

CHV Series Vector Control Inverter Options

Operating Instructions for Injection Molding Card

1. Model and Specifications

1.1 Model and Functions

The injection molding card of CHV inverter has two types: current signal gathering card and voltage signal gathering card.

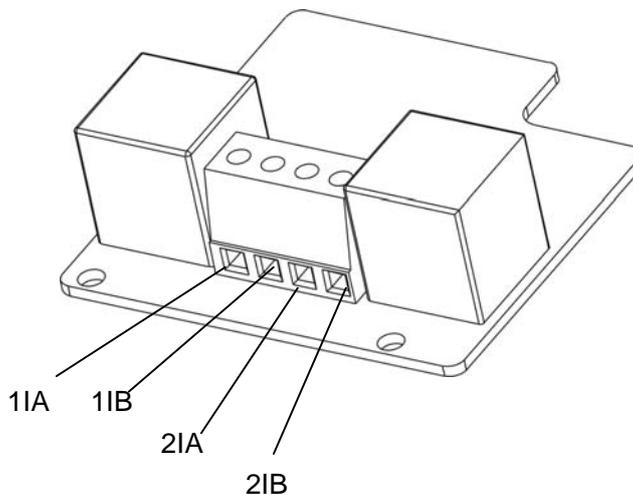
The user must select injection molding card when applying inverter to injection molding machine. This card can collect and process pressure and flow signals of injection molding machine. The signals include voltage signals and current signals, so the injection molding machine card is divided into current signal gathering card and voltage signal gathering card. The current signal gathering card includes a processing circuit of two differential current input signals. The voltage signal gathering card includes a processing circuit of two differential voltage input signals. Please make selection according to the actual applications.

1.2 Technical Features

Type of Gathering Card	Wiring Terminal	Function	Input Voltage	Input Current
Current signal gathering card	11A, 11B, 21A, 21B	Flow and pressure of injection molding machine. Current signal input	---	0~1A
Voltage signal gathering card	1VA, 1VB, 2VA, 2VB	Flow and pressure of injection molding machine. Voltage signal input	0~10V	---

2. Description of Current Signal Gathering Card

Appearance description of the current signal gathering card



The card has four wiring terminals, as shown in the following figure.

1IA	1IB	2IA	2IB
-----	-----	-----	-----

Where, 1IA and 1IB are input terminals of current signal channel, and the corresponding internal channel is AI3. The corresponding parameters of functional code P0.03=2 is set to be P5.25~P5.29. 1IA is the positive input terminal of differential current, while 1IB is the negative input terminal. 2IA and 2IB are input terminals of current signal channel 2, and the corresponding internal channel is AI4. The corresponding parameters of functional code P0.04=1 are set to be P5.30~P5.34. 2IA is the positive input terminal of differential current, while 2IB is the negative input terminal. In addition, the combination mode of two signal channels is set by parameter P0.05. Pay attention to the current flow direction of signal line when wiring; otherwise, the inverter cannot operate normally. If any signal is input, LED will indicate whether the wiring is correct. For the current signal card, if the current signal is greater than 0.6A, the LED will light up, and its brightness will increase with the input signal.

3. Description of Voltage Signal Gathering Card

The voltage signal gathering card has four wiring terminals, as shown in the following figure.

1VA	1VB	2VA	2VB
-----	-----	-----	-----

Where, 1VA and 1VB are input terminals of voltage signal channel, and the corresponding internal channel is AI3. The corresponding parameter of functional code P0.03=2 is set to be P5.25~P5.29. 1IA is the positive input terminal of differential voltage, while 1IB is the negative input terminal. 2VA and 2VIB are input terminals of voltage signal channel 2, and the corresponding internal channel is AI4. The corresponding parameter of functional code P0.04=1 is set to be P5.30~P5.34. 2VA is the positive input terminal of differential voltage, while 2VB is the negative input terminal. In addition, the combination mode of two signal channels is set by parameter P0.05. Pay attention to the flow direction (positive/negative) of signal line when wiring, otherwise, the inverter cannot operate normally. If any signal is input, LED will indicate whether the wiring is correct. For the voltage signal card, if the voltage signal is greater than 6V, the LED will light up, and its brightness will increase with the input signal.

4. Special Functions

Functional code P4.12: if it is set to be “0”, indicates the terminal control command is invalid when power-on; if it is set to be “1”, indicates that the terminal control command is enabled when power-on.

5. Precautions on Wiring

- The signal line of injection molding machine card should be separated from the power line. Parallel wiring is forbidden.
- To prevent injection molding machine signals from disturbance, please select a shielded cable as the signal line of injection molding machine card.
- The shielding layer of shielded signal line cable in injection molding machine card should be grounded (such as terminal PE of inverter), and furthermore, only one end is grounded to prevent signal disturbance.