



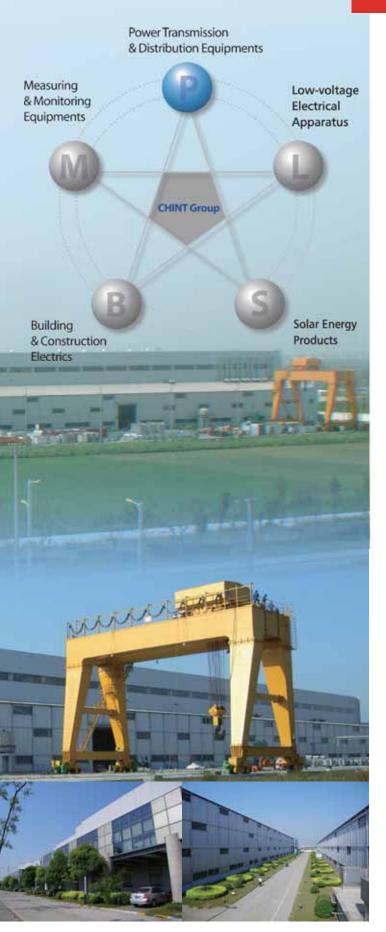
### **Brief Introduction to Products**

# 2011/2012

**Brief Introduction to Products** 



### **Brief Introduction**



#### **About CHINT T&D**

CHINT T&D is a branch company of CHINT Group Corporation. Covering 900,000m², with an investment of 450 million USD. CHINT T&D has one of the world largest power transmission & distribution equipment manufacturing centers in Shanghai.

#### Sales Turnover

Around 535 million USD in the year of 2010

#### **Employee**

4,300 employees

#### **Product Range**

- Power Transformer up to 750kV
- Distribution Transformer up to 35kV
- Dry-type Transformer up to 35kV
- Reactor up to 220kV
- GIS up to 252kV
- HV Circuit Breaker & Disconnector up to 252kV
- VCB 12~40.5kV
- MV & LV Switchgear Panel, Prifabricated Substation up to 40.5kV
- LV Terminal Box, Bus Bar Duct
- Surge Arrester & Insulator up to 500kV, CT & PT up to 220kV
- Power Distribution Automation System
- Cable up to 36kV
- Capacitor
- Turn-key Solution

#### **About CHINT Group**

- CHINT is the leading player in the Power Transmission & Distribution industry and Low-voltage electrics industry in China. Founded in 1984 by a few local entrepreneurs and currently hiring 18,000 employees worldwide.
- Ranked in The 2010 BCG 100 New Global Challengers (The Boston Consulting Group, 2010)
- CHINT Low-voltage Electrics launched IPO at the Shanghai Stock Exchange of China (2010)
- No.2 in China Électricity Industry's Top 10 Most Competitive Enterprises (China Machinery Industry Information Institute, 2009)
- No.3 in China Electricity Industry(China Machinery Industry Information Institute, 2009)
- No.240 in Top 500 Chinese-Companies (China Enterprise Federation, 2009).
- No.1 in Power T&D and the controlling devices (China Machinery Summit, 2009)
- Ranked in Top 100 Best Employers in China (China Entrepreneurs Summit, 2008)
- No.15 in Top 100 Private & Public Companies in China (Forbes, 2006)
- National Quality Management Award(2004) (One of top honours for manufacturing companies in China)
- Worldwide business operation with 2,000 sales offices, agents, distributors, and local partners in domestic Chinese market and distributors & local partners in over 70 countries. International branches or regional offices set up in USA, UAE, Germany, Russia, Brazil, Ukraine, Hong Kong, UK and Kenya.
- CHINT stretches its business to a new frontier of solar energy by setting up a branch company specialized in the solar energy products development.
- The R&D center of CHINT is recognized as the National Level R&D Center run by the companies, which means the R&D level of CHINT Group has reached the leading position in the industry of China.

## ${f S}$ ales References

With a worldwide presence in over 90 countries such as, Italy, Germany, Estonia, USA, Russia, Japan, Australia, Saudi Arabia, Poland, Ukraine, Mongolia, Kazakhstan, Pakistan, Myanmar, Indonesia, Thailand, Egypt, Yemen, Algeria, Morocco, Congo, Tanzania, Mali, Kenya, South Africa, Ghana, Nigeria, Colombia, etc, CHINT T&D provides reliable and high-qualified products and solutions to clients engaged in different businesses.



#### **Utility User** (Over 40 National Electricity Companies)

ENEL-Italy

Products: Distribution transformer, cable.

EMS-Serbia

Products: Power transformer.

PPC-Greece

Products: Power transformer, cable.

Fingrid-Finland

Products: Distribution transformer.

EAC-Cyprus

Products: Cable.

HS ORKA HF-Iceland

Products: Power transformer

FNA-Armenia

Products: HV circuit breaker, switch disconnector, etc.

Eesti. Energia-Estonia

Products: Power transformer.

NEC-Bulgaria

Products: VCB.

BPC-Bhutan

Products: Surge arrester.

CELEC S.A-Ecuador

Products: Power transformer.

CNEL-Ecuador

Products: Power transformer.

ICE-Costa Rica

Products: Power transformer.

FNDFSA-Chile

Products: Power transformer, surge arrester, insulator, SF6 circuit breaker.

PDVSA-Venezuela

Products: Power transformer.

**ELCOSA-Honduras** 

Products: Power transformer. Enersis-Chile

Products: Power transformer, surge arrester,

insulator, SF<sub>6</sub> circuit breaker.

UNE-Cuba

Products: Cut-out fuse.

ENE-Angola

Products: GIS

ENA-Armenia

Products: HV circuit breaker, switch disconnector, etc.

FVN-Vietnam

Products: Switch disconnector, power transformer, etc.

NEA-Nepal

Products: Substation turn-key project.

TANESCO-Tanzania

Products: Substation turn-key project.

RECO-Rwanda

Products: Distribution transformer, etc.

SNEL-D.R. Congo

Products: Power transformer.

MEPE-Myanmar

Products: Reactor. Power transformer.

KPLC-Kenya

Products: Cut-out fuse, surge arrester, insulator.

KENGEN-Kenya

Products: Surge arrester.

ZESCO-Zambia

Products: CT-VT metering unit.

VRA-Ghana

Products: MV switchgear, DC panel, disconnector.

SONABEL-Burkina Faso

Products: Power transformer, reactor.

SBFF-Benin

Products: Power transformer.

REGIDESO-Burundi

Products: Power transformer, distribution transformer.

PEDEEE-Syria

Products: Insulator, surge arrester, substation turn-key project.

TEIAS-Turkey

Products: Surge arrester, insulator.

PEEGT-Syria

Products: Insulator.

PEC-Yemen

Products: Substation turn-key project.

QESCO-Pakistan

Products: Surge arrester

NEC-Sudan

Products: Power transformer.

PHCN-Nigeria

Products: Transformer protection & control panel.

TATA Power-India

Products: Power transformer.

WARD-Lebanon

Products: SF6 circuit breaker, disconnector,

surge arrester, insulator.

NEPCO-Jordan

Products: Power transformer, pad-mounted transformer.

EEPCO-Ethiopia

Products: HV Circuit breaker, disconnector, earthing switch, surge arrester, insulator, CT.

Kamoki-Pakistan

Products: Substation turn-key project.

More >>>

### Global Operation in Over 90 Countries

#### **Industrial End User**

BHP Billiton-Australia

Products: CT& PT, distribution transformer, etc.

Fincantieri-Italy

Products: Power transformer.

Chevron-USA

Products: Switchgear panel, distribution transformer.

Rio Tinto-Australia

Products: CT.

AGGREKO-UK

Products: Power transformer.

FMG-Australia

Products: Power transformer.

UPM-Finland

Products: MV switchgear panel.

TATA Chemical-India

Products: Switchgear panel.

INVISTA-USA

Products: Distribution transformer, switchgear panel, DC panel.

JFE Steel-Japan

Products: Disconnector.

VISY Paper-Australia

Products: Switchgear panel.

Sasol-South Africa

Products: Dry-type transformer.

SHANGRI-LA Hotel-Phillippine

Products: Distribution transformer.

De Beers-Botswana/South Africa

Products: Distribution transformer.

CODELCO-Chile

Products: Dry type transformer.

Barrick Gold-South Africa

Products: Dry-type transformer.

 Serebryabskiy Cement Plant-Russia Products: HV capacity compensation device, HV capacitor.

Alake Aluminum Factory-Iran

Products: Switchgear panel.

SIBAYAK geothermal Power Plant-Indonesia

Products: MV&LV switchgear panels, surge arrester, insulator, CT, VCB.

Kingdom Iron and Steel co.-Saudi Arabia

Products: Distribution transformer, dry-type transformer.

SMCO-D.R. Congo

Products: Substation turn-key project.

More >>>

#### **Engineering & Contracting**

EIFFAGE-France

Products: Power transformer, reactor.

FLUOR-USA

Products: Power transformer.

More >>>

#### **Turn-key Project**

Kamoki-Pakistan

Projects: 230kV substation EPC.

Saint Gobain-France

Projects: 35kV substation EPC.

PEC-Yemen

Projects: 132kV and 32kV substation EPC.

NEA-Nepal

Projects: 132kV and 33kV substation EPC.

SMCO-D.R. Congo

Projects: 220kV substation EPC.

TANESCO-Tanzania

Projects: 35kV and 66kV substation EPC.

More >>>



### **Global Operation with Focussed Services**

Power Transformer & Reactor



Distribution Transformer



• Gas Insulated Switchgear (GIS)



• HV Switch



Switchgear Panel



• VCB



• Dry-type Transformer



• Turn-key Project



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#### **Transformer**



#### Oil-immersed Power Transformer

#### 66-750kV Power Transformer

Application: suitable for power plant, substation, large-scale industrial etc.

Standards: IEC 60076-1, IEC 60076-2, IEC 60076-3, IEC 60076-5; ANSI, IEEE, AS, etc.

Parameters: • Voltage range: 50/60Hz 66-750kV.

Capacity range: 5000kVA-650000kVA.

Features: • High security and reliability in operation.

- Economic and efficient to reduce network loss and operation cost.
- High short circuit strength and insulating strength.
- Compact design, Low-noise and light in weight.
- Customized transformers are available on your requirement.
- Competitive short delivery time.



#### 35kV Power Oil-immersed Distribution Transformer

Application: for power distribution system and large scale industrial enterprises, etc. Standards: IEC 60076-1, IEC 60076-2, IEC 60076-3, IEC 60076-5; ANSI, IEEE, AS, etc.

Parameters: • Rated Voltage: 50/60Hz 35kV.

Rated Capacity: 50-75000kVA.

Features: • High security and reliability in operation.

- Economic and efficient to reduce network loss and working cost.
- High short circuit strength and insulating strength.
- Low temperature rise. Low noise.
- Customized transformers are available on your requirement.
- Competitive short delivery time.



#### 20kV Oil-immersed Distribution Transformer

Application: for power distribution system and industrial enterprises.etc

Standards: IEC 60076; ANSI, IEEE, AS, etc. Parameters: • Rated Voltage: 50/60Hz 20kV.

Rated Capacity: 50-2500kVA.

Features: • KEMA certified.

- High security and reliability in operation.
- Economic and efficient to reduce network loss and working cost.
- Low temperature rise.
- Low noise.
- Suitable for long time transportation under various conditions
- Customized transformers are available on your requirement.
- Competitive short delivery time.



#### 10kV Oil-immersed Distribution Transformer

Application: for power distribution system and industrial enterprises, etc.

Standards: IEC 60076-1, IEC 60076-2, IEC 60076-3, IEC 60076-5; ANSI, IEEE, AS, etc.

Parameters: Rated Voltage: 50/60Hz 10kV.

Rated Capacity: 30-6300kVA.

Features: • High security and reliability in operation.

- Economic and efficient to reduce network loss and working cost.
- Low temperature rise.
- Low noise.
- Suitable for long time transportation under various conditions
- Customized transformers are available on your requirement.
- Competitive short delivery time.

#### **Transformer**



#### 10kV Pad-mounted Transformer

Application: outdoor service, mainly for power distribution.

Standards: IEC 60076-1, IEC 60076-2, IEC 60076-3, IEC 60076-5; ANSI, IEEE, AS, etc.

Parameters: • Rated Voltage: 50/60Hz 10kV.

Rated Capacity: 100-1000kVA.

Features: • US type distribution pad-mounted transformer with HV &LV compartments, easy for operation.

- High security and reliability in operation.
- Economic and efficient to reduce network loss and working cost.
- Low temperature rise.
- Low noise.
- Customized transformers are available on your requirement.

#### **Special Transformer**

#### 35kV Oil-immersed Converter Transformer

Application: for converting the voltage of the power system into the voltage required by the rectifier and then into DC power supply in three-phase, 35kV, 50/60Hz power system. Applicable for electrochemical processing, electrolysis, electroplating, magnetic excitation and drawing in metallurgical and chemical industry.

Ratings: ■ Capacity ≤20000kVA.

#### Rectifier Transformer

Application: applicable for regulating rectifier for aluminum electrolysis power supply in series voltage 1200V, series current 320kA electrolysis system.

Ratings: ■ Capacity ≤ 10000kVA for voltage 10-35kV.

Capacity ≤ 150000kVA for voltage 110-220kV.

#### **Furnace Transformer**

Application: for converting the voltage of power system into the voltage required by furnaces in three-phase, 35kV, 50/60Hz power system. Applicable for smelting iron and steel, calcium carbide, crystalline silicon and ferro alloy.

Ratings: ■ Capacity ≤10000kVA for voltage 10kV (three-phase)

- Capacity ≤50000kVA for voltage 35kV and 110kV (three-phase)
- Capacity ≤12500kVA for voltage 35kV (single-phase)
- Capacity ≤27000kVA for voltage 110kV (single-phase)

#### References

CHINT T&D transformers are widely adopted by Utility Users from Italy, Finland, Estonia, Serbia, Greece, Iceland, Ecuador, Costa Rica, Myanmar, Chile, Venezuela, Honduras, Vietnam, Rwanda, D.R. Congo, Benin, Burkina Faso, Burundi, Sudan, India, etc.; Industrial End Users like BHP Billiton, Fincantieri, FMG, Chevron, AGGREKO, INVISTA, SHANGRILA Hotel, De Beers, etc. and Engineering Companies like EIFFAGE, Fluor and so on.

Note: Contact us for more detailed sales references.

#### **Transformer**



#### **Dry-type Transformer**

#### 10kV Epoxy Resin Dry-type Transformer

Application: for power distribution system and large industrial enterprises, etc.

Standards: IEC 60076-11

Parameters: Rated Voltage: 10kV.

Rated Capacity: 30-2500kVA.

Features: • High security and reliability in operation.

- Economic and efficient to reduce network loss and working cost.
- Low temperature rise.
- Low noise.
- Operation in moist place with high moisture-proof capability.
- Customized transformers are available on your requirement.



#### 10kV H-class Insulation Dry-type Transformer

Application: for power distribution system and industrial enterprises, etc.

Standards: IEC 60076-11

Parameters: • Rated Voltage: 10kV.

Rated Capacity: 200-2500kVA.

Features: • High security and reliability in operation.

- Economic and efficient to reduce network loss and working cost.
- Low noise.
- Low partial discharge.
- Operation in moist place with high moisture-proof capability.
- Customized transformers are available on your requirement.



#### 20kV Epoxy Resin Dry-type Transformer

Application: for power distribution system and large industrial enterprises, etc.

Standards: IEC 60076-11

Parameters: Rated Voltage: 20kV.

Rated Capacity: 50-2500kVA.

Features: • High security and reliability in operation.

- Economic and efficient to reduce network loss and working cost.
- Low temperature rise.
- Low noise.
- Operation in moist place with high moisture-proof capability.
- Customized transformers are available on your requirement.



#### 35kV Epoxy Resin Dry-type Transformer

Application: for power distribution system and large industrial enterprises, etc.

Standards: IEC 60076-11

Parameters: Rated Voltage: 35kV.

Rated Capacity: 50-20000kVA.

Features: • High security and reliability in operation.

- Economic and efficient to reduce network loss and working cost.
- Low temperature rise.
- Low noise.
- Operation in moist place with high moisture-proof capability.
- Customized transformers are available on your requirement.

#### **Transformer**



#### SCBH15 Amorphous Alloy Dry-typeTransformer

Application: applicable for all places where common dry-type transformers are used, such as high-rise buildings, commercial centers, airports, oil platforms, subways, tunnels, airports, railway stations, industrial and mining enterprises and power plants. It is especially suitable for places which are flammable and explosive.

Standards: IEC 60076-11

Parameters: Rated capacity: 30-2500kVA

HV rated voltage: 10kV

Features: • SCBH15 Amorphous Alloy Dry-typeTransformer

- High safety and reliability, non-pollution, can directly run in the load center.
- High mechanical strength, high resistance to short-circuit, low partial discharge, high thermal stability and long life.
- Low no-load loss, high efficiency and low noise.
- Good thermal performance, high running capability. It can increase the capacity to run during forced air cooling.
- Good moisture performance, fire-retardant, explosion prevention and maintenance-free.
- Small size, light weight.

#### References

CHINT T&D dry-type transformers are widely adopted by Industrial End Users from Australia, Japan, Italy, France, South Africa, Bangladesh, Saudi Arabia, etc. like Saint Gobain, VISY Paper, SACOL, etc.; Utility Users from Laos, etc. and Engineering Companies from Australia, Lebanon and so on.

\* Note: Contact us for more detailed sales references.



#### **Transformer**







#### Reactor

#### BKS, BKD HV Oil-immersed Shunt Reactor

Application: for rated voltage up to 330kV power system, to improve power factor, limit over-

current or over-voltage, etc.

Standards: IEC 60076-6

Parameters: • Rated Voltage: 35-330kV.

Rated Capacity: 5000-50000kVar.

Features: Small electromagnetic pollution with silicon-steel sheet as magnetic media.

- Low eddy current loss of core.
- Low noise.
- Low vibration<100 µm.

#### CKS(C,G), BKSC Dry-type Core Series/Shunt Reactor

Application: for rated voltage up to 35kV power system, to improve power factor, limit over-

current or over-voltage, etc.

Standards: IEC 60076-6

Parameters: Rated Voltage: 6-35kV.

Rated Capacity: 50-20000kVar.

Features: • High insulation performance of F level.

- Small electromagnetic pollution with silicon-steel sheet as magnetic media.
- Low eddy current loss of core.
- Low noise.
- · Compact design and low weight.

#### Dry-type Air Core Reactor Series

Application: for rated voltage up to 66kV power system, to improve power factor, limit over-

current or over-voltage, etc.

Standards: IEC 60076-6

Parameters: • Rated Voltage: 6-66kV.

Rated Capacity: 50-20000kVar.

Features: Low loss and guarantees the reactance linearity with high-order harmonic wave.

- High current limiting capability.
- Low loss and noise.
- Good protection against from the interference of the environmental changes.
- Good environmental protection performances by adoption of specified insulation material.
- Greatly enhanced mechanical intensity.

#### References

CHINT T&D reactors are widely adopted by Utility Users from Burkina Faso, Myanmar, Mongolia, Armenia, etc.; Industrial End Users from Australia, Mongolia, etc., and Engineering Companies from France, etc. like EIFFAGE and so on.

% Note: Contact us for more detailed sales references.

#### **Gas Insulated Switchgear (GIS)**

#### Gas Insulated Switchgear (GIS)

#### 126kV Gas Insulated Switchgear (GIS)

Application: for power substations, especially substations in city center, contaminated region and also hydropower stations.

Standards: IEC 62271-203

Parameters: Rated voltage: 72.5-145kV.

Rated current: 1250-4000A.

Rated breaking current, 3s: 40kA.

Features: Compact design, three phases in common tank, Less installation area.

- Rated breaking current 40kA for the circuit breakers.
- Spring mechanism during the operation without oil and gas.
- High operation reliability, less maintenance.
- High anti-seismic capability.
- Meet customer requirements by modular design.

#### 252kV Gas Insulated Switchgear (GIS)

Application: for power substations, especially substations in city center, contaminated region

and also hydropower stations.

Standards: IEC 62271-203

Parameters: Rated voltage: 252kV.

• Rated current: 2000-4000A.

Rated breaking current, 3s: 50kA.

Features: • Compact design, three phases Busbar in common tank, save installation area.

Rated breaking current 50kA for the circuit breakers.

- High operation reliability, less maintenance.
- High anti-seismic capability.
- Meet customer requirements by modular design.



#### 126, 145kV Mini-type Gas Insulated Switchgear (GIS)

Application: for power substations, especially substations in city center, contaminated region and also hydropower stations.

Standards: IEC 62271-203

Parameters: Rated voltage: 126,145kV.

Rated current: 2500, 3150A.

Rated breaking current, 3s: 40kA.

Features: • KEMA under testing.

- Miniaturized design.
- High insulation reliability.
- Good breaking capacity for the circuit breakers.
- Low noise during the operation without oil and gas.
- Meet various requirements of clients by modular design.
- Both single-pole and three-pole operation applicable.
- High anti-seismic capability.
- High operation reliability, therefore less maintenance is needed.

#### References

CHINT T&D GIS products are widely adopted by Utility users of Angola, Mongolia, China etc.; power generation users like HUANENG Wind Power Plant, etc.; Industrial End Users like China National Petroleum Corporation, Qinghai-Tibet Railway, Sichuan Coal Industry Group and Engineering Companies. CHINT T&D is one of the few approved GIS product supplier of China State Grid.

\* Note: Contact us for more detailed sales references.

#### **Disconnector**



#### **Disconnector**

#### **GW4 Two-column Disconnector**

Application: In rated voltage 40.5~252kV power system, to separating the circuits under offload status, set up air electrical clearning between the tested electrical apparatuses and electrified circuit.

Standards: IEC 62271-102

Parameters: Rated voltage: 40.5-252kV.
Rated current: 1250-4000A.

Rated short time withstand current, 3s: 50kA.

Features: • Outstanding performances and reliable operation.

• Free maintenance due to its stable contact pressure and self-cleaning capability.

High anticorrosion capability.

• Easy installation and adjustment.



## GW22 Vertical Single-column & Single-arm Flexible Fold Type Disconnector

Application: in 252kV power system, to separating the circuits under off-load status, set up air electrical clearning between the tested electrical apparatuses and electrified

circuit.

Standards: IEC 62271-102

Parameters: Rated voltage: 252kV.

Rated current: 3150, 4000A.

Rated short time withstand current, 3s: 50kA.

Features: • With the min. phase distance and vertical length compared with similar products.

 With high mechanical intensity and light by adoption of aluminum alloy at the conductive part.

Reliable operation.

 Influence of the environment reduced with the operation mechanism and balancing spring sealed in tubes.



#### GW23 Horizontal Single-arm Flexible Fold Type Disconnector

Application: in 252kV power system, to separating the circuits under off-load status, set up security air electrical clearning between the tested electrical apparatuses and electrified circuit.

Standards: IEC 62271-102

Parameters: • Rated voltage: 252kV.

Rated current: 3150A.

Rated short time withstand current, 3s: 50kA.

Features: • With the min. phase distance and vertical length compared with similar products.

• With high mechanical intensity and light by adoption of aluminum alloy at the conductive part.

Reliable operation.

 Influence of the environment reduced with the operation mechanism and balancing spring sealed in tubes.

Increased contact range of moving and static contact.

Most of the components could be used on GW22-252 disconnector.

#### References

CHINT T&D Disconnectors are widely adopted by Utility Users from Vietnam, Ethiopia, Lebanon, Tanzania, etc.; Industrial End Users from France, Kenya, Japan, etc. like JFE Steel and Engineering Companies from Vietnam, Bangladesh, Mongolia, Lebanon, USA, etc. 

\*\* Note: Contact us for more detailed sales references.

#### **HV Earthing Switch & SF6 Circuit Breaker**



#### **HV** Earthing switch

#### JW High-voltage Earthing Switch

Application: in 126-252kV power systems for HV busbars.

Standards: IEC 62271-102

Parameters: • Rated voltage: 126kV, 252kV.

Rated short time withstand current, 3s: 40kA, 50kA.
Rated lighting impulse withstand voltage: 550kV, 1050kV.

Features: • Compact design, stale performances and reliable contact.

• Good anticorrosion performances of the base.

• Easy installation and adjustment.

#### References

CHINT T&D Earthing Switches are widely adopted by Industrial End Users from Australia, etc. like FMG; Engineering Companies from Bangladesh, Vietnam, etc. and Utility Users. 

\*\*Note: Contact us for more detailed sales references.



#### SF<sub>6</sub> Circuit Breaker

#### LW8 SF6 Dead Tank Circuit Breaker

Application: for control and protection of 40.5kV power system.

Standards: IEC 62271-100

Parameters: • Rated voltage: 40.5kV.

Rated current: 2000A.

Rated short-circuit breaking current: 31.5kA.

Features: With CT14 spring operation mechanism.

High breaking capacity.

• Secure and reliable operation.

Applicable for frequent operation; easy or free of maintenance.



#### LW8A SF<sub>6</sub> Live Tank Circuit Breaker

Application: for control and protection of 40.5kV power system.

Standards: IEC 62271-100

Parameters: • Rated voltage: 40.5kV.

Rated current: 2000A.

Rated short-circuit breaking current: 31.5kA.

Features: • With current transformer for measurement and protection.

High breaking capacity by adoption of self-expansion arc-quenching theory.

Secure and reliable operation and high insulation level.

Applicable for frequent operation; easy or free of maintenance.

Fully sealed.

Easy installation and adjustment, low noise.

#### SF<sub>6</sub> Circuit Breaker





#### LW36 SF<sub>6</sub> Circuit Breaker

Application: for control and protection of 126, 145kV power system.

Standards: IEC 62271-100

Parameters: • Rated voltage: 126, 145kV.

• Rated current: 3150, 4000A.

• Rated short-circuit breaking current: 40kA.

Features: • Reliable insulation performances.

• Utilization of spring operating mechanism.

Low noise, easy or free of maintenance.

Easy installation and adjustment.

#### LW43 SF<sub>6</sub> Circuit Breaker

Application: for control and protection 220 kV power system.

Standards: IEC 62271-100

Parameters: Rated voltage: 252kV.

Rated current: 4000A.

Rated short-circuit breaking current: 50kA.

Features: • High breaking capacity.

Reliable insulation performance.

Low noise, without leakage of oil and gas.

• Easy installation and adjustment. Less maitenance.

Long service life.

#### References

References: CHINT T&D SF<sub>6</sub> Circuit Breakers are widely adopted by Utility Users from Ghana, Lebanon, Ethiopia, Armenia, Chile, Ethiopia, Myanmar, Pakistan, etc., Industrial End Users from Kenya, Vietnam, etc. and Engineering Companies from Lebanon, Ghana, USA, Bangladesh, Vietnam and so on.

\* Note: Contact us for more detailed sales references.



#### **MV Cubicle and Component**



#### **MV** Switchgear Panel

#### KYN28A-12(Z) Metalclad Withdrawable Switchgear Panel

Application: in 3.6~12kV power system for control, protection and monitoring.

VCBs produced by CHINT or VCBs produced by other manufacturers could be

installed in the switchgear panel.

Standards: IEC 62271-200

Parameters: • Rated voltage: 3.6-12kV.

Rated current: 630-5000A.

Rated short-circuit breaking current: 16-50kA.

Features: • Compact design.

Easy operation and installation.

Reliable interlock.

Less Maintenance.

#### KEMA≰



#### KYN28A-24(Z) (GZS1) Metalclad Withdrawable Switchgear Panel

Application: in 3.6~24kV power system for control, protection and monitoring.

VCBs produced by CHINT or VCBs produced by other manufacturers could be installed in the switchgear panel.

Standards: IEC 62271-200

Parameters: Rated voltage: 24kV.

Rated current: 630-3150A.

Rated short-circuit breaking current: 16-31.5kA.

Features: • KEMA certified.

Compact design.

Easy operation and installation.

Reliable interlock.

Less Maintenance.



#### KYN61-40.5(Z) Metalclad Withdrawable AC Switchgear Panel

Application: in the system of 50Hz, 40.5kV, for power distribution, circuit control and protection.

Standards: IEC 62271-200

Parameters: • Rated voltage: 40.5kV.

Rated current: 630-2000A.

• Rated short-circuit breaking current: 25-31.5kA.

Features: • Compact design.

Easy operation and installation.

Reliable interlock.

Less Maintenance.



#### XGN15-12(F), XGN15-12 (F•R) Air-insulated Ring Main Unit

Application: in the system of 50Hz, voltage up to 12kV, current up to 630A, for power

distribution, circuit control and protection.

Standards: IEC 62271-200

Parameters: • Rated voltage: 3.6-12kV.

Rated current: 630A.

Rated short-circuit breaking current: 125A.

Features: • Compact design.

Easy operation and installation.

Reliable interlock.

Less Maintenance.





#### XGN36-12(DXG-12) Air-insulated Ring Main Unit

Application: in the system of 50Hz, 3.6~12kV, 630A~3150A for power distribution, circuit control and protection.

Standards: IEC 62271-200

Parameters: Rated voltage: 3.6-12kV.
Rated current: 630-1250A.

Rated short-circuit breaking current: 20-31.5kA.

Features: • Compact design.

Easy operation and installation.

Reliable interlock.Less Maintenance.

#### HXGN15A-12(F • R) Air-insulated Ring Main Unit

Application: in the system of 50Hz, 3.6~12kV and below, for making and breaking of load current and short-circuit current, controlling and protecting.

Standards: IEC 60420

Parameters: • Rated voltage: 3.6-12kV.

Rated current: 630A.

• Maximum rated current of capacitor: 125A.

Features: Reliable operation.

· Compact design.

Easy operation and installation.

Reliable interlock.

Less Maintenance.

#### References

CHINT T&D MV Switchgear Panels are widely adopted by Utility Users from Yemen, Myanmar, Tanzania, Thailand, Indonesia, etc.; Industrial End Users from USA, Bangladesh, Russia, Australia, France, Algeria, etc. like Saint Gobain, VISY Paper and Engineering Companies from Estonia, Australia, Vietnam, Myanmar, Romania, D.R. Congo, etc.





#### **Prefabricated Substation**

#### YBM(P) 29-12/0.4 Scenery Type Prefabricated Substation

Application: The substation consisted of HV switchgears, transformer, LV switchgear supplied all by CHINT to receive and distribute power energy in distribution system of high-rise buildings, residential areas, factories, parks, etc.

Standards: IEC1330

Parameters: Rated voltage: high voltage side: 3.6-12kV, low voltage side: 0.4kV.

- Rated current: high voltage side: 630A, low voltage side: 100-3200A.
- Rated capacity: 50-2X1600kVA and below.

Features: • Designed to perfectly match with the sceneries around.

- Compact design.
- High security and reliability in operation.
- Easy maintenance and movable for convenient installation.
- Customized substations are available on your requirement.



#### YBM(P) 29-12/0.4 Series Mobile Type Prefabricated Substation

Application: The substation consisted of HV switchgears, transformer, LV switchgear supplied all by CHINT to receive and distribute power energy in distribution system of mining and other places with dust and frequent electricity variation.

Standards: IEC1330

Parameters: Rated voltage: high voltage side: 3.6-12kV, low voltage side: 0.4kV.

- Rated current: high voltage side: 630A, low voltage side: 100-3200A.
- Rated capacity: 50-1600kVA.

Features: • Movable.

- Compact design.
- High security and reliability in operation.
- Easy maintenance and movable for convenient installation.
- Customized substations are available on your requirement.



#### YBM(P) 29-12/0.4 Ordinary Prefabricated Substation

Application: The substation consisted of HV switchgears, transformer, LV switchgear supplied all by CHINT to receive and distribute power energy in distribution system of high-rise buildings, residential areas, factories, parks, etc.

Standards: IEC1330

Parameters: • Rated voltage: high voltage side: 3.6-12kV, low voltage side: 0.4kV.

- Rated current: high voltage side: 630A, low voltage side: 100-3200A.
- Rated capacity: 50-2X1600kVA and below.

Features: • Designed to perfectly match with the sceneries around.

- Compact design.
- High security and reliability in operation.
- Easy maintenance and movable for convenient installation.
- Customized substations are available on your requirement.



#### YBM(P)29-24/0.4 Ordinary Prefabricated Substation

Application: The substation consisted of HV switchgears, transformer, LV switchgear supplied all by CHINT to receive and distribute power energy in distribution system of high-rise buildings, residential areas, factories, parks, etc.

Standards: IEC1330

Parameters: Rated voltage: high voltage side: 24kV, low voltage side: 0.4kV.

Rated current: high voltage side: 630-1250A, low voltage side: 100-3200A.

Rated capacity: 50-1600kVA.

Features: • Designed to perfectly match with the sceneries around.

Compact design.

• High security and reliability in operation.

• Easy maintenance and movable for convenient installation.

Customized substations are available on your requirement.



#### YB29-40.5/12 Prefabricated Substation

Application: The substation consisted of HV switchgears, transformer, LV switchgear supplied all by CHINT to receive and distribute power energy in distribution system of (high-rise buildings, residential areas, factories, parks, )city ,rural areas, factories, oil fields, large-scale construction site etc.

Standards: IEC1330

Parameters: Rated voltage: high voltage side: 40.5kV, low voltage side: 12(7.2, 3.6)kV.

• Rated current: high voltage side: 630-1600A, low voltage side: 630-3150A.

Rated capacity: 2X20000kVA and below.

Features: • Designed to perfectly match with the sceneries around.

Compact design.

High security and reliability in operation.

Easy maintenance and movable for convenient installation.

Customized substations are available on your requirement.

• With Combination of large capacity, the building of low cost, the characteristics of a high degree of automation.

#### References

CHINT T&D Prefabricated Substations are widely adopted by Utility Users from Tajikistan, etc., Industrial End Users and Engineering Companies.

% Note: Contact us for more detailed sales references.



#### KEMA₹



#### Vacuum Circuit Breaker (VCB)

#### NV series Indoor Vacuum Circuit Breaker

Application: in 12-24 kV power distribution system for control and protection.

Standards: IEC 62271-100

Parameters: • Rated voltage: 12-24kV.

Rated current: 630-3150A.

• Rated short-circuit breaking current: 16-40kA.

Features: • KEMA certified.

Compact and modular deign.

Less maintenance.

High insulation level and breaking capacity.

Both withdrawable and fixed types are available.



#### ZN63A-12 Indoor Vacuum Circuit Breaker

Application: in 12kV power distribution system for control and protection.

Standards: IEC 62271-100

Parameters: • Rated voltage: 12kV.

Rated current: 630-5000A.

Rated short-circuit breaking current: 20-50kA.

Features: • Advanced arc-extinguishing mode adopted.

• High insulation level and peak withstand current capacity.

• Impact and vibration reduced, Less maintenance.

Mechanical endurance up to 20,000 times.



#### ZN28-12kV Indoor Vacuum Circuit Breaker

Application: in 12kV power distribution system for control and protection.

Standards: IEC 62271-100

Parameters: • Rated voltage: 12kV.

Rated current: 630-3150A.

Rated short-circuit breaking current: 20-40kA.

Features: • High insulation level and peak withstand current capacity.

Impact and vibration reduced.

Reliable operation.

Less maintenance.



#### ZW8-12(Z) Outdoor Vacuum Circuit Breaker with Intelligent Controller

Application: in 12kV power distribution system for control and protection.

Standards: IEC 62271-100

Parameters: • Rated voltage: 12kV.

Rated current: 630-1000A.

Rated short-circuit breaking current: 12.5-20kA.

Features: • Low loss for the control unit.

Anti-dust and anti-moisture.

 Back-up battery could be installed to ensure the normal work of 12 hours after break.

• The programmable interface and software could facilitate the utilization.

Various telecommunication modes are available.

Remotely controlled through DMS system telecommunication.

#### **MV Cubicle and Component**









#### ZN85-40.5kV Indoor Vacuum Circuit Breaker

Application: in 40.5kV power distribution system for control and protection.

Standards: IEC 62271-100

Parameters: • Rated voltage: 40.5kV.

Rated current: 630-2000A.

• Rated short-circuit breaking current: 20-31.5kA.

Features: • High insulation level and breaking capacity.

Compact and modular deign.

Less maintenance.

High operation endurance.

Applicable to various working conditions.

#### ZW7-40.5 Outdoor Vacuum Circuit Breaker

Application: in 40.5kV power system, for making and breaking load current, overload current

and short circuit protection.

Standards: IEC 62271-100

Parameters: • Rated voltage: 40.5kV.

Rated current: 1250~2000A.

Rated short-circuit breaking current: 20kA, 25kA, 31.5kA.

Features: • Simple construction and easy installation.

High insulation level and waterproof.

Both spring and magnetic operation mechanism available.

 Internal current transformers can realize multiple transformation ratio output, high secondary output.

#### NVW2-12kV Series Outdoor AC Vacuum Circuit Breaker

Application: for making and breaking load current, overload current and short-circuit current

in 12kV AC50Hz power system, protecting and controlling of substation and

equipments.

Standards: IEC 62271-100

Parameters: • Rated voltage: 12kV.

Rated current: 630-1250A.

Rated short-circuit breaking current: 20kA,25kA.

Features: • Compact design and light in weight.

Enclosed construction can realize anti-dust and anti-moisture.

Maintenance-free.

Both manual and electric power operation and remote control.

#### NVW5-12kV Series Outdoor AC Vacuum Circuit Breaker

Application: for making and breaking load current, overload current and short-circuit current

in 12kV AC50Hz power system, protecting and controlling of substation and equipments.

equipinents.

Standards: IEC 62271-100

Parameters: • Rated voltage: 12kV.

Rated current: 630A.

• Rated short-circuit breaking current: 20kA.

Features: • Compact design and light in weight.

■ Enclosed construction filled with SF<sub>6</sub> gas can realize anti-dust and anti-moisture.

Maintenance-free.

#### References

CHINT T&D VCBs are widely adopted by Panel Builders in Poland, Bulgaria, etc., Utility Users from Indonesia, Russia, Tanzania, etc.; Industrial End Users from Indonesia, Ukraine, Finland, Poland, Russia, Australia, Malaysia, etc. like VISY Paper; Engineering Companies from Vietnam, etc.

\* Note: Contact us for more detailed sales references.



#### **Load Break Switch**

### FLN36-12D/630-20 SF<sub>6</sub> Load Break Switch FLRN36-12D/T125-31.5 SF<sub>6</sub> Switch-fuse Combination

Application: for making and breaking of load current, over-load current and short-circuit

current to control and protect the circuit and transformer, etc. in power distribution

system.

Standards: IEC 60265-1, IEC 62271-105.

Parameters: Rated voltage: 12kV.

Rated current: 630-1250A.

Rated breaking current of closed loop: 630A.

Rated current of the fuse: 125A.

Features: Indication of the active contact to show the operation status of the switch.

High insulation level.

• Fully sealed and reliable operation.



### FZN21-12D/T630-20 Indoor Vacuum Load Break Switch FZRN21-12D/T125-31.5 Indoor AC HV Vacuum Switch-fuse Combination

Application: for making and breaking of load current, over-load current and short-circuit

current to control and protect the circuit and transformer, etc. in power distribution

system.

Standards: IEC 60265-1, IEC 62271-105.

Parameters: • Rated voltage: 12kV.

Rated current: 630A.

Rated breaking current of closed loop: 630A.

Rated current of the fuse: 125A.

Features: • High breaking capacity.

Compact design and light in weight.

Reliable operation and long operation endurance.



#### NFZ77-40.5D/T1250-20 NFZR77-40.5D/T63-31.5 Outdoor AC Vacuum Load Break Switch

Application: for making and breaking rated current and overload current, protecting the

equipments from phase-loss fault in 35kV AC50Hz power system.

Standards: IEC 60265-1, IEC 62271-105.

Parameters: Rated voltage: 40.5kV

Rated current: 1250A

• Fuse current: 63A

Features: • Compact design and light in weight.

High breaking capacity.

Maintenance-free.

Safety and reliable operation.

Long mechanical life.



#### NFW1-12kV Outdoor AC Vacuum Load Break Switch

Application: for making and breaking load current and short-circuit breaking current in

12kV AC50Hz power system.

Standards: IEC 60265-1

Parameters: • Rated voltage: 12kV.

Rated current: 630A.

Rated short-time withstand current: 20kA

Features: • High breaking capacity.

Safe and reliable operation.

Maintenance-free.

Flexible installation.

With automation distribution interface.



#### FLW-12kV Outdoor AC SF<sub>6</sub> Load Break Swtich

Application: for making and breaking load current and short-circuit breaking current in

10kV AC50Hz power system.

Standards: IEC 60265-1

Parameters: Rated voltage: 12kV

- Rated current: 630A

- Rated shot-time withstand current: 20kA

Features: • High corrosion-resistance and pollution degree.

Magnetic blast arc quenching.

With explosion-proof device and pressure alarming device.



#### **MV** Earthing Switch

#### JN15-12(24)kV Indoor Earthing Switch

Application: in 12, 24kV power system for HV busbars.

Standards: IEC 62271-102

Parameters: Rated voltage: 12, 24kV.

Rated short-time withstand current: 31.5-40kA.



#### **Cut-out Fuse**

Application: protection device for protecting power system from over-load and short-circuit

failure.

Standards: IEC 60282-2

Parameters: • Rated voltage: 12-36kV.

Features: • High over-current protection capability, high breaking current.

• High industrial frequency withstands voltage, and mechanical strength, etc.

• High quality on strict testing.

#### References

CHINT T&D Load Break Switch, Earthing Switch and Cut-out Fuse products are widely adopted by Utility Users from Thailand, Zambia, etc.; Industrial End Users from Russia, South Africa, Poland, Colombia, Bangladesh, Tanzania, Australia, Mongolia, etc. like VISY Paper and Engineering Companies from Vietnam, Ghana, Kenya, USA, etc. like EIFFAGE and so on.

\* Note: Contact us for more detailed sales references.

#### **LV** Cubicle



#### LV Switchgear Panel

#### NGC8 Low-voltage Switchgear Panel

Application: for circuit control, protection, monitoring and power distribution in power

distribution system.

Standards: IEC 60439-1

Parameters: • Rated insulation voltage: 1000V.

Rated operational voltage: 690V.

Features: Rated current up to 6300A. High impact resistance and high protection level.

 Efficient distribution circuit configuration. A single standard panel can be installed with 48 circuits.

NJZ3.0D intelligent power control system adopted.

Maintenance-free. High safety protection performance, protection degree of the enclosure can be up to Ip54.

Raw material is non-CFC and non-halogen, which is environment-friendly.

 Structural design and material selection greatly pay attention to preventing the production of arc.

Modular design and flexible assembly.



#### NGC3 Low-voltage Withdrawable Switchgear Panel

Application: for circuit control, protection, monitoring and power distribution in power

distribution system.

Standards: IEC 60439-1

Parameters: • Rated insulation voltage: 690V, 1000V.

Rated operational voltage: 400V, 690V.

Features: Protection degree: IP30, IP40, IP54

High accuracy and quality

Modular design of the components and spare parts.

Easy installation and dismantling.

 Cable ways are specially designed for installation. In addition, cable fixing parts are available.

 Each position of every unit is clearly indicated and max. 3 locks are available for locking.



#### NGG1 Low-voltage Switchgear Panel

Application: for circuit control, protection, monitoring and power distribution in power

distribution system.

Standards: IEC 60439

Parameters: • Rated voltage: 400V.

Rated current: 400-3150A.

Rated short-circuit breaking current: 15-50kA.

Features: Protection degree: IP20~IP40.

High accuracy and quality of the switchgear could be ensured.

Modular design of the components and spare parts.

Easy installation and dismantling.

Good heat dispensing capability.

With a complete earthing protection system.



#### NGL2 Low-voltage Sealed Power Distribution Switchgear Panel

Application: for circuit control, protection, monitoring and power distribution in power distribution system.

Standards: IEC 60439-1

Parameters: • Rated insulation voltage: 660V.

■ Rated current: ≤1250A.

Features: Protection degree: IP 40 or Ip54.

High accuracy and quality.

Modular design of the components and spare parts.

Easy installation and dismantling.

#### **LV** Cubicle









#### NGZ2 DC Power Supply Panel

Application: in the power plant and substation as the DC power supply.

Standards: IEC 61204-2001

Parameters: • Rated output voltage: 48-220V DC.

Rated output current: 5-50A DC.

Features: • Easy connection and installation.

Reliable operation.

Maintenance-free.

Un-interrupted power supply could be ensured.

#### PK Microcomputer-protected Measuring & Controlling Switchgear Panel

Application: for intelligent measurement, protection and control of the HV apparatuses in power distribution system.

Standards: IEC 60255

Parameters: Rated power supply voltage: 110/220V DC.

Sample ratings: voltage 110V/50HZ; current:5A/50HZ.

Features: • Equipped with CPU and chips from Intel to realize reliable processing capability.

COMS chips adopted to lower the power loss and anti-interference capability.

• High reliability to meet the requirements needed for various working conditions.

#### References

CHINT T&D LV Switchgear Panels are widely adopted by Utility Users from Vietnam, Myanmar, Mongolia, Indonesia, Yemen, Thailand, etc.; Industrial End Users from Finland, Vietnam, Sudan, etc. like UPM and Engineering Companies from Vietnam, Congo (Brazzaville), Algeria, India, Mongolia, Republic of Equatorial Guinea, Angola, Ghana and so on.

\*\* Note: Contact us for more detailed sales references.

#### LV Terminal Cubicle

#### NXPW1 Outdoor Distribution Board

Application: in 400V power distribution systems, for capacitor correction, measurement and control.

Standards: IEC 60439-1

Parameters: Rated voltage: 400V.

Load current: 630A and below; compensation 200kvar and below.

Features: • Compact design and Reliable operation.

• Protection degree: IP43, IP54.

Easy installation and connection.

Customized cubicles are available on your requirement.

#### NXM2 LV Lighting Box

Application: for control, residual current protection of power distribution system, over-load, short-circuit and phase failure protection of motor and other protection functions.

Standards: IEC 60439-1

Parameters: • Rated voltage: 400V.

Load current: 63A and below.

Features: • Protection degree: IP3X.

Reliable operation and compact design.

Easy connection.

Customized cubicles are available on your requirement.

Both concealed and wall-hung type installations are available.

#### **LV** Cubicle





#### NXK1 LV Series Control Box

Application: for control, residual current protection of power distribution system, over-load, short-circuit and phase failure protection of motor and other protection functions.

Standards: IEC 60439-1

Parameters: • Rated voltage: 400V.

Load current: 630A and below.

Features: • Reliable operation and compact design.

Protection degree: indoor IP40, outdoor IP43.

Customized cubicles are available on your requirement.

#### NXJ1 LV Series Metering Box

Application: for control, residual current protection of power distribution system, over-load, short-circuit and phase failure protection of motor and other protection functions.

Standards: IEC 60439-1

Parameters: • Rated voltage: 400V.

Load current: 125A and below.

Features: • Reliable operation and compact design.

Protection degree: indoor IP40, outdoor IP43.

Various specifications for the requirements of different meters' installation.

#### References

CHINT T&D LV Terminal Cubicle products are widely adopted by Utility Users, Industrial End Users and Engineering Companies from Spain, UK, Cyprus, Finland, Russia, Sudan, India, Indonesia, New Caledonia, Australia, Libya, South Africa, Ghana, Venezuela, Syria, etc. like FMG and so on.

% Note: Contact us for more detailed sales references.



#### **Surge Arrester & Insulator**

#### KEMA≼



#### KEMA≰



#### **Surge Arrester**

Application: for protecting rated voltage up to 500kV power transmission & distribution system

from over-voltage.

Standards: IEC 60099-4

Parameters: • Rated voltage 0.22kV-500kV.

Features: • 3-36kV composite surge arresters KEMA certified.

- GIS metal oxide surge arrester, composite metal oxide surge arrester and porcelain metal oxide surge arrester available.
- Easy installation and maintenance.
- Good sealing capability to ensure reliable operation.
- Protection and reliability of the surge arrester have been greatly enhanced.

#### **Insulator**

Application: for rated voltage up to 500kV power transmission lines supporting or suspending.

Standards: IEC 61109

Parameters: Rated voltage 10kV-500kV.

Features: • Long rod polymer insulator, polymer pin insulator, polymer post insulator, and line post insulator available.

- Secure and reliable operation on high mechanical strength.
- Compact design and light in weight which is convenient for transportation. Good anti-vibration capability. Good anti-moisture capability.
- Good electric performances.
- High anti-aging performances which is perfect for utilization under conditions of high altitude.
- Easy for maintenance.
- KEMA Certified.

#### References

CHINT T&D Surge Arresters & Insulators are widely adopted by Utility Users from Estonia, Nepal, Chile, Lebanon, Kenya, Armenia, Turkey, Tanzania, Bhutan, Ethiopia, etc., Industrial End Users from Kazakhstan, Colombia, Tanzania, Malaysia, Morocco, Colombia, etc. and Engineering Companies from Belgium, USA, Estonia, Pakistan, Lebanon, Kenya, Italy, Vietnam, etc.

\* Note: Contact us for more detailed sales references.



#### CT & PT









#### SF<sub>6</sub> Current Transformer (Outdoor)

Application: for power, current measurement and relay protection in voltage up to 220kV AC

50Hz power system.

Standards: IEC 60044-1 Ratings: 110kV-220kV.

Features: • Reliable operation.

Reliable insulation capability.High measurement accuracy.

Reliable current-carrying capability.

#### SF<sub>6</sub> Voltage Transformer (Outdoor)

Application: for power ,voltage measurement and relay protection in voltage up to 126kV

AC 50Hz power system.

Standards: IEC 60044-2 Ratings: 110kV-126kV.

Features: • Reliable operation.

Reliable insulation capability.

High measurement accuracy.

■ Maintenance-free.

• Reliable sealing performance.

#### Oil Type Current Transformer (Outdoor)

Application: for power, current measurement and relay protection in voltage up to 220kV

AC 50Hz power system.

Standards: IEC 60044-1 Ratings: 33kV-220kV.

Features: • Reliable operation.

Reliable insulation capability.

High measurement accuracy.

Reliable current-carrying capability.

Maintenance-free.

#### Oil Type Voltage Transformer (Outdoor)

Application: for power ,voltage measurement and relay protection in voltage up to 132kV

AC 50Hz power system.

Standards: IEC 60044-2 Ratings: 33kV-132kV.

Features: Reliable operation.

Reliable insulation capability.

High measurement accuracy.

Maintenance-free.

• Reliable sealing performance.

#### Cast Resin Current Transformer (Outdoor)

Application: for power ,current measurement and relay protection in voltage up to 35kV AC

50/60Hz power system.

Standards: IEC 60044-1 Ratings: 10kV=35kV.

Features: • Reliable operation.

Reliable insulation capability.

High measurement accuracy.

Relibale curret-carrying capability.

Maintenance-free.

#### CT & PT











#### Cast Resin Voltage Transformer (Outdoor)

Application: for power, voltage measurement and relay protection in voltage up to 35kV

50/60Hz power system.

Standards: IEC 60044-2 Ratings: 10kV-35kV

Features: • Reliable operation.

 Reliable insulation capability. High measurement accuracy.

Maintenance-free.

Reliable seal performance.

#### Cast Resin Current Transformer (Indoor)

Application: for power ,current measurement and relay protection in voltage up to 35kV AC

50/60Hz power system and for panel builders.

Standards: IEC 60044-1 Ratings: 10kV-35kV

Features: • Reliable operation.

 Reliable insulation capability. High measurement accuracy.

Reliable current-carrying capability.

Maintenance-free.

#### Cast Resin Voltage Transformer (Indoor)

Application: for voltage and power measurements, and relay protection in voltage up to

35kV 50/60Hz power system and for panel builders.

Standards: IEC 60044-2 Ratings: 10kV-35kV

Features: Reliable operation.

 Reliable insulation capability. High measurement accuracy.

Maintenance-free.

• Reliable sealing performance.

#### Oil-immersed Capacitor Voltage Transformer

Application: for voltage and power measurements, relay protection and carrier

telecommunication in 50Hz power system.

Standards: IEC 60044-5 Ratings: 66kV-220kV

Features: • Compact structure.

 Reliable insulation capability. High measurement accuracy.

Maintenance-free.

Reliable sealing performance.

#### CT/VT Metering Unit

Application: for active/reactive power measurement in voltage upto 35kV 50Hz AC power

Standards: IEC 60044-3 Ratings: 10kV,35kV

Features: Reliable operation and high measurement accuracy.

Easy installation.

Maintenance-free.

#### References

CHINT T&D CT & PT products are widely adopted by Utility Users from Bulgaria, Myanmar, Ethiopia, Indonesia, Tanzania, etc.; Industrial End Users from Russia, South Africa, Australia, etc. like Rio Tinto and Engineering Companies from Mongolia, Thailand, France, Lebanon, USA, etc. like EIFFAGE and so on.

※ Note: Contact us for more detailed sales references.

#### **Capacitor**



#### TBB Series Shunt Capacitor Compensation Equipment

Application: for enhancement of power factor, lowering circuit loss and improve voltage quality

in rated voltage 1-110kV. power distribution system.

Standards: IEC 60871-1

Parameters: Rated voltage: 1-110kV.

Rated capacity: 0.3-60Mvar.

Feature: Compact design and reliable operation.

Inside- capacitors fuse for failure protection.

Outside capacitors with discharge circuit for over voltage relay protection.

• With no- load tapping changer for capacity of the capacitor.



#### TBBF Subdivided-switching Shunt Capacitor Equipment

Application: for enhancement of power factor, lowering circuit loss and improve voltage quality

of rated voltage 6.6-12kV. power distribution system.

Standards: IEC 60871-1

Parameters: Rated voltage: 1-35kV.

Rated capacity: 0.3-30Mvar.

Features: • Automatic control of reactive power.

Compact design.

High utilization of the capacitor.

Complete protection and control protection and high automation level.



#### TBBF(X) Subdivided-switching Shunt Capacitor Equipment

Application: for enhancement of power factor, lowering circuit loss and improve voltage quality

of rated voltage 1-10kV. power distribution system.

Standards: IEC 60871-1

Parameters: Rated voltage: 1-10kV.

Rated capacity: 0.3-20Mvar.

Features: • Automatic control of reactive power.

Compact design.

High utilization of the capacitor.

Complete protection and control protection and high automation level.



#### TBBH Shunt Capacitor Equipment

Application: for enhancement of power factor, lowering circuit loss and improve voltage quality

in rated voltage 6.6kV/12kV/40.5kV power distribution system,

Standards: IEC 60871-1

Parameters: • Rated voltage: 1-35kV.

Rated capacity: 0.6-10Mvar.

Feature: • Compact design and reliable operation.

Inside- capacitors fuse for failure protection.

• Outside capacitors with discharge circuit for over voltage relay protection.

With no- load tapping changer for capacity of the capacitor.



#### **B**<sup>A</sup>MH Assembling Shunt Capacitor

Application: for switching capacitors in rated voltage12kV.power distribution system.

Standards: IEC 60871-1

Parameters: Rated voltage: 1-42kV.

Rated capacity: 600-10000kVar.

Features: • Compact design and reliable operation.

Reliability has been greatly enhanced by fuse protection.

#### **Capacitor**



#### TBBX Var Local Compensation Equipment

Application: for enhancement of power factor, lowering circuit loss and improve voltage quality

in rated voltage 6.6-12kV.power distribution system and start-up operation of

the motors.

Standards: IEC 60871-1

Parameters: Rated voltage: 6-10kV.

Rated capacity: 50-1500kVar.

Features: • Compact design and cost-effective.



#### TBBZ Pole-mounted Automatic-switching Shunt-capacitor Equipment

Application: for enhancement of power factor, lowering circuit loss and improve voltage quality

in 6.6kV/12kV power distribution system.

Standards: IEC 60871-1

Parameters: • Rated voltage: 6-10kV.

Rated capacity: 100-1200kVar.

Feature: Perfect protection function.

Compact design and reliable operation.

Advanced control mode. provide for control power transformer itself.

Convenient for installation, easy maintenance.



#### BAM All-film Shunt Capacitor

Application: for enhancement of power factor, lowering circuit loss and improve voltage quality

of rated voltage 1kV and above power distribution system.

Standards: IEC 60871-1

Parameters: • Rated voltage: 1-21kV.

Rated capacity: 150-500kVar.

Features: • Compact design and light in weight.

Low loss and temperature-rise.

Long operation endurance.

Low partial discharge performances.



#### TALF AC Filter Capacitor Equipment

Application: for absorbing harmonic current generated by the harmonic source and restraining

harmonics in 6-35kV power system.

Parameters: • Rated voltage: 6-35kV.

Rated capacity: 0.3-60Mvar.

Features: • Compact design and reliable operation.

Low loss.

Low operating temperature.

• Flexible structure and easy for operation.

#### **Capacitor**



### MSVC Magnetic Control Reactor Type HV Static Reactive Compensator

Application: applicable in the system where reactive power load changes frequently, such as wind power, PV power plants, electric arc furnaces, rolling mills, mine hoist, electric locomotives and other high-pressure systems.

Parameters: • Max. capacity of MCR branch line: 50000kvar

Max. capacity of FC branch: 100000kvar

Features: Fast tracking reactive power regulation, using magnetic valve type controllable saturable reactor. Low active power loss and quick response.

 Optical-isolating phase-moving triggering technology adopted, light transmission phase-moving triggering, small size.

 Triggered by light phase separation technique, the light transmission phase trigger, equipment, small size

 Control components adopt LV thyristor, safe and reliable; maintenance-free, long life.

 Multi-CPU parallel processing technology adopted and high automation degree realized, enabling various kinds of data transmission and "four remote" function.



#### NTSC Dynamic Filtering Compensator

Application: applicable for places requiring dynamic reactive compensation or harmonic contro, especially suitable for occasions with mill, spot welder, crane, elevator and traffic.

Parameters: • Rated voltage: AC0.4-1kV

■ Power factor: >0.9

Dynamic response time: <20ms</li>

Features: Reactive power compensation, improving power factor, reducing loss and saving energy.

 Enhancing the load capacity of the transformer or line, reducing with harm from harmonic.

• Extending the service life of transformers and and other electrical equipments.

 Reducing electromagnetic interference and improving the protecting reliability of automation equipment and communicating system.

Inhibiting voltage change to improve the quality of power supply voltage.

#### References

CHINT T&D Capacitors and Equipments are widely adopted by Utility Users from Lebanon, etc.; Industrial End Users from Romania, Russia, Bangladesh, Australia, etc. like VISY Paper and Engineering Companies from Vietnam, etc.

\* Note: Contact us for more detailed sales references.

#### CHN.

#### Cable & Wire



#### **Power Cable**

Application: for 1~35kV power transmission & distribution lines with great current.

Standards: IEC 60502-1997

Features: ■ Al/XLPE 1×25+16C, Al/XLPE 1×240 mm² and Cu/XLPE 1×240 mm² cables

• High fire-resistance capability. Fire-resistance categories of A, B, C could be satisfied.



Application: for power distribution devices, control, measurement and protection 450/750V

Features: • High fire-resistance capability. Fire-resistance categories of A, B, C could be

satisfied.



#### Concentric Conductor Power Cable

Application: for power transmission to power lines with rated voltage 0.6/1kV and below.



#### Flame-retardant Cable for Mining

Application: applicable for minings. Rubber Insulated Flame-retardant Tube Cable, XLPE Insulated Flame-retardant Power Cable and PVC Insulated Power Cable available.



#### Twisting-resistant Flexible Cable for Wind Power

Application: applicable in the cabin, the upper of the cabin and tower, the lower part of the tower and the prefabricated substation at the bottom of the tower.

Features: Resistance to low temperature and wearing; resistance to fatigue, weather aging, microbe and corrosion; resistance to twisting, cold, salt, oil and UV.



#### Non-halogen cable for PV systems

Application: applicable for solar connecting equipment, solar power substation, PV systems, etc.

Features: Resistance to ozone, UV, acid and alkali, high temperature, cold and dent.

- Halogen free and flame retardant.
- Compatibility to standard connectors and the connection system.
- TüV certified.

#### Cable & Wire



#### Civilian Wire & Cable

Application: for 450/750V lines in lighting devices, household appliances, meters & instruments and telecommunication devices.



#### Overhead Insulation Cable

Application: for 35kV power transmission & distribution overhead lines.

Features: • Environmental protective type cable, Low smoke quantity and non-poisoned gas releasing.



#### Rubber Insulation Soft Cable

Application: for 450/750V lines in lighting devices, household appliances, etc.



#### Pre-fabricated Branched Cable

Application: for application in residential house, office buildings, tunnels and factories.



#### **Computer Cable**

Application: for 200/500V computer network and control system with anti-interference capability.

#### References

CHINT T&D Cables are widely adopted by Utility Users from Italy, Cyprus, Yemen, Malta, Zambia, etc., Industrial End Users from Australia, etc. like VISY Paper, and Engineering Companies from USA, etc.

 $\ensuremath{\mathbb{X}}$  Note: Contact us for more detailed sales references.

#### **Power Protection & Automation**



#### NZB6 Series Protection and Management Device

Applications: for monitoring and protecting power equipment, distribution network and substations in voltage up to 126kV power system.

Standard: IEC60255-1, IEC60870-1

Ratings: 10kV~126kV

Features: • 32-bit industrial microprocessor and multi-CPU

- Functional integration of protection, control, measurement, communication and automation.
- High-performance hardware platform and reliable & uniform software platform.



#### NZK329 Power Factor Intelligent Measurement

Applications: for 380V power distribution system of large-scale industrial enterprises, universities ,hospitals and research institutes , real-time monitoring and auto-switching of passive compensation cabinet to ensure qualified power factor.

Standard: IEC 60255-1, IEC 60870-1

Ratings: 380Vac

Features: • Advanced DSP core hardware platform with 8-way switching data input.

- 3-phase current and voltage measurement ,calculation of active power ,passive power, power factor and kilowatt-hour , and alarming when out of range.
- Calculating and recording functions.
- RS485 communication interface and Mod Bus RTU communication protocol.



#### NZB379 Motor Intelligent Control and Protection Device

Applications: in 3-phase power system of petroleum, chemical, mechanical, textile and refining fields, monitoring, measuring, protecting and control of 380V motor.

Standard: IEC 60255-1, IEC 60870-1

Ratings: 380Vac

Features: • Advanced 32-bit DSP dual-core CPU hardware platform to ensure accurate and reliable control of capacitor switching.

- Measuring, analyzing and compensation functions.
- Abnormal switching or fault recording function.
- Strong anti-interference ability to ensure the system stability and reliability under 2000V or less impulse.



#### NZL308 Intelligent Measurement and Control Device

Applications: in 380V power distribution system, monitoring single feeder and realizing remote monitoring and alarming functions.

Standard: IEC 60255-1, IEC 60870-1

Ratings: 380Vac

Features: Advanced DSP core hardware platform with 11-way switching data input.

- Digital display of motor status.
- Standard DC4~20mA analogue output.

#### References

CHINT T&D Power Protection & Automation Equipments are widely adopted by Industrial End Users and Engineering Companies from Algeria, Turkey, etc.

% Note: Contact us for more detailed sales references.

#### **Turn-key Solution**



#### **Turn-key Solution**

General: CHINT T&D provides Turn-key solution as an EPC contractor for project of power generation, high voltage transmission line, power substation, distribution substation and hydro electrical power station, which is of high grade quality and delivering client satisfaction through timely performance and the provision of cost efficient. Also CHINT T&D is an ISO-9001 certified company and we undertake turn-key solution right from the stage of feasibility studies through conceptual design, detail engineering, manufacturing, installation and testing & commissioning.

Events: • 100MW power plant, turn-key solution, Inner Mongolia-China

- 2×57MW power plant, turn-key solution, Inner Mongolia-China
- 132kV substation EPC, Bajil & Suq Abs-Yemen
- 132kV and 33kV substation EPC-Nepal
- 35kV and 66kV substation EPC-Tanzania
- 220kV substation EPC-D.R. Congo
- 230kV substation EPC-Pakistan

Salient Features: The Turn-key solution as an EPC contractor covers a range of services, including the manufacture of high voltage and low voltage equipment such as transformers, GIS, CB, VCB, Switchgears and Cables, Solar products etc. and also have a turn-key solution division, which includes professional senior engineering members and project management team, all highly experienced.

- Project finance PF Service for turn-key or EPC.
- Risk management for project of client.
- Project management planning, schedule etc.
- Designing from conceptual to detail.
- Equipment manufacturing and supply.
- Execution, testing & commissioning and handing-over.



#### 132kV Three-phase Power Transformer with OLTC 500kV Power Transformer Cable **100** 8.11 WEB Scover XQJ series Cable Bracket Mini Prefabricated Substation LW36-145kV Outdoor SF6 Circuit Breaker 252kV Power Transformer ZW32-12 Outdoor HV VCB 12 PZ series Lighting and Control Box FZRN21-120/T125-31.5 Indoor AC HV Vacuum Load Switch Cut-out Fuse Combined Equipment NCM1 Coarctation Insulated Control Bus-bar 145kV GIS Integrated Automation Power Management and Monitoring System YB6A Intelligent Prefabricated Substation 1 FLRN36-12D SF<sub>6</sub> Load Switch Fuse Combined Equipment LW 43-252kV Circuit Breaker 10kV-500kV Composite Insulator 1 ZN63A-12(VS1) Vacuum Circuit Breaker (VCB) NGZ3 DC Power Supply Switchgear YB6 series Prefabricated Substation 252kV GIS 145kV Mini GIS 0.22kV-500kV Porcelain and Composite Arrestor Outdoor SF<sub>6</sub> Circuit Breaker NV Series Vacuum Circuit Breaker (VCB) 35kV Oil-immersed Transformer with OLTC in SZ9 series GW23-252KV Switch Disconnector NGZ2 series Power Supply Switchgear HXGN15A-12 Air-insulated Ring Main Unit SC(B) series Epoxy Resin Dry-type Transformer . . XKGKL Dry Type Air-core Current-limiting Reactor CKGKL Dry Type Air-core Reactor 145kV Mini GIS Fixed Type Metal Enclosed Switchgear XGN15-12 (SF6) Air-insulated Ring Main Unit YB29-40.5/12 Prefabricated Substation S9.S11-M R Three-phase Fully-sealed Roll-core Transformer BAMH Assembled HV Shunt Capacitor GW22-252kV Switch Disconnector KYN28A-24(Z) Metalclad Enclosed Withdrawable Switchgear NGC1.2.3 series LV Withdrawable Switchgear Available Product Range from CHINT T&D: 4 ... 145kV Switch Disconne KYN61-40.5(Z) Metalclad Enclosed Withdrawable Switchgear BAM Full-film HV Shunt Capacitor ..... KYN28A-12(Z) Matalciaf Enciced Withdrawabie Switchgear 0.38-0.6KV 252-750KU 36-40.5KU 126-145KU 3.6-24KU 7.2kV-252kV PT & CT



#### **International Business:**

Attributed to our reliable quality and perfect after-sales service, CHINT T&D has been relied on and entrusted with by many of our clients around the world. We will continue to supply best products and try hard to win more compliments through our best service.

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