

# Churod Presentation

- **Company Profile**
- **Products and Customers**



**1200+**  
Employees

◆ Founded in 2009, Headquarters in Dongguan, China



**4**  
Plants

◆ Leading electronics supplier of **Relays/Contactors, Sensors, CCS**



**0.16B€**  
Turnover

◆ 4 plants with 0.5B pcs annual output of relays and sensors



**8%**  
R&D spent

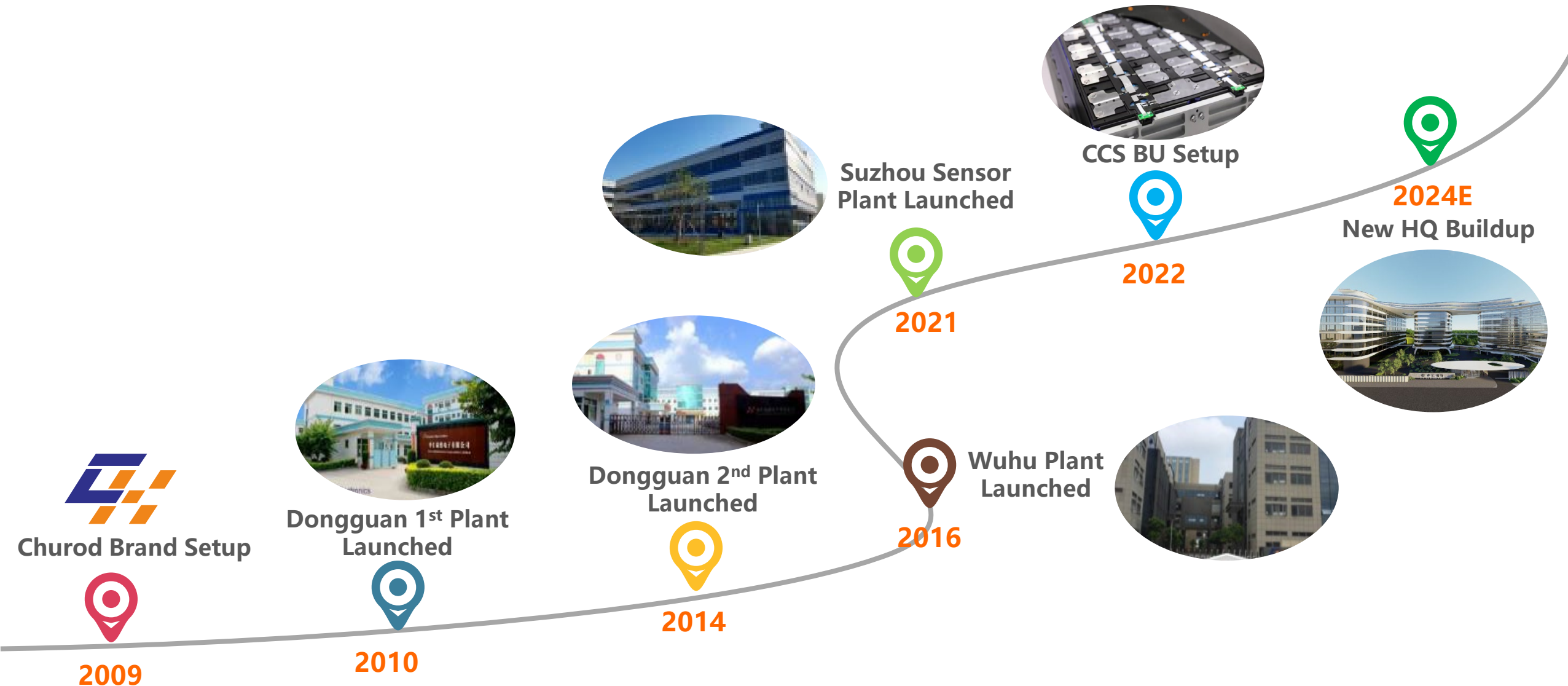
◆ Globalization strategy with footprints in the US, EU, and Japan.

◆ Full implementation of IPD process (Integrated Project Development)

◆ Internal lab with UL, VDE, CNAS certified



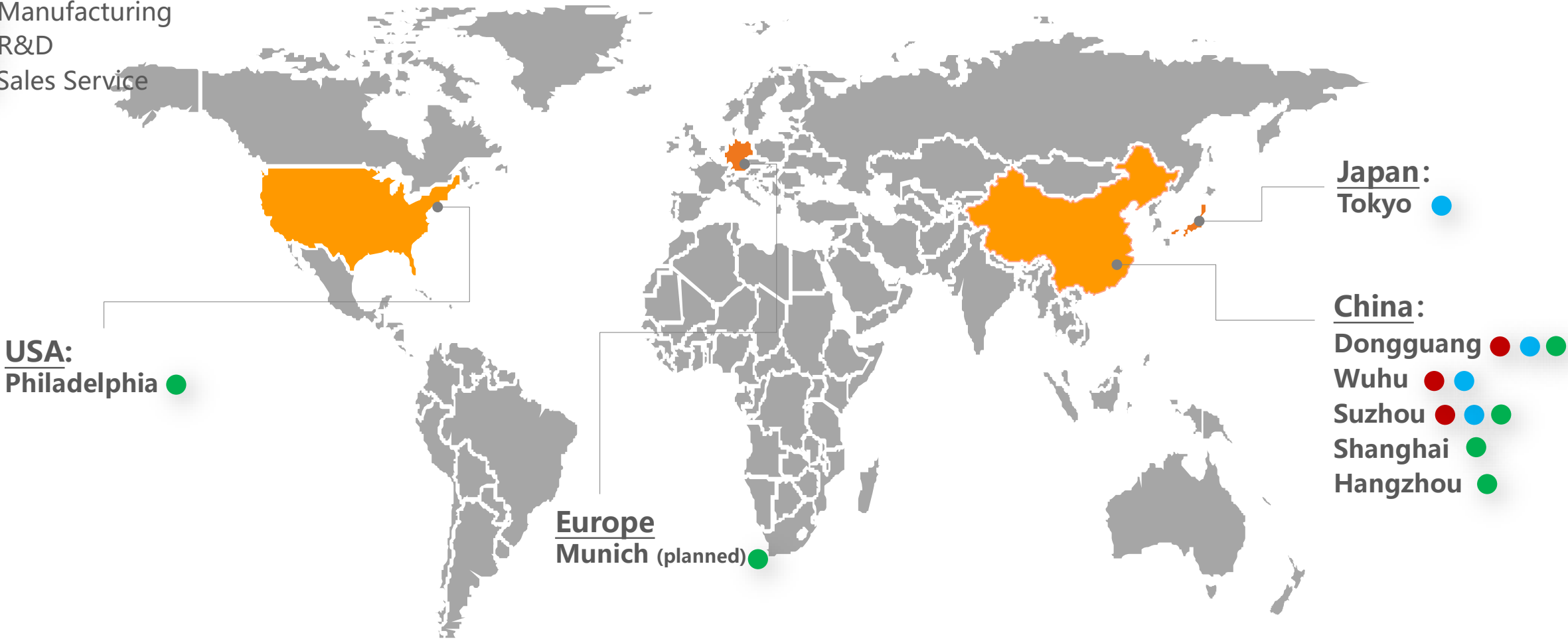
# Company History



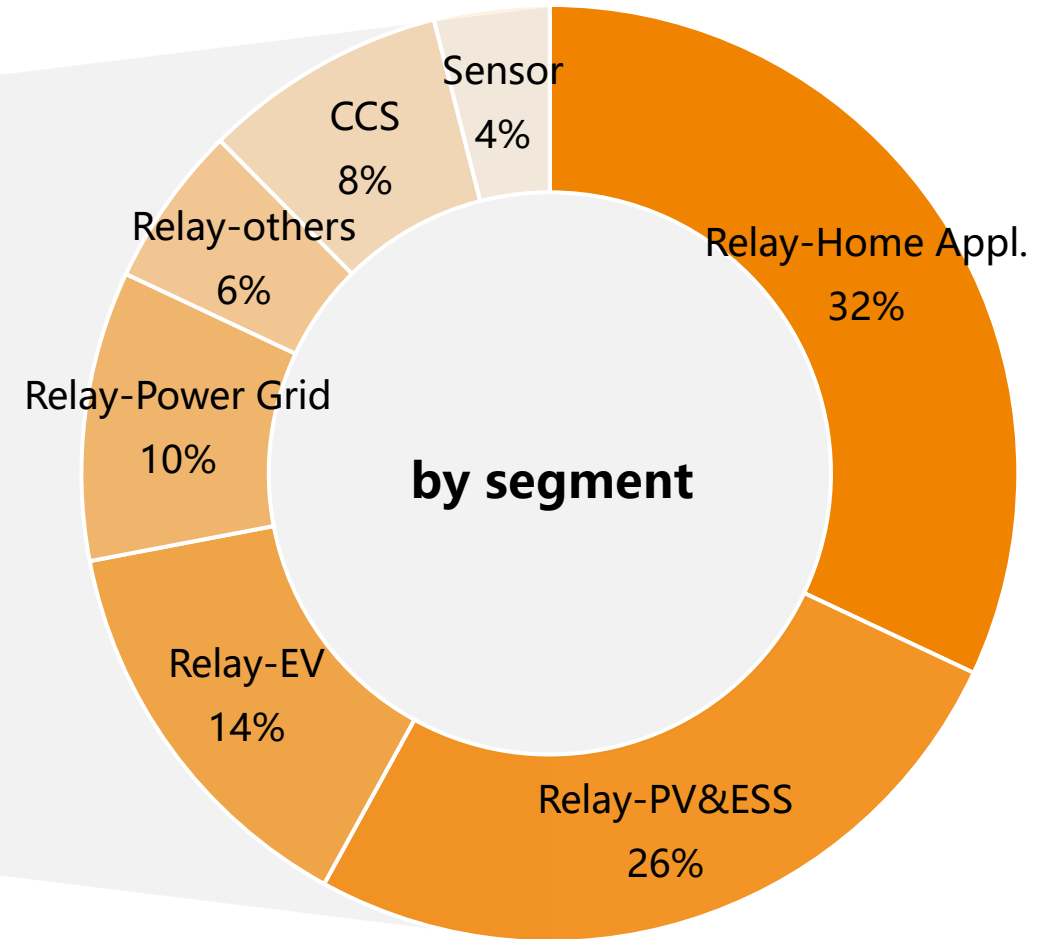
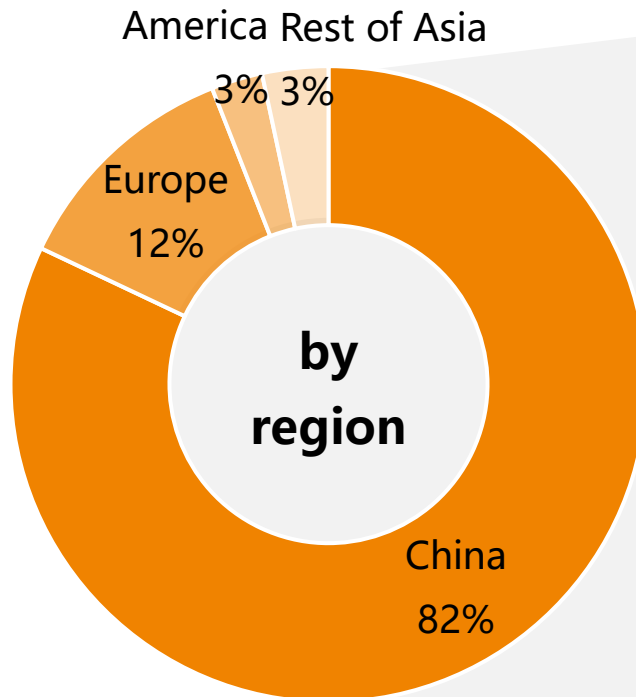
Churod steps into second evolution after 2020 by capturing new growth drivers

# Global footprint

- Manufacturing
- R&D
- Sales Service

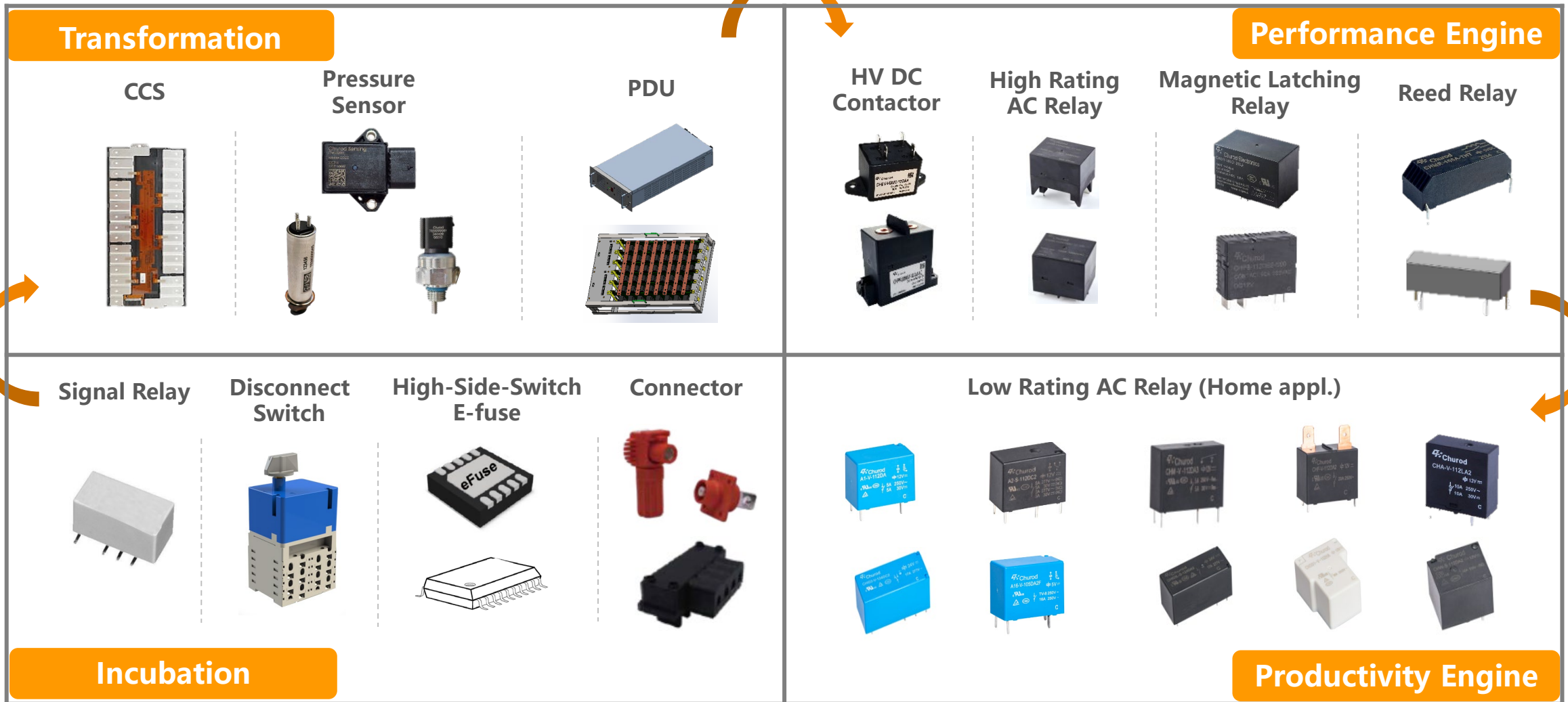


Churod sticks to globalization strategy, exploring new sites around the world

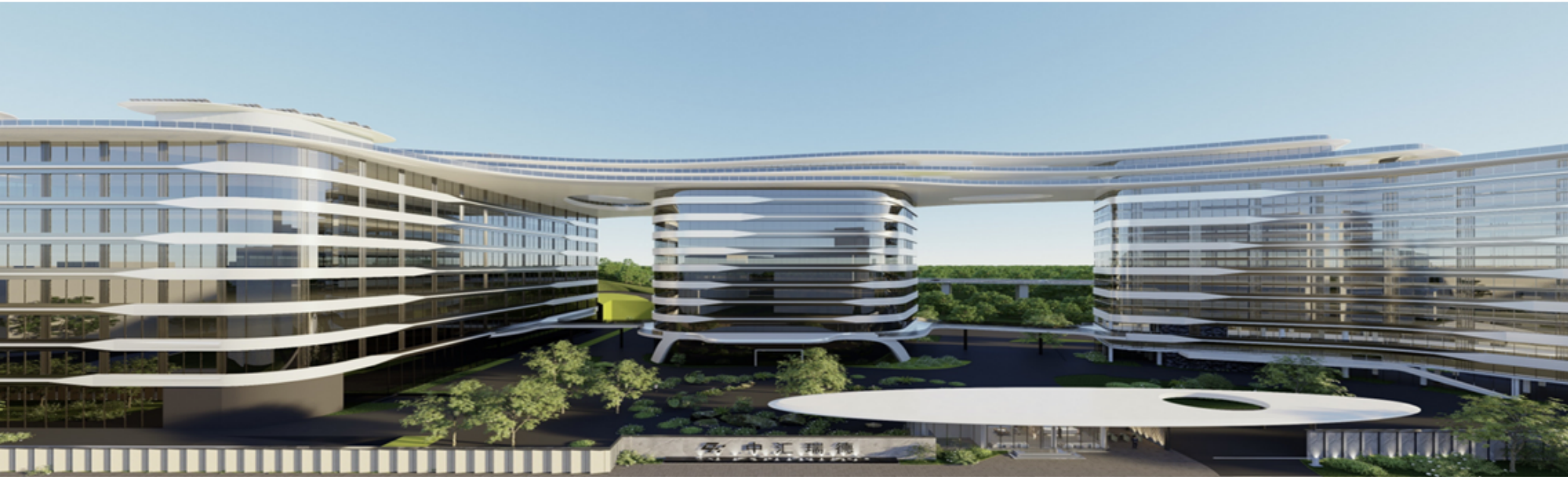


Churod provides product solutions to multiple market segments around the world

# Growth Strategy



The product portfolio enables Churod to be a long-term partner to our customers



## Talents

Management team is ambitious and has experience from global Top 500 enterprises, forging ahead with determination and unity.

## Innovation

R&D team led by Japanese experts with over 40 years in relay and contactor development; we apply the IPD process and foster cross-pollination of ideas between departments

## Automation

Our core production strategy is to automate to reduce costs and guarantee consistent quality

## Quality

- TS16949
- ISO14000
- ISO9000

## Manufacture

Lean  
Manufacturing  
Management ;  
MEMS System;  
Intelligent  
Manufacturing

## High Technology Expertise





## Honor & Qualification

- CHUROD Lab has UL & TUV Witness Test Certification
- Part of our Patent Certificate, CNAS Certification

## Test Capability

- Reliability Test for new developed products
- Regular Tests for mass production products
- Special tests requested by customers
- Able to replicate most customer load tests involving resistive, inductive, capacitive, motor, and lighting loads
- Our environmental testing includes heat, humidity, thermal shock, salt spray, shock, vibration
- IEC testing for glow wire, ball pressure, explosion-proof seal

部分专利证书



Churod实验室已获得UL及TUV实验室资格证书



体系证书ISO9001



体系证书ISO14001



体系证书IATF16949



## CHUROD is a leader in overall level of automation



Fully automatic  
injection molding

Fully automatic  
steel stamping

Fully automatic  
coil winding

Fully automatic  
semi-finished  
products assembly

Fully automatic  
WIP products quality  
check

Fully automatic  
workshop



1

2

3

4

5

6



## ■ Products and Customers

- Application Fields
- Customers
- Broad Selection of Relays

# Major Industry Application



**Photovoltaic**



**Communication  
Power**



**Energy  
Storage**



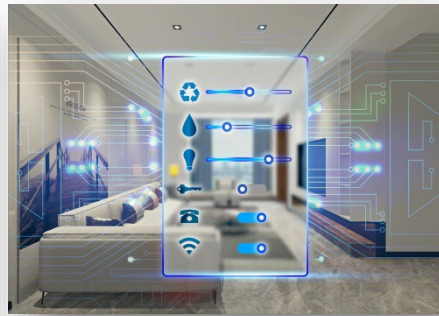
**Safety**



**Electric  
Meter**



**Home  
Appliance**



**Smart  
Home**



**Industrial  
Vehicles**



**Charging  
Piles**



**Automotive**

# Customers





# Home Appliance relay solutions

## 1 Applications



## 2 Relay Recommendation

No.	Relay Part	Feature
1	A1-S-112DA	5A, Sealed/Explosion-proof
2	A1-V-112DA	5A, Vented
3	A1-S-112HA	10A, Sealed/Explosion-proof
4	A1-V-112HA	10A, Vented
5	A1-S-112HAF	10A, Sealed/Explosion-proof
6	CHM-S-112DA3	5A, Sealed/Explosion-proof
7	CHM-V-112DA3	5A, Vented
8	A2-S-112DA2	5A, Sealed, SPST(Form A)
9	A2-S-112DC2	5A, Sealed, SPDT(Form C)
10	CHW-S-112DA2	10A, Sealed, SPST(Form A)
11	CHW-S-112DC2	10A, Sealed, SPDT(Form C)
12	CHZ01-S-112LA2	10A, Sealed
13	CHZ02-S-112LA2	16A, Sealed/Explosion-proof
14	CHZ03-S-112LA2	16A, Sealed/Explosion-proof
15	CHI03-S-112DA2	20A, Sealed/Explosion-proof
16	CHF-S-112DA2	20A/25A, Sealed/Explosion-proof
17	CHF-V-112DA2	20A/25A, Vented
18	CHFN-S-112DA2	20A/25A, Sealed/Explosion-proof
19	CHFN-V-112DA2	20A/25A, Vented
20	CHS01-S-112LA	30A/40A, Vented/Sealed
21	CHS02-S-112LA	30A, Vented/Sealed

## 3 Relay Features

### A1-V/S-112DA/HA/HAF

- ▶ Coil Voltage: 12VDC
- ▶ Coil Power: 450mW/200mW
- ▶ Cert. Load: DA:5A / HA/HAF:10A
- ▶ Type of Encapsulation: Vented/Sealed/Explosion-proof(optional)



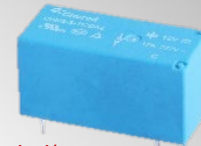
### A2-S-112DA2/DC2

- ▶ Coil Voltage: 12VDC
- ▶ Coil Power: 200mW/150mW
- ▶ Cert. Load: 10A
- ▶ Type of Encapsulation: Sealed



### CHI03-S-112DA2

- ▶ Coil Voltage: 12VDC
- ▶ Coil Power: 400mW
- ▶ Cert. Load: 20A
- ▶ Type of Encapsulation: Sealed/Explosion-proof(optional)



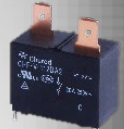
### CHZ01/02/03-S-112LA2

- ▶ Coil Voltage: 12VDC
- ▶ Coil Power: 530mW
- ▶ Cert. Load: 10A/16A
- ▶ Type of Encapsulation: Sealed/Explosion-proof(optional)



### CHF/CHFN-V/S-112DA2

- ▶ Coil Voltage: 12VDC
- ▶ Coil Power: 900mW
- ▶ Cert. Load: 20A/25A(optional)
- ▶ Type of Encapsulation: Vented/Sealed/Explosion-proof(optional)



### CHS01/02-S-112LA2

- ▶ Coil Voltage: 12VDC
- ▶ Coil Power: 900mW
- ▶ Cert. Load: 30A/40A
- ▶ Type of Encapsulation: Sealed/Explosion-proof(optional)



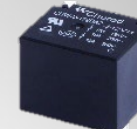
### CHM-V/S-112DA3

- ▶ Coil Voltage: 12VDC
- ▶ Coil Power: 200mW
- ▶ Cert. Load: 5A
- ▶ Type of Encapsulation: Vented/Sealed/Explosion-proof(optional)



### CHW-S-112DA2/DC2

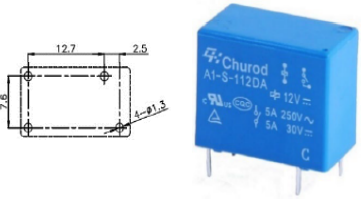
- ▶ Coil Voltage: 12VDC
- ▶ Coil Power: 360mW/240mW
- ▶ Cert. Load: 10A
- ▶ Type of Encapsulation: Sealed



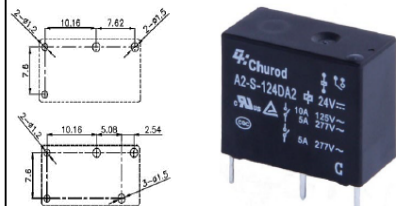


# Home appliance relay solutions

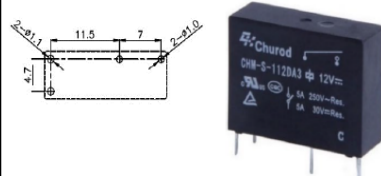
**A1**  
SPST-NO (1 form A)  
3A-10A; 1/6hp; TV5; 4A FLA/5A LRA  
200mW and 450mW coil options  
Dielectric coil-contact 4kV (10kV surge)  
Class F (155°C) insulation standard  
Glow wire IEC60035; Explosion-proof IEC60079



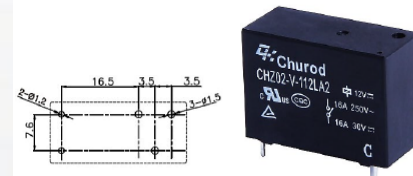
**A2**  
SPST-NO, NC, or SPDT (1 form A, B, or C)  
3A-10A; 1/10hp; 5A@120VAC pilot duty  
150mW, 200mW, and 400mW coil options  
Dielectric coil-contact 4kV (8kV surge)  
Class F (155°C) insulation standard  
Glow wire IEC60035



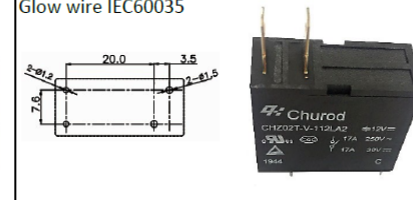
**CHM/CHMN**  
SPST-NO (1 form A)  
3-10A; 1/10hp; 1.4 FLA/7.5LRA; 0.4-5A pilot duty  
200mW and 280mW coil options  
Dielectric coil-contact 4.5kV (7kV surge)  
Class F (155°C) insulation standard  
Glow wire IEC60035; Explosion-proof IEC60079



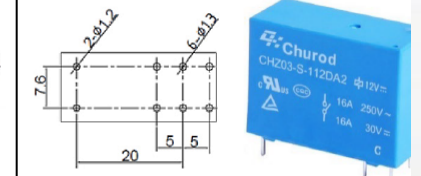
**CHZ02**  
SPST-NO (1 form A)  
16A-20A; 1/6hp@250VAC  
120mW, 540mW and 720mW coil options  
Dielectric coil-contact 5kV (10kV surge)  
3.5mm pin spacing, QCT option (T-type)  
Class F (155°C) insulation standard  
Glow wire IEC60035; Explosion proof IEC60079



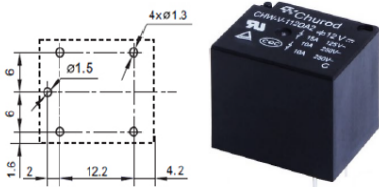
**CHZ02T**  
SPST-NO (1 form A)  
17A-20A  
540mW and 720mW coil options  
Dielectric coil-contact 5kV (10kV surge)  
Quick connect power terminals  
Class F (155°C) insulation standard  
Glow wire IEC60035



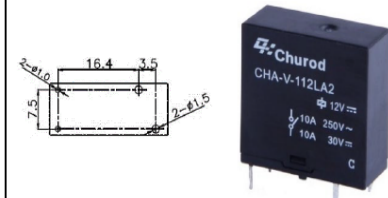
**CHZ03**  
SPST-NO or SPDT (1 form A or C)  
16A-20A; 1/6hp@250VAC  
120mW, 540mW and 720mW coil options  
Dielectric coil-contact 5kV (10kV surge)  
5.0mm pin spacing  
Class F (155°C) insulation standard  
Glow wire IEC60035; Explosion-proof IEC60079



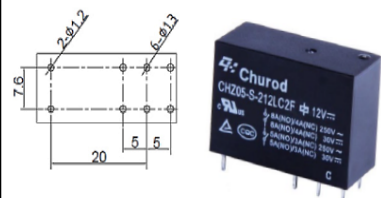
**CHW**  
"Sugar cube style"  
SPST-NO, NC, or SPDT (1 form A, B, or C)  
15A; 1.5FLA/15A LRA; 80W Tungsten  
240mW and 360mW coil options  
Class F (155°C) insulation standard  
Glow wire IEC60035; Explosion-proof IEC60079



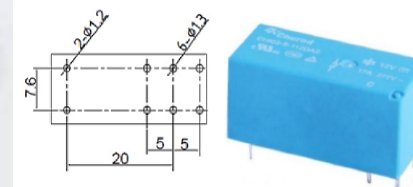
**CHA**  
SPST-NO (1 form A)  
10A@250VAC/30VDC  
250mW or 540mW coil  
Dielectric coil-contact 4kV (10kV surge)  
Class F (155°C) insulation standard



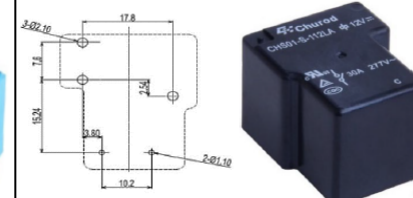
**CHZ05**  
DPST-NO or DPDT (2 form A or C)  
10A@250VAC/30VDC; B300 pilot duty  
540mW and 720mW coil options  
Dielectric coil-contact 5kV (10kV surge)  
Class F (155°C) insulation standard  
Glow wire IEC60035; Explosion-proof IEC60079



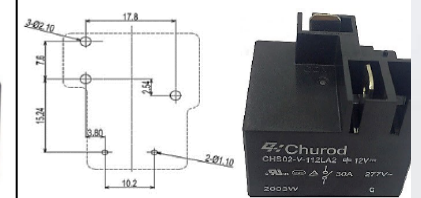
**CHI03**  
SPST-NO, NC, or SPDT (1 form A, B, or C)  
20A; 1hp@120/240/480; 10FLA/60LRA; TV8  
400mW coil  
Dielectric coil-contact 5kV (10kV surge)  
Class F (155°C) insulation standard  
Glow wire IEC60035; Explosion-proof IEC60079



**CHS01**  
SPST-NO, NC, or SPDT (1 form A, B, or C)  
20A-40A; 2hp@250VAC  
900mW coil  
Dielectric coil-contact 2.5kV (3kV surge)  
Class F (155°C) insulation standard  
Glow wire IEC60035; Explosion-proof IEC60079



**CHS02**  
SPST-NO, NC, or SPDT (1 form A, B, or C)  
20A-40A; 2hp@250VAC  
900mW coil  
Dielectric coil-contact 2.5kV (3kV surge)  
Class F (155°C) insulation standard  
Glow wire IEC60035; Explosion-proof IEC60079





# Smart Homes relay solutions

## 1 Applications



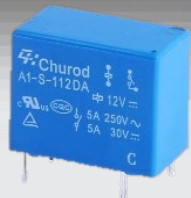
## 2 Relay Recommendation

No.	Applications	Relay P/N
1	Smart switch Smart socket	A1-S-105HA2
		A1-S-112HA2
		CHI03-S-105DA2
		CHI03-S-112DA2
		CHI03L-S-105DA2
		CHI03L-S-112DA2
		CHI03L-S-105HA2
		CHI03L-S-112HA2
2	Smart window/motor	A16-V-105DA2F
		A16-V-112DA2F
2	Smart window/motor	A1-S-112HA2
3	Smart lighting control	A1-S-112HA2
		CHI03-S-112DA2
4	Smart toilet	CHI03-S-112DA2
5	Smart clothes hanger	A1-S-112HA2
6	Others	A1-S-112HA2
		A1-S-124HA2
		CHI03-S-112DA2
		CHI03-S-124DA2
		CHI03L-S-112HA2

## 3 Relay Features

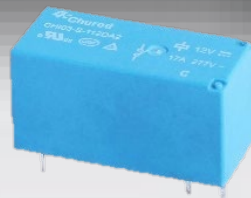
### A1 series

- ▶ Coil Voltage: 5VDC-24VDC
- ▶ Coil Power: 450mW/200mW
- ▶ Cert. Load: 10A TV-5



### CHI03 series

- ▶ Coil Voltage: 5VDC-24VDC
- ▶ Coil Power : 400mW
- ▶ Cert. Load : 20A TV-8



### CHI03L series

- ▶ Coil Voltage: 5VDC-24VDC
- ▶ Coil Power: 400mW/600mW
- ▶ Cert. Load: 16A TV-8
- ▶ Type of Coil: Latching (optional)



### A16 series

- ▶ Coil Voltage: 5VDC-24VDC
- ▶ Coil Power : 400mW
- ▶ Cert. Load : 16A TV-8



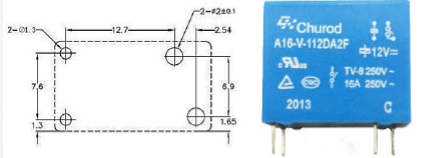




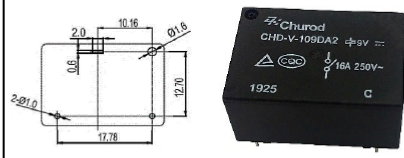
# Industrial relay solutions

## AGV; UPS; Electricity Meter; Inverter; Telecom Power (5A~120A)

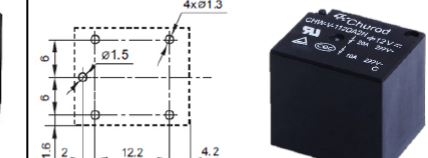
**A16**  
SPST-NO (1 form A)  
16A@125V, 277VAC; 1/6hp@125/250; TV8  
400mW coil  
Dielectric coil-contact 4kV (10kV surge)  
Class F (155°C) insulation standard  
Glow wire IEC60035



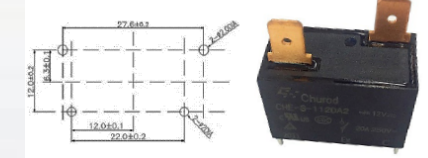
**CHD**  
SPST-NO (1 form A)  
16A@250VAC  
200mW coil  
Dielectric coil-contact 2.5kV (5kV surge)  
Class F (155°C) insulation standard  
Glow wire IEC60035



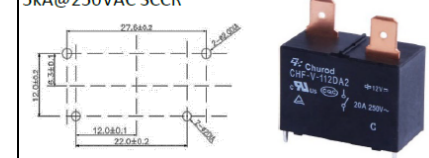
**CHW-H**  
SPST-NO, NC, or SPDT (1 form A, B, or C)  
20A; 1hp@250VAC; TV-8  
240mW and 360mW coil options  
Dielectric coil-contact 2kV (10kV surge)  
Class F (155°C) insulation standard



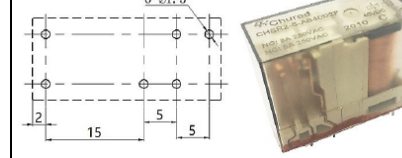
**CHE/CHEN**  
SPST-NO (1 form A)  
20A-30A; 2hp@250VAC; 25FLA/85LRA; 25A ind  
900mW coil  
PCB or PCB with Quick Connect Terminals  
Dielectric coil-contact 4.5kV (10kV surge)  
Class F (155°C) insulation standard  
Glow wire IEC60035; Explosion-proof IEC60079



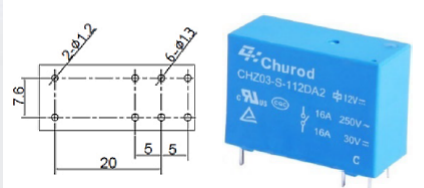
**CHF/CHFN**  
SPST-NO (1 form A)  
16A-25A; 2hp@250VAC; 25FLA/85LRA  
900mW coil  
PCB or PCB with Quick Connect Terminals  
Dielectric coil-contact 4.5kV (10kV surge)  
Class F (155°C) insulation standard  
Glow wire IEC60035; Explosion-proof IEC60079  
5kA@250VAC SCCR



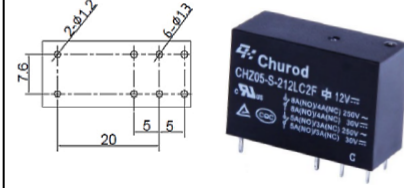
**CHSR2/4/6 - Force guided relay**  
2 pole (1A + 1B or 2C); 4 pole (3A + 1B);  
6 pole (4A + 2B or 3A + 3B)  
8A; A300 pilot duty NO / B300 pilot duty NC  
400VAC max switching voltage  
700mW coil  
Dielectric coil-contacts 4kV (surge 10kV)  
6kV surge between contact sets



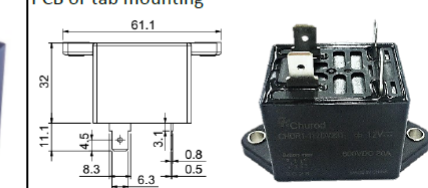
**CHZ03**  
SPST-NO or SPDT (1 form A or C)  
16A-20A; 1/6hp@250VAC  
120mw, 540mW and 720mW coil options  
Dielectric coil-contact 5kV (10kV surge)  
Class F (155°C) insulation standard  
Glow wire IEC60035; Explosion-proof IEC60079



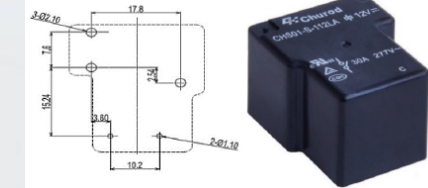
**CHZ05**  
DPST-NO or DPDT (2 form A or C)  
10A; B300 pilot duty  
540mW and 720mW coil options  
Dielectric coil-contact 5kV (10kV surge)  
Class F (155°C) insulation standard  
Glow wire IEC60035; Explosion-proof IEC60079



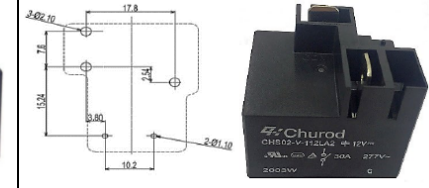
**CHDR1**  
SPST-NO-DM(1 form X)  
20A@600VDC or 50A@500VDC  
20A type momentary max current 200A;  
50A type momentary max current 300A  
2W coil  
Dielectric coil-contact 2kV (10kV surge)  
PCB or tab mounting



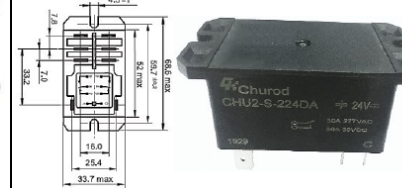
**CHS01**  
SPST-NO, NC, or SPDT (1 form A, B, or C)  
20A-40A; 2hp@250VAC  
900mW coil  
Dielectric coil-contact 2.5kV (3kV surge)  
Class F (155°C) insulation standard  
Glow wire IEC60035; Explosion-proof IEC60079



**CHS02**  
SPST-NO, NC, or SPDT (1 form A, B, or C)  
20A-40A; 2hp@250VAC  
900mW coil  
Dielectric coil-contact 2.5kV (3kV surge)  
Class F (155°C) insulation standard  
Glow wire IEC60035; Explosion-proof IEC60079



**CHU**  
DPST-NO or DPDT (2 form A or C)  
40A@277VAC; 1hp@120VAC/2.5hp@240VAC  
DC coil (1.7W) or AC coil (4VA, 50Hz or 60Hz)  
PCB / panel mount w/Quick Connect Terminals  
Dielectric coil-contact 4kV (10kV surge)  
Class F (155°C) insulation standard

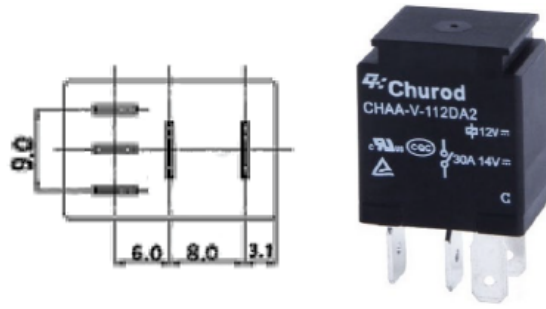




# Automotive relay solutions

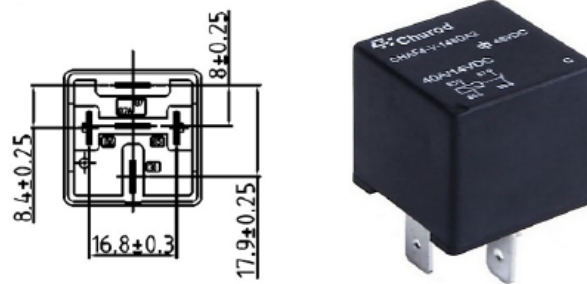
## CHAA

"Micro ISO" package  
SPST-NO or SPDT (1 form A or C)  
30A-40A; 40A-80A make (motor); 100A-150A make (lamp)  
Coil paralleled resistor or diode



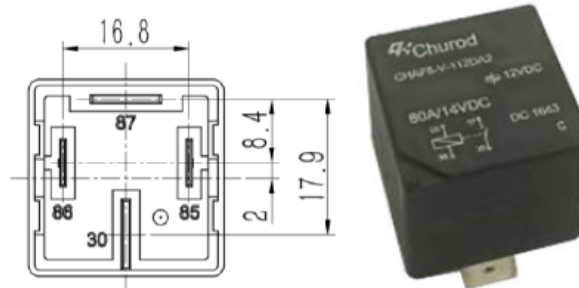
## CHAF4/5/6

"Mini ISO" package  
SPST-NO or SPDT (1 form A or C)  
Tied 87 terminal available  
60A; 150A make (motor); 180A make (lamp)  
Coil paralleled resistor or diode  
Plugin, PCB, or removable mounting bracket



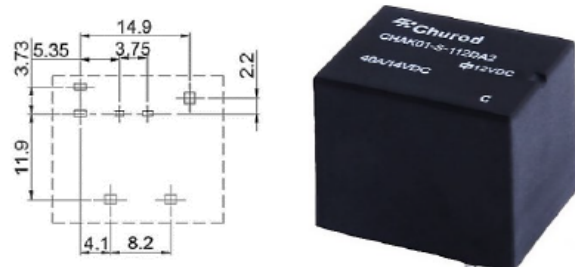
## CHAF7/8

"Mini ISO" package  
SPST-NO (1 form A)  
40-70-80A; 160A make (motor); 210A make (lamp)  
Coil paralleled resistor or diode  
Plugin, PCB, or removable mounting bracket



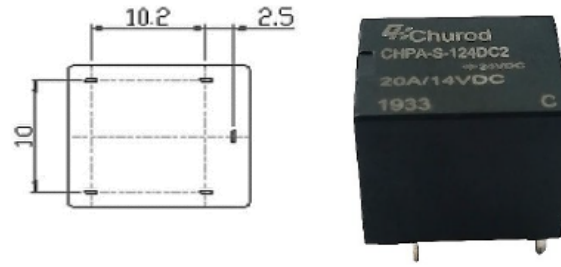
## CHAK

"Mini K" package  
SPST-NO or SPDT (1 form A or C)  
20A-40A; 40A-80A make (motor); 2x21W+5W or 4x21W+42x5W (lamp)  
US or Euro footprint  
Open or sealed



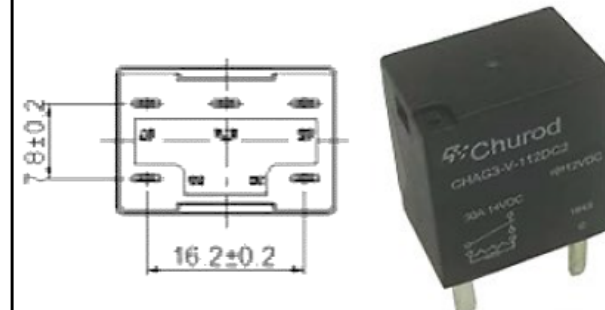
## CHPA

SPST-NO or SPDT (1 form A or C)  
20A; 25A make (motor); 90A make (lamp); 6x21W (flasher)  
Coil paralleled resistor or diode



## CHAG3

"Mini ISO 280"  
SPST-NO or SPDT (1 form A or C)  
35A; 150A make (lamp); 80A make (inductive)  
Coil paralleled resistor or diode





# Solutions for forklifts and AGV



## Monostable solutions

## Latching solutions



**CHDR**  
-100A@48/60VDC  
-150A@60VDC  
-3.6mm contact gap



**CHEV-NA**  
-60A/120A @1000VDC  
-Bi-directional load  
-Aux switch standard



**CHDR1**  
-20A@600VDC  
-50A@500VDC  
-3.0mm contact gap



**CHEV-H250E**  
-250A@1000VDC  
-Bi-directional load  
-Aux switch standard



**CHDC**  
-200A/400A  
@80/105VDC



**CHEV-P500E**  
-500A@1000VDC  
-Bi-directional load



**CHDC-SL**  
-200A/400A/500A  
@80VDC  
-Optional aux switch



**CHC**  
-63A/80A @80/60VDC  
-90A@48VDC/250VAC  
-Aux switch standard

**CHDR-L**  
-80A/110A/125A  
@24/60/80VDC  
-Aux switch standard





# New Product CHDC series

## 1 Applications

### 5G Base Station Power



### Energy Storage



### Inverter



### Low-speed Vehicle



## 2 Relay Recommendation:

No.	Application	Major Relay P/N
1	5G Base Station Power	CHDC-148D200BS
		CHDC-148D200SL
2	Energy Storage	CHDC-148D250ASH
3	Inverter	CHDC-124D200AS
		CHDC-124D400AS
4	Low-speed Vehicles	CHDC-124D200AS
		CHDC-124D400AS

## 3 Relay Features

### CHDC-124D200BS/AS/400AS

- ▶ Coil Voltage: 24VDC/48VDC
- ▶ Coil Power : Hold 3.6W/4.8W
- ▶ Rated Load : 200A, 400A@60VDC
- ▶ Type of Contact: SPST-NO (1 form A) / SPDT (1 form C)
- ▶ Mounting: Screw Mounting

### CHDC-148D200SL

- ▶ Coil Voltage: 48VDC
- ▶ Coil Power : 48W
- ▶ Rated Load : 200A@80VDC
- ▶ Type of Contact: SPST-NO (1 form A)
- ▶ Mounting: Screw Mounting
- ▶ Type of Coil: Latching Coil





# EV charging solutions



Level 1 and 2 charging, low speed battery vehicle

DC charging

## Monostable solutions



**CHS01**  
-30A to 60A@277VAC  
-Industry standard footprint



**CHAR-A75/90C**  
-75A/90A@1000VAC  
-Coil designed to be underdriven



**CHIB**  
-40A@277VAC  
-Double pole  
-Aux switch standard

## Latching solutions



**CHP8/9**  
-60A to 120A@277VAC  
-customized terminals



**CHDR-L**  
-80A/110A/125A  
@24/60/80VDC  
-Aux switch standard



**CHC**  
-63A/80A @80/60VDC  
- 90A@48VDC/250VAC  
- Aux switch standard



**CHEV-NA**  
-60A/120A @1000VDC  
-Bi-directional load  
-Aux switch standard



**CHDR1**  
-20A@600VDC  
-50A@500VDC  
-3.0mm contact gap



**CHEV-H250E**  
-250A@1000VDC  
-Bi-directional load  
-Aux switch standard



**CHPV-S20/40**  
-20A/40A@  
1000VDC/1500VDC  
-Bi-directional load



**CHDC**  
-200A/400A  
@80/105VDC  
-Latching type to 500A



**CHEV-P500E**  
-500A@1000VDC  
-Bi-directional load



# Product Overview in EV Charger

## AC Charger

### China Standard

CHS01 (43A/50A/60A)



### EU Standard

CHIB-40A(2A1B) CHID-50A(1A1B)



### US Standard

CHAR-112A(75A/90A)



## Compact DC Charger

CHDR1-112D50G(500VDC/50A)



## DC fast Charger

### Power Module



### Power Distribution Module

### Charging Port

CHFN (50A)



CHS01(43/50/60A)



CHP (90A)



CHDR\_L(80/110/150A)



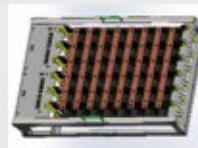
Latching Relay:  
CHDR-LA (80/110/150A)



HV Contactor (ceramic)  
1000V/250A



### PDU/ Switch Box



### HV Contactor (Ceramic)

1000V/250A



1000V/400A



1000V/500A

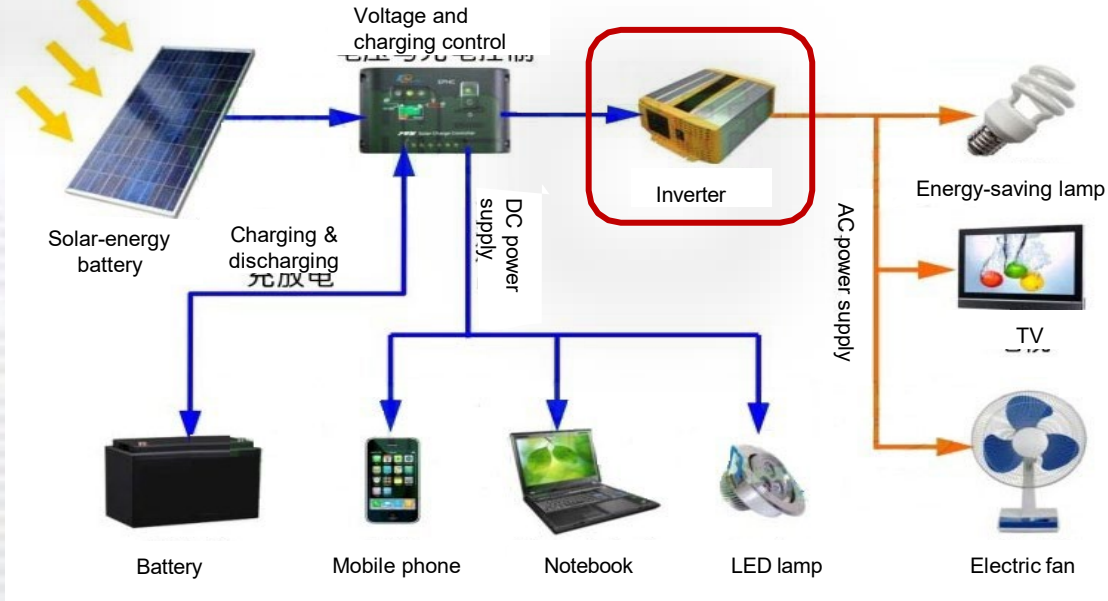


1000V/600A





## 1 Applications



## 2 Relay Recommendation

No.	Inverter Power	Major Relay P/N	Current
1	10KW or below	CHFN-V-112HA2F(31A)	31A
		CHFN-V-112HA2F(35A)	35A
2	10~25KW	CHS01-V-112HA(35A)	35A
		CHS01-V-112HA2(43A)	43A
3	30~40KW	CHS01-V-112HA2(50G)	50A
		CHS01-V-112HA2(60G)	60A
		CHAR-112A70DA2	70A
4	40~60KW	CHAR-112A100T/CHAR-112A90C	100A
5	60~70KW	CHAR-112A130/CHAR-112A120C	130A
6	80~110KW	CHAR-112A150/CHAR-112A165C	150A
7	120~225KW	CHAR-112A200/CHAR-112A200C	200A
8	230~250KW	CHAR-112A230C	230A

## 3 Relay Features

### CHFN-V-112HA2F(31A/35A)

- ▶ Coil Voltage: 12VDC
- ▶ Coil Power: 1.4W
- ▶ Cert. Load: 31A/35A
- ▶ Contactor Gap:  $\geq 1.8\text{mm} / 2.25\text{mm}$

### CHS01-V-112HA(35A/43A)

- ▶ Coil Voltage: 12VDC
- ▶ Coil Power: 2.25W
- ▶ Cert. Load: 35A/43A
- ▶ Contactor Gap:  $\geq 1.8\text{mm}$

### CHS01-V-112HA2(43G/50G/60G)

- ▶ Coil Voltage: 12VDC
- ▶ Coil Power: 2.25W
- ▶ Cert. Load: 43A/50A/60A
- ▶ Contactor Gap:  $\geq 2.25\text{mm}$

### CHAR-112A100T/130/150/200

- ▶ Coil Voltage: 12VDC
- ▶ Coil Power: 3.2W
- ▶ Cert. Load: 100A/130A/150A/200A
- ▶ Contactor Gap:  $\geq 3.6\text{mm}$

### CHAR-112A200C/230C

- ▶ Coil Voltage: 12VDC
- ▶ Coil Power: 2.0W
- ▶ Cert. Load: 200A / 230A
- ▶ Contactor Gap:  $\geq 4.0\text{mm}$





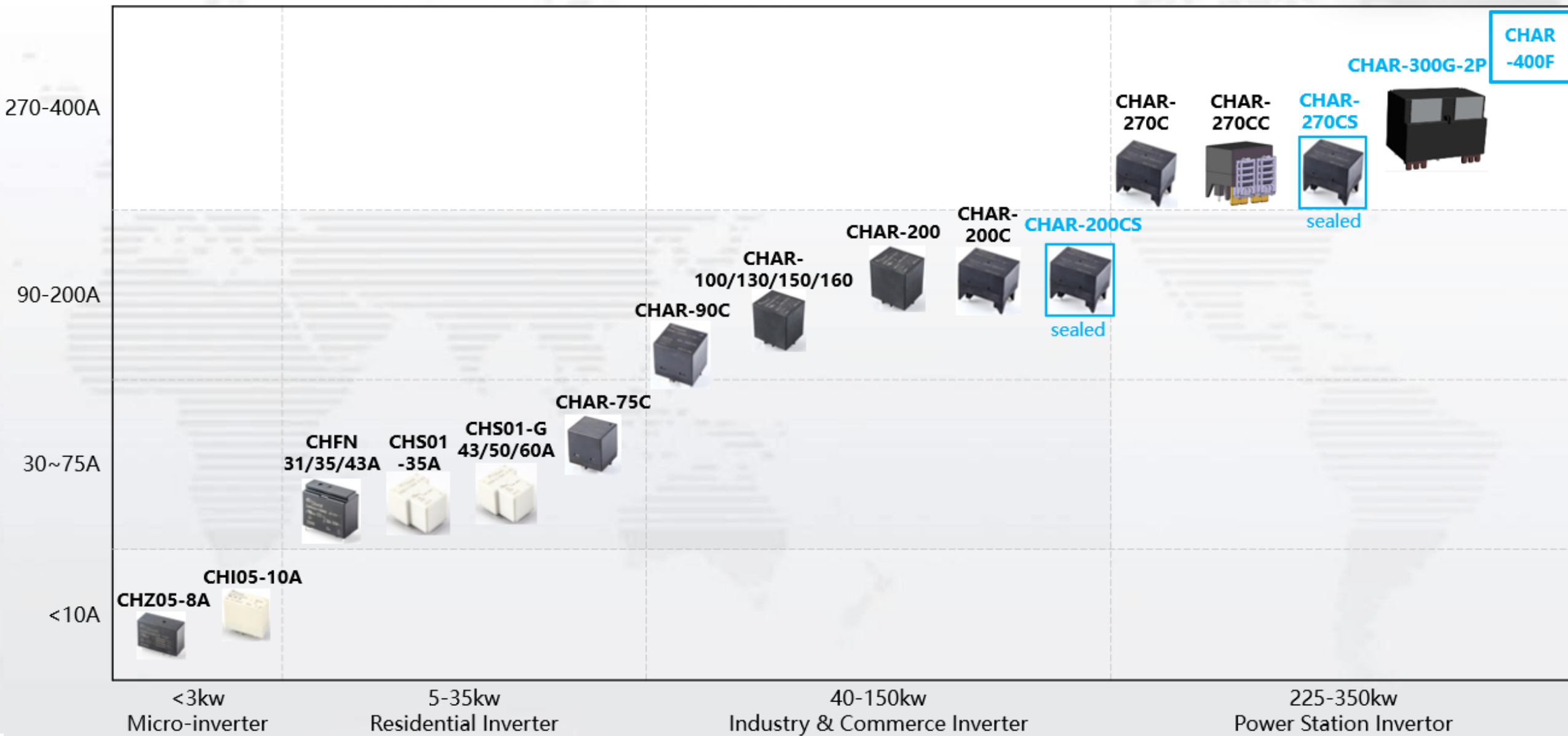
# AC Relay for Inverter



中汇瑞德股份  
WWW.Churod.Com

Launched

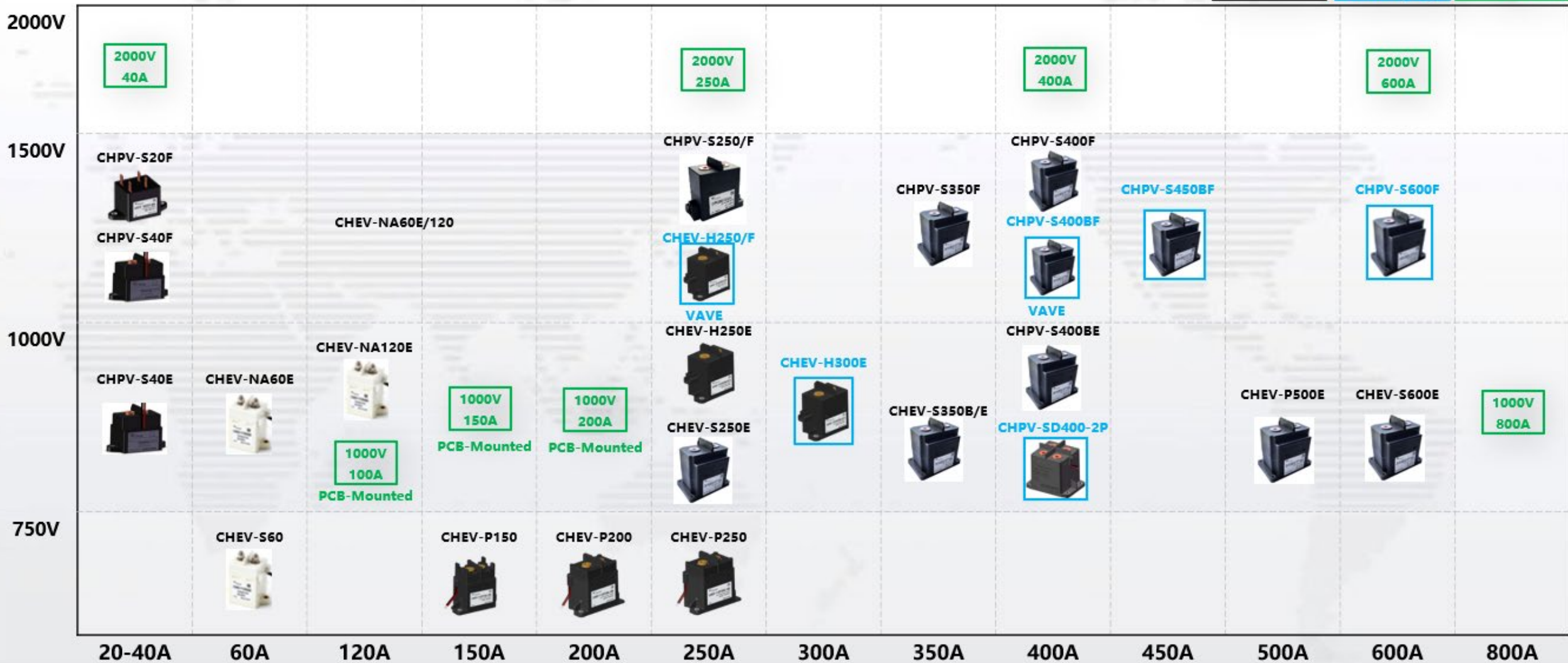
Developing





# HV Contactor

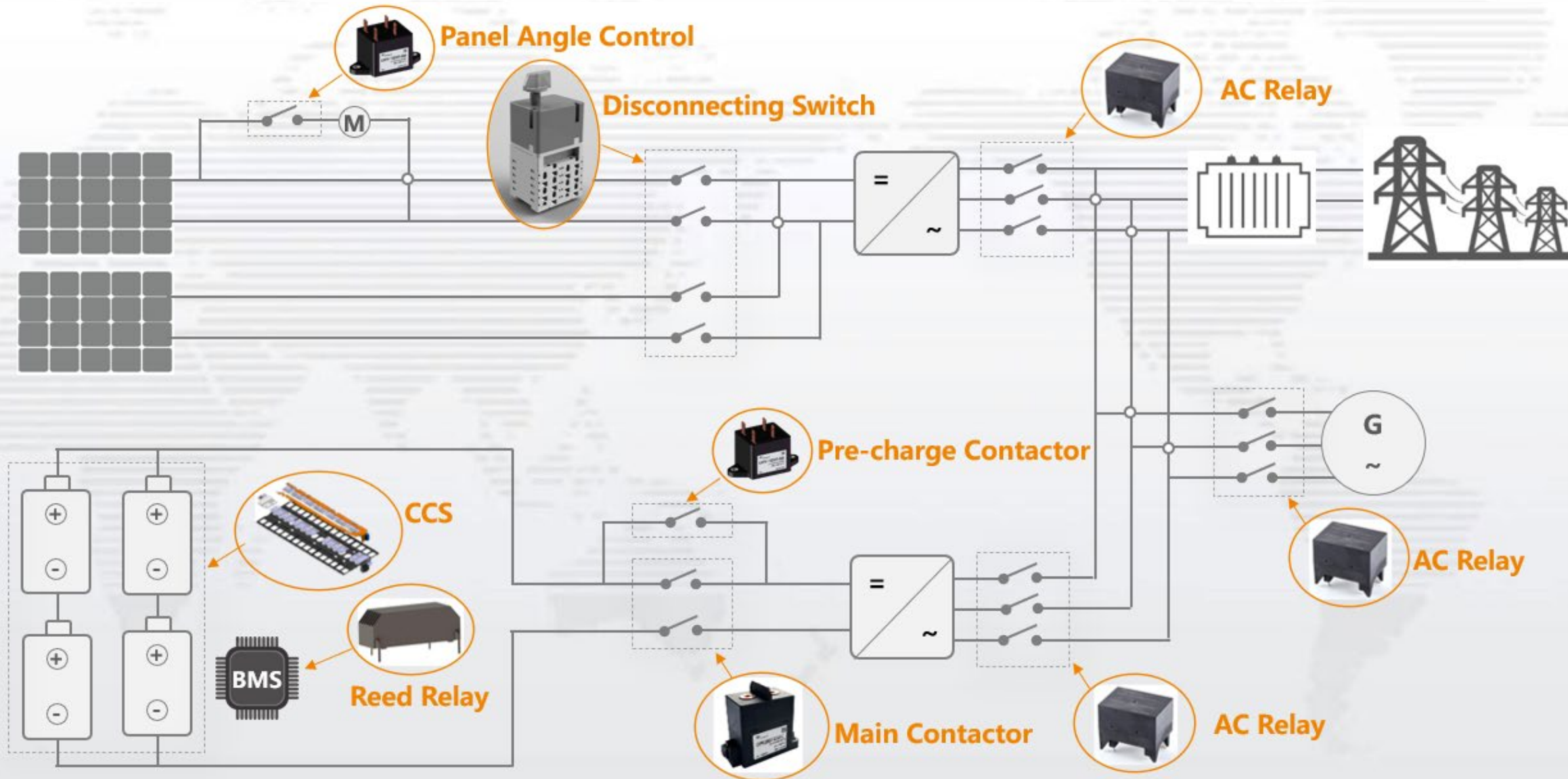
Launched    Developing    Plan



Churod focuses on ceramic sealing technology for HV contactors, provides robust product to our customers



# Product Overview in Solar Energy Storage





# Cross reference guide

Appliance					Alternative				
Churod	Hongfa	TE	Omron	Panasonic	Churod	Hongfa	TE	Omron	Panasonic
A1	HF32F	OJ/OJE/T77	-----	JK	A2	HF33F	PCH	G5Q	JQ
A2	HF33F	PCH	G5Q	JQ	CHZ03-H	HF141FH/HF141FD	OZ	G2R-1-E	JR
CHM	HF46F	PCJ	G5NB	LD	CHI05-H	HF140FF	-----	G2RG	-----
CHW	HF3FF/HF3FA	ORWH	G5LE	LS/JS	CHI04	HF158F-V	-----	-----	-----
CHA	HF36F	SDT	G5PA-1	LK	CHFN-H	HF161F-W	PCFN	G4A	LFG
CHZ05	HF141FD	OMI-2P	G2R-2	JW	CHS01-H	HF165F	T9S	-----	-----
CHZ02	HF14FF/HF141FF	OMI/OMIH	G2R-1	JW	CHAR	-----	-----	-----	-----
CHZ02T	HF62F	OMIF	G5JS	LE	CHDR	HF167F	-----	-----	HE1AN
CHZ03	HF141FH/HF141FD	OZ	G2R-1-E	JR	CHDC	-----	-----	-----	-----
CHI03	HF115F	RT	G2RL	LZ	CHEV	HFE18V/80V/82V	EV/EVC/LEV/IHV	G9E	AEV
CHS01	HF105F/HF2150	T9A	G8P	JTN/JTV	CHI03-L	HFE20	RT1	G2RK	-----
CHS02	HF105F/HF2160	T9A	G8P	JTN/JTV	CHP8	HFE19	EW	G9TA/G9TB	ADZS
					CHDR-L	-----	-----	-----	-----

Industrial					Automotive				
Churod	Hongfa	TE	Omron	Panasonic	Churod	Hongfa	TE	Omron	Panasonic
A16	HF32FV-16	-----	-----	-----	CHAA	HFV6	V23074	G8HN	CM
CHD	HF7520	PCD	G5CA	JV	CHAF4/6	HFV4	VF4	G8JN/R	CB
CHW-H	HF21FF	-----	-----	-----	CHAF7/8	HFV7	VF7	G8JN/R	CB
CHZ03	HF141FH/HF141FD	OZ	G2R-1-E	JR	CHAG3	HFV11	VJ28	G8V/VL	-----
CHZ05	HF141FD	OMI-2P	G2R-2	JW	CHAK	HFKP	Power K/V23076	G8PE	-----
CHDR1	HFE80V-20/60	-----	-----	AEV1/AEV2	CHPA	HFKW	-----	G8QN	CQ/JJ-M
CHE	HF102F/HF160F	PCF	G4A	JM					
CHF	HF102F/HF160F	PCF	G4A	JM					
CHSR2	HFA2	V23047	STI	-----					
CHS01	HF105F/HF2150	T9A	G8P	JTN/JTV					
CHS02	HF105F/HF2160	T9A	G8P	JTN/JTV					
CHU	HF92F	T92	-----	-----					

HVDC				
Churod	Hongfa	TE	Omron	Panasonic
CHEV-E/S	HFE82V	AP/EV/LEV/IHV	G9V	AEV
CHEV-H/P	HFE82V	AP/EV/LEV/IHV	G9V	AEV
CHI04	HF158F-V	-----	-----	-----
CHPV	HFE88P	AP/EV/LEV/IHV	G9V	AEV
CHMV	-----	EV	-----	-----
CHMR	-----	-----	-----	-----

***Thank You***