



TECO



# Power Devices Catalogue

## 低壓開關產品



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## Company Profile

TECO Technology (Vietnam) Co., Ltd., a wholly owned subsidiary of TAIWAN TECO Electric & Machinery Company, had been issued its investment license in 2006 by the Vietnam government. TECO Electric & Machinery Company was founded in 1956. It was initially engaged in motor production then had entered the field of heavy electricity, electronic control, home appliances, information, communications, electronics & key components, infrastructure construction and financial investment and other diversified areas of development.

As early as 1968, TECO Electric & Machinery company cooperated with General Electric company (GE) and Kabushiki-gaisha Yasukawa Denki (Yasukawa) in the electromechanical field. Then TECO cooperated with Westinghouse USA, Hitachi Japan, Ericsson Sweden, Mitsubishi Japan, Deutsche Telekom Germany, Siemens and other international groups in many industrial sectors. TECO Group currently controls more than 50 subsidiaries which are located in the Asia, North America, Europe and Australia, and has more than 10,000 work force all over the world. It is one of the well known enterprises in the world.

TECO Technology (Vietnam) Co., Ltd is manufacturing Magnetic Switch and No Fuse Breaker and other low voltage products. TECO provides high and low voltage distribution equipment, generators, power distribution panels, inverters, PLC and servo controllers and other products to meet the customers' needs for safety of electricity. And TECO also provides complete automation services to our clients.

So much experience tells us that only good quality, perfect service, and continuous innovation, are the most important factors to success. We promise and will always adhere to bringing customers the securest and the most comfortable life experience. Come on! Make a better world with TECO !

## Our Products

- AC Magnetic Contactor
- Direct On Line Motor Starter
- Molded Case Circuit Breaker
- Intelligent Universal Circuit Breakers
- Thermal Overload Relay
- Residual Current Circuit Breaker
- Distribution Board

## Marketing Channel

Product of TECO are widely distributed all over the Vietnam and Asia such as Bangladesh, Pakistan, Sri Lanka, Hong Kong, Taiwan, Malaysia, Myanmar, etc, for use in air-conditioner starter, switchboard panel, industrial motor starter, automation control, home appliances protection, etc.



## 1 High Performance

- Comply with IEC 60947, UL 508  
CSA C22.2, GB 14048
- Electrical Lifespan : 1M operations

## 2 High Reliability

- Dual Points Aux. Contact Design

## 3 Safety

- V-0 Flame Retardant Materials in Casing
- IP-20 Finger Protection Terminals

## 4 Green Products

- Compliance with RoHS
- Enviromentally Friendly Materials






## 5 Universal Design

- New Appearance with Streamline Front Cover Design
- Approvals :





## Certificates

Certificates						
Catalogue number		 CNS	 R41024	 EC Declaration of Conformity	 TÜV	 Powered by DEKRA
		TAIWAN		EC Declaration	CB Scheme	KEMA certificate
		(TERTEC)	(BSMI)			
<b>TE-600</b>	<b>3P</b>	●	—	—	—	—
<b>TE-800</b>	<b>3P</b>	●	—	—	—	—
<b>TE-1000</b>	<b>3P</b>	●	—	—	—	—
<b>TE-1200</b>	<b>3P</b>	●	—	—	—	—
<b>TE-1600</b>	<b>3P</b>	●	—	—	—	—
<b>TCB-400H1</b>	<b>3P/4P</b>	—	—	●	●	—
<b>TCB-400H3</b>	<b>3P/4P</b>	—	—	●	●	—
<b>TCB-630H1</b>	<b>3P/4P</b>	—	—	●	●	—
<b>TCB-630H3</b>	<b>3P/4P</b>	—	—	●	●	—
<b>TCB-800H1</b>	<b>3P/4P</b>	—	—	●	●	—
<b>TCB-800H3</b>	<b>3P/4P</b>	—	—	●	●	—
<b>TJ636S</b>	<b>1P/2P/3P/4P</b>	—	—	●	●	—
<b>TJ6310S</b>	<b>1P/2P/3P/4P</b>	—	—	●	●	—
<b>TVM1-100</b>	<b>3P</b>	—	—	—	—	●
<b>TVM1-125</b>	<b>3P</b>	—	—	—	—	●
<b>TVM1-160</b>	<b>3P</b>	—	—	—	—	●
<b>TVM1-250</b>	<b>3P</b>	—	—	—	—	●
<b>TVM1-400</b>	<b>3P</b>	—	—	—	—	●
<b>TVM1-630</b>	<b>3P</b>	—	—	●	●	—
<b>TVM1-800</b>	<b>3P</b>	—	—	●	●	—

# TVM1 Series **NEW!**

## - High Capacity & Economic Type



Frame size(AF)		100		125		160		250		400		630		800					
Type		TVM1-100		TVM1-125		TVM1-160		TVM1-250		TVM1-400		TVM1-630		TVM1-800					
Number of Poles		3	4	3	4	3	4	3	4	3	4	3	4	3	4				
Rated current(A) At ambient temperature		10 15 20 32 40 50 63 75 100		10 15 20 32 40 50 63 75 100 125		125 160		125 150 175 200 225 250		250 300 350 400		400 500 630		630 700 800					
Rated insulation voltage(V) CNS, IEC		AC 800																	
Rated breaking capacity(KA)																			
IEC 60947-2 AC 415V		35/21		35/21		50/35		50/35		50/35		65/42		65/42					
EN 60947-2 AC 240V		50/35		50/35		70/50		70/50		85/60		100/65		100/65					
Dimensions(mm)		a	76	76	107	107	150	182	210										
		b	130	130	165	165	257	270	280										
		c	66	66	75	75	105	110	106										
		d	83	83	95	95	115	160	145										
		aa	25	25	35	35	44	58	70										
		bb	110	110	125	125	194	200	243										
Weight(kg)																			
<b>Features</b>																			
Automatic tripping device		Fixed-thermal				Fixed-thermal and fixed-magnetic				Fixed-thermal and adjustable magnetic									
Trip button		●				●				●				●					
ON / OFF Indicator		—				—				—				—					
Accessories (include)																			
United	Shunt trip	IR	●				●				●				●				
	Under voltage trip	AW	●				●				●				●				
Accessories (option)																			
Internally mounted	Shunt trip	SHT	●				●				●				●				
	Under voltage trip	UVT	—				—				—				—				
	Auxiliary switch	AUX	●				●				●				●				
	Alarm switch	ALT	●				●				●				●				
	Alarm + Auxiliary switch	AUX+ALT	●				●				●				●				
Externally mounted	Electrical operation mechanics		CD	●				●				●				—			
	External operating handle	FH	—				—				●				●				
		FL	—				●				●				●				
		FG	—				●				●				—				
		TFJ	—				—				—				●				
	Extension handle		EHA	—				—				—				●			
	Attached flat bar		TBB	—				—				—				●			
Interpole barrier		TQQ	●				●				●				●				
Terminal cover		XPR	●				●				●				—				

Note : ● : Available — : Not available

# TVM1 Series **NEW!**

## - High Capacity & Economic Type



Frame size(AF)		1000	1250	1600		
Type		<b>TVM1-1000</b>	<b>TVM1-1250</b>	<b>TVM1-1600</b>		
Number of Poles		3	3	3		
Rated current(A) At ambient temperature		800 1000	1000 1250	1600		
Rated insulation voltage(V) CNS,IEC		AC 800				
Rated breaking capacity(KA)						
IEC 60947-2 AC 380V		85/43	85/43	100/50		
EN 60947-2 AC 220V		100/50	100/50	125/63		
Dimensions(mm)	a	210	210	210		
	b	330	330	330		
	c	138	138	138		
	d	190	190	190		
	aa	—	—	—		
	bb	—	—	—		
	Weight(kg)					
<b>Features</b>						
Automatic tripping device		Fixed-thermal	Fixed-thermal and fixed-magnetic	Fixed-thermal and adjustable magnetic		
Trip button		—	—	—		
ON / OFF Indicator		—	—	—		
Accessories (include)						
united	Shunt trip	IR	●	●	●	
	Under voltage trip	AW	●	●	●	
Accessories (option)						
Internally mounted	Shunt trip	SHT	●	●	●	
	Under voltage trip	UVT	—	—	—	
	Auxiliary switch	AUX	●	●	●	
	Alarm switch	ALT	●	●	●	
	Alarm + Auxiliary switch	AUX+ALT	●	●	●	
Externally mounted	Electrical operation mechanics	CD	●	●	●	
	External operating handle		FH	—	—	—
			FL	—	—	—
			FG	—	—	—
			TFJ	—	—	—
	Extension handle	EHA	●	●	●	
	Attached flat bar	TBB	●	●	●	
Interpole barrier	TQQ	●	●	●		
Terminal cover	XPR	—	—	—		

Note : ● : Available    — : Not available

# TCB Series

## - High Performance Type



Frame size (AF)	125		250		400		630		800	
Type	<b>TCB 125H1/H3</b>		<b>TCB 250H1/H3</b>		<b>TCB 400H1/H3</b>		<b>TCB 630H1/H3</b>		<b>TCB800H1/H3</b>	
Number of poles	3	4	3	4	3	4	3	4	3	4
Rated current(A) at ambient temperature 40°C	16, 20, 25, 32, 40, 50, 63, 75, 80, 100, 125		125, 150, 160, 175, 180, 200, 225, 250		250, 300 350, 400		500, 630		700, 800	
Rated insulation voltage (V) CNS,IEC	AC 690V									
Rated breaking capacity (kA)										
IEC 60947-2 AC 400V	H1: 50/35					H3: 85/50				

Dimensions (mm) 	a	90	120	105	140	140	184	210	280	210	280
	b	155		165		257		275		275	
	c	83 (97)		83 (95)		97.5 (110)		97.5 (110)		97.5 (110)	
	d	113		116		153		154		154	
	aa	30		35		43.5		70		70	
	bb	132		126		211		243		243	
	Weight (kg)	1.3	1.7	1.7	2.3	4.2/4.7	5.3/5.9	7.4	10	9	12

Features										
Automatic tripping device	Fixed-thermal and fixed-magnetic									
Trip button	●	●	●	●	●	●	●	●	●	●
ON / OFF Indicator	—	—	—	—	—	—	—	—	—	—

Accessories (option)										
Internally mounted	Shunt trip	SHT	●	●	●	●	●	●	●	●
	Under voltage trip	UVT	●	●	●	●	●	●	●	●
	Auxiliary switch	AUX	●	●	●	●	●	●	●	●
	Alarm switch	ALT	●	●	●	●	●	●	●	●
	Alarm + Auxiliary switch	AUX+ALT	●	●	●	●	●	●	●	●
Externally mounted	Electrical operation mechanics	CD				●				
	Extension handle	EHA				●	●	●	●	●
	Attached flat bar	TBB	—	●	● (H1)/ ● (H3)					
	Interpole barrier	TOO								
Terminal cover	XPR									

Note : ● : Available — : Not available ① : Standard accessory ② : Built in  
 ③ : Lock off attachment can be supplied with handle when ordered. ④ : Supplied to order. ⑤ : IP rating meets IP 42.  
 ⊗ : Special on request



# TE Series electronic Type



Frame size (AF)	600	800	1000	1200	1600
Type	<b>TE—600</b>	<b>TE—800</b>	<b>TE—1000</b>	<b>TE—1200</b>	<b>TE—1600</b>
Number of poles	3	3	3	3	3
Rated current(A) at ambient temperature 40°C	Adjustable	Adjustable	Adjustable	Adjustable	Adjustable
	300 400 600	400 500 700	500 700 900	600 800 1200	800 1000 1400
	350 500	450 600 800	600 800 1000	700 1000	900 1200 1600
Rated insulation voltage (V) CNS,IEC	AC 690				
Rated breaking capacity (kA)					
IEC 60947-2 AC 400V	50/25		85/43		100/50
EN 60947-2 AC 230V	85/43		100/50		125/63
Dimensions (mm) 	a	210	210	210	210
	b	275	370	370	370
	c	103	140	140	140
	d	145	191	191	191
	aa	70	70	70	70
	bb	243	338	338	338
	Weight (kg)	10.70	11.20	24	24

## Features

Automatic tripping device	Electronic
Trip button	●
ON / OFF Indicator	—

## Accessories (option)

			600	800	1000	1200	1600
Internally mounted	Shunt trip SHT	●	●	●	●	●	●
	Under voltage trip UVT	●	●	●	●	●	●
	Auxiliary switch AUX	●	●	●	●	●	●
	Alarm switch ALT	●	●	●	●	●	●
	Alarm + Auxiliary switch AUX+ALT	●	●	●	●	●	●
	Electrical operation mechanics CD	●④	●④	—	—	—	—
Externally mounted	External operating handle	FH	—	—	—	—	—
		FL	—	—	—	—	—
		FG	—	—	—	—	—
		TFJ	●④	●④	●④	●④	●④
	Extension handle EHA	●	●	●①	●①	●①	
	Attached flat bar TBB	●②	●②	●②	●②	●②	
	Interpole barrier TQO	●①	●①	●①	●①	●①	
Terminal cover XPR	—	—	—	—	—		

Note : ● : Available — : Not available ① : Standard accessory ② : Built in  
 ③ : Lock off attachment can be supplied with handle when ordered. ④ : Supplied to order.  
 ⊕ : Special on request

# ELCB TLB Series

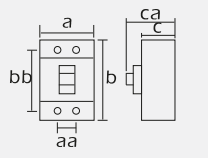


Frame size (AF)		63		100		100		100		100		100		
Type		TLB-63L1		TLB-100L1		TLB-100L2		TLB-100		TLB-100AS		TLB-100AB		
Number of poles		2   3		3   4		3   4		3		3		3		
Rated current(A) at ambient temperature 40°C		15 40 20 50 30 60		15 40 75 20 50 100 30 60		15 40 75 20 50 100 30 60		15 40 75 20 50 100 30 60		15 40 75 20 50 100 30 60		15 40 75 20 50 100 30 60		
Phases and wires		1 φ 2W   1 φ 2W 3 φ 3W		1 φ 2W   3 φ 4W 1 φ 3W 3 φ 3W		1 φ 2W   3 φ 4W 1 φ 3W 3 φ 3W		1 φ 2W 1 φ 3W 3 φ 3W		1 φ 2W 1 φ 3W 3 φ 3W		1 φ 2W 1 φ 3W 3 φ 3W		
Rated insulation voltage (V)		110~220   110~440		110~440		110~440		110~220   380~440		220-380		220		
Rated sensitivity current (mA) ( ) : rated non-tripping current (mA)	Standard goods	30(15)		30(15)		30(15)		30(15)		30(15)		30(15)		
	Order goods	—		100(50),200(100), 300(150) changeover ③		100(50),200(100), 300(150) changeover ③		100(50),200(100), 300(150) changeover ③		100(50),200(100), 300(150) changeover ③		—		
Max. operation time (sec.)						≤ 0.1								
Earth leakage indication						Indicator								
Rated breaking capacity (kA)														
CNS 5422	AC 440V	—		2.5/2.5		7.5/7.5		7.5/7.5		—		7.5/7.5		
JIS C8371	AC 380V	—		5/5		7.5/7.5		10/10		—		10/10		
Asym/sym	AC 220V *240V	10/10		10/10		10/10		18/15		18/15		—		
	AC*100V *110V	10/10		10/10		10/10		18/15		—		—		
CNS 14816-2	AC 440V	—		2.5/2		7.5/3.8		7.5/3.8		7.5/3.8		—		
IEC 60947-2	AC*115V	—		2.5/2		7.5/3.8		7.5/3.8		7.5/3.8		—		
EN 60947-2	AC 380V	—		5/3		7.5/3.8		10/5		10/5		15/7.5		
Icu/Ics	AC 220V	10/5		10/5		10/5		15/7.5		15/7.5		25/13		
	AC*110V	10/5		10/5		10/5		15/7.5		—		—		
		10/5		10/5		10/5		15/7.5		—		—		
Dimensions (mm)		a	50	75	75	100	75	100	75	75	75	156	156	
		b	96		130		130		177		156		156	
		C (height)	60		60		60		68		65		65	
		ca	80		80		80		87		77		77	
		aa	—		25		25		25		25		25	
		bb	84		84		111		111		158		133	
Weight (kg)		0.34	0.47	0.7	0.9	0.7	0.9	0.7	0.9	0.9	0.9	0.9	0.9	
Features														
Automatic tripping device		Hydraulic-magnetic						Fixed-thermal and fixed			Hydraulic-magnetic			
Earth leakage tripping device		Electronic						Electronic			Electronic			
Trip button		●						●			●			
Connections		Terminal screw						Terminal screw			Terminal screw			
Accessories (option)														
Internally mounted	Shunt trip	SHT	—		●		●		—		—		—	
	Under voltage trip	UVT	—		—		—		—		—		—	
	Auxiliary switch	AUX	—		●		●		—		—		—	
	Alarm switch	ALT	—		●		●		●		—		—	
Externally mounted	Electrical operation mechanics	CD	—		—		—		—		—		—	
	External operating handle	FH	—		—		—		—		—		—	
		FL	—		—		—		—		—		—	
		FG	—		●		●		●		—		—	
		TFJ	—		—		—		—		—		—	
	Extension handle	EHA	●①		●		●		—		—		—	
	Attached flat bar	TBB	—		—		—		—		—		—	
Interpole barrier	TQO	—		●①		●①		●①		●①		●①		
Terminal cover	XPR	—		●①		●		●		—		—		

Note : ● : Available — : Not available ① : Standard accessory ② : Built in ③ : Supplied to order.

# ELCB TLB Series



Frame size (AF)	125		125		250		250		400		800		
Type	TLB-125E		TLB-125S		TLB-250E		TLB-250S		TLB-400S		TLB-800H4		
Number of poles	3		3   4		3		3   4		3		3   4		
Rated current(A) at ambient temperature 40°C	15 40 75 20 50 100 30 60 125		15 40 75 20 50 100 30 60 125		125 200 150 225 175 250		125 200 150 225 175 250		250 400 300 350		500 700 600 800 630		
Phases and wires	1 φ 2W 1 φ 3W 3 φ 3W		1 φ 2W   3 φ 4W 1 φ 3W   3 φ 3W 3 φ 3W		1 φ 2W 1 φ 3W 3 φ 3W		1 φ 2W   3 φ 4W 1 φ 3W 3 φ 3W		1 φ 2W 1 φ 3W 3 φ 3W		1 φ 2W   3 φ 4W 1 φ 3W 3 φ 3W		
Rated insulation voltage (V)	220-440		220-440		220-440		220-440		220   380-440		220-440		
Rated sensitivity current (mA) ( ) : rated non-tripping current (mA)	Standard goods	30(15)		30(15)		30(15) ③		30(15) ③		00(50),200(100), 300(150) changeover		00(50),200(100), 300(150) changeover ③	
	Order goods	100(50),200(100), 500(250) changeover ③		100(50),200(100), 300(150) changeover ③		100(50),200(100), 300(150) changeover ③		100(50),200(100), 300(150) changeover ③		—		—	
Max. operation time (sec.)	≤ 0.04												
Earth leakage indication	Indicator												
Rated breaking capacity (kA)													
CNS 5422	AC 440V	18/15		30/25		18/15		30/25		30/25		105/90	
JIS C8371	AC 380V	25/22		35/30		25/22		35/30		35/30		105/90	
Asym/sym	AC 220V*240V	35/30		60/50		35/30		60/50		60/50		150/125	
	AC*100V 110V	—		—		—		—		—		—	
CNS 14816-2	AC 440V	15/7.5		25/13		15/7.5		25/13		25/13		90/45	
IEC 60947-2	AC*15V	22/11		30/15		22/11		30/15		30/15		90/45	
EN 60947-2	AC 380V	22/11		30/15		22/11		30/15		30/15		90/45	
Icu/Ics	AC 220V	30/15		50/25		30/15		50/25		50/25		125/63	
Dimensions (mm) 	a	90		90   120		105		105   140		140		210   280	
	b	155		155		165		165		257		275	
	C (height)	68		86		68		86		97		97.5	
	ca	86		106		89		108		155		155	
	aa	30		30		35		35		44		70	
	bb	132		132		126		126		194		243	
	Weight (kg)	1.3		1.55   2		1.75		2.1   2.7		6.7		12.5   16	

## Features

Automatic tripping device		Fixed-thermal and fixed-magnetic						Hydraulic-magnetic		Hydraulic-magnetic				
Earth leakage tripping device		Electronic						Electronic		Electronic				
Trip button		●						●		—				
Connections		Terminal screw						Busbar		Busbar				
Accessories (option)		●		●		●		●		●		●		
Internally mounted	Shunt trip SHT	—		—		—		—		●		●		
	Under voltage trip UVT	●		●		●		●		●		●		
	Auxiliary switch AUX	●		●		●		●		●		●		
	Alarm switch ALT	—		—		—		—		—		●		
Externally mounted	Electrical operation mechanics CD	—		—		—		—		—		●		
	External operating handle	FH	—		—		—		—		●		—	
		FL	●		●		●		●		—		—	
		FG	●		●		●		●		—		—	
		TFJ	—		—		—		—		—		—	
	Extension handle EHA	—		—		—		—		●		●		
	Attached flat bar TBB	—		—		●		●		●②		●②		
Interpole barrier TOO	●①		●①		●①		●①		●①		●①			
Terminal cover XPR	●		●   —		●		●   —		—		—			

Note : ● : Available — : Not available ① : Standard accessory ② : Built in ③ : Supplied to order.

## TJ Series MCB



		MCB 6kA			
Frame size (AF)		63			
Type		TJ-6365			
Characteristic		"C" Curve			
Number of poles		1	2	3	4
Ambient temperature		40°C			
Rated voltage (V) AC		240	415	415	415
Rated breaking capacity (kA)					
IEC 60898	AC 415V	6	6	6	6
Icu	AC 240V	6	6	6	6
Rated Current(A)		6A, 10A, 16A, 20A, 25A, 32A, 40A, 50A, 63A			
Dimensions (mm)					
	a	18	36	54	72
	b	82			
	c	50			
	d	75			
Weight (kg)		0.1	0.2	0.3	0.4
Automatic tripping device		Fixed-thermal and fixed-magnetic			
Connections		Terminal screw			
Installation		On 35 mm DIN rail			

## SB Series Safety Switch

		SB	
Frame size (AF)		32	
Type		TSS	
Characteristic			
Number of poles		2	
Ambient temperature		40°C	
Rated voltage (V) AC		240	
Rated breaking capacity (kA)			
IEC 60898	AC 415V		
Icu	AC 240V	1.5kA	
Rated Current(A)		6A, 10A, 16A, 20A, 25A, 32A,	
Dimensions (mm)			
	a	32	
	b	70	
	c	26	
	d	50	
Weight (kg)		0.1Kg	



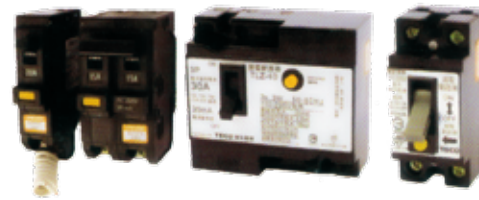


## RC Series RCCB



	RCCB		
Frame size (AF)	63		
Type	<b>RC-362S</b>	<b>RC-364S</b>	
Characteristic	C \ D curve		
Number of poles	2	4	
Ambient temperature	40°C		
Rated voltage (V) AC	240	415	
Rated Current(A)	25A, 32A, 40A, 63A		
Dimensions (mm)	a	36	72
	b	82	
	c	50	
	d	75	
Weight (kg)	0.2	0.35	
Connections	Terminal screw		
Installation	On 35 mm DIN rail		

## ELCB – TLB TLZ Series



Frame size (AF)	30	50	50	50				
Type	<b>TLZ-30F</b>	<b>TLZ-50B</b>	<b>TLZ-50EC</b>	<b>TLZ-50EB</b>				
Number of poles	2	2	2	3	1P2E	2P2E		
Rated current(A) at ambient temperature 40°C	5 10 15 20 30	30	50	5 10 15 20 30 40 50	15 20 30 40 50			
Phases and wires	1ø2W	1ø2W	1ø2W	1ø2W 3ø3W 1ø3W	1ø2W			
Rated insulation voltage (V)	110~220	110~220	110~220	220~440	110~220	220		
Rated sensitive current (mA)	30(15)	30(15)	30(15)	30(15)	30(15)			
Max. operation time (sec.)	≤0.1(s)							
Earth leakage indication	BUTTON							
Rated breaking capacity (kA)	AC 440V	-	-	-	-	2.5	-	-
	AC 380V	-	-	-	-	2.5	-	-
	AC 220V	1.5	1.5	2.5	2.5	2.5	5	5
	AC 110V	1.5	1.5	2.5	2.5	-	5	-
Dimensions	a	32	35	68.5	90	5	50	
	b	70	70	71	80	123	113	
	c	38	41	40	40	60	60	
	d	52	56.5	58.5	58.5	77	80	
	aa	-	-	34	55	-	-	
	bb	62	62	60	70	-	-	
Weight (kg)	0.11	0.13	0.2	0.3	0.23	0.38		

Note : ● : Available    — : Not available    ① : Standard accessory    ② : Built in    ③ : Supplied to order.



## 1 High Performance

- Comply with IEC 60947, UL 508  
CSA C22.2, GB 14048
- Electrical Lifespan : 1M operations

## 2 High Reliability

- Dual Points Aux. Contact Design

## 3 Safety

- V-0 Flame Retardant Materials in Casing
- IP-20 Finger Protection Terminals

## 4 Green Products

- Compliance with RoHS
- Enviromentally Friendly Materials

## 5 Universal Design

- New Appearance with Streamline Front Cover Design
- Approvals :



# Certificates

Certificates						
Catalogue number	Canada		Canada & U.S.A.		Germany	EC Declaration of conformity
	SP	SP <sub>US</sub>	RU <sub>US</sub>	UL <sub>US</sub>	TÜV	CE
<b>Miniature Contactors</b>						
CN-5		•		•	•	•
CN-5K		•		•		•
CN-6		•		•	•	•
CN-6K		•		•		•
<b>U Series IEC Contactors</b>						
CU-9		•		•	•	•
CU-11		•		•	•	•
CU-16		•		•	•	•
CU-18		•		•	•	•
CU-18/4P		•		•	•	•
CU-22		•		•	•	•
CU-22/4P		•		•	•	•
CU-32R				•		
CU-40		•		•	•	•
CU-50		•		•	•	•
CU-65		•		•	•	•
CU-80		•		•	•	•
CU-90				•		
<b>N Series IEC Contactors</b>						
CN-100R		•		•		
CN-125R		•		•		
CN-150		•		•		•
CN-180		•		•		•
CN-220		•		•		•
CN-300		•		•		•
CN-400(K)						•
CN-500(K)						•
CN-630(K)						•

Certificates						
Catalogue number	Canada		Canada & U.S.A.		Germany	EC Declaration of conformity
	SP	SP <sub>US</sub>	RU <sub>US</sub>	UL <sub>US</sub>	TÜV	CE
<b>RHU / RHN Series Bimetallic Overload Relays</b>						
RHU-5		•		•		•
RHU-10		•		•		•
RHU-80		•		•		•
RHN-180		•		•		•
<b>D.O.L Magnetic Starters</b>						
HUE-9/11/16					•	•
HUEB-9/11/16					•	•
HUF-9/11/16/18					•	•
HUFB-9/11/16/18					•	•
<b>Accessories</b>						
CUA-2		•		•		•
CUA-4		•		•		•
CNA-2M		•		•	•	•
CNA-4M		•		•	•	•
CNA-110		•		•	•	•
CNA-111B(C)		•		•	•	•
CNA-111SR		•		•	•	•
RAM-4K		•		•		•
CI-18 /35		•		•		
CNI-6		•		•		
CNI-18		•		•		•
CNI-100		•		•		
CNE-1		•		•		•
CSS-1/2(S)						•

# CU Series IEC Contactors

Non-reversing Type			CN-5(K)			CN-6(K)			CU-11			CU-16			CU-18			CU-22		
			CN-5P(K)			CN-6P(K)			CUL-11			CUL-16			CUL-18			CUL-22		
Reversing Type			CNL-5(K)			CNL-6(K)														
Rated Insulation Voltage (Ui) IEC V			690/600						690/600			690/600			1000/600			1000/600		
Thermal Current IEC (Ith) A			20						25			25			35			40		
Thermal Current UL (Ith) A			20						24			30			35			40		
Rated Power Capacities (Ie) AC3 IEC 60947-4-1	1P	110V	8	0.37	0.5	10.5	0.55	0.75	10.5	0.55	0.75	13.5	0.75	1	19.5	1.1	1.5	25.5	1.5	2
		220V	7	0.75	1	10	1.1	1.5	10.5	1.1	1.5	14	1.5	2	20.5	2.2	3	26	3	4
	3P	220/230V	7.5	1.5	2	10.1	2.2	3	12	3	4	16	4	5.5	23	5.5	7.5	27	7.5	10
		380/400V	7	3	4	9	4	5.5	12	5.5	7.5	16	7.5	10	22	11	15	26	11	15
		415V	6.5	3	4	8.5	4	5.5	11	5.5	7.5	15	7.5	10	21	11	15	21	11	15
		440V	6	3	4	8	4	5.5	11	5.5	7.5	15	7.5	10	21	11	15	21	11	15
		500V	5	3	4	6.5	4	5.5	9	5.5	7.5	13	7.5	10	19	11	15	19	11	15
		660V	4	3	4	5	4	5.5	7	5.5	7.5	10	7.5	10	14	11	15	14	11	15
690V	4	3	4	5	4	5.5	7	5.5	7.5	10	7.5	10	14	11	15	14	11	15		
NEMA class			00			0			0			0			1			1		
Contact configuration			Non-reversing: 3A1a or 3A1b						Non-reversing: 3A1a or 3A1b											
			Reversing: 3A1a x 2 or 3A1b x 2						Reversing: 3A1a x 2 or 3A1b x 2											

# CN Series IEC Contactors

Non-reversing Type			CN-100R			CN-125R			CN-150			CN-180			CN-220			CN-300			CN-400(K)			CN-500(K)					
			CNL-100R			CNL-125R			CNL-150			CNL-180			CNL-220			CNL-300			CNL-400(K)			CNL-500(K)					
Rated Insulation Voltage (Ui) IEC V			1000/600						1000/600			1000/600			1000/600			1000/600			1000			1000					
Thermal Current IEC (Ith) A			135						150			200			240			260			350			450			550		
Thermal Current UL (Ith) A			130						150			200			240			260			350			—			—		
Rated Power Capacities (Ie) AC3 IEC 60947-4-1	1P	110V	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
		220V	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
	3P	220/230V	115	30	40	138	40	54	150	45	60	182	55	75	225	65	85	300	90	125	400	110	150	500	150	20	5		
		380/400V	115	60	80	138	75	100	147	80	110	179	95	125	225	120	160	300	160	220	400	200	270	500	257	35	0		
		415V	105	60	80	138	75	100	138	80	110	178	100	136	220	125	170	300	160	220	400	220	300	460	257	35	0		
		440V	105	60	80	135	75	100	131	80	110	182	110	150	220	132	180	300	160	220	400	220	300	430	257	35	0		
		500V	93	65	85	105	75	100	129	90	125	156	110	150	190	132	180	250	160	220	375	257	350	410	280	38	0		
		660V	75	65	85	85	75	100	107	100	136	118	110	150	140	132	180	220	200	270	330	300	410	355	335	45	0		
690V	75	65	85	85	75	100	107	100	136	118	110	150	140	132	180	220	200	270	330	300	410	355	335	45	0				
NEMA class			3			4			4			5			5			5			6			6					
Contact configuration			Non-reversing: 3A2a2b Reversing: 3A2a2b x 2						Non-reversing: 3A2a2b (Max 3A4a4b) Reversing: 3A2a2b x 2 (Max 3A3a3bx2)						Non-reversing: 3A2a2b (Max 3A4a4b) , AC coil plus 1a Reversing: 3A2a2b x 2 (Max. 3A4a4b x 2)														



CU-32R			CU-40			CU-50			CU-65			CU-80			CU-90		
CUL-32R			CUL-40			CUL-50			CUL-65			CUL-80			CUL-90		
1000/600			1000/600			1000/600			1000/600			1000/600			1000/600		
60			60			70			80			100			135		
50			60			72			85			104			120		
A	kW	Hp	A	kW	Hp	A	kW	Hp	A	kW	Hp	A	kW	Hp	A	kW	Hp
35	1.5	2	43	2.2	3	48	3	4	50	3	4	60	4	5.5	—	—	—
35	3.7	5	43	5.5	7.5	48	6	8	50	6	8	55	7.5	10	—	—	—
35	9	12	44	11	15	55	15	20	65	18.5	25	75	22	30	85	25	35
32	15	20	40	20	27	55	25	35	64	30	40	72	37	50	85	45	60
32	15	20	40	22	30	52	25	35	64	33	45	72	40	54	85	45	60
32	15	20	40	22	30	52	30	40	64	37	50	70	40	54	85	51	70
30	18.5	25	35	22	30	45	30	40	55	37	50	65	45	60	80	55	75
23	18.5	25	26	22	30	35	30	40	45	37	50	60	45	60	65	55	75
22	18.5	25	26	22	30	35	30	40	45	37	50	60	45	60	65	55	75
2									3								
Non-reversing: 3A1a1b						Non-reversing: 3A2a2b											
Reversing: 3A1a1b x 2						Reversing: 3A2a2b x 2											

## CU Series IEC Contactors

CN-630(K)		
CNL-630(K)		
1000		
660		
—		
A	kW	Hp
—	—	—
—	—	—
630	200	270
630	335	450
600	355	480
600	375	500
525	355	480
460	450	610
460	450	610
6		


		CU-10/4P		CU-18/4P		CU-22/4P		
Catalogue Number								
Rated Insulation Voltage (Ui) IEC V		690		1000		1000		
Thermal Current AC/DC (Ith) A		25		35		40		
		A(AC1)	KW(AC1)	A(AC1)	KW(AC1)	A(AC1)	KW(AC1)	
Rated Power Capacities (Ie) AC1 IEC 60947-1 CNS 14816	1P	110V	25	2.7	35	3.9	40	4.3
		220V	25	5.5	35	8	40	8.8
	3P	220V	25	9.5	35	13	40	15
		380V	25	16	35	23	40	26
		440V	25	19	35	27	40	29
		550V	—	—	—	—	—	—
Contact configuration		4A		4A or 2A2B				

# H Series Magnetic Starters with Push button



Catalogue number	IP 40		HUEB-11			HUEB-16			HUB-18			HUB-22			HUB-32R			HUB-40		
	IP 42		HUPB-11			HUPB-16			HUPB-18			HUPB-22			—			—		
	IP 65		HUFB-11			HUFB-16			HUFB-18			HUFB-22			—			—		
Rated Insulation Voltage (Ui) IEC V			690			690			1000			1000			1000			1000		
Rated Operational Voltage (Ue) IEC V			690			690			690			690			690			690		
Thermal Current (Ith) IEC/UL A			25/24			25/32			35/35			40/40			60/55			60/60		
			A	kW	Hp	A	kW	Hp	A	kW	Hp	A	kW	Hp	A	kW	Hp	A	kW	Hp
Rated Power Capacities (Ie) AC3 IEC 60947-4-1	Single	110V	10.5	0.55	0.75	13.5	0.75	1	19.5	1.1	1.5	25.5	1.5	2	35	1.5	2	43	2.2	3
		220V	10.5	1.1	1.5	14	1.5	2	20.5	2.2	3	26	3	4	35	3.7	5	43	5.5	7.5
	Three phase	220V	12	3	4	16	4	5.5	23	5.5	7.5	27	7.5	10	35	9	12	44	11	15
		380V	12	5.5	7.5	16	7.5	10	22	11	15	26	11	15	32	15	20	40	20	27
		415V	11	5.5	7.5	15	7.5	10	21	11	15	21	11	15	32	15	20	40	22	30
		440V	11	5.5	7.5	15	7.5	10	21	11	15	21	11	15	32	15	20	40	22	30
		500V	9	5.5	7.5	13	7.5	10	19	11	15	19	11	15	30	18.5	25	35	22	30
		660V	7	5.5	7.5	10	7.5	10	14	11	15	14	11	15	23	18.5	25	26	22	30
690V	7	5.5	7.5	10	7.5	10	14	11	15	14	11	15	22	18.5	25	26	22	30		
Rated Power Capacities (Ie) AC3 UL 508	Single	110-120V	16	—	1	20	—	1.5	24	—	2	24	—	2	24	—	2	34	—	3
		220-240V	12	—	2	17	—	3	17	—	3	28	—	5	38	—	5	40	—	7.5
	Three phase	200/208V	18	—	5	18	—	5	26	—	7.5	26	—	7.5	25.3	—	7.5	49	—	15
		220-240V	15.2	—	5	15.2	—	5	22	—	7.5	28	—	10	28	—	10	42	—	15
		440-480V	11	—	7.5	14	—	10	21	—	15	27	—	20	27	—	20	40	—	30
		550-600V	11	—	10	11	—	10	17	—	15	22	—	20	27	—	30	41	—	40
For use with bimetallic overload relays			RHU-10/□1			RHU-10/□1			RHU-10/□1			RHU10/□1			RHU-10/□2			RHU80/□2		
For use with contactors			CU-11			CU-16			CU-18			CU-22			CU-32R			CU-40		
Contact Configuration			3A1a or 3A1b						3A1a 1b											
Electrical Durability (ops)			1M						1M											
Mechanical Durability (ops)			5M						5M											
 Overall Dimensions (w* h * d) mm / (kg)	IP 40		88*160*107.5 / 0.9						100*170.6*117.3 / 2.0						130*240*136 / 2.0			130*240*136 / 2.0		
	IP 42		90*184*112 / 0.9						100*194*122.5 / 0.9						—			—		
	IP 65																			

# H Series Magnetic Starters with Push button

Catalogue number	IP 40		HUB-50			HUB-65			HUB-80			HUB-90		
	IP 42		—			—			—			—		
	IP 65		—			—			—			—		
Rated Insulation Voltage (Ui) IEC V			1000			1000			1000			1000		
Rated Operational Voltage (Ue) IEC V			690			690			690			690		
Thermal Current (Ith) IEC/UL A			70/72			80/85			100/104			135/120		
			A	kW	Hp	A	kW	Hp	A	kW	Hp	A	kW	Hp
Rated Power Capacities (Ie) AC3 IEC 60947-4-1	Single	110V	48	3	4	60	4	5.5	60	4	5.5	—	—	—
		220V	48	6	8	60	7.5	10	55	7.5	10	—	—	—
	Three phase	220V	55	15	20	75	22	30	75	22	30	85	25	35
		380V	55	25	35	72	37	50	72	37	50	85	45	60
		415V	52	25	35	72	40	54	72	40	54	85	45	60
		440V	52	30	40	70	40	54	70	40	54	85	51	70
		500V	45	30	40	65	45	60	65	45	60	80	55	75
		660V	35	30	40	60	45	60	60	45	60	65	55	75
690V	35	30	40	60	45	60	60	45	60	65	55	75		
Rated Power Capacities (Ie) AC3 UL 508	Single	110-120V	56	—	5	80	—	7.5	80	—	7.5	80	—	7.5
		220-240V	50	—	10	68	—	15	68	—	15	68	—	15
	Three phase	200/208V	49	—	15	79	—	25	79	—	25	79	—	25
		220-240V	54	—	20	80	—	30	80	—	30	80	—	30
		440-480V	52	—	40	77	—	60	77	—	60	77	—	60
		550-600V	52	—	50	62	—	60	62	—	60	77	—	75
For use with bimetallic overload relays			RHU-80/□3			RHU-80/□3			RHU-80/□3			RHU-80/□3		
For use with contactors			CU-50			CU-65			CU-80			CU-90		
Contact Configuration			3A1a 1b						3A2a 2b					
Electrical Durability (ops)			1M						1M					
Mechanical Durability (ops)			5M						5M					
 Overall Dimensions (w * h * d) mm / (kg)	IP 40		170*330*154 / 3.5						170*330*154 / 3.5					
	IP 42		—						—					
	IP 65		—						—					

# RHU/RHN Series Thermal Overload Relays



## Features

- \* Reduce power consumption for energy saving and reduction of carbon emissions
- \* Comply with IEC, and China GB standard motor

- \* Certified: CSA, UL
- \* Comply with RoHS, CE
- \* Phase failure protection

Catalogue number	RHU-5/□	RHU-10/□1	RHU-10/□2	RHU-80/□□1	RHU-80/□□2	RHU-80/□□3
Frame Size (mm)	45			56		
Rated Insulation Voltage (Ui)	UL 600V, IEC 690V					
Setting Current Range (A)	0.1~0.16 0.16~0.25 0.25~0.4 0.35~0.5 0.45~0.63 0.55~0.8 0.75~1 0.9~1.3 1.1~1.6 1.4~2 1.8~2.5 2.3~3.2 2.9~4 3.5~4.8 4.5~6.3 5.5~7.5 7.2~10 9~12.5	0.1~0.16 0.16~0.25 0.25~0.4 0.35~0.5 0.45~0.63 0.55~0.8 0.75~1 0.9~1.3 1.1~1.6 1.4~2 1.8~2.5 2.3~3.2 2.9~4 3.5~4.8 4.5~6.3 5.5~7.5 7.2~10 9~12.5 11.3~16 15~20 17.5~21.5 21~25 24.5~30 29~36 33~38	9~12.5 11.3~16 15~20 17.5~21.5 21~25 24.5~30 29~36 33~38	17~25	17~25 24.5~36 35~47	24.5~36 35~47 45~60 58~75 72~90
For Use With Contactors	CN-5(K)/CN-6(K)	CU-9/11/12/16/ 17/18/22/32R	CU-27/32/38	CU-18/22/32R	CU-40	CN-50/65/80
Type of Terminal	Screw					
Reset Mode	Automatic, Manual					
Contacts Configuration	1a+1b					
Temperature Compensation Range	-5°C ~ +40°C					
Trip Class	10A					
Contact Capacities	AC 15	120V	6			
		240V	3			
		380V	1.9			
	Ith	N.C. Contact	10	6	10	
N.C. Contact		10	6	10		
Applicable adapter	RP-10	—				
Maximum wire size in AWG	AWG10 (5.3mm <sup>2</sup> )	AWG8 (8.4mm <sup>2</sup> )		AWG4 (22mm <sup>2</sup> )		AWG3 (38mm <sup>2</sup> )

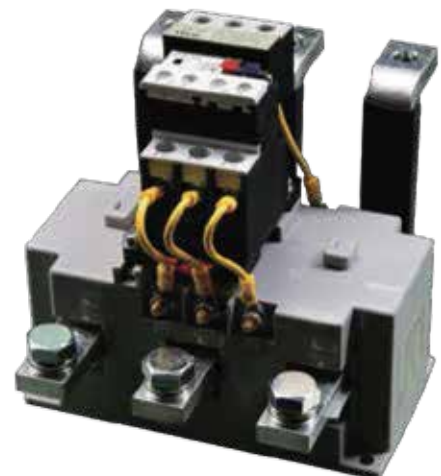


# RHU/RHN Series Thermal Overload Relays









Catalogue number	RHU-80/□□4	RHU-80/□□P	RHN-180/□□1	RHN-180/□□2	RHN-180/□□3	RHN-180/□□4
Frame Size (mm)	56			100		
Rated Insulation Voltage (Ui)	UL 600V, IEC 690V					
Setting Current Range (A)	17~25 24.5~36 35~47	17~25 24.5~36 35~47 45~60 58~75 72~90 77~97	65~95 85~125 110~160	65~95 85~125 110~160	65~95 85~125 110~160 125~185	65~95 85~125 110~160 125~185
For Use With Contactors	CU-27/32/38	With adapter	CN-100R/125R	CN-150	CN-180	CN-220/300
Type of Terminal	Screw					
Reset Mode	Automatic, Manual					
Contacts Configuration	1a+1b					
Temperature Compensation Range	-5°C ~ +40°C					
Trip Class	10A					
Contact Capacities	AC 15	120V	6			
		240V	3			
		380V	1.9			
		480V	1.5			
		500V	1.4			
		600V	1.2			
	lth	N.C. Contact	10			
		N.C. Contact	10			
Applicable adapter	—					
Maximum wire size in AWG	AWG4 (22mm <sup>2</sup> )	AWG3 (38mm <sup>2</sup> )	—			

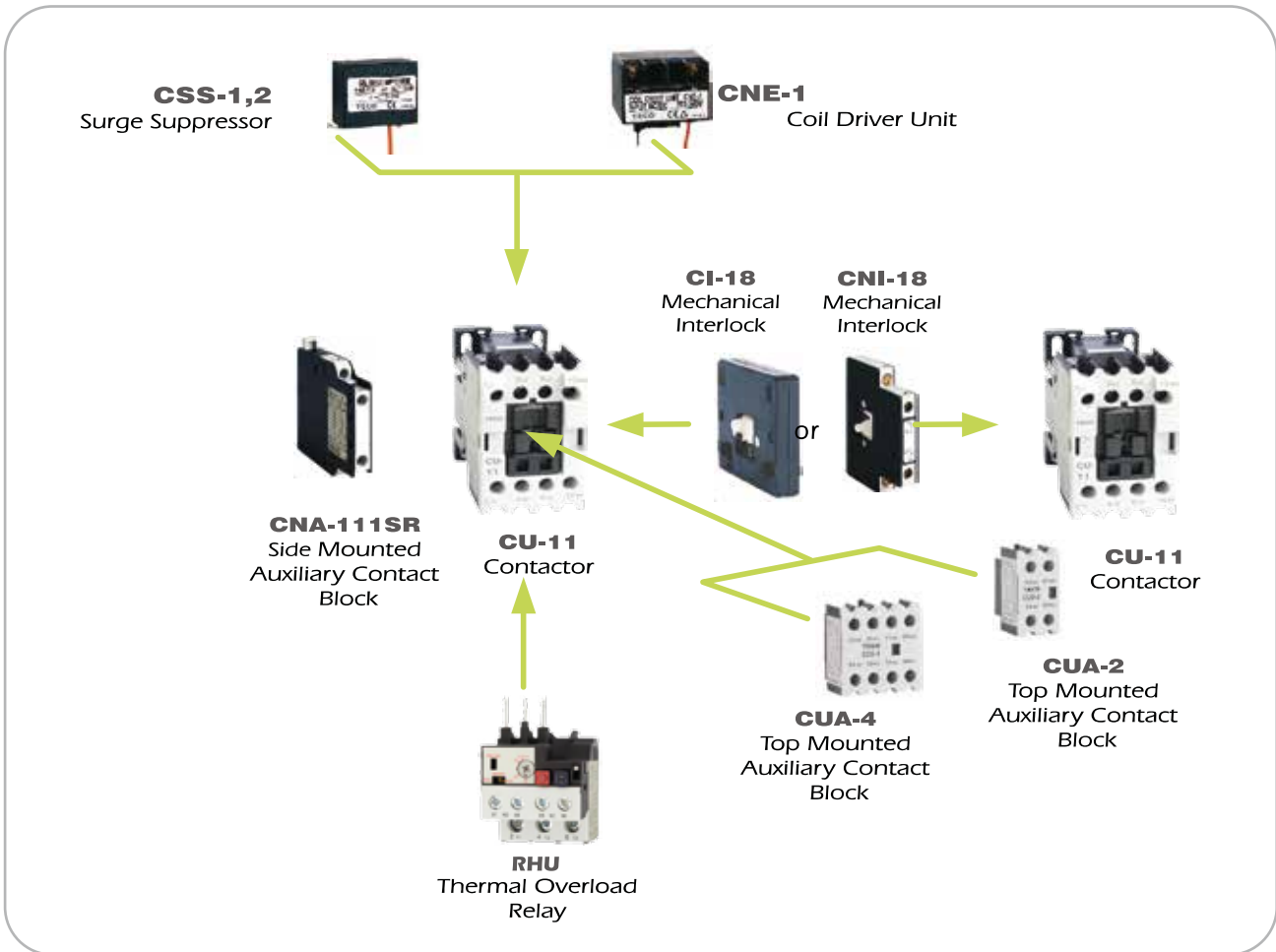
Catalogue number	RHN-180/□□P	RHN-300/□□	RHN-300/□□P
Frame Size (mm)	100	150	
Rated Insulation Voltage (Ui)	UL 600V, IEC 690V		
Setting Current Range (A)	65~95 85~125 110~160 125~185	145~200 175~240 203~280 245~336	145~200 175~240 203~280 245~336
For Use With Contactors	—	CN-220/300	—
Type of Terminal	Power Side	—	Terminal
	Load Side	Screw	
Reset Mode	Automatic, Manual		
Contacts Configuration	1a+1b		
Temperature Compensation Range	-5°C ~ +40°C		
Trip Class	10A		
Contact Capacities	AC 15	120V	6
		240V	3
		380V	1.9
		480V	1.5
		500V	1.4
		600V	1.2
	lth	N.C. Contact	10
		N.C. Contact	10
Applicable adapter	—		
Maximum wire size in AWG	—		



# Accessories

Catalogue number		CNA-2M	CNA-4M	CUA-2	CUA-4	CNA-111SR	CNA-111B(C)
							
Rated insulation voltage (Ui) IEC		V 690					
Contact rating code designator UL		A 600 Q300					
Thermal current AC/DC (Ith)		A 10 / 2.5					
Rated operational current Ie (A) IEC 60947-5-1 UL 508	AC 15	120V 6					
		240V 3					
		380V 1.9					
		480V 1.5					
		500V 1.4					
	DC 13	600V 1.2					
		125V 0.55					
		250V 0.27					
Contact configuration		2a, 2b ,1a1b	4a, 3a1b, 2a2b, 1a3b, 4b	2a, 2b, 1a1b	4a, 4b, 3a1b, 2a2b,1a3b	1a1b	1a1b
Electrical durability (ops) AC 15		1M					
Mechanical durability (ops)		5M					
Weight (kg)		0.035	0.04	0.025	0.045	0.04	0.04
For use with	U Series	—	—	CU-11/12/16/17/18/ 22/32R/38/40/50/ 65/80/90		CU-11/12/16/ 17/18/22/32 /38/40	—
	N Series	CN-5/6 CN-5K/6K	CN-5/6 CN-5K/6K	—		—	CN-100R/125R/ 150/180/200/ 300

# Accessories



## CNI • CI Interlock

\*These reversing contactors (CNI/CUL series) are designed with mechanical interlock. To against short-circuits resulting from stuck contactors.

Catalogue number		CNI-6	CNI-18	CI-18	CI-35	CNI-100
Photo						
Rated insulation voltage (Ui) IEC V		—	690	—	—	—
Rated operational voltage (Ue) IEC V		—	660	—	—	—
Thermal current AC (Ith) A		—	10	—	—	—
Contact configuration		—	2b	—	—	—
Weight (kg)		—	0.3	—	—	—
Minimal operation current		—	DC24V 5mA	—	—	—
For use with	U Series	—	CU-11/12/16/17 /18/22/32R	CU-11/16/18/22 27/32/32R/38	CU-40/50/65/80/90	—
	N Series	CN-5/6	—	—	—	CN-100/125/150 /180/220/300
Operational type		Mechanical				
Part number for order		AC : F07912 DC : V83153	V96450 Notes 1	V57909 Notes 1	V57912 Notes 1	V77662

Notes 1 : These type include two dovetail joints.

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