

Standard specifications

ZT130UFE02001

April 24, 2015

KAWASAKI HEAVY INDUSTRIES, LTD.

ROBOT DIVISION

Specification :	90101-2350DEA
(Arm) :	90151-0066DEA
(Controller) :	90152-0005DEA

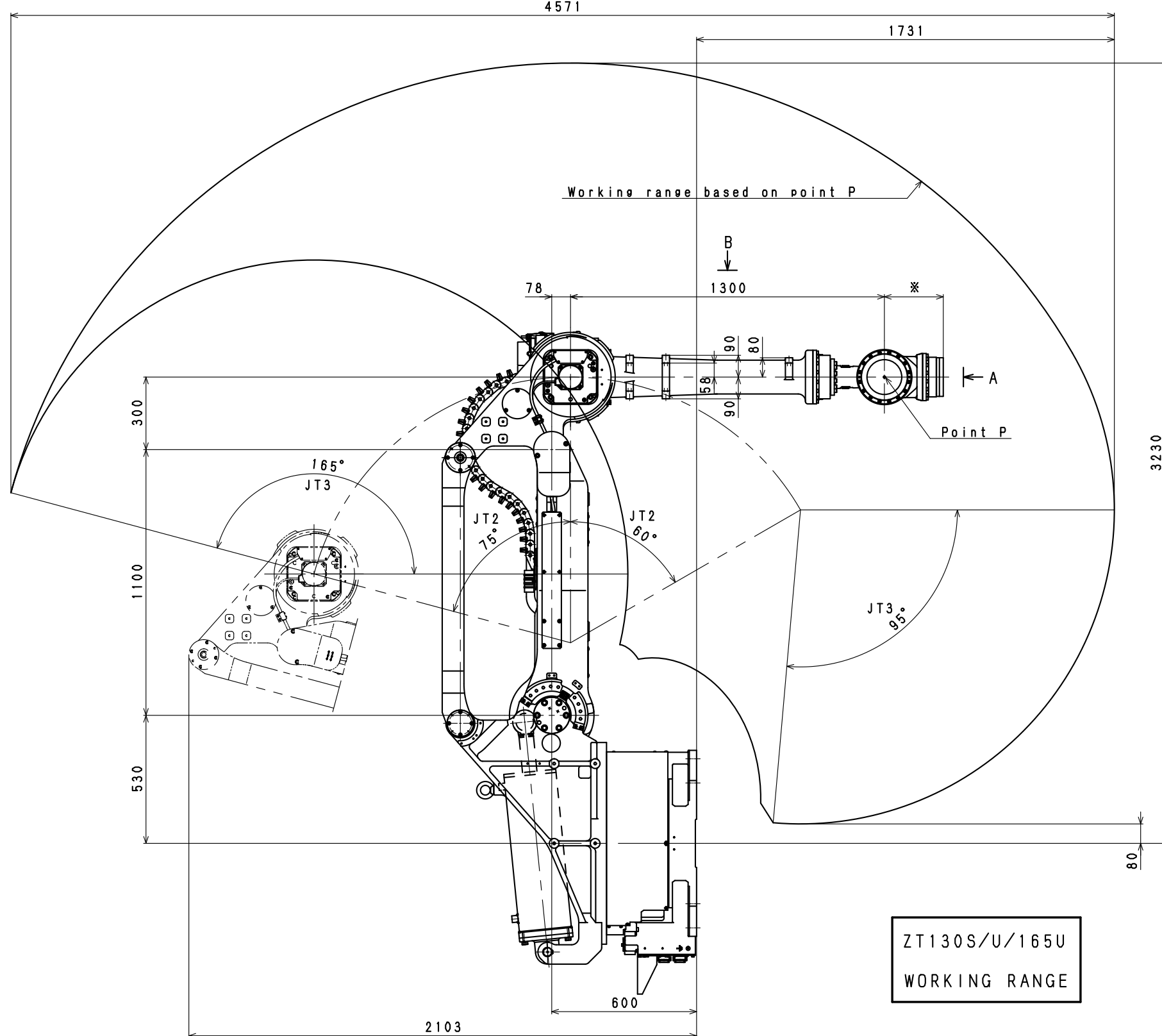
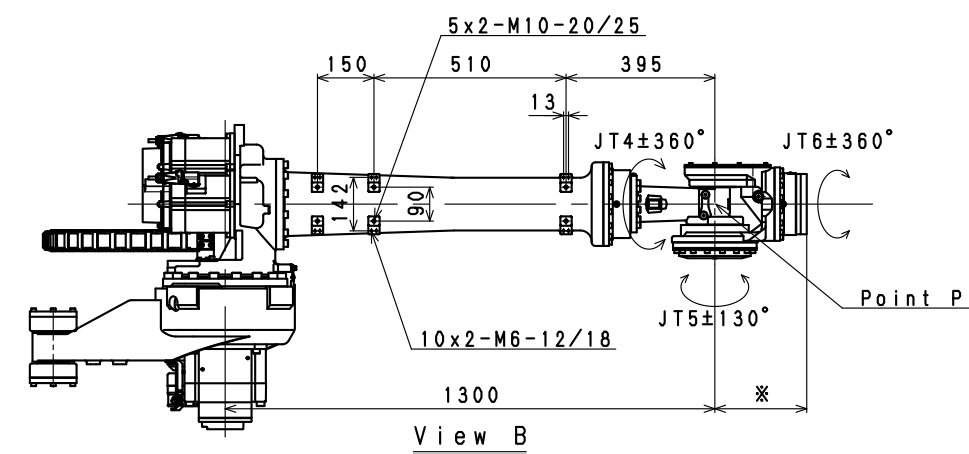
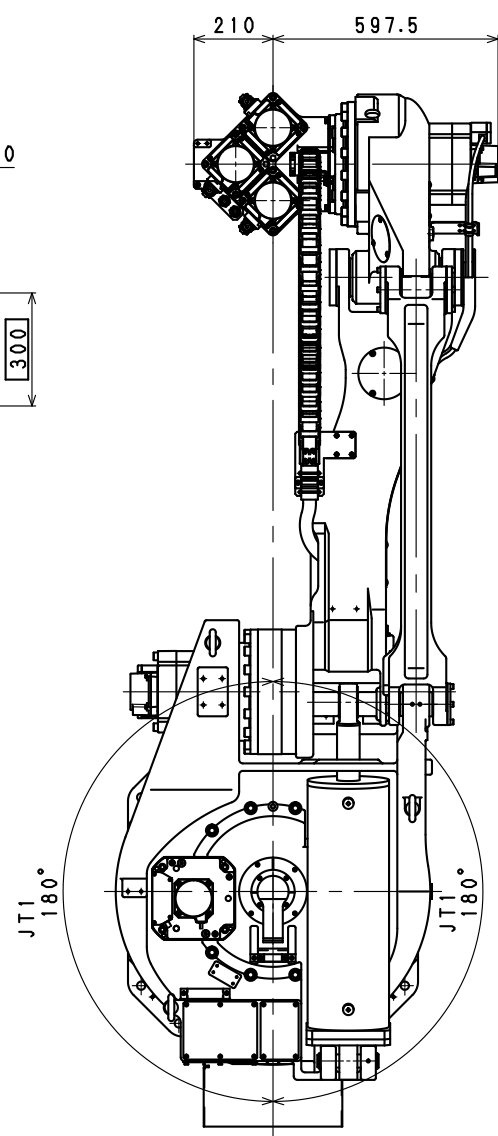
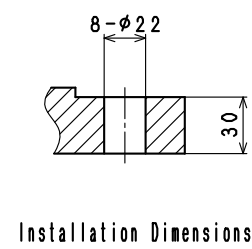
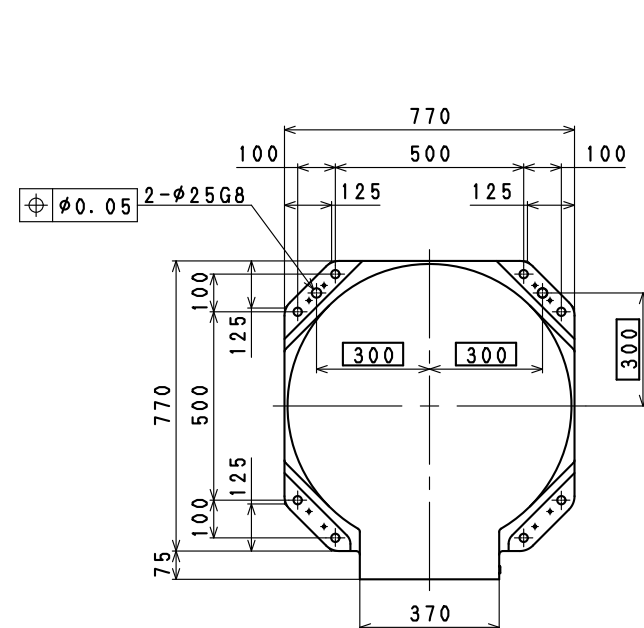
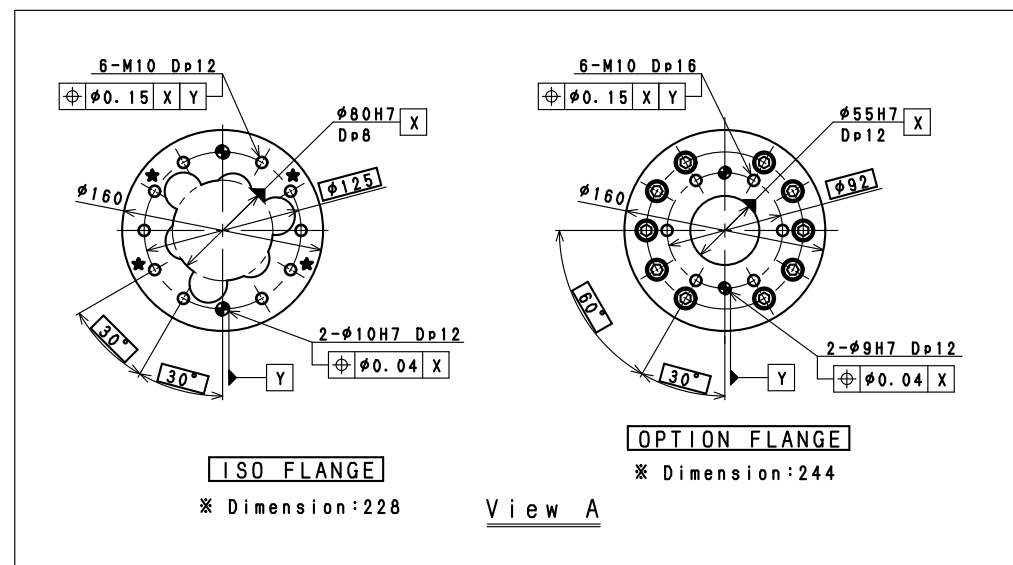
1. Specification of Robot

[1] Robot Arm

1. Model	ZT130U-E		
2. Type	Articulated robot		
3. Degree of freedom	6 axes (Option 7 axes)		
4. Axis specification	Operating axis	Max. operating range	Max. speed
	Arm rotation (JT1)	+180° ~ -180°	105°/s
	Arm out-in (JT2)	+60° ~ -75°	105°/s
	Arm up-down (JT3)	+165° ~ -95°	105°/s
	Wrist swivel (JT4)	+360° ~ -360°	140°/s
	Wrist bend (JT5)	+130° ~ -130°	135°/s
	Wrist twist (JT6)	+360° ~ -360°	230°/s
	Linear traverse (-)	2000 mm (Standard)	1000 mm/s
5. Repeatability	±0.3 mm (at the tool mounting surface)		
6. Max. payload	130 kg		
7. Max. linear interpolation speed	2500 mm/s		
8. Load capacity of wrist			
		Max. torque	Moment of inertia*
	JT4	735 N·m	51.9 kg·m ²
	JT5	735 N·m	51.9 kg·m ²
	JT6	421 N·m	27.4 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.			
9. Driving motor	Brushless AC Servomotor		
10. Working range	See attached drawing.		
11. Mass	1550 kg (without options)		
12. Color	Munsell 10GY9/1 equivalent		
13. Installation	Rack mounting		
14. Built-in utilities	Pneumatic piping (φ 12×2 lines)		
15. Environment cond.	(Temperature) 0 ~ 45 °C, (Humidity) 35 ~ 85 %, no dew, nor frost allowed		
16. Options			
Color	Color (Munsell)		
Adapter Plate for Flange convert	φ125→φ160, φ125→φ92, φ125→φ113		
Mechanical stopper	JT1, JT2, JT3		
Limit switch	JT1, JT2, JT3		
Solenoid valves	Double solenoid/ Single solenoid valves (3 units max.)		
Air cleaning unit	filter, regulator, ruburiketa		
Optional harness	Type C0, Type D0, Type E0(NPN), Type E0(PNP), Type H0(NPN), Type H0(PNP)		
Servo on lamp	Comply UL Standard		
17. Others	Consult Kawasaki about maintenance parts and spare parts.		

[2] Controller		
1. Model	E02	
2. Enclosure	Enclosed structure / Indirect cooling system	
3. Dimensions	See attached drawing	
4. Number of controlled axes	Max.9 axes (standard 7 axes, option 2 axes)	
5. Servo control and drive system	Full Digital Servo System	
6. Type of control	Teach mode	Joint, Base, Tool, Fixed Tool (option) operation mode
	Repeat mode	Joint, Linear, Circular (option) interpolation
7. Teaching method	Teaching or AS language programming	
8. Memory capacity	8 MB	
9. External operation signals	External Emergency stop, External Hold, etc.	
10. Number of IO slots	3 slots	
11. Operation panel	Teach/Repeat SW, Emergency Stop SW, Control power lamp	
12. Communication I/F	Ethernet(100BASE-TX) , USB, RS-232C each 2port (1port on panel, 1port inside controller)	
13. Mass	See attached drawing	
14. Power requirement	AC200 V - AC220 V±10%, 50/60 Hz, 3 phases, Max. 7.5 kVA	
15. Ground	Less than 100 Ω (robot dedicated ground) Leakage current: max. 100 mA	
16. Ambient temperature	0 - 45°C	
17. Relative humidity	35 - 85 % (non-condensation)	
18. Color	Munsell: 10GY9/1 equivalent	
19. Teach Pendant	TFT color display (5.7 inch LCD) with touch panel Emergency Stop SW, Teach Lock SW and Enable SW	
20. Safety Circuit	Category: 4, Performance Level: e (EN ISO13849-1) ★	
21. Standard Options		
	General purpose IO board	IN:32 OUT:32 NPN(sink) type or PNP(source) type
	TP sheet language	English or Japanese or Chinese
	I/O connector	D-SUB 37pin(male, female) with cover
	Power/Signal cable	5m, 10m, 15m
	Teach Pendant cable	5m, 10m, 15m
	Transformer unit	AC380V-415V / AC440V-480V by tap selection
22. Other Options		
	Additional IO board	IN:64/96 OUT:64/96 NPN(sink) type or PNP(source) type
	Motor brake release	Manual brake release switch BOX
	PC cable (RS-232C)	1.5 m, 3 m
	External axes control	Additional amplifier and harnesses for external axes
	Extended safety functions	Cubic-S(Motion area monitoring, Joint monitoring, Speed monitoring etc.)
	Teach Pendant option	Connector for TP less
	Fast check mode	Fast check mode Switch
	Others	Field BUS, Software PLC, Analog input/output, Conveyor Synchronization
23. Others	Consult Kawasaki about maintenance parts and spare parts.	

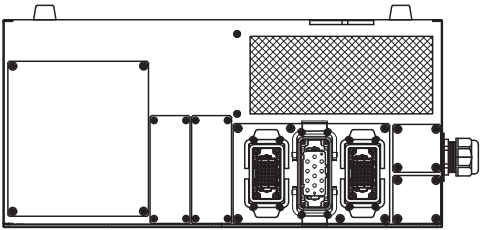
★ Category and Performance level (PL) are determined by the whole system and conditions.
The safety circuit of this controller is available in the system of category: up to 4, PL: up to e.



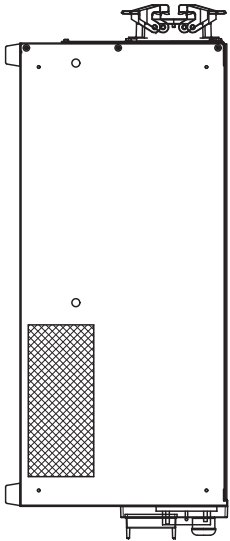
ZT130S/U/165U
WORKING RANGE

E 0 2 C O N T R O L L E R

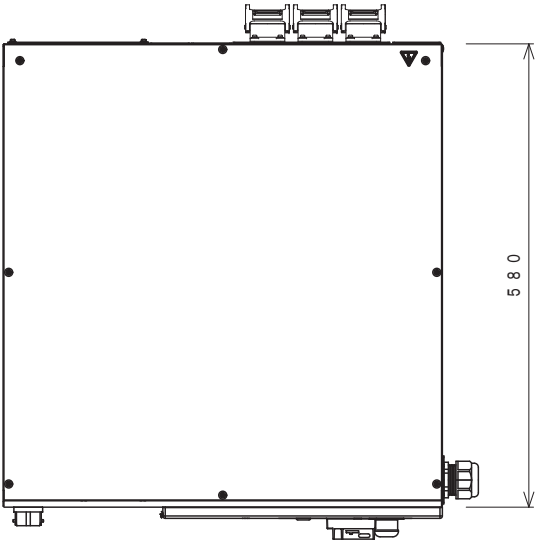
MASS : 4 0 K g



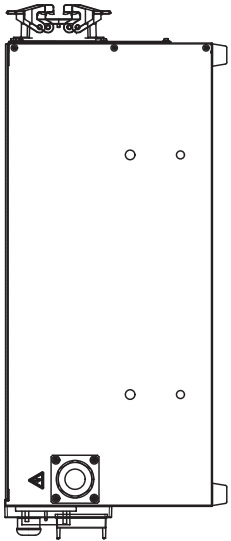
REAR VIEW



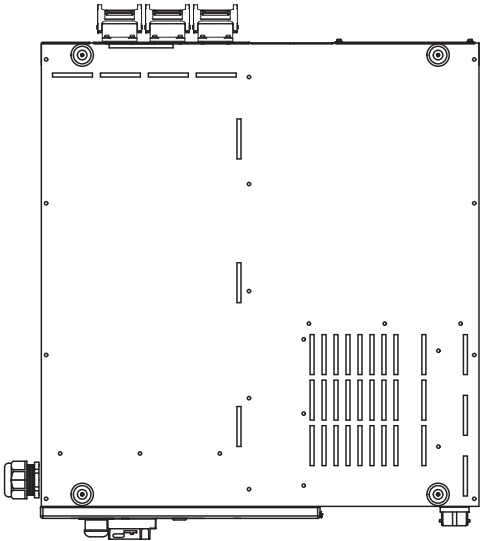
SIDE VIEW



TOP VIEW

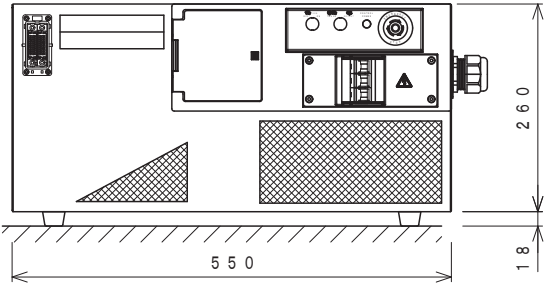
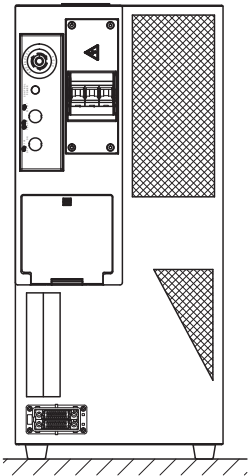


SIDE VIEW



BOTTOM VIEW

Vertical Mount



FRONT VIEW

