KRIPAL





浙江科瑞普电气有限公司

ZHEJIANG KRIPAL ELECTRIC CO.,LTD.



KRIPAL

Since 1992

National High-tech Enterprise

Zhejiang Export Premium Brand

National-level "Little Giant" Enterprise

Zhejiang Patent Demonstration Enterprise

Wenzhou Green Low-Carbon Factory





公司简介 | COMPANY PROFILE

浙江科瑞普电气有限公司是一家专业从事研发、生产、销售低压电气、防水电气和新能源产品的国家级专精特新"小巨人"企业、国家高新技术企业。

公司成立于1992年，经过多年的蓬勃发展，现已逐渐发展成为中国颇具影响力的电气制造商。

公司建有遍布全球的销售体系和服务网络，产品出口欧洲、澳洲、美洲、非洲、大洋洲、东南亚和港澳台地区，并在当地具有良好的品牌效应，并获得浙江出口名牌企业称号。公司现有厂房面积60000平方米，员工600余人，其中高级工程师10+人，专业技术人员30余人，高级管理人员30余人。

产品获得欧盟CE、美国UL、德国TUV、荷兰KEMA、瑞典SEMKO、澳大利亚SAA、德国VDE及欧盟RoHs等国际认证，以及3C国家认证和CB国际电子产品全球互认体系，通过IS09001质量管理体系、ISO14001环境管理体系、ISO45001职业健康与安全管理体系、ISO5001能源管理体系的认证。

公司与国内外科研机构广泛合作，引进国外先进的制造检测设备，先后开发出具有自主知识产权的产品100余种，多项产品已获国家发明及实用新型专利，成为省级技术研发中心和浙江省专利示范企业。

公司坚持"科学管理、自主创新、协调合作、品牌至上"的企业方针，信守"德行天下"的承诺，践行"与客户合作共赢、与员工共同富裕、为股东创造效益、为社会贡献和谐"的核心价值观，为努力实现专业电气世界品牌梦的使命而奋斗。

Zhejiang KRIPAL Electric Co., Ltd is one of the national new high-tech enterprises integrated of researching, producing and selling water-proof electric, low-voltage electric and new energy electric products. Established in 1992, KRIPAL now is gradually becoming the influential electric manufacturer in China after many years well development.With a great brand effect, KRIPAL has the completed sales and service network with its products been exported to all over the world like Europe. Australia. American. Africa. Oceania. South east of Asia, and district of HongKong, Macaw and Taiwan.KRIPAL is awarded the title of "Famous Export Brand".

KRIPAL now has the factory area 60000 m2 and workers more than 600, including over 10 senior engineers, 30 professional technicists and 30 senior executives. Products pass the certification of CE, CB, UL, VDE, TUV, KEMA, SAA, SEMKO, ROHS, and China CCC as well as quality management system such as ISO9001,ISO14001,ISO45001,ISO5001.

Cooperated with domestic and foreign R&D institutions, KRIPAL, successively developed more than 100 independent intellectual properties; some of them were successfully awarded the national patent for invention and utility models as its well performance. KRIPAL now has been selected as provincial technical research and development center and patent demonstration enterprise by government.

KRIPAL always adheres to the enterprise principle of "Scientific management, independent Innovation, Coordinating Collaboration and Cultural Brand", keep faith of "moral first" and fulfill the core value of "double-win cooperation with customers, creating profit for company owners, getting rich together with workers, building harmony for society" and fight for the mission of"make the dream of world famous electrical brand come true".

ACB UKDW1万能式断路器

UKDW1 7500 D 7500 3 IC5.0(M) Wiring Method



	Product Model
	Frame Rated Current: Inm=1600 Inm=2500 Inm=4000 Inm=7500
	Mounting Type: Fixed (F) Draw-out (D)
	Rated Current: UKDW1 -1600:200、 100、 630 、800、 1000、 1250、 1600 UKDW1 -2500:630、 800 、1000、 1250 、1600、 2000、 2500 UKDW1 -4000:2500 、2900、 3200 、3600 、3900、 4000 UKDW1 -7500:4000、 5000、 6300 、7500
	Number of Poles3、4
	Controller Type: IC5.0(M) IC7.0(3M) IC8.0(3H)
	S: Horizontal Wiring C:Vertical Wiring

Quick Selection Guide

Frame Rated Current	Rated Current
Inm=1600	UKDW1 -1600:200、 100、 630 、800、 1000、 1250、 1600
Inm=2500	UKDW1 -2500:630、 800 、1000、 1250 、1600、 2000、 2500
Inm=4000	UKDW1 -4000:2500 、2900、 3200 、3600 、3900、 4000
Inm=7500	UKDW1 -7500:4000、 5000、 6300 、7500

UKDW1 – 7500 | D / 7500 | 3 | IC5.0(M) | Wiring Method

- UKDW1 – Product Model
- D / 7500 – Mounting Type: Fixed (F) Draw-out (D)
- 3 – Poles: 3、4
- IC5.0(M) – Controller Type: IC5.0(M) IC7.0(3M) IC8.0(3H)
- Wiring Method – S:Horizontal Wiring C:Vertical Wiring

Application and Scope of Use

The UKDW1 series of intelligent universal circuit breakers (referred to as circuit breakers) is suitable for AC 50Hz, with a rated operating voltage of 400V~1690V~1800V/1140V, and a rated operating current of 7500A and below. It is used in power distribution networks to distribute electrical energy and protect circuits and power equipment from hazards such as overload, under-voltage, short circuits, and grounding faults. The circuit breaker adopts an intelligent controller with precise selective protection and multiple functions, providing comprehensive protection. It is particularly suitable for power distribution networks that require enhanced power supply reliability and the avoidance of unnecessary power outages. The 6.0 and 8.0 intelligent controllers are equipped with communication interfaces for easy connection to Þeld buses, enabling "remote measurement," "remote adjustment," "remote control" and "remote signaling" functions to meet the requirements of control automation. When conÞgured with a leakage current transformer and a corresponding intelligent controller, it can also provide leakage protection. Circuit breakers with a rated operating current of 1000A and below can also be used in AC 50Hz, 400V networks for overload, short-circuit, under-voltage, and ground fault protection of motors. Under normal conditions, they can also be used for the infrequent starting of motors.

The circuit breaker has an isolation function, the corresponding symbol"⟋ ⊬" 。

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The circuit breaker complies with the following standards

- IEC60947-1
- IEC60947-2
- IEC60947-4-1

Installation Environment Requirements

The circuit breaker should be installed in a dry, dust-free environment, free from corrosive gases and explosive media, and protected from impact. If the environment does not meet these conditions, the protection level of the complete set of equipment should be increased accordingly. Specific requirements are shown in the table below:

Item	Specifications
Ambient Temperature	The electrical and mechanical characteristics are suitable for ambient temperatures from -5°C to +40°C (certified). For ambient temperatures greater than +40°C, derating is required. The derating factors can be found in the instruction manual.
Relative Humidity	When the ambient temperature is up to +50°C, the relative humidity of the air should not exceed 50% .At lower temperatures, a higher relative humidity is permissible, for example, up to 90% at 20°C.
Altitude	≤2000m. Derating factors for altitudes exceeding 2000m can be found in the instruction manual.
Installation Requirements	The vertical inclination of the circuit breaker installation should be ≤5°.
Pollution Degree	3 Poles
Utilization Category	Universal Circuit Breakers: B
Protection Degree	When the circuit breaker is installed in a cabinet with a door frame, the protection level is IP40 for the front and IP40 for other faces.

Main Technical Data and Performance Indicators

Model		UKDW1	UKDW1	UKDW1	UKDW1
Frame Rated Current Inm (A)		1600	2500	4000	7500
Rated Operational Current In (A)		200A、400A、630A、800A 1000A、1250A、1600A	400A、630A、800A、1000A、1250A、1600A、2000A、2500A	2000A、2500A、2900A、3200A、3600A、3900A、4000A	4000A、5000A、6300A、7500A
Rated Operational Voltage Ue (V)		50HZ AC400V,690V	50HZ AC400V,500V 690A,800A,1140A		
Rated Insulation Voltage Ui (V)		1000V	1140V		
Rated Impulse Withstand Voltage Uimp (kV)		12	12		
Power Frequency Withstand Voltage U (V) 1min		AC50HZ 3500	AC50HZ 3500		
Number of Poles		3P/4P	3P/4P		
Rated Ultimate Short-Circuit Breaking Capacity (rms) Icu (kA	400V	65	100		150
	690V	50	65	80	100
	800/1140V		50	50	65
Rated Service Short-Circuit Breaking Capacity (rms) Icw (kA	400V	55	100	100	150
	690V	42	65	80	100
	800/1140V		50	50	65
Rated Short-Time Withstand Current (1s) (rms) Icw (kA	400V	55	100	100	150
	690V	42	65	80	100
	800/1140V		50		65
Total Breaking Time (without additional delay)(ms)		12~18			
Closing Time (ms)		≤60			
Operation Performance	Electrical Life (number of cycles)	2000			
	Mechanical Life (number of cycles) Maintenance -free	10000			
	Mechanical Life (number of cycles) With maintenance	20000			

Preparation Before Installation

Before installation, use a 500V DC megohmmeter to check the insulation resistance of the circuit breaker as required. At an ambient temperature of 25°C ± 5°C and a relative humidity of 50%~70%, the insulation resistance should be no less than 500MΩ. The insulation resistance test points are: between each phase and the ground when the circuit breaker is closed; and between each phase and each pole when the circuit breaker is open.

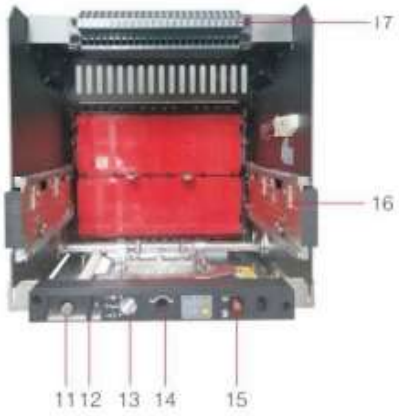
Circuit Breaker Structure

Functions

1. Fault Trip Reset Button
2. Open Position Lock
3. Close Button (I)
4. Open Button (O)
5. Intelligent Control Unit
6. Main Contact Position Indicator
   I: Closed O: Open
7. Circuit Breaker Close-Ready Indicator
8. Circuit Breaker Stored Energy/Released Energy Indicator
9. Manual Energy Storage Handle
10. Circuit Breaker Technical Parameters



11. Crank Handle and Storage Hole (for draw-out type only)
12. Draw-out "Separated" Position Safety Padlock
13. Circuit Breaker "Separated," "Test," and "Connected" Position Indicators
14. Crank Handle Operating Hole
15. Three-Position Lock Reset Button
16. Slide Rails (for draw-out type only)
17. Control Circuit Terminal Block (Fixed)



18. Control Circuit Terminal Block (Moving)
19. Shunt Release
20. Closing Solenoid
21. Auxiliary Switch
22. Motor for Stored Energy
23. Manual Energy Storage Handle
24. Operating Mechanism

