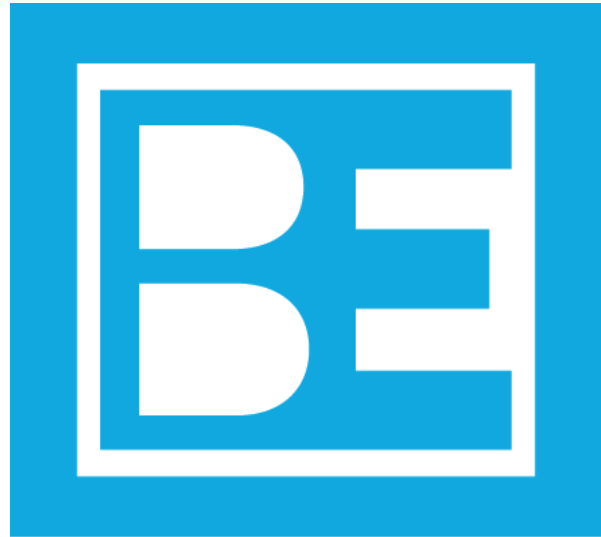




**BETA
ELECTRIC**

**POWER CONTACTOR
AND
THERMAL OVERLOAD RELAY**

power Contactor 9~95A

Standard_ IEC1-4-60947



Technical Data

Description	Remote making & breaking circuits	
	Application	Protect circuit from over-load when assembling with thermal over-load relay
		Frequent start-up and control of AC contactor
	Electric value	AC50/60Hz, 690V, up to 95A
	Utilization category	AC-3, AC-4
	Altitude	≤2000m
	Ambient temperature	-5°C~+40°C
	Mounting category	III
	Mounting conditions	Inclination between the mounting plane and the vertical plane should
Standar d		IEC/EN 60947-4-1. IEC/EN 60947-5-1.

AC Coil	Volts(VAC) / 50Hz	24	48	110	220	380									
Oper ation	Code	A	B	C	D	E									

DC Coil	Volts(VDC)	12	24	48	110	220
Oper ation	Code	J	K	L	M	N

Contactor 9~95A

Standard_ IEC1-4-60947



Technical Data

Technical
Specification

Standard	IEC/EN60947-4-1 IEC/EN60947-5-1					
Model No.		PC-9	PC-12	PC-18	PC-25	PC-32
Rated Conventional Heating Current	I _{th} (A)	20	20	32	40	50
Rated Voltage U _i (V)	U _i (V)	690	690	690	690	690
Rated Operation Current U _e =380/415V	AC-3 I _e (A)	9	12	18	25	32
	AC-4 I _e (A)	3.5	5	7.7	8.5	12
Power Controlled	220/240V KW	2.2	3	4	5.5	7.5
3ph-cage Motor	380/415V KW	4	5.5	7.5	11	15
AC-3	660/690V KW	5.5	7.5	10	15	18.5
Electrical life(x10 ³ operations)	AC-3	1000	1000	1000	1000	800
	AC-4	200	200	200	200	200
Mechanical life(x10 ⁶ operations)		10	10	10	10	8
Main circuit	3P or 4P					
Auxiliary circuit Cat.:AC-15,U _e =415V I _e =0.95A I _{th} =10A	1NO / 1NC / 1NO +1NC					

Standard	IEC/EN60947-4-1 IEC/EN60947-5-1					
Model No.		PC-40	PC-50	PC-65	PC-80	PC-95
Rated Conventional Heating Current	I _{th} (A)	60	80	80	100	125
Rated Voltage U _i (V)	U _i (V)	690	690	690	690	690
Rated Operation Current U _e =380/415V	AC -3 I _e (A)	40	50	65	80	95
	AC-4 I _e (A)	18.5	24	28	37	44
Power Controlled	220/240V KW	11	15	18.5	22	25
3ph-cage Motor	380/415V KW	18.5	22	30	37	45
AC-3	660/690V KW	30	33	37	45	45
Electrical life(x10 ³ operations)	AC-3	800	600	600	600	600
	AC-4	150	150	150	100	100
Mechanical life(x10 ⁶ operations)		8	8	8	6	6
Main circuit	3P or 4P					
Auxiliary circuit Cat.:AC-15,U _e =415V I _e =0.95A I _{th} =10A	1NO + 1NC					

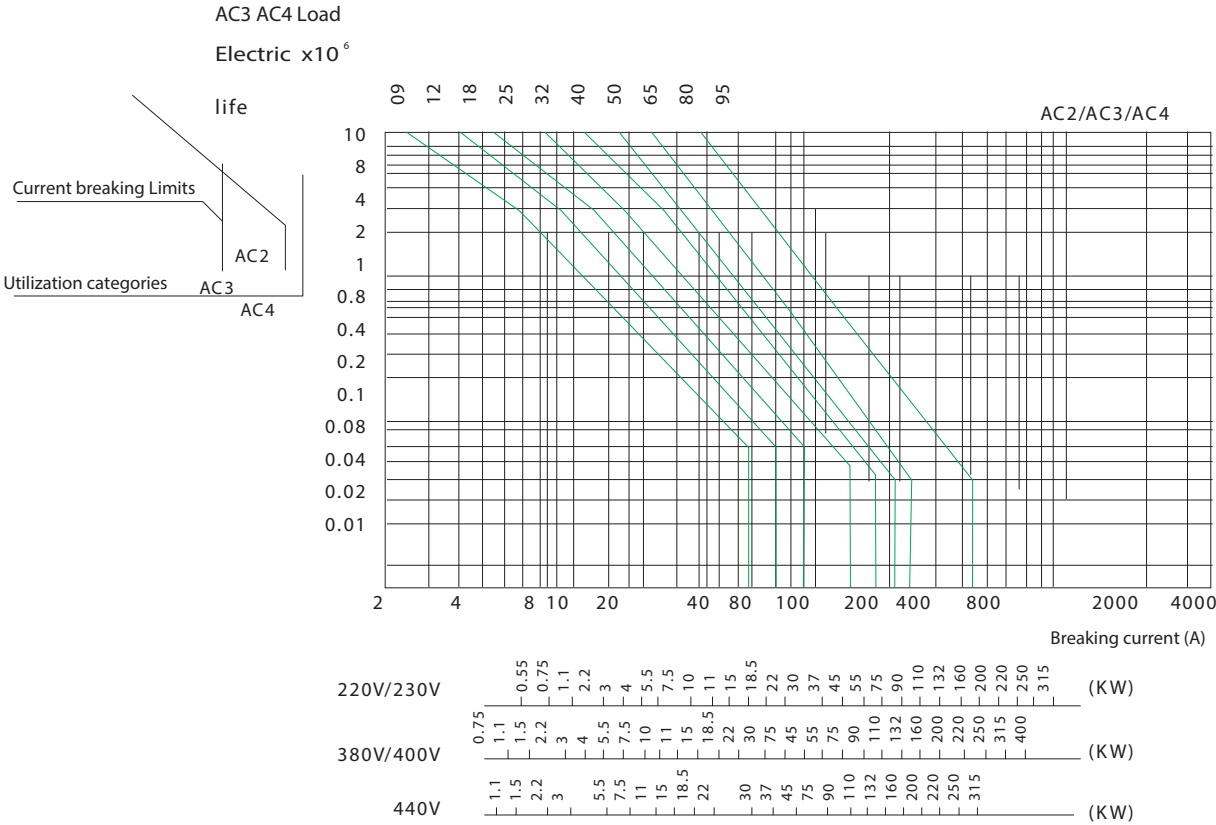
Contactor 9~95A

Standard_ IEC1-4-60947

Technical Information

Terminal Connection	Model	Cabling cross section (Cu)				Scr ew siz e	Tight ening torque(N.m)
		Number of piec e	Flexible cable with cold-pressed socket (mm²)	Flexible cable without cold-pressed socket(mm²)	Inflexible cable(mm²)		
	PC - 09	1~2	2.5	4	4	M3.5	0.8
	PC - 12	1~2	2.5	4	4	M3.5	0.8
	PC - 18	1~2	4	6	6	M3.5	0.8
	PC - 25	1	4	10	6	M4	1.2
		2	4	6	6	M4	1.2
	PC - 32	1	4	10	6	M4	1.2
		2	4	6	6	M4	1.2
	PC - 40	1	10	16	10	M4	3.5
		2	10	10	10	M8	3.5
	PC - 50	1	16	25	25	M8	3.5
		2	16	16	-	M8	3.5
	PC - 65	1	16	25	25	M8	3.5
		2	16	16	-	M8	3.5
	PC - 80	1	50	50	50	M8	3.5
		2	25	35	-	M10	4.0
	PC - 95	1	50	50	50	M10	4.0
		2	25	35	-	M10	4.0

Curve

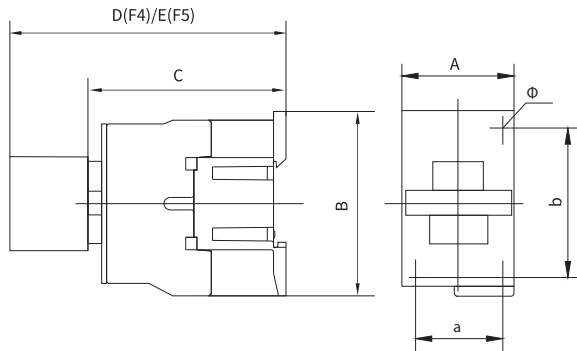


Contactor 9~95A

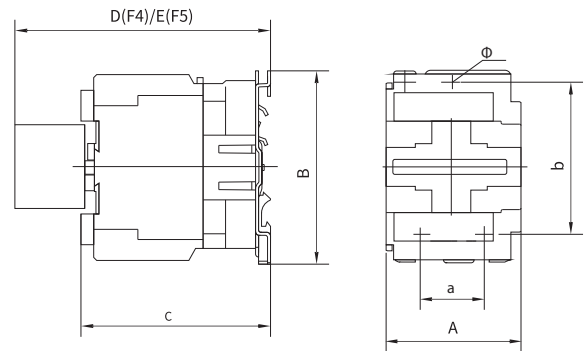
Standard_ IEC1-4-60947

Overall and Mounting Dimension (mm)
AC Coil Voltage

PC (09-32) AC

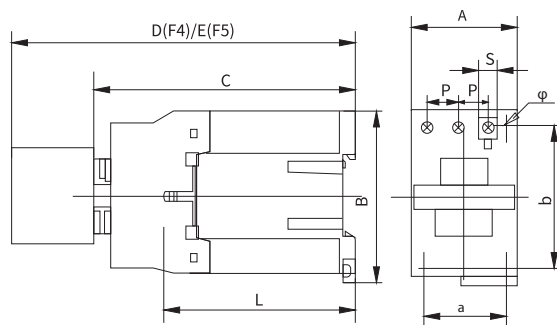


PC (40-95) AC

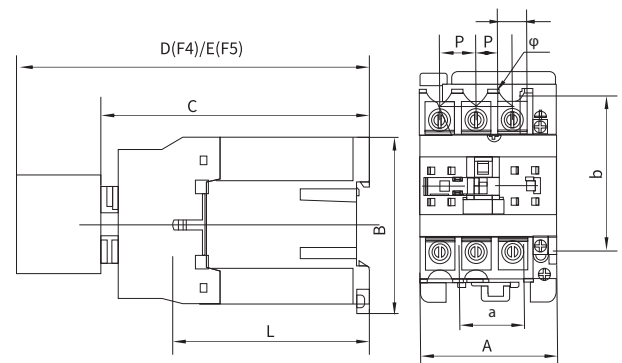


DC Coil Voltage

PC (09-32) DC



PC (40-95) DC

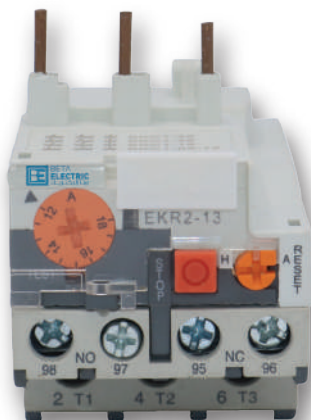


Note:

1. L: in main circuit, the distance between terminals and plate;
2. P: in main circuit, the distance between two phases;
3. S: in main circuit, the width of contacting plate.

Model	A Max	B Max	C Max	D Max	E Max	a	b	Φ	L	P	S
PC-09 (DC) ~ 12 (DC)	47	76	82(116)	125.5(160.5)	140.5(174.5)	34/35	50/60	4.5	60(95)	10.5	8.6
PC-18 (DC)	47	76	87(122)	120.5(154.5)	145.5(180.5)	34/35	50/60	4.5	61(96)	11.3	10.4
PC-25 (DC)	57	86	95(131)	133.5(169.5)	153.5(189.5)	40	48	4.5	70(107)	13.2	11.7
PC-32 (DC)	57	86	100(138)	138.5(176.5)	158.5(196.5)	40	48	4.5	71.6(120)	14.5	13
PC-40 (DC) ~ 65 (DC) (1NO+1NC)	77	129	116(173)	154.5(211.5)	174.5(231.5)	40	100/110	6.5	78(135)	20	8.6
PC-80 (DC) ~ 95 (DC) (1NO+1NC)	87	129	127(183)	165.5(226.5)	185.5(246.5)	40	100/110	6.5	83(140)	23.5	12

Standard_ IEC1-4-60947



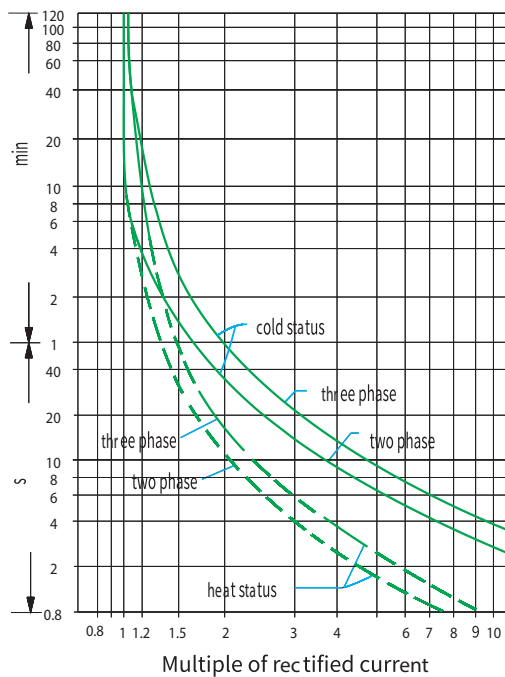
Technical Data

Description	Electric value	AC50/60Hz, 690V, 0.1A~93A
	Tripping class	10A
	Mounting version	Plug-in: Available for TH 025, 032, 095
Feature	3-phase bimetal	
	Continuously readjustable current settings	
	Temperature compensation	
	Tripping indicator	
	Test button	
	Stop button	
	Manual and automatic reset button	
	Electrically separated 1N/O plus 1N/C contact	

Technical Specification

Protection property	Item	Series No.	I/In	Operating time T_p	Test Condition
Overload protection	1		1.05	>2 h	Start from cold status
	2		1.2	$\leq 2h$	Start from heat status, right after item No.1
	3		1.5	$\leq 2min$	Start from heat status, right after item No.1
	4		7.2	$2s < T_p \leq 10s$	Start from cold status
Phase failure protection	5	Any two phases	Another phases	>2 h	Start from cold status
		1.0	0.9		
	6	1.15	0	$\leq 2 h$	Start from heat status, right after item No.5

Curve



Main Technical Data	Phase failure protection function	Yes
	Automatic & manual reset	Yes
	Temperature compensation	Yes
	Tripping indicator	Yes
	Test & stop pushbutton	Yes
Mounting mode	Plug-in	Yes
	Independent	Yes
	No. of contacts	1N/O+1N/C
Auxiliary contacts	Rated Current (A) (AC-15 220 V)	2.73
	Rated Current (A) (AC-15 380 V)	1.58
	Rated Current (A) (DC-13 220 V)	0.2

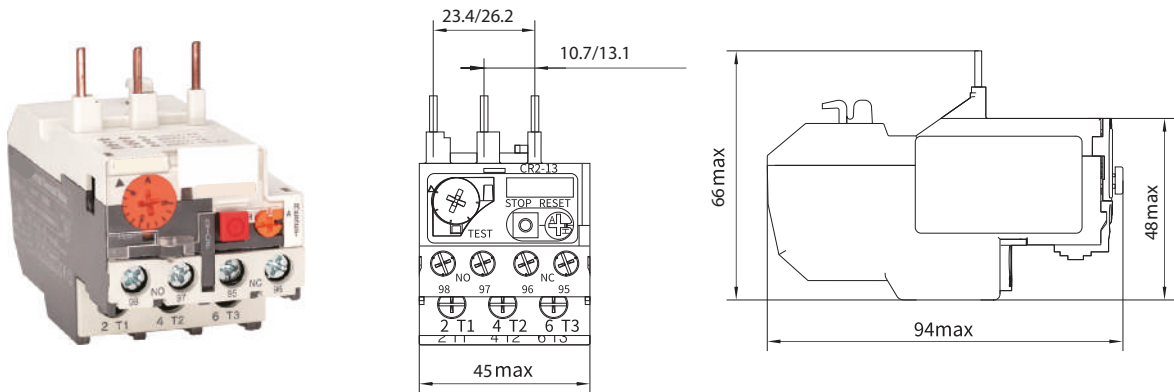
Assembly with contactor

Model of Overload relay	Code	Rated current (A)	Recommended fuse type(Recommended RT16)		Contactor Matched
			aM	gG	
TH 025	1301	0.1~0.16	0.25	2	PC 009 PC 012 PC 018 PC 025 PC 032
	1302	0.16~0.25	0.5	2	
	1303	0.25~0.4	1	2	
	1304	0.4~0.63	1	2	
	1305	0.63~1	2	4	
	1306	1~1.6	2	4	
	1307	1.6~2.5	4	6	
	1308	2.5~4	6	10	
	1310	4~6	8	16	
	1312	5.5~8	12	20	
	1314	7~10	12	20	
	1316	9~13	16	25	
	1321	12~18	20	35	
	1322	17~25	25	50	
TH 032	2353	23~32	40	63	PC 032
	2355	30~40	40	80	
TH 095	3353	23~32	40	63	PC 040 PC 050 PC 065 PC 080 PC 095
	3355	30~40	40	100	
	3357	37~50	63	100	
	3359	48~65	63	100	
	3361	55~70	80	125	
	3363	63~80	80	125	
	3365	80~93	100	160	

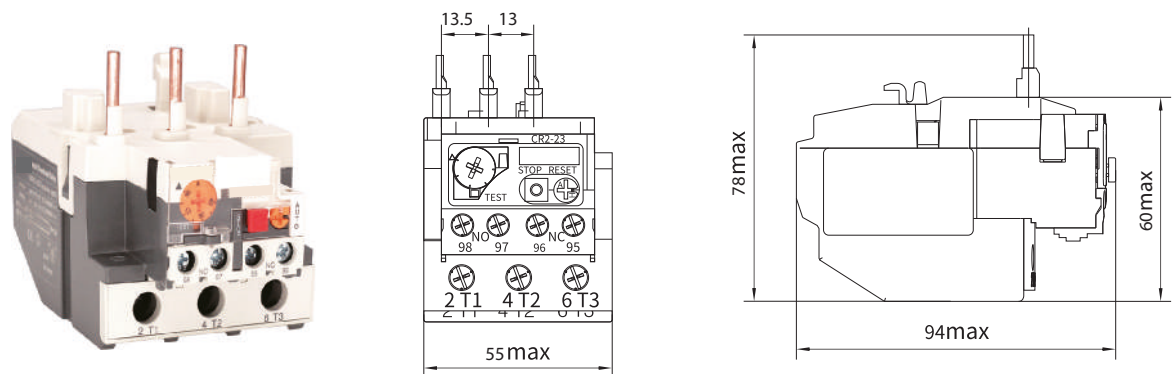
Standard_ IEC1-4-60947

Overall and Mounting Dimension (mm)

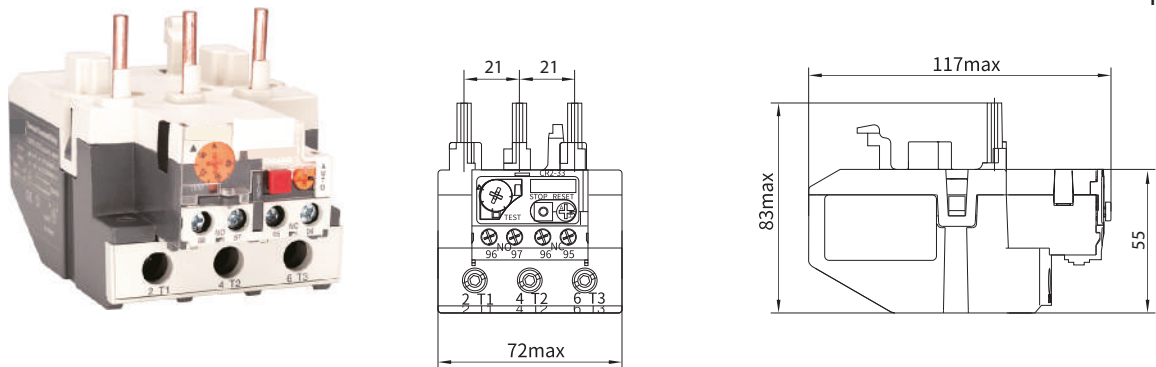
TH 025



TH 032



TH 095



Wiring

Items	TH 025	TH 032	TH 095
Cross section area of conductor mm ²	Main circuit	Single core or stranded wire	1~4
			4~10
	Auxiliary circuit	Single core or stranded wire	4~35
			0.5~2.5
			0.5~2.5
			0.5~2.5

Standard_ IEC1-4-60947

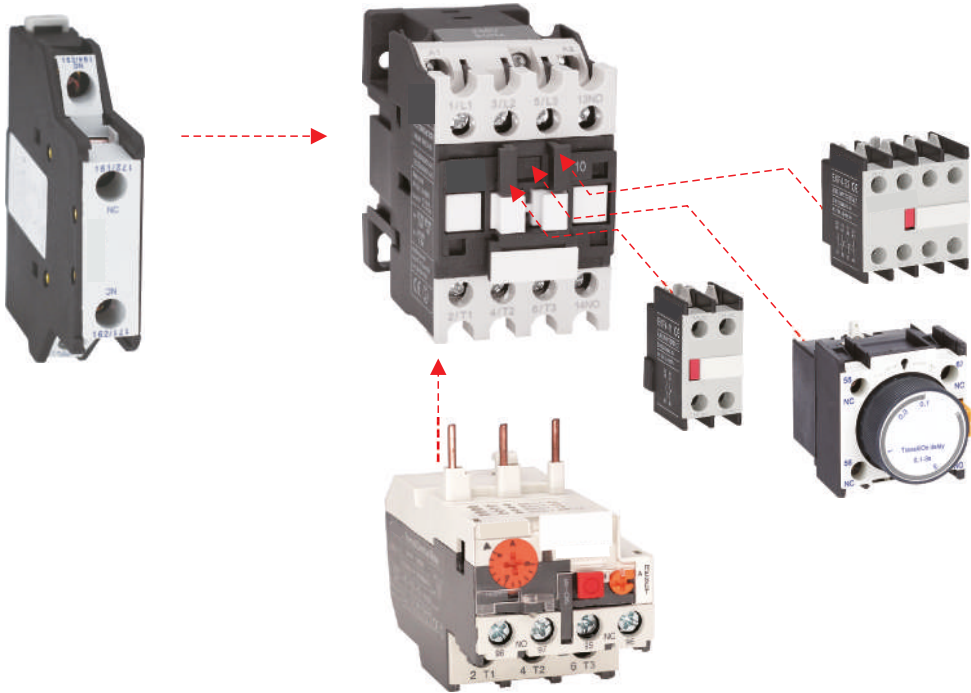
	Sepecific ation	Model	Cont act Number	Cont actor Matched
	Auxiliary Contact 4-pole Front mount	BE.PCAUX40F	4NO	PC 009 ~ 095
		BE.PCAUX31F	3NO+1NC	
		BE.PCAUX22F	2NO+2NC	
		BE.PCAUX13F	1NO+3NC	
		BE.PCAUX04F	4NC	
	Auxiliary Contact 2-pole Front mount	BE.PCAUX20F	2NO	PC 009 ~ 095
		BE.PCAUX11F	1NO+1NC	
		BE.PCAUX02F	2NC	
	Auxiliary Contact 2-pole Side mount	BE.PCAUX20S	2NO	PC 009 ~ 095
		BE.PCAUX11S	1NO+1NC	
		BE.PCAUX02S	2NC	
	INO+INC Pneumatic timer ON-delay	BE.PCT003SN	0.1~3s	PC 009 ~ 095
		BE.PCT030SN	0.1~30s	
		BE.PCT180SN	10~180s	
	INO+INC Pneumatic timer OFF-delay	BE.PCT003SF	0.1~3s	
		BE.PCT030SF	0.1~30s	
		BE.PCT180SF	10~180s	
	Contactor Coil	BE.PCCO018A	24VAC	PC 009 ~ 018
		BE.PCCO018B	48VAC	
		BE.PCCO018C	110VAC	
		BE.PCCO018D	220VAC	
		BE.PCCO018E	380VAC	
		BE.PCCO032A	24VAC	PC 025 ~ 032
		BE.PCCO032B	48VAC	
		BE.PCCO032C	110VAC	
		BE.PCCO032D	220VAC	
		BE.PCCO032E	380VAC	
		BE.PCCO095A	24VAC	PC 040~ 95
		BE.PCCO095B	48VAC	
		BE.PCCO095C	110VAC	
		BE.PCCO095D	220VAC	
		BE.PCCO095E	380VAC	

Standard_ IEC1-4-60947

	Sepecification	Model	Contactor Matched
	Accessories for Reversing/ change-over type contactor	BE.PCMI032	PC009~032
		BE.PCMI095	PC040~095

	Sepecific ation	Model	TOR Matched
	Mounting Block for Thermal Overload Relay	TH025	BE.THMB025
		TH032	BE.THMB032
		TH095	BE.THMB095

Mounting Sketch Map





**BETA
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