

Leader in electrical power management

Intelligent
Circuit
Breakers

ONENESS

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ONENESS



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slogan

The company is devoted to international trade in the energy and industrial fields, integrating outstanding industrial products from around the globe and addressing customers' pain points in supply chain management and import/export trade. Our core businesses comprise Intelligent Circuit Breaker, Solenoid Valve, and Supply Chain Management for import/export trade.

Intelligent Circuit Breaker: Leader in electrical power management.

Supply Chain Management: Promoter of global supply chain.

Solenoid Valve: Expert in fluid control.

ONENESS

Company



Guangzhou Oneness Technology Co., Ltd., headquartered in Guangzhou, specializes in high-end energy solutions and industrial products. The company's core offerings include intelligent circuit breakers and solenoid valves. The division responsible for the intelligent circuit breaker product line is based in Shanghai, with manufacturing facilities located in Zhejiang. The company employs 70 professionals dedicated to electrical product R&D and production testing, and 18 staff members dedicated to import and export trade operations.

We have a presence in over 60 countries and serve more than 160 clients. We boast a team of professionals from renowned global companies, deeply engaged in technology, research and development, production, procurement, and sales. We are eager to maintain close communication with enterprises in high-end sectors such as electric power, energy conservation and environmental protection, fluid control, and more, and to foster the integration of world cultures.



60+
serve country

160+
customer



Products



What is it?

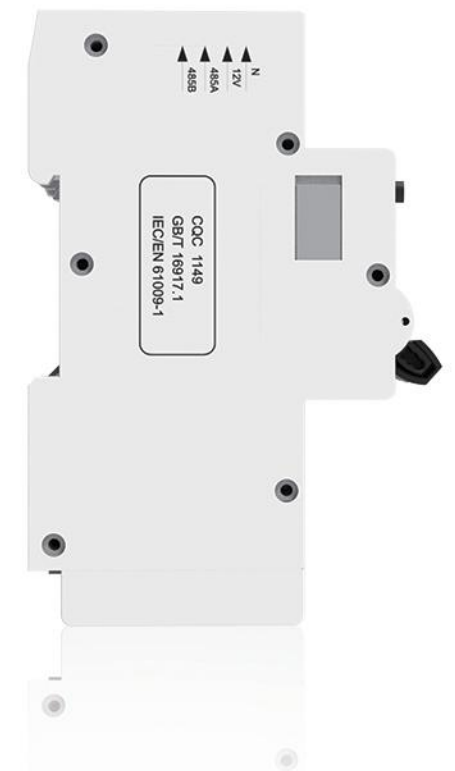
The Oneness Intelligent Circuit Breaker is applied in distribution networks and industrial control fields. It is a device with advanced automation, data processing and networking capabilities. Through data driving, intelligent decision-making and automatic control, it can achieve efficient, safe and flexible energy management.

In terms of safety, it can prevent electrical faults and reduce the risk of accidents. In case of faults, it can respond quickly. Through predictive maintenance and data analysis, it can meet the stringent requirements for personnel safety and equipment life in industrial scenarios, ensuring stable system operation.

What can I do?

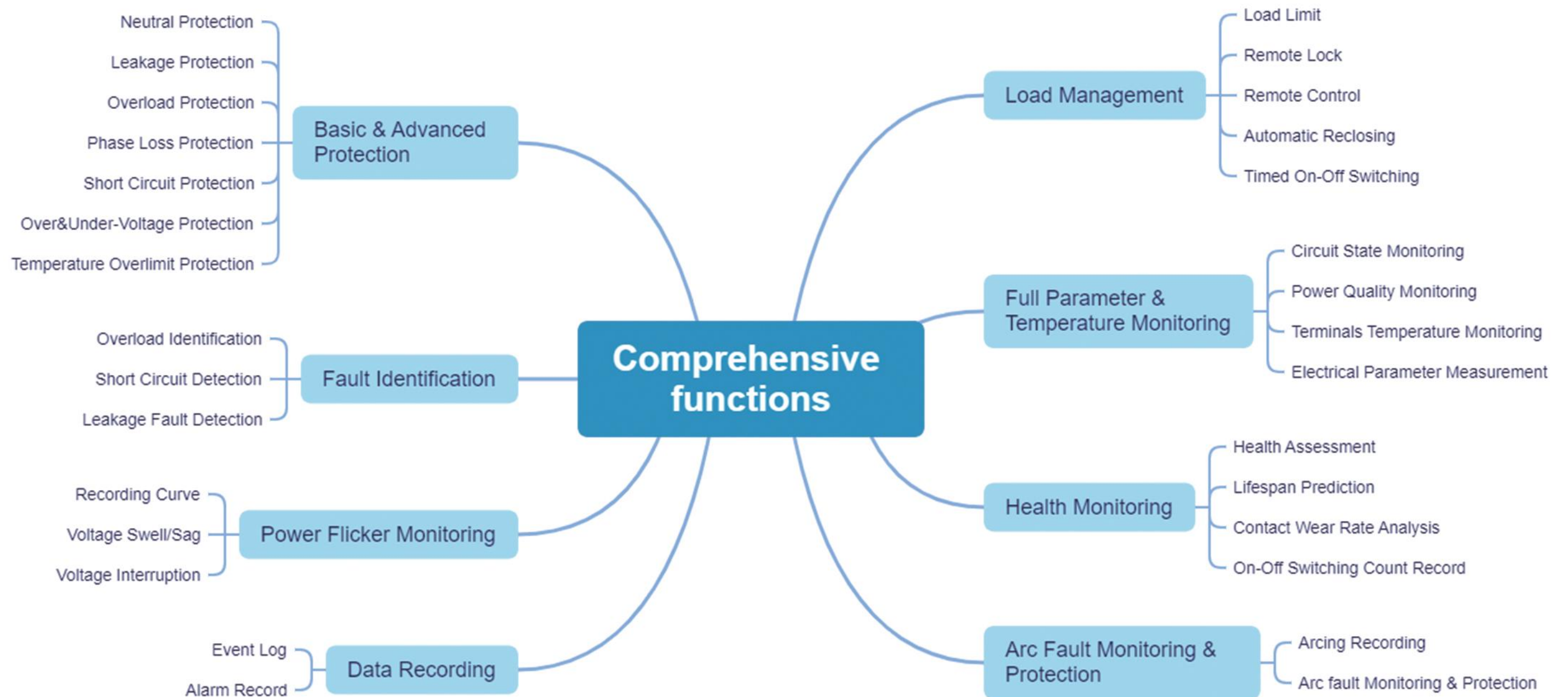
The functions of Oneness intelligent breaker include electrical protection, monitoring, fault identification, and load management, so as to enhance the safety of electricity use, fine energy efficiency management, and monitor the quality of electric energy. The integrated design has changed the form of splicing modules and reduced the product size.

The application of AI technology makes the intelligent management of the breaker system more inclined to the unattended mode. AI plays an important role in equipment predictive maintenance, generating adaptive control strategies, coordinating intelligent breakers with other equipment, data AI analysis and optimization processes, and customizing industry demands to adapt to different scenarios. It is committing to improving the safety of electrical equipment, reducing costs, and adapting to complex environments.



Comprehensive functions:

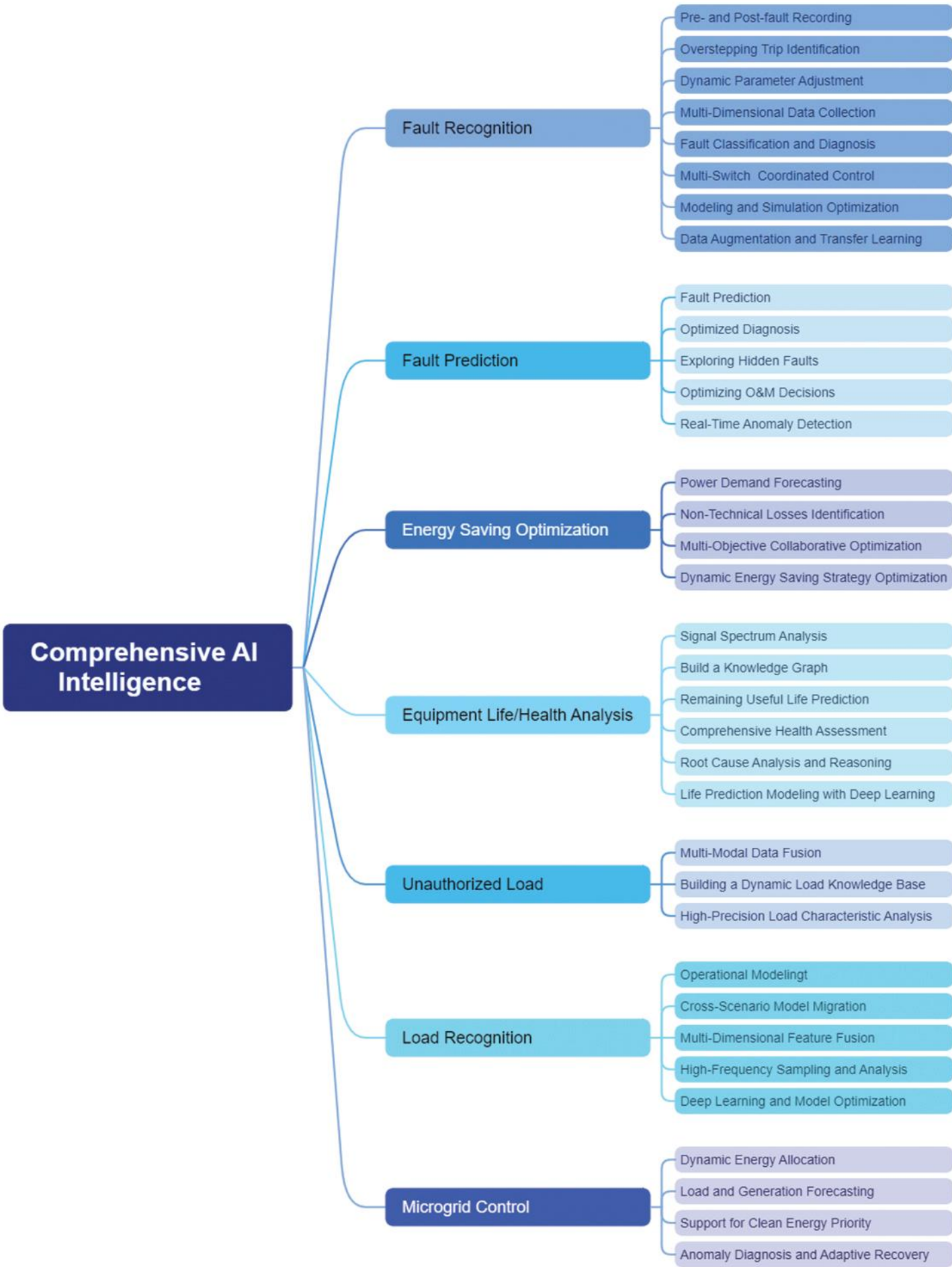
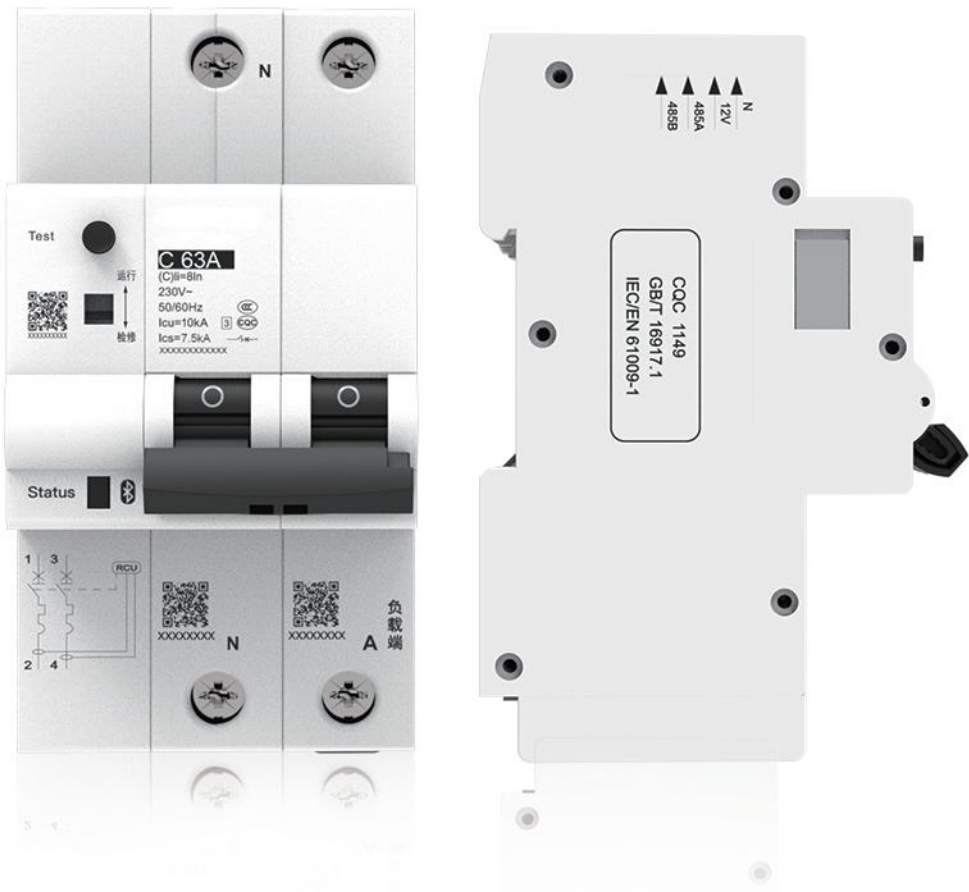
The Oneness Intelligent Circuit Breaker is based on the product architecture of the perception layer, network layer, cloud platform application layer, and the core technology of integrating advanced production with intelligence. With the advanced concept of combining high-quality hardware and embedded chip intelligent algorithms, the product achieves stable performance and complete functions.



Comprehensive AI Intelligence:

Oneness Intelligent Circuit Breaker algorithm technology R&D began in 2006, providing an 18-year foundation of research. Data collection is based on the high-frequency sampling "Chip Electrogram" technology, with 1024 sampling points per wave. On this basis, AI algorithms and model research are continuously carried out, and some functions have been realized.

With the deep integration of AI technology, high-end industrial-grade intelligent circuit breaker will shift from "passive execution" to "active decision-making", becoming an indispensable intelligent node in the future industry. As AI continues to advance, it will drive the functional expansion of intelligent breaker across multiple dimensions. The convergence and collaboration of AI in more fields await our joint participation and development.



As per statistical data, 42.9% of fires are caused by electrical faults. Improving electrical safety standards and providing protection against overload, leakage, and short circuits in the wiring is essential.

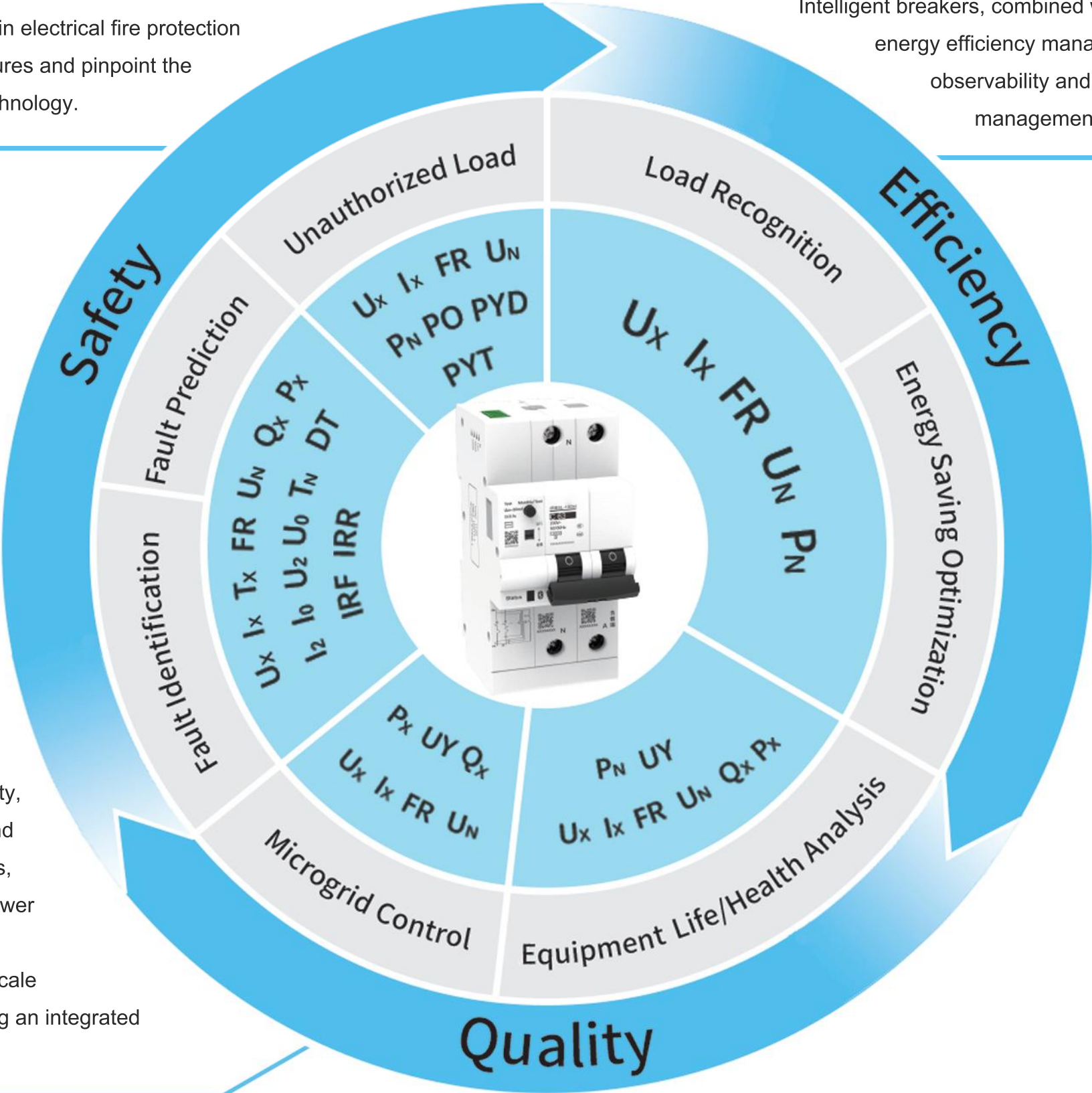
Intelligent breakers eliminate blind spots in electrical fire protection through comprehensive protective measures and pinpoint the cause of faults using fault recognition technology.

Currently, the energy consumption data of low-voltage systems is opaque and has room for optimization. The low-carbon requirements are to reach the carbon emission peak by 2030 and achieve carbon neutrality by 2060.

Intelligent breakers, combined with the UPCA system, enable refined energy efficiency management, achieving high-granularity observability and measurability, adjustable energy management strategies, and controllable equipment.

The complex source-load side environment deteriorates the power quality, and "ghost faults" in critical equipment and production lines lead to substantial losses, necessitating higher granularity online power quality monitoring.

Intelligent breakers have enabled large-scale deployment of online monitoring, featuring an integrated design and controllable costs.





Breaker Solution for Petrol Station

Problem

- Non-compliant operations lead to electrical accidents.
- Illegal load causes circuit overload and poses a safety risk.
- Lack of early warning functions for electrical safety hazards.
- Short circuits, overloads, and insulation damage cause sparks.
- Arc faults in electrical equipment ignite flammable gas mixtures.
- Electrical failures result in power outages and other downtime losses.
- Complicated wiring makes it difficult to troubleshoot electrical accidents.

Solution

- Operational data logging and remote control.
- Real-time monitoring, AI analysis, and trend prediction.
- Real-time monitoring of abnormal arcs with timely automatic power cutoff (AFCI).
- Intelligent topology identification and fault path analysis for rapid localization of fault points.
- Selective power supply protection, automatic backup power switching, and self-healing of faults.
- Multi-level protection mechanisms such as short-circuit protection, overload protection, and insulation monitoring.

Core Value

- Precise safety protection to reduce the risk of fire and explosion. Unmanned operation and maintenance, with real-time monitoring,
- intelligent identification, remote operation, and fault prediction.

Problem

- Arc faults lead to electrical fires.
- Long time to troubleshoot electrical faults.
- Power quality issues result in product scrap.
- Safety hazards such as leakage currents and overtemperature are difficult to detect.
- Transient over-voltage or short-circuit cause equipment damage, downtime, and ghost faults.
- Harmonic distortion and unbalanced three-phase loads affect equipment efficiency and lifespan.

Solution

- Arc fault monitoring and protection with arc recording.
- Enhance surge protection capability and quickly isolate faulty circuits.
- Monitor various parameters of breakers and equipment to predict fault risks.
- Real-time monitoring of electrical parameters with alarm activation in case of abnormalities.
- Real-time data acquisition and intelligent analysis for rapid localization of anomaly sources.
- Achieve comprehensive protection against short circuits, leakage currents, phase losses, overtemperatures, etc.

Core Value

- Ensure power quality through proactive defense, early warning, and precise protection.
- Intelligently driven, with real-time data acquisition and analysis for cost reduction and efficiency improvement.



Breaker Solution for Precision Production Line

Breaker Solution for New Energy Industry

Problem

- DC circuit overload, short circuit, and arc fault in photovoltaic arrays.
- Power quality fluctuations after the grid connection of new energy sources.
- Fast charging pile DC surges, and uneven load distribution among multiple charging piles.
- Unable to monitor the power generation status, efficiency, and power quality in real-time.
- Disturbances such as surges, harmonics, and reverse currents during the grid connection of new energy sources.
- Failures when microgrids are separated from the main grid, and faulty areas not being isolated in a timely manner.
- Overcurrent and overtemperature during charging and discharging of the energy storage battery group. Grid connection and disconnection switching failure.

Solution

- Islanding operation protection, quickly isolating faulty areas.
- Protection for charging pile circuits. Intelligent coordination of load distribution.
- Real-time monitoring enables continuous tracking of the equipment's operational status.
- Coordinating multiple energy sources' access. Proactive protection to address power quality issues.
- DC-side protection for photovoltaic arrays, with abnormality detection and rapid fault disconnection.
- AC-side grid connection protection, suppressing harmonics and surges at the point of interconnection.
- Monitoring the charge and discharge circuits of battery groups. Ensuring seamless transition during system mode switching.

Core Value

- Ensure the stability of new energy sources, improve energy utilization efficiency.
- Enhance the safety of new energy sources, support unattended operation, and improve management efficiency.

