

Selection Guide

Model No.	Rated Power (kW)	Rated Input Current (A)	Rated Output Current (A)
3AC 380V ± 15%			
CHV190-018G-4	18.5	38	37
CHV190-022G-4	22.0	46.0	45.0
CHV190-030G-4	30.0	62.0	60.0
CHV190-037G-4	37.0	76.0	75.0
CHV190-045G-4	45.0	90.0	90.0
CHV190-055G-4	55.0	105.0	110.0
CHV190-075G-4	75.0	140.0	150.0
CHV190-090G-4	90.0	160.0	176.0
CHV190-110G-4	110.0	210.0	210.0
CHV190-132G-4	132.0	240.0	250.0
CHV190-160G-4	160.0	290.0	300.0
CHV190-185G-4	185.0	330.0	340.0
CHV190-200G-4	200.0	370.0	380.0
CHV190-220G-4	220.0	410.0	415.0
CHV190-250G-4	250.0	460.0	470.0
CHV190-280G-4	280.0	500.0	520.0
CHV190-315G-4	315.0	580.0	600.0
CHV190-350G-4	350.0	620.0	640.0
CHV190-400G-4	400.0	670.0	690.0
CHV190-500G-4	500.0	835.0	860.0

CHV190 Series
Special Inverter for Crane



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Brief Introduction

CHV190 is a special inverter for crane which was developed in 2008. Now it has been widely use in many countries. The load types include: RTG/RMG/STS、gantry crane、bridge crane、floating crane、tower crane、 building hoist、 vertical shaft winder and so on.

Technical Features

Input & Output

- Input voltage range: 380 ± 15%
- Input frequency range: 47~63Hz
- Output voltage range: 0~rated input voltage
- Output frequency range: 0~400Hz

I/O Features

- Programmable digital input: Provide 5 terminals which can accept ON–OFF input and 1 terminal can accept high speed pulse input (HDI1). 4 inputs can be extended by I/O extension card.
- Programmable analog input: AI1 can accept input of 0 ~10V, AI2 can accept input of 0~10V or 0~20mA.
- Programmable open collector output: Provide 2 output terminals, 1 output (open collector output or high speed pulse output) can be extended by I/O extension card.
- Relay output: Provide 2 output terminals. 1 output can be extended by I/O extension card.
- Analog output: Provide 1 output terminal, whose output scope can be 0~20 mA or 0~10 V, as chosen. 1 AO (0~20mA or 0~10V) can be extended by I/O card.
- Motor temperature detection: I/O extension card can provide 1 terminal for motor temperature detection which supports PT100/PT1000.

Main Control Functions

- Control mode: Sensorless vector control (SVC), vector control with PG (VC), V/F control.
- Overload capacity: 60s with 150% of rated current, 10s with 180% of rated current, 1s with 200% of rated current.
- Starting torque: 150% of rated torque at 0.5Hz (SVC); 200% of rated torque at 0 Hz (VC).
- Speed adjusting range: 1:100 (SVC); 1:1000 (VC)
- Speed accuracy: ± 0.5% of maximum speed (SVC); ± 0.1% of maximum speed (VC)
- Carrier frequency: 1.0 kHz~16.0 kHz.

Other Functions

- Frequency reference source: Digital input, analog input, HDI Input, multi–speed terminal, UP/DOWN terminal, Modbus communication, Profibus communication, master–slave mode given, classification multi–step speed given
- Run command source: Keypad, terminal, communication (support Modbus and Profibus communication command)
- Crane control logic: Brake, contactor control
- Starting pre–torque compensation
- DC braking at starting and stopping
- PG Card: Asynchronous PG Card (12V), synchronous PG Card (5V).
- Automatic voltage regulation (AVR): Automatically keep the output voltage stable when input voltage fluctuating
- Up to 30 fault protections: Protect from over current, over voltage, under voltage, over temperature, phase failure, over load etc.
- "Black box" function: 17 kinds of waveform can be saved at 0.2s before the last fault, which will make trouble shooting more convenient.

Product Advantage

Speed ascend while at light load——Highly–efficient

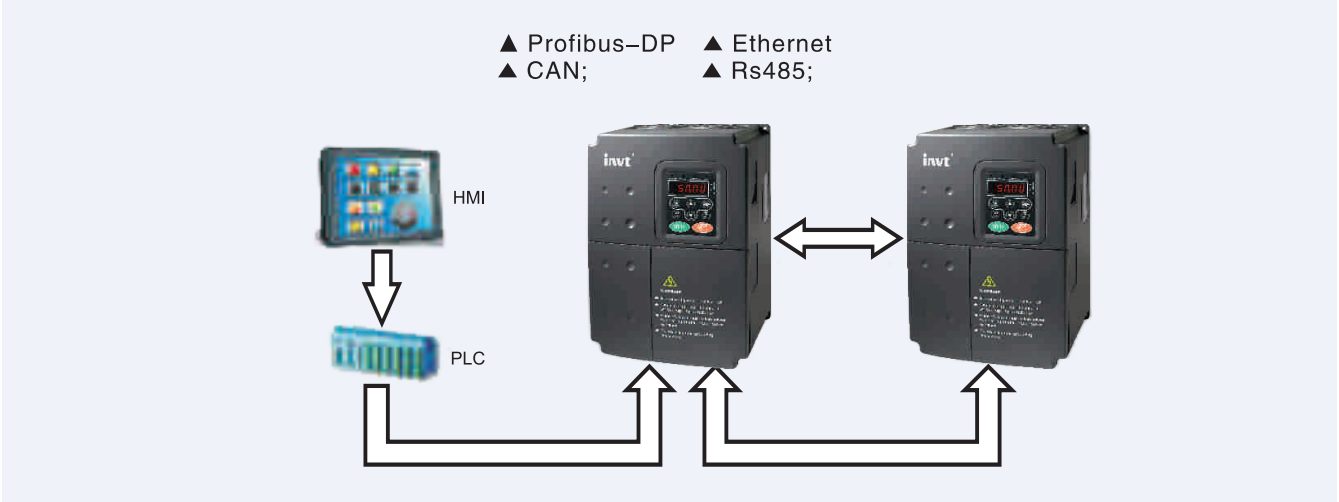
The speed will be ascended to 2 times while the crane without load or with light load, enhance the efficiency.



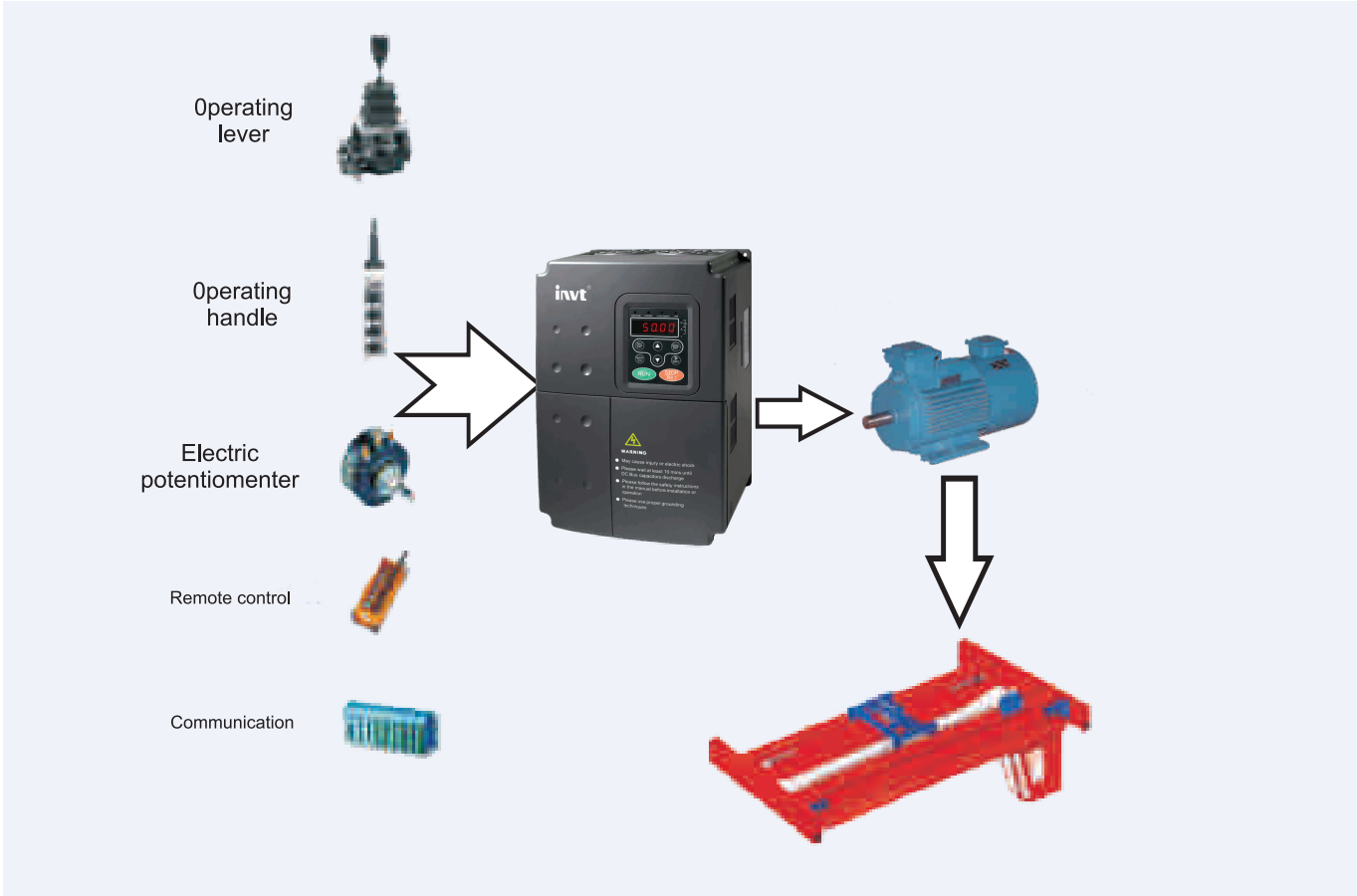
Loose Rope Detection-----Safe and Reliable



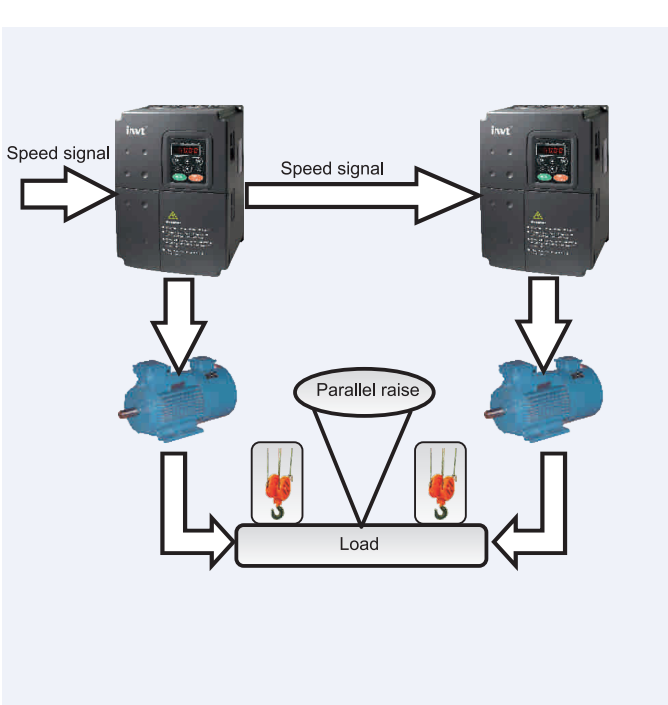
Provide many types of communication protocols



Provide multi–operation modes



Master–slave Synchronous Speed



Master–slave Power Equilibrium

