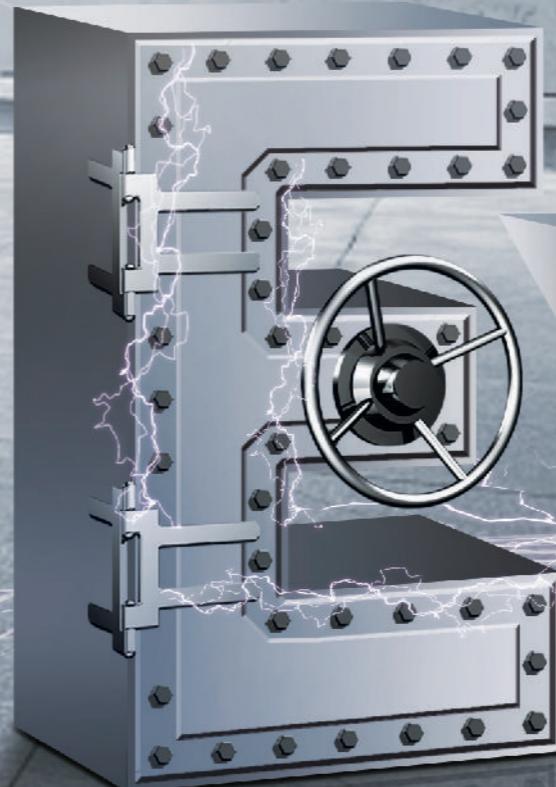




Spark Free
Refrigerator/Freezer



Spark Free Refrigerator

Typical Installation

Spark free refrigerators are installed typically in many different laboratories and research facilities to store chemical or experimental reagents that are flammable, explosive, evaporative or corrosive.



Product Advantages

ATEX II C-T6 E.U. Explosion Proof Certification

Explosion proof features include antistatic liner, gasket, explosion proof fan motor, over current and voltage protection. ATEX II C-T6 explosion proof certification for Haier's laboratory refrigerator ensures safety in your work place.

3~16°C Setting Temperature Range

Smart temperature control system limits the temperature variance within $\pm 3^{\circ}\text{C}$. Adjustable set point for the range of $3^{\circ}\text{C} \sim 16^{\circ}\text{C}$, factory default set temperature is 5°C , controlling the temperature inside the chamber is $2\sim 8^{\circ}\text{C}$.

One-touch Search for Historic Data

The highest and lowest historic temperature data is saved and can be checked with one keystroke.

High Efficiency HC Cooling Technology

The hydrocarbon refrigeration system operates at a much higher efficiency and reduces the energy consumption by about 50 percent.



Ergonomic Design

High Strength Glass Shelves

Tempered glass shelves hold 40 kg of products per shelf.

Low Noise

Noise cancelling technology reduces the sound level to less than 40 dB(A) for a much-improved environment.



Dual Lock Design with Multiple Alarm Systems

A mortise lock is standard on the door. Standard alarms include high and low temperature, door ajar, and sensor errors.



Cabinet Structure



Glass Shelf



ATEX Certification Label

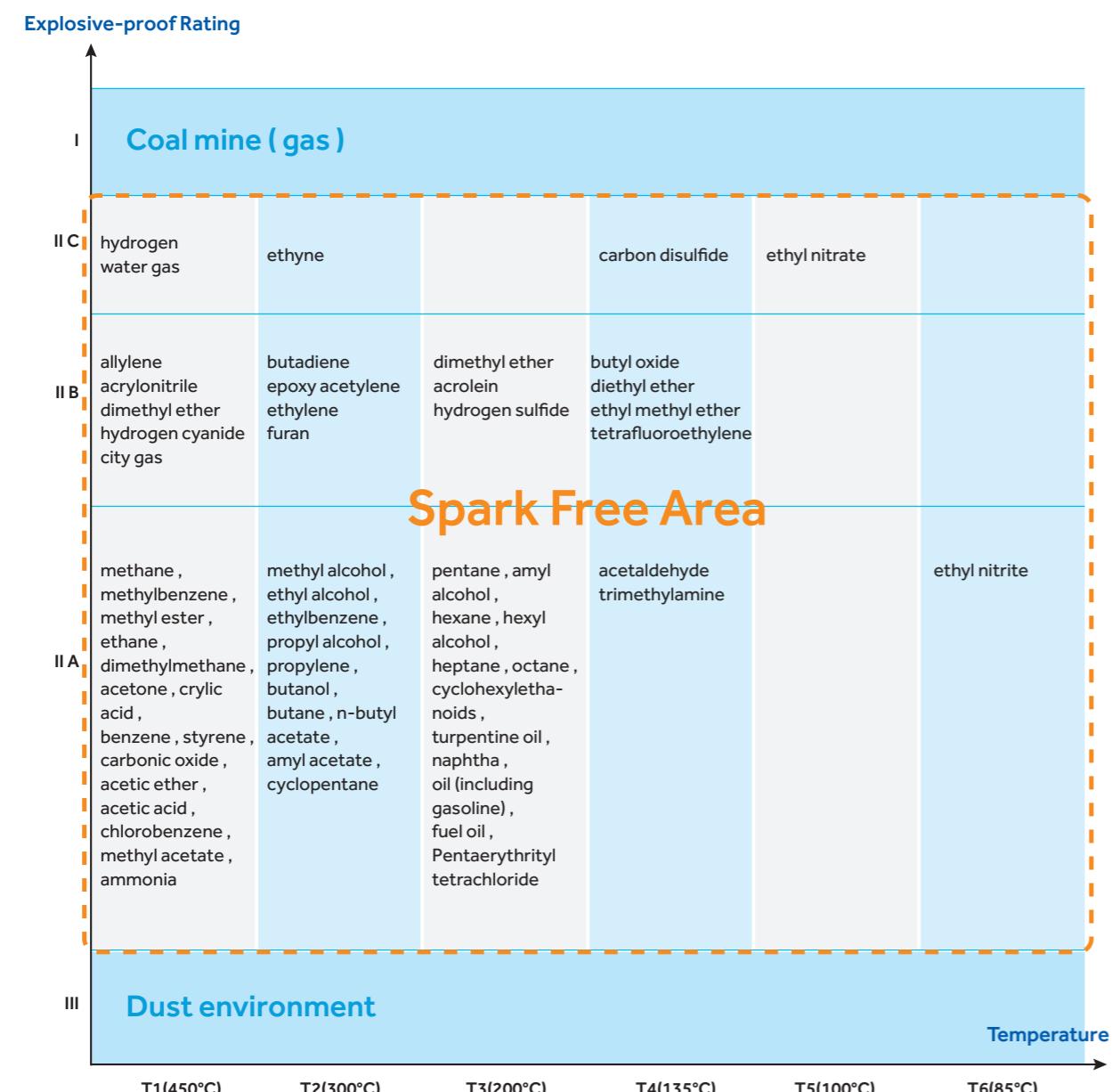


Explosion Proof Cabinet/Fan

Spark Free Refrigerator

Application Range

Haier spark free refrigerators are ATEX certified in the application range II 3G Ex ic nA II T6, which means the appliances can be found in the whole II zone environment (including II A and II B, II C), a typical environment within many biochemistry laboratories.



Warning: Do not store open containers of volatile substances in this refrigerator.

Specifications



	Model	HLR-118SF	HLR-310SF	HLR-310FL(115V)	HLR-310FL(220V)
Technical Data	Type	Under-Counter	Upright	Upright	Upright
	Climate Class	N	N	N	N
	Cooling Type	Forced Air Cooling	Forced Air Cooling	Forced Air Cooling	Forced Air Cooling
	Defrost Mode	Auto	Auto	Auto	Auto
	Refrigerant	R600a	R600a	R600a	R600a
Performance	Sound Level (dB(A))	40	40	40	40
	Temperature Range (°C)	3~16°C Adjustable	3~16°C Adjustable	3~16°C Adjustable	3~16°C Adjustable
	Ambient Temperature (°C)	16~32	16~32	16~32	16~32
	Controller	Microprocessor	Microprocessor	Microprocessor	Microprocessor
Control	Display	LED	LED	LED	LED
	Power Supply (V/Hz)	220~240/50	220~240/50	115/60	220~240/50
	Power (W)	55	210	210	210
	Electrical Current (A)	1.2	1.26	1.26	1.26
Electrical Data	Power Consumption (kWh/24h)	0.56	1.05	1.05	1.05
	Capacity (L/Cu.Ft)	118/4.2	310/10.9	310/10.9	310/10.9
	Net/Gross Weight (approx)	kg 44/49	72/83	72/83	72/83
		lbs 97/108	158.7/183	158.7/183	158.7/183
Dimensions	Interior Dimensions (W*D*H)	mm 515*415*630	560*500*1290	560*500*1290	560*500*1290
		in 20.3*16.3*24.8	22.0*19.7*50.8	22.0*19.7*50.8	22.0*19.7*50.8
	Exterior Dimensions (W*D*H)	mm 597*635*810	605*598*1840	605*598*1840	605*598*1840
		in 23.5*25*31.9	23.8*23.6*73.6	23.8*23.6*73.6	23.8*23.6*73.6
Alarms	Packing Dimensions (W*D*H)	mm 700*710*930	680*690*1940	680*690*1940	680*690*1940
		in 26.8*27.2*35.8	26*26.4*79.5	26*26.4*79.5	26*26.4*79.5
	Container Load (20'/40'/40'H)	48/96/96	24/51/51	24/51/51	24/51/51
	High/Low Temperature	Y	Y	Y	Y
Accessories	Sensor Error	Y	Y	Y	Y
	Door Ajar	Y	Y	Y	Y
	Caster	2	4	4	4
	Foot	2	2	2	2
Other	Shelves/Baskets	2/1	4/0	4/0	4/0
	Water Tray	1	1	1	1
	Padlock Adapter Kit/Quantity	/	1	1	1
	Built-in Key Door Lock/Quantity	1	1	1	1
	Certification	CE, ATEX	CE, ATEX	UL, Energy Star	CE, ATEX

Combined Refrigerator and Freezer with Spark-free Interior

Application Range

Used for storage of volatile, unstable, low boiling point (flammable and explosive) compounds/dangerous other items that require a low temperature in pharmaceutical factories and laboratories etc.



Product Advantages

High Performance

Refrigerator: Forced-air cooling system with cycle defrost, temperature uniformity $\pm 3^\circ\text{C}$
 Freezer: Cold wall cooling system, manual defrost, temperature uniformity $\pm 5^\circ\text{C}$
 Optional USB interface, RS485 & printer, easy to get temperature record

Multipurpose and Space Efficient

One cabinet with two independent chambers, both are self-contained and independently controlled with individual doors

Environment Friendly

Hydrocarbon refrigerant (R600a for refrigerator/R290 for freezer) and CFC-free polyurethane insulation for reduced global warming potential

Microprocessor Controller with Digital Display

Refrigerator temperature 2~8°C with resolution of 0.1°C
 Freezer temperature -30~10°C with resolution of 1°C
 Multiple alarm functions with remote alarm contact to ensure safe monitoring

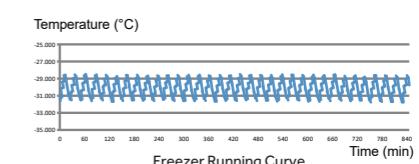
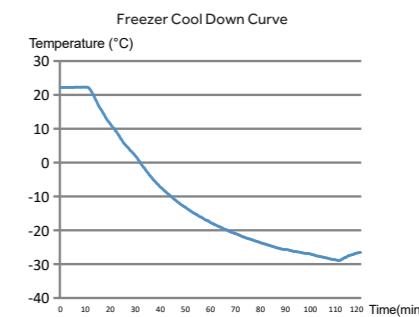
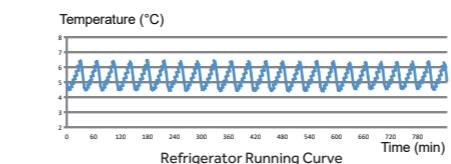
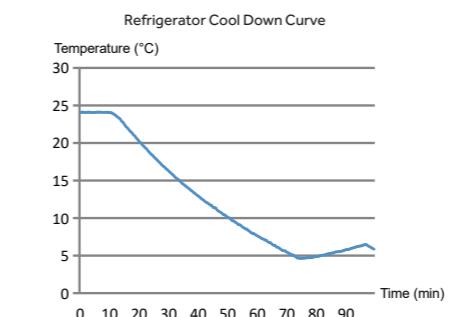
Stainless Steel Interior

The interior of refrigerator and freezer are both made of stainless steel, which is easy to clean and corrosion-proof

ATEX Certified

Low Energy Consumption: 1.5 kWh/24h

25°C Ambient Temperature Curve



Combined Refrigerator and Freezer with Spark-free Interior



Specifications

	Model	HLRF-319SF			
Technical Data	Cabinet Type	Upright			
	Climate Class	N, 16-32°C			
	Cooling Type	Refrigerator: Forced Air Cooling/Freezer: Direct Cooling			
	Defrost Mode	Refrigerator: Auto/Freezer: Manual			
	Refrigerant	Refrigerator: R600a/Freezer: R290			
	Sound Level (dB(A))	43			
Performance	Temperature Range (°C)	Refrigerator: 3~16/Freezer: -10~-30			
	Controller	Microprocessor			
	Display	LED			
Electrical Data	Power Supply (V/Hz)	220-240~/50			
	Power (W)	230			
	Electrical Current (A)	1.5			
	Power Consumption (kWh/day)	1.5			
Dimensions	Capacity (L/Cu.Ft)	Refrigerator: 219/7.7; Freezer: 100/3.5			
	Net/Gross Weight (approx)	<table> <tr> <td>kg</td><td>130/140</td></tr> <tr> <td>lbs</td><td>319.7/352.7</td></tr> </table>	kg	130/140	lbs
kg	130/140				
lbs	319.7/352.7				
Interior Dimensions (W*D*H)	<table> <tr> <td>mm</td><td>Refrigerator: 605*510*720/Freezer: 515*465*440</td></tr> <tr> <td>in</td><td>Refrigerator: 23.8*20*28.3/Freezer: 20.2*18.3*17.3</td></tr> </table>	mm	Refrigerator: 605*510*720/Freezer: 515*465*440	in	Refrigerator: 23.8*20*28.3/Freezer: 20.2*18.3*17.3
mm	Refrigerator: 605*510*720/Freezer: 515*465*440				
in	Refrigerator: 23.8*20*28.3/Freezer: 20.2*18.3*17.3				
Exterior Dimensions (W*D*H)	<table> <tr> <td>mm</td><td>735*660*1810</td></tr> <tr> <td>in</td><td>28.9*26.0*71.3</td></tr> </table>	mm	735*660*1810	in	28.9*26.0*71.3
mm	735*660*1810				
in	28.9*26.0*71.3				
Packing Dimensions (W*D*H)	<table> <tr> <td>mm</td><td>775*720*1930</td></tr> <tr> <td>in</td><td>30.5*28.3*76</td></tr> </table>	mm	775*720*1930	in	30.5*28.3*76
mm	775*720*1930				
in	30.5*28.3*76				
Container Load (20'/40'/40'H)	21/43/43				
Alarms	High/Low Temperature	Y			
	Sensor Error	Y			
	Power Failure	Y			
	Door Ajar	Y			
	Low Battery	Y			
	Remote Alarm	Y			
	Caster	Y/4			
Accessories	Foot	Y/2			
	Porthole	N			
	Shelves	Refrigerator: 3; Freezer: 2			
	Stylus Printer	Optional (printer or RS485, either-or)			
	RS485	Optional (printer or RS485, either-or)			
	USB Interface	Optional			
	Certification	CE, ATEX			
Other					

-30°C Spark Free Freezer

53/54

Typical Installation

It can be used for safe storage of potentially flammable items and other temperature sensitive samples at low temperatures. Applications found within life science, medical, electronics and chemical industries.



Product Advantages



Explosion Proof Interior

SF series freezers feature standard interior design. FL series freezers feature antistatic interior design. All metal parts are grounded reliably and interior design is explosion proof. Certificates include China anti-explosion proof and EU explosion proof ATEX II C-T6



Superior Temperature Uniformity

The temperature uniformity is $\pm 3^\circ\text{C}$ with the setting temperature of -30°C



Low Noise Design

Noise-reduction features and structure noise reduction design



High-efficiency and Energy-saving Compressor and System

High-efficiency hydrocarbon compressor, optimized refrigeration system and low power consumption



Green and Environmental Friendly

Hydrocarbon refrigerant, energy saving and environmental protection, built with LBA foam insulation, complies with European RoHS Directive



Multiple Alarm Functions

High, Low temperature, door ajar, power failure, sensor error, high ambient temperature alarm and also equipped with remote alarm interface, alarm mode is sound and flash



DW-30L298SF **DW-30L298FL**

Laboratory Deep Freezer with explosion-proof interior
Interior Temp. Range : $-10 \sim -30^\circ\text{C}$ (DW-30L298FL/SF)
Internal II3/- G Ex ic IIC T6 Gc
Certification No.:CML 18ATEX4058X
Serial No.:In the Barcode
Qingdao Haier Biomedical Co., Ltd.

Anti-static operating instruction
1.Clean plastic parts with a damp cloth only.
2.Do not use a dry cloth to clean plastic parts.
3.Danger of sparks due to electrostatic discharge.
4.Warning - potential electrostatic charging hazard - see instructions.

Ergonomic Design



Microprocessor-controlled System

Microprocessor control with LCD temperature display precision at 0.1°C . Internal temperature is adjustable from -10°C to -30°C



Rich Configuration

Standard: DW-30L298SF interior material is PCM with 3 plastic coated wire shelves, DW-30L298FL interior material is SUS with 3 chrome-plated wire shelves

Optional: stainless steel shelves, drawer, temperature recorder, RS485 or USB (one out of two)



Adjustable Shelves

The adjustable shelves ensure the maximum usage efficiency of the internal space, and users can store items of different sizes as needed



Improved Handle Design

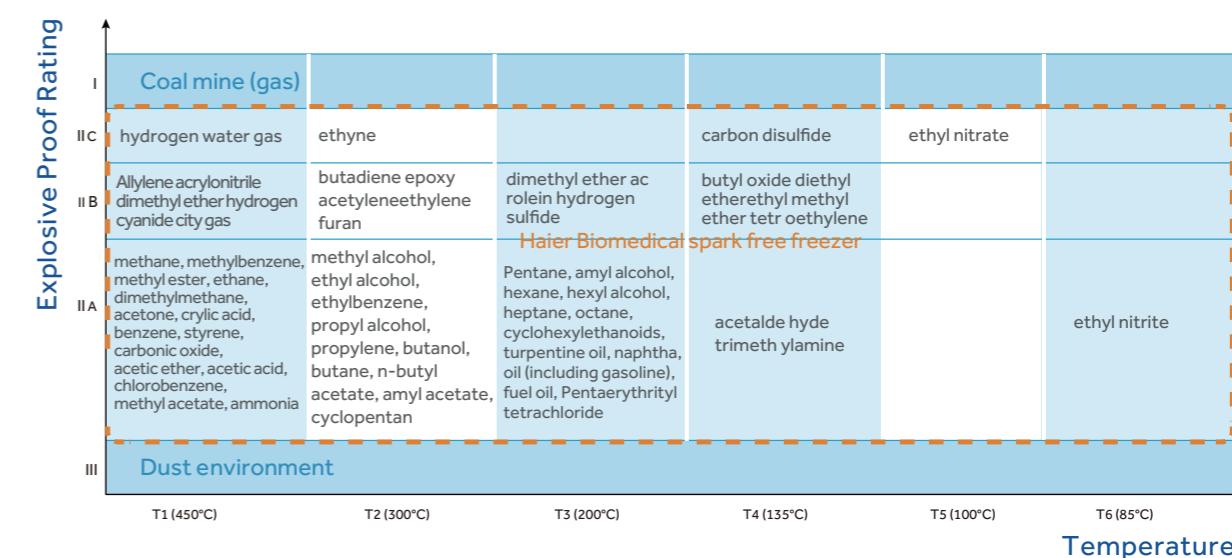
The ergonomic chamfer design of the handle ensures smooth operation and maximum durability



Feet and Casters

4 back-and-forth casters and 2 adjustable feet (out of two) for easy moving and leveling

Application Range



-25°C Spark Free Freezer

Product Advantages



Explosion Proof Interior

The SF series is composed of a non-anti-static liner, door lining and drawers. Equipped with an overcurrent and overvoltage protection system with all components earthed to ensure static is discharged safely. Certified to ATEX IIC-T6 EU and can be used in zone 2 environments.



Hydrocarbon Energy-saving

Adopting high-efficiency HC compressor and optimized refrigeration system, for safe and reliable cold storage of your samples.



Environmentally Friendly

The HC system is a completely green refrigeration solution. With LBA foamed polyurethane insulation in line with European ROHS directive for environmentally friendly materials.



Low Noise

Cabinet structure and refrigeration system noise reduction design lowers noise level to less than 27dB (A) and eliminating any harsh high-frequency noises.

Ergonomic Design



Microprocessor

- Microprocessor electronic temperature controller, LCD digital temperature display, display precision is 0.1°C, temperature set point -10~25°C. Temperature uniformity is ±3°C.
- Multiple alarms including high and low temperature, sensor error, power failure, door ajar, high ambient and remote alarm.
- Alarm mode: sound and light alarm.
- It can be connected to remote alarm.



Undercounter Biomedical Freezer

The DW-25L92 cabinet is designed with a height of 810mm, which can be easily placed under the bench to save storage space.

Specifications



	Model	DW-25L92SF	DW-30L298SF	DW-30L298FL
Technical Data	Cabinet Type	Upright	Upright	Upright
	Climate Class	SN N	SN N	SN N
	Cooling Type	Direct Cooling	Direct Cooling	Direct Cooling
	Defrost Mode	Manual	Manual	Manual
	Refrigerant	HC	HC	HC
	Sound Level (dB(A))	27	41	41
Performance	Cooling Performance (°C)	-25	-30	-30
	Temperature Range (°C)	-10~25	-10~30	-10~30
	Controller	Microprocessor	Microprocessor	Microprocessor
Control	Display	LED	LCD	LCD
	Power Supply (V/Hz)	220~240/50	220~240/50	220~240/50
Electrical Data	Power (W)	150	330	330
	Capacity (L/Cu.Ft)	92/3.2	298/10.5	298/10.5
Dimensions	Net/Gross Weight (approx)	kg 101.4/112.4	46/51 253.5/286.6	115/130 253.5/286.6
	Interior Dimension (W×D×H)	mm 435*410*635	mm 541*443*1218	mm 541*443*1218
		in 17.1*16.1*25.0	in 21.3*17.4*48.0	in 21.3*17.4*48.0
	Exterior Dimension (W×D×H)	mm 597*635*810	mm 770*710*1828	mm 770*710*1828
		in 23.5*25*31.9	in 30.3*28.0*72.0	in 30.3*28.0*72.0
	Packing Dimension (W×D×H)	mm 680*690*940	mm 840*770*2000	mm 840*770*2000
Alarms		in 26.8*27.1*37.0	in 33.1*30.3*78.7	in 33.1*30.3*78.7
	Container Load (20'/40'/40'H)	48/102/102	21/42/42	21/42/42
	High/Low Temperature	Y	Y	Y
	Remote Alarm	Y	Y	Y
	Power Failure	N	Y	Y
	Sensor Error	Y	Y	Y
Accessories	Low Battery	N	N	N
	High Ambient Temperature	N	Y	Y
	Dirty Condenser	N	N	N
	Door Ajar	Y	Y	Y
	Casters	Y(4)	Y(4)	Y(4)
	Leveling Feet	Y(2)	Y(2)	Y(2)
	Porthole	N	N	N
	Inner Doors	N	N	N
	Drawers	3- Plastic Drawers	6- Plastic Drawers, Optional	6- Permanent Anti-Static Plastic Drawers, Optional
	Shelves	N	3- Adjustable Wire Shelves	3- Adjustable Wire Shelves
Others	Shelf Dimensions (W×D)(mm)	N	518*373	518*373
	Max. Load per Shelf (kg)	N	20	20
	USB Interface	N	Optional	Optional
	RS485	N	Optional	Optional
	NFC	N	N	N
	Temperature Recorder	N	N	N
	Certificate	ATEX Explosion Proof Certificate,CE	ATEX Explosion Proof Certificate,CE	ATEX Explosion Proof Certificate,CE