

Water Resistance Test Chamber

Data Sheet - QWRT-1000 IEC TYPE

1. Product Name: Water Resistance Test Chamber

Water Resistance Test Chamber is used to evaluate the exterior protection level of electrical and electronic products, aimed at testing harmful influences caused by water entering the instrument, thereby detecting the exterior body waterproof ability.

2. Technical Specifications:

Applications	Electrical and electronic products					
Exterior Dimension	2000 x 1200 x 2090mm (W x D x H)					
Interior Dimension	1000 x 1000 x 1000 mm (W x D x H)					
Test Items	IPX1	IPX2	IPX3	IPX4	IPX5	IPX6
	Water Spray Area		Swing Tube Diameter: 40cm		Nozzle Diameter Φ	
	80 x 80cm		1sec at 60°	3sec at 180°	6.3mm	12.5mm
Water Flow	1.0 \pm 0.50 mm/min	3.0 \pm 0.50 mm/min	N*0.07L/min		12.5L/min	100L/min
			Micro-pore N=16	Micro-pore N=25		
Test Stage	ϕ 300mm \times 1 r.p.m					
Test Time	0 ~ 999.9min					
Water Supply	Tap Water					
Executive Standard	IEC 60529 / GB4208-2008					
Instructions	The test of which second bit of code is 5 and 6, the distance from the nozzle test article is 2.5~3.0 m; water sprayed to the test article from a tank outside; sprinklers is outside the box with a special shelf fixed, waterproof acrylic board is around the water column.					



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3. Structure:

- a. *Interior Material:* Stainless Steel (SUS #304).
- b. *Exterior Material:* Painted Steel.
- c. *Chamber Door:* single door, window 380 x 310mm, attach lights and manual wipers, to facilitate the operator to view test article in the test tank at any time.
- d. Explosion-proof, firm and durable.
- e. *Water tank:* made of stainless steel standard needle $\varnothing 0.4\text{mm}$.
- f. *Swing Tube:* In accordance with IEC60529 specifications for Picture 4.
- g. *Flush Nozzle:* according to IEC60529 specifications for Picture 6.
- h. *Pressurised water circulating pump equipment:* stainless steel products, pressure gauge, meter.
- i. *Safety control system:* pressurised water pump mechanical overload warning.
- j. Aluminium hollow shelf $\varnothing 300\text{mm}$ turntable, along with 15° tilt fixed wheel head, easy for customers to adjust the product while testing.
- k. Speed motor, oscillating tube is adjustable, easy to operate.

4. Control Panel:

- a. Switch breaker without fuse.
- b. Digital microcomputer temperature indicator (0 ~ 100°C).
- c. Digital microcomputer time controller (0 ~ 999.9min).
- d. Pressure pumps, with a start switch indicator light and electromagnetic switch.
- e. *Pressure gauge:* 0 ~ 300Kpa.
- f. *Flow-meter:* 0 ~ 120L / min.
- g. Swing tube motor speed controller.
- h. Rain drops / Swing Tube / Spray switch group.

5. Standard Delivery:

- a. Operation and Maintenance Manual x 1.
- b. Equipment Factory Performance Test Report x 1.
- c. Swing pipe (16 holes, 25 holes) x each one.
- d. Allen wrench 4mm x 1.
- e. The needle (0.4) x 36.
- f. Filter x 1 group.
- g. 15°C tilt wheel fixed head x 1.
- h. Rain drops collecting tray $20 \times 20 \times 4 \text{ cm}$ x 1.
- i. water spray test waterway x 1 (optional).
- j. nozzle (6.3; 12.5). Each x 1.

6. Power supply:

3 Phase 4W + G 380VAC 50HZ (voltage fluctuation $\leq \pm 10\%$).

7. Ground protection: Grounding resistance $\leq 4\Omega$.

8. Warranty: One year

8.a Requires on-site water and electricity; drain and exhaust provided by the customer!



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9. Annex I: RT-1000IEC Included component list

RT-1000IEC (IPX1.2.3.4.5.6)	
Relays	LY2SN/MY4SN
Electromagnetic Switch	CU-11 3.5-5.0A 220VAC
Electromagnetic Contactor	CU-11
Timer	999.9min 220VAC
No Fuse Switch	BM60 3P 20A
Oversvoltage Owed to Reverse Protection	K8AB2 380VAC
Temperature Displayer	FY701
Micro Switch	TZ-8166
Selector Switch	1a 3 segment A037
Pipeline Pump	50SG15-30 including fixed holder
Booster	12WG-10
Flow-meter	2.5L/min & 120L/min
Motor	Induction motor 90W 220VAC, speed governor attached
Pinhead	All stainless steel 22G
Handle	Explosion-proof
After-button	Zinc Alloy
Machine body	Depending on the specification (stainless steel inner box, carton paint)



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9. Annex II: Component Images:



Picture 1: Rain Test IPX1/IPX2



Picture 2: Swing Tube Test IPX3/IPX4



Picture 3: Spray Test IPX5/IPX6