

# RDW5 Series

## Intelligent type Air circuit breaker



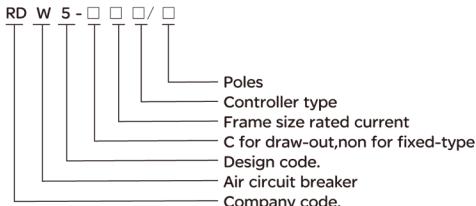
### Description

RDW5 series intelligent type Air circuit breaker is applied to power distribution network of AC 50/60Hz, rated operating voltage up to 400V/690V, rated current up to 6300A. It's mainly used to distribute power and protect circuit and power-supply equipment against damage of faults, such as overload, under-voltage, short-circuit, single-phase grounding, and it has insulation function. Besides, the circuit breaker has various intelligent protect function, can realize bidirectional communication between several breaker and central control computer by its network system, realize remote control function to satisfied the requirements of automatic system control. The circuit breaker conforms the standard of IEC60947-2.

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### Model No.



### Normal operation condition and installation condition

3.1 Temperature: no more than +40°C, no less than -5°C, and average day temperature no more than +35°C.

If customer requires condition of higher than +40°C, or lower than -25°C, it should be consulted with manufacturer.

3.2 Installation location attitude no more than 2000m

3.3 Humidity: when the temperature at +40°C, it no more 50%

The higher humidity is accepted at the lower temperature. The average humidity of month should no more than 90%, and the average temperature of month should not lower than +25°C.

The condensation should be taken care when the humidity change.

3.4 Protection class: IP20

3.5 Using type: B type

3.6 Pollution type: 3 level

3.7 Installation type:

Type of circuit breaker main circuit, under voltage release, primary coil of power transformer is installation IV; type of Auxiliary circuit and control circuit installation is III.

3.8 Installation condition: it should be installed according to instruction, vertical plane tilt angle should not exceed 5°

3.9 It conforms standard IEC 60947-2.

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### Main technique parameter

Model No.		RDW5-1600	RDW5-2500	RDW5-4000	RDW5-6300
Rated current (A)		200,400,630,800, 1000,1250,1600	1000,1250,1600, 2000,2500	2000,2500,2900, 3200,3600,4000	4000,5000,6300
Neutral rated current In(A)		100%In	100%In	100%In	50%In
Rated operating voltage (V)				AC 400/690	
Frequency (Hz)				50/60Hz	
Number of poles				3P/4P	
Rated impulse withstand voltage Uiimp (kV)				AC 12	
Rated isolation voltage Ui (V)				AC 1000	
Power frequency withstand voltage(V) 1min				3500(Main circuit)	
Rated ultimate short circuit breaking capacity(Icu) KA	AC400V	42	80	100	80
	AC690V	-	50	65	-
Rated operating short circuit breaking capacity(Ics) KA	AC400V	32	65	80	65
	AC690V	-	50	65	-
Rated withstand current for short-time(Icw)1s(KA)	AC400V	20/30(0.5s)	65	80	65
	AC690V	-	40	50	-
Rated short circuit connection ability (Icm) KA	Electrical life	7000	6500	3000	3000
	Mechanical life	15000	15000	10000	10000
Using type				B type	
Breaking time(without any auxiliary delay				25-30ms	
Closing time				≤70ms	

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Model No.		RDW5-1600	RDW5-2500	RDW5-4000	RDW5-6300
Operation life(times) 2500A below	400V electrical life	8000	8000	5000	1500
	690V electrical life	3000	2500	2000	1000
1time/3min;Above 2500A 1time/6min	Mechanical life (maintenance - free)	15000	12500	10000	6500
	Mechanical life (maintenance)	30000	25000	20000	13000
Wire incoming pattern		Wire to enter from the upper or lower port			
Arc distance(mm)		0			
Installation method		Fixed type or draw-out type			

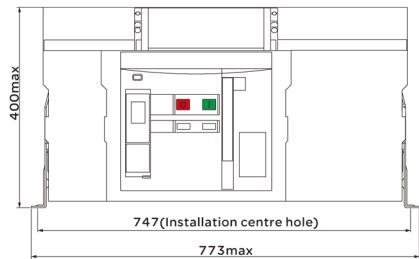
### External and installation dimension

Draw-out type						Fixed type			
Model	Poles	Width (mm)	Height (mm)	Depth (mm)	Weight (kg)	Width (mm)	Height (mm)	Depth (mm)	Weight (kg)
RDW5-1600	3P	282	351	345	43	254	320	254	22
	4P	352	351	345	55	324	320	254	26.5
RDW5-2500	3P	375	435	485	84	368	400	360	47
	4P	470	435	485	96	463	400	360	56
RDW5-4000	3P	435	435	515	100	428	400	392	53
	4P	550	435	515	130	543	400	392	67
RDW5-6300	3P	780	435	515	195	773	400	441	106
	4P	895	435	515	225	888	400	441	120

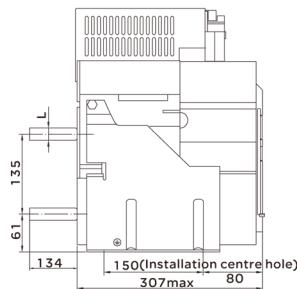
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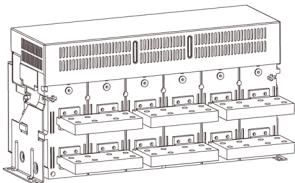
Overall dimension



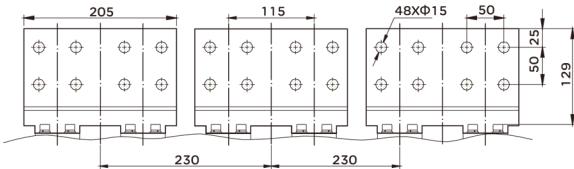
horizontal connection and overall dimension



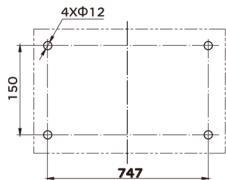
RDW5-6300/3P Fixed type horizontal connection



horizontal connection and phase spacing



Installation dimension



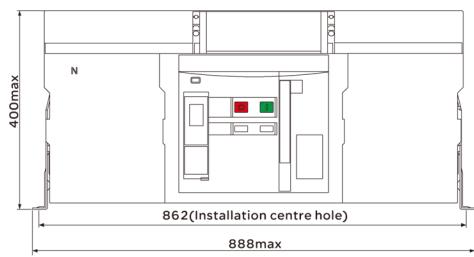
The relationship with busbar thickness and current

Rated current A	Busbar thickness mm
4000	20
5000 6300	30

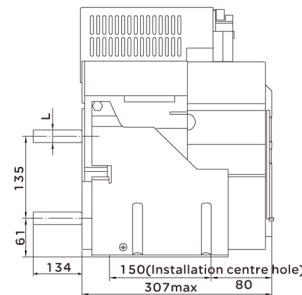
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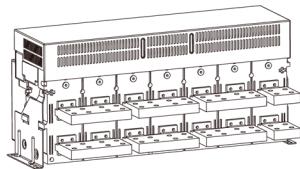
Overall dimension



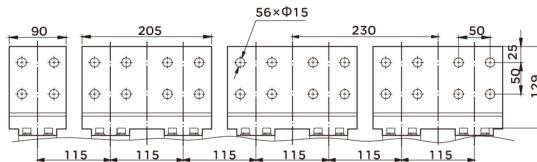
horizontal connection and overall dimension



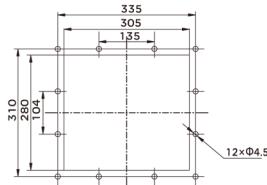
RDW5-6300/4P Fixed type horizontal connection



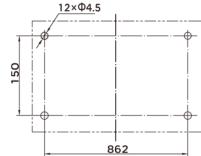
horizontal connection and phase spacing



Doorframe installation dimension of RDW5-4000-6300 fixed type



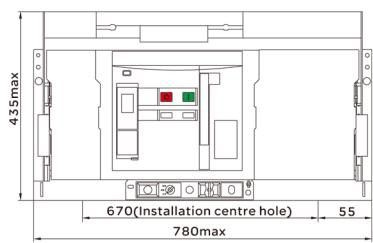
Installation dimension



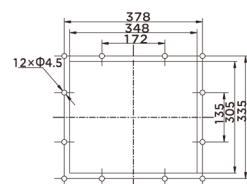
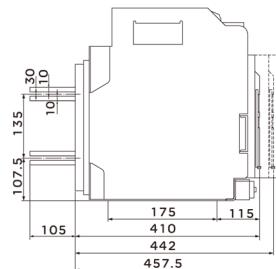
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Overall dimension



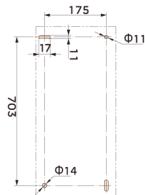
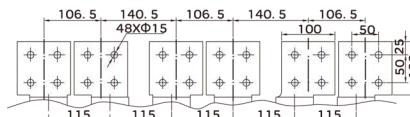
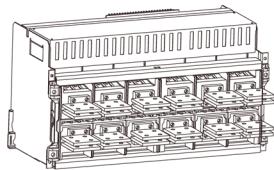
horizontal connection and overall dimension    Doorframe installation dimension



RDW5-6300/3P The horizontal connection of fixed type

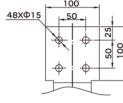
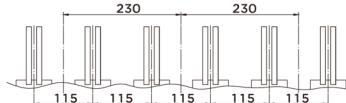
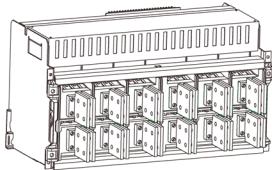
horizontal connection and phase spacing

Installation dimension



RDW5-6300/3P The vertical connection of fixed type

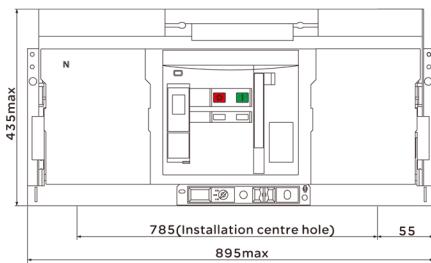
Vertical connection and phase spacing



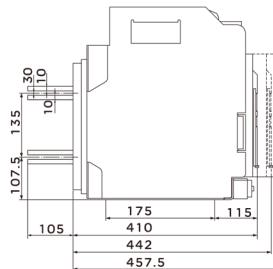
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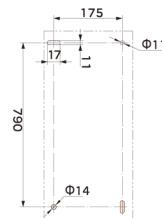
## Overall dimension



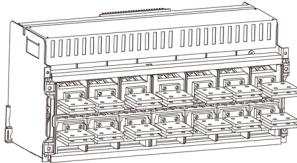
horizontal connection and overall dimension



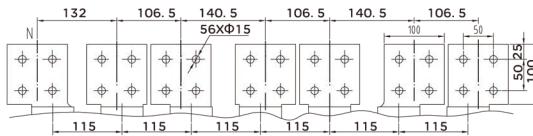
### Installation dimension



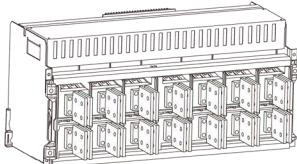
RDW5-6300/4P The horizontal connection of fixed type



#### horizontal connection and phase spacing



RDW5-6300/4P The vertical connection of fixed type



## Vertical connection and phase spacing

