



Connection requirement

- 1:Power line: Tricolor power wire and yellow-green ground wire
- Temperature control line: Two thin wires of 110℃ thermistor
- 2:Cooling water outlet
- 3:Pressure for tool changing and de-dusting: 0.4MPa
- 4:Pressure of air sealing: 0.2MPa
- 5:Inlet air pressure for tool-removing: 0.70MPa
- 6:Cooling water inlet: delivery of water pump head 12m(Don't connect wrong!)
- 7:Proximity switch: Two PNP(normally open) N.O. for tool-removing and tool-mounting
- 8:Encoder cable
- 9:Hanging ring

Connection Description

- 1:Three colored wires are connected with U, V, W phases/ Yellow-green wire is connected with earth
- Temperature controlled line is connected externally with temperature control protector
- 2:The quick plug of cooling water outlet is 8/6 hose
- 3:The quick plug for tool-changing and dust-removing is 6/4 hose
- 4:The quick plug for air-sealing is 6/4 hose
- 5:The quick plug for tool-removing is 6/4 hose
- 6:The quick plug of cooling water inlet is 8/6 hose
- 7:Connect brown wire of proximity switch with +24 VDC,and blue line connected to 0VDC
- Signal loading end connected to +24VDC/the other end connected to black line
- 8:Encoder reading head GS05A-MI-S(1Vpp signal output)
- 9:Hanging ring applied for mounting

Parameters of PTC110 three-core thermistor	
DC power supply	Maximum DC25V/100mA
-20~25℃	≤300Ω
≤90℃	≤750Ω
105℃	≤1650Ω
110℃	Rated function temperature
115℃	≥3990Ω
≥125℃	≥12KΩ
≤160℃	Maximum storage temperature

Encoder wiring: circular connector:		
Signal	Terminal pin number	Colour
VCC+5V	1	Brown
GND	2	White
A+	3	Green
A-	4	Yellow
B+	5	Blue
B-	6	Red
Z+	7	Grey
Z-	8	Pink
External isolation(shielding)	10	
Note:1. The remaining terminals are not connected 2. Encoder-GS05A-MI-S(Chord wave 1Vpp)		

Model GDL150-40-12/12B

Voltage 380V

Power 12kw

Current 25A

Frequency 400-500Hz

Rotation 12000-15000rpm

Phase 4P

Rotation Direction Counterclockwise viewed from the end of spindle extension

Tool Holder BT40 With key

Pop-rievet BT40-45°

Weight 47KG

Special warning

- 1.It shall not change tools before complete stop of spindle.The manual tool-changing button shall be unavailable while spindle is rotating;otherwise it would cause the block of spindle!
- 2.The compressed air shall be clean and dry with filtering precision of 0.1 μm! Air sealing shall be normally open.It is recommended to apply two levels of filtering with precisions of 0.5μm/0.1μm, and the filter shall be equipped with automatic drainage.
- 3.The air seal shall be kept normally open!
- 4.During the operation,the frequency converter shall be set strictly according to the U-f curve of the spindle.

						Water-cooled Asynchronous Motor Spindle				Jiangsu HQD Spindle							
														Outline drawing with keys			
标记	处数	分 区	更改文件号	签 名	年、月、日					阶段标记		重量	比例	GDL150-40-12Z/12B			
设 计			标准化							S						1:3	
审 核																	
工 艺			批 准							共 1 张 第 1 张							