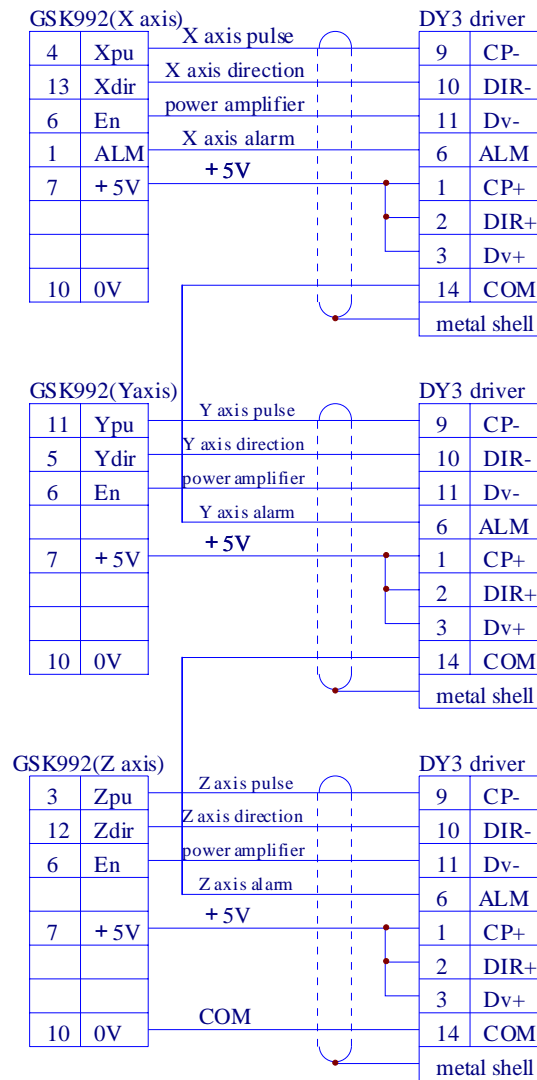
Connection between GSK992 and DY3 driver



(Caution: Bit D4(Alarm level is defined by this bit) of parameter p0 should be 0.)

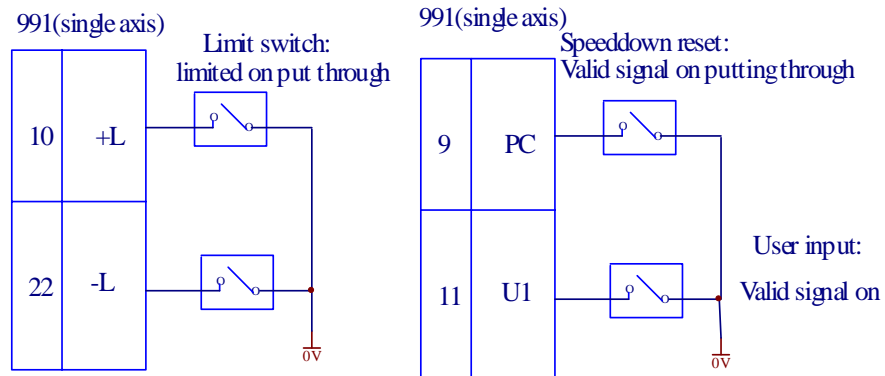
14--Connection between GSK992 and DY3 driver

Connection between GSK992(three axes) and DY3 driver

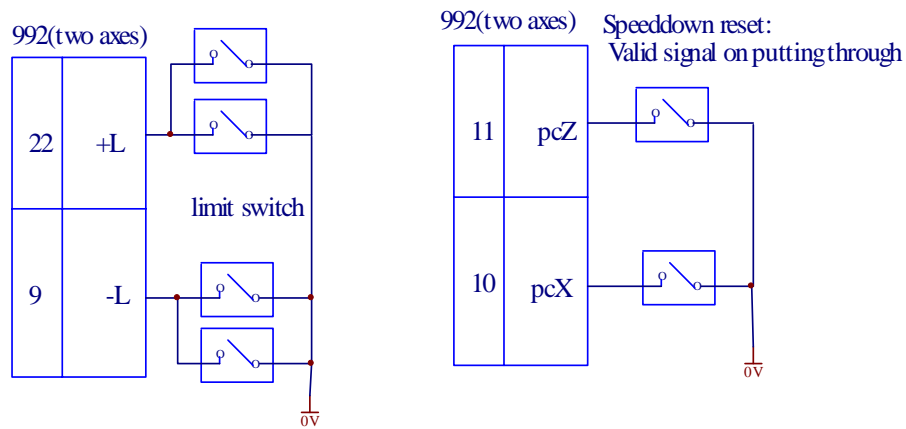


(Caution: Bit D4(Alarm level is defined by this bit) of parameter p0 should be 0.)

15--Connection between GSK992(three axes) and DY3 driver

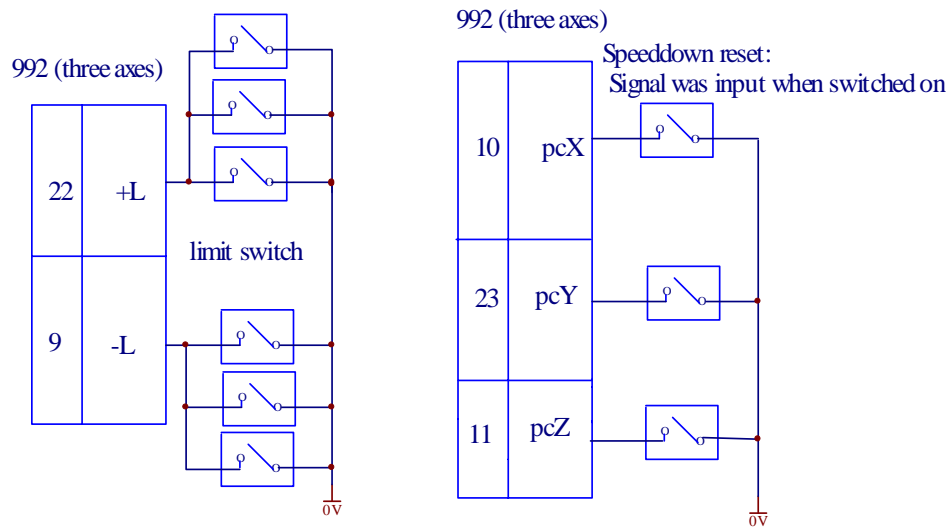


16--Input Signal Connection Sketch(Single Axis)



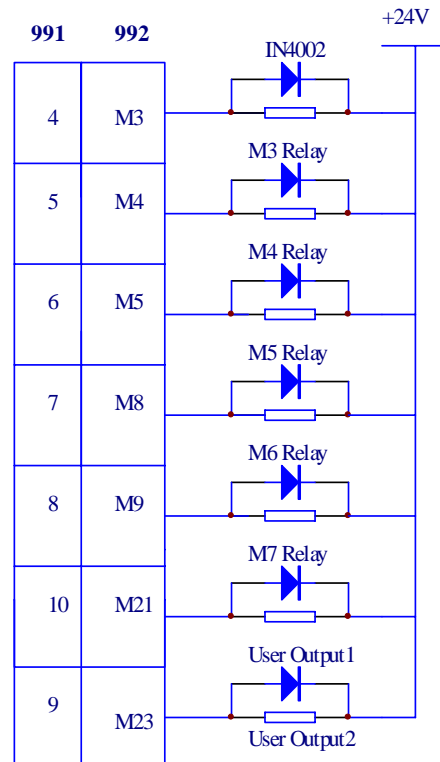
Limit switches of two axes are used separately with connection in parallel
switch-on means limit

17--Input Single Connection Sketch(Two Axes)



Limit switches of three axes are used separately with connection in parallel in the same direction
Spacing when switched on

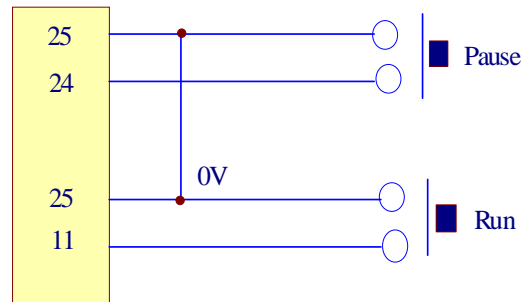
18--Signal Input Connection Sketch (three axes)



19--Signal Output Connection Interface

Schematic plan of External key

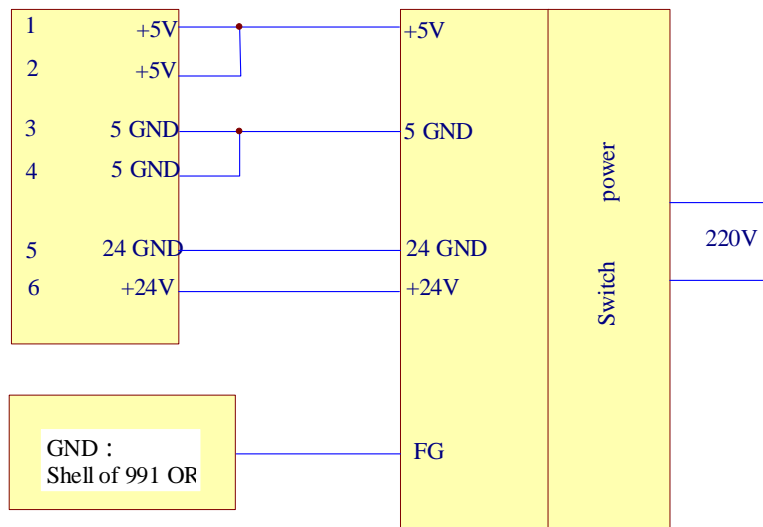
Output & External Key Plug (DB25 slots)



Caution:

1. External Key can be optional.
2. Two keys are valid in low level, pin 25 is 0V (Low level), one signal will be input when any of two keys is pushed once.
3. Two keys are non-self-locking and normal open.

20--Connection of External Keyboard



Caution:

1. The wire from switch power to Controller GDN pin should be as short and wide as possible.
2. Power interface is connected to the switch power by a special plug.
3. The connection between switch power and controller should be finished before leaving factory.

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