



Power Devices Catalogue

低壓開關產品



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Company Profile

TECO Technology (Vietnam) Company was established since year 2006, which was located in Long Thanh, Dong Nai, Vietnam. TECO Technology (Vietnam) Company was approved by the Vietnam Government to invest in the establishment from TECO Electric & Machinery.

TECO Electric & Machinery was founded in 1956, initially in the motor production, has entered the heavy electric, electronic control, home appliances, information, communications, electronics and key components, infrastructure construction and financial investment in the core business areas of development.

TECO Electric & Machinery Company in 1968 with the American Company, General Electric and Japan Company, Yaskawa electromechanical technical cooperation, followed by cooperated with the U.S. Westinghouse, Japan's Hitachi, Sweden Ericsson, Mitsubishi, NEC, Deutsche Telekom, Germany's Siemens and other international electronic, electrical and communications group to establish business cooperation relationship. TECO Group currently has about 30 of affiliated companies at home and abroad, the cause of the territory has been expanded to Asia, the Americas and Europe, and distribution of the global staff of more than million people to become well-known, one of the world-class group.

TECO Technology (Vietnam) Company was division of the Electrical and Controller, which products manufacturing such as circuit breaker and low voltage power distribution equipment belonging to Group management and control. Division formerly known as Taian Electric, since its founding in 1969 to the October 2003 merger with TECO date, high voltage power distribution equipment, generator sets, power strips, inverter, programmable controller and servo controller products to meet customer the most basic electrical safety requirements, and provide a holistic automation services.

Years of hardwork, and TECO Electric & Machinery by heavy electric appliance field, to become a global high-tech enterprise, from manufacturing, marketing, service to the development, the establishment of an aspect of the world of international brand TECO. Teco Group abundant resources of integration comprehensive efficiency TECO Technology (Vietnam) Company will be established in Vietnam and its neighboring countries in Southeast Asia's production and sales base through continuous innovation and Houzhi R & D technology, to provide customer satisfaction as the guide of products and improve after-sales service, the progressive realization become Vietnam cum-low-voltage power distribution equipment in Southeast Asia, the renowned first-class brand manufacturers.

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.

Certificates

Certificates					
Catalogue number					
		Germany	TAIWAN		EC Declaration of Conformity
			(TERTEC)	(BSMI)	
TO-50E	2P	●	—	●	●
TO-50EC	3P	●	—	●	●
TO-100EB	2P/3P	●	—	●	●
TO-125EB	2P/3P	—	—	●	●
TO-160EBE	3P	●	—	●	●
TO-250EB	2P/3P	—	—	●	●
TO-400EB	2P/3P	●	—	●	●
TO-630EB	3P	—	—	●	●
TO-800EB	3P	●	—	●	●
TO-125SB	3P	—	—	●	●
TO-125SC	3P/4P	—	—	●	●
TO-160SBE	3P	—	●	—	●
TO-160SC	3P/4P	—	●	—	●
TO-250SB	3P	—	●	—	●
TO-250SC	3P/4P	—	●	—	●
TO-400SB	2P/3P	—	●	—	●
TO-600SB	3P/4P	—	●	—	●
TO-800SB	3P/4P	—	●	—	●
TO-125H	3P/4P	—	●	—	●
TO-160H	3P/4P	—	●	—	●
TO-400H	3P/4P	—	●	—	●
TO-630H	3P/4P	—	●	—	●
TO-800H	3P/4P	—	●	—	●
TE-600	3P	—	●	—	●
TE-800	3P	—	●	—	—
TE-1000	3P	—	●	—	—
TE-1200	3P	—	●	—	—
TE-1600	3P	—	●	—	—
TLB-100E	3P	—	●	—	—
TLB-100L1	3P/4P	—	●	—	—
TLB-125E	3P	—	●	—	—
TLB-125S	3P/4P	—	●	—	—
TLB-250E	3P	—	—	●	—
TLB-250S	3P/4P	—	—	●	—
TLB-400S	3P	—	—	●	—

Certificates					
Catalogue number					
		TAIWAN		EC Declaration of Conformity	CB Scheme
		(TERTEC)	(BSMI)		
TJ636S	1P/2P/3P/4P	—	—	●	●
TJ6310S	1P/2P/3P/4P	—	—	●	●

TO Series Economical Type

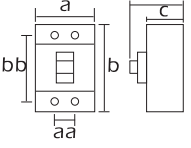


Frame size (AF)		50		50		100		125		160		250		400	
Type		TO—50E		TO—50EC		TO—100EB		TO—125EB		TO—160 EBE		TO—250EB		TO—400EB	
Number of poles		2		3		2	3	2	3	3		2	3	3	
Rated current(A) at ambient temperature 40°C		15 40 20 50 30		15 40 20 50 30		15 40 75 20 50 100 30 63		125		140 150 160		125 200 150 225 175 250		250 350 300 400	
Rated insulation voltage (V) CNS,IEC		AC 690													
Rated breaking capacity (kA)															
IEC 60947-2		AC 400V		2.5/1.3		15/7.5	15/10	22/11		30/25		30 / 15		35 / 25	
EN 60947-2		AC 230V		5/2.5		25/13	25/15	42/35		42/35		42 / 35		50 / 35	
Dimensions (mm)		a	50	75	50	75	60	90	90		105		140		
		b	130			130		155		155		165		260	
		c	60			68		68		68		68		103	
		d	79			87		86		86		86		130	
		aa	—	25	—	25	—	30	30		35		45		
		bb	111			111		132		132		126		214	
Weight (kg)		0.4	0.6	0.6	0.8	0.8	1.1	1.1		1.1		1.45	1.45	4.5	6
Features															
Automatic tripping device		Fixed-thermal and fixed-magnetic										Fixed-thermal		Fixed-thermal and adjustable magnetic	
Trip button		●													
ON / OFF Indicator		—												●	
Handle lock (OFF - POSITION)		—													
Connections		Terminal screw												Busbar	
Accessories (option)															
Internally mounted	Shunt trip	SHT	●③	●③	●③	●		●		●		●		●	
	Under voltage trip	UVT	—	—	—	—		—		—		—		—	
	Auxiliary switch	AUX	●③	●③	●③	●		●		●		●		●	
	Alarm switch	ALT	●③	●③	●③	●		●		●		●		●	
	Alarm + Auxiliary switch	AUX+ALT	●③	●③	●③	●		●		●		●		●	
Externally mounted	Electrical operation mechanics	CD	—	●④	—	●④	—	●④	—		●④		—		
	External operating handle	FH	—	●	—	●	—	—	—		—		●		
		FL	—	—	—	—	—	●	—		●		—		
		FG	—	●②	—	●②	—	●②	—		●⑤		—		
		TFJ	—	—	—	—	—	—	—		—		●④		
	Extension handle	EHA	—	—	—	—		—		—		—			
	Attached flat bar	TBB	—	—	—	—		●		●		●②			
	Interpole barrier	TQQ	●	●	●①	●①		●		●①		●①			
Terminal cover	XPR	—	●	—	●	—	●	—		●		—			

Note : ● : Available — : Not Available ① : Standard Accessory ② : IP rating meets IP 42.
③ : Can be supplied separately. ④ : Supplied to order.

TO Series Standard Type



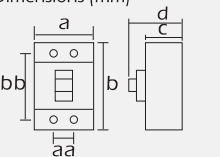
Frame size (AF)		125			160			250			400						
Type		TO – 125SB		TO – 125SC	TO – 160SBE		TO – 160SC		TO – 250SB		TO – 250SC	TO – 400SB					
Number of poles		3		3*	3		3		3		3						
Rated current(A) at ambient temperature 40°C		15 20 25 32 40 50 63 75 100 125			140 150 160		125 140 150 160		175 180 200		225 250		250 350 300 400				
Rated insulation voltage (V) CNS,IEC		AC 690															
Rated breaking capacity (kA)																	
IEC 60947-2		AC 400V		35/25		42/30		35/25		42/30		35/25		42/30		50/35	
EN 60947-2		AC 230V		50/35		—		50/35		—		50/35		—		85/60	
Dimensions (mm) 		a	90		90	120	90		105	140	105		105	140	140	185	
		b	155		155		155		165		165		165		260		
		c	68		86		68		86		68		86		103		
		d	86		104		86		104		86		104		130		
		aa	30		30		30		35		35		35		45		
		bb	132		132		132		126		126		126		214		
Weight (kg)		1.1		1.4	1.7	1.1		1.8	2.3	1.45		1.8	2.3	4.5	6		
Features																	
At Automatic tripping device		Fixed-thermal				Fixed-thermal and fixed-magnetic						Fixed-thermal and adjustable-magnetic					
Tri Trip button		●				●				●				●			
OI ON / OFF Indicator		—				—				—				—			
Accessories (option)																	
Internally mounted	Shunt trip	S	●				●				●				●		
	Under voltage trip	U	—				—				—				—		
	Auxiliary switch	A	●				●				●				●		
	Alarm switch	A	●				●				●				●		
	Alarm + Auxiliary switch AUX+A	AUX+A	●				●				●				●		
Externally mounted	Electrical operation mechanics	E	●④				—	●④			●④			—			
	External operating handle		—				—	—			—			—			
			—				—	●			●			●			
			—				—	●⑤			●⑤			—			
		—				—	—			—			●④				
	Extension handle	EH	—				—			—			●				
	Attached flat bar	T	—				●			●			●②				
	Interpole barrier	TC	●				●①			●①			●①				
	Terminal cover	X	●				—	●			●			—			

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

TO Series

- High Performance Type



Frame size (AF)	125				160				250				400					
Type	TO—125H				TO—160H				TO—250H				TO—400H					
Number of poles	3				3				3				3					
Rated current(A) at ambient temperature 40℃	15 30 60 125				125 150				175 225				250 350					
	20 40 75				140 160				200 250				300 400					
	25 50 100																	
Rated insulation voltage (V) CNS,IEC	AC 690																	
Rated breaking capacity (kA)																		
IEC 60947-2	AC 400V		50/35				50/35				50/35				65/42			
EN 60947-2	AC 230V		—				—				—				100/60			
Dimensions (mm) 	a	90		120		105		140		105		140		140				
	b	155				165				165				260				
	c	86				86				86				103				
	d	104				104				104				130				
	aa	30				35				35				45				
	bb	132				126				126				214				
	Weight (kg)	1.4		1.7		1.8		2.3		1.8		2.3		5.6				

Features

Automatic tripping device			Fixed-thermal and fixed-magnetic			Fixed-thermal and adjustable-magnetic
Trip button			●	●	●	●
ON / OFF Indicator			—	—	—	●
Accessories (option)						
Internally mounted	Shunt trip	SHT	●⑥	●⑥	●	●
	Under voltage trip	UVT	—	—	—	—
	Auxiliary switch	AUX	●⑥	●⑥	●	●
	Alarm switch	ALT	●⑥	●⑥	●	●
	Alarm + Auxiliary switch	AUX+ALT	●⑥	●⑥	●	●
Externally mounted	Electrical operation mechanics	CD	●④	●④	—	—
	External operating handle	FH	●	●	●	●
		FL	—	—	—	—
		FG	●⑤	●⑤	●⑤	—
		TFJ	—	—	—	●④
	Extension handle	EHA	—	—	—	—
	Attached flat bar	TBB	—	—	●②	●②
	Interpole barrier	TQQ	●①	●①	●①	●①
	Terminal cover	XPR	—	—	—	—

te : ● : 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

TCB Series

- High Performance Type



Frame size (AF)	125	250	400	630	800
Type	TCB 125H1/H3	TCB 250H1/H3	TCB 400H1/H3	TCB 630H1/H3	TCB800H1/H3
Number of poles	3	3	3	3	3
Rated current(A) at ambient temperature 40°C	15, 20, 25, 30, 40, 50, 63, 75, 80, 100, 125	125, 150, 160, 175, 180, 200, 225, 250	250, 300 350, 400	500, 600	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		257		275	
	c	83		83		97.5		97.5		97.5	
	d	113		116		153		154		154	
	aa	30		35		43.5		70		70	
	bb	132		136		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											
At Automatic tripping device	Fixed-thermal and fixed-magnetic										
Tri Trip button		●		●		●		●		●	
On OFF Indicator		—		—		—		—		—	

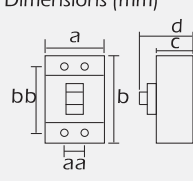
Accessories (option)

Internally mounted	Shunt trip	SI	● (Right)	● (Right)	● (Right)	● (Right)	● (Right)
	Under voltage trip	UV	● (Right)	● (Right)	● (Right)	● (Right)	● (Right)
	Auxiliary switch	AI	● (Left) ● (Right)	● (Left)	● (Left) ● (Right)	● (Left) ● (Right)	● (Left) ● (Right)
	Alarm switch	A	● (Left) ● (Right)	● (Left)	● (Left)	● (Left)	● (Left)
	Alarm + Auxiliary switch	AUX+AI	● (Left) ● (Right)	● (Left)	● (Left)	● (Left)	● (Left)
Externally mounted	Electrical operation mechanics				●		
	Extension handle	EHA	● ①		●	●	●
	External operating bar	TBB	—	●	● (H1)/ ● (H3) ①		● ①
	Interlocking barrier	TQQ			● 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. ⑤ : IP rating meets IP 42.
 ⑥ : Special on request

TE Series electronic Type



Frame size (AF)		600	800	1000	1200	1600
Type		TE—600	TE—800	TE—1000	TE—1200	TE—1600
Number of poles		3	3	3	3	3
Rated current(A) at ambient temperature 40℃		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	
		b	275		370	
		c	103		140	
		d	145		191	
		aa	70		70	
		bb	243		338	
Weight (kg)		10.70	11.20	24	24	27

Features

Automatic tripping device	Electronic
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	●	●	●	●	●
	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	TQQ	●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

RCBOs TLB Series

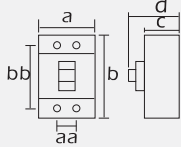


Frame size (AF)		100		100	125	125			
Type		TLB—100L1		TLB—100E	TLB—125E	TLB—125S			
Number of poles		3	4	3	3	3	4		
Rated current(A) at ambient temperature 40℃		15 20 30 40 50 60 75 100		15 20 30 40 50 60 75 100	15 20 30 40 50 60 75 100 125	15 20 30 40 50 60 75 100 125			
Phases and wires		1 φ 2W 1 φ 3W 3 φ 3W	3 φ 4W	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	3 φ 4W		
Rated insulation voltage (V)		110~440		110~440	220-440	220-440			
Rated sensitivity current (mA) () : rated non-tripping current (mA)	Standard goods	30(15)		30(15)	30(15)	30(15)			
	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.)		≤ 0.1							
Earth leakage indication		Indicator							
Rated breaking capacity (kA)									
IEC 60947-2	AC 440V	7.5／3.8		7.5／3.8	15／7.5	25／13			
EN 60947-2	AC 415V	7.5／3.8		10／5	22／11	30／15			
CNS 14816-2	AC 380V	7.5／3.8		10／5	22／11	30／15			
Icu/Ics	AC 220V	10／5		15／7.5	30／15	50／25			
CNS 5422 JIS C8371	AC 440V 480V	7.5		7.5	15	25			
	AC 380V	7.5		10	22	30			
	AC 220V 240V	7.5		15	30	50			
Icu	AC 100V 110V	10		15	—	—			
Dimensions (mm)		a	75	100	90	90	90	120	
		b	130	130	155	155	155		
		C (height)	60	60	68	68	86		
		d	80	80	86	86	106		
		aa	25	25	30	30	30		
		bb	111	111	132	132	132		
Weight (kg)		0.7	0.9	1.2	1.3	1.55	2		
Features									
Automatic tripping device		Hydraulic-magnetic		Fixed-thermal and fixed-magnetic					
Earth leakage tripping device		Electronic		Electronic					
Trip button		●		●					
Connections		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	—	—	—	—			
	Attached flat bar	TBB	—	—	—	—			
	Interpole barrier	TQQ	●①	●①	●①	●①			
Terminal cover	XPR	●	●	●	●	—			

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

RCBOs TLB Series



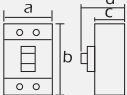
Frame size (AF)		250		250		400			
Type		TLB—250E		TLB—250S		TLB—400S			
Number of poles		3*		3*	4*	3*			
Rated current(A) at ambient temperature 40℃		125 200	150 225	175 250	125 200	150 225	175 250	250 300 350 400	
Phases and wires		1 φ 2W 1 φ 3W 3 φ 3W		1 φ 2W 1 φ 3W 3 φ 3W	3 φ 4W		1 φ 2W 1 φ 3W 3 φ 3W		
Rated insulation voltage (V)		220-440		220-440		220	380-440		
Rated sensitivity current (mA) () : rated non-tripping current (mA)	Standard goods	30(15)		30(15)		100(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		—			
Max. operation time (sec.)		≦ 0.1							
Earth leakage indication		Indicator							
Rated breaking capacity (kA)									
IEC 60947-2	AC 440V	15/7.5		25/13		25/13			
EN 60947-2	AC 415V	22/11		30/15		30/15			
CNS 14816-2	AC 380V	22/11		30/15		30/15			
Icu/Ics	AC 220V	30/15		50/25		50/25			
CNS 5422 JIS C8371	AC 440V 480V	15		25		25			
	AC 380V	22		30		30			
	AC 220V 240V	30		50		50			
Icu	AC 100V 110V	10		1		—			
Dimensions (mm)									
		a	105		105	140	140		
		b	165		165		275		
		C (height)	68		86		97		
		d	89		108		155		
		aa	35		35		44		
		bb	126		126		194		
Weight (kg)		1.4		1.8	2.7	5.4			
Features									
Automatic tripping device		Fixed-thermal and fixed-magnetic							
Earth leakage tripping device		Electronic							
Trip button		●							
Connections		Terminal screw				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	—	—	—				
	Interpole barrier	TQQ	●①	●①	●①				
Terminal cover	XPR	●	●	●					

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

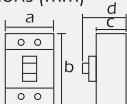
TJ Series MCB



		MCB 6kA				MCB 10kA			
Frame size (AF)		63							
Type		TJ-636S				TJ-6310S			
Characteristic		"C" Curve				"C" Curve			
Number of poles		1	2	3	4	1	2	3	4
Ambient temperature		40℃							
Rated voltage (V) AC		240	415	415	415	240	415	415	415
Rated breaking capacity (kA)									
IEC 60898 Icu	AC 415V	6	6	6	6	10	10	10	10
	AC 240V	6	6	6	6	10	10	10	10
Rated Current(A)									
		6A, 10A, 16A, 20A, 25A, 32A, 40A, 50A, 63A, 80A, 100A							

Dimensions (mm)		a	18	36	54	72	18	36	54	72
	b	82								
	c	50								
	d	75								
Weight (kg)		0.1	0.2	0.3	0.4	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								

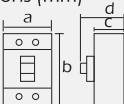
SB Series Safety Switch

		SB
Frame size (AF)		30
Type		TSS
Characteristic		
Number of poles		2
Ambient temperature		40°C
Rated voltage (V) AC		240
Rated breaking capacity (kA)		
IEC 60898 Icu	AC 415V	
	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



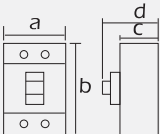
RC Series RCCB



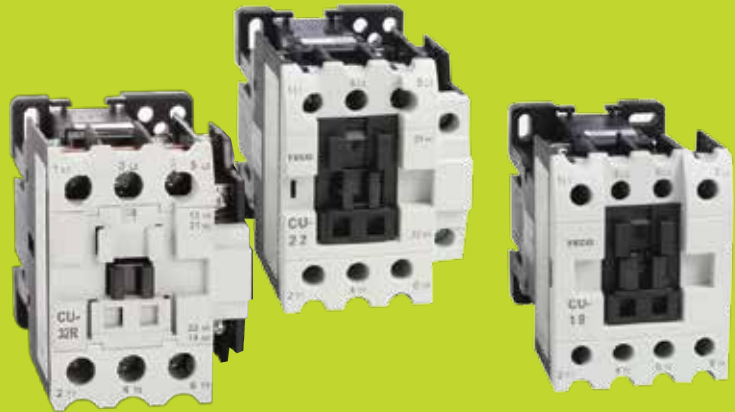
	RCCB			
Frame size (AF)	63			
Type	RC-362		RC-364	
Characteristic	C、D curve			
Number of poles	2	2	4	4
Ambient temperature	40℃			
Rated voltage (V) AC	240	240	415	415
Rated Current(A)				
		25A, 32A, 40A, 63A		
Dimensions (mm) 	a	36		72
	b	82		
	c	50		
	d	75		
	Weight (kg)		0.2	0.2

ELCB – TLB TLZ Series



Frame size (AF)	30		50		50		50	
Type	TLZ-30F		TLZ-50B		TLZ-50EC		TLZ-50EB	
Number of poles	2		2		2	3	1P2E	2P2E
Rated current(A) at ambient temperature 40℃	5 20	10 30	15 30	30	50	5 20 50	10 30 40	15 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)	
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

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
- Environmentally 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
						
Miniature Contactors						
CN-5		•		•	•	•
CN-5K		•		•		•
CN-6		•		•	•	•
CN-6K		•		•		•
CNL-5		•		•	•	•
CNL-5K		•		•		•
CNL-6		•		•	•	•
CNL-6K		•		•		•
U Series IEC Contactors						
CU-9		•		•	•	•
CU-11		•		•	•	•
CU-12				•		•
CU-16		•		•	•	•
CU-17				•		•
CU-18		•		•	•	•
CU-18/4P		•		•	•	•
CU-22		•		•	•	•
CU-22/4P		•		•	•	•
CU-27		•		•		•
CU-32R				•		•
CU-38		•		•		•
CU-40		•		•	•	•
CU-50		•		•	•	•
CU-65		•		•	•	•
CU-80		•		•	•	•
CU-90				•		•
CUL-9		•		•	•	•
CUL-11		•		•	•	•
CUL-12				•		•
CUL-16		•		•	•	•
CUL-17				•		•
CUL-18		•		•	•	•
CUL-18/4P		•		•	•	•
CUL-22		•		•		•
CUL-22/4P		•		•		•
CUL-27		•		•		•
CUL-32R				•		•
CUL-38		•		•		•
CUL-40		•		•	•	•
CUL-50		•		•	•	•
CUL-65		•		•	•	•
CUL-80		•		•	•	•
CUL-90				•		•
CL-10F	•					
N Series IEC Contactors						
CN-100R		•		•		
CN-125R		•		•		
CN-150		•		•		•
CN-180		•		•		•
CN-220		•		•		•
CN-300		•		•		•
CN-400(K)						•
CN-500(K)						•
CN-630(K)						•
CNL-100R		•		•		
CNL-125R		•		•		
CNL-150		•		•		
CNL-180		•		•		•
CNL-220		•		•		•

Certificates

Catalogue number	Canada		Canada & U.S.A.		Germany	EC Declaration of conformity
						
RHU / RHN Series Bimetallic Overload Relays						
RHU-5		•		•		•
RHU-10		•		•		•
RHU-80		•		•		•
RHN-180		•		•		•
D.O.L. Magnetic Starters						
HUE-9/11/16					•	•
HUEB-9/11/16					•	•
HUF-9/11/16/18					•	•
HUFB-9/11/16/18					•	•
Definite Purpose Contactors						
DPA-1 Pole		•	•			•
DPA-1.5 Pole		•	•			•
DPA-2 Pole		•	•			•
DPA-3 Pole		•	•			•
Electronic Overload Relays						
EOL-40/		•		•	•	•
EOL-80/		•		•	•	•
EOL-200/		•		•	•	•
Accessories						
CUA-2		•		•		•
CUA-4		•		•		•
CNA-2M		•		•	•	•
CNA-4M		•		•	•	•
CNA-110		•		•	•	•
CNA-111B(C)		•		•	•	•
CNA-111SR		•		•	•	•
RAU-4		•		•		•
RAM-4		•		•		•
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-12			CU-16			CU-17			CU-18			CU-22		
																													
			CN-5P(K)						CN-6P(K)			CUL-11			CUL-12			CUL-16			CUL-17			CUL-18			CUL-22		
																													
Reversing Type			CNL-5(K)						CNL-6(K)																				
																													
Rated Insulation Voltage (Ui) IEC V			690/600									690/600			690/600			690/600			690/600			1000/600			1000/600		
Thermal Current IEC (Ith) A			20									25			25			25			25			35			40		
Thermal Current UL (Ith) A			20									24			24			30			30			35			40		
			A	kW	Hp	A	kW	Hp	A	kW	Hp	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	1P	110V	8	0.37	0.5	10.5	0.55	0.75	10.5	0.55	0.75	10.5	0.55	0.75	13.5	0.75	1	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	10.5	1.1	1.5	14	1.5	2	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	12	3	4	16	4	5.5	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	12	5.5	7.5	16	7.5	10	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	11	5.5	7.5	15	7.5	10	15	7.5	10	21	11	15	21	11	15			
		440V	6	3	4	8	4	5.5	11	5.5	7.5	11	5.5	7.5	15	7.5	10	15	7.5	10	21	11	15	21	11	15			
		500V	5	3	4	6.5	4	5.5	9	5.5	7.5	9	5.5	7.5	13	7.5	10	13	7.5	10	19	11	15	19	11	15			
		660V	4	3	4	5	4	5.5	7	5.5	7.5	7	5.5	7.5	10	7.5	10	10	7.5	10	14	11	15	14	11	15			
690V	4	3	4	5	4	5.5	7	5.5	7.5	7	5.5	7.5	10	7.5	10	10	7.5	10	14	11	15	14	11	15					
NEMA class			00						0			0			0			0			0			1					
Contact configuration			Non-reversing: 3A1a or 3A1b Reversing: 3A1a x 2 or 3A1b x 2									Non-reversing: 3A1a1b Reversing: 3A1a1b x 2			Non-reversing: 3A1a or 3A1b Reversing: 3A1a x 2 or 3A1b x 2			Non-reversing: 3A1a1b Reversing: 3A1a1b x 2											

CN Series IEC Contactors

Non-reversing Type			CN-100R			CN-125R			CN-150			CN-180			CN-220			CN-300			CN-400(K) 註3			CN-500(K) 註3		
																										
Reversing Type			CNL-100R			CNL-125R			CNL-150			CNL-180			CNL-220			CNL-300			CNL-400(K) 註3			CNL-500(K) 註3		
																										
Rated Insulation Voltage (Ui) IEC V			1000/600			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			—			—		
			A	kW	Hp	A	kW	Hp	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	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	205
		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	350
		415V	105	60	80	138	75	100	138	80	110	182	100	136	220	125	170	300	160	220	400	220	300	460	257	350
		440V	105	60	80	135	75	100	131	80	110	182	110	150	220	132	180	300	160	220	400	220	300	430	257	350
		500V	93	65	85	105	75	100	129	90	125	156	110	150	190	132	180	250	160	220	375	257	350	410	280	380
		660V	75	65	85	85	75	100	107	100	136	118	110	150	140	132	180	220	200	270	330	300	410	355	335	450
690V	75	65	85	85	75	100	107	100	136	118	110	150	140	132	180	220	200	270	330	300	410	355	335	450		
NEMA class			3			4									5			5			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-27			CU-32			CU-32R			CU-38			CU-40			CU-50			CU-65			CU-80			CU-90					
																													
CUL-27			CUL-32			CUL-32R			CUL-38			CUL-40			CUL-50			CUL-65			CUL-80			CUL-90					
																													
1000/600			1000/600			1000/600			1000/600			1000/600			1000/600			1000/600			1000/600			1000/600					
50			60			60			60			60			70			80			100			135					
45			50			50			55			60			72			85			104			120					
A	kW	Hp	A	kW	Hp	A	kW	Hp	A	kW	Hp	A	kW	Hp	A	kW	Hp	A	kW	Hp	A	kW	Hp	A	kW	Hp			
30	1.5	2	35	1.5	2	35	1.5	2	39	2.2	3	43	2.2	3	48	3	4	50	3	4	60	4	5.5	—	—	—			
30	3	4	35	3.7	5	35	3.7	5	39	5	7	43	5.5	7.5	48	6	8	50	6	8	55	7.5	10	—	—	—			
30	7.5	10	35	9	12	35	9	12	39	11	15	44	11	15	55	15	20	65	18.5	25	75	22	30	85	25	35			
30	15	20	32	15	20	32	15	20	38	18.5	25	40	20	27	55	25	35	64	30	40	72	37	50	85	45	60			
28	15	20	32	15	20	32	15	20	38	22	30	40	22	30	52	25	35	64	33	45	72	40	54	85	45	60			
27	15	20	32	15	20	32	15	20	38	22	30	40	22	30	52	30	40	64	37	50	70	40	54	85	51	70			
26	15	20	30	18.5	25	30	18.5	25	33	22	30	35	22	30	45	30	40	55	37	50	65	45	60	80	55	75			
21	15	20	23	18.5	25	23	18.5	25	25.2	22	30	26	22	30	35	30	40	45	37	50	60	45	60	65	55	75			
20	15	20	22	18.5	25	22	18.5	25	24.2	22	30	26	22	30	35	30	40	45	37	50	60	45	60	65	55	75			
			2																		3								
Non-reversing: 3A1a1b Reversing: 3A1a1b x 2															Non-reversing: 3A2a2b 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		

Catalogue Number			CU-10/4P		CU-18/4P		CU-22/4P	
								
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			

Capacitor Contactors

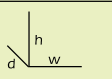
				CU-11C		CU-17C		CU-18C		CU-32C		CU-50C		CU-65C		CU-80C	
Catalogue Number																	
Rated Insulation Voltage (Ui) IEC,CNS/UL V				690/600		690/600		1000/600		1000/600		1000/600		1000/600		1000/600	
Thermal Current (Ith) IEC/UL A				25/24		25/32		35/35		60/50		70/72		80/85		100/104	
				KVAR	A	KVAR	A	KVAR	A	KVAR	A	KVAR	A	KVAR	A	KVAR	A
Rated Power Capacities (Ie) AC 6b IEC 60947-4-1 CNS 14816		Three Phase	220-240V	6.9	18	8.5	22	10	26	15	39	25	60	27	66	36	92
			400-440V	12.5	16	16.7	22	20	26	30	39	40	58	45	65	61	86
			550-600V	18	16	24	21	30	29	44	42	47	45	58	54	84	81
Contact Configuration				3A1a+1a or 3A1b+1a		3A1a1b+1a				3A2a2b+1a							
Rated Making Capacity A				X x Ie ("X" depends on capacity of capacitor)													
Rated Breaking Capacity A				1 x Ie													
Operational Frequency times/hr				300													
Mechanical Durability (million ops)				1													
Electrical Durability AC 6b (million ops)				0.2													
Weight (kg)				0.4		0.5		0.5		0.6		1.4					
Environment	Storage Temperature (°C)			-40 ~ +80													
	Operating Temperature (°C)			-20 ~ +55 (Non frozen)													
	Relative Humidity (RH)			45~85% (Non dew)													
	Operating Altitude (m)			Below 2000m													
	Operating Position (Degree)			±30°													
Control Circuit Features																	
Contact Configuration				1a+1a or 1b + 1a		1a1b + 1a				2a2b + 1a							
Rated Insulation Voltage (Ui) IEC,CNS/UL V				690/600													
Rated Operation Voltage (Ue) IEC,CNS/UL V				660/600													
Thermal Current (Ith) AC/DC A				10 / 2.5													
Contact Rating Code Designator UL				A600 Q300													
Rated Operational (Ie) Current (A) IEC 60947-5-1 UL 508		AC-15 /A600	120V	6													
			240V	3													
			380V	1.9													
			480V	1.5													
			500V	1.4													
			600V	1.2													
		DC-13 /Q600	125V	0.55													
			250V	0.27													

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	—	75	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

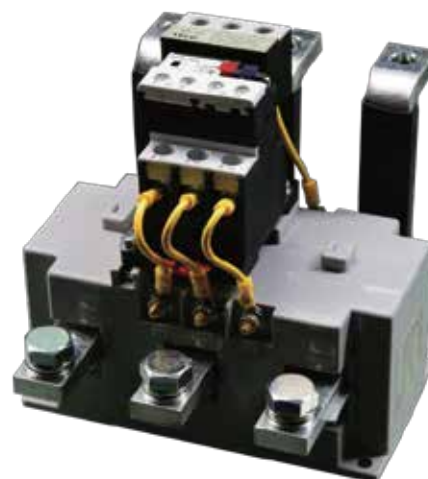
Catalogue number			RHU-5/□	RHU-10/□1	RHU-10/□2	RHU-80/□□1	RHU-80/□□2	RHU-80/□□3
Frame Size (mm)			45			56		
Rated Insulation Voltage (Ui)			UL 600V, IEC 690V					
Setting Current Range (A)			0.1~0.16	0.1~0.16	9~12.5	17~25	17~25	24.5~36
			0.16~0.25	0.16~0.25	11.3~16		24.5~36	34~47
			0.25~0.4	0.25~0.4	15~20		35~47	45~60
			0.35~0.5	0.35~0.5	17.5~21.5			58~75
			0.45~0.63	0.45~0.63	21~25			72~90
			0.55~0.8	0.55~0.8	24.5~30			
			0.75~1	0.75~1	29~36			
			0.9~1.3	0.9~1.3	33~38			
			1.1~1.6	1.1~1.6				
			1.4~2	1.4~2				
			1.8~2.5	1.8~2.5				
			2.3~3.2	2.3~3.2				
			2.9~4	2.9~4				
			3.5~4.8	3.5~4.8				
			4.5~6.3	4.5~6.3				
			5.5~7.5	5.5~7.5				
7.2~10	7.2~10							
9~12.5	9~12.5							
		11.3~16						
		15~20						
		17.5~21.5						
		21~25						
		24.5~30						
		29~36						
		33~38						
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℃ ~ +40℃					
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 ²)	AWG8 (8.4mm ²)		AWG4 (22mm ²)		AWG3 (38mm ²)

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 34~47	17~25 24.5~36 34~47 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℃ ~ +40℃					
Trip Class			10A					
Contact Capacities	AC 15	120V	6					
		240V	3					
		380V	1.9					
		480V	1.5					
		500V	1.4					
		600V	1.2					
	Ith	N.C. Contact	10					
		N.C. Contact	10					
Applicable adapter			—					
Maximum wire size in AWG			AWG4 (22mm ²)	AWG3 (38mm ²)	—			

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	Screw
	Load Side		Screw		
Reset Mode			Automatic, Manual		
Contacts Configuration			1a+1b		
Temperature Compensation Range			—5℃ ~ +40℃		
Trip Class			10A		
Contact Capacities	AC 15	120V	6		
		240V	3		
		380V	1.9		
		480V	1.5		
		500V	1.4		
		600V	1.2		
	Ith	N.C. Contact	10		
		N.C. Contact	10		
Applicable adapter			—		
Maximum wire size in AWG			—		

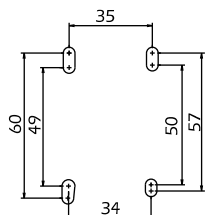
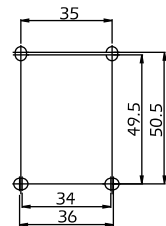


RAU-4 / RAM-4 Control Relays

Features

* 4,6,8 auxiliary contacts available
 * Easy installation by screw and DIN
 * Protective cover design

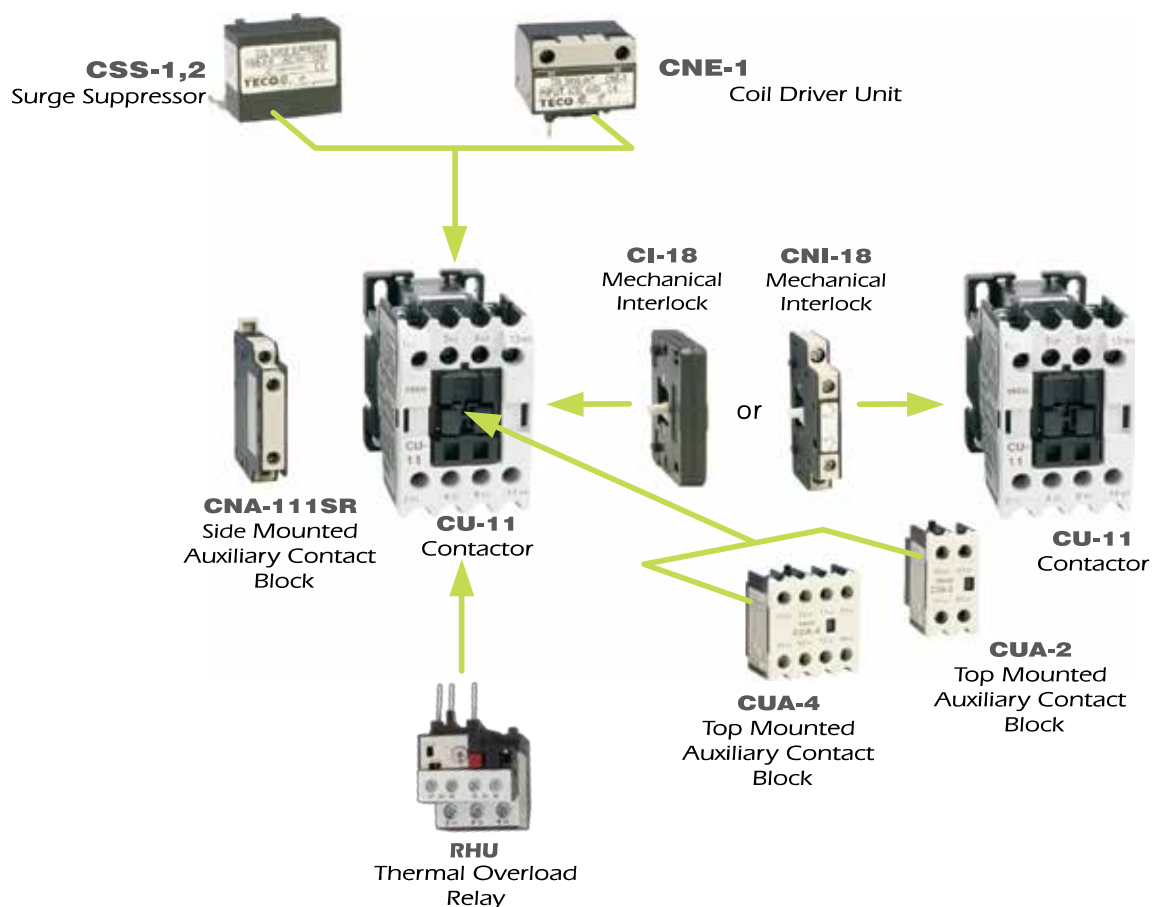
* Dual contacts design
 * Flame-retardant engineering plastics in coil set

Catalogue number			RAU-4	RAM-4	RAM-4K
					
Rated insulation voltage (Ui) IEC		V	690	690	
Rated operational voltage (Ue) IEC		V	690	690	
Thermal current AC/DC (Ith)		A	10	10	
Contact rating code designation UL			A600 Q300	A600 Q300	
Rated operational current Ie (A) IEC 60947-5-1 UL 508	AC 15 /A600	120V	6	6	
		240V	3	3	
		380V	1.9	1.9	
		480V	1.5	1.5	
		500V	1.4	1.4	
		600V	1.2	1.2	
	DC 13 /Q300	125V	0.55	0.55	
		250V	0.27	0.27	
Contact configuration			4a, 3a1b, 2a2b, 1a3b, 4b	4a, 3a1b, 2a2b	
Electrical durability (ops) AC 15			1M	1M	
Mechanical durability (ops)			5M	5M	
Weight (kg)			0.3	0.18	
 Overall Dimensions (w* h * d) mm			45*70*82	45*58*54	
Installation information					

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 designatiør 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					
		600V	1.2					
	DC 13	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.

TMS - Manual Motor Starter



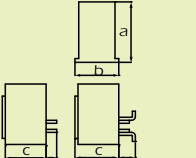
Specifications

Catalogue number		TMS-32S					
Frame size		32					
Number of poles		3					
Maximum rated current (A)		32					
Rated operational voltage (VAC)		690					
Operational frequency (Hz)		50 / 60Hz					
Rated breaking capacity (kA) IEC 60947-2 EN 60947-2 Icu/Ics	Rated operational Voltage Ue(V)	220V 240V 230V	415V 400V	460V 440V	525V 500V	690V 600V	
	Setting current range (I means max. Current Ie(A))	Icu/Ics	Icu/Ics	Icu/Ics	Icu/Ics	Icu/Ics	
	0.1-0.16 (0.16)	100/100	100/100	100/100	100/100	100/100	
	0.16-0.25 (0.25)	100/100	100/100	100/100	100/100	100/100	
	0.25-0.4 (0.4)	100/100	100/100	100/100	100/100	100/100	
	0.4-0.63 (0.63)	100/100	100/100	100/100	100/100	100/100	
	0.63-1.0 (1)	100/100	100/100	100/100	100/100	100/100	
	1.0-1.6 (1.6)	100/100	100/100	100/100	100/100	100/100	
	1.6-2.5 (2.5)	100/100	100/100	100/100	100/100	3/3	
	2.5-4.0 (4)	100/100	100/100	50/38	50/38	3/3	
	4-6 (6)	100/100	100/100	50/38	50/38	3/3	
	5-8 (8)	100/100	100/100	15/11	10/10	3/3	
	6.3-10 (10)	100/100	50/38	15/11	10/10	3/3	
	9-13 (13)	100/100	50/38	15/11	6/5	3/3	
	11-16 (16)	100/100	25/19	15/11	6/5	3/3	
	14-20 (20)	50/50	25/19	10/8	6/5	3/3	
	19-25 (25)	50/50	25/19	10/8	6/5	3/3	
	24-32 (32)	50/50	25/19	10/8	5/4	3/3	
Overall dimensions (mm)	W	45					
	H	96					
	D	93					
Weight (kg)		0.5					
Accessories	Under voltage trip UVT	●					
	Shunt trip SHT	●					
	Auxiliary+Alarm switch AUX+ALT	●					
	Alarm switch ALT	●					
	Side mounted auxiliary switch	●					
	Top mounted auxiliary switch	●					
Temperature compensation		Automatic					
Phase failure protection		●					
Protection degree		IP 20					
Mechanical endurance (Ops)		100,000					
Electrical endurance (Ops)		100,000					
Operating enviromental temperature		-20 ~ +60°C					
Storage enviromental temperature		-40 ~ +80°C					
Altitude (m)		2,000					
Rated impulse withstand voltage (kV)		6					

BAW Air Circuit Breaker

ISO 9001 CE CCC



Catalogue number			BAW-1250			BAW-1600			BAW-3200			BAW-4000		BAW-6300			
TYPE			FIX, DRAW OUT			FIX, DRAW OUT			FIX, DRAW OUT			DRAW OUT		DRAW OUT			
Number of poles			3		4	3		4	3		4	3		3		4	
Rated current A at Ambient temperature 40°C			200 800		400 1000	6a30 1250		200 800 1000 1250 1600		200 800 1000 1250 1600		400 1000 1250 2500	3200	4000		4000 5000 6300	
Maximum rated voltage (Ue) 60Hz V			AC50Hz 400V						AC 50Hz 400V, 690V								
Rated operation voltage (Ui) 60Hz V			690			1000											
Rated insulation voltage (Uimp) k V			8			12											
Rated inpulse withstand voltage In (A)			50% In			50% In			50% In - 100% In					50% In			
Rated beaking capacity (kA)																	
IEC 60947-2CNS 14816-2Icu/Ics	AC 400V		65/50			65/50			100/65			100/80		120/100			
	AC 690V								65/50			65/65		80/65			
Fully off time (no additional delay)			12 ~ 18 ms														
Closing time			Max 60m/s														
Opening and closing operation performance			7000			10000						2000					
Dimintions level 			draw out	a	362	362	357	357	438	438	438	488	488				
				b	276	346	254	324	450	450	565	828	943				
				c	323	323	300	300	516	516	466	466	466				
			fix	a	315	315	335	335	401	401	-	-	-				
				b	266	336	266	336	537	537	-	-	-				
				c	239	239	199	199	372	372	-	-	-				

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