

# AC CONTACTOR



# RC1N(LC1-D) AC Contactor



RC1N-09



RC1N-50



RC1N-80



RC1N-150

## Application range

RC1N(LC1-D) series AC contactor is suitable for frequency 50/60Hz, rated insulation voltage up to 1000V, rated operation current 9~150A under AC-3 duty. It is mainly used for making/breaking electric circuits at a long distance & for frequent starting/stopping & controlling AC Motors. It is used in combination with thermal relay to compose a magnetic motor starter. The products comply with IEC60947-4-1 standard.

## Technical parameter

- The coil voltage of the contactor is AC 24V, 36V, 48V, 110V, 220V, 380V, DC 12V, 24V, 48V, 110V,220 V; Note: special voltage specifications can be customized with the company.
- Action characteristics: ac suction voltage: 85-110%Us. Release voltage: 20-75%Us; Direct current absorption voltage of 85-110%Us, Release voltage: 10-75%Us.

## Design feature

- The contactor is the protection type, the movement structure is the direct moving type, the contact is the double breakpoint, with small volume, light weight, low power consumption, long life,safety and reliability;
- The contactor can be composed of a mechanical reversible interlocking magnetic starter,Stardelta starter, and a variety of derived series products can be combined with the addition of auxiliary contact group and delay timer etc.

# RC1N(LC1-D) AC Contactor



## Main Technical Parameter

Table1

Type	RC1N -09	RC1N -12	RC1N -18	RC1N -25	RC1N -32	RC1N -38	RC1N -40	RC1N -50	RC1N -65	RC1N -80	RC1N -95	RC1N -115	RC1N -150	
Rated working current Ie (A) AC-3Ue≤440V	9	12	18	25	32	38	40	50	65	80	95	115	150	
Rated hear current Ith (A)	25	25	32	40	50	50	60	80	80	125	125	200	200	
Rated insulation voltage Ui (V)	690	690	690	690	690	690	1000	1000	1000	1000	1000	1000	1000	
Rated operating voltage Ue (V) Max	690	690	690	690	690	690	1000	1000	1000	1000	1000	1000	1000	
Rated operational power in AC-3 Pe (kW)	220/230V	2.2	3	4	5.5	7.5	9	11	15	18.5	22	25	30	40
	380/400V	4	5.5	7.5	11	15	18.5	18.5	22	30	37	45	55	75
	415/440V	4	5.5	9	11	15	18.5	22	25/30	37	45	45	59	80
	500V	5.5	7.5	10	15	18.5	18.5	22	30	37	55	55	75	90
	660/690V	5.5	7.5	10	15	18.5	18.5	30	33	37	45	45	80	100
Rated operational power in AC-4 Pe (kW)	220/230V	1.5	1.5	2.2	3	4	4	4	5.5	7.5	7.5	9	9	11
	380/400V	2.2	3.7	4	5.5	7.5	7.5	9	11	11	15	15	18.5	22
	415/440V	2.2	3	3.7	5.5	7.5	7.5	9/11	11	11/15	15	15	18.5	22
	500V	3	4	5.5	7.5	9	9	11	15	18.5	22	22	30	37
	660/690V	4	5.5	7.5	10	11	11	15	18.5	22	25	25	30	45
Frequency of operation (l/h)	1200	1200	1200	1200	1000	1000	1000	1000	1000	750	750	750	750	
Electrical endurance (x10 <sup>4</sup> )	AC-3	100	100	100	100	80	80	80	60	60	60	60	60	60
	AC-4	20	20	20	20	20	20	15	15	15	10	10	15	15
Mechanical endurance (x10 <sup>6</sup> )	15	15	15	15	15	15	6	6	6	4	4	4	4	
Operating voltage range of coil	Close voltage:(0.85~1.1)Us						Open voltage:(20%~75%)Us							
Power consumption of coil (VA)	Atracting	7	7	7	7	7	7	20	20	20	20	20	20	22
	Starting	70	70	70	70	70	70	200	200	200	200	200	200	300
Rated insulation voltage of auxitiary 690 contacts (V)	690	690	690	690	690	690	690	690	690	690	690	690	690	
Conventional thermal current of 10 auxitiary contacts (A)	10	10	10	10	10	10	10	10	10	10	10	10	10	
Auxitiary contacts speecification	AC-15:360VA						DC-13:33W							

# RC1N(LC1-D) AC Contactor












## Standard control circuit voltage

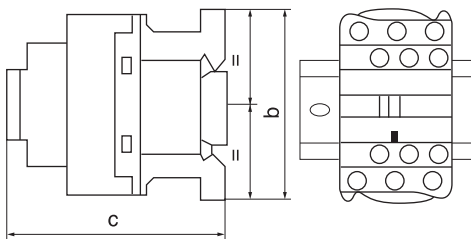
Table2

Volts	24	42	48	110	220	230	240	380	400	415	440	500	660
50Hz	B5	D5	E5	F5	E5	F5	U5	Q5	V5	N5	R5	S5	Y5
60Hz	B6	D6	E6	F6	E6	F6	U6	Q6	-	-	R6		
50/60Hz	B7	D7	E7	F7	E7	F7	U7	Q7	V7	N7	R7		

## Contactor and other auxiliary blocks

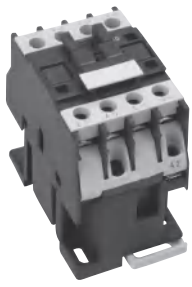
Contactor	Auxiliary Blocks	Relative Products
	+ 	→ 
	+ 	→ 
	+ 	→ 

## Outline and Mounting Dimension

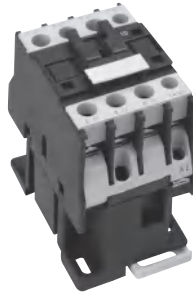


	09	12	18	25	32	38	40	50	65	80	95	115	150
b	76.6	76.6	76.6	76.6	76.6	76.6	127	27	27	27	27	158	158
c	87	87	87	94	94	94	116	116	116	123.8	123.8	132	132

# RC1-D(LC1-D) AC Contactor



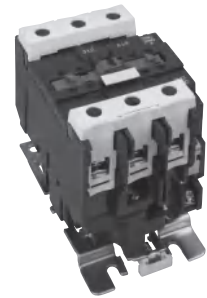
RC1-09



RC1-18



RC1-65



RC1-95

## Application range

RC1 series AC Contactor is suitable for using in the circuits up to the rated voltage 690VAC 50/60Hz, rated current up to 620A, for making, breaking, frequently starting & controlling the AC motor. Combined with the auxiliary contact block, timer delay & machine-interlocking device etc, it becomes the delay contactor, mechanical interlocking contactor, star-delta starter. With the thermal relay, it is combined into the electromagnetic starter.

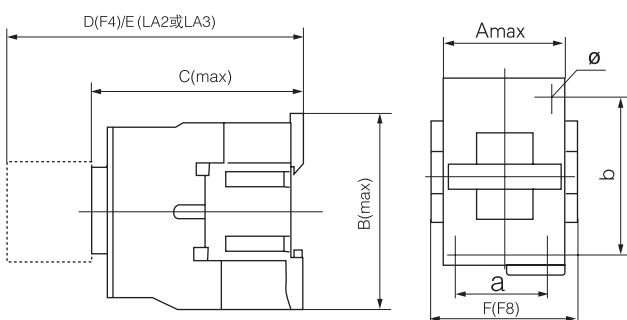
The product conforms to IEC60947-4-1 standard.

## Construction Features

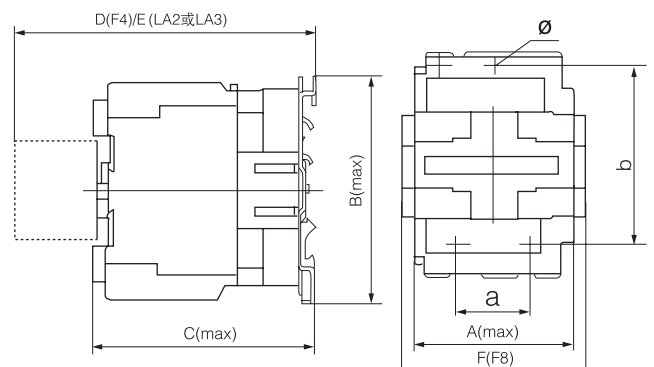
- Adopt building block system to mount auxiliary contactor block, air delay auxiliary contactor, thermal overload relay and so on, which can be combined into multiple derived series product.
- Contactor has the advantage of Small volume, light, low consumption, high life, good safety.
- Main contactor below 32A has 1 N/C or 1 N/O, there is 1 N/C and 1 N/O above 40A. Contactor can be assembled with F4F8 auxiliary contact or Time-delay block.
- Contactor can not only use screw mounting, but also use 35mm [VC1-09~95], 75mm [VC1-40~95] and 2 x 35mm [VC1-115~170] international standard Din-rail mounting.

## Outline and Mounting Dimension

RC1-09~32



RC1-40~95



# RC1-D(LC1-D) AC Contactor



RC1-115



RC1-205

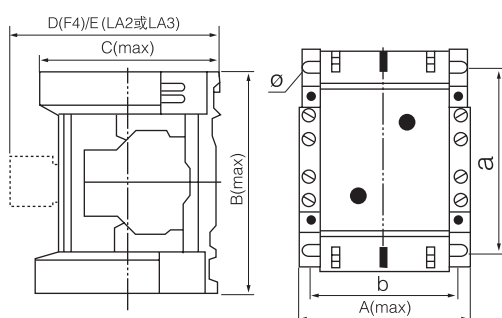


RC1-300

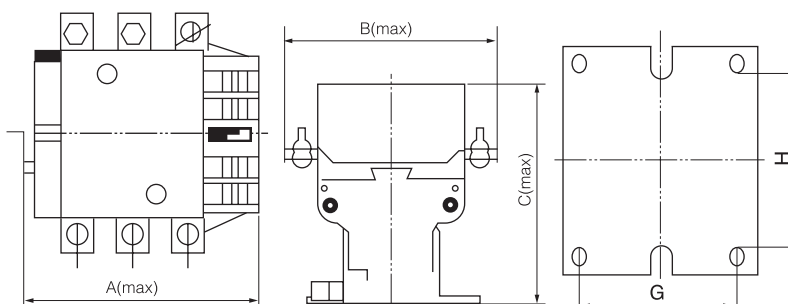


RC1-620

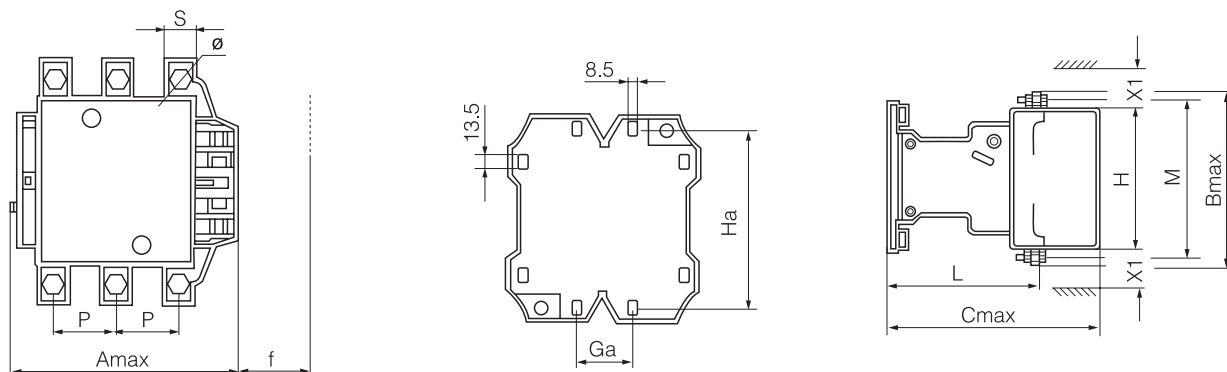
RC1-115-170



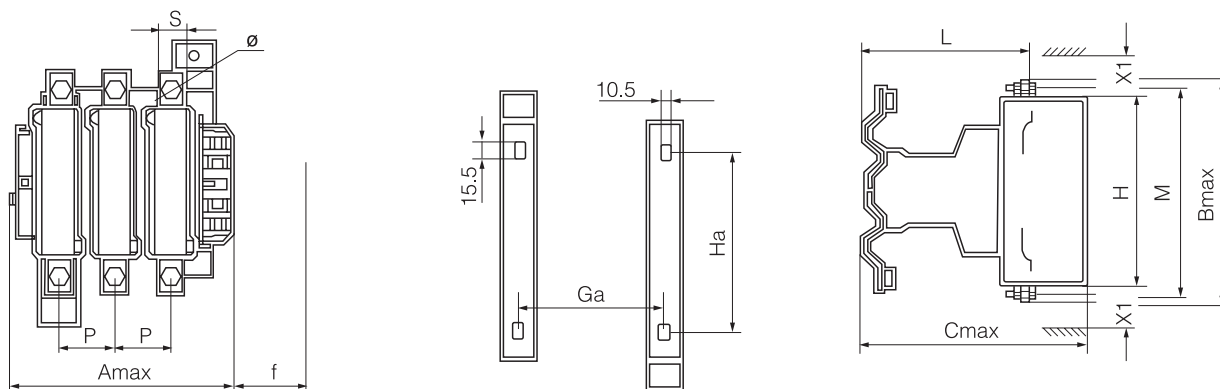
RC1-205-300



RC1-410-475



RC1-620



# RC1-D(LC1-D) AC Contactor



## Main Technical Parameter

Main parameter and technical characteristic (Table2, Table3)

Table 1(Unit:mm)

Type	Amax	Bmax	Cmax	Dmax	Emax	Fmax	a	b	ø
RC1-09~12	47	76	82	115	135	73	35	50/60	4.5
RC1-18	47	76	87	120	140	73	35	50/60	4.5
RC1-25	57	86	95	128	149	83	40	50/60	4.5
RC1-32	57	86	100	133	154	83	40	50/60	4.5
RC1-4011~6511	77	129	116	147	167	103	40	100/110	6.5
RC1-40004~65004	85	129	115	150	168	113	40	100/110	6.5
RC1-40008~65008	85	129	126	150	168	111	40	100/110	6.5
RC1-8011~9511	87	129	127	155	175	113	40	100/110	6.5
RC1-80004~95004	97	129	123	155	175	123	40	100/110	6.5
RC1-80008~95008	97	129	134	155	175	123	40	100/110	6.5
RC1-115~170	120	162	133	155	173	-	130	95/110	6.5

Table 3(Unit:mm)

Type	Amax	Bmax	Cmax	P	S	Ø	f	M	H	L	X1≤ 500V	X1> 500V	Ga	Ha
RC1-205	170	175	183	40	20	M8	131	154	127	113.5	10	15	80	106/119
RC1-245	170	175	183	48	25	M10	131	172	127	113.5	10	15	80	106/119
RC1-300	218	210	223	48	25	M10	147	181	158	145	10	15	96	106/119
RC1-410	215	210	223	48	25	M10	147	181	158	145	15	20	80	170/180
RC1-475	235	240	235	55	30	M10	150	208	172	146	15	20	80	170/180
RC1-620	310	304	257	80	40	M12	181	264	202	155	20	30	180	180/190

Note: a. f: min.distance needed to mound and dismount the coil

b. X1:Confirm flashover distance according to working volt and breaking capacity

# RC1-D(LC1-D) AC Contactor



## Main Technical Parameter

Main parameter and technical characteristic (Table1, Table2)

Table1

Parameter Item	Type	RC1-09	RC1-12	RC11-18	RC1-25	RC1-32	RC1-40	RC1-50	RC1-65	RC1-80	RC1-95	
		Rated working current (A)	380V	AC-3	9	12	18	25	32	40	50	65
AC-4	3.5			5	7.7	8.5	12	18.5	24	28	37	44
660V	AC-3		7	9	12	18	21	34	39	42	49	49
	AC-4		1.5	2	3.8	4.4	7.5	9	12	14	17.3	21.3
Rated heat current (A)		20	20	32	40	50	60	80	80	110	110	
Rated voltage (A)		690	690	690	690	690	690	690	690	690	690	
Standard power ratings of 3-phase motors 50/60Hz inn category AC-3 (kW)	220V	2.2	3	4	5.5	7.5	11	15	18.5	22	25	
	380V	4	5.5	7.5	11	15	18.5	22	30	37	45	
	660V	5.5	7.5	10	15	18.5	30	33	37	45	55	
Operating frequency (sub/h)	Electrical life	AC-3	1200	1200	1200	1200	600	600	600	600	600	600
		AC-4	300	300	300	150	150	150	150	150	150	150
	Mechanical life	3600	3600	3600	3600	3600	3600	3600	3600	3600	2400	2400
Electrical life ( $\times 10^4$ )	AC-3	100	100	100	100	80	80	60	60	60	60	
	AC-4	20	20	20	20	20	15	15	15	10	10	
Mechanical life( $\times 10^4$ )		1000	1000	1000	1000	800	800	800	800	600	600	
Matching fusing model		RT16-16	RT16-20	RT16-25	RT16-32	RT16-50	RT16-63	RT16-63	RT16-80	RT16-100	RT16-125	
Average power consumption (VA) (20°C)	50Hz	Pick-up	76	76	76	110	110	230	230	230	230	230
		Holding	9.4	9.4	9.4	11	11	32	32	32	32	32
Per weight(Kg)	3P+NO/NC	0.33	0.33	0.35	0.52	0.55	1.22	1.22	1.22	1.42	1.42	
	4P(4NO	0.33	0.33	-	0.52	-	1.32	1.32	1.32	1.59	1.59	
	4P(2NO 2NC)	0.33	0.33	-	0.52	-	1.37	1.37	1.37	1.65	1.65	



# RC1-D(LC1-D) AC Contactor



## Main Technical Parameter

Table2

Parameter Item	Type	RC1-115	RC1-150	RC11-170	RC1-205	RC1-245	RC1-300	RC1-410	RC1-475	RC1-620	
Rated working current (A)	380V	AC-3	115	150	170	205	245	300	410	475	620
		AC-4	50	65	70	80	100	124	150	185	225
	660V	AC-3	86	107	118	130	170	225	235	290	360
		AC-4	25	32	35	40	47	60	72	85	100
Rated heat current (A)		200	200	200	275	275	380	450	580	800	
Rated voltage (A)		1000	1000	1000	1000	1000	1000	1000	1000	1000	
Standard power ratings of 3-phase motors 50/60Hz inn category AC-3 (kW)	380V	55	75	85	90	110	160	200	250	335	
	660V	80	90	100	110	129	220	280	330	450	
Operating frequency (sub/h)	Electrical life	AC-3	600	300	300	600	600	600	300	300	300
		AC-4	300	300	300	150	150	150	150	150	150
	Mechanical life( $\times 10^4$ )	2400	2400	2400	2400	2400	2400	2400	1200	1200	1200
Electrical life ( $\times 10^4$ )	AC-3	40	40	40	50	50	50	30	30	20	
	AC-4	2	2	2	10	10	10	8	8	5	
Mechanical life( $\times 10^4$ )		300	300	300	300	300	300	100	100	100	
Matching fusing model		RT16-160	RT16-200	RT16-250	RT16-315	RT16-315	RT16-400	RT16-500	RT16-630	RT16-630	
Average power consumption (VA) (20°C)	50Hz	Pick-up	300	300	300	800	800	1200	1200	1250	1650
		Holding	22	22	22	55	55	13	20	24	22
Per weight(Kg)		2.08	2.08	2.08	4.6	4.7	8.5	8.5	10.8	17.4	

# RC1-F(LC1-F) AC Contactor



RC1-F115



RC1-F150

## Application range

RC1-F AC contactor is suitable for using in the circuits up to the rated voltage 380V AC 50/60Hz, current 800A, for long distance breaking circuit and frequently starting or controlling the motor. It also can be used for the control of distribution circuits of rated current from 115A to 800A.

It conforms to IEC60947-4-1.

## Main Technical Parameter

Type	Rated operational current in AC-3(A)	Max power ratings of 3-phase motors in category AC-3(kW)							Operating frequency (time/hour) AC-3	Electrical life AC-3 x10 <sup>4</sup>	Mechanical life x10 <sup>4</sup>
		220V 230V	380V 400V	415V	440V	500V	660V 690V	1000V			
RC1-F115	115	30	55	59	59	75	80	65	1200	120	1000
RC1-F1154	115	30	55	59	59	75	80	65	1200	120	1000
RC1-F150	150	40	75	80	80	90	100	65	1200	120	1000
RC1-F1504	150	40	75	80	80	90	100	65	1200	120	1000
RC1-F185	185	55	90	100	100	110	110	100	600	100	600
RC1-F1854	185	55	90	100	100	110	110	100	600	100	600
RC1-F225	225	63	110	110	110	130	129	100	600	100	600
RC1-F2254	225	63	110	110	110	130	129	100	600	100	600
RC1-F265	265	75	132	140	140	160	160	147	600	80	600
RC1-F2654	265	75	132	140	140	160	160	147	600	80	600
RC1-F330	330	100	160	180	200	200	220	160	600	80	600
RC1-F3304	330	100	160	180	200	200	220	160	600	80	600
RC1-F400	400	110	200	220	250	257	280	185	600	80	600
RC1-F4004	400	110	200	220	250	257	280	185	600	80	600
RC1-F500	500	147	250	280	295	355	335	335	600	80	600
RC1-F5004	500	147	250	280	295	355	335	335	600	80	600
RC1-F630	630	200	335	375	400	400	450	450	600	80	600
RC1-F6304	630	200	335	375	400	400	450	450	600	80	600
RC1-F780	780	220	400	425	425	450	475	40	600	80	600
RC1-F7804	780	220	400	425	425	450	475	450	600	80	600
RC1-F800	800	250	450	450	450	450	470	450	600	80	600

# RC1-F(LC1-F) AC Contactor

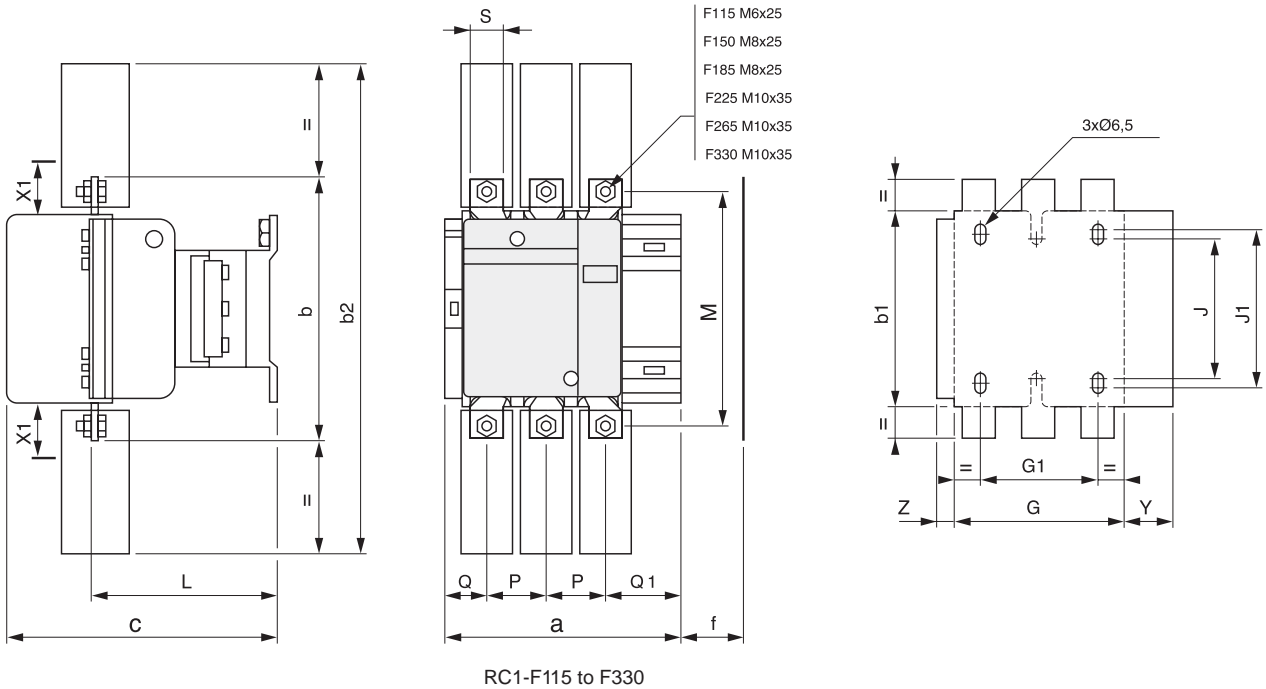


RC1-F630



RC1-F780

## Outline and Mounting Dimension



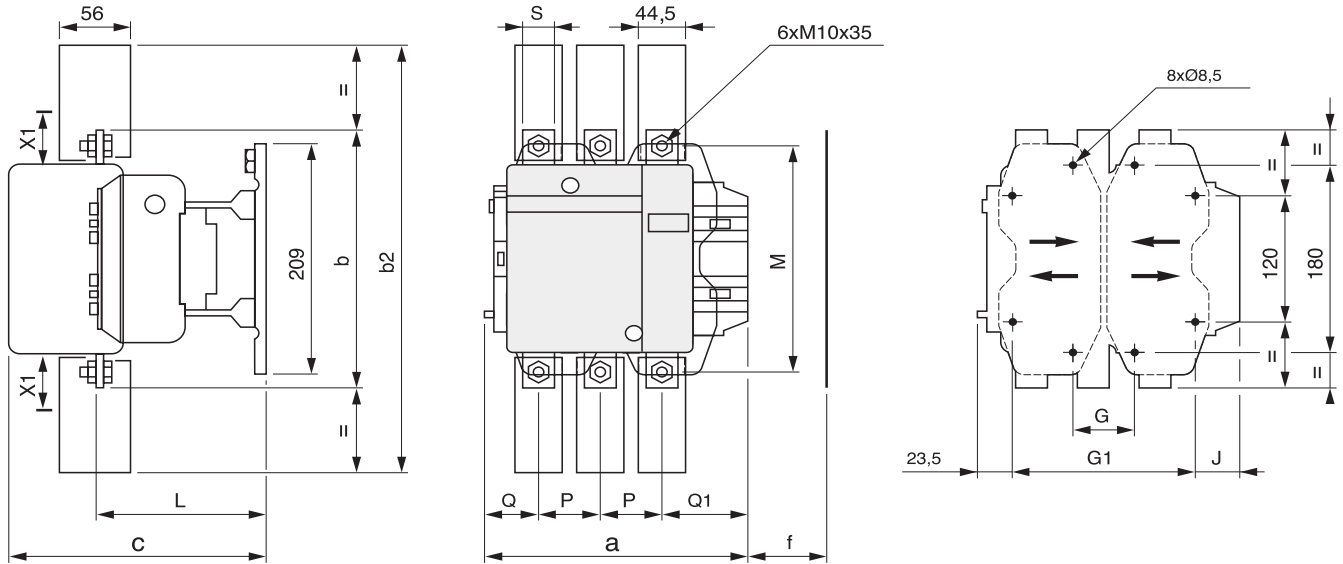
RC1-		a	b	b1	b2	c	f	G	G1	J	J1	L	M	P	Q	Q1	S	1	Y	Z
F115	3P	163.5	162	137	265	171	131	106	80	106	120	107	147	37	29.5	60	20	26	44	13.5
	4P	200.5	162	137	265	171	131	143	80	106	120	107	147	37	29.5	60	20	26	44	13.5
F150	3P	163.5	170	137	301	171	131	106	80	106	120	107	150	40	26	57.5	20	34	44	13.5
	4P	200.5	170	137	301	171	131	143	80	106	120	107	150	40	26	57.5	20	34	44	13.5
F185	3P	168.5	174	137	305	181	130	111	80	106	120	113.5	154	40	29	59.5	20	34	44	13.5
	4P	200.5	174	137	305	181	130	151	80	106	120	113.5	154	40	29	59.5	20	34	44	13.5
F225	3P	168.5	197	137	364	181	130	111	80	106	120	113.5	172	48	21	51.5	25	44.5	44	13.5
	4P	208.5	197	137	364	181	130	151	80	106	120	113.5	172	48	17	47.5	25	44.5	44	13.5
F265	3P	201.5	203	145	375	213	147	142	96	106	120	141	178	48	39	66.5	25	44.5	38	21.5
	4P	244.5	203	145	375	213	147	190	96	106	120	141	178	48	34	66.5	25	44.5	38	21.5
F330	3P	213	206	145	375	213	147	154.5	96	106	120	145	181	48	43	74	25	44.5	38	20.5
	4P	261	206	145	375	213	147	202.5	96	106	120	145	181	48	43	74	25	44.5	38	20.5

f= minimum distance required for coil removal

# RC1-F(LC1-F) AC Contactor

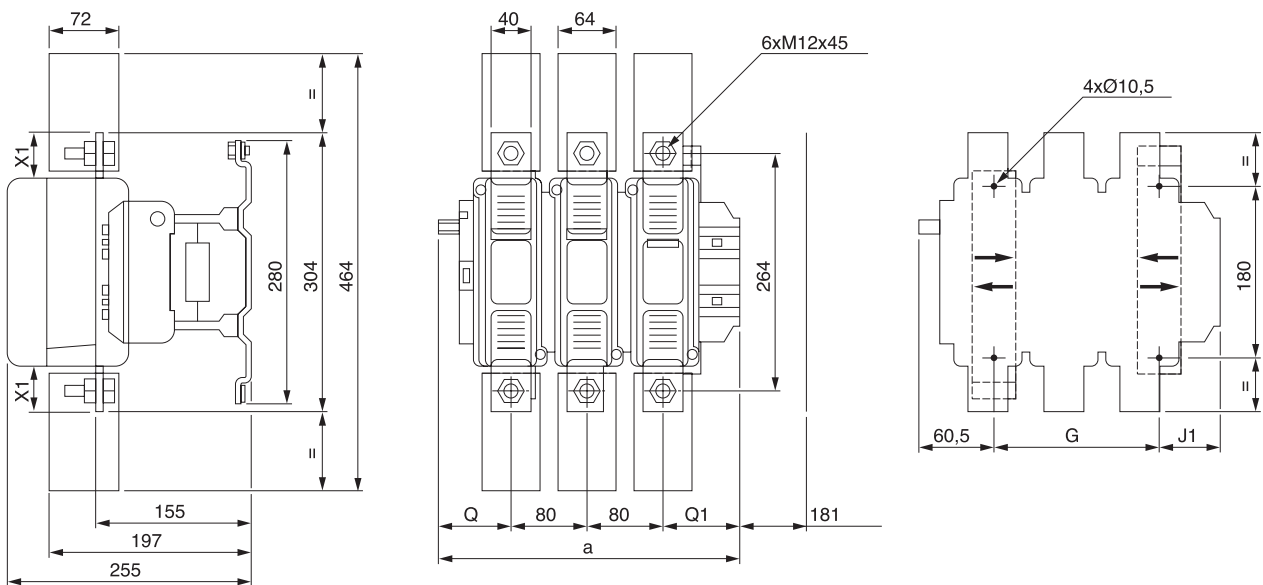


## Outline and Mounting Dimension



RC1-F400 to F500

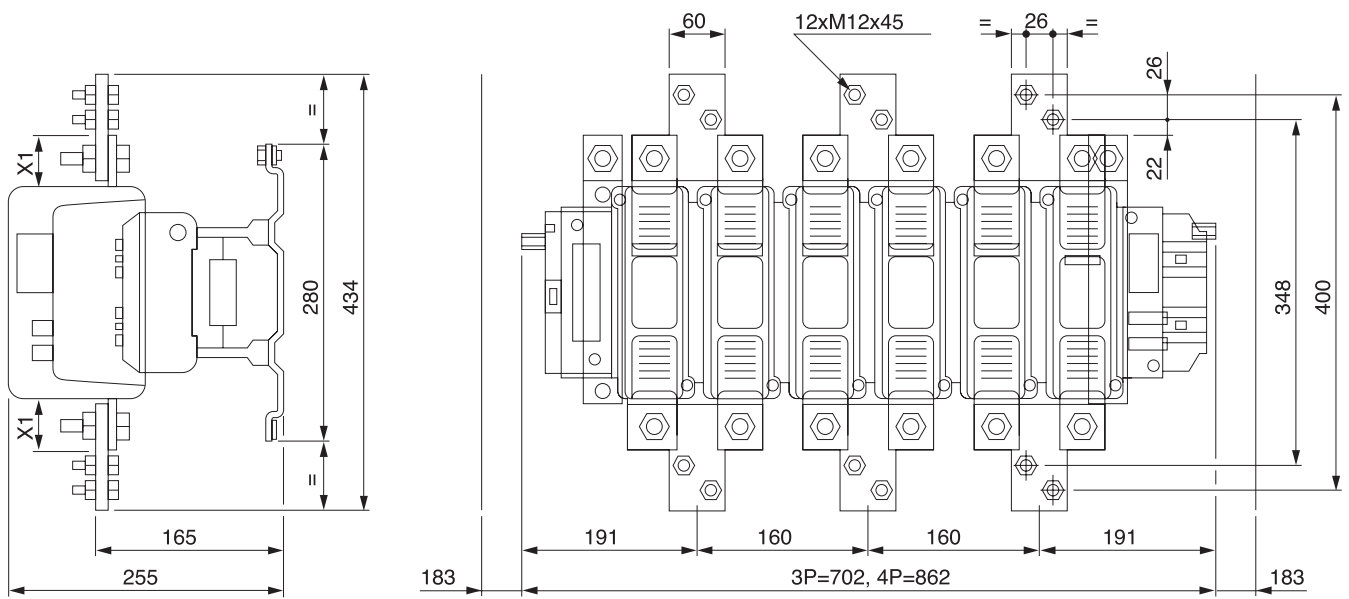
RC1-		a	b	b2	c	f	G*	G min.	G max.	G1 *	G1 min.	G1 max.	J	L	M	P	Q	Q1	S
F400	2P	213	206	375	219	119	80	66	102	170	156	192	19.5	145	181	48	69	96	25
	3P	213	206	375	219	119	80	66	102	170	156	192	19.5	145	181	48	43	74	25
	4P	261	206	375	219	119	80	66	150	170	156	240	67.5	145	181	48	43	74	25
F500	2P	233	238	400	232	141	80	66	120	170	156	210	39.5	146	208	55	76	102	30
	3P	233	238	400	232	141	80	66	120	170	156	210	39.5	146	208	55	46	77	30
	4P	288	238	400	232	141	140	66	175	230	156	265	34.5	146	208	55	46	77	30



RC1-F630 and F800

RC1-F		a	G	G min.	G max.	J1	Q	Q1
F630	2P	309	180	100	195	68.5	102	127
F630,F800	3P	309	180	100	195	68.5	60	89
F630	4P	389	240	150	275	68.5	60	89

# RC1-F(LC1-F) AC Contactor



RC1-F780

## Bobbin of AC Contactor RC1-F

Type	Used for contactor
LX1-FF	RC2-F115-F150
LX1-FG	RC2-F185-F225
LX1-FH	RC2-F265-F330
LX1-FJ	RC2-F400
LX1-FK	RC2-F500
LX1-FL	RC2-F630
LX1-FK(1)	RC2-F780

# RC2-K(LC1-K) AC Contactor



RC2-K12



RC2-K09N



RC2-K09NZ



F4-K11

## Application range

RC2-K series AC contactor is suitable for use in the circuit up to the rate and frequent starting, controlling the AC motor. The addition of auxiliary contact group to the contactor, combined with the proper thermal relay, can act to protect the circuit bound to overload. It conforms to IEC60947-4-1.

## Main Parameter And Technical Characteristic

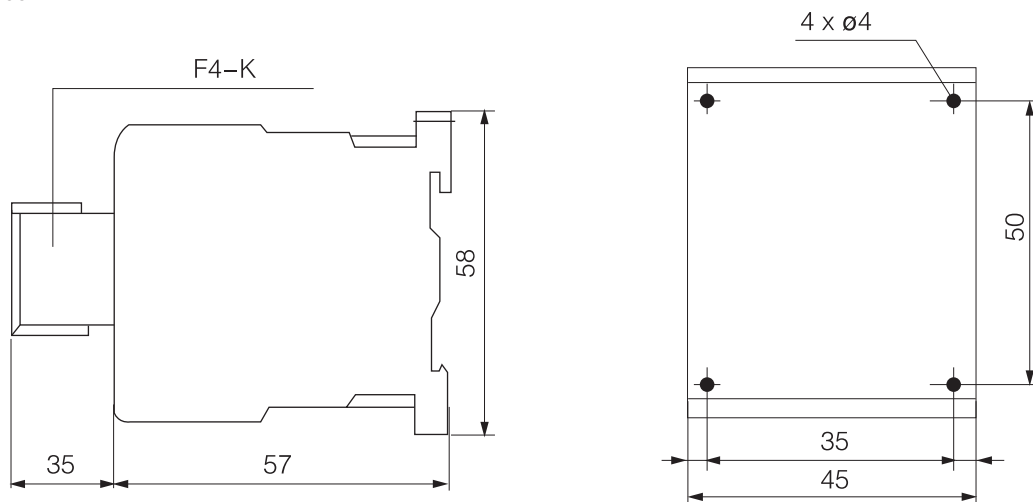
Parameter Item	Type		06	09	12
Rated working current(A)	380V	AC-3	6	9	12
		AC-4	2.6	3.5	5
Rated insulation voltage(V)			690	690	690
Appointed heating current(A)			16	20	20
Three phases cage motors power which can be pulled AC3(kW)	220V		1.5	2.2	3
	380V		2.2	4	5.5
	660V		3	5.5	7.5
Operation frequency (time/hour)	Electrical lfie ( $\times 10^4$ )	AC-3	1200	1200	1200
		AC-4	300	300	300
		Mechanical life ( $\times 10^4$ )	3600	3600	3600
Electrical lfie(frequencyx $10^4$ )		AC-3	50	50	50
		AC-4	10	10	10
Mechanical life(timesx $10^4$ )			1000	1000	1000
Auxiliary contact block	Combination	50Hz	F4-K20,F4-K02,F4-K11,F4-K31,F4-K13,F4-K40,F4-K04		
	Conventiannal heating current		6	6	6
	Control capacity		AC-15 360VA;DC-13 33W		
Matching fusing model			RT16-16	RT16-16	RT16-16
Average power consumption (VA) 20°C	Pick-up		30	30	30
	Holding		4.5	4.5	4.5
Number of piece			1	1	1
Cable(mm <sup>2</sup> )			2.5	2.5	2.5
Screw size			M3	M3	M3
Tightening torque (N. M)			0.5	0.5	0.5
Unit weight (kg)	RC1-K		0.18	0.18	0.18
	RC1-KN		0.36	0.36	0.36
	RC1-KZ		0.18	0.18	0.18

# RC2-K(LC1-K) AC Contactor

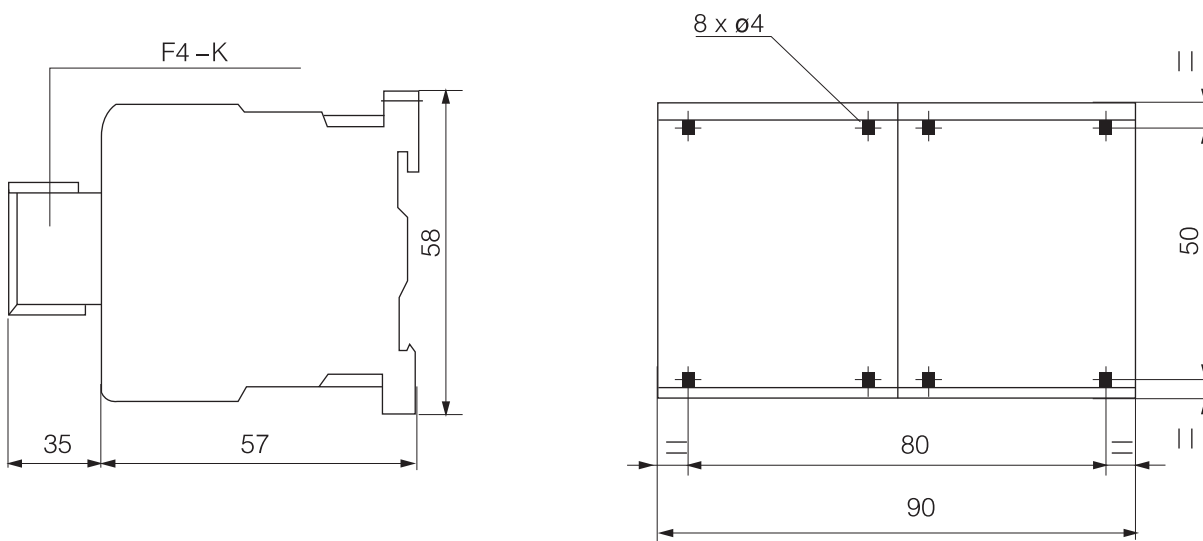


## Outline and Mounting Dimension

RC2-K06-K12



RC2-K06N-K12N



# CJ19 Chang-Eover Capac-Itor Contactor



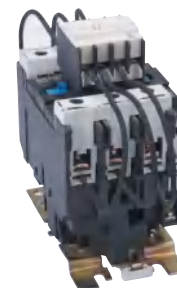
CJ19-25



CJ19-43



CJ19-63



CJ19-95

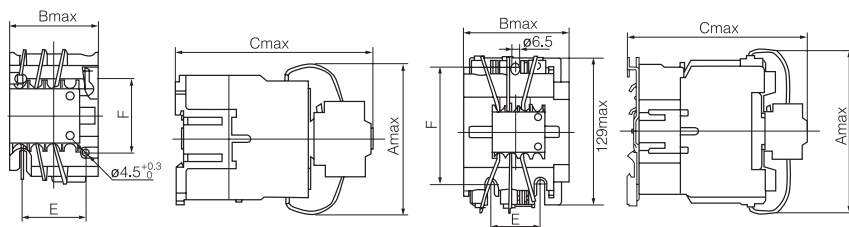
## Application Range

CJ19 Changeover capacitor contactor is especially used for low voltage shunt capacitor. And it widely used in reactive power compensation equipment with AC 50Hz and voltage 380V, inrush current system in the contactor can decrease shock to capacitor and lower switching overvoltage in while breaking a circuit. Moreover, it can replace transfer device which are composed of one contactor and three current limiting reactors, its feature is small, light, joints convenient and reliable, huge capacity of turning on/off. This product conforms to GB14048.4, IEC60947-4-1 standard.

## Main Parameters And Technical Performance

Parameter Item	Type	CJ19-25	CJ19-32	CJ19-43	CJ19-63	CJ19-80	CJ19-95
		Rated current (A)	380V	17	23	29	43
Controllable capacitor capacity (kVar)	230V	6.5	8.5	10	20	21	21
	400V	12	16.7	20	32	40	50
Rated insulation voltage $U_i$ (V)		690	690	690	690	690	690
Restrained surge capacity		20In	20In	20In	20In	20In	20In
Electrical life		10	10	10	8	6	6
Operating characteristic		Pick up:(85%~110%)Us:Drop-out:(20%~75%)Us					
Average power consumption (VA) (20°C)	Strar-up	76	110	110	230	230	230
	Holding	9.4	11	11	32	32	32
Control capacity of auxiliary contact		AC-15 360VA:DC-13 33W					
Unit weight (kg)		0.44	0.60	0.63	1.33	1.5	1.5

## Outline And Mounting Dimension



CJ19-25~43

CJ19-63~95

Type	Amax	Bmax	Cmax	E	F
CJ19-25	117	47	123	35	50/60
CJ19-32	130	58	130	40	50/60
CJ19-43	130	58	135	40	50/60
CJ19-63	170	79	150	40	100/110
CJ19-80	200	87	158	40	100/110
CJ19-95	200	87	158	40	100/110



# RTH Thermal Overload Relay



RTH-22



RTH-40



RTH-85

## Application

The TOR Protect the motors, Locking, Open phase(differential)

## Characteristics

- Direct mounting structure The TOR is mounting directly to the Magnetic Contactors without additional brackets.(Applied model: VTH-22, 40, 85)
- Safety cover The finger proof safety cover prevent careless touch of electric conductor(Applied model: RTH-22, 40, 85)
- Separation of power part and operation part The main circuit and the operation part are separately designed and the operation part is commonly used in RTH-22, 40, 85
- Easy operation

## Types And Ratings

Ratings	Type	RTH-22			RTH-40			RTH-85		
	Nominal current	Ranges			Ranges			Ranges		
		Min.	Mid.	Max.	Min.	Mid.	Max.	Min.	Mid.	Max.
Rated current(A)	0.14	0.1	0.14	0.16						
	0.21	0.16	0.21	0.25						
	0.33	0.25	0.33	0.4						
	0.52	0.4	0.52	0.63						
	0.82	0.63	0.82	1						
	1.3	1	1.3	1.6						
	2.1	1.6	2.1	2.5						
	3.3	2.5	3.3	4						
	5	4	5	6	4	5	6			
	6.5	5	6.5	8	5	6.5	8			
	7.5	6	7.5	9	6	7.5	9			
	8.5	7	8.5	10	7	8.5	10	7	8.5	10
	11	9	11	13	9	11	13	9	11	13
	15	12	15	18	12	15	18	12	15	18
	19	16	19	22	16	19	22	16	19	22
	22				18	22	26	18	22	26
	30				24	30	36	24	30	36
	34				28	34	40	28	34	40
	42							34	42	50
55							45	55	65	
65							54	65	75	
74							63	74	85	

# LR2 Thermal Relay



LR2-13



LR2-23



LR2-33



LR2-150

## Application

LR2 series thermal relay is suitable for using in the circuit rated voltage up to 660V, rated current 93A AC 50/60Hz, for over-current protection of AC motor. The relay has the differential mechanism and temperature compensation and can plug in LC1 series AC contactor. The product conforms to IEC60947-4-1 standard.

## Motion Characteristic: Three-phase Balance Motion Time

No	Times of the setting current(A)	Motion time	Start condition	Ambient temperature					
1	1.05	>2h	Cold state	20±5°C					
2	1.2	<2h	Heat state (Following the No.1 test)						
3	1.5	<4min							
4	7.2	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td>10A</td> <td>2s&lt;Tp ≤ 10s</td> <td>≤ 63A</td> </tr> <tr> <td>10</td> <td>4s&lt;Tp ≤ 10s</td> <td>&gt;63A</td> </tr> </table>	10A		2s<Tp ≤ 10s	≤ 63A	10	4s<Tp ≤ 10s	>63A
10A	2s<Tp ≤ 10s	≤ 63A							
10	4s<Tp ≤ 10s	>63A							

## Phase-losing Motion Characteristic

No	Times of the setting current(A)		Motion time	Start condition	Ambient temperature
	Any two phases	Another phase			
1	1.0	0.9	>2h	Cold state	20±5°C
2	1.15	0	<2h	Heat state (Following the No.1 test)	

## Specification

Type	Number	Setting range (A)	For contactor	Type	Number	Setting range (A)	For contactor
LR2-25	1301	0.1~0.16	VC1-09~32	LR2-36	2353	23~32	VC1-09~32
	1302	0.16~0.25	VC1-09~32		2355	30~40	VC1-09~32
	1303	0.25~0.4	VC1-09~32		3322	17~25	VC1-09~32
	1304	0.4~0.63	VC1-09~32		3353	23~32	VC1-09~32
	1305	0.63~1	VC1-09~32	3355	30~40	VC1-09~32	
	1306	1~1.6	VC1-09~32	LR2-93	3357	37~50	VC1-09~32
	1307	1.6~2.5	VC1-09~32		3359	48~65	VC1-09~32
	1308	2.5~4	VC1-09~32		3361	55~70	VC1-09~32
	1310	4~6	VC1-09~32		3363	63~80	VC1-09~32
	1312	5.5~8	VC1-09~32	3365	80~93	VC1-95	
	1314	7~10	VC1-09~32	4365	80~104	VC1-95	
	1316	9~13	VC1-09~32	LR2-150	4367	95~120	VC1-95~115
1321	12~18	VC1-09~32	4369		110~140	VC1-115	
1322	17~25	VC1-32					

# LR2 Thermal Relay



## Assembly With Thermal Over-load Relay

Model of contactor	Model	Model of contactor		
		Rated current (A)	Recommended fuse type	
			aM	gG
LC1-D09 LC1-D12 LC1-D18	 LR2	0.1~0.16	0.25	2
		0.16~0.25	0.5	2
		0.25~0.4	1	2
		0.4~0.63	1	2
		0.63~1	2	4
		1~1.6	2	4
LC1-D09 LC1-D12 LC1-D18	 LR2	1.25~2	4	6
		1.6~2.5	4	6
		2.5~4	6	10
		4~6	8	16
		5.5~8	12	20
		7~10	12	20
LC1-D09 LC1-D12 LC1-D18 LC1-D25	 LR2	9~13	16	25
		0.1~0.16	0.25	2
		0.16~0.25	0.5	2
		0.25~0.4	1	2
		0.4~0.63	1	2
		0.63~1	2	4
		1~1.6	2	4
		1.25~2	4	6
		1.6~2.5	4	6
		2.5~4	6	10
		4~6	8	16
		5.5~8	12	20
LC1-D32	 LR2	7~10	12	20
		9~13	16	25
		12~18	20	35
		17~25	25	50
		23~32	40	63
		28~36	40	80
LC1-D40 LC1-D50 LC1-D65 LC1-D80 LC1-D95	 LR2	23~32	40	63
		30~40	40	100
		37~50	63	100
		48~65	63	100
		55~70	80	125
		63~80	80	125
		80~93	100	160

# LRD Thermal Relay



LRD-13



LRD-23



LRD-33

## Application

LRD series thermal relay is suitable for using in the circuits rated voltage up to 660V, rated current 93A AC 50/60Hz, for over-current protection of AC motor. The relay has the differential mechanism and temperature compensation and can plug in RC1N series AC contactor. The product conforms to IEC60947-5 standard.

## Motion Characteristic: Three-phase Balance Motion Time

No	Times of the setting current(A)	Motion time	Start condition	Ambient temperature					
1	1.05	>2h	Cold state	20±5°C					
2	1.2	<2h	Heat state (Following the No.1 test)						
3	1.5	<4min							
4	7.2	<table border="1"> <tr> <td>10A</td> <td>2s&lt;Tp ≤ 10s</td> <td>≤ 63A</td> </tr> <tr> <td>10</td> <td>4s&lt;Tp ≤ 10s</td> <td>&gt;63A</td> </tr> </table>	10A		2s<Tp ≤ 10s	≤ 63A	10	4s<Tp ≤ 10s	>63A
10A	2s<Tp ≤ 10s	≤ 63A							
10	4s<Tp ≤ 10s	>63A							

## Phase-losing Motion Characteristic

No	Times of the setting current(A)		Motion time	Start condition	Ambient temperature
	Any two phases	Another phase			
1	1.0	0.9	>2h	Cold state	20±5°C
2	1.15	0	<2h	Heat state (Following the No.1 test)	

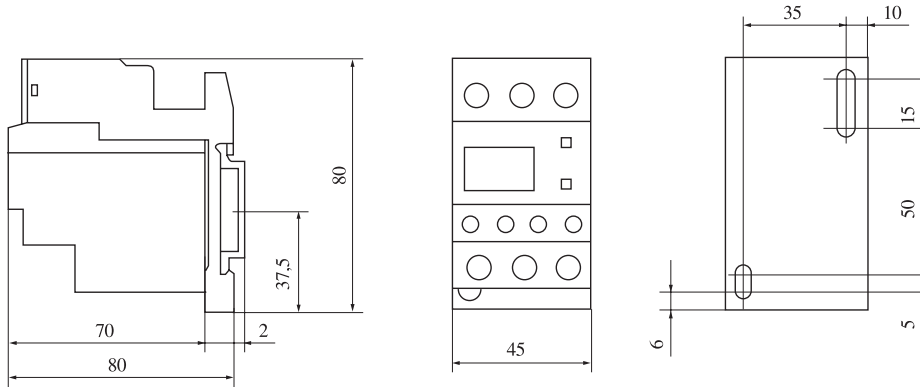
## Specification

Type	Number	Setting range (A)	For contactor	Type	Number	Setting range (A)	For contactor
LRD-25	D01	0.10~0.16	RC1N-09~38	LRDN-36	2353	23~32	RC1N-25~32
	D02	0.16~0.25	RC1N-09~38		2355	30~40	RC1N-25~32
	D03	0.25~0.40	RC1N-09~38		3322	17~25	RC1N-40~95
	D04	0.40~0.63	RC1N-09~38		3353	23~32	RC1N-40~95
	D05	0.63~1	RC1N-09~38	3355	30~40	RC1N-40~95	
	D06	1~1.7	RC1N-09~38	LRD-93	3357	37~50	RC1N-50~95
	D07	1.6~2.5	RC1N-09~38		3359	48~65	RC1N-50~95
	D08	2.5~4	RC1N-09~38		3361	55~70	RC1N-65~95
	D10	4~6	RC1N-09~38		3363	63~80	RC1N-65~95
	D12	5.5~8	RC1N-09~38		3365	80~93	RC1N-95
	D14	7~10	RC1N-09~38				
	D16	9~13	RC1N-09~38				
	D21	12~18	RC1N-09~38				
	D22	16~24	RC1N-09~38				
D53	30~38	RC1N-09~38					

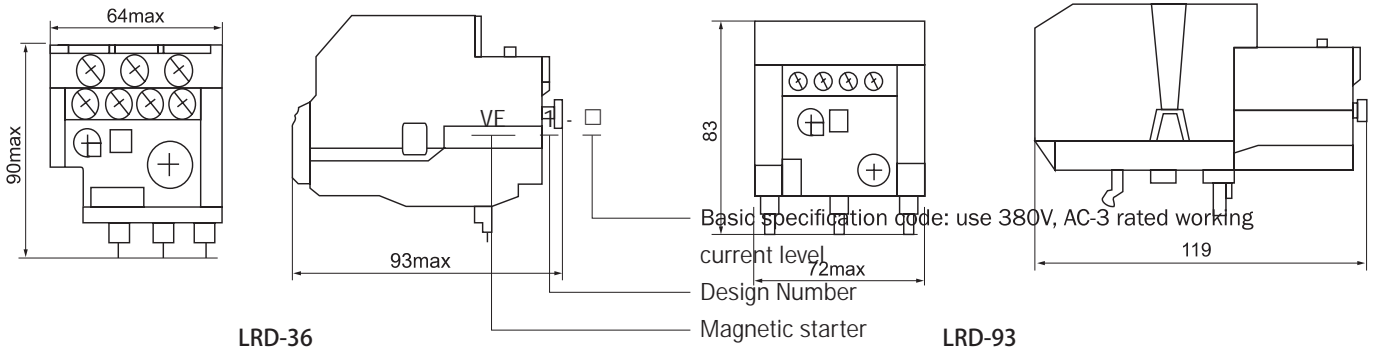
# LRD Thermal Relay



## Outline and Mounting Dimension





LRD-25



LRD-36

LRD-93

## Accessories

Pic	Description	Application
	LRD-36 mounting base	LRD-93 mounting base
	Assembled with LRD-36 to form a complete set	Assembled with LRD-93 to form a complete set

# RLE1-D(LE1-D) Magnetic Force Starter



RLE1-D09,12,18



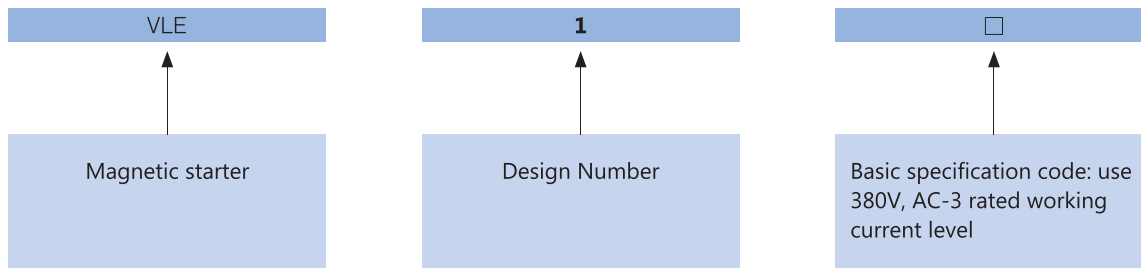
RLE1-D25,32



RLE1-D40,50,65,80,95

## Application

RLE1 magnetic starter (hereinafter referred to as the starter) is suitable for AC 50Hz or 60Hz, rated voltage to 660V, current to 95A circuit, used to control the direct start and stop of the motor, the starter with thermal overload relay can be used for the motor Carry out overload and phase failure protection.



## Structural Features

- The starter is of protective type, plastic shell type (VE1-09~32) and metal shell type (VE1-40~95), and the protection level can reach IP65;
- The operating mechanism is a manual start and stop button, and the starter is an irreversible starter with a thermal (overload) relay;
- The VE1 AC contactor with 35mm standard rails selected in the starter can be directly buckled on the base of the starter. The thermal (overload) relay three-phase lead hard wire can be directly inserted into the three-phase main contact of the contactor, which is convenient for assembly and wiring.

## Main Parameters And Technical Performance

- The main technical performance indicators and component equipment of the starter (see Table 1);
- The starter rated control circuit voltage  $U_s$  is: AC 50/60Hz, 24V, 42V, 110V, 220/230V, 240V, 380/400V, 415V, 440V, 480V, 600V;
- Range of action:  
Pull-in voltage: 50 or 60H 80% $U_s$ -110%  $U_s$ ; 50/60Hz 85% $U_s$ ~110% $U_s$ ;  
Release voltage: 20% $U_s$ -75% $U_s$
- The operating range of the starter with thermal (overload) relay has the operating characteristics of thermal relay;
- The operating frequency with thermal relay is 30 times/hour;

# RLE1-D(LE1-D) Magnetic Force Starter

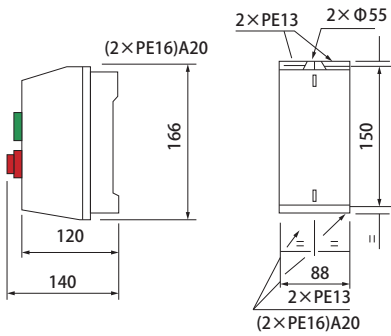


## Technical Parameters

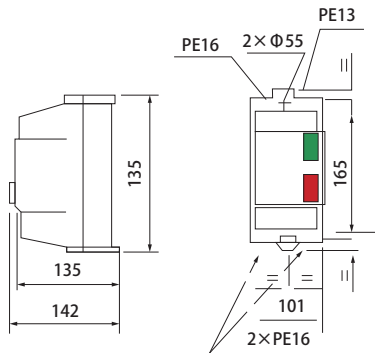
model	Rated heating Current Ith(A)	Rated insulation Voltage Ui(V)	Rated working current (A)				Rated control power AC-3(KW)					Equipped thermal relay model	Current setting range(A)	Equipped AC contactor model		
			AC-3		AC-4		220V	380V	415V	440V	500V				660V 690V	
RLE1-09	20	600							0.37	0.37	0.37	0.37	JLR2-13	0.63-1	JLC1-09	
									0.37	0.55	0.55	0.55	0.55	JLR2-13	1-1.6	JLC1-09
							0.75	0.75	1.1	1.1	1.1	1.1	1.1	JLR2-13	1.6-2.5	JLC1-09
							1.1	1.5	1.5	1.5	2.2	2.2	2.2	JLR2-13	2.5-4	JLC1-09
							1.5	2.2	2.2	2.2	3.7	3.7	3.7	JLR2-13	4-6	JLC1-09
							2.2	3	3.7	3.7	4	4	4	JLR2-13	5.5-8	JLC1-09
RLE1-12	20	600	12	8.9	5	2	3	5.5	5.5	5.5	7.5	7.5	JLR2-13	9-13	JLC1-12	
RLE1-18	32		18	10.6	7.7	3.8	4	7.5	9	9	10	10	JLR2-13	12-18	JLC1-18	
RLE1-25	40		25	18	8.5	4.4	5.5	11	11	11	15	15	JLR2-13	17-25	JLC1-25	
RLE1-32	50		32	21	12	7.5	7.5	15	15	15	18.5	18.5	JLR2-23	23-32	JLC1-32	
RLE1-40	60		40	34	18.5	9	11	18.5	22	22	30	30	JLR2-23	30-40	JLC1-40	
RLE1-50	80		50	39	24	12	15	22	25	30	33	33	JLR2-33	37-50	JLC1-50	
RLE1-65	80		65	42	28	14	18.5	30	37	37	37	37	JLR2-33	55-70	JLC1-65	
RLE1-80	100		80	49	37	17.3	22	37	45	45	45	45	JLR2-33	63-80	JLC1-80	
RLE1-95	100		95	49	44	21.3	25	45	45	55	45	45	JLR2-93	80-93	JLC1-95	

## Shape And Installation Dimensions(mm)

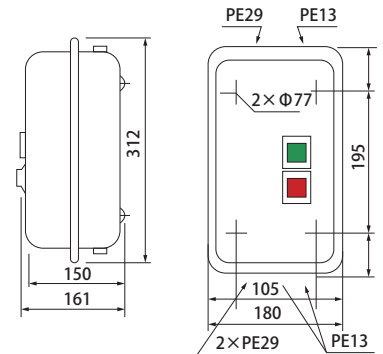
RLE1-09~18

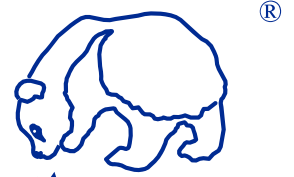


RLE1-25~32



RLE1-40~95





**MEGALEC**