

SPECIFICATION OF ROBOT

FA006EFD40

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KAWASAKI HEAVY INDUSTRIES LTD.
ROBOT DIV.

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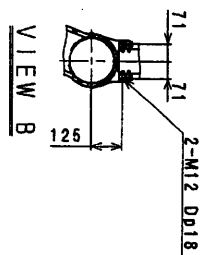
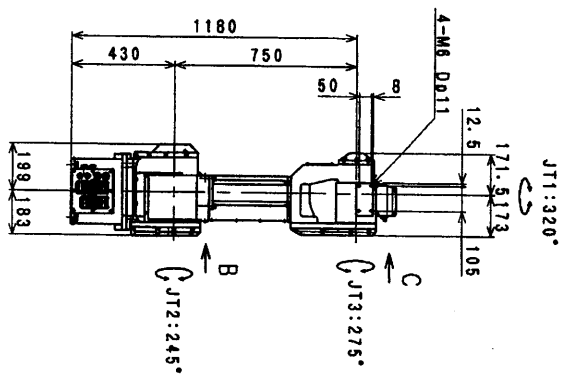
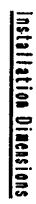
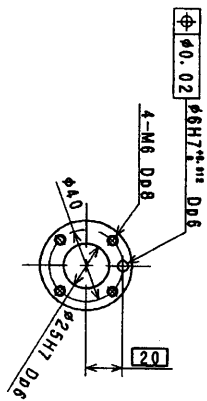
1. Specification of Robot

[1] Robot Arm

1. Model	FA006E-C			
2. Type	Articulated robot			
3. Degree of freedom	6 axes (Option 13 axes max.)			
4. Axis specification	Operating axis		Max. operating range	Max. speed
	Arm rotation	(JT1)	+160 ° ~ − 160 °	200 ° /s
	Arm out-in	(JT2)	+140 ° ~ − 105 °	140 ° /s
	Arm up-down	(JT3)	+120 ° ~ − 155 °	200 ° /s
	Wrist swivel	(JT4)	+270 ° ~ − 270 °	360 ° /s
	Wrist bend	(JT5)	+145 ° ~ − 145 °	360 ° /s
	Wrist twist	(JT6)	+360 ° ~ − 360 °	600 ° /s
	Linear traverse	(JT7)	2000 mm (Standard)	1200 mm/s
5. Repeatability	±0.1 mm (at the tool mounting surface)			
6. Max. payload	6 kg			
7. Max. speed	9200 mm/s (at the center of tool mounting surface)			
8. Max. linear interpolation speed	1800 mm/s			
9. Load capacity of wrist				
		Max. torque	Moment of inertia *	
	JT4	12.0 N•m	0.24 kg•m ²	
	JT5	12.0 N•m	0.24 kg•m ²	
	JT6	6.0 N•m	0.07 kg•m ²	
Note* Each value in this table shows allowable moment of inertia of JT4/JT5/JT6 when max. allowed torque is applied to each axis. If more detailed data is required for your application, please contact Kawasaki.				
10. Driving motor	Brushless AC Servomotor			
11. Working range	See attached drawing.			
12. Mass	170 kg (without options)			
13. Color	Munsell 10GY9/1 equivalent			
14. Installation	Floor or Ceiling mounting			
15. Environment cond.	(Temperature) 0 ~ 45 °C, (Humidity) 35 ~ 85 %, no dew, nor frost allowed			
16. Options	Torch holder	Torch holder with shock absorber		
	Torch bracket	Std. bracket (350 A), Std. bracket (500 A)		
	Cable hanger	Cable hanger (with rubber supports)		
	Installation	Wall mounting		
	Arm installation stand	Height 600 mm, 300 mm		
	Arm installation plate	750 mm × 750 mm		
	Positioner	Payload (200 kg/1000 kg/other) no. of axis (1/2)		
	Electrical insulating plate			
17. Others	Consult Kawasaki about maintenance parts and spare parts.			

[2] Controller

1. Model	D40/D42	Arc welding
2. Construction	Self-supported type	
3. Dimensions	See attached drawing	
4. Number of controlled axes	6 axes for D40/D42, 7/8 axes(built-in addition, option), Max.16 axes(external additional amplifier, option)	
5. Servo control and drive system	Full Digital Servo System	
6. Type of control	Teach mode	Joint, Base, Tool operation mode
	Repeat mode	PTP, CP control mode
		Joint, Linear, Circular (option) interpolation
7. Teaching method	Teaching or AS language programming	
8. Memory capacity	1 MB (Includes system memory)	
9. External operation signals	External Motor Power Off, External Hold, etc.	
10. General purpose signals	Input signals	32 channels (Includes dedicated signals)
	Output signals	32 channels (Includes dedicated signals)
11. Operation panel	Basic Operation Switches (Motor Power On, Cycle Start, Error Reset, Emergency Stop, Hold/Run, Teach/Repeat)	
12. Cable length	Power/Signal cable	10 m
	Teach Pendant cable	10 m
13. Mass	See attached drawing	
14. Power requirement	AC380/400/415/440 V \pm 10% with transformer, 50/60 Hz, 3 phases, 5.9 kVA(D40), 11.4 kVA(D42)	
15. Ambient temperature	0 - 45 °C	
16. Relative humidity	35 - 85 % (non-condensation)	
17. Ground	Less than 100 Ω (robot dedicated ground)	
	Leakage current: max. 10 mA	
18. Color	Munsell: 10GY9/1 equivalent	
19. Teach Pendant	Color display (6.4 inch LCD) with touch panel Emergency Stop, Teach Lock and Deadman Switches 58 hardware keys	
20. Auxiliary storage	PC card interface	
21. Arc welding spec.	Automatic arc welding sequence functions, built-in database for arc welding, built-in arc welding interface, function of wire inching, wire retractor, gas control	
22. Options		
Memory capacity	4 MB (Includes system memory)	
General purpose signals	Input signals	64/96/128 channels (Includes dedicated signals)
	Output signals	64/96/128 channels (Includes dedicated signals)
Power/Signal cable	5 m, 15 m	
Teach Pendant cable	5 m, 15 m	
PC card	16/32/64/128 MB	
PC cable	1.5 m, 3 m	
Others	Built-in PLC, LAN, Interbus-S, analog input and so on	
23. Others	Consult Kawasaki about maintenance parts and spare parts.	



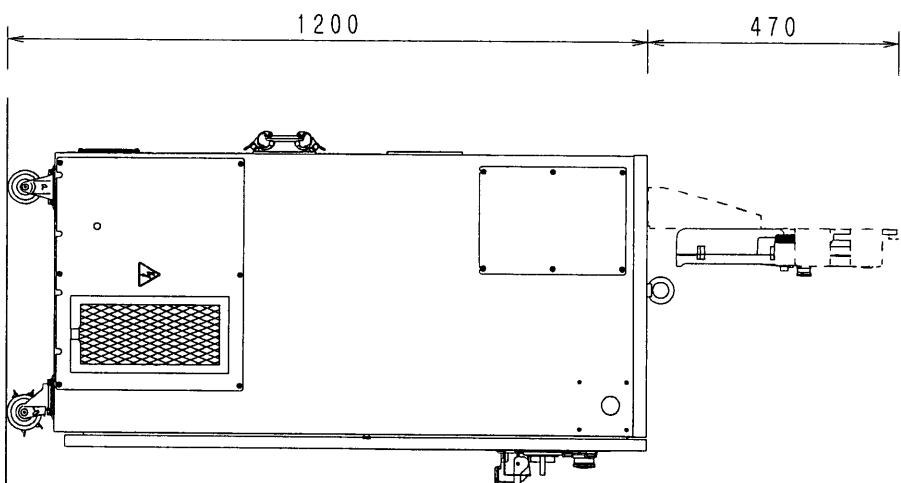
FA006E
WORKING RANGE

D40 CONTROLLER

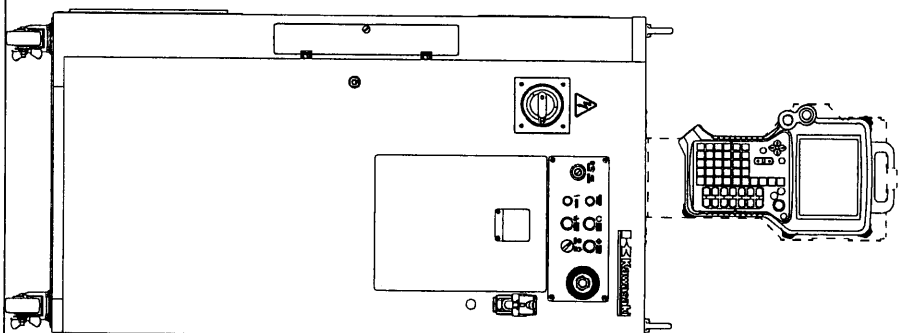
MASS : 155kg

550

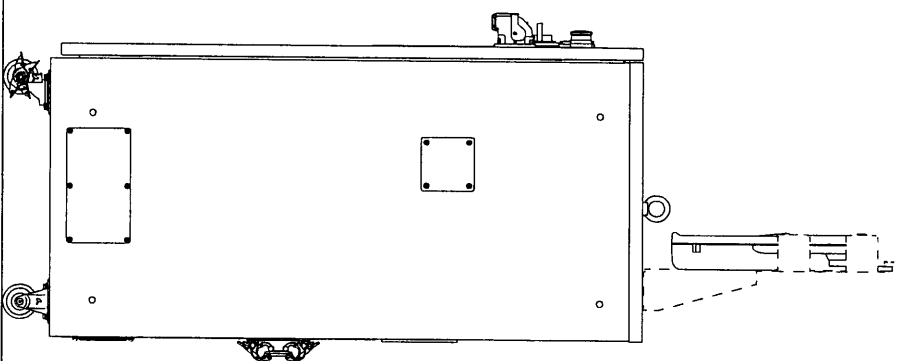
600



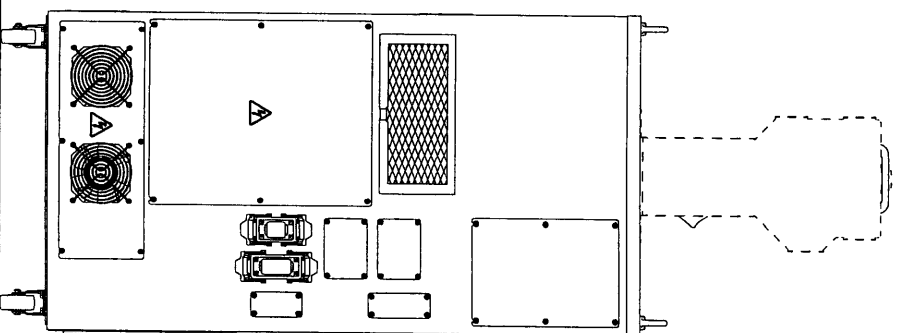
SIDE VIEW



FRONT VIEW



SIDE VIEW



REAR VIEW