

FEATURES

- Outline dimension(30.3×15.9×20.4)
- 1 Form A(SPST-NO) arrangement
- Designed to meet UL/cUL,TUV,CQC requirements
- 4,500VAC dielectric strength between coil and contact
- F class Insulation System
- RoHS compliance
- REACH SvHC compliance
- Halogen-Free type available



File NO. E341422



File NO. R50366268



File NO. CQC16002152596

APPLICATION

Air Conditioner, Micro-oven, Washing Machine...etc

COIL PARAMETER

Coil voltage	5-48VDC
Coil power	900mW

COIL DATA@23°C

CHE				
Nominal coil voltage (VDC)	Nominal Current (mA)	Coil Resistance ($\Omega \pm 10\%$)	Operate Voltage (VDC Max.)	Release Voltage (VDC Min.)
5	180.0	28	3.75	0.25
6	150.0	40	4.5	0.30
9	100.0	90	6.75	0.45
12	75.0	160	9	0.60
18	50.0	360	13.5	0.90
24	37.5	640	18	1.20
48	18.8	2560	36	2.40

CONTACT DATA

Contact arrangement	1 Form A(SPST-NO)
Contact material	Ag Alloy
Initial contact resistance	100m Ω max.@6VDC,1A
Max. switching voltage	277VAC/30VDC
Max. switching current	30A
Max. switching power	8,310VA / 900W
Contact rating	20A 277VAC, Resistive
	25A 277VAC, Resistive
	20A 30VDC, Resistive
	30A 250VAC, Resistive for QC type,30K cycles
	25A 250VAC, Inductive(cos ϕ =0.75)
	25A stable current , 85A Inrush current, 250VAC
	2HP 250VAC Motor
Mechanical endurance	10,000,000 ops Min.(no load)
Electrical endurance	100,000 ops Min.(rated load 1s on /9s off)
Minimum load(reference value)	100mA @5VDC

CHARACTERISTICS

Operate voltage		75% of nominal voltage or less
Release voltage		5% of nominal voltage or more
Operate time (At nominal voltage)		20ms max.
Release time(At nominal voltage)		20ms max.
Insulation resistance		1,000 MΩ min. (at 500 VDC)
Insulation system		155 (F)
Dielectric strength	Between coil and contacts	4,500 VAC, 50/60 Hz for 1 min
	Between open contacts	1,000 VAC, 50/60 Hz for 1 min
Surge voltage between coil and contacts		10,000V(1.2/50us)
Vibration resistance	Destruction	10 to 55 Hz,1.5mm double amplitude
	Malfunction	10 to 55 Hz,1.5mm double amplitude
Shock resistance	Destruction	1,000m/S ² (100G approximately)
	Malfunction	100m/S ² (10G approximately)
Ambient temperature		-40°C~-+85°C (without icing or condensation)
Ambient humidity		20%~85% RH
Terminal		PCB terminal & #250 Quick connect terminal
Enclosure (94V-0 Flammability Ratings)		V: Vented(Flux-tight),plastic cover.(RT II)
		S: Sealed,plastic cover.(RT III)
Weight		Approx. 20g

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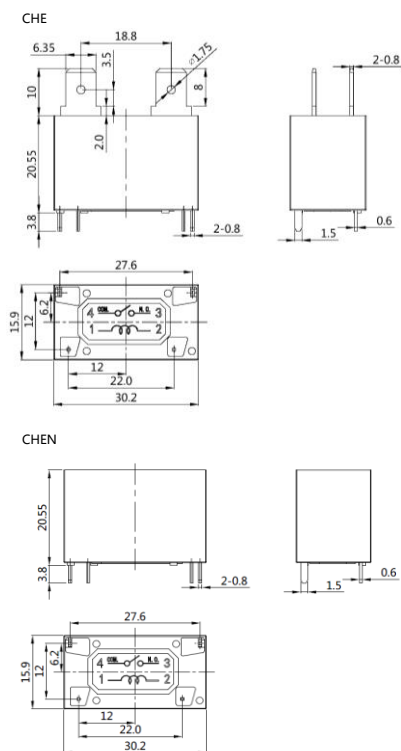
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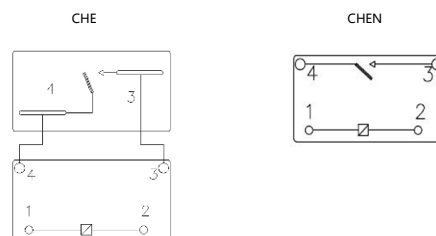
ORDERING INFORMATION

	CHE	-S	-1	12	D	A	2	(20A)	000
1. Product Family	CHE = #250 Quick Connect CHEN = PCB Terminal only								
2.Enclosure									
V = Vented(Flux-tight),plastic cover,(RT II) S = Sealed,plastic cover,(RT III)									
3.Number of Poles									
1 = 1 pole									
4.Rated Coil Voltage									
05 = 5VDC 06 = 6VDC 09 = 9VDC 12 =12VDC 24 = 24VDC 48=48VDC									
5.Coil Input									
D = Standard(900mW)									
6.Contact Arrangement									
A = Form A (SPST-NO)									
7.Contact material									
2 = AgSnO ₂									
9.Nominal Current									
(20A)=Nominal Current 20A (25A)=Nominal Current 25A									
9.Additional numbers and /or letters									
000-999, AAA-ZZZ, aaa-zzz or blank, which does not represent electrical changes, only for specific customer requirements									

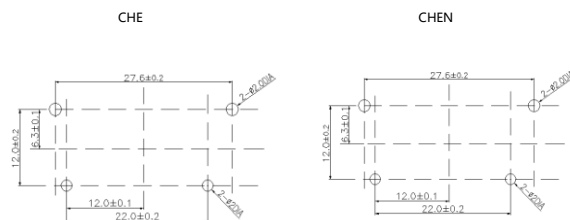
OUTLINE DIMENSION



WIRING DIAGRAMS (BOTTOM VIEWS)



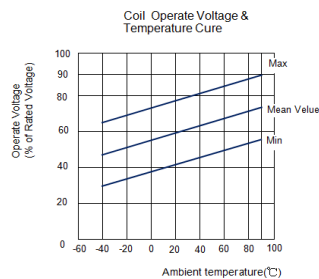
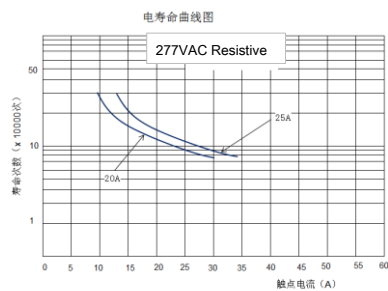
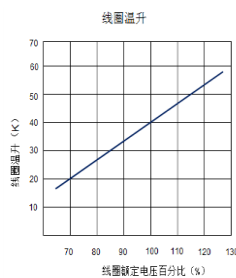
PC BOARD LAYOUTS (BOTTOM VIEWS)



Remark:

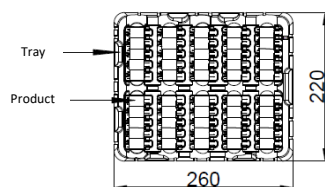
- 1) The reference tolerance in outline dimension:
outline dimension $\leq 1\text{mm}$, reference tolerance is $\pm 0.2\text{mm}$;
outline dimension $> 1\text{mm}$ and $\leq 5\text{mm}$, reference tolerance is $\pm 0.3\text{mm}$;
outline dimension $> 5\text{mm}$,
- 2) The reference tolerance for PC Board layout is $\pm 0.1\text{mm}$.

Reference Data



PACKAGING FIGURE

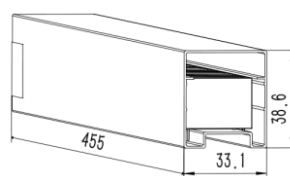
1.Box



50 pcs inside a box

500 pcs inside a carton

2.Tube



25 pcs inside a tube

500 pcs inside a carton

Disclaimer:

The specification is for reference only, if you need more detail information, please contact Churod. We could not evaluate all the performance and all parameters for every possible application.

And the user should be in a right position to choose the suitable product for their own application. If there is any new need, please contact Churod for the technical service.

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FEATURES

- Outline dimension (30.1mm×15.7mm×23.3mm)
- #250 quick connect terminal and PCB terminal
- 1 Form A (SPST) contact arrangement
- Designed to meet cULus,TUV,CQC requirements
- 4,500VAC Dielectric strength between coil and contact
- RoHS compliance
- REACH SvHC compliance
- Explosion-proof type



File NO. E341422



File NO. R50220099



File NO. CQC1100206606

APPLICATION

Air Condition, Washing Machine...etc

COIL PARAMETER

Coil voltage	5-48VDC
Coil power	900mW

COIL DATA@23°C

CHE				
Nominal coil voltage (VDC)	Nominal Current (mA)	Coil Resistance (Ω±10%)	Operate Voltage (VDC Max.)	Release Voltage (VDC Min.)
5	180.0	28	3.75	0.25
6	150.0	40	4.5	0.30
9	100.0	90	6.75	0.45
12	75.0	160	9	0.60
18	50.0	360	13.5	0.90
24	37.5	640	18	1.20
48	18.8	2560	36	2.40

CONTACT DATA

Contact arrangement	1 Form A(SPST)
Contact material	Ag Alloy
Initial contact resistance	100mΩ max.@6VDC,1A
Max. switching voltage	250VAC/30VDC
Max. switching current	25A
Max. switching power	6,250VA / 750W
Contact rating	25A 250VAC,Resistive
	25A 30VDC,Resistive
	20A 250VAC,Resistive
	20A 30VDC,Resistive
	25A 250VAC,Inductive(cos Φ =0.75)
	25A FLA/ 85 LRA 250V AC
	2HP 240VAC,Motor
Mechanical endurance	10,000,000 ops Min.(no load)
Electrical endurance	100,000 ops Min(rated load 1s on /9s off)
Minimum load(reference value)	100mA @5VDC

CHARACTERISTICS

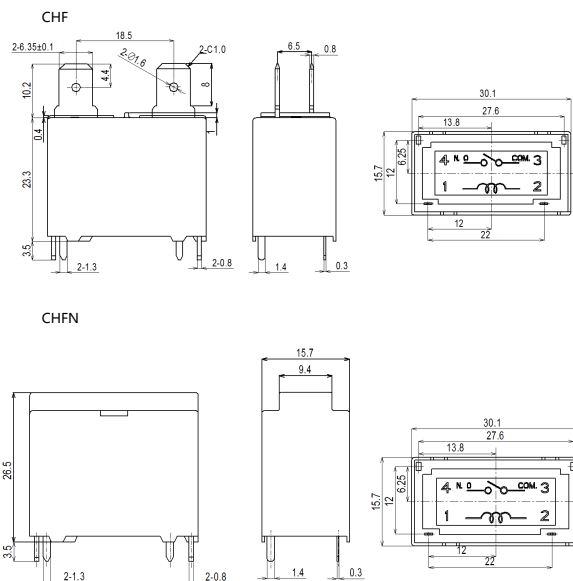
Operate voltage		75% of nominal voltage or less
Release voltage		5% of nominal voltage or more
Operate time (At nominal voltage)		20ms max.
Release time(At nominal voltage)		10ms max.
Insulation resistance		1,000 MΩ min. (at 500 VDC)
Dielectric strength	Between coil and contacts	4,500 VAC, 50/60 Hz for 1 min
	Between open contacts	1,000 VAC, 50/60 Hz for 1 min
Surge voltage between coil and contacts		10,000V(1.2/50us)
Vibration resistance	Destruction	10 to 55 Hz,1.5mm double amplitude
	Malfunction	10 to 55 Hz,1.5mm double amplitude
Shock resistance	Destruction	1,000m/S ² (100G approximately)
	Malfunction	100m/S ² (10G approximately)
Ambient temperature		-40℃~+85℃ (without icing or condensation)
Ambient humidity		20%~85% RH
Terminal		PCB terminal & #250 Quick connect terminal
Enclosure (94V-0 Flammability Ratings)		V: Vented(Flux-tight),plastic cover.(RT II)
		S: Sealed,plastic cover.(RT III)
Weight		Approx. 23g



ORDERING INFORMATION

	CHF	-S	-1	12	D	A	2	000
1. Product Family								
CHF = #250 Quick Connect								
CHF N = PCB Terminal only								
2. Enclosure								
V = Vented (Flux-tight, RT II)								
S = Sealed (Wash-tight, RT III)								
3. Number of Poles								
1 = 1 pole								
4. Rated Coil Voltage								
05 = 5VDC 06 = 6VDC 09 = 9VDC 12 = 12VDC								
24 = 24VDC 48 = 48VDC								
5. Coil Input								
D = Standard (900mW)								
6. Contact Arrangement								
A = Form A (SPST-NO)								
7. Contact material								
2 = AgSnO ₂								
8. Additional numbers and /or letters								
000-999, AAA-ZZZ, aaa-zzz or blank, which does not represent electrical changes, only for specific customer requirements								

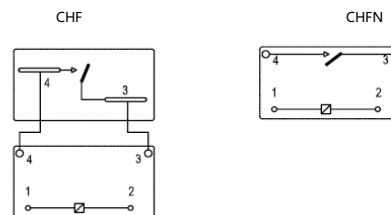
OUTLINE DIMENSION



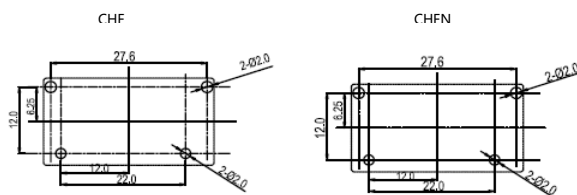
Remark:

- 1) The reference tolerance in outline dimension:
outline dimension ≤ 1mm, reference tolerance is ±0.2mm;
outline dimension > 1mm and ≤ 5mm, reference tolerance is ±0.3mm;
outline dimension > 5mm, reference tolerance is ±0.5mm.
- 2) The reference tolerance for PC Board layout is ±0.1mm.

WIRING DIAGRAMS (BOTTOM VIEWS)



PC BOARD LAYOUTS (BOTTOM VIEWS)



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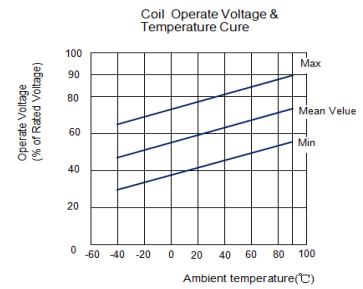
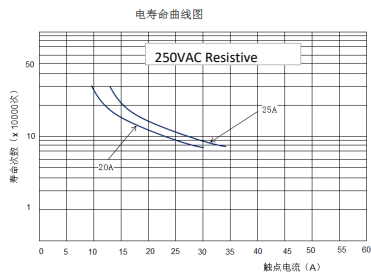
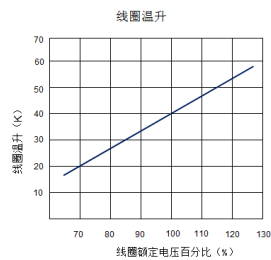


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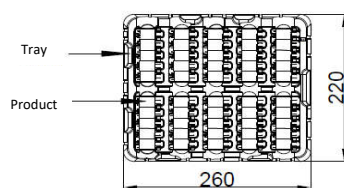
e-mail : comp@es-france.com
Site Web : www.es-france.com

Reference Date



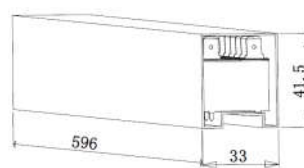
PACKAGING FIGURE

1.Box



50 pcs inside a box
500 pcs inside a carton

2.Tube



34 pcs inside a tube

Disclaimer:

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FEATURES

- Outline dimension (30.1mm×15.7mm×26.5mm)
- PCB terminal
- 1 Form A (SPST) contact arrangement
- Designed to meet cULus,TUV,CQC requirements
- 4,500VAC Dielectric strength between coil and contact
- Contact GAP 2.0mm Min.
- RoHS compliance
- REACH SvHC compliance

APPLICATION

Solar Inverter, AC Power Supply, Washing Machine...etc

COIL PARAMETER

Coil voltage	9-24VDC
Coil power	1.4W

COIL DATA@23°C

CHE				
Nominal coil voltage (VDC)	Nominal Current (mA)	Coil Resistance ($\Omega \pm 10\%$)	Operate Voltage (VDC Max.)	Release Voltage (VDC Min.)
9	155.6	58	6.75	0.45
12	116.7	103	9	0.60
18	77.8	231	13.5	0.90
24	58.3	411	18	1.20

CONTACT DATA

Contact arrangement	1 Form A(SPST)
Contact material	Ag Alloy
Initial contact resistance	100m Ω max.@6VDC,1A
Max. switching voltage	277VAC
Max. switching current	35A
Max. switching power	9,695VA
Contact rating	20A 250VAC/277VAC,Resistive
	31A 250VAC/277VAC,Resistive
	35A 250VAC/277VAC,Resistive
	20A 250VAC/277VAC,Inductive(cos $\Phi = 0.8$)
	31A 250VAC/277VAC,Inductive(cos $\Phi = 0.8$)
	35A 250VAC/277VAC,Inductive(cos $\Phi = 0.8$)
Mechanical endurance	500,000 ops Min.(no load)
Electrical endurance	30,000 ops Min(rated load)
Minimum load(reference value)	100mA @5VDC

CHARACTERISTICS

Operate voltage		75% of nominal voltage or less
Release voltage		5% of nominal voltage or more
Operate time (At nominal voltage)		20ms max.
Release time(At nominal voltage)		10ms max.
Insulation resistance		1,000 M Ω min. (at 500 VDC)
Dielectric strength	Between coil and contacts	4,500 VAC, 50/60 Hz for 1 min
	Between open contacts	2,800 VAC, 50/60 Hz for 1 min
Surge voltage between coil and contacts		10,000V(1.2/50us)
Vibration resistance	Destruction	10 to 55 Hz,1.5mm double amplitude
	Malfunction	10 to 55 Hz,1.5mm double amplitude
Shock resistance	Destruction	1,000m/S ² (100G approximately)
	Malfunction	100m/S ² (10G approximately)
Ambient temperature		-40°C ~ +85°C (without icing or condensation)
Ambient humidity		5% ~85% RH
Terminal		PCB terminal
Enclosure (94V-0 Flammability Ratings)		V: Vented(Flux-tight),plastic cover.(RT II)
		S: Sealed,plastic cover.(RT III)
Weight		Approx. 23g

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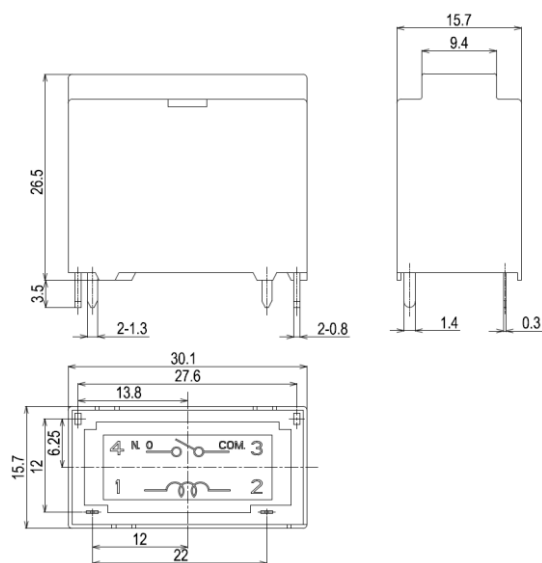
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ORDERING INFORMATION

	CHFN	-V	-1	12	H	A	2	F	(35A)	000
1. Product Family	CHFN									
2. Enclosure		V = Vented (Flux-tight, RT II) S = Sealed (Wash-tight, RT III)								
3. Number of Poles			1 = 1 pole							
4. Rated Coil Voltage				09 = 9VDC 12 = 12VDC 18 = 18VDC 24 = 24VDC						
5. Coil Input					H = High Capacity Type (1.4W)					
6. Contact Arrangement						A = Form A (SPST-NO)				
7. Contact material							2 = AgSnO ₂			
8. Insulation System								F or Blank = Class F (155°C)		
9. Nominal Current									(35A) = Nominal Current 35A (31A) = Nominal Current 31A	
8. Additional numbers and /or letters										000-999, AAA-ZZZ, aaa-zzz or blank, which does not represent electrical changes, only for specific customer requirements

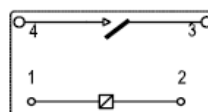
OUTLINE DIMENSION



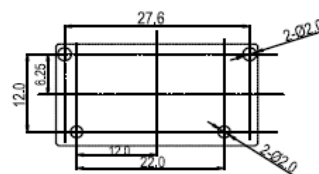
Remark:

- 1) The reference tolerance in outline dimension:
outline dimension $\leq 1\text{mm}$, reference tolerance is $\pm 0.2\text{mm}$;
outline dimension $> 1\text{mm}$ and $\leq 5\text{mm}$, reference tolerance is $\pm 0.3\text{mm}$;
outline dimension $> 5\text{mm}$, reference tolerance is $\pm 0.5\text{mm}$.
- 2) The reference tolerance for PC Board layout is $\pm 0.1\text{mm}$.

WIRING DIAGRAMS (BOTTOM VIEWS)



PC BOARD LAYOUTS (BOTTOM VIEWS)



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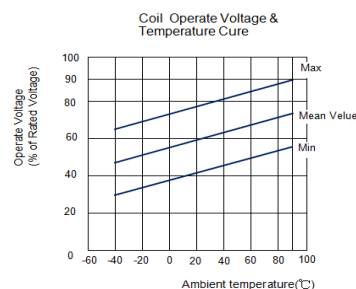
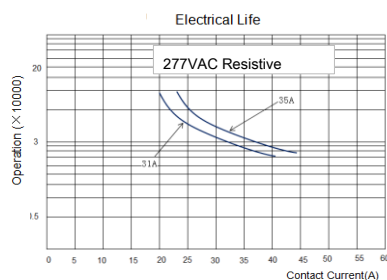
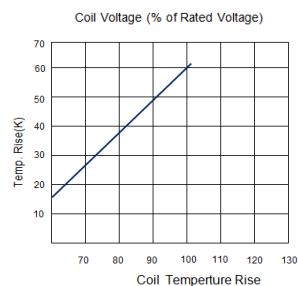


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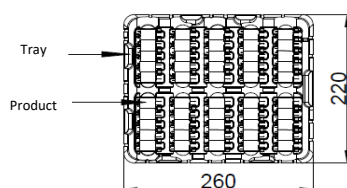
e-mail : comp@es-france.com
Site Web : www.es-france.com

Reference Date



PACKAGING FIGURE

1.Box



50 pcs inside a box

500 pcs inside a carton

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And the user should be in a right position to choose the suitable product for their own application. If there is any new need, please contact Churod for the technical service.

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