

## Standard Specifications

E01 Controller

E02 Controller

E03 Controller

E04 Controller

June 09, 2020

Kawasaki Heavy Industries, Ltd.  
Robot Business Division

Specification number : 90152-0080DEA

## Controller specifications

1. Model (Robot type)	E01 BA/RA/RF RS010/RS020	E02 BX/BT/CX/ZX RS030/RS080	E03 CP/RD	E04 MX350/MX420 MX500/MX700
2. Dimensions	W550×D580×H278mm			
3. Construction	Enclosed structure : Indirect cooling system, IP54 equivalent			
4. Controlled axes	Std. 7 axes (Max 9 axes)		Std.5 (Max 6)	Std.6 (Max 8)
5. Memory capacity	8MB			
6. I/O signals	External operation sig.: Ext. Emergency Stop, Ext. HOLD signal etc.			
	General-purpose I/O sig.: GPIO board (Input 32/Output 32) <sup>*2</sup> NPN(Sink) type or PNP(Source) type			
7. Cable length	Robot-controller:		5m (Opt.10m/15m)	
	Teach pendant:		5m (Opt.10m/15m)	
8. Mass	40kg	40kg	45kg	40kg
9. Power requirements	AC200-AC220V±10%、50/60Hz、3 phases			
	Max. 5.6kVA	Max. 7.5kVA	Max. 12kVA	
10. Ground	Less than 100Ω (robot dedicated ground), Leakage current: max. 100mA			
11. Installation environment	Ambient temperature: 0 - 45°C			
	Relative humidity: 35 - 85% (non-condensation)			
12. Teach Pendant	Color LCD with touch-panel Emergency Stop SW, Teach Lock SW and Enable SW Selectable from Japanese/English/Chinese			
13. Operation panel	Emergency Stop SW, Teach/Repeat SW			
14. External interface	Ethernet(100BASE-TX/10BASE-T) , USB, RS-232C : each 2port (1port on panel, 1port inside controller)			
15. Type of control	Teach mode: Joint, Base, Tool operation mode (option) Fixed Tool operation mode			
	Repeat mode: Joint, Linear interpolation mode (option) Circular interpolation mode			
16. Teaching method	Easy operation teaching or AS language programming			
17. Color	Munsell: 10GY9/1 equivalent			
18. Safety Circuit	Max PL(Performance Level) e, Category 4 (EN ISO13849-1) <sup>*1</sup>			
19. Arc welding I/F	Arc-welding I/F board <sup>*2</sup> (Standard for Arc-welding robot)			
20. Options				
External axes control	Additional amplifier and External axes harnesses			
Additional GPIO	GPIO board (Input 32/Output 32) <sup>*2</sup> NPN(sink) type or PNP(source) type			
I/O signal connector	D-SUB 37 pin (male/female) with cover			
Transformer unit	AC380-415V / AC440-480V (tap selection)			
Teach Pendant option	Connector for TP less			
Operation panel option	Fast check mode Switch			
External memory	USB memory			
PC cable (RS-232C)	1.5m, 3m			
Motor brake release	Manual brake release switch			
Extended safety functions	Cubic-S(Motion area monitoring, Joint monitoring, Speed monitoring etc.)			
Others	GP Field BUS <sup>*2</sup> , Software PLC, Analog input/output <sup>*2</sup> , Conveyor Synchronization, Vision application and so on			

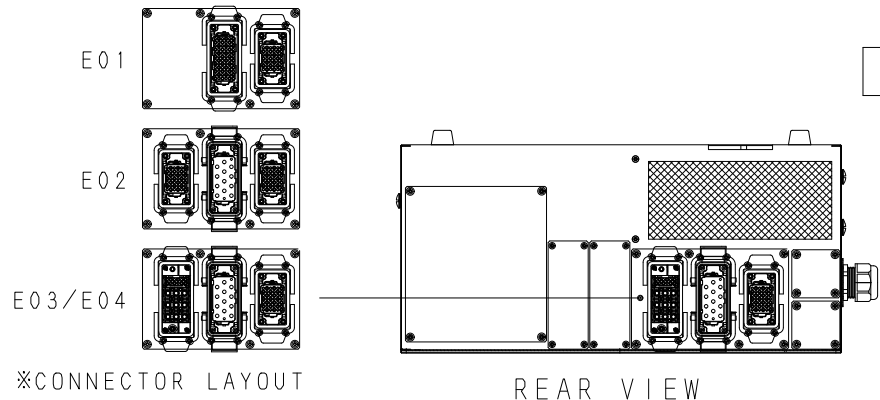
Consult Kawasaki about maintenance parts and spare parts.

\*1 Category and Performance level (PL) are determined by the whole system and conditions.

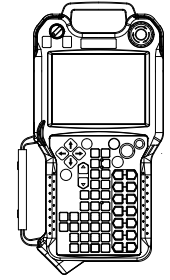
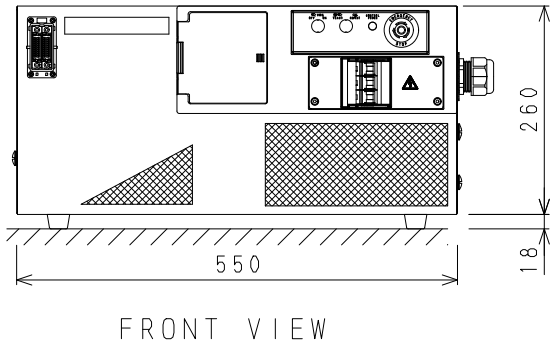
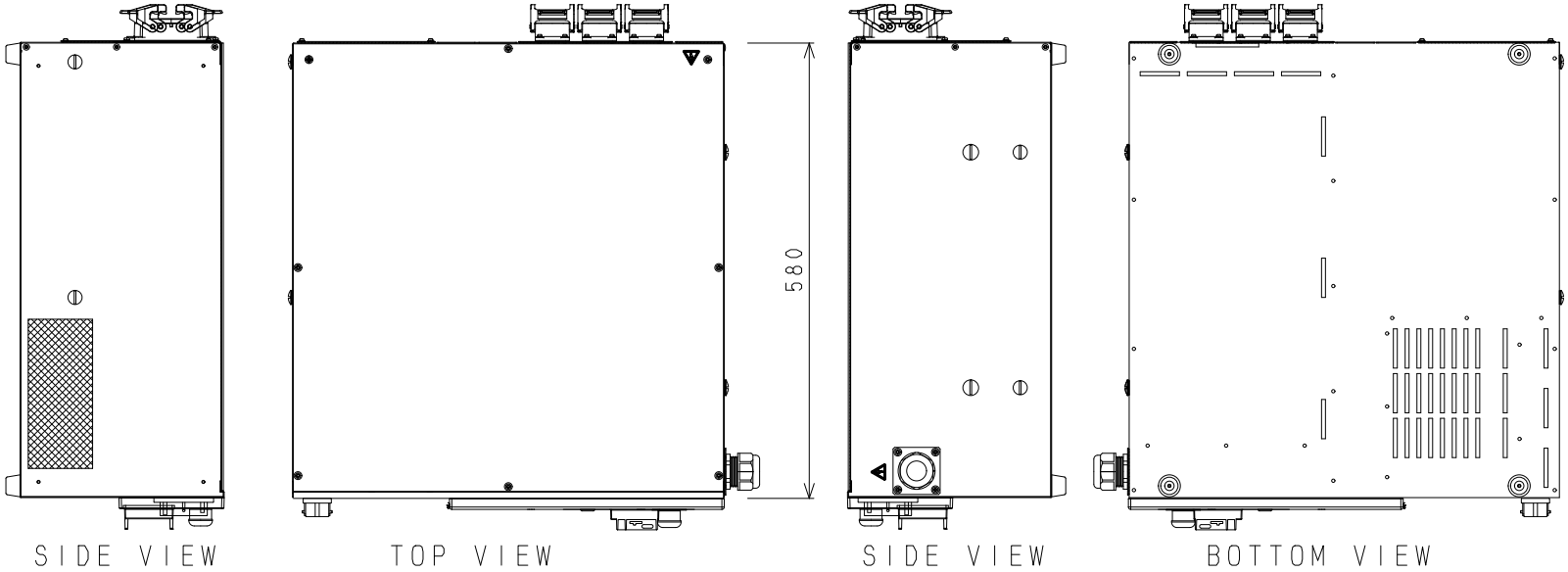
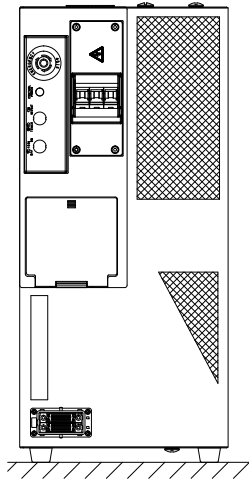
The safety circuit of this controller is available in the system of category: up to 4, PL: up to e.

\*2 Up to 3 option slots, be careful when choosing options.

E01/E02/E03/E04 CONTROLLER



Vertical Mount



Teach Pendant