



KV-700

CPU unit with built-in serial port



SPECIFICATIONS

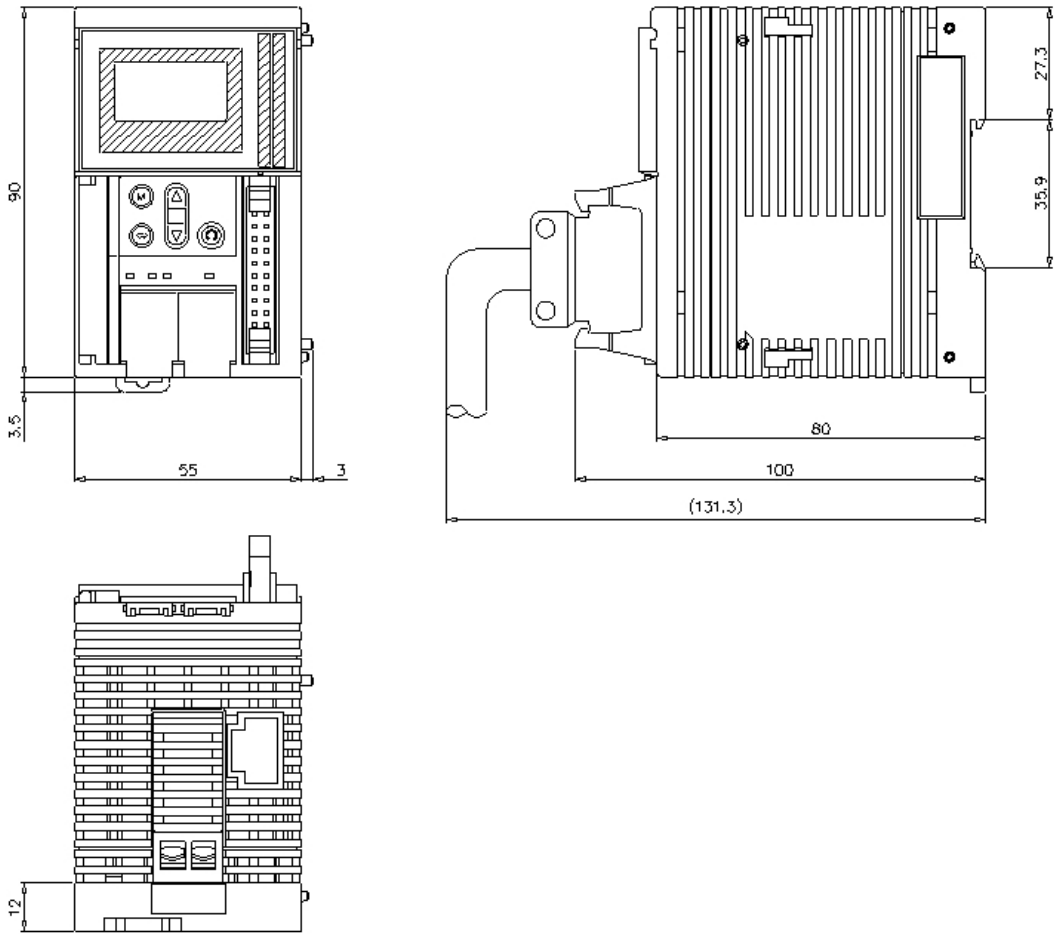
Model				KV-700	
Type				CPU Unit	
Performance specifications	Arithmetic control mode			Stored program mode	
	I/O control mode			Refresh mode	
	Program language			Expanded ladder, mnemonic	
	Number of commands			Basic instruction: 67 classes, 122 instructions Applied instruction: 19 classes, 19 instructions Arithmetic operation instruction: 64 classes, 294 instructions Extended instruction: 31 classes, 48 instructions Total: 181 classes, 483 instructions	
	Instruction execution speed			Basic instruction: Min. 100 ns Applied instruction: Min. 100 ns	
	Program capacity			Approx. 16k steps (Approx. 32k steps for memory expansion)	
	Maximum number of units to be installed			16 units (48 units when expansion units are connected)	
	Maximum number of I/O points			Maximum 3,086 points for expansion (KV-EB1S/KV-EB1R: When 2 units are expanded, 64-point I/O unit is used)	
	Bit device	Input relay R		Total 9530 points 1 bit	
		Output relay R			
		Internal auxiliary relay R			
		Control relay CR		640 points 1 bit	
	Word device	Timer T		Total 512 points 32 bits	
		Counter C			
		Data memory DM		20000 points 16 bits (40000 points 16 bits for memory expansion)	
	Temporary data memory TM			512 points 16 bits	
	High-speed counter CTH			2 points 32 bits	
				4 points 32 bits (2 points for one high-speed counter)	
	Control memory CM			4,000 points 16 bits	
	Positioning pulse output			2 points (maximum output frequency: 100 kHz)	
CPU unit I/O			Input: 10 points, output: 4 points		
Power failure hold function	Program memory		Flash ROM can be rewritten 100,000 times		
	Device		5 years (operating ambient temperature of 25°C in the power failure hold mode) ^{*1}		
Self-diagnosis function			CPU abnormal, RAM abnormal, other		
General specifications	Supply voltage			24 VDC (±10 %)	
	Operating ambient temperature			0 to +50 °C (No freezing) ^{*2,3}	
	Operating ambient humidity			35 to 85 % RH (No condensation) ^{*2}	
	Storage ambient temperature			-20 to +70 °C ^{*2}	
	Operating atmosphere			No dust or corrosive gas	
	Operating altitude			2,000 m or less	
	Pollution degree			2	
	Noise immunity			1,500 Vp-p or more, Pulse width: 1 μs, 50 ns (based on a noise simulator), IEC standard-compliant (IEC61000-4-2/3 /4/6)	
	Withstand voltage			1,500 VAC for one minute (between the power terminals and the I/O terminals, and between the external terminals and the housing)	
	Insulation resistor			50 MΩ or more (measured between power terminals and I/O terminals, and between external terminals and the housing with 500 VDC megohmmeter)	
	Vibration resistance	Intermittent vibration	Frequency 10 to 57 Hz	Half amplitude: 0.075 mm ^{*4}	
			Frequency 57 to 150 Hz	Acceleration: 9.8 m/s ^{*24}	
		Continuous vibration	Frequency 10 to 11 Hz	Half amplitude: 0.035 mm ^{*4}	
			Frequency 57 to 150 Hz	Acceleration: 4.9 m/s ^{*24}	
	Impact resistance			Acceleration 150 m/s ² , Operation time 11 ms, twice in each of the X, Y and Z directions	
	Overvoltage category			II (when using KV-U7)	
Internal current consumption				CPU unit: 160 mA or less Expansion unit: KV-EB1S 15 mA or less, KV-EB1R 25 mA or less (except the drive current for input loop)	
Weight				CPU unit: KV-700 approx. 240 g, Additional memory for KV-700 (OP-42138) approx. 10 g End unit: Approx. 30 g, Start unit for KV-1000/700: approx. 30 g Expansion unit: KV-EB1S approx. 90 g, KV-EB1R approx. 115 g	

^{*1} Target device: R/LR/CR/T/C/DM/EM/FM/CTH/CTC/CM
^{*2} Guaranteed range in which the system can be used.
^{*3} Specified according to the temperature in the control panel on the lower side of the unit.
^{*4} JIS B 3502 Compliant with IEC61131-2, Number of scanning operations: 10 times in each of the X, Y, and Z directions (for 100 min.)

Dimensions

* Download CAD file or product manual for larger image/text and more detail.

KV-700



CPU SIDE UNIT

END UNIT

