

Dynamic and Regenerative Braking Unit Product Catalog

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- Industrial Automation:** ■ Frequency Inverter ■ Servo & Motion Control ■ Motor & Electric Spindle ■ PLC
 ■ HMI ■ Intelligent Elevator Control System ■ Traction Drive
Electric Power: ■ SVG ■ Solar Inverter ■ UPS ■ Online Energy Management System

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DBU Series Dynamic Braking Unit

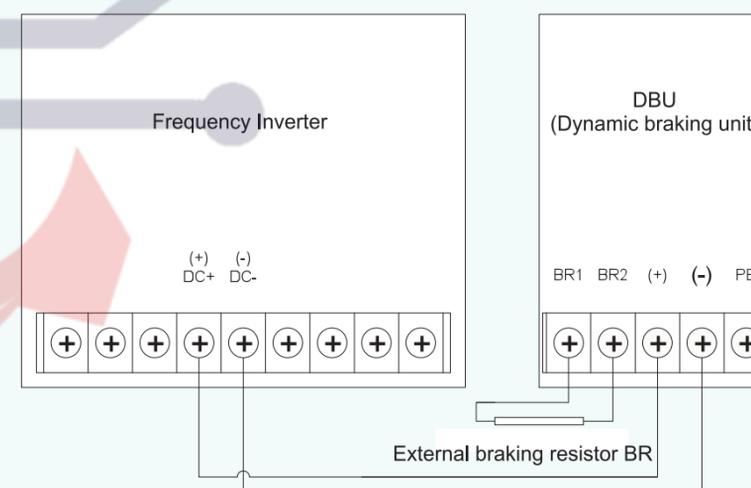
This series of products have been widely used with the products of ABB, Siemens, Mitsubishi, Schneider, Emerson, Yaskawa, Fuji, Hitachi and other international famous brands.



Parameters List and Configurations of DBU Series Products

Model	Voltage (V)	Braking Mode	Available Inverter	External dimension (H*W*D) (mm)
DBU-055-2	3AC220	Dynamic braking	11-55kW	180*110*120
DBU-055-4	3AC380	Dynamic braking	18.5-55kW	
DBU-160-4	3AC380	Dynamic braking	132-160kW	285*180*164
DBU-220-4	3AC380	Dynamic braking	185-220kW	
DBU-315-4	3AC380	Dynamic braking	132-315kW	
DBU-350-6	3AC660	Dynamic braking	22-350kW	385*200*162

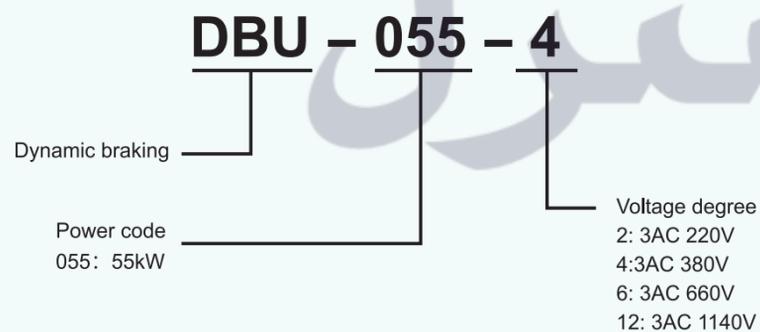
Wiring Diagram of the Main Circuit



Specifications

- Braking mode: Dynamic braking
- Parallel mode: Support the master-slave machine in parallel connection
- Braking voltage: settable
- Response time: within 1 ms, there are multiple noise filtering algorithms
- Braking usage rate: 5 minutes of full load braking at 100% braking rate, long-time running with full load braking at 50% braking rate
- Over-temperature protection: 85°C
- Protection: over-current protection, over-temperature protection, IGBT short circuit protection and braking resistor short-circuit protection
- Common resistor is optional
- Protection degree: IP20

Nameplate Description of DBU Series Dynamic Braking Units



Wiring diagram of the main circuit of DBU dynamic braking unit with any kind frequency inverter

Application Environment of DBU Series Products

The device has the best performance and longest service life in the following designated environment:

- Indoor, good ventilation, the altitude is not more than 1000m, no direct sunlight
- Environment temperature: -10 - 40°C
- Avoid high temperature, humidity, rain and water drops, the relative humidity is less than 90% RH (no condensation)
- To prevent electromagnetic interference, keep away from interference sources and vibration
- To prevent the invasion of powder, dust, cotton, metal powder and corrosive gas
- It is prohibited to use in dangerous environment of flammable explosive gas, liquid or solid.

DBU100H Series Dynamic Braking Unit for High-performance and Heavy-load

DBU100H series dynamic braking units is designed by our company for the braking applications of high-performance and heavy-load. Its continuous braking at rated braking current can meet the requirements of customers in the application of large inertia and rapid deceleration or stopping.

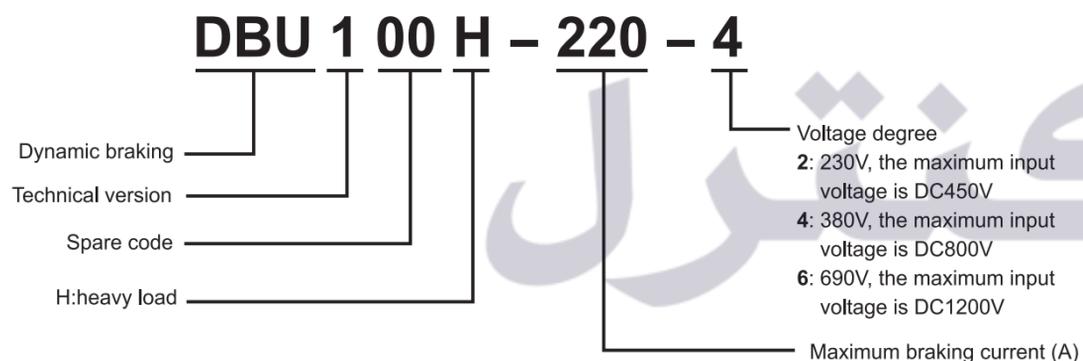
It can be widely used in the industries of elevators, looms, paper-making machinery, centrifugal machines, washing machines, drawing machines, winding machines, linkage systems, crown blocks, mining and lifting etc.



Main Features

- Three voltage degrees of 220V/380V/660V and the braking current is 60A~400A
- Multiple brake voltage thresholds can be set
- Parallel application of multiple machines
- Be applied in the application of 100% motor feedback
- Long-time running at the maximum braking current
- Meet the design requirement of EMC: IEC61800-3 the protection degree is IP20
- A variety of fault output and external fault input functions

Nameplate Description of DBU100H Series Dynamic Braking Units



Power	Voltage degree (V)	Model of braking unit	Available resistance of 100% braking torque (Ω)	Dissipated power of braking resistor (kW) (10%braking)	Dissipated power of braking resistor (kW) (50%braking)	Dissipated power of braking resistor (kW) (80%braking)	Mini. braking resistor(Ω)
220V-15kW	220	DBU100H-60-2	9.6	2	11	18	6.4
220V-18kW			8	3	14	22	
220V-22kW			6.5	3	17	26	
220V-30kW		DBU100H -110-2	4.8	5	23	36	3.5
220V-37kW			3.9	6	28	44	
220V-45kW			3.2	7	34	54	
220V-55kW		DBU100H -160-2	2.6	8	41	66	2.4
220V-75kW			1.9	11	56	90	
220V-90kW		Two DBU100H -160-2	1.6	7*2	34*2	84*2	2.4*2
220V-110kW			1.3	9*2	43*2	66*2	
380V-37kW	380	DBU100H-60-4	13.2	6	28	44	11.7
380V-45kW			10.9	7	34	54	
380V-55kW			8.9	8	41	66	
380V-75kW		DBU100H-110-4	6.5	11	56	90	6.4
380V-90kW			5.4	14	68	108	
380V-110kW			4.5	17	83	132	
380V-132kW		DBU100H-160-4	3.7	20	99	158	4.4
380V-160kW			3.1	24	120	192	
380V-200kW		DBU100H-320-4	2.5	30	150	240	3.2
380V-220kW			2.2	33	165	264	
380V-250kW	DBU100H-400-4	2	38	188	300	1.8	
380V-280kW		3.6*2	21*2	105*2	168*2		
380V-315kW	Two DBU100H-320-4	3.2*2	24*2	118*2	189*2	2.2*2	
380V-350kW		2.8*2	27*2	132*2	210*2		
380V-400kW	Two DBU100H-400-4	2.4*2	30*2	150*2	240*2	1.8*2	
380V-500kW		2*2	38*2	186*2	300*2		
660V-37kW	660	DBU100H-110-6	32.7	6	28	44	10
660V-45kW			26.9	7	34	54	
660V-55kW			22	8	41	66	
660V-75kW			16.1	11	56	90	
660V-90kW			13.4	14	68	108	
660V-110kW		11	17	83	132		
660V-132kW		DBU100H-160-6	9.2	20	99	158	6.9
660V-160kW			7.6	24	120	192	
660V-200kW		DBU100H-220-6	6.1	30	150	240	5
660V-220kW			5.5	33	165	164	
660V-250kW	DBU100H-320-6	4.8	38	188	300	3.4	
660V-280kW		4.3	42	210	336		
660V-315kW	DBU100H-320-6	3.8	47	236	378	2.8	
660V-350kW		3.5	53	263	420		
660V-400kW	Two DBU100H-220-6	3	60	300	480	5*2	
660V-500kW		4.8*2	38*2	186*2	300*2		
660V-560kW			4.4*2	42*2	210*2	336*2	

Note: The wiring diagram of the main circuit of DBU100H is the same as DBU series products.

External Dimension of DBU100H Series Products

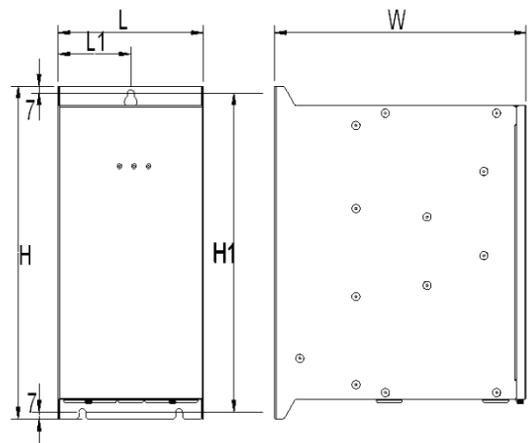


Figure 1 Dimension of 60A-220A products

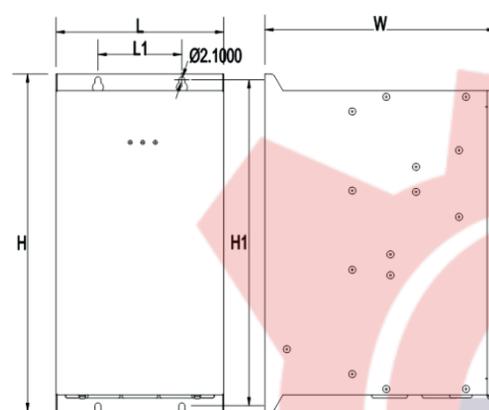


Figure 2 Dimension of 320A-400A products

Model	L(mm)	L1(mm)	W(mm)	H(mm)	H1(mm)
DBU100H-060-2	130	65	163	260	246
DBU100H-060-4					
DBU100H-110-2	150	75	260	340	326
DBU100H-110-4					
DBU100H-110-6					
DBU100H-160-2					
DBU100H-160-4	200	100	275	405	391
DBU100H-160-6					
DBU100H-220-2					
DBU100H-220-4					
DBU100H-220-6					
DBU100H-400-4					

RBU Series Regenerative Braking Unit

RBU series regenerative braking units can feed the regenerative power during motor operation back to the grid, saving the conventional energy consumption of the braking units on resistors. It is suitable for the application which needs large renewable energy during motor running.

RBU series products are applicable to all general inverters of the 380V, 660V and 1140V. At present, it has been widely used in hoisting, mining, centrifugal machines, oil field pumping units and other industry fields.

This series of products have been widely used with the products of ABB, Siemens, Mitsubishi, Schneider, Emerson, Yaskawa, Fuji and other international famous brands.

Specially, it can be suitable for all kinds of elevator inverters.

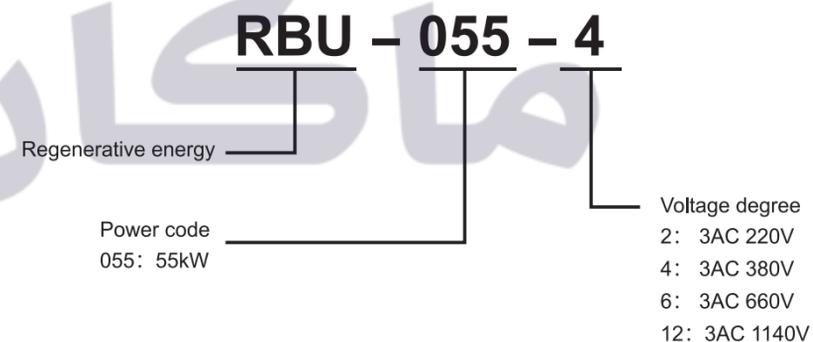
- Flexible feedback, safe operation of the elevator inverter without impact
- Noise filtering, no pollution and interference to other equipment and grid
- No power consumption of resistor braking, and change the operation environment of equipments totally
- Air conditioning is not needed according to the situation, to save the cost of air conditioning equipments and the power consumption



Specifications

- Braking mode: Regenerative braking
- Response time: Within 2 ms, there are multiple noise filtering algorithm
- Grid voltage: 3AC 380V/660V/1140V (depend on model)
- Grid frequency: 50HZ/60HZ
- Operation voltage: settable
- Braking torque: 150%
- Regenerative mode: 120 degree of current feedback
- Current distortion: <5%
- Protection: over-current protection, over-temperature protection, over-voltage protection and short circuit protection
- Protection degree: IP20

Nameplate Description of RBU Series Regenerative Braking Units



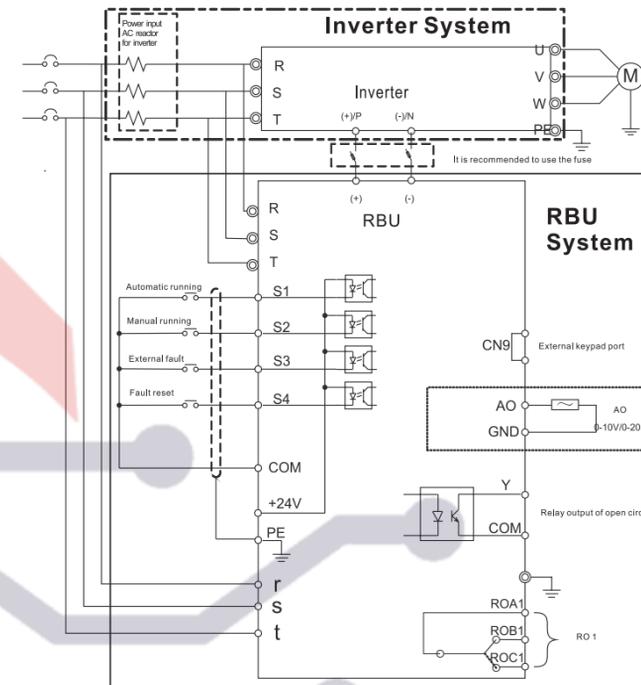
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Product Models of RBU Series Products

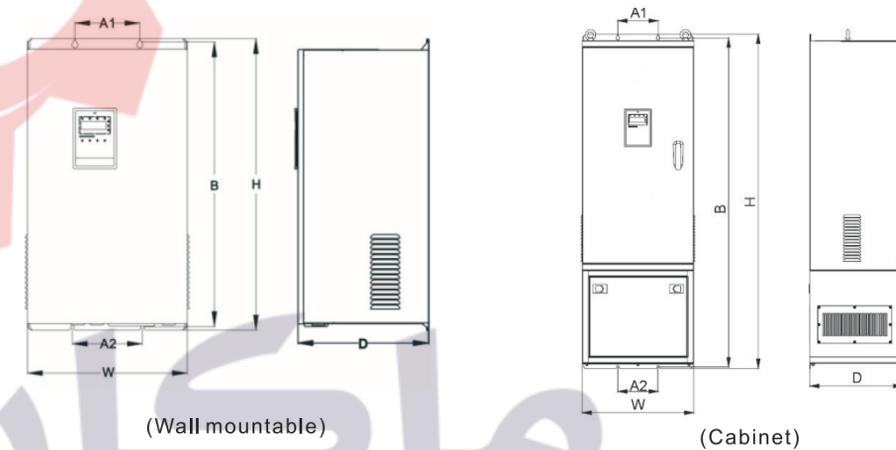
Model	Input voltage(V)	Rated capacity(kW)	Rated current at DC side(A)	Rated current at AC side(A)
RBU-7R5-4	380	7.5	13	10
RBU-011-4		11	19	15
RBU-015-4		15	26	20
RBU-018-4		18.5	32	25
RBU-022-4		22	37	30
RBU-030-4		30	51	40
RBU-037-4		37	64	50
RBU-045-4		45	77	60
RBU-055-4		55	96	75
RBU-075-4		75	128	100
RBU-090-4		90	150	120
RBU-110-4		110	183	145
RBU-132-4		132	220	176
RBU-160-4		160	267	213
RBU-185-4		185	308	246
RBU-200-4		200	333	266
RBU-220-4		220	366	292
RBU-055-6		660	55	52
RBU-075-6	75		71	56
RBU-090-6	90		86	68
RBU-110-6	110		105	84
RBU-132-6	132		126	100
RBU-160-6	160		152	122
RBU-185-6	185		176	140
RBU-200-6	200		190	152
RBU-220-6	220		209	167
RBU-250-6	250		238	190
RBU-055-12	1140	55	30	24
RBU-160-12		160	90	72

Installation Wiring



Wiring diagram of RBU-380V regenerative braking unit with any kind frequency inverter

External Dimension of RBU Series Products



Voltage degree (V)	Power (kW)	A1 (mm)	A2 (mm)	B (mm)	H (mm)	W (mm)	D (mm)	Installation hole (mm)
		Installation dimension		External dimension				
380(wall mountable)	7.5-22	130	140	401.5	415	240	216	6
	30-75	130	140	563.5	577	220	236	6
	90-220	130	140	563.5	577	320	261	6
660(wall mountable)	55-250	130	140	563.5	577	320	261	6
1140(cabinet)	55-160	/	/	/	1064	360	300	6

RBU100H Series Regenerative Braking Unit for High-performance and Heavy-load

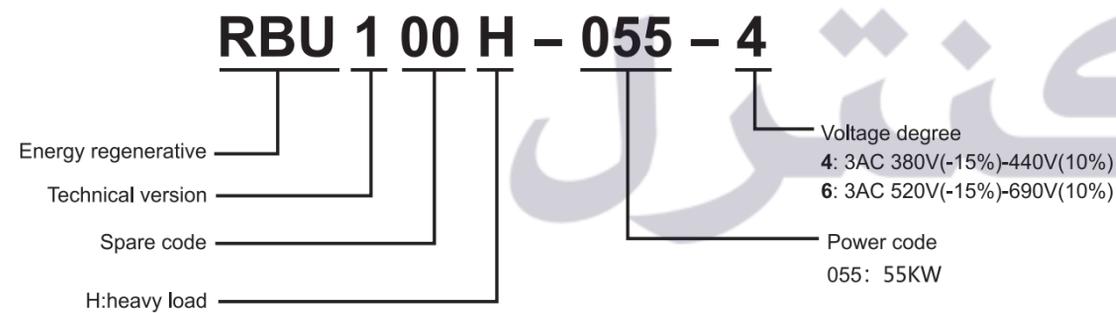
RBU100H series regenerative braking units is designed by our company for the braking applications of high-performance and heavy-load. Its continuous braking at rated regenerative current can meet the requirements of customers in the application of large inertia and rapid deceleration or stopping, at the same time, the inertia mechanical energy can be feed back to the grid to save the energy cost. It can be widely used in the industries of elevators, centrifugal machines, washing machines, building hoisting, oil fields, crown blocks, ports, mining and lifting etc. This series of products have been widely used with the products of ABB, Siemens, Mitsubishi, Schneider, Emerson, Yaskawa, Fuji, Hitachi and other international famous brands.



Main Features

- Two voltage degrees of 400V/660V and the single adapter power can be up to 400V 250kW/660V 400kW
- Flexible setting of regenerative voltage threshold through software
- Keypad or terminal control can be selected through the keypad setting, and the automatic and manual mode can be switched through the keypad or terminal signal
- Parallel application of multiple machines, to meet the usage requirements of larger capacity
- Be applied in the application of 100% motor feedback
- Long-time running at the maximum regenerative current
- To meet the design requirement of EMC: IEC61800-3, the protection degree is IP20
- A variety of fault output and external fault input functions

Nameplate Description of RBU100H Series Regenerative Units

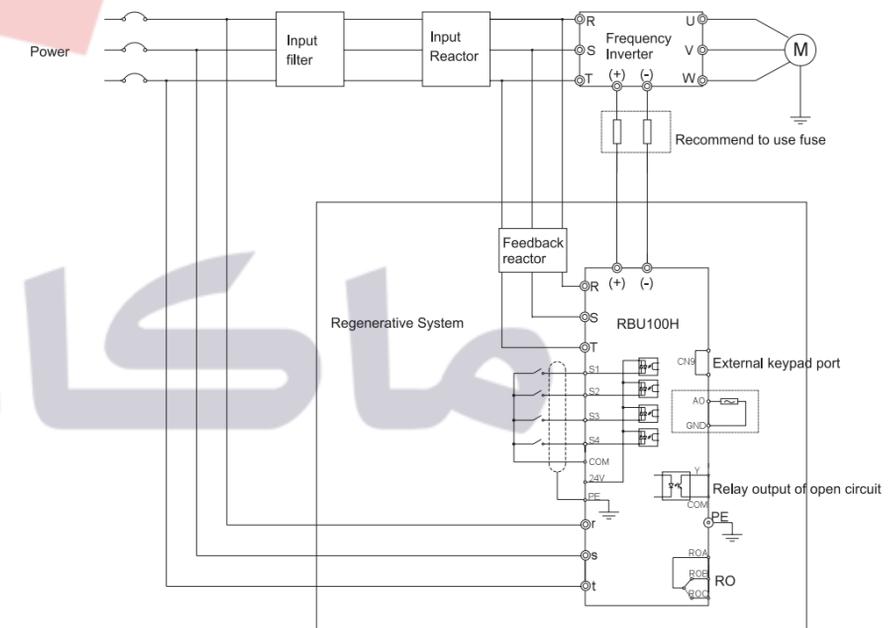


Product Models of RBU100H Series Products

Model	Input voltage(V)	Rated capacity(kW)	Rated current at DC side(A)	Rated current at AC side(A)
RBU100H-022-4	400	22	37	30
RBU100H-030-4		30	51	40
RBU100H-045-4		45	77	60
RBU100H-055-4		55	96	75
RBU100H-090-4		90	150	120
RBU100H-110-4		110	183	145
RBU100H-132-4		132	220	176
RBU100H-160-4		160	267	213
RBU100H-200-4		200	333	266
RBU100H-250-4		250	417	330
RBU100H-055-6	660	55	52	42
RBU100H-090-6		90	86	68
RBU100H-160-6		160	152	122
RBU100H-200-6		200	190	152
RBU100H-315-6		315	300	230
RBU100H-400-6		400	400	330

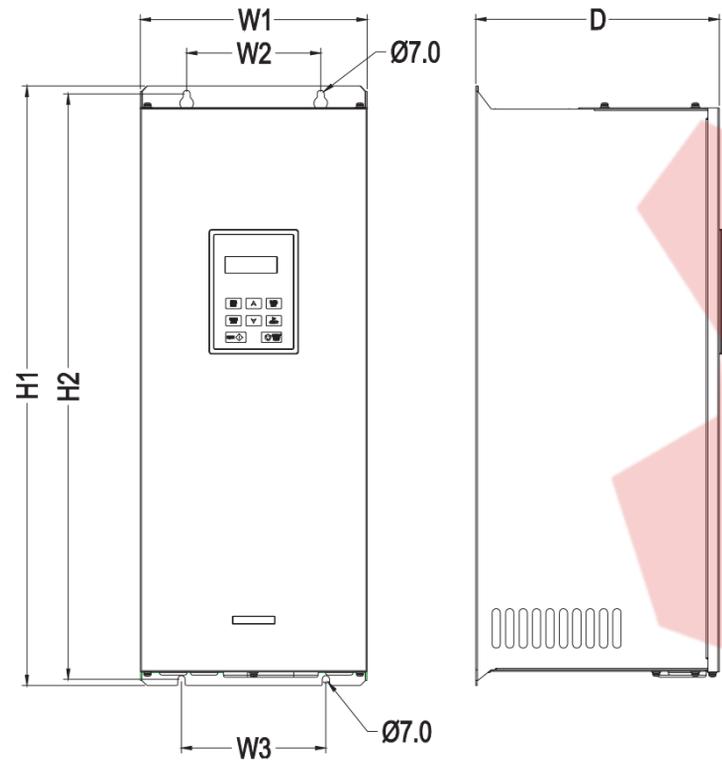
It is necessary to install the external reactors because the structure of RBU100H regenerative units and the dimension and size of the reactor needs to be confirmed when ordered.

Installation Wiring

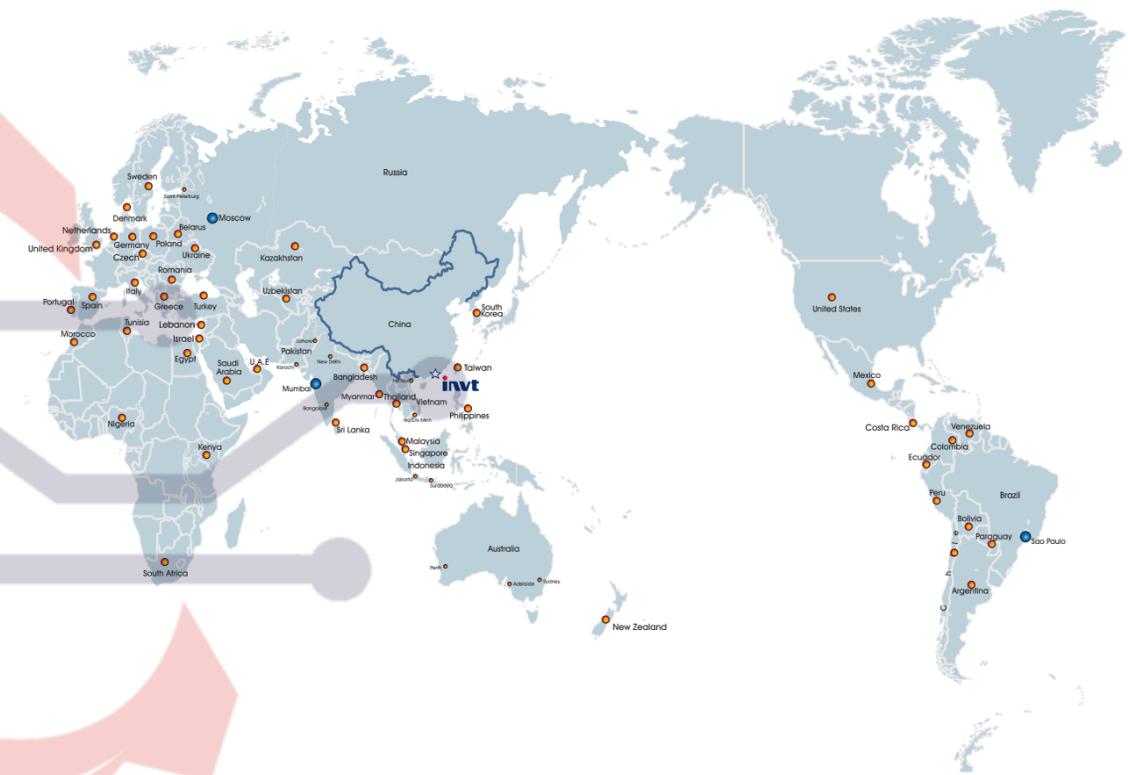


Wiring diagram of RBU100H-380V regenerative braking unit with any kind frequency inverter

External Dimension of RBU100H Series Products



Sales Network



Voltage degree	Power	Installation dimension			External dimension			Installation hole(mm)
		W2(mm)	W3(mm)	H2(mm)	W1(mm)	H1(mm)	D(mm)	
400V	22-45kW	130	140	563.5	220	577	236	7
	55-132kW	130	140	563.5	320	577	261	7
	160-250kW	250	250	732	440	750	326.2	9
660V	55-160kW	130	140	563.5	320	577	261	7
	200-400kW	250	250	732	440	750	326.2	9

- India subsidiary company in Mumbai
- Russia representative office in Moscow
- Brazil representative office in Sao Paulo
- Exported to more than 60 countries and regions

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