



Compact, General-purpose Inverter with Sensorless Vector Control

VS-606V7

Catalog No.
KAE-S606-11.1



The VS-606V7, a compact, sensorless vector inverter, enables powerful performance and flexibility with enhanced functions.

Features

- Yaskawa's unique sensorless vector technology delivers superb torque characteristics.
- Software library contains Yaskawa's exceptional drive expertise and includes PID control and energy-saving control to handle many types of applications.

Model Designation

CIMR - V7 A A 2 0P1

Inverter

VS-606V7 series

Type

- A : With digital operator (with volume control)
- C : With digital operator (without volume control)
- B : Without digital operator (with blank cover)

Specifications

- A : Japan domestic standards (Conforms to UL/cUL, CE requirements.)

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

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.	
MECHATROLINK (Optional unit : SI-T/V7*1)		
Type	MECHATROLINK-II	MECHATROLINK-I
Baud Rate	10 Mbps	4 Mbps
Network Size	30 nodes	15 nodes
String Size	17 bytes or 32 bytes	17 bytes
CC-Link (Optional unit : SI-C/V7*2)		
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)	
PROFIBUS-DP (Optional unit : SI-P1/V7*2)		
Baud Rate	9.6 kbps to 12 Mbps	
Transmission Distance	1200 m / 9.6 kbps to 100 m / 12 Mbps	
String Size	2, 6, or 12 bytes.	
CANopen (Optional unit: SI-S1/V7*2)		
Transmission distance and Baud Rate	5000 m / 10 kbps to 25 m / 1 Mbps	
Compliance	DS301 Ver 3.0 / DSP 402 Ver 1.1	
Network Size	127 nodes (for inverter: 1 to 99 nodes)	

*1: Models of 3.7 kW or lower are currently available for MECHATROLINK communications. Requires the exclusive software for the SI-T/V7 installed in the inverter.

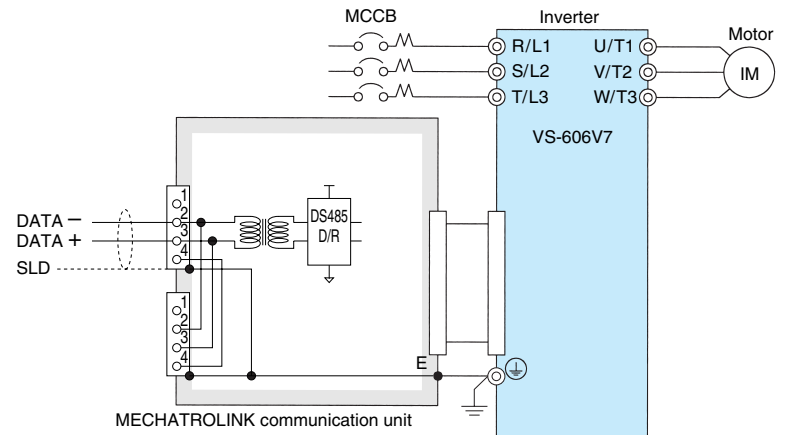
*2: The inverter supports only standard software.

Models for Optional Units



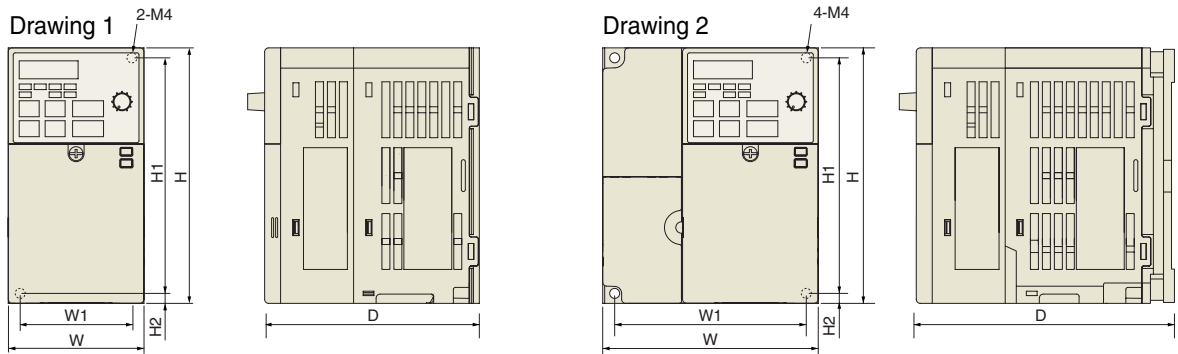
- MECHATROLINK : SI-T/V7
- CC-Link : SI-C/V7
- PROFIBUS-DP : SI-P1/V7
- CANopen : SI-S1/V7

Connection Diagram with MECHATROLINK Communication Unit



Dimensions Units: mm

Note: Optional communication units are shown as attached in drawings.



Voltage	Max. Applicable Motor Output kW	Inverter Model CIMR-V7A* A00000	DWG	Open-chassis Type (IP00) in mm						Approx. Mass kg
				W	H	D	W1	H1	H2	
200V Class (Three-phase)	0.1	20P1	1	68	128	114	56	118	5	1.1
	0.2	20P2				146				1.4
	0.4	20P4				166				1.6
	0.75	20P7	2	108	169	96	1.9			
	1.5	21P5			178		2.0			
	2.2	22P2			181		128	2.6		
	3.7	23P7								
200V Class (Single-phase)	0.1	B0P1	1	68	128	114	56	118	5	1.1
	0.2	B0P2				169				1.2
	0.4	B0P4				178				1.5
	0.75	B0P7	2	108	194	96	2.0			
	1.5	B1P5			201		2.7			
	2.2	B2P2			218		158	3.4		
	3.7	B3P7								
400V Class (Three-phase)	0.2	40P2	2	108	128	130	96	118	5	1.5
	0.4	40P4				148				1.6
	0.75	40P7				178				2.0
	1.5	41P5				194				
	2.2	42P2		140	181	128	2.6			
	3.0	43P0								
	3.7	43P7								

*: Model differs if a digital operator is used or not.