



Compact, General-purpose Inverter with
Sensorless Vector Control for Communications

Varispeed V7



DeviceNet model



CC-Link model

The Varispeed V7, a compact, sensorless vector inverter, enables powerful performance and flexibility with enhanced functions.

Features

- Yaskawa's unique sensorless vector technology delivers high torque at low speeds.
- Software library contains Yaskawa's exceptional drive expertise and includes PID control and energy-saving control to handle many types of applications.
- Varispeed V7 supports open field networks.

Model Designation

CIMR – V7 N A 2 0P1

Inverter

Varispeed V7 series

Type

Note: Contact your Yaskawa representative for details about models without cooling fins.

⟨DeviceNet model⟩

N : With digital operator (with volume control)

M : With digital operator (without volume control)

P : Without digital operator (with blank cover)

⟨CC-Link model⟩

D : With digital operator (with volume control)

F : With digital operator (without volume control)

E : Without digital operator (with blank cover)

Specifications

A : Japan domestic standards

Voltage Class

B : Single-phase 200VAC

2 : Three-phase 200VAC

4 : Three-phase 400VAC

Applicable

Maximum Motor Output

(P = decimal point)

0P1 : 0.1kW

to

7P5 : 7.5kW

Note: No models of 5.5kW and 7.5kW are currently available for CC-Link.

Specifications

Item	Description	
Voltage Class	200V (single-/ three-phase)	400V (three-phase)
Motor Output Range	0.1 to 7.5 kW (three-phase) 0.1 to 3.7 kW (single-phase)	0.2 to 7.5 kW (three-phase)
Control Method	Sine wave PWM [V/f control, sensorless vector control (switched by parameter)]	
Frequency Control Range	0.1 to 400Hz	
Overload Capacity	150% rated output current for one minute	
Accel/Decel Time	0.01 to 6000 s (Accel/decel time are independently programmed.)	
Protective Functions	Motor overload protection, instantaneous overcurrent, overload, overvoltage, undervoltage, stall prevention, etc.	
Standard Functions	PID control, energy-saving control, restart after momentary power loss, speed search, constant copy, etc.	
DeviceNet model		
Baud Rate	125 k / 250 k / 500 kbps	
Messages	Group 2 Only, UCMM without connection port, Explicit messages, and polled I/O messages.	
I/O Assembly Instances	7 types of input instances (4 to 8 bytes); 7 types of output instance (4 to 8 bytes) ; AC drive profile provided	
CC-Link model*		
Remote I/Os	32 inputs; 32 outputs	
Remote Registers	4 words for RWr; 4 words for RWw	
No. of Stations	Single station (Remote device station)	

*: No models of 5.5kW and 7.5kW are currently available for CC-Link.

Use VS-606V7 with optional SI-C/V7 communication units instead.

Contact your Yaskawa representative for details about CE-compliant CC-Link models.

