

MELFA CR800-R Compatible Robot Controller



MELFA CR800-R Compatible Robot Controller Instruction Manual

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MELFA CR800-R Compatible Robot Controller



- CR800-R

- CR800-Q
- CR800-D

MELSEC iQ-R/Q compatible robot controller

Uses a multi-CPU configuration that dramatically improves its interaction with FA equipment and also offers highly precise control and fast yet simple information management.

Standalone type robot controller

Can be constructed as the control nucleus for robot controllers.



Specifications

Robot CPU		R16RTCPU Q172DSRCPU		Built-in	
Number of axes controll ed		Maximum 6 axes+ additional 8 axes available			
Robot language		MELFA-BASIC V, VI			
Position teac hing method		Teaching method, MDI method			
Memory capacity	Number of teachi ng point s	points	39000 26000 	 	39000
	Number of steps	step	78000 52000		78000
	Number of progr ams	uni t	512		
	General-purpose I/O	poi nts	OinpuVOoutput (8192 input points/8192 output p oints with the multiple CPU common device)		OinpuVOoutput (Up to 256/256 when options a re used)
	Dedicat ed I/O	poi nts	Assigned to multiple CPU com mon device		Assigned to ge neral-purpose I/O

	Gripper open/close	points	8 input 18 output'6			
External input output	Emergency stop input	points	1 (redundant)			
	Door switch input	points	1 (redundant)			
	Enabling device input „,7	points	1 (redundant)			
	Emergency stop output	points	1 (redundant)			
	Mode output	points	1 (redundant)			
	Robot error output	points	1 (redundant)			
	Synctror izationcl a:tlilionaxes	points	1 (redundant)			
	Encoder input	channels	2 Q173DPX (optional)		2	
In te	RS-422	ports	1 (dedicated TIB)			
	Ethernet	ports	1 (dedicated TIB) 1 (for customer) 10BASE-T/100BASE-TX/1000BASE-T Correspondence with CC-Link IE Field Basic (Ver.A1 d or later)			
	USB'5	ports	1 (USB port of programmable c ontroller CPU unit)		1 (Ver. 2.0 device function s only, mini B t erminal)	
	Addition al-axis f unction	chan nel s	1 (SSCNET 111/H)			

rf ac e	Extensio n slot **,	slo ts	1 (Avaible only for function ex pansion option card)		2	
	RIC com municati on interf ace	ch an nel s			2 (daisy chain)	
	Remote 1/0	ch an nel s	– 1 (Ver.2)			
	Memory extensio n slot	slo ts		 	1	
Ambient tem perature		·C	Oto 40 (controller) IOto 55 (robot CPU)		01040	
Relative hum idity		% RH	45 to 85			
	Input vol tage ran ge *2	V	RV-2FR/4FR/7FR, RH-3FRH/3FRHR/6FRH/12FRH/20F RH: Single-phase AC 200V to 230V RV-13FR/20FR/7FRLL, RH-1FRHR: Three-phase AC 2 00V to 230V or Single-phase AC 230V			
P o w e r s u p p l y	Power c apacity * 3	KV A	RV-2FR, RH-3FRH: 0.5 RH-3FRHR, RV-4FR, RH-6FRH: 1.0 RH- 12FRH/20FRH: 1.5			
			RV-7FR (except RV-7FRLL): 2.0			
			RV-7FRLL, RV-13FR, RV-20FR: 3.0			
External dim ensions (incl uding legs)		m m	430(W) x 425(D) x 99.5(H)			
Mass		kg	Approx. 12.5			
Structure [pr otective specification]			Self-contained floor type/open structure (Vertical an d horizontal position can be placed) [IP20]			
Grounding * 4		g	100 or less (class D grounding)			

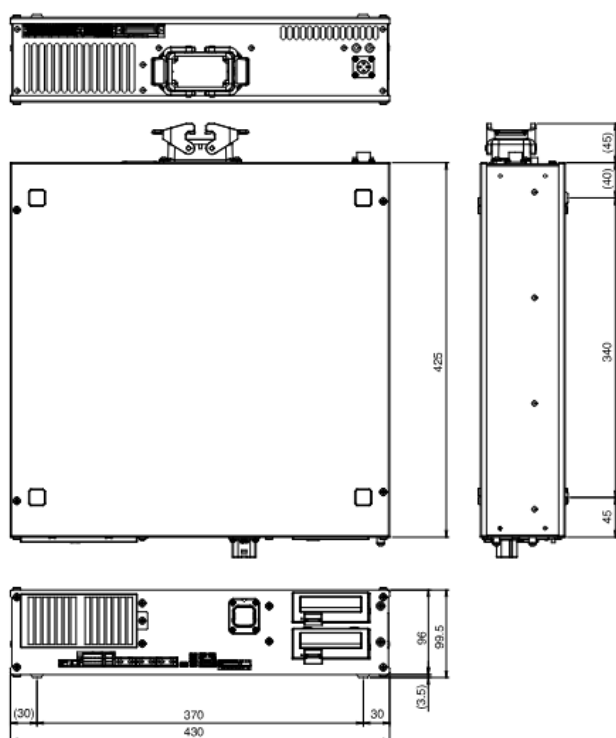
1. For installing option interface.

2. The rate of power-supply voltage fluctuation is within 10%.
3. The power capacity indicates the rating for normal operation. Take note that the power capacity does not include the inrush current when the power is turned on.
The power capacity is only a rough guide and whether or not operation can be guaranteed depends on the input power-supply voltage.
4. Grounding workS are the customer's responsibility.
5. Recommended USB cable (USB A-to-USB mini B): MR-J3USBCBL3M (Mitsubishi Electric), GT09-C30USB-5P (Mitsubishi Electric System & Service Co., Ltd)
6. RV-2FR series has 4 inputs and 4 outputs.
7. Mode selection switch provided by the customer.

Controller

CR800-R/CR800-Q

► External Dimensions

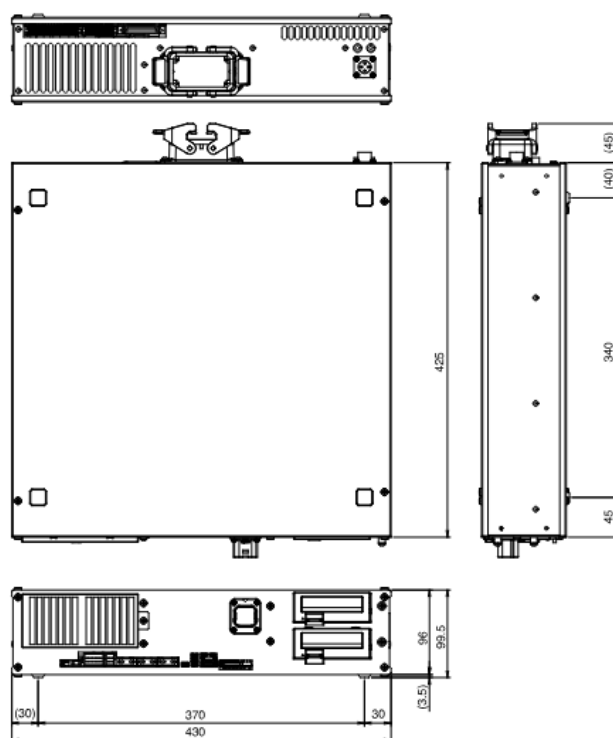


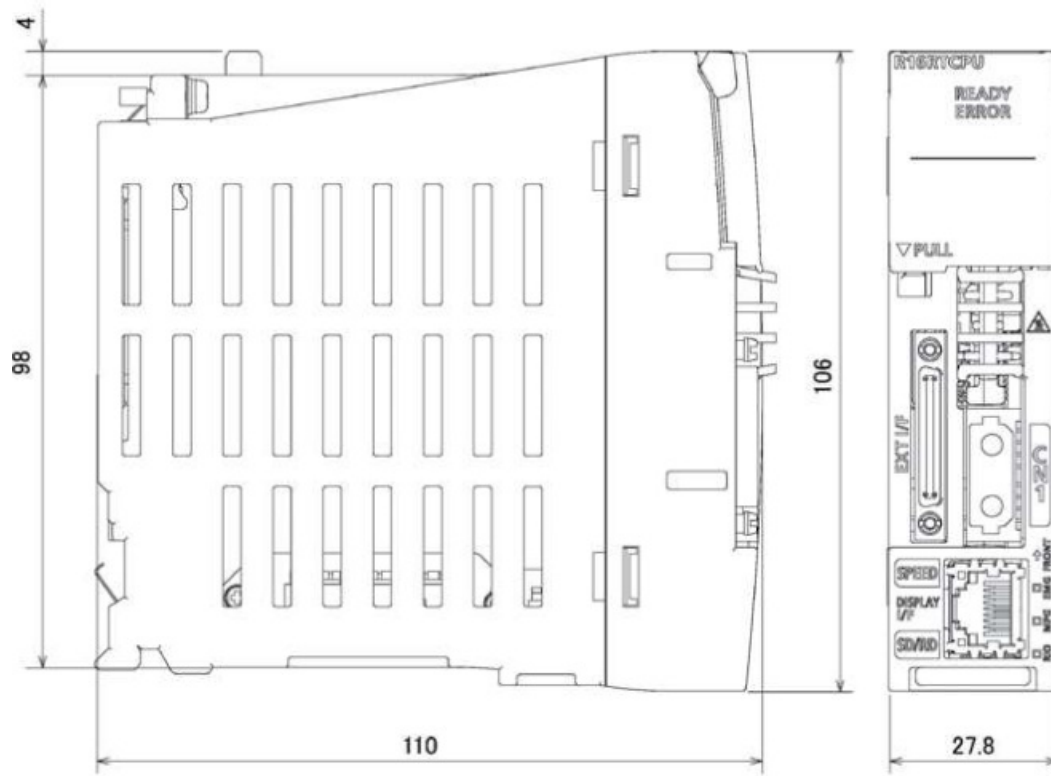
R16RTCPU

R16RTCPU

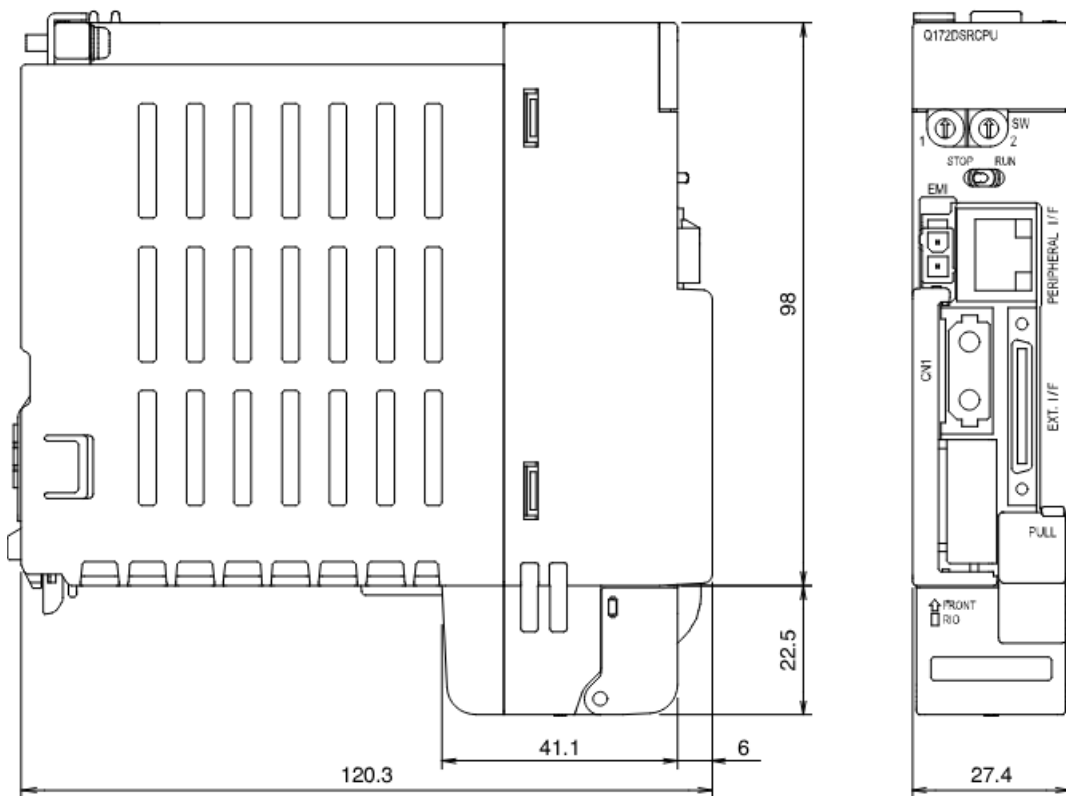
CR800-D

► External Dimensions





Q172DSRCPU



Multiple CPU environment

<CR800-R>

Unit	Item
Base	R35B 5-slot
	R38B a-slot
	R312B 12-slot
Power supply	R61P
	R62P
	R63P
	R64P
PLC CPU	ROOCPU
	R01CPU
	R02CPU
	R04CPU
	R08CPU
	R16CPU
	R32CPU
	R120CPU
Safety CPU	R08SFCPU-SET
	R16SFCPU-SET
	R32SFCPU-SET
	R120SFCPU-SET

<CRSOO-0>

Unit	Item
Base	High-speed standard base between multiple CPU
	0350B 5-slot
	0380B 8-slot
	03120B 12-slot
Power supply	061P
	062P
	063P
	064PN
PLC CPU	Universal Model
	003UD(EN)CPU
	004UD(EN)HCPU
	006UD(EN)HCPU
	010UD(E)HCPU
	013UD(EN)HCPU
	020UD(E)HCPU
	026UD(EN)HCPU
	01 OOUUD(E)HCPU

MELSEC iQ-R/Q compatible robot controller

CR860-R/Q: Uses a multi-CPU configuration that dramatically improves its interaction with FA equipment and also offers highly precise control and fast yet simple information management.

CR860-D: Can be constructed as the control nucleus for robot controllers.



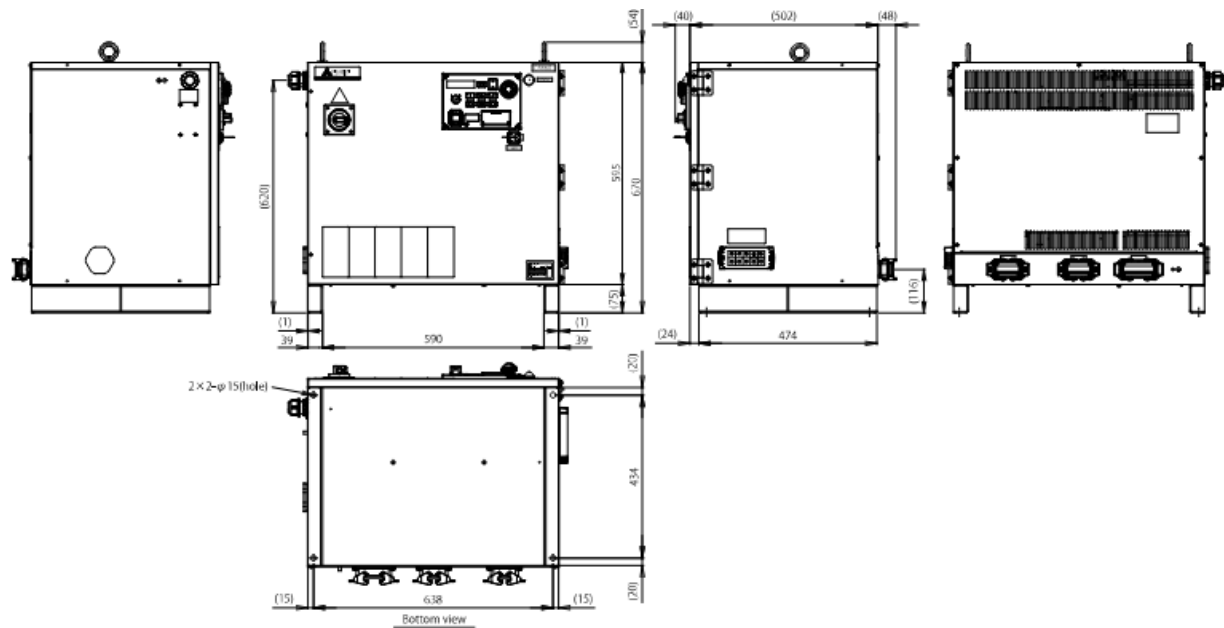
Specifications

Robot CPU			R16RT CPU	I	Q172DSRCPU	Built-in
Number of axes			Maximum 6 axes + additional 8 axes available			
Programming language			MELFA-BASIC V,VI			
Position teaching method			Teaching or MDI			
Memory capacity	Number of teaching positions	point	39000	26000	I	39000
	Number of steps	step	78000	52000		78000
	Number of programs	point	512			
	General-purpose I/O	point	O input/ O output (8192 input/ 8192 output with the multiple CPU common device)			O input/ O output (Up to 256 / 256 when options are used)
	Dedicated I/O	point	Assigned to multiple CPU common device			Assigned to general-purpose I/O
	Hand I/O	point	12 input points/ 8 output points			
	External emergency stop input	point	1 (redundant)			

External input/ output	Emergency stop output	point	1 (redundant)	
	Enabling device input	point	1 (redundant)	
	Mode output	point	1 (redundant)	
	Robot error output	point	1 (redundant)	
	Additional axis synchronization output	point		
	Door switch input	point		
	Encoder input	point	2	2
Interface	Additional axis	channel		
		channel		
	USB	port		1(Only the Ver.2.0 High Speed device function is supported.USS mini-B)
	Ethernet	port	1 (Dedicated T/B) 1 (1000BASE-T / 100BASE-TX / 10BASE-T)	
	Option slot	slot	2 (Available only for function extension option card)	2
	SD memory card slot	slot	1(Unusable)	1
	RS-422	port		
	Emergency stop switch		1	
	Mode selector		1	
Power supply	Input voltage range	V	Three-phase 200 to 240 (The rate of power-supply voltage fluctuation is within+ 10% to -15%)	
	Power capacity	kVA	7.5 (Inrush current is not included)	
External dimensions		mm	670(W) X 500(D) X 670(H)	

Mass	kg		
Ambient temperature	°C	Oto 45 (Controller) / 0 to 55 (Robot CPU)	Ot
Ambient humidity	%RH		
Structure			
Grounding	n	r less (Class D grounding)	

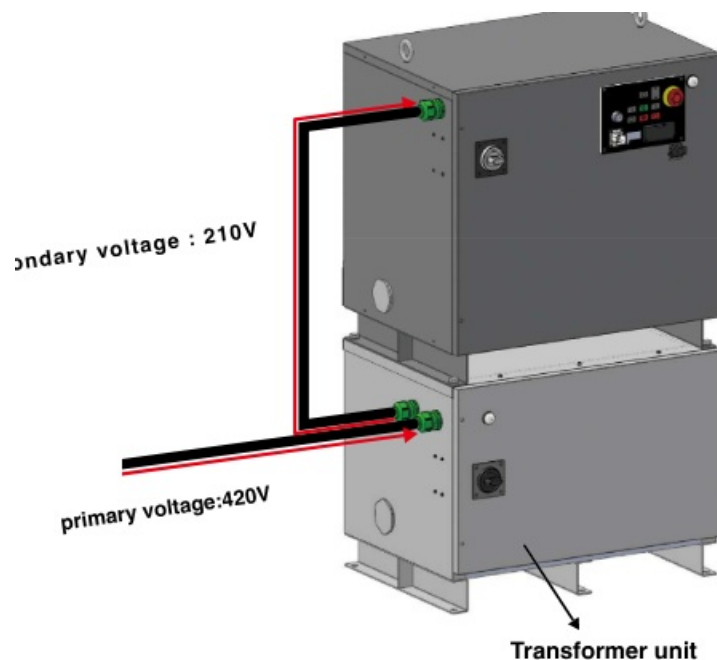
CR860-R/CR860-Q/R860-D



Transformer unit(option)

By using this transformer unit, the robot can be operated with 400V power supply.

This transformer unit is used to step down the voltage from 400V to 200V. This transformer unit is designed only for the CR860 controller. and is not used for other controllers.



Specification

Item	Specifications
External dimensions	670(W) × 500(H) × 515(D)
Color	Dark gray
Mass	Approx. 120kg (only the robot arm, excluding cables)
Phase	Three-phase
Capacity	10kVA
Frequency	50Hz
Rated voltage (primary side)	AC420V(±10%)
Rated voltage (secondary side)	AC210V(±5%)
Wiring	Delta connection
Operating temperature	0 to 45°C
Relative humidity	10 to 85%RH
Elevation	1000m or lower
Protection specifications	IP54

Documents / Resources

	MELFA CR800-R Compatible Robot Controller [pdf] Instruction Manual CR800-R, CR800-R Compatible Robot Controller, Compatible Robot Controller, Robot Controller, Controller
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References

- [User Manual](#)

[Manuals+](#), [Privacy Policy](#)

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