

## nFA-G7-CDH80A



### FUNCTIONAL FEATURES

- Adopt split design  
G7 electrical cabinet is divided into power supply part and control part. The power supply part mainly focuses on heating devices so it adopts multi-group fan and air channel design to ensure good heat dissipation. The control part is isolated from the power supply part to prevent dust and oil pollution from entering and ensure the cleanliness of the control part. Besides, it can also avoid abnormal operation of the control part devices affected by dust and oil pollution.
- Equipped with safety emergency stop board independent of the control system, G7 electrical cabinet adopts imported forced disconnect relay to provide double circuit emergency stop to ensure the reliability of emergency stop.
- Automatic external power-on function  
It can greatly ensure the safety of the operator through the methods of automatic external power-on function
- Energy-saving mode  
It can effectively reduce standby energy consumption and avoid personal injury who is strayed in robots standby state.
- Adopt three-phase 380V power supply to direct power supply, which saves transformer and cost
- Adopt built-in three-phase filter to effectively isolate external interference and prevent internal interference output
- Double switching power supply design can avoid internal power interference
- It is convenient and simple to maintenance with split module design
- It can drive 50-220kg load with large output power.

### CABINET TECHNICAL INDEX

Main power source	Phase/voltage	Main circuit power supply: three-phase 380VAC (-20%~+10%), 50/60Hz Control loop power supply: single-phase AC220VAC (±10%~±10%), 50/60Hz	
	Input Power	Maximum Power:16KW	
Cooling Mode		Air Cooling	
Insulation and Withstand Voltage		Grounding AC2600VAC@50Hz, voltage withstand 1Min (except control part of power supply)	
Institutions algorithm		Vertical multi-joint series, vertical multi-joint parallelogram, vertical multi-joint L-shaped wrist robot, etc	
System Mode		Teach, Reproduction, Remote	
Stopping Resistor		Internal	
Regenerative Resistor		External	
Instruction System		Motion, Logic, Process, Operation	
Soft PLC		Ladder diagram editing, 5000 steps, 10MS cycle	
Application		Handling, welding, spraying, palletizing, cutting, etc	
Teaching pendant		8-inch TFT-LCD, keyboard + touch screen, mode selection switch, safety switch, emergency stop button	
User memory		400M	
Communication Mode		TCP/IP, ModbusTcp, ModbusRtu, CAN	
Controlled Axes		6+2 (The standard configuration is 6 axes, and the external axes need to be selected) Controller: 22DI, 22DO; Drive Units: 3DI, 3DO	
Interference		4-way 0-10V analog output, 12-bit accuracy(expandable COM)	
		Double encoder signal interface(position tracking)	
		Robot terminal: maintenance switch, external emergency stop	
		Ethernet, CAN, RS485, RS232 2 USB interface	
Protective Function		Overcurrent, overvoltage, undervoltage, overheat, overload, overspeed, excessive position deviation, abnormal communication, etc	
Safety Mode		Associated emergency stop can rapidly stop the robot when abnormal signal occurs	
Environmental Specification	Installation Instruction		Indoor (avoid direct sunlight), no corrosive fog (avoid lampblack, flammable gas and dust)
	Altitude		Altitude: under 2000m
	Ambient Temperature		-20°C~55°C (If the ambient temperature exceeds 45°C, please keep the surrounding air to circulate)
	Storage Temperature		-20°C~55°C (Maximum temperature: 80°C for 72 hours without condensation)
	Humidity		Under 20~80%RH (No condensation)
Vibration			Random Vibration: Frequency: 20-500Hz, X Direction 2.04m/s <sup>2</sup> , Y Direction 7.4m/s <sup>2</sup> , Z Direction 10.4m/s <sup>2</sup> Sine Sweep: Frequency: 10-58 Hz Acceleration: under 10m/s <sup>2</sup>
	Connecting Cable		Under 20~93%RH (No condensation)
Dimension (MM)			630*939*472
Weight (KG)			112KG

### CABINET DIMENSIONAL DRAWING

