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# CNJUHO<sup>®</sup>

## ELECTRIC

Contactors  
Thermal overload relay  
Moulded case circuit breaker

**CNJUHO<sup>®</sup>**  
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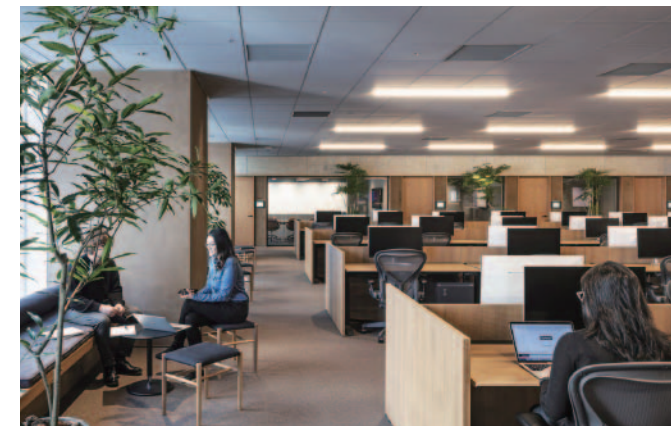
## Company Profile

Wenzhou Juhong Electric Co., Ltd. is located in Xiangyang Industrial Zone, Liushi City, it is the capital of electrical appliances. It is a comprehensive electrical appliance company with industrial control products as the leading, scientific research, production, manufacturing and sales.

The company is major producing AC contactors, motor protectors, thermal relays, the first to pass the ISO9001 quality system certification, ISO14001 environmental protection system certification and OHSAS18001 occupational health and safety management system certification. all products have passed CE safety certification, and some products have passed CB certification. The company strict implementation of 6S management, with beautiful environment, clean and orderly production workshop, each product has passed the inspection before the factory qualified rate reached 100%.

Our company products are exported to Asia, the Middle East, South America, Africa, customers throughout the world more than 140 countries and regions, widely used in petrochemical, metallurgy, machine tools, electrical equipment and so on. With the spirit of harmony, seeking truth, pragmatism and innovation, Juhong people uphold the management concept of creating value for customers, seeking development for employees, taking responsibility for society, serving the country for industry, striving for world famous brands and constantly striving for progress.

New journey, new starting point, new power, Juhong will bring new and old customers to create a better tomorrow.



### People-oriented quality era

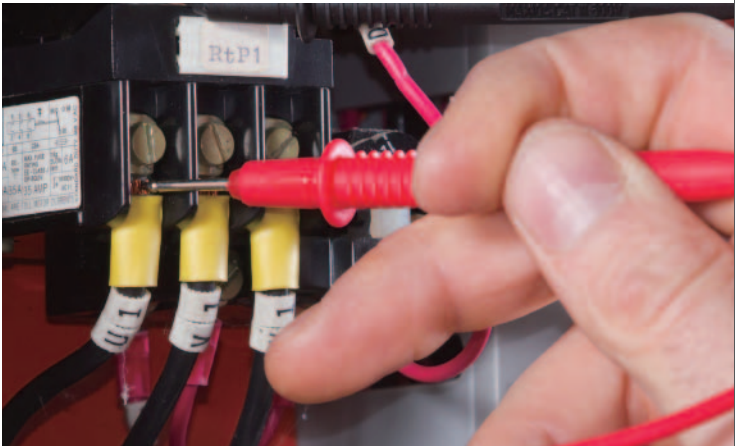
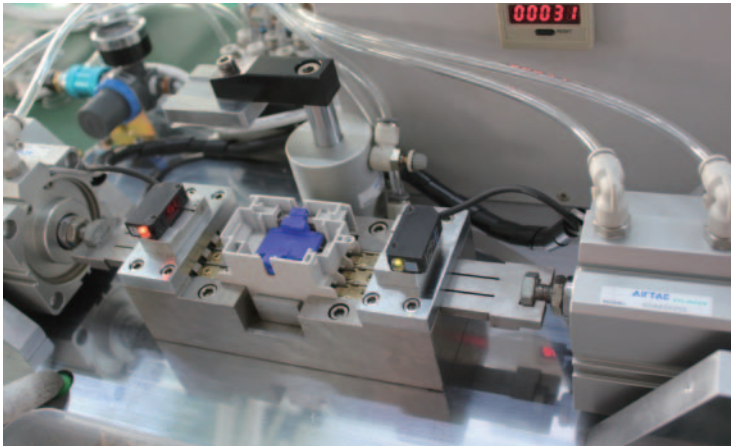
Every perfect classic is a starting point for innovation. The world sighs the miracles and only the pioneers create miracles. CNJUHO Electric has innovative technology and exquisite craftsmanship. Ride the wind and waves to guide the safety industry into a more beautiful realm.





# Production Force

The perfect production process, not only because we have advanced production process equipment and perfect detection means, in contrast, we pay more attention to the key role of people in this process. Technical experts and technical personnel to participate in, so that our products in the manufacturing, it has excellent potential value, which is to ensure the stability and reliability of our products!



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JXC AC Contactor

1. Application

JXC AC contactor is a new model with novel designation and compacted structure. they are mainly used for controlling starters and motors. It can also be combined with appropriate thermal overload relays.

2. Feature

- Rated operation current Ie: 6A~100A
- Rated operation voltage Ue: 220V~690V
- Rated insulation voltage: 690V (JXC-06M~100), 1000V (JXC-120~630)
- Number of poles: 3P and 4P (only for JXC-06M~12M)
- Coil control method: AC (JXC-06(M)~225), DC (JXC-06M~12M),AC/DC (JXC-265~630)
- Installation method: JXC-06M~100 rail and screw installation,JXC-120~630 screw installation

3. Operation And Installation Conditions

Type	Operation and installation conditions
Installation class	III
Pollution degree	3
Compliant standards	IEC/EN 60947-1, IEC/EN 60947-4-1, IEC/EN 60947-5-1
Certification mark	CE
Enclosure protection degree	JXC-06M~38: IP20; JXC-40~100: IP10; JXC-120~630: IP00
Ambient temperature	Operation temperature limits: -35°C~+70°C. Normal operation temperature range: -5°C~+40°C. The 24-hour average temperature should not exceed +35°C. For use beyond the normal operation temperature range, see "Instructions for use in abnormal conditions" in the annex.
Altitude	Not exceeding 2000 m above sea level
Atmosphere conditions	The relative humidity should not exceed 50% at the upper temperature limit of +70°C. A higher relative humidity is allowed at a lower temperature, e.g. 90% at +20°C. Special precautions should be taken against occasional condensation due to humidity variations.
Installation conditions	The angle between the installation surface and the vertical surface should not exceed ±5°.
Shock and vibration	The product should be installed in places without significant shaking,shock, and vibration.

4. Parameters

Main circuit parameters and technical performance

Contactor model			JXC-06	JXC-09	JXC-12	JXC-16	JXC-18	JXC-22
Conventional thermal current Ith (A)			20	20	25	25	32	32
Rated insulation voltage Ui (V)								
Rated impulse withstand voltage Uimp (kV)			8					
Rated making capacity								
Rated breaking capacity								
Rated operation current Ie (A)	220V/230V/240V	AC-3	6	9	12	16	18	22
		AC-4	6	9	12	16	18	22
	380V/400V/415V	AC-3	6	9	12	16	18	22
		AC-4	6	9	12	12	18	18
	660V/690V	AC-3	3.8	6.6	8.9	8.9	12	14
		AC-4	3.8	6.6	8.9	8.9	12	12
Rated control power (kW)	AC-3	220V/230V/240V	1.5	2.2	3	3	4	5.5
		380V/400V/415V	2.2	4	5.5	7.5	7.5	11
		660V/690V	3	5.5	7.5	7.5	10	11
Electrical life (cycles)		AC-3						
Mechanical life (cycles)								
Main contact			3 NO					
Fuse supplied for SCPD			NT00-20	NT00-20	NT00-25	NT00-25	NT00-32	NT00-32
Matching thermal overload relay			NXR-25					
Built-in auxiliary contact		3P	1 NO+1 NC					
		4P						

Control circuit		Contactor model	JXC-06M	JXC-09M	JXC-12M	JXC-06	JXC-09	JXC-12	JXC-16	JXC-18	JXC-22
Main circuit connection	Cable connection (mm <sup>2</sup> )	Prefabricated flexible wire	1	1~2.5		1~4				1.5~6	
			2	1~1.5		1~2.5				1.5~4	
	Hard wire		1	1~2.5		1~4				1.5~6	
			2	1~2.5		1~4				1.5~6	
	Size of fastening screw		M3			M3.5				M3.5	
	Tightening torque (N·m)		0.8			0.8				0.8	
Control circuit connection	Cable connection (mm2)	Prefabricated flexible wire	1	1~2.5		1~4					
			2	1~1.5		1~2.5					
	Hard wire		1	1~2.5		1~4					
			2	1~2.5		1~4					
	Size of fastening screw		M3			M3.5					
	Tightening torque (N·m)		0.8			0.8					

Contactor model		JXC-06M	JXC-09M	JXC-12M	JXC-06	JXC-09	JXC-12	JXC-16	JXC-18	JXC-22
Coil control power supply	AC 50Hz	24, 36, 48, 110, 127, 220, 230, 240, 380, 415			24, 36, 48, 110, 127, 220, 230, 240, 380, 415					
	DC	24, 48, 110, 220			-					
	Pull-in	(75%~120%) Us			(70%~120%) Us					
	Release	AC: (20%~70%) Us; DC: (10%~70%) Us			(20%~65%) Us					
	Start	25~40			40~60					
	Hold	2~7			9.5					
	AC	1~3			1~3					
	DC	-			-					



Contactor model			JXC-25	JXC-32	JXC-38	JXC-40	JXC-50	JXC-65	JXC-75	JXC-85	JXC-100
Conventional thermal current Ith (A)			40	50	50	60	80	80	90	100	110
Rated insulation voltage Ui (V)			690								
Rated impulse withstand voltage Uimp (kV)			8								
Rated making capacity			Making current: 10×Ie (AC-3) or 12×Ie (AC-4)								
Rated breaking capacity			Breaking current: 8×Ie (AC-3) or 10×Ie (AC-4)								
Rated operation current Ie (A)	220V/230V/240V	AC-3	25	32	38	40	50	65	75	85	100
		AC-4	25	32	38	40	50	65	75	85	100
	380V/400V/415V	AC-3	25	32	38	40	50	65	75	85	100
		AC-4	25	32	38	40	50	65	75	85	100
	660V/690V	AC-3	18	22	22	34	39	42	42	49	49
		AC-4	18	22	22	34	39	42	42	49	49
Rated control power (kW)	AC-3	220V/230V/240V	5.5	7.5	9	11	15	18.5	22	22	25
		380V/400V/415V	11	15	18.5	18.5	22	30	37	37	45
		660V/690V	15	18.5	18.5	30	37	37	37	45	45
Electrical life (cycles)		AC-3	1.2×10 <sup>6</sup>			1×10 <sup>6</sup>			0.8×10 <sup>6</sup>		
		AC-4	See electrical life curve								
Mechanical life (cycles)			1×10 <sup>7</sup>			0.9×10 <sup>7</sup>			0.65×10 <sup>7</sup>		
Main contact			3 NO								
Fuse supplied for SCPD			gG40	gG50	gG50	gG63	gG80	gG80	gG100	gG100	gG125
Matching thermal overload relay			NXR-25								
Built-in auxiliary contact		3P	1 NO + 1 NC								
		4P	-								

Control circuit		Contactor model	JXC-25	JXC-32	JXC-38	JXC-40	JXC-50	JXC-65	JXC-75	JXC-85	JXC-100
Main circuit connection	Cable connection (mm <sup>2</sup> )	Prefabricated flexible wire	1	1.5~10			6~25			10~35	
			2	1.5~6			4~10			6~16	
	Hard wire		1	1.5~6			6~25			10~35	
			2	1.5~6			4~10			6~16	
	Size of fastening screw		M4			M8			M8		
	Tightening torque (N·m)		1.2			6			6		
Control circuit connection	Cable connection (mm <sup>2</sup> )	Prefabricated flexible wire	1	1~4							
			2	1~2.5							
	Hard wire		1	1~4							
			2	1~4							
	Size of fastening screw		M3.5								
	Tightening torque (N·m)		0.8								

Contactor model		JXC-25	JXC-32	JXC-38	JXC-40	JXC-50	JXC-65	JXC-75	JXC-85	JXC-100
Coil control power supply	AC 50Hz	24, 36, 48, 110, 127, 220, 230, 240, 380, 415								
Control voltage	Pull-in	70%~120%) Us								
	Release	(20%~65%) Us								
Coil average power (VA)	Start	50~70			160~210			190~250		
	Hold	8~11.4			13~25			17~30		
Heat dissipation (W)	AC	1~3			4~8			6~10		
	DC	-			-			-		

## JLC1-D AC Contactor

### 1. General

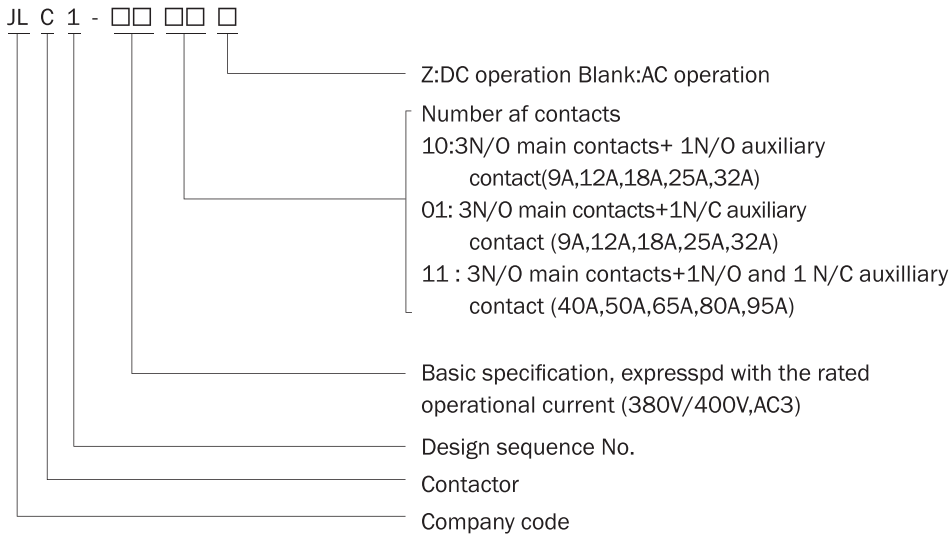
- Application: remote making & breaking circuits; protect circuit from over-load when assembling with thermal over-load relay;frequent start-up and control ofAC contactor;
- Electric ratings: AC50/60Hz,690v,up to 95A;
- Utilization category:AC-3,AC-4;
- Altitude:≤2000m;
- Ambient temperature: -5 °C~+40 °C;
- Mounting category: III;
- Mounting conditions: inclination between the mounting planeand the verticalll plane should not exceed ±5 °;
- Standard: IEC/EN 60947-4-1, IEC/EN 60947-5-1.
- Control Goil vantage(AC Goil Operation).

Volts(VAC)	24	36	42	48	110	127	220	230	240	380	415	440	480	500	600	
Code	50Hz	B5	C5	D5	E5	F5	G5	M5	P5	u5	Q5	N5	R5	-	S5	Y5
	60Hz	B6	-	D6	E6	F6	G6	M6	-	u6	Q6	-	R6	T6	-	-
	50/60Hz	B7	-	D7	E7	F7		M7	P7	-	Q7	N7	R7	-	-	-

Control Coil Voltage(DC Coil Operation)

Volts(VDC)	12	24	36	48	110	220
Code	JD	BD	CD	ED	FD	MD

### 2. Type Designation



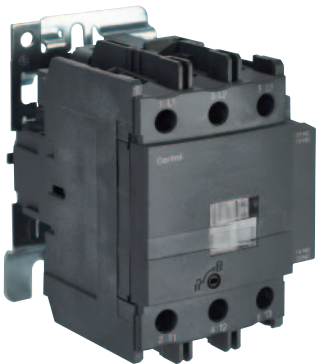
JLC1-D12



JLC1-D18



JLC1-D40A



JLC1-D95

3. Main Technical Parameter

Table1												
Type		JLC1-D09	JLC1-D12	JLC1-D18	JLC1-D25	JLC1-D32	JLC1-D38	JLC1-D40	JLC1-D50	JLC1-D65	JLC1-D80	JLC1-D95
Rated working current Ie (A) AC-3Ue≤440V		9	12	18	25	32	38	40	50	65	80	95
Rated hear current Ith (A)		25	25	32	40	50	50	60	80	80	125	125
Rated insulation voltage Ui (V)		690	690	690	690	690	690	1000	1000	1000	1000	1000
Rated operating voltage Ue (V) Max		690	690	690	690	690	690	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
	380/400V	4	5.5	7.5	11	15	18.5	18.5	22	30	37	45
	415/440V	4	5.5	9	11	15	18.5	22	25/30	37	45	45
	500V	5.5	7.5	10	15	18.5	18.5	22	30	37	55	55
	660/690V	5.5	7.5	10	15	18.5	18.5	30	33	37	45	45
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
	380/400V	2.2	3.7	4	5.5	7.5	7.5	9	11	11	15	15
	415/440V	2.2	3	3.7	5.5	7.5	7.5	9/11	11	11/15	15	15
	500V	3	4	5.5	7.5	9	9	11	15	18.5	22	22
	660/690V	4	5.5	7.5	10	11	11	15	18.5	22	25	25
Frequency of operation (I/h)		1200	1200	1200	1200	1000	1000	1000	1000	1000	750	750
Electrical endurance (x10 <sup>4</sup> )	AC-3	100	100	100	100	80	80	80	60	60	60	60
	AC-4	20	20	20	20	20	20	15	15	15	10	10
Mechanical endurance (x10 <sup>6</sup> )		15	15	15	15	15	15	6	6	6	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	8	8	8	11	11	20	20	20	20	20	20
	Starting	70	70	110	110	110	110	200	200	200	200	200
Rated insulation voltage of auxitiary contacts (V)		690	690	690	690	690	690	690	690	690	690	690
Conventional thermal current of auxitiary contacts (A)		10	10	10	10	10	10	10	10	10	10	10
Auxitiary contacts speecification						AC-15:360VA				DC-13:33W		

4. Standard Control Circuit Voltage

Table2													
Volts	24	42	48	110	220	230	240	380	400	415	440	500	660
50Hz	B5	D5	E5	F5	M5	P5	U5	Q5	V5	N5	R5	S5	Y5
60Hz	B6	D6	E6	F6	M6	P6	U6	Q6	-	-	R6		
50/60Hz	B7	D7	E7	F7	M7	P7	U7	Q7	V7	N7	R7		

JLC1 AC Contactor

1. General

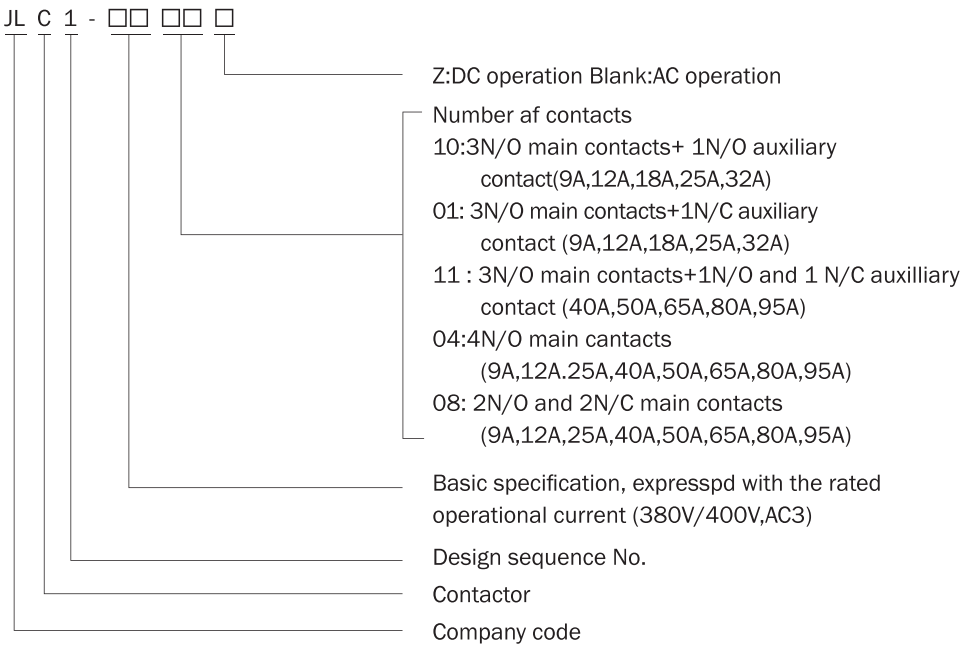
- Application: Remote making & breaking circuits; protect circuit from over-load when assembling with thermal over-load relay;frequent start-up and control of AC contactor;
- Electric ratings: AC50/60Hz,690v,up to 95A;
- Utilization category: AC-3,AC-4;
- Altitude: ≤ 2000m;
- Ambient temperature: -5℃~+40℃;
- Mounting category: III;
- Mounting conditions: Inclination between the mounting planeand the vertical plane should not exceed ±5°;
- Standard: IEG/EN 60947-4=IEC/EN 60947-5-1.
- Control Goil valtage(AC Goil Operation).

Volts(VAC)	24	36	42	48	110	127	220	230	240	380	415	440	480	500	600	
Code	50Hz	B5	C5	D5	E5	F5	G5	M5	P5	U5	Q5	N5	R5	-	S5	Y5
	60Hz	B6	-	D6	E6	F6	G6	M6	-	U6	Q6	-	R6	T6	-	-
	50/60Hz	B7	-	D7	E7	F7		M7	P7	-	Q7	N7	R7	-	-	-

Control Coil Voltage(DC Coil Operation)

Volts(VDC)	12	24	36	48	110	220
Code	JD	BD	CD	ED	FD	MD

2. Type Designation





3. Technical Data

Main parameter and technical characteristic (Table 1 Table 2 ) Table 1

Standard	IEC/EN60947-4-1 IEC/EN60947-5-1					
Model No.		JLC1-09	JLC1-12	JLC1-18	JLC1-25	JLC1-32
Rated Conventional Heating Current	Ith(A)	20	25	32	40	50
Rated voltage Ui(v)	ui(V)	690	690	690	690	690
Rated Operation Currentue=380/415V	AC-3 Ie(A)	9	12	18	25	32
	AC-4 Ie(A)	3.5	5	7.7	8.5	12
Power Controlled 3ph cage Motor AC-3	220/240V KW	2.2	3	4	5.5	7.5
	380/415V KW	4	5. 5	7.5	11	15
	660/690V KW	5.5	7.5	10	15	18.5
Electrial life(x10 <sup>3</sup> operations)	AC-3	1000	1000	1000	1000	800
	AC-4	200	200	200	200	200
Mechanical life(x10 <sup>6</sup> operations)		10	10	10	10	8
Matched Fuse	Size	RT16-00	RT16-00	RT16-00	RT16-00	RT16-00
	A	20	25	32	40	50
Main circuit		3P or 4P				
Auxiliary circuit		1NO or 1NC				
at.: AC-15, Ue=415, Vle=0.95, Alth=10A						

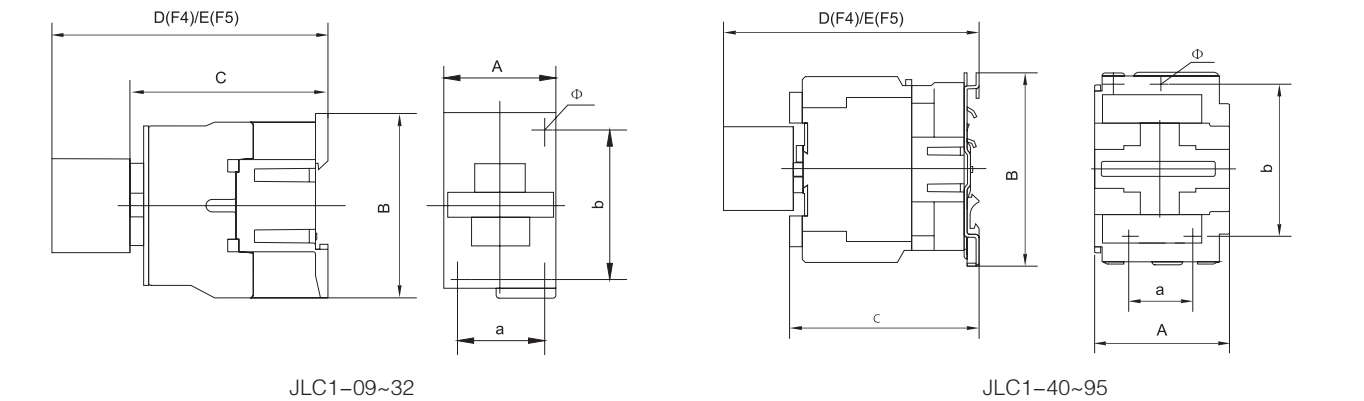
Standard	IEC/EN60947-4-1 IEC/EN60947-5-1					
Model No.		JLC1-40	JLC1-50	JLC1-65	JLC1-80	JLC1-95
Rated Conventional Heating Current	Ith(A)	60	80	80	110	125
Rated voltage Ui(V)	ui(V)	690	690	690	690	690
Rated Operation Currentue=380/415V	AC-3 Ie(A)	40	50	85	80	95
	AC-4 Ie(A)	18.5	24	28	37	44
Power Controlled 3ph cage Motor AC-3	220/240V Kw	11	15	18.5	22	25
	380/415V Kw	18.5	22	30	37	45
	660/690v KW	30	33	37	45	45
Electrial life(x10 <sup>3</sup> operations)	AC-3	800	600	600	300	600
	AC-4	150	150	150	100	100
Mechanical life(x10 <sup>6</sup> operations)		8	8	8	6	6
Matched Fuse	Size	RT16-00	RT16-00	RT16-00	RT16-00	RT16-00
	A	60	70	80	110	125
Main circuit		3P or 4P				
Auxiliary circuit		1NO or 1NC				
at.: AC-15, Ue=415, Vle=0.95, Alth=10A						

4. Technical Lnformation

4.1 Terminal connection

Midel	2 Cabling cross Section(cu)				Screw size	Tightening torque(N. m)
	Numbet of piece	Flexible cable with cold-pressed sockEt(mm²)	Flexible cable without cold-pressed socket(mm²)	Inflekbile cable(mm²)		
JLC1-09	1-2	2.5	4	4	M3.5	0.8
JLC1-12	1-2	2.5	4	4	M3.5	0.8
JLC1-18	1-2	4	6	6	M3.5	0.8
JLC1-25	1	4	10	6	M4	1.2
	2	4	6	6	M4	1.2
JLC1-32	1	4	10	6	M4	1.2
	2	4	6	6	M4	1.2
JLC1-40	1	10	16	10	M4	3.5
	2	10	10	10	M8	3.5
JLC1-50	1	16	25	25	M8	3.5
	2	16	16	-	M8	3.5
JLC1-65	1	16	25	25	M8	3.5
	2	16	16	-	M8	3.5
JLC1-80	1	50	50	50	M8	3.5
	2	25	35	-	M10	4.0
JLC1-95	1	50	20	50	M10	4.0
	2	25	35	-	M10	4.0

5. Overall And Mounting Dimensions (mm)



Model	A max	B max	C max	D max	E max	a	b	Φ	L	P	S
JLC1-09(Z)~12(z)	47	76	82(116)	120.5(154.5)	140.5(174.5)	34/35	50/60	4.5	60(95)	10.5	8.6
JLC1-18(Z)	47	76	87(122)	125.5(160.5)	145.5(180.5)	34/35	50/60	4.5	61(96)	11.3	10.4
JLC1-25(Z)	57	86	95(131)	133.5(169.5)	153.5(189.5)	40	48	4.5	70(107)	13.2	11.7
JLC1-32(Z)	57	86	100(138)	138.5(176.5)	158.5(196.5)	40	48	4.5	71.6(120)	14.5	13
JLC1-4011(Z)~6511(z)	77	129	116(173)	154.5(211.5)	174.5(231.5)	40	100/110	6.5	78(135)	20	8.6
JLC1-4004/4008(Z)~6504/6508(Z)	84	129	116(173)	154.5(211.5)	174.5(231.5)	40	100/110	6.5	78(135)	20	8.6
JLC1-8011(Z)~9511(Z)	87	129	127(188)	165.5(226.5)	185.5(246.5)	40	100/110	6.5	83(140)	23.5	12
JLC1-8004/8008(Z)~9504/9508(Z)	96	129	127(183)	160.5(221.5)	180.5(241.5)	40	100/110	6.5	83(140)	23.5	12

JLC1-F AC Contactor

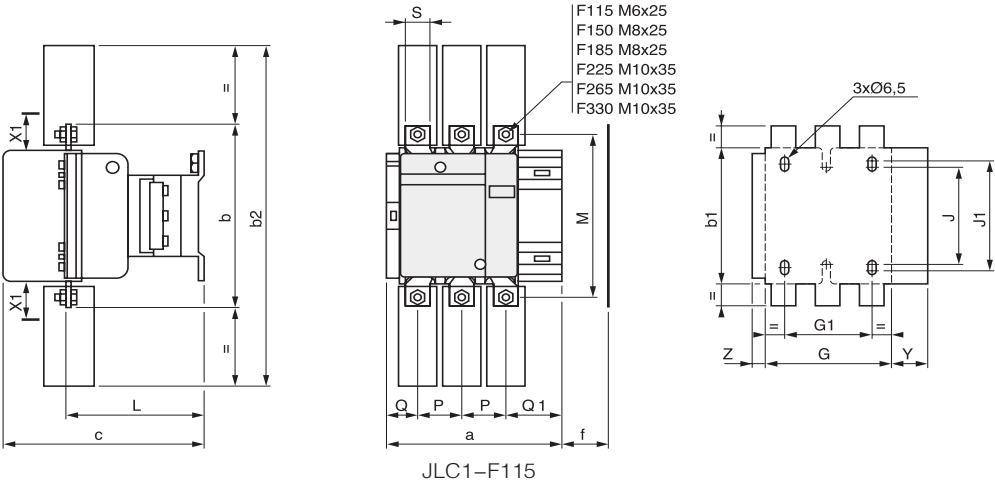
1. Application Range

JLC1-F AC contactor is suitable for using in the circuits u 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.

2. Specification

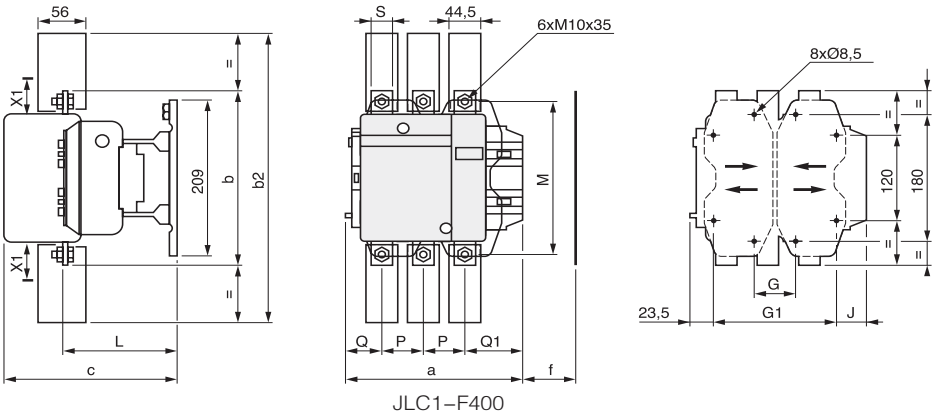
Type	AC-3(A) Rated operational current in AC-3(A)	Max power ratings of 3-phase motors in category AC-3(kW)							Operating frequency (time/ hour) AC-3	Electrical life AC-3 x10 <sup>4</sup>	Mecha- nical life x10 <sup>4</sup>
		220V 230V	380V 400V	415V	440V	500V	660V 690V	1000V			
JLC1-F115	115	30	55	59	59	75	80	65	1200	120	1000
JLC1-F1154	115	30	55	59	59	75	80	65	1200	120	1000
JLC1-F150	150	40	75	80	80	90	100	65	1200	120	1000
JLC1-F1504	150	40	75	80	80	90	100	65	1200	120	1000
JLC1-F185	185	55	90	100	100	110	110	100	600	100	600
JLC1-F1854	185	55	90	100	100	110	110	100	600	100	600
JLC1-F225	225	63	110	110	110	130	129	100	600	100	600
JLC1-F2254	225	63	110	110	110	130	129	100	600	100	600
JLC1-F265	265	75	132	140	140	160	160	147	600	80	600
JLC1-F2654	265	75	132	140	140	160	160	147	600	80	600
JLC1-F330	330	100	160	180	200	200	220	160	600	80	600
JLC1-F3304	330	100	160	180	200	200	220	160	600	80	600
JLC1-F400	400	110	200	220	250	257	280	185	600	80	600
JLC1-F4004	400	110	200	220	250	257	280	185	600	80	600
JLC1-F500	500	147	250	280	295	355	330	315	600	80	600
JLC1-F5004	500	147	250	280	295	355	335	335	600	80	600
JLC1-F630	630	200	335	375	400	400	450	450	600	80	600
JLC1-F6304	630	200	335	375	400	400	450	450	600	80	600
JLC1-F780	780	220	400	425	425	450	470	450	600	80	600
JLC1-F7804	780	220	400	425	425	450	475	450	600	80	600
JLC1-F800	800	250	415	450	450	450	470	450	600	80	600

3. Outline And Mounting Dimension



JLC1-		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

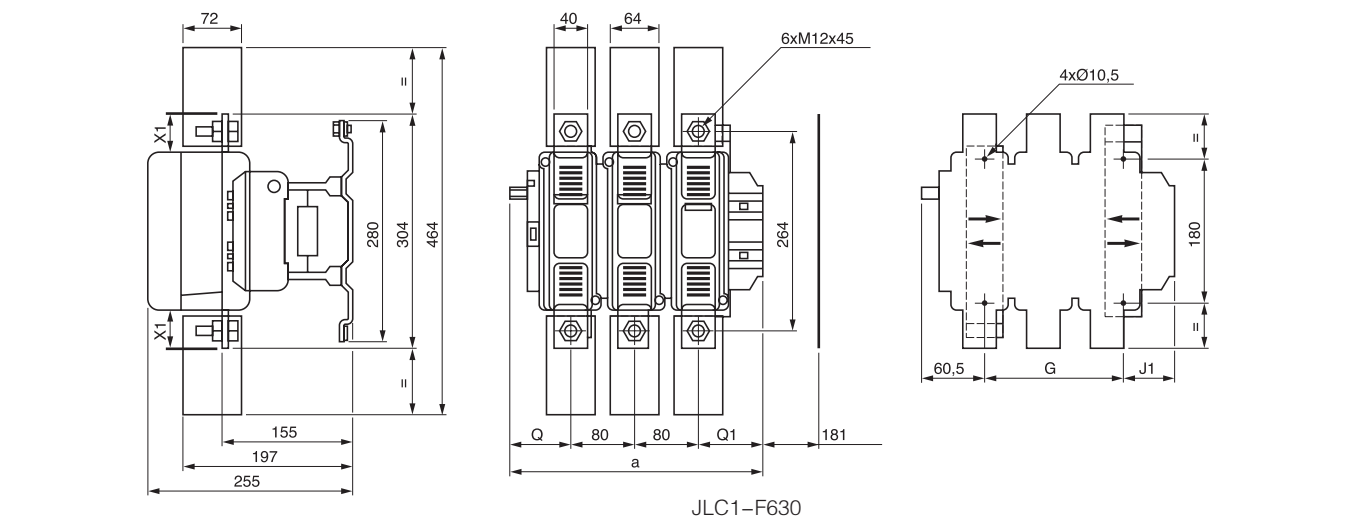
f= minimum distance required for coil removal



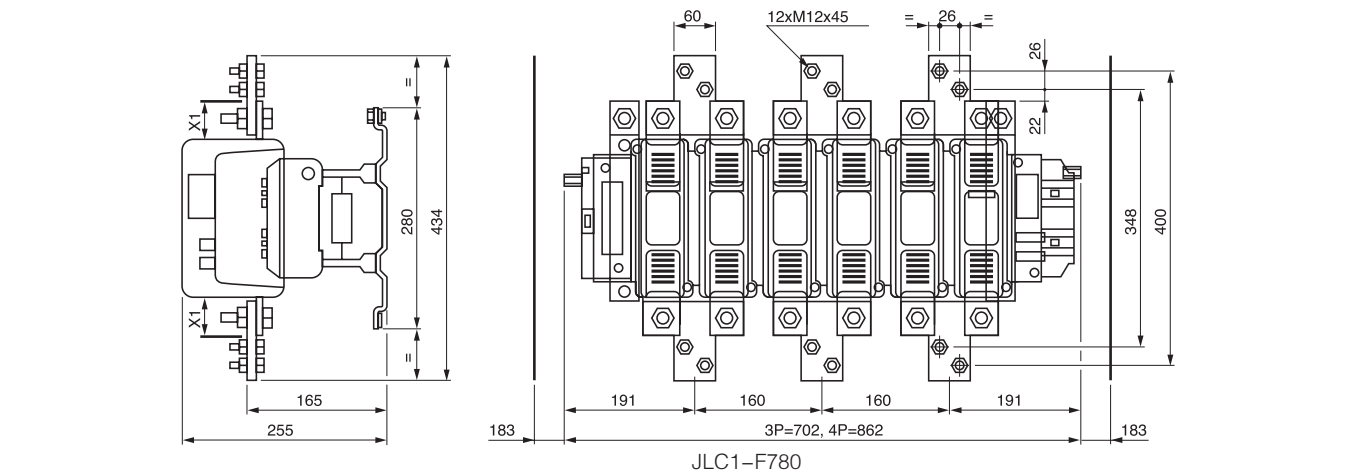
JLC1-		a	b	b2	c	f	G*	G min.	G max.	G1 *	G1 min.	G1 max.	J	L	M	P	Q	Q1	S
F400	2P	213	206	375	219	119	80	66	102	170	156	192	19.5	145	181	48	69	96	25
	3P	213	206	375	219	119	80	66	102	170	156	192	19.5	145	181	48	43	74	25
	4P	261	206	375	219	119	80	66	150	170	156	240	67.5	145	181	48	43	74	25
F500	2P	233	238	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



3. Outline And Mounting Dimension



JLC1-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



JLC1-F Bobbin of AC Contactor JLC1-F

Type	Used for contactor
LX1-FF	JLC1-F115~F150
LX1-FG	JLC1-F185~F225
LX1-FH	JLC1-F265~F330
LX1-FJ	JLC1-F400
LX1-FK	JLC1-F500
LX1-FL	JLC1-F630
LX1-FK(1)	JLC1-F780

	Sepecification	Model	Contact Number	Contactor Matched
	Auxiliary Contact 4-pole Front mount	F4-40	4NO	JLC1-09~95 JLC1-115~800
		F4-31	3NO+1NC	
		F4-22	2NO+2NC	
		F4-13	1NO+3NC	
		F4-04	4NC	
	Auxiliary Contact 2-pole Front mount	F4-20	2NO	JLC1-09~95 JLC1-115~800
		F4-11	1NO+1NC	
		F4-02	2NC	
	Auxiliary Contact 2-pole Side mount	F8-20	2NO	JLC1-09~95
		F8-11	1NO+1NC	
		F8-02	2NC	
	1NO+1NC Pneumatic timer ON-delay	F5-T0	0.1~3s	JLC1-09~95 JLC1-115~800
		F5-T2	0.1~30s	
		F5-T4	10~180s	
		F5-D0	0.1~3s	
	1NO+1NC Pneumatic timer OFF-delay	F5-D2	0.1~30s	JLC1-09~95 JLC1-115~800
		F5-D4	10~180s	
		F4-DN40	4NO	
		F4-DN31	3NO+1NC	
	Auxiliary Contact 4-pole Front mount	F4-DN22	2NO+2NC	JLC1-DN09~DN95
		F4-DN13	1NO+3NC	
		F4-DN04	4NC	
		F4-DN20	2NO	
		F4-DN11	1NO+1NC	
	Auxiliary Contact 2-pole Front mount	F4-DN02	2NC	JLC1-DN09~DN95
	Contactor Coil	JLX1-D2	AC Volts	JLC1-09~18
		JLX1-D4	AC Volts	JLC1-25~32
		JLX1-D6	AC Volts	JLC1-40~95
	Contactor Coil Water Proof	JLX1-6N	AC Volts	JLC1-40~95
		JLX1-FF	AC Volts	JLC1-115~150
		JLX1-FG	AC Volts	JLC1-185~225
		JLX1-FH	AC Volts	JLC1-265
		JLX1-FJ	AC Volts	JLC1-400
		JLX1-FK	AC Volts	JLC1-500
		JLX1-FL	AC Volts	JLC1-630
		JLX1-FX	AC Volts	JLC1-780

JLC2 Mechanical interlock contactor



JLC2-09N



JLC2-32N



JLC2-80N

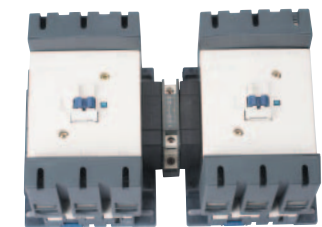
1. Application

JLC2-D of mechanical chain contacts (hereinafter referred to as mechanical chain contacts) is in the JLC2-D series AC contactor, based on the installation of machinery assembled chain body. It applies to AC 50 or 60Hz, rated voltage up to 660V and below, rated current up to 95A and the following circuit, for long-distance direct control of three-phase squirrel-cage motor starting, stopping and reversing operation. It has a mechanical chain, can ensure the safe operation of two reverse contacts to prevent short circuit accidents. With JRS1 series thermal relay contacts, which can be made for motor overload protection. This series of touch products meet IEC60947-4-1, GB14048.4 standards.

2. Feature

Ambient air temperature of -5°C ~ 40°C, and the 24h average does not exceed 35°C.  
Altitude: Altitude less than 2000m.  
Atmospheric conditions: 40°C, relative humidity of the atmosphere does not exceed 50%; At a lower temperature allows a higher relative humidity, the wettest month of the monthly minimum temperature level does not exceed 25°C, the monthly mean maximum relative humidity of not more than 90%, due to temperature changes in the product of condensation occurring on the measures must be taken.  
Pollution degree: 3;  
Installation Category: III class;  
Installation conditions: The mounting surface and the vertical gradient is not greater than ± 5° .  
Impulsive vibration: Product should be installed and used in the absence of a significant shake and shock, vibrations JLC2-D AC Contactor.

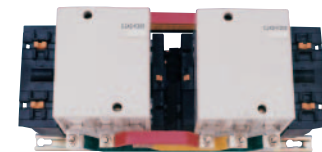
Type	Rated current AC-3(A)	Controlled power (KW)				
		220V	380V	415V	440V	660V
JLC2-09N	9	2.2	4	4	4	5.5
JLC2-12N	12	5.5	5.5	5.5	5.5	7.5
JLC2-18N	18	7.5	7.5	9	9	10
JLC2-25N	25	5.5	11	11	11	15
JLC2-32N	32	7.5	15	15	15	18.5
JLC2-40N	40	18.5	18.5	22	22	30
JLC2-50N	50	15	22	25	30	33
JLC2-65N	63	18.5	30	37	37	37
JLC2-80N	80	22	37	45	45	45
JLC2-95N	95	22	45	45	45	41
JLC2-115N	115	30	55	59	59	80
JLC2-150N	150	40	75	80	80	100
JLC2-170N	170	55	90	100	100	110
JLC2-205N	205	63	110	110	110	129
JLC2-245N	145	75	132	132	132	160
JLC2-300N	300	100	160	200	200	220
JLC2-410N	410	110	220	250	250	280
JLC2-475N	475	147	265	280	280	355
JLC2-620N	620	200	335	400	400	450



JLC2-150N



JLC2-F115N



JLC2-F205N

		Table 2									
Parameter Item	Type	JLC2- 115N	JLC2- 150N	JLC2- 170N	JLC2- 205N	JLC2- 245N	JLC2- 300N	JLC2- 410N	JLC2- 475N	JLC2- 620N	
Rated working current (A)	380V AC-3	115	150	170	205	245	300	410	475	620	
	220V	30	40	55	63	75	100	110	147	200	
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	
Per weight(Kg)	3P	4.32	4.32	4.32	9.9	10.2	18.4	18.7	24	38.8	

3. Outline And Mounting Dimension

FIGURE 1 JLC2-09N~32N(Horizontal installation)

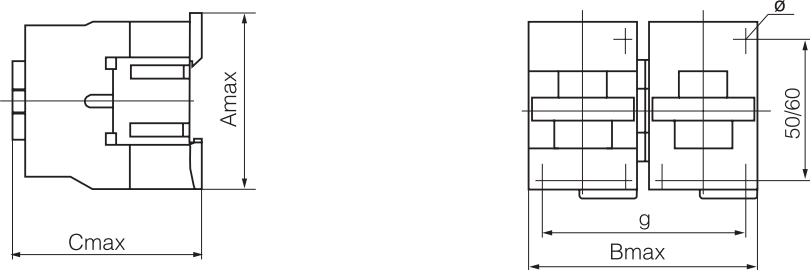
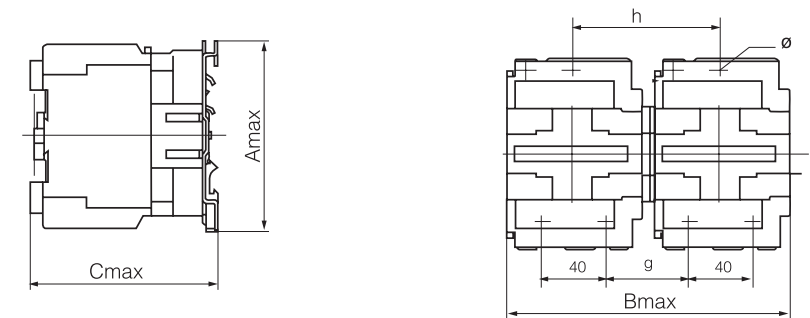


FIGURE 2 JLC2-40N~95N(Horizontal installation)





JLC2-09N~170N(Horizontal installation)

Type	Amax	Bmax	Cmax	g	h	ø
JLC2-09N~12N	81	106	85	95	-	4.5
JLC2-18N	81	106	87	95	-	4.5
JLC2-25N	94	129	100	112	-	4.5
JLC2-32N	96	129	103	112	-	4.5
JLC2-40N~65N	129	165	116	50	90	6.5
JLC2-80N~95N	129	185	127	57	96	6.5
JLC2-115N~170N	162	268	133	242/256	-	6.5

Table 4(Unit:mm)

JLC2-F115N~F330N,JLC2-205N~300N(Horizontal installation)

Type	a	P	P1	Q1	S	ø	f	b	b1	M	c	L	G	J	H	ø1	Y	X1	
																		≤500V	>500V
JLC2-F115	346	37	78	60	15	M6	109	162	137	147	171	107	80	72	120/106	6.5	57	10	15
JLC2-F1154	420	37	78	60	15	M6	109	162	137	147	171	107	80	109	120/106	6.5	75.5	10	15
JLC2-F150	346	40	72	57.5	20	M8	109	170	137	150	171	107	80	72	120/106	6.5	57	10	15
JLC2-F1504	420	40	72	55.5	20	M8	109	170	137	150	171	107	80	109	120/106	6.5	75.5	10	15
JLC2-F185, 205	357	40	78	59.5	20	M8	117	174	137	154	181	113.5	80	78	120/106	6.5	59.5	10	15
JLC2-F1854	437	40	78	59.5	20	M8	117	174	137	154	181	113.5	80	118	120/106	6.5	79.5	10	15
JLC2-F225,245	357	48	62	51.5	25	M10	117	197	137	175	181	113.5	80	78	120/106	6.5	59.5	10	15
JLC2-F2254	437	48	54	47.5	25	M10	117	197	137	175	181	113.5	80	118	120/106	6.5	79.5	10	15
JLC2-F265	424	48	99	66.5	25	M10	143	203	145	178	213	141	96	109	120/106	6.5	61.5	10	15
JLC2-F2654	520	48	99	66.5	25	M10	143	203	145	178	213	141	96	157	120/106	6.5	85.5	10	15
JLC2-F330,400	445	48	105	74	25	M10	143	206	145	181	219	145	96	122	120/106	6.5	65.5	10	15
JLC2-F3304	541	48	105	74	25	M10	143	206	145	181	219	145	96	170	120/106	6.5	89.5	10	15

Table 5(Unit:mm)

JLC2-F400N~F500N,JLC2-410N~475N(Horizontal installation)

Type	a	P	P1	Q1	S	ø	f	b	b1	M	c	L	G	G1	J	H	ø1	Y	X1	
																			≤500V	>500V
JLC2-F400,410	445	48	105	74	25	M10	151	206	209	181	219	145	80	170	156	170/180	8.5	19.5	15	20
JLC2-F4004	541	48	105	74	25	M10	151	206	209	181	219	145	80	170	156	170/180	8.5	67.5	15	20
JLC2-F500,475	485	55	111	77	30	M10	169	238	209	208	232	146	80	170	156	170/180	8.5	39.5	15	20
JLC2-F5004	595	55	111	77	30	M10	169	238	209	208	232	146	140	230	156	170/180	8.5	34.5	15	20

Table 6(Unit:mm)

JLC2-F630N~F800N,JLC2-620N(Horizontal installation)

Type	a	P	P1	Q1	S	ø	f	b	b1	M	c	L	G	J	H	ø1	Y	X1	
																		≤500V	>500V
JLC2-F630,620	636	80	138	89	40	M12	201	304	280	264	255	155	180(100/195)	139	180/190	10.5	68.5	20	30
JLC2-F6304	796	80	138	89	40	M12	201	304	280	264	255	155	240(150/275)	139	180/190	10.5	68.5	20	30
JLC2-F800	636	80	138	89	40	M12	201	304	280	264	255	155	180(100/195)	139	180/190	10.5	68.5	20	30

Table 7(Unit:mm)

JLC2-F115N~F330N(Vertical installation)

Model type	a	P	P1	Q1	S	ø	f	b	P1	M	c	L	G	H	J	ø1	Y	X1	
																		≤500V	>500V
JLC2-F115	184	37	60	50	15	M6	109	357-472	48-163	147	171	107	80	120	80-195	6.5	57	10	15
JLC2-F1154	221	37	60	50	15	M6	109	357-472	48-163	147	171	107	80	120	80-195	6.5	75.5	10	15
JLC2-F150	184	40	57	47	20	M8	109	365-480	45-160	150	171	107	80	120	80-195	6.5	57	10	15
JLC2-F1504	221	40	55.5	45.5	20	M8	109	365-480	45-160	150	171	107	80	120	80-195	6.5	75.5	10	15
JLC2-F185	192	40	59.5	52.5	20	M8	117	389-484	61-156	154	181	113.5	80	120	100-195	6.5	59.5	10	15
JLC2-F1854	232	40	59.5	52.5	20	M8	117	389-484	41-156	154	181	113.5	80	120	100-195	6.5	79.5	10	15
JLC2-F225	192	48	51.5	44.5	25	M10	117	412-507	43-138	172	181	113.5	80	120	100-195	6.5	59.5	10	15
JLC2-F2254	232	48	47.5	40.5	25	M10	117	412-507	43-138	172	181	113.5	80	120	100-195	6.5	79.5	10	15
JLC2-F265	226	48	66.5	63.5	25	M10	143	448-583	47-202	178	213	141	96	120	130-265	6.5	61.5	10	15
JLC2-F2654	274	48	66.5	63.5	25	M10	143	448-583	47-202	178	213	141	96	120	130-265	6.5	85.5	10	15
JLC2-F330	240	48	74	70	25	M10	143	481-586	94-199	181	219	145	96	120	160-265	6.5	65.5	10	15
JLC2-F3304	288	48	74	70	25	M10	143	481-586	94-199	181	219	145	96	120	160-265	6.5	89.5	10	15

Table 8(Unit:mm)

JLC2-F400N~F500N(Vertical installation)

Model type	a	P	Q1	Q	S	ø	f	b	P1	M	c	L	G	G1	H	J	ø1	Z	Y	X1	
																				≤500V	>500V
JLC2-F400	240	48	74	70	25	M10	151	481-586	94-199	181	219	145	80	170	180	100/205	8.5	50.5	19.5	15	20
JLC2-F4004	288	48	74	70	25	M10	151	481-586	94-199	181	219	145	80	170	180	100/205	8.5	50.5	67.5	15	20
JLC2-F500	261	55	77	74	30	M10	169	533-618	87-172	208	232	146	80	170	180	120/205	8.5	51.5	39.5	15	20
JLC2-F5004	316	55	77	74	30	M10	169	533-618	87-172	208	232	146	140	230	180	120/205	8.5	51.5	34.5	15	20

Table 9(Unit:mm)

JLC2-F630N~F800N(Vertical installation)

Model type	a	P	Q1	Q	S	ø	f	b	P1	M	c	L	G	H	J	ø1	Z	Y	X1	
																			≤500V	>500V
JLC2-F630	309	80	89	60	40	M12	201	669-684	101-116	264	255	155	180(100-195)	190	180-195	10.5	60.5	68.5	20	30
JLC2-F6304	389	80	89	60	40	M12	201	669-684	106-116	264	255	155	240(150-275)	190	180-195	10.5	60.5	88.5	20	30
JLC2-F800	309	80	89	60	40	M12	201	669-684	106-116	264	255	155	180(100-195)	190	180-195	10.5	60.5	68.5	20	30

Table 10(Unit:mm)

JLC2-F780N(Vertical installation)

Model type	a	P	Q1	Q	S	ø	f	b	P1	M	H	c	L	G	G1	H	ø1	Z	Y	X1	
																				≤500V	>500V
JLC2-F780	704	160	192	192	60	M12	201	435	81-101	400-438	202	225	165	240	-	180	10.5	91	133	20	30
JLC2-F7804	864	160	192	192	60	M12	201	435	81-101	400-438	202	225	165	240	190	180	10.5	91	103	20	30

Table 11(Unit:mm)

#### 4. Ordering Instructions

When placing an order,you should point out the below:

1. Product name and model, rated operational voltage and frequency of coil, order quantity.

Ordering example: Reversing Contactor JLC2-40N AC 220V 50Hz 60PCS.

JLC1-K AC contactor

1. Application Range

JLC1-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.

2. Main Parameter And Technical Characteristic

Table1

Parameter Item		Type	06	09	12
Rating working current(V)	380V	AC-3	6	9	12
		AC-4	2.6	3.5	5
Rating working 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 (×10 <sup>4</sup> )	AC-3	1200	1200	1200
		AC-4	300	300	300
	Mechanical life (×10 <sup>4</sup> )		3600	3600	3600
Electrical lfie		AC-3	50	50	50
		AC-4	10	10	10
Mechanical life			1000	1000	1000
Auxiliary contact block		Combination	F4-K20,F4-K02,F4-K11,F4-K31 F4-K13,F4-K40,F4-K04		
		Conventionnal heating current	6A	6A	6A
		Control capacity	AC-15 360VA;DC-13 33W		
Matching fusing model			RT16-16	RT16-16	RT16-16
Average power consumption (VA) 20°C	50Hz	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)		JLC1-K	0.18	0.18	0.18
		JLC1-KN	0.36	0.36	0.36
		JLC1-KZ	0.18	0.18	0.18

3. Outline And Mounting Dimension

FIGURE 1 JLC1-K06~K12

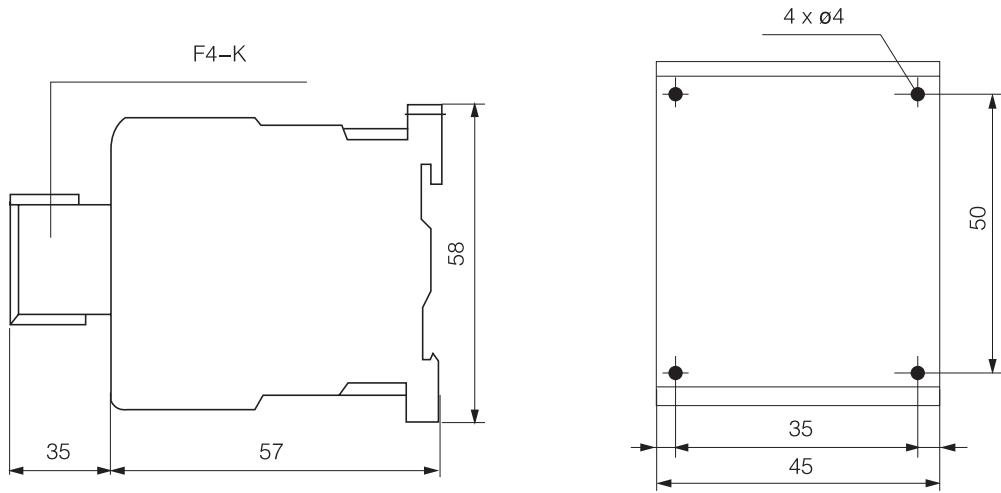
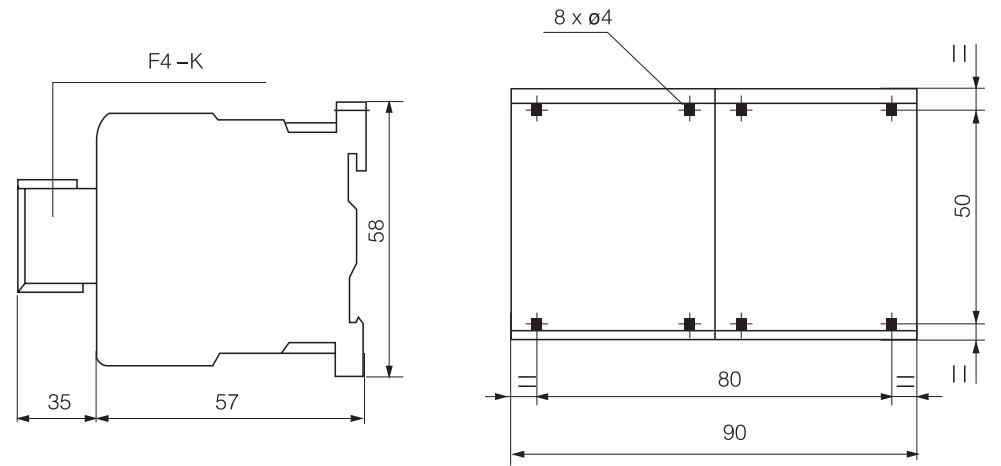


FIGURE 2 JLC2-K06~12



4. Ordering Instructions

When placing an order ,you should point out the below:

1. Product name and model, rated operational voltage and frequency of coil, order quantity.

Ordering example: JLC1-K0910 AC 220V 50Hz 10PCS



LP1 new type DC contactor

Application

LP1 new type DC contactor is suit to 24V/DC,36V/DC ,48V/DC voltage Rated current from 9A to 95A for control electric motor and machine tools,it is complied with standard IEC60947.

product type	DC contactor
Product model number	LP1
Application field	Applied to non inductive or micro inductive load, resistance furnace in AC load with power factor
class of use	AC-1 AC-3 AC-4
number of pole	3P
Power pole contact composition	3NO
rated working current	25A 60 °C in...Upper<=440V AC AC-1 Applies to the power loop 9A60 °C in...Upper<=440V AC AC-3 Applies to the power loop
Auxiliary contact point type	24VDC
Auxiliary contact point type	1NO+1NC
Rated working voltage	power supply loop:<=690V AC 25...400 Hz power supply loop:<=225V DC
Electric motor power	5.5kW in...Upper 500V AC 50/60Hz (AC-3) 2.2kW in...Upper 220/240V AC 50/60Hz (AC-3) 4kW in...Upper 380/400V AC 50/60Hz (AC-3) 4kW in...Upper 415/440V AC 50/60Hz (AC-3) 5.5kW in...Upper 660/690V AC 50/60Hz (AC-3) 2.2kW in...Upper 400V AC 50/60Hz (AC-4)
Electric life	0.6 Mcycles 25A AC-1Ue<=440V 2 Mcycles 9A AC-3Ue<=440V 2 Mcycles 6.6A AC-3Ue660/690V
mechanical life	30 Mcycles
Max operation frequency	3600 times/hour in...Above<60 °C
Action time	55ms closure 20ms break
Control voltage limit	Release:0.1...0.25Uc 60 °C Run:0.7...1.25Uc 60 °C
Agred heating current (ith)	25A in... the upper<60 °C is suitable for power supply loop 10A... Above<60 °C for signal loop
Average impedance	2.5mΩ-Ith25A50Hz Applicable power loop
Rated insulation voltage (Ui)	Power supply circuit: 690V in accordance with IEC 60947-4-1 Signal loop: 690V in accordance with IEC 60947-1
Surge suppression module	build-in bidirectional peak current limiting diode
Auxiliary contact point type	Type Mechanical connection 1 NO+ 1 NC in accordance with IEC 60947-5-1 The type is mirrored to the main contact status.1 NC complies with IEC 60947-4-1
Frequency of singal loop	25...400Hz
Mini on/off current	suit to singal loop
Mini on/off voltage	suit to singal loop
No overlap time	1.5 ms loss of power between NC and NO contact 1.5 ms is generated between NC and NO contact
insulation resistance	>10MΩ apply signal loop suit to singal lop
installation method	Din rail installation Baseplate installation
Control loop characteristics	DC standard
Rated shock tolerance voltage (Uimp)	6KV is complied with IEC60947
Safety cover	no
Safety class	B10d=1369863 times, contactors with nominal loads comply with EN/ISO13849-1 B10d=20000000 times,contactors for nominal loads comply with EN/ISO13849-1
time constant	28 ms
Surge power(W)	5.4W 20 °C
Hodup power consumption(W)	5.4W in...Up 20 degrees Celsius



LP1-D09BD



LP1-D18BD



LP1-D25BD



LP1-D32BD

LP1-D DC Contactors

1. Application range

LP1-D series DC operated AC contactor (hereinafter to be referred as contactor) , it mainly applies to the circuit of AC 50Hz/60Hz , and rated insulation voltage 690V . When used in AC-3, and rated operational voltage 380V , rated current up to 95A , for long distance breaking circuit block , time-delay block , thermal overload relay devices etc.  
This product conforms to GB14048.4,IEC60947-4-1. standard.

2. Outline and Mounting Dimension

FIGURE 1 LP1-D09~32

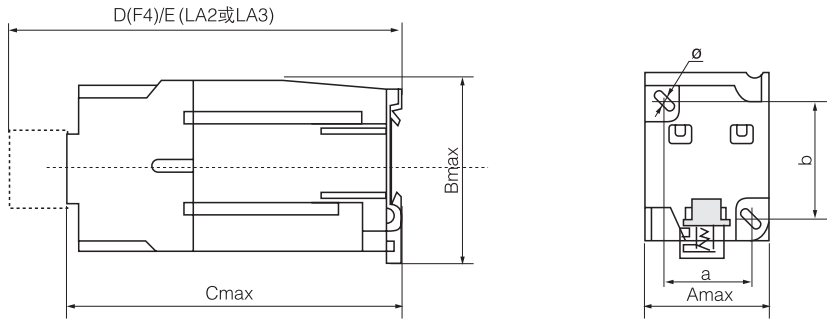
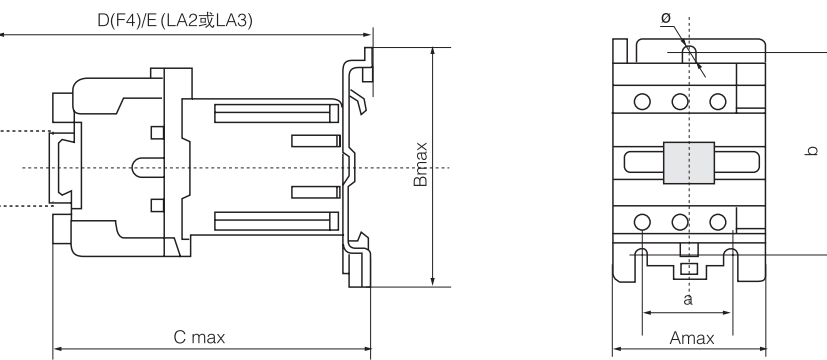


FIGURE 2 LP1-D40~95



LP1-D1210



LP1-D2501



LP1-D4011



LP1-D8011

Product Model	Amax	Bmax	Cmax	Dmax	Emax	a	b	ø
LP1-D-09~12	47	76	116	149	160	45	50/60	4.5
LP1-D-18	47	76	120	157	177	45	50/60	4.5
LP1-D-25	57	86	130	163	184	40	50/60	4.5
LP1-D-32	57	86	135	168	189	40	50/60	4.5
LP1-D-4011~6511	77	129	175	203	223	40	100/110	6.5
LP1-D-40004~65004	85	129	174	203	223	40	100/110	6.5
LP1-D-40008~65008	85	129	185	203	223	40	100/110	6.5
LP1-D-8011~9511	87	129	183	212	230	40	100/110	6.5
LP1-D-80004~95004	97	129	180	212	230	40	100/110	6.5
LP1-D-80008~95008	97	129	191	212	230	40	100/110	6.5

Note : Not only use screw mounting, but also can use 35mm [ CJX2-09Z~95Z ] and 75mm [CJX2-40Z~95Z ]  ┐┐  international standard Din-rail mounting.

3. Main Parameter And Technical Characteristic

3.1 Rated controllable voltage of DC coil (Table 1)

Coil voltage (V)	12	24	36	48	60	72	110	125	220	250	440
Coil code	JD	BD	CD	ED	ND	SD	FD	GD	MD	UD	RD

3.2 Main parameter and technical characteristic (Table 2)

Table 2												
Parameter		Type	LP1-D-09	LP1-D-12	LP1-D-18	LP1-D-25	LP1-D-32	LP1-D-40	LP1-D-50	LP1-D-65	LP1-D-80	LP1-D-95
Item												
Rated operational current (A)	380V	AC-3	9	12	18	25	32	40	50	65	80	95
		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
Conventional heating current (A)			20	20	32	40	50	60	80	80	110	110
Rated insulation voltage (V)			690	690	690	690	690	690	690	690	690	690
Power of controllable		220V	2.2	3	4	5.5	7.5	11	15	18.5	22	25
3-phase squirrel-cage		380V	4	5.5	7.5	11	15	18.5	22	30	37	45
motor (kW) AC-3		660V	5.5	7.5	10	15	18.5	30	33	37	45	55
Operational frequency	Electric life (×10 <sup>4</sup> )	AC-3	1200	1200	1200	1200	600	600	600	600	600	600
		AC-4	300	300	300	150	150	150	150	150	150	150
(operation/h)		Mechanical life(×10 <sup>4</sup> )	3600	3600	3600	3600	3600	3600	3600	3600	2400	2400
Electric life (operation/h)		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 (operation/h)			1000	1000	1000	1000	800	800	800	800	600	600
Screw size			M3.5	M3.5	M3.5	M4	M4	M8	M8	M8	M10	M10
Tightening torque (N·m)			0.8	0.8	0.8	1.2	1.2	3.5	3.5	3.5	4	4
DC coil power (W)			9	9	11	11	11	20	20	20	20	20
Operating range			Pick-up voltage : 85%~110% Us ; Drop-out voltage : 10%~70% Us									
Basic parameter of auxiliary contact			AC-15: 360VA DC-13: 33W lth: 10A									



J3TF30



J3TF31

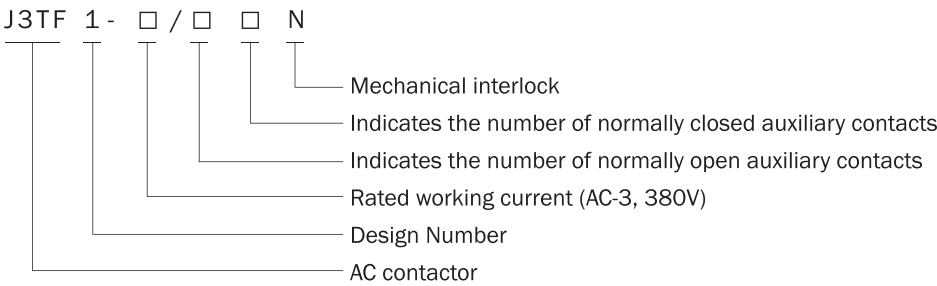
J3TF AC contactor

1. Application range

J3TF series slag contactor utilises dry AC 50H7 or 60Hz, rated insulation voltage is 690-1000V, rated working voltage is 0.475A when rated working voltage is 380V under AC-3 use category, and the main supply distance is It is used for connecting surge and breaking circuit, and is suitable for controlling the start, stop and reverse of AC motors.

Comply with GB/T14048.4, IEC60947-4-1, VDE0660 and other standards.

2. Product number



4. Main parameters and technical performance

Type	Rated thermal current (A)	Mechanical life×10 <sup>6</sup>	Conventional heating current	Electric life ×10 <sup>6</sup>		250Rated working current(380V)(A)		Controllable motor power (kW) 50Hz						
								AC-3					AC-4	
				380V	660V	AC 3	AC 4	230 /220V	400/ 380V	500V	690/ 660V	1000V	400/ 380V	690/ 660/
J3TF40	690	15	20	1.2	0.2	9	3.3	2.4	4	5.5	5.5	-	14.8/1.4	2.54/2.4
J3TF41	690	15	20	1.2	0.2	12	4.3	3.3	5.5	7.5	7.5	-	2/1.9	3.45/3.3
J3TF42	690	15	30	1.2	0.2	16	7.7	4	7.5	9	9	-	3.5	6
J3TF43	690	15	30	1.2	0.2	22	8.5	5.5	11	11	11	-	4	6.6
J3TF44	690	10	45	1.2	0.2	32	15.6	8.5	15	21	23	-	7.5	13
J3TF45	690	10	55	1.2	0.2	38	18.5	11	18.5	25	23	-	9	15.5
J3TF46	1000	10	80	1.2	0.2	45	24	15	22	30	39	-	12.6/12	21.8/208
J3TF47	1000	10	80	1.2	0.2	63	28	18.5	30	41	55	-	14.7/14	25.4/24.3
J3TF48	1000	10	100	1.2	0.2	75	34	22	37	50	67	39	17.9/17	30.9/29.5
J3TF49	1000	10	100	1.2	0.2	85	42	26	45	59	67	39	22/21	38/36
J3TF50	1000	10	160	1.2	0.2	110	54	37	55	76	100	658	28.4/27	49/46.9
J3TF51	1000	10	160	1.2	0.2	140	68	43	75	98	100	65	36/35	63/60
J3TF52	1000	10	220	1.2	0.2	170	75	55	90	118	156	90	40/38	69/66
J3TF53	1000	10	220	1.2	0.2	205	96	64	110	145	156	90	52/50	90/86
J3TF54	1000	10	300	1.2	0.2	250	110	78	132	178	235	132	61/58	105/100
J3TF55	1000	10	300	1.2	0.2	300	125	93	160	210	235	132	69/66	119/114
J3TF56	1000	10	400	1.2	0.2	400	150	125	22	248	375	250	85/81	147/140
J3TF57	1000	10	475	1.2	0.2	475	165	148	252	342	432	250	110/104	197/190





J3TF42



J3TF44



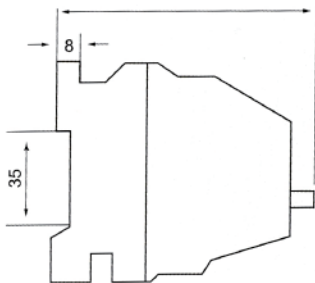
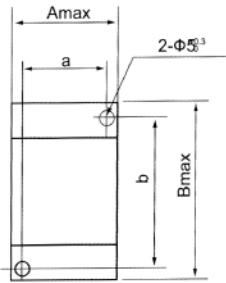
J3TF51

3. Working conditions

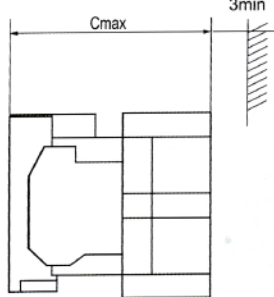
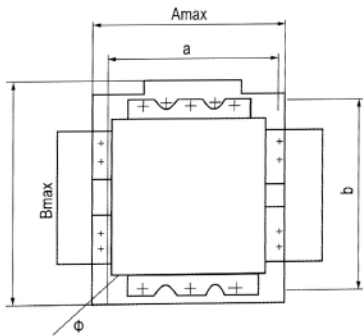
- ◆ The altitude does not exceed 2000 meters;
- ◆ Ambient temperature: -25 °C~+55 °C;
- ◆ Relative air humidity: no more than 50% at +40 °C, no more than 90% at +25 °C;
- ◆ Atmospheric conditions: there is no medium that can cause explosion hazard, and there is no gas or conductive dust that corrodes metal and damages insulation;
- ◆ Where there is no significant shaking and shock vibration;
- ◆ In a place where there is no rain or snow.

5. Shape and installation dimensions

J3TF-9~32F



J3TF-45~475F



Type	A max	B max	C max	a	b	c
J3TF-40, 41	45	78.5	104(90)	35+0.31	60+0.37	
J3TF-42, 43	46	85	114	35+0.31	75+0.37	
J3TF-44, 45	74	88	08	50+0.31	75+0.37	
J3TF-46, 47	91(114)	120	124	70+0.6	100+0.2	4.8
J3TF-48, 49	102(125)	135	142	80+0.6	100+0.2	5.5
J3TF-50, 51	122(145)	156	154	100+0.2	130+0.8	6.5
J3TF-52, 53	140(1 63)	185	190	100+0.2	160+0.8	7
J3TF-54, 55	150(173)	205	200	120+0.2	180+0.8	9
J3TF-56, 57	165(1 88)	205	225	130+0.8	180+0.8	9

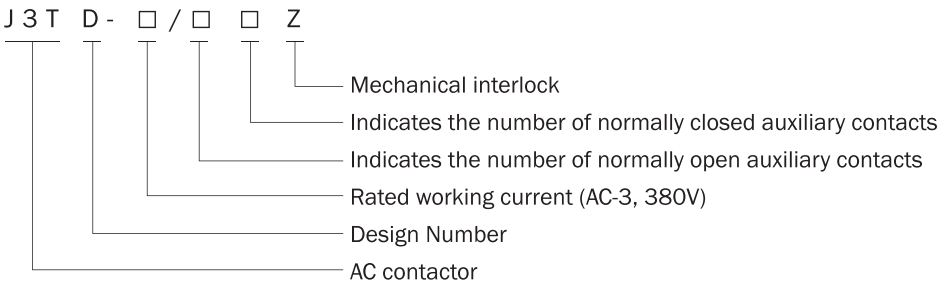
J3TD AC Contactor

1. Application range

The J3TDseries mechanical interlocking reversible contactor is AC 50Hz or 60Hz, the rated insulation voltage is 690-1000V, and the rated working current is 9A-475A when the rated working voltage is 380V under the AC-3 usage category. Mainly used to control the forward and reverse rotation of AC motors.

Comply with GB/T14048.4, IEC60947-4-1, VDE0660 and other standards.

2. Product number



J3TD-40



J3TD-42



J3TD-44

3. Main parameters and technical performance

Type	Rated insulation voltage(V)	Mechanical life×10 <sup>6</sup>	Electric life×10 <sup>6</sup>		Rated working current(380V)(A)		Controllable motor power (kW) 50Hz					
			AC-3	AC-3	AC 3	AC 4	AC-3			AC-4		
							230 /220V	400/ 380V	500V	690/ 660V	400/ 380V	690/ 660/
J3TD-09	660	10	1.0	0.2	9	3.3	2.4	4	5.5	5.5	1.4	2.4
J3TD-12	660				12	4.3	3.3	5.5	7.5	7.5	1.9	3.3
J3TD-16	660				16	4	4	7.5	10	11	3.5	6
J3TD-22	660				22	6.1	6.1	11	11	11	4	6.6
J3TD-32	660				32	8.5	8.5	15	15	23	7.5	13

Attracting coil power consumption					Working voltage range of attracting coil	Operating frequency		Conventional heating current	Auxiliary contact current (A)		Auxiliary contact agreed hair current (A)	Auxiliary contact rated insulation voltage (A)
AC(50Hz)				DC					AC-15	DC-13		
maintain (VA)	Power Factor	Pull in (VA)	Power Factor	Pull and hold(VA)		AC-3	AC-4		380/220V	110/220V		
10	0.29	68	0.82	6.2	0.8~1.1	1000	250	20	6/10	0.9/0.45	10	660
10	0.29	68	0.82	6.2	0.8~1.1	1000	250	20	6/10	0.9/0.45	10	660
10	0.29	68	0.82	6.2	0.8~1.1	750	250	30	6/10	0.9/0.45	10	660
10	0.29	68	0.82	6.2	0.8~1.1	750	250	30	6/10	0.9/0.45	10	660
10	0.29	68	0.82	6.2	0.8~1.1	750	250	55	4/6	0.9/0.45	10	660

J3TH AC contactor



J3TH-22

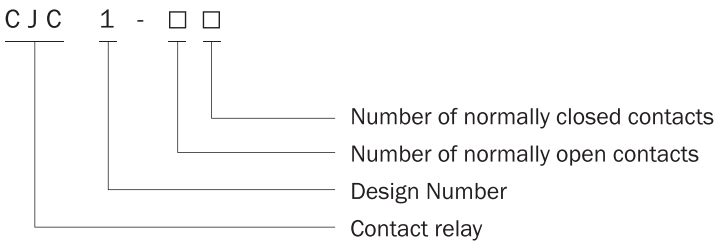


J3TH-44

1. Application

The J3TH contact relay is suitable for AC 50Hz, 60Hz. In the control circuit with rated voltage to 60V or DC voltage to 600V, it is used to control various electromagnetic coils to amplify the signal or transmit the signal to related control components at the same time. Its performance indicators are the product equivalent to 3TH.

2. Product number



3. Outline and Mounting Dimension

Model		J3TH (3TH80)	J3TH (3TH82)	J3TH (3TH40)	J3TH (3TH42)	J3TH (3TH30)
Rated insulation voltage UI(V)		660	660	660	660	660
Rated working current Ie(A)	AC-15(AC-11) DC-13(DC-11)	6 0.25	6 0.25	6 0.25	6 0.25	6 0.25
Electric life(×10 <sup>6</sup> )	AC-15(AC-11)	30	30	30	30	30
Operating frequency (times/h)	AC-3 AC-15 DC-13	1.2 1000	1.2 1000	1.2 1000	1.2 1000	1.2 1000
Mechanical life(×10 <sup>6</sup> )		36	36	36	36	36
Action characteristics		Pull-in voltage: 85-110%, release voltage: 20~75% US				
Action time		The coil is energized to the normally closed contact breaking: 9~20ms				
Conventional heating current (A)		10	10	10	10	10

Type	Structure	Normally open contact (cover number)	Normally closed contact (cover number)
J3TH-04-OA	One Way	0	4
J3TH-13-OA		1	3
J3TH-22-OA		2	2
J3TH-31-OA		3	1
J3TH-40-OA	Two-way	4	0
J3TH-44-OA		4	4
J3TH-53-OA		5	3
J3TH-62-OA		6	2
J3TH-71-OA		7	1
J3TH-80-OA		8	0

JCA2 AC contactor

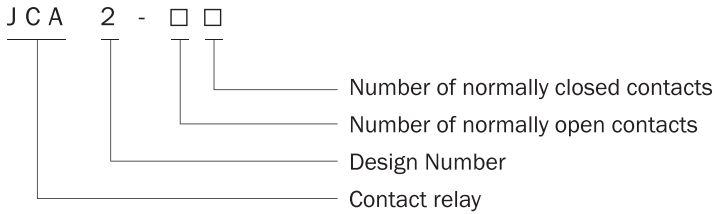


JCA2

1. Application

JCA2 contactor relays are mainly used for relay control, signal transmission, isolation and amplification circuits with AC 50/60Hz, rated working voltage up to 660V and DC rated voltage up to 220V for making, breaking, and amplifying circuits.

2. Product number



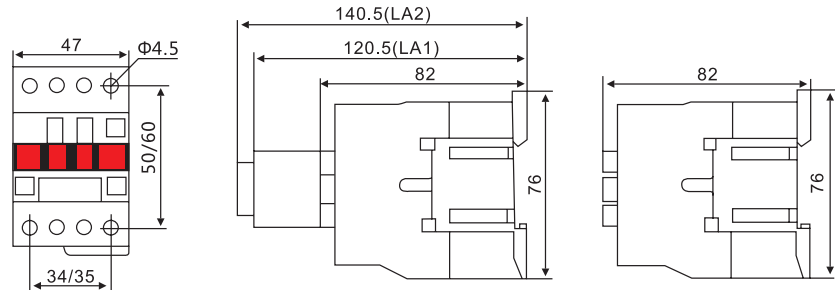
3. Outline and Mounting Dimension

model	Number of contact pairs	
	Normally open	Normally closed
JCA2-40	4	0
JCA2-31	3	1
JCA2-22	2	2
JCA2-13	1	3
JCA2-04	0	4

4. Normal working conditions and installation conditions


- ◆ Ambient air temperature: -5°C~+40°C, the average value within 24 hours does not exceed +35°C;
- ◆ Altitude: no more than 2000m;
- ◆ Atmospheric conditions: when the highest temperature is +40°C, the relative humidity of the air does not exceed 50%; higher relative humidity is allowed at lower temperatures, such as 90% at 20°C. Special measures should be taken for the occasional condensation due to temperature changes;
- ◆ Pollution degree: Level 3; ◆ Installation category: Class III;
- ◆ Installation conditions: the inclination of the installation surface and the vertical surface is not more than ±5°;
- ◆ Impact vibration: The product should be installed and used in a place where there is no significant shaking, impact and vibration.

5. Shape And Installation Dimensions ( mm )



JMC type  
Magnetic Contactors



Frame size				18AF				22AF			
				JMC-6a	JMC-9a	JMC-12a	JMC-18a	JMC-9b	JMC-12b	JMC-18b	JMC-22b
Type	Screws clamp terminals			●	●	●	●	●	●	●	●
	Lug clamp terminals			-	-	-	-	-	-	-	-
Number of poles				3pole				3pole			
Rated operational voltage, Ue				690V				690V			
Rated insulation voltage, Ui				690V				690V			
Rated frequency				50/60Hz				50/60Hz			
Rated impulse withstand voltage, Uimp				6kV				6kV			
Maximum operating rate in operating cycles per hour(AC3)				1800 operations per hour				1800 operations per hour			
Durability	Mechanical			15 mil. operations				15 mil. operations			
	Electrical			2.5 mil. operations				2.5 mil. operations			
Current and power	AC-1	Thermal current	[A]	25	25	25	32	25	27	40	45
		200/240V	[kW]	2.2	2.5	3.5	4.5	2.5	3.5	4.5	5.5
	AC-3		[A]	9	11	13	18	11	13	18	22
		380/440V	[kW]	3	4	5.5	7.5	4	5.5	7.5	11
			[A]	7	9	12	18	9	12	18	22
		500/550V	[kW]	3	4	7.5	7.5	4	7.5	7.5	15
			[A]	6	7	12	13	7	12	13	20
		690V	[kW]	3	4	7.5	7.5	4	7.5	7.5	15
			[A]	4	5	9	9	6	9	9	18
		1000V	[kW]	-	-	-	-	-	-	-	-
Rated Short-time withstand current (IEC 60947)		[A]	-	-	-	-	-	-	-	-	
	1S	[A]	210	250	280	300	250	280	300	400	
	10s	[A]	105	110	120	130	110	120	154	186	
	30s	[A]	70	70	80	85	70	80	100	130	
	1min	[A]	61	61	61	70	61	61	84	90	
	10min	[A]	40	45	47	50	45	50	60	60	
	30min	[A]	30	30	30	40	30	30	40	50	
	≥15min	[A]	25	26	28	30	26	28	30	45	
UL rating (50/60Hz)	Continuous curren		[A]	25	25	25	32	25	25	40	40
	Single phase	110-120V 220-240V	[HP]	0.5	0.5	1	2	0.5	1	2	2
			[HP]	1.5	1.5	2	3	1.5	2	3	3
	Three phase	200-208V	[HP]	2	2	3	7.5	2	3	7.5	7.5
		220-240V	[HP]	3	3	5	7.5	3	5	7.5	10
		440-480V	[HP]	5	5	7.5	10	5	7.5	10	15
		550-600V	[HP]	7.5	7.5	10	15	7.5	10	15	20
	NEMA size			00	00	0	1	00	0	1	-
<div><div>Size and weight</div><div></div></div>	AC control	Weight	[kg]	0.33				0.34			
		Size(W×H×D)Z	[mm]	45×73.5×80.4				45×73.5×87.4			
	DC control	Weight	[kg]	0.4				0.41			
		Size(W×H×D)	[mm]	45×73.5×96.6				45×73.5×103.6			
Auxiliary(standard)				1NO or 1NC				1NO1NC			
Auxiliary	Side mount			UA-1				UA-1			
	Front mount			UA-2, UA-4				UA-2, UA-4			

Note) Minimum conduct current of Auxiliary contactor is DC 17V 5mA.

JMT type  
Thermal Overload Relays



			MT-12/□	MT-32/□
Type	Screws clamp terminals		●	●
	Lug clamp terminals		-	-
Rated operational voltage, Ue		[V]	690	690
Rated insulation voltage, Ui		[V]	690	690
Rated impulse withstand voltage, Uimp		[kV]	6	6
Trip class			10A, 20	10A, 20
Setting range			0.1~18A	0.1~40A
Size and weight	Weight		kg	0.1
	Size(W×H×D)	[mm]	45×73.2×63.7	45×75×90

\* The safety cover of magnetic contactor and thermal overload relay is optional.



40AF		65AF		100AF			150AF	
JMC-32a	JMC-40a	JMC-50a	JMC-65a	JMC-75a	JMC-85a	JMC-100a	JMC-130a	JMC-150a
●	●	●	●	●	●	●	●	●
-	-	●	●	●	●	●	●	●
3pole		3pole		3pole			3pole	
1000V		1000V		1000V			1000V	
1000V		1000V		1000V			1000V	
50/60Hz		50/60Hz		50/60Hz			50/60Hz	
8kV		8kV		8kV			8kV	
1800 operations per hour		1800 operations per hour		1800 operations per hour			1200 operations per hour	
12 mil. operations		12 mil. operations		12 mil. operations			5 mil. operations	
2 mil. operations		2 mil. operations		2 mil. operations		1 mil. operations	1 mil. operations	
55	60	100	115	125	135	160	200	250
7.5	11	15	18.5	22	25	30	37	45
32	40	55	65	75	85	105	130	150
15	18.5	22	30	37	45	55	60	75
32	40	50	65	75	85	105	130	150
18.5	22	30	33	37	45	55	60	70
28	32	43	60	64	75	85	90	100
18.5	22	30	33	37	45	55	55	55
20	23	28	35	42	45	65	60	60
22	22	30	30	37	37	37	75	75
17	17	23	23	28	28	28	50	50
600	700	1000	1050	1100	1200	1320	1350	1800
260	300	550	700	750	800	900	950	1200
160	190	330	380	400	450	500	700	800
100	120	250	270	300	350	400	550	600
70	80	150	200	220	270	270	350	450
55	65	90	120	140	170	180	200	300
50	60	87	96	114	150	160	175	280
50	60	70	100	110	135	160	200	250
3	3	3	5	5	7.5	10	10	15
5	7.5	10	15	15	15	20	20	25
7.5	15	20	25	25	30	30	40	40
10	15	25	30	30	40	40	40	50
20	30	40	50	50	60	75	75	100
25	30	50	60	60	75	75	75	75
1P	2	-	-	-	3	-	-	4
0.55		1.05		1.93			2.4	
69×83×90		79×106×119		94×140×135.8				
0.77		1.3		2.8				
69×83×117.1		79×106×146.4		94×140×172.3			119×158×130.3	
2NO2NC		2NO2NC		2NO2NC			2NO2NC	
UA-1		UA-1		UA-1			UA-1	
UA-2, UA-4		UA-2, UA-4		UA-2, UA-4			UA-2, UA-4	



MT-32/□	MT-63/□	MT-95/□	MT-150/□
●	●	●	●
-	●	●	●
690	690	690	690
690	690	690	690
6	6	6	6
10A, 20	10A, 20	10A, 20	10A, 20
0.1~40A	4~65A	7~100A	34~150A
0.17	0.31/0.33	0.48/0.5	0.67
45×75×90	55×81×100	70×97×110	95×109×113



CJ19 Changeover Capacitor Contactor

1. Application Range

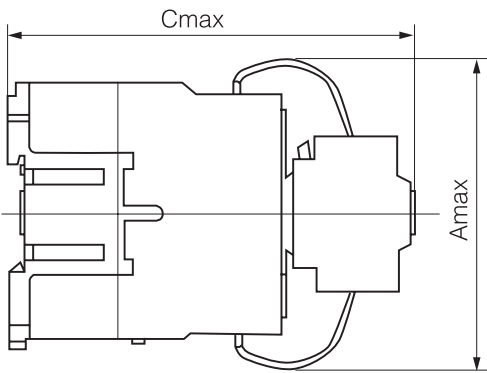
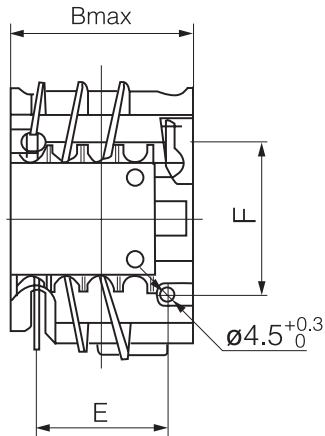
CJ19 Changeover capacitor contactor is especailly used for low voltage shunt capacitor. And it widely used in reactive power compensation equipment with AC 50Hz and voltage 380V, inrush current system in the contactor can decrease shock to capactor and lower switching overvoltagein while breaking a circuit.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

2. Main Parameters And Technical Performance

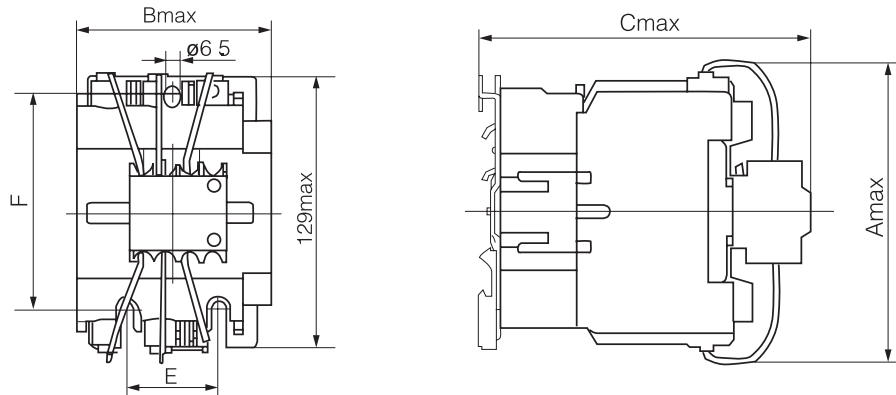
Parameter Item	Type	CJ19-25	CJ19-32	CJ19-43	CJ19-63	CJ19-80	CJ19-95
Rated current (A)	380V	17	23	29	43	58	72
Controllable capacitor capacity (kVar)	230V	6.5	8.5	10	20	21	21
	400V	12	16.7	20	32	40	50
Rated insulation voltage Ui (V)		690	690	690	690	690	690
Restrained surge capacity		20In	20In	20In	20In	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

3. Outline And Mounting Dimension

CJ19-25~43



CJ19-63~95

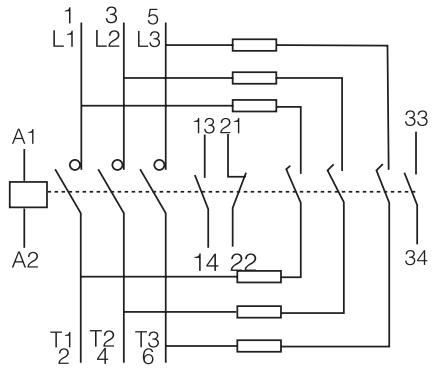


Type	Amax	Bmax	Cmax	E	F
CJ19-25	117	47	123	35	50/60
CJ19-32	130	58	130	40	50/60
CJ19-43	130	58	135	40	50/60
CJ19-63	170	79	150	40	100/110
CJ19-80	200	87	158	40	100/110
CJ19-95	200	87	158	40	100/110

4. Design Feature

The contactor is a direct moving double breakpoint structure, the contact system is divided into two layers, and the upper layer has three pairs of current limiting contacts and current-limiting resistance consist of inrush current device. When it is closed, it is connected to the work contact after several milliseconds, and the permanent magnetic block in the current limit contact is released by the spring reaction. Disconnect the current-limiting resistor to make the capacitor work properly and the contactor internal circuit connection diagram (see figure 3). CJ19-25~43 have two auxiliary contacts, CJ19-63~95 have three auxiliary contacts. For CJ19-25~43, Screws are available for installation, as well as the 35mm standard din rail. For CJ19-63~95, 35mm or 75mm standard din rail can be mounted are available for installation.

Photo 3 Example:CJ19-63/21,95/21



5. Ordering Instructions

When placing an order,you should point out the below:  
Model, rated operational voltage and frequency of coil and quantity  
Example:Changeover capacitor contactor CJ19-32/11 AC 220 50Hz 500PCS

CJ20 AC contactor

1. Application Range

CJ20 series AC contactors are mainly used for AC 50Hz (or 60Hz), rated working voltage up to 660V (or 1140V) rated working current up to 630A in the power system for long-distance frequent connection and breaking of circuits, and can be connected with appropriate thermal relays Or an electronic protection device is combined into an electromagnetic starter to protect the circuit that may be overloaded.

The product complies with GB/T14048.4, IEC60947-4-1 and other standards.

2. Product Number

CJ20-□□/□

CJ

20

-

□□

/

□

Auxiliary specification code ("06" means 660V; "11" means 1140V)

Mining contactors are represented by the letter "K",

Energy-saving (energy) type is represented by "J"

Direct operation is represented by "Z"

Basic specification code, expressed by 380V,

AC-3 rated working current value

Design Number

AC contactor

3. Outline And Mounting Dimension

The contactor is fixed and installed with screws. CJ20-10~25 can also be installed with 35mm standard rails. The appearance and installation dimensions are shown in Figure 1, Figure 2, Figure 3 and Table 4.

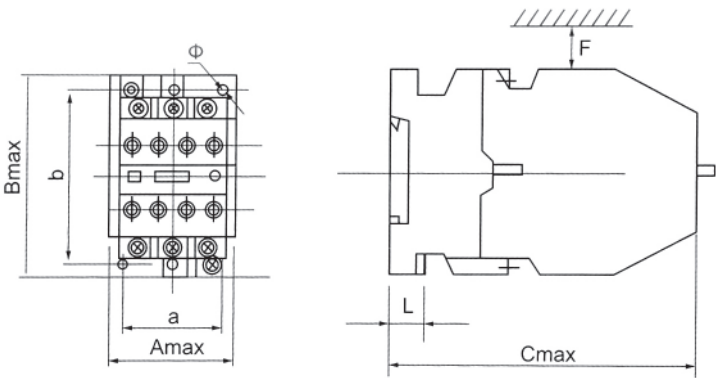


Figure 1 CJ20-10, 16, 25 shape and installation dimensions

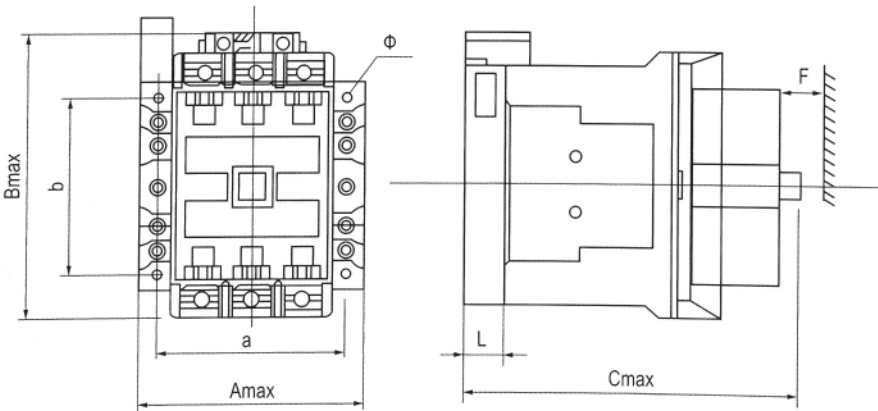


Figure 2 CJ20-40 appearance and installation dimensions

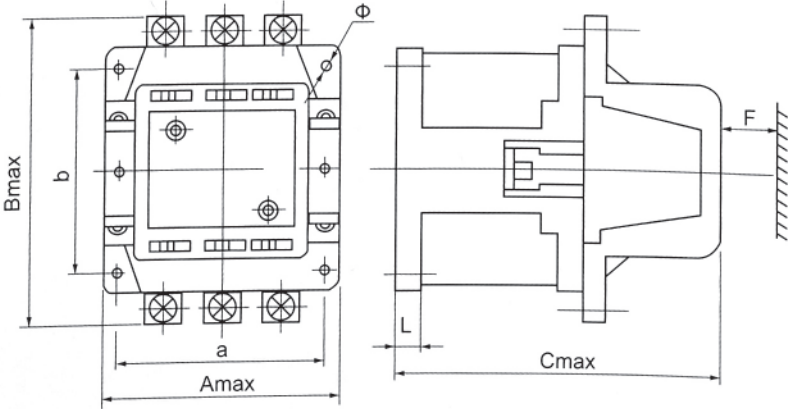


Figure 3 CJ20-60~630 appearance and installation dimensions

Type	A	B	C	a	b	φ	L	Fmin
	mm							
CJ20-10	44.5	67.5	107	35±0.31	55±0.37	5 <sup>+0.3</sup> <sub>0</sub>	8	10
CJ20-16	44.5	73	116.5	35±0.31	60±0.37	5 <sup>+0.3</sup> <sub>0</sub>	8	10
CJ20-25	53	91	122	40±0.31	80±0.37	5 <sup>+0.3</sup> <sub>0</sub>	7.5	10
CJ20-40	87	112.5	125	70±0.31	80±0.37	5 <sup>+0.3</sup> <sub>0</sub>	15.5	30
CJ20-63	116	142	146	100±0.36	90±0.36	5.8 <sup>+0.3</sup> <sub>0</sub>	13	60
CJ20-100	122	147	154	108±0.435	92±0.435	7 <sup>+0.58</sup> <sub>0</sub>	15	70
CJ20-160	146	187	178	130±0.5	130± 0.5	9 <sup>+0.58</sup> <sub>0</sub>	15	80
CJ20-250	190	235	230	160±0.5	130±0.5	9 <sup>+0.58</sup> <sub>0</sub>	17	100
CJ20-400	190	235	230	160±0.5	150±0.5	9 <sup>+0.58</sup> <sub>0</sub>	17	110
CJ20-630	245	294	287	210±0.575	150± 0.5	11 <sup>+0.58</sup> <sub>0</sub>	20	120

CJX9 AC contactor



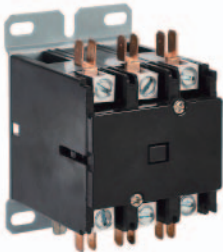
CJX9-1P 30A



CJX9-2P 30A



CJX9-2P 40A



CJX9-3P 40A

1. Partial Listing Of Available 1&2 Pole Contactors

1 Pole NO with or without shunt ; 2 Pole NO ; Silver Cadmium Oxide Contacts.

Fla Rating	Number Of Poles	24V Coil	120V Coil	208/240V Coil	277V Coil
20 FLA	1	CJX9-1XQ00AA	CJX9-1XT00AA	CJX9-1XU00AA	CJX9-1XV00AA
	2	CJX9-2XQ00AA	CJX9-2XT00AA	CJX9-2XU00AA	CJX9-2XV00AA
25 FLA	1	CJX9-1XQ01AA	CJX9-1XT01AA	CJX9-1XU01AA	CJX9-1XV01AA
	2	CJX9-2XQ01AA	CJX9-2XT01AA	CJX9-2XU01AA	CJX9-2XV01AA
30 FLA	1	CJX9-1XQ02AA	CJX9-1XT02AA	CJX9-1XU02AA	CJX9-1XV02AA
	2	CJX9-2XQ02AA	CJX9-2XT02AA	CJX9-2XU02AA	CJX9-2XV02AA
40 FLA	1	CJX9-1XQ04GG	CJX9-1XT04GG	CJX9-1XU04GG	CJX9-1XV04GG
	2	CJX9-2XQ04GG	CJX9-2XT04GG	CJX9-2XU04GG	CJX9-2XV04GG

INITIAL DIELECTRIC STRENGTH

Between contacts & coils: 2,200 VAC

Between poles: 2,200 VAC (includes shunt)

Between open contacts: 2,200 VAC (no shunt)

ARC COVER

Optional on 20-30 FLA ; Standard on 40 FLA

INSULATION SYSTEM

130°C Class B

TEMPERATURE EANGE

-40°C to +65°C

-40°F to +150°F

UNIT WEIGHT

1Pole .5lb

2Pole .6lb

POWER POLE TERMINATIONS

# 10-32 screw or box lug

WIRE SIZE

# 10-32 screw 16-8\*

Box lug 14-4

\*must use ring terminal

RECOMMENDED TIGHTENING TORQUE

# 10-30 screw 22 in.lbs

Box lug 40 in.lbs

QUICK CONNECTS

Coil terminals Dual: .250" QC

Power terminals 1 Pole : Quad .250"QC

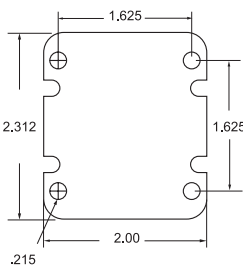
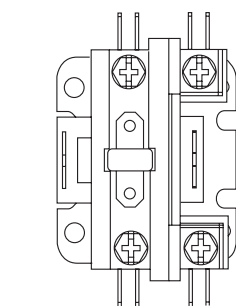
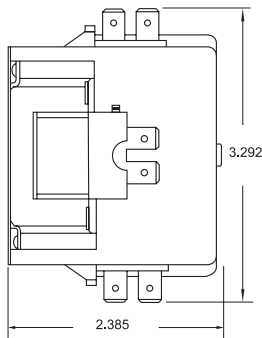
2 Pole : Dual or Quand.25"QC

Coil Rating	1 Pole Contactors				2 Pole Contactors			
Nominal Coil Voltage	24	120	208/240	277	24	120	208/240	277
Nominal Coil Resistance Ohms	18	420	1800	2500	11	237	1000	1600
Maximum Pick Up Voltage	18	88	177	221	18	88	177	221
Minimum Drop Out Voltage	6-15	20-70	40-140	50-185	6-15	20-70	40-110	65-185
Nominal Inrush VA@50Hz	31	31	31	31	33	33	33	33
Nominal Inrush VA@60Hz	28	28	28	28	30	30	30	30
Nominal Sealed VA@50Hz	6	6	6	6	8	8	8	8
Nominal Sealed VA@60Hz	5	5	5	5	6.5	6.5	6.5	6.5
Maximum Coil Voltage	30	132	264	300	30	132	264	300

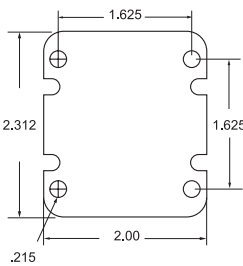
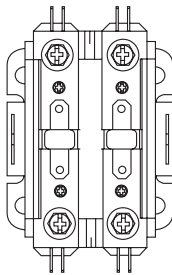
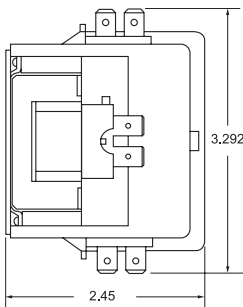
2. Electrical Rating

Full Load Amps	Resistive Amps @ 600VAC	Locked Rotor Amps @240/277 VAC	Locked Rotor Amps @480 VAC	Locked Rotor Amps @600 VAC	Maximum Horsepower	
					Voltage	Single Phase
1 Pole Contactors						
20	30	120	100	80	120	1
					140	2
25	35	125	125	100	120	1
					240	2
30	40	125	126	100	120	1
					240	2
40	50	160	160	120	120	2
					240	3
2 Pole Contactors						
20	30	100	100	80	120	2
					240	3
25	35	125	125	100	120	2
					240	3
30	40	125	125	100	120	2
					240	3
40	50	160	160	120	120	2
					240	3

3. Outline And Mounting Dimension



1 Pole Dimensions (Inches)



2 Pole Dimensions (Inches)

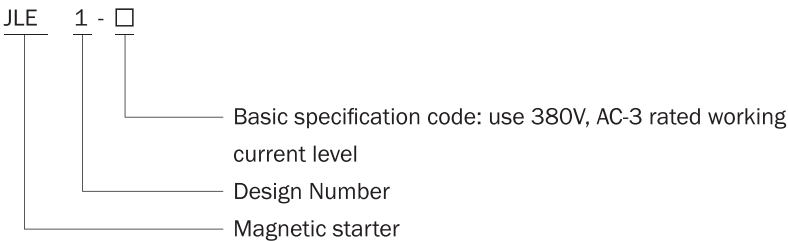


JLE1 Magnetic starter

1. Application

JLE1 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.

2. Product Number



3. Structural Features

- The starter is of protective type, plastic shell type (JLE1-09~32) and metal shell type (JLE1-40~95), 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 JLE1 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.

4. 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 Us 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%Us~110% Us; 50/60Hz 85%Us~110%Us;
  - Release voltage: 20%Us~75%Us
- The operating range of the starter with thermal (overload) relay has the operating characteristics of thermal relay;
- 5. The operating frequency with thermal relay is 30 times/hour;



JLE1-D09,12,18



JLE1-D25,32



JQCX2-18

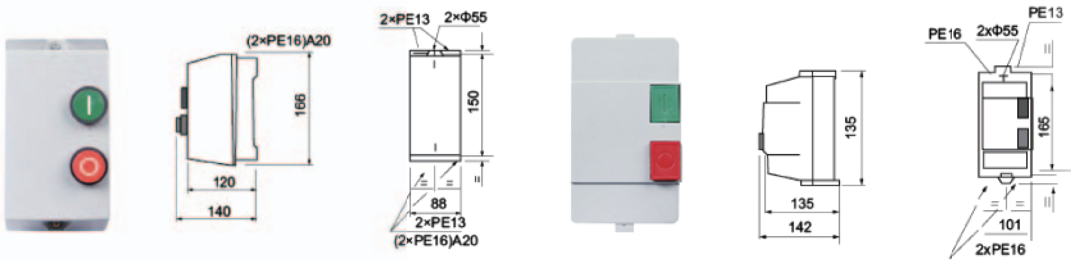


JLE1-D18N,25N,32N

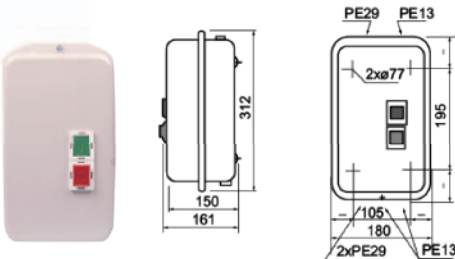
5. Technical Parameters

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			
			380V	660V	380V	660V	230V	400V	415V	440V	500V	690V			
JLE1-09	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	JLR2-13	1-1.6	JLC1-09
							0.75	0.75	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	JLR2-13	2.5-4	JLC1-09
							1.5	2.2	2.2	2.2	3.7	3.7	JLR2-13	4-6	JLC1-09
							2.2	3	3.7	3.7	4	4	JLR2-13	5.5-8	JLC1-09
JLE1-12	20						2.2	4	4	4	5.5	5.5	JLR2-13	7-10	JLC1-09
JLE1-18	32		12	8.9	5	2	3	5.5	5.5	5.5	7.5	7.5	JLR2-13	9-13	JLC1-12
JLE1-25	40		18	10.6	7.7	3.8	4	7.5	9	9	10	10	JLR2-13	12-18	JLC1-18
JLE1-32	50		25	18	8.5	4.4	5.5	11	11	11	15	15	JLR2-13	17-25	JLC1-25
JLE1-40	60		32	21	12	7.5	7.5	15	15	15	18.5	18.5	JLR2-23	23-32	JLC1-32
JLE1-50	80		40	34	18.5	9	11	18.5	22	22	30	30	JLR2-23	30-40	JLC1-40
JLE1-65	80		50	39	24	12	15	22	25	30	33	33	JLR2-33	37-50	JLC1-50
JLE1-80	100		65	42	28	14	18.5	30	37	37	37	37	JLR2-33	55-70	JLC1-65
JLE1-95	100		80	49	37	17.3	22	37	45	45	45	45	JLR2-33	63-80	JLC1-80
			95	49	44	21.3	25	45	45	55	45	45	JLR2-93	80-93	JLC1-95

6. Shape And Installation Dimensions ( mm )

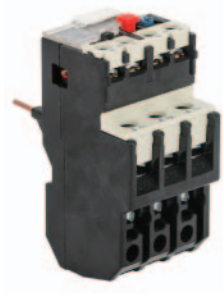


JLE1-09~18 appearance and installation dimensions JLE1-25~32 appearance and installation dimensions

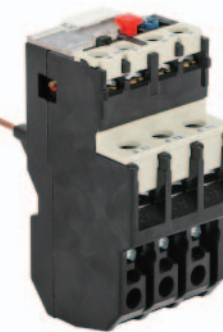


JLE1-40~95 appearance and installation dimensions

JLR2-D Thermal Overload Relay



JLR2-D13



JLR2-D23



JLR2-D33

1. Application

JLR2 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 JLC1 series AC contactor. The product conforms to IEC60947-4-1 standard.

2. 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	
3	1.5	<4min	(Following the No.1 test)	
4	7.2	10A 2s<Tp≤10s ≤63A 10 4s<Tp≤10s >63A	Cold state	

3. Phase-losing Motion Characteristic

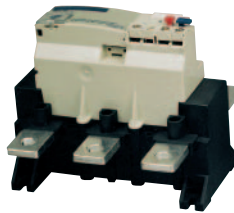
No	Times of the setting current(A)		Motion time	Start condition	Ambient temperature
	Any two phases	Another phase			
1	1.0	0.9	>2h	Cold state	20±5 °C
2	1.15	0	<2h	Heat state (Following the No.1 test)	

4. Specification

Type	Number	Setting range (A)	For contactor
JLR2-D13	1301	0.1~0.16	JLC1-09~32
	1302	0.16~0.25	JLC1-09~32
	1303	0.25~0.4	JLC1-09~32
	1304	0.4~0.63	JLC1-09~32
	1305	0.63~1	JLC1-09~32
	1306	1~1.6	JLC1-09~32
	1307	1.6~2.5	JLC1-09~32
	1308	2.5~4	JLC1-09~32
	1310	4~6	JLC1-09~32
	1312	5.5~8	JLC1-09~32
	1314	7~10	JLC1-09~32
	1316	9~13	JLC1-09~32
	1321	12~18	JLC1-09~32
	1322	17~25	JLC1-32
JLR2-D23	2353	23~32	CJX2-09~32
	2355	30~40	JLC1-09~32
JLR2-D33	3322	17~25	JLC1-09~32
	3353	23~32	JLC1-09~32
	3355	30~40	JLC1-09~32
	3357	37~50	JLC1-09~32
	3359	48~65	JLC1-09~32
	3361	55~70	JLC1-09~32
	3363	63~80	JLC1-09~32
JLR2-D43	3365	80~93	JLC1-95
	4365	80~104	JLC1-95
	4367	95~120	JLC1-95~115
	4369	110~140	JLC1-115



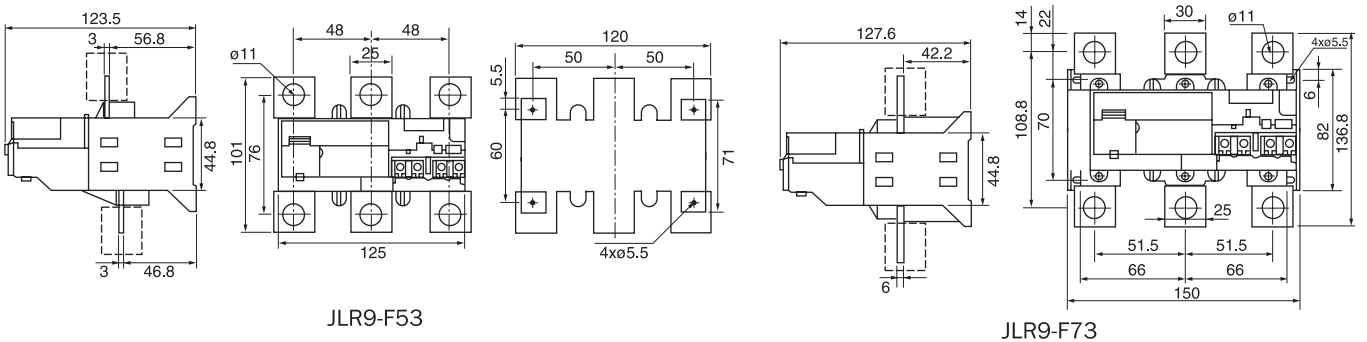
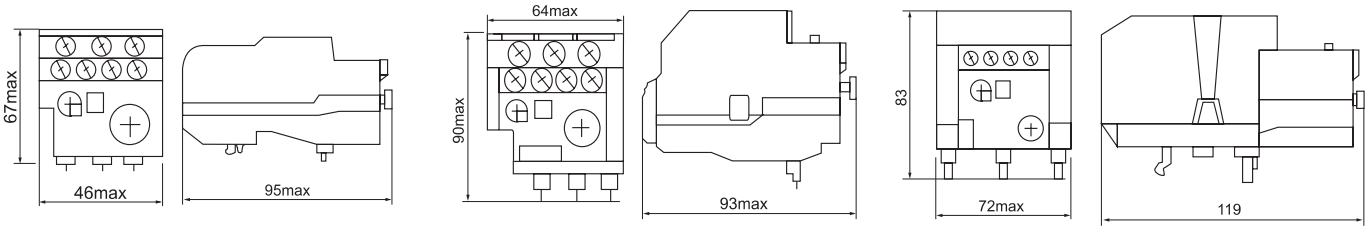
JLR9-F53



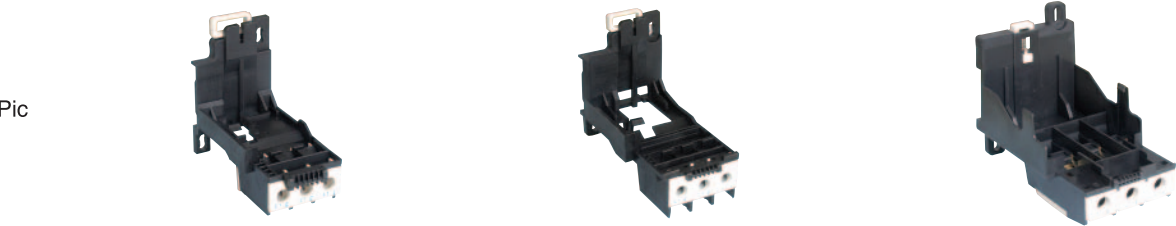
JLR9-F73

Type	Number	Setting range (A)	For contactor
JLR9-F53	F5369	90~150	JLC1-F115~F150
	F5357	30~50	JLC1-F115~F185
	F5363	48~80	JLC1-F115~F185
	F5367	60~100	JLC1-F115~F185
JLR9-F73	F5369	90~150	JLC1-F115~F185
	F5371	132~220	JLC1-F225~F265
	F7375	200~330	JLC1-F225~F500
	F7379	300~500	JLC1-F225~F500
	F7381	380~630	JLC1-F400~F630

5. Outline And Mounting Dimension



6. Accessories



Description	JLR9-F53 mounting base	JLR9-F53 mounting base	JLR9-F73 mounting base
Application	Assembled with JLR9-25 to form a complete set	Assembled with JLR9-36 to form a complete set	Assembled with JLR9-93 to form a complete set

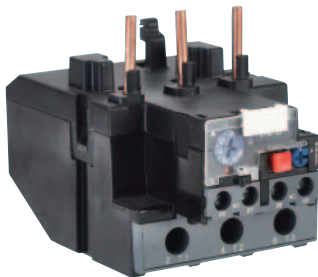
JLRD New Thermal Overload Relay



JLRD-13



JLRE-13



JLRD-33

1. Application

JLRD 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 JLC1N series AC contactor. The product conforms to IEC60947-4-1 standard.

2. 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	
3	1.5	<4min	(Following the No.1 test)	
4	7.2	10A 2s<Tp≤10s ≤63A 10 4s<Tp≤10s >63A	Cold state	

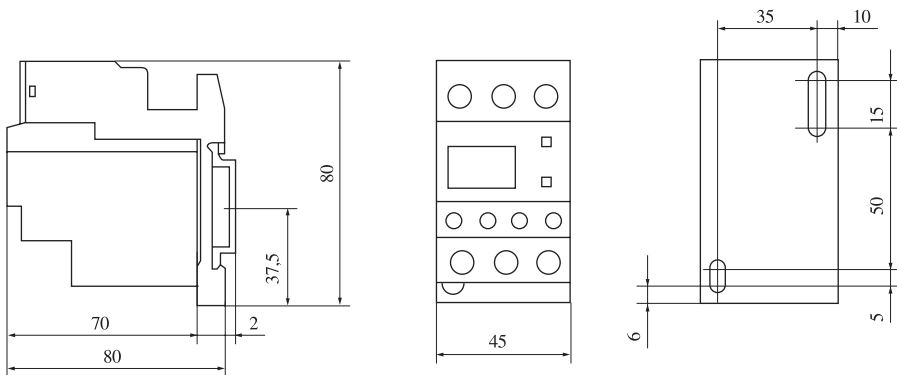
3. Phase-Losing Motion Characteristic

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)	

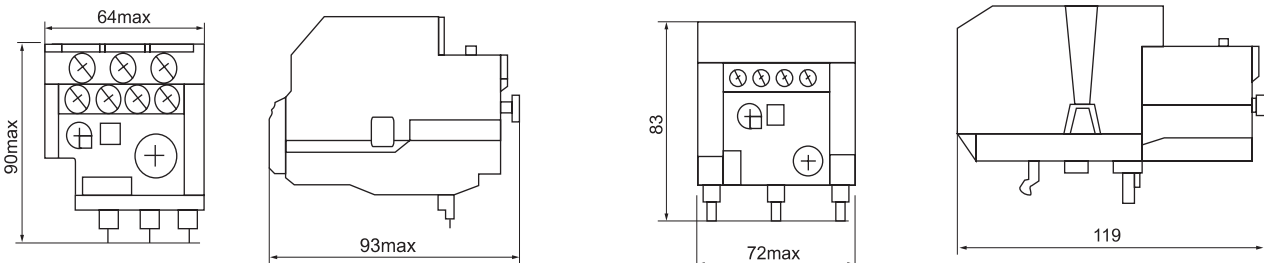
4. Specification

Type	Number	Setting range (A)	For contactor
JLRD-13	D01	0.10~0.16	JLC1-DN-09~38
	D02	0.16~0.25	JLC1-DN-09~38
	D03	0.25~0.40	JLC1-DN-09~38
	D04	0.40~0.63	JLC1-DN-09~38
	D05	0.63~1	JLC1-DN-09~38
	D06	1~1.7	JLC1-DN-09~38
	D07	1.6~2.5	JLC1-DN-09~38
	D08	2.5~4	JLC1-DN-09~38
	D10	4~6	JLC1-DN-09~38
	D12	5.5~8	JLC1-DN-09~38
	D14	7~10	JLC1-DN-09~38
	D16	9~13	JLC1-DN-09~38
	D21	12~18	JLC1-DN-09~38
	D22	16~24	JLC1-DN-09~38
JLRD-33	3322	17~25	JLC1-DN-40~95
	3353	23~32	JLC1-DN-40~95
	3355	30~40	JLC1-DN-40~95
	3357	37~50	JLC1-DN-50~95
	3359	48~65	JLC1-DN-50~95
	3361	55~70	JLC1-DN-65~95
	3363	63~80	JLC1-DN-65~95
	3365	80~93	JLC1-DN-95

5. Outline And Mounting Dimension



JLRD-25



JLRD-36

JLRD-93

6. Accessories

Pic



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



J3UA Thermal Overload Relay



J3UA54



J3UA59



J3UA-58

1. Application

J3UA thermal relay is suitable for AC 50/60Hz, voltage up to 660V and current up to 630A, general AC motor of long or discontinuous long operation, used as overload protection and has the functions of breaking phase protection, temperature compensation, and trip indication. It can automatically and manually get back. It can be fixed with contactor CJX1 together, also be independtly fixed. The product conforms to IEC60947-4-1 standard.

2. 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	
3	1.5	<4min		(Following the No.1 test)	
4	7.2	10A	2s<Tp≤10s	≤63A	
		10	4s<Tp≤10s	>63A	

3. 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)	

4. Specification

Type	Number	Setting range (A)	For contactor	Type	Number	Setting range (A)	For contactor
J3UA50	0A	0.1~0.16	J3TF40 J3TF41	J3UA52	0A	0.1~0.16	J3TF42 J3TF43
	0C	0.16~0.25			0C	0.16~0.25	
	0E	0.25~0.4			0E	0.25~0.4	
	0G	0.4~0.63			0G	0.4~0.63	
	0J	0.63~1			0J	0.63~1	
	0K	0.8~1.25			0K	0.8~1.25	
	1A	1~1.6			1A	1~1.6	
	1B	1.25~2			1B	1.25~2	
	1C	1.6~2.5			1C	1.6~2.5	
	1D	2~3.2			1D	2~3.2	
	1E	2.5~4			1E	2.5~4	
	1F	3.2~5			1F	3.2~5	
	1G	4~6.3			1G	4~6.3	
	1H	5~8			1H	5~8	
	1J	6.3~10			1J	6.3~10	
	1K	8~12.5			1K	8~12.5	
	2S	10~14.5			2A	10~16	
					2B	12.5~20	
					2C	16~25	

Type	Number	Setting range (A)	For contactor	Type	Number	Setting range (A)	For contactor		
J3UA54	1G	4~6.3	J3TB44	J3UA59	0K	0.8~1.25	J3TF42 J3TF43 J3TF44 J3TF45 J3TF46 J3TF47		
	1J	6.3~10			1A	1~1.6			
	2A	10~16			1B	1.25~2			
	2B	12.5~20			1C	1.6~2.5			
	2C	16~25			1D	2~3.2			
	2D	20~32			1E	2.5~4			
	2Q	25~36			1F	3.2~5			
J3UA55	0A	0.1~0.16	J3TF44 J3TF45		1G	4~6.3			
	0C	0.16~0.25			1H	5~8			
	0E	0.25~0.4			1J	6.3~10			
	0G	0.4~0.63			1K	8~12.5			
	0J	0.63~1			2A	10~16			
	0K	0.8~1.25			2B	12.5~20			
	1A	1~1.6			2C	16~25			
	1B	1.25~2			2D	20~32			
	1C	1.6~2.5			2E	25~40			
	1D	2~3.2			2M	32~45			
	1E	2.5~4			2T	40~57			
	1F	3.2~5			2P	50~63			
	1G	4~6.3		J3UA60	2H	55~80	J3TF50		
	1H	5~8			2W	63~90			
	1J	6.3~10			2X	80~110			
	1K	8~12.5			3H	90~120			
J3UA58	2A	10~16	J3TF46 J3TF47 J3TF48 J3TF49	J3UA61	3J	110~135	J3TF54		
	2B	12.5~20			2H	55~80			
	2C	16~25			2W	63~90			
	2D	20~32			2X	80~110			
	2Q	25~36		3H	90~120	J3TF52 J3TF53			
	2R	32~40		3J	110~135				
	8M	36~45		3K	120~150				
	J3UA59	1G		4~6.3	J3TF40 J3TF41		J3UA62	2H	55~80
		8A		11~17		2W		63~90	
		2B		12.5~20		2X		80~110	
		2C		16~25		3H		90~120	
		2D		20~32		3J	110~135	J3TF56 J3TF57	
		2E		25~40		3K	120~150		
		2F		32~50		3L	135~160		
		2T		40~57		3M	150~180		
		2P		50~63		J3UA66	2K	80~125	
2V		57~70	3B	125~200					
2U		63~80	3C	160~250					
8W		70~88	3D	200~320					
J3UA59	0A	0.1~0.16	J3TF40 J3TF41	J3UA68	3E	250~400			
	0C	0.16~0.25			3F	320~500			
	0E	0.25~0.4			3G	400~630			
	0G	0.4~0.63							
	0J	0.63~1							

J3VE Motor Protection Circuit Breaker



J3VE1



J3VE3



J3VE4



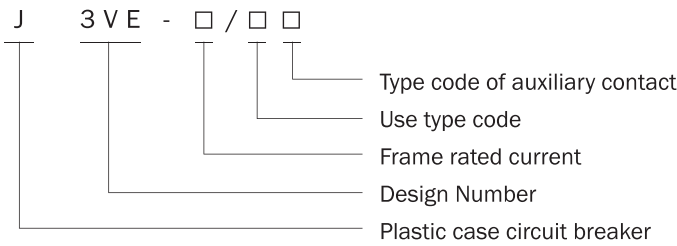
J3VE-C

1. Application

J3VE series molded case circuit breakers (hereinafter referred to as circuit breakers) are suitable for dry AC 50Hz, rated working voltage AC380V, AC660V, and rated current 0.1A to 63A. It can be used as overload and short circuit protection of electric motors. It can also be used as power distribution circuit. Used for overload and short circuit protection of electrical equipment. Under normal conditions, it can also be used for infrequent switching of lines and infrequent starting of motors.

This series of products comply with GB/T14048.2 and IEC60947-2 standards.

2. Product number



3. Structure

- This series of circuit breakers are mainly composed of mechanism, contact system, tripping device of arc extinguishing system, insulating base and shell.
- J3VE1 type circuit breakers are equipped with auxiliary contacts. J3VE3 and J3VE4 type circuit breakers are not equipped with auxiliary contacts, but they can be equipped with auxiliary contact accessories.
- There are two types of trips in circuit breakers: one is a bimetallic inverse time delay trip for overload protection; the other is an electromagnetic instantaneous trip for short-circuit protection. The circuit breaker also has a temperature compensation device, so the protection characteristics are not affected by the ambient temperature.
- J3VE1, J3VE3 and J3VE4 circuit breakers are operated by button, knob and handle respectively.
- The circuit breaker is installed in front of the board. J3VE1, J3VE3, type circuit breakers also have a standard mounting card, which can be directly installed on a standard rail with a width of 35mm (should comply with DINEN50022).
- The mechanism of J3VE3 and J3VE4 circuit breakers uses quick-on and quick-break structures, and their tripping devices have limited current characteristics, so the circuit breaker has a high short-circuit breaking capacity.
- The front of the circuit breaker has a pointer for adjusting the current of the tripping device, which can set the tripping current within the specified range.
- The circuit breaker can be attached with accessories such as undervoltage release, shunt release, indicator light, lock, and various protection types of enclosures. Please specify when ordering.

4. Tripping characteristics

Type	Rated current of trip unit (A)	Current rectification range of trip unit (A)	Code-name	Types of auxiliary contacts							
				Without auxiliary contact		One normally open and one normally closed		Two normally open		Two normally closed	
				Order number	correspond	Order number	correspond	Order number	correspond	Order number	correspond
J3VE1	0.16	0.1-0.16	B	20/10-B	005/2BU00	20/11-B	005/2BU00	20/11-B	005/2BU00	20/11-B	005/2BU00
	0.25	0.16-0.25	c	-c	-2CU00	-C	-2CU00	-C	-2CU00	-C	-2CU00
	0.4	0.25-0.4	D	-D	-2DU00	-D	-2DU00	-D	-2DU00	-D	-2DU00
	0.63	0.4-0.63	E	-E	-2EU00	-E	-2EU00	-E	-2EU00	-E	-2EU00
	1	0.63-1	F	-F	-2FU00	-F	-2FU00	-F	-2FU00	-F	-2FU00
	1.6	1-1.6	G	-G	-2GU00	-G	-2GU00	-G	-2GU00	-G	-2GU00
	2.5	1.6-2.5	H	-H	-2HU00	-H	-2HU00	-H	-2HU00	-H	-2HU00
	3.2	2-3.2	u	-u	-*8HU00	-U	-*8HU00	-U	-*8HU00	-U	-*8HU00
	4	2.5-4	J	-J	-2JU00	-J	-2JU00	-J	-2JU00	-J	-2JU00
	5	3.2-5	v	-V	-*8JU00	-v	-*8JU00	-v	-*8JU00	-v	-*8JU00
	6.3	4-6.3	K	-K	-2KU00	-K	-2KU00	-K	-2KU00	-K	-2KU00
	8	5-8	w	-w	-*8KU00	-w	-*8KU00	-w	-*8KU00	-w	-*8KU00
	10	6.3-10	L	-L	-2LU00	-L	-2LU00	-L	-2LU00	-L	-2LU00
	12.5	8-12.5	x	-X	-*8LU00	-x	-*8LU00	-x	-*8LU00	-x	-*8LU00
	16	10-16	M	-M	-2MU00	-M	-2MU00	-M	-2MU00	-M	-2MU00
	20	14-20	N	-N	-2NU00	-N	-2MU00	-N	-2MU00	-N	-2MU00

Type	Trip rated current (A)	Current rectification range of trip unit (A)	Codename	Types of auxiliary contacts	
				Order number	correspond
J3VE3	1.6	1-1.6	G	32/10-G	000/2GA00
	2.5	1.6-2.5	H	-H	-2HA00
	4	2.5-4	J	-J	-2JA00
	6.3	4-6.3	K	-K	-2KA00
	10	6.3-10	L	-L	-2LA00
	12.5	8-12.5	L	-L	*8LA00
	16	10-16	M	-M	-2MA00
	20	12.5-20	M	-M	*8MA00
	25	16-25	o	-o	-2NA00
	32	22-32	P	-P	-2PA00

5. Tripping characteristics

Type	Trip rated current (A)	Current rectification range of trip unit (A)	Codename	Types of auxiliary contacts	
				Order number	correspond
J3VE4	10	6.3-10	L	63/10-L	200/OCL00
	16	10-16	M	-M	-OCM00
	25	16-25	P	-P	-OCP00
	32	22-32	Q	-Q	-OCQ00
	40	28-40	R	-R	-OCRO0
	50	36-50	s	-s	-OCS00
	63	45-63	T	-T	-OCT00

6. The Main Technical Parameters

Basic parameters of circuit breaker

Model		J3VE1	J3VE3	J3VE4
Number of poles		3 poles		
Rated working voltage Ue		AC380V,AC660V		
Rated insulation voltage Ui		660V		
Rated impulse withstand voltage Uimp		6KV		
Frame grade rated current A		20	32	63
Rated short-circuit breaking capacity (KA)	AC380V	1.5	10	22
	AC660V	1	3	7.5
Mechanical life (times)		40000	4000	20000
Electric life (times)		5000	5000	1500

Auxiliary contact parameters

Use category	Conventional heating current A	Rated insulation voltage V	Rated working electricity	Rated working electricity
AC-15	6	660	AC220	1.8
			AC380	1.5

Note:J3VE1,2 can be equipped with auxiliary contact components alone.

Overcurrent trip characteristics

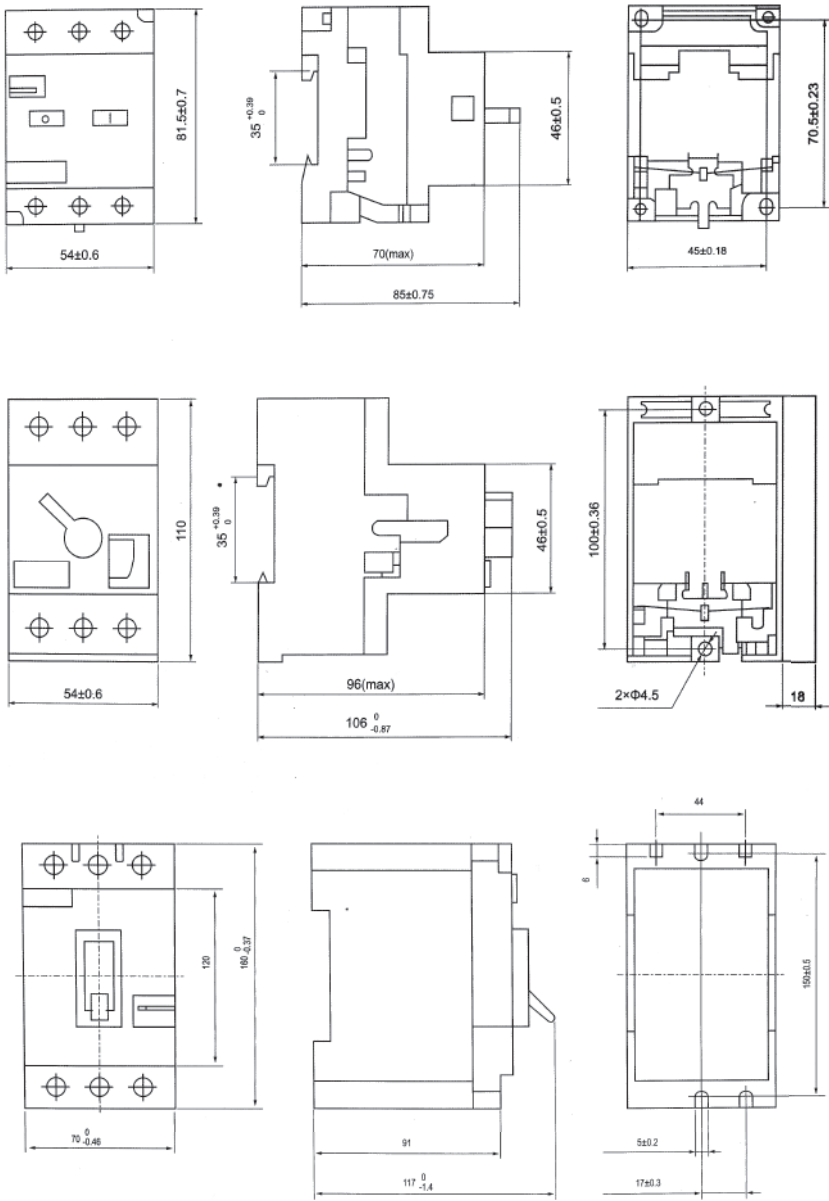
Serial number	Circuit breaker for power distribution			Ambient air temperature
	Test current multiple	Action time	Starting state	
1	1.05In	Within 1 hour No tripping	Cold start	+30 °C± 2 °C
2	1.3In	Trip within 1 hour	Connection 1 proceed	
3	10In	<0.2s trip	Cold start	Any suitable temperature

Moulded Case Circuit Breaker Series

Overcurrent trip characteristics

Serial number	Circuit breaker for power distribution			Ambient air temperature
	Test current multiple	Action time	Starting state	
1	1.05In	No tripping within 2 hours	Cold start	+20 °C ±5 °C
2	1.2In	Trip within 2 hours	Connect sequence 1 to pass and sequence 1 current reaches	
3	1.5In	Trip within 3min	Start after thermal equilibrium	
4	7.2In	2~10s trip	Cold start	Any suitable temperature
5	12In	<0.2s trip	Cold start	

7. Outline and Mounting Dimension



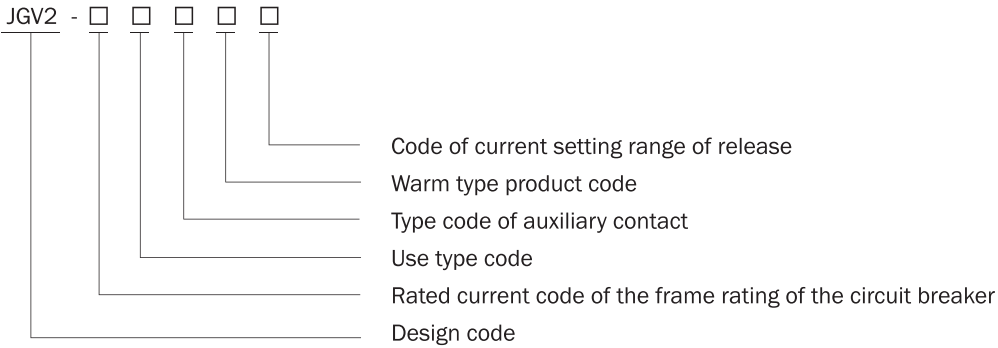


JGV2 Motor Protection Circuit Breaker

1. Application range

JGV2 series is a motor protection circuit breaker, adopting modular design, beautiful appearance, small size, phase failure protection, built-in thermal relay, strong functionality and good versatility. JGV2 series comply with IEC60947.2 and EC60947-4.1 and EN60947-1 standards. Kaitian and contactor can form a direct motor starter. The enclosure protection grade of JGV2 series can reach IP65. There are three types of products in this series: JGV2-M and ME are button-controlled motors with thermal-magnetic protective circuit breakers; JGV2-RS are transfer switch-controlled motors with thermal-magnetic protective circuit breakers; JGV2-LS, LE are transfer switch control The motor with magnetic protection circuit breaker (without thermal delay protection).

2. Product number



3. Structural features

- Three-phase bimetallic sheet type
- With continuous adjustable device for setting current
- With temperature compensation
- With action instructions
- Has a testing organization
- Has a stop button
- With manual and automatic reset buttons
- With electrically separable one normally open and one commonly closed contact

4. Technical Characteristic

Table 1													
Type	Rated current of trip unit In(A)	Setting current adjustment range (A)	Rated ultimate short-circuit breaking capacity Icu (kA), rated operating short-circuit breaking capacity Ics (kA)										Arcing distance (mm)
			230/240V		400/415V		440V		500V		690V		
			Icu	Ics	Icu	Ics	Icu	Ics	Icu	Ics	Icu	Ics	
JGV2-32	0.16	0.1-0.16	100	100	100	100	100	100	100	100	100	100	40
	0.25	0.16-0.25	100	100	100	100	100	100	100	100	100	100	40
	0.4	0.25-0.4	100	100	100	100	100	100	100	100	100	100	40
	0.63	0.4-0.63	100	100	100	100	100	100	100	100	100	100	40
	1	0.63-1	100	100	100	100	100	100	100	100	100	100	40
	1.6	1-1.6	100	100	100	100	100	100	100	100	100	100	40
	2.5	1.6-2.5	100	100	100	100	100	100	100	100	3	2.25	40
	4	2.5-4	100	100	100	100	100	100	100	100	3	2.25	40
	6.3	4-6.3	100	100	100	100	50	50	50	50	3	2.25	40
	10	6-10	100	100	100	100	15	15	10	10	3	2.25	40
JGV3-80	14	9-14	100	100	15	7.5	8	4	6	4.5	3	2.25	40
	18	13-18	100	100	15	7.5	8	4	6	4.5	3	2.25	40
	23	17-23	50	50	15	6	6	3	4	3	3	2.25	40
	32	24-32	50	50	15	6	6	3	4	3	3	2.25	40
	40	25-40	-	-	35	17.5	-	-	-	-	4	2	50
	63	40-63	-	-	35	17.5	-	-	-	-	4	2	50
	80	56-80	-	-	35	17.5	-	-	-	-	4	2	50

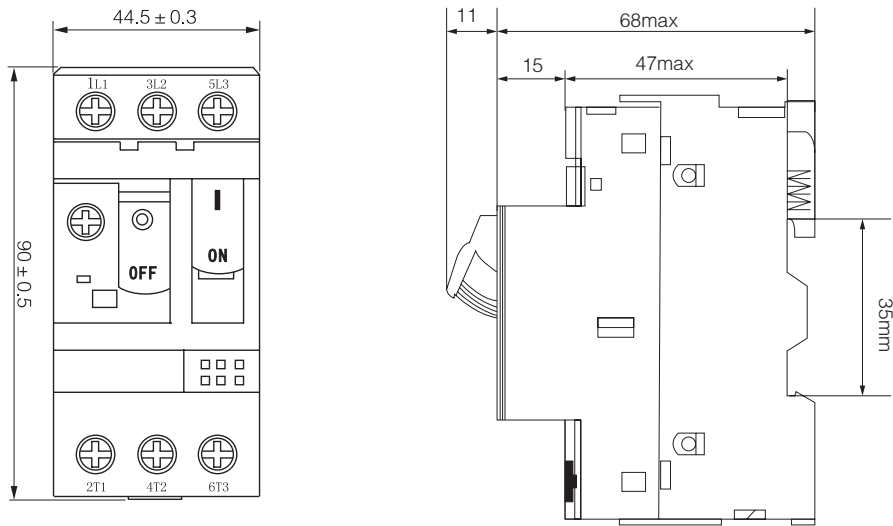
Rated power of the three-phase motor controlled by the circuit breaker (see Table 2)								
Type	Rated current of trip unit In (A)	Rated current adjustment range (A)	Standard rated power of three-phase motor (kW)					
			AC-3, 50Hz/60Hz					
			230/240V	400V	415V	440V	500V	690V
JGV2-32	0.06	0.1-0.16	-	-	-	-	-	-
	0.25	0.6-0.25	-	-	-	-	-	-
	0.4	0.25-0.4	-	-	-	-	-	-
	0.63	0.4-0.63	-	-	-	-	-	0.37
	1	0.63-1	-	-	-	0.37	0.37	0.55
	1.6	1-1.6	-	0.37	-	0.55	0.75	1.1
	2.5	1.6-2.5	0.37	0.75	0.75	1.1	1.1	1.5
	4	2.5-4	0.75	1.5	1.5	1.5	2.2	3
	6.3	4-6.3	1.1	2.2	2.2	3	3.7	4
	10	6-10	2.2	4	4	4	5.5	7.5
JGV3-80	14	9-14	3	5.5	5.5	7.5	7.5	9
	18	13-18	4	7.5	9	9	9	11
	23	17-23	5.5	11	11	11	11	15
	32	24-32	7.5	15	15	15	18.5	26
	40	25-40	-	18.5	-	-	-	30
	63	40-63	-	30	-	-	-	45
	80	56-80	-	37	-	-	-	55

The enclosure protection level is: IP20;

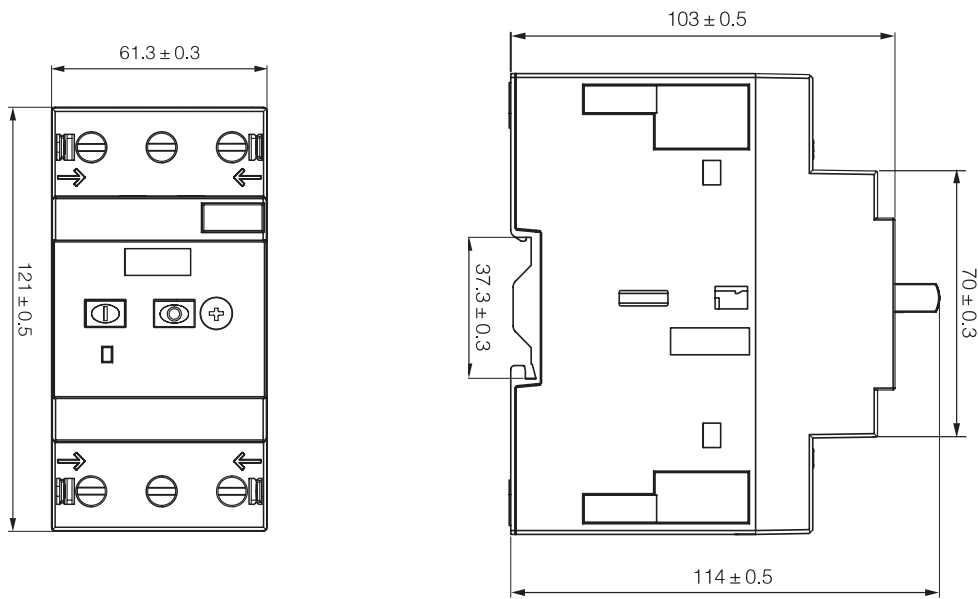
The operating performance of the circuit breaker (see Table 3)

Type	Frame rated current Inm(A)	Operating cycles per hour	Operation cycle times		
			Power ups	No power	Total
1	32	120	2000	10000	12000
2	80	120	2000	10000	12000

5. Outline and Mounting Dimension



JGV2-32M



JGV3-80M

JM1 Moulded Case Circuit Breaker

1. Application

JM1 series moulded case circuit breaker is one of products developed and manufactured by adopting international advanced technology. It is supplied with rated insulating voltage 550 and 800V and used for circuit of AC 50/60Hz, rated operating voltage AC 400V (or below), rated operating current up to 1600A for infrequent changing over and starting of the motors.The products conforms to IEC60947-2 standard.

2. Main Technical Specification

Table 1

Type	Rated current (A)	Pole	Rated insulating voltage (V)	Rated operating voltage (V)	Arcing-over distance (mm)	Ultimate short circuit breaking capacity (kA)	Servies short circuit breaking capacity (kA)	Operation performance	Utilization category
JM1-63L	(6),10,16,20,	3, 4	500V	400V	0	25	18	1500	8500
JM1-63M	25,32,40,50,63				0	50	35		
JM1-100L	(10),16,20,25,32,				0(≤50)	35	22		
JM1-100M	40,50,63,80,100				0(≤50)	50	35		
JM1-100H					0(≤50)	85	50		
JM1-225L	100,125,160,	3, 4	800V	400V	≤50	35	22	1000	7000
JM1-225M	180,200,225				≤50	50	35		
JM1-225H					≤50	85	50		
JM1-400L	225,250,315,				≤50	50	35		
JM1-400M	350,400				≤100	65	42		
JM1-630L	400	3			≤100	50	35	1000	4000
JM1-630M	500				≤100	65	42		
JM1-630H	630				≤100	100	65		
JM1-800M	630,700,				≤100	75	50		
JM1-800H	800				≤100	100	65		
JM1-1250M	1000,1250				≤100	100	65		
JM1-1250H					≤100	125	75		
JM1-1600M	1600				≤100	150	80		

Note: 6A without thermal protection

The N-pole of four-poles breaker is sited at the right side of the product has four types:

Type A: Without current trip-lease on N pole which making all the time, not closing and opening with the other three poles.

Type B: Without current trip-release on N pole which closing and opening with the other poles.

Type C: With current trip-release which closing and opening with the other three poles.

Type D: With current trip-release which making all the time not closing and opening with the other three poles.

3. Protection Characteristic

The thermodynamic release of a circuit breaker provides the feature of inverse time-delay, while the magnetic release is the instantaneous operation as shown on table 2(distribution circuit breaker) and table 3 (motor protection circuit breaker).



JM1-125/3P



JM1-225/3P



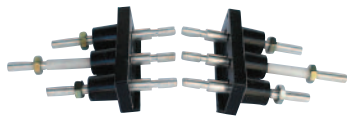
JM1-400/3P



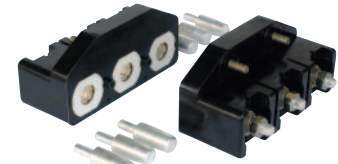
JM1-630/3P



JM1-400L/3P



Back panel connection



Plug-in



Electromagnetic operation device



Motor-driven operation device

Table 2

Rated current of release (A)	Thermodynamic release ( ambient temperature $\begin{matrix} \text{land } +40^{\circ}\text{C} \\ \text{marine } +45^{\circ}\text{C} \end{matrix}$ )		Operating current of magnetic release (A)
$10 \leq I_n \leq 63$	$\geq 1$	$< 1$	$10I_n \pm 20\%$
$63 < I_n \leq 100$	$\geq 2$	$< 2$	
$100 < I_n \leq 800$	$\geq 2$	$< 2$	$5I_n \pm 20\%$ $10I_n \pm 20\%$

Table 3

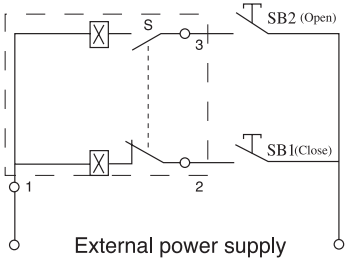
Rated current of release (A)	Thermodynamic release ( ambient temperature $\begin{matrix} \text{land } +40^{\circ}\text{C} \\ \text{marine } +45^{\circ}\text{C} \end{matrix}$ )				Operating current of magnetic release (A)
	1.0I <sub>n</sub> (cold state) non-trip time(h)	1.20I <sub>n</sub> (heat state) trip time (h)	1.50I <sub>n</sub> (heat state) trip time (h)	7.2I <sub>n</sub> (cold state) trip time(h)	
$10 \leq I_n \leq 225$	$\geq 2$	$< 2$	$\leq 4\text{min}$	$4\text{s} < T_p \leq 10\text{s}$	$12I_n \pm 20\%$
$225 < I_n \leq 630$			$\leq 8\text{min}$	$6\text{s} < T_p \leq 20\text{s}$	

4. Accessories of Circuit Breaker

4.1 The external accessories of the breaker

- Motor-driven operation device

1) Wiring diagram of type CDM electromagnetic operation device(fitting JM1-63,100,225) see the following drawing (wiring diagram of the external accessories of the breaker in the dotted frame)

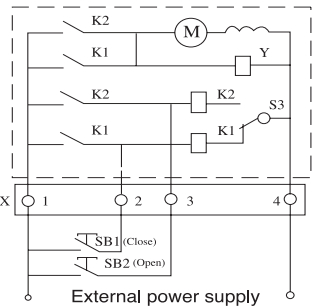


Code description: SB<sub>1</sub>SB<sub>2</sub> stand for push button.(provided by users themselves)

Number “1”“2”“3” stand for number of wiring terminals.

Voltage rating: AC50/60Hz 230V, 400V, DC 220V

2) Wiring diagram of type CD motor-driven operation device (fitting JM1-400,630,800) see belows (wiring diagram of the external accessories of the breaker in the dotted frame)



Code description: SB<sub>1</sub>SB<sub>2</sub> stand for push button. (provided by users themselves)

“X” stands for line connection terminals

Voltage rating: AC50/60Hz 230V,400V, DC220V

JM1L Earth Leakage Circuit Breaker

1. Application and Description

JM1L series earth leakage circuit breaker are one of the new type earth leakage breakers which have been developed by the company using international advanced design and manufacturing technology. Suitable for a line of AC50/60Hz, rated voltage up to 400V, rated current 16A to 630A. and is acted as infrequent changeover of circuit or infrequent starting of motor. The breaker has overload, short-circuit and under-voltage protective function, which can protect the circuit and the power equipment against damage, meanwhile, it can provide protection to these fire dangers that caused by these long-time existed grounding fault that can not be detected by the over-current protection.

This breaker can be installed vertically(upright) or horizontally(transverse).

Wiring of the breaker can not be in adverse direction, that means power supply line must be connected to terminal 1,3 and 5,and the load line connected to terminal 2,4 and 6.

The rated residual operating current I<sub>Δn</sub> and the maximum breaking time can be adjusted on site according to practical condition.

The leakage protection module still can work normally when the phase voltage reduce to 50V.

It has the same overall size with the JM1 series breakers, which make the installation more exchangeable.

The breakers are suitable for isolation, its symbol are:

The breakers comply with the demands of the following standards:

IEC60947-1 and GB/T 14048.1 General

IEC60947-2 and GB 14048.2 Low voltage breakers

IEC60947-4 and GB 14048.4 Contactors and motor starters

IEC60947-5.1 and GB 14048.5 Electrical equipments of electromechanical control circuit



JM1L-225M/3P



JM1L-400M/4P

2. Main Technical Specifications

Type	JM1L-100	JM1L-225	JM1L-400	JM1L-630
Frame current I <sub>m</sub> (A)	100	225	400	630
Rated current I <sub>n</sub> (A)	(10)16,20,25,32,40,50,63,80,100	100, 125, 160, 180, 200, 225	225, 250, 315, 350,400	400, 500, 630
Pole number	3 4	3 4	3 4	3 4
Rated insulation voltage U <sub>i</sub> (V)	AC800			
Rated working voltage U <sub>e</sub> (V)	AC 400V			
Rated impulse with stand voltage U <sub>imp</sub> (V)	8000			
Arc-over distance(mm)	>50			
Breaking capacity grade	M	H	M	M
Limiting short-circuit breaking capacity I <sub>cu</sub> (kA)	50 85	50 85 50	65	65
Service short-circuit breaking capacity I <sub>cs</sub> (kA)	35 50	35 35 50 35	42	42
Rated residual operating current I <sub>Δn</sub> (mA)	Non-delay type			
	100/300/500			
Rated residual non-operatingcurrent I <sub>Δno</sub> (mA)	Delay type			
	100/300/500			
Operation performance (time)	1/2 I <sub>Δn</sub>			
	1500	1000	1000	1000
	8500	7000	4000	4000



Note: According to the pole number of product, it calssifies three and four poles. The neutral pole (N-Pole) of the four-poles products has four types:

Type A: N-pole without over-current release unit, it has been connected all the time, not closing and opening with the other three poles.

Type B: N-pole without over-current release unit, which closing and opening with the other three poles.

Type C: N-pole fixed with over-current release unit, which closing and opening with the other three poles.

Type D: N-pole fixed with over-current release unit, it has been connected all the time, not closing and opening with the other three poles.

1. The limiting breaking and arc-over distance includes horizontal and vertical installation.

2. If the three-pole breaker of this series is connected with three phase load, the load can not

have neutral line, otherwise the breaker will have fault action.

3. If the three-pole breaker of this series is connected with single phase load, the phase line willbe connected to the left pole, and the neutral line is connected to the right pole, the middle

pole is blanket

3. Protection Characteristic

The thermal release of the breaker has again-time-limit property; the electromagnetic release is inst. Operation, its property see table 2(for distribution),table 3 (motor protection).

Table 2

Rated current of release (A)	Thermal release (ambient temperature +40℃ )		Electromagnetic release tripping current(A)
	1.05In(cold state ) non-trip time (h)	1.03In(hot state) trip time (h)	
10≤In≤63	1	1	10In±20%
63≤In≤125	2	2	
125≤In≤630	2	2	5In±20% 10In±20%

Table 3

Rated current of release (A)	Thermal release (ambient temperature +40℃ )				Electromagnetic release tripping current(A)
	1.0In(cold state) non-trip time(h)	1.20In(heat state) trip time (h)	1.50In(heat state) trip time (h)	7.2In(cold state) trip time(h)	
10≤In≤400	2	2	8min	6s<Tp≤20s	12In±20%

4. Residual Current Operating Time of Earth Leakage Circuit Breaker

4.1 Non-delay type operation characteristics see table 4(I Δ n≤30mA should be Non-delay type)

Table 4

Rated current		I Δ n	2I Δ n	5I Δ na	10I Δ n
Non-delay type	Max.breaking time(s)	0.3	0.15	0.04	0.04

Note: ato I Δ n≤30mA earth leakage circuit breaker, 0.25A can instead of 5I Δ n According toa, adopt 0.25A, then 10 I Δ n is 0.5A.

4.2 Delay type operation characteristics see table 5

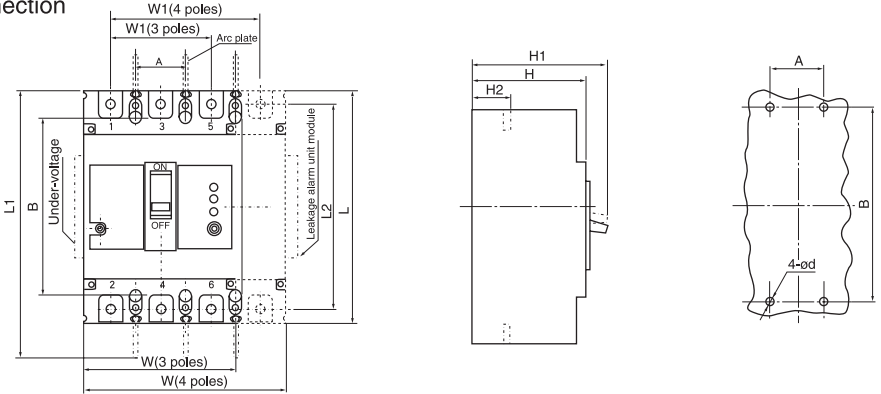
Limiting non-driven time of delay type earth leakage circuit breaker according to 2I Δ n, operation

characteristics see table 5

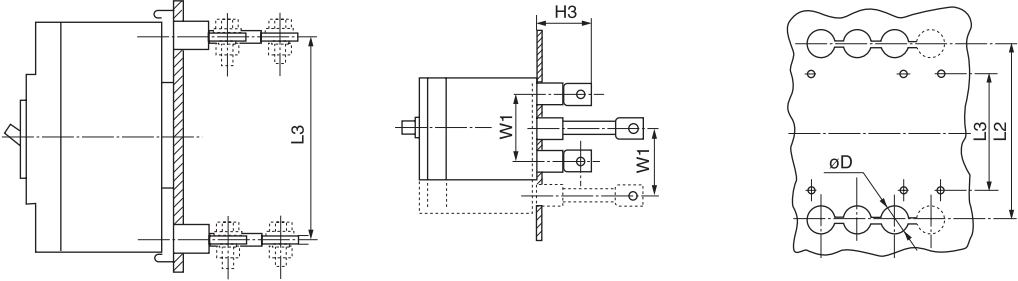
5. Outline and Installation Dimensions

Type	Outline dimensions																		Installation dimensions			
	Front panel connection								Back panel connection			Plug-in connection										
	W	L	H	W1	L1	L2	H1	H2	L3	H3	D	L4	L5	H4	H5	H6	C	D	D1	A	B	d
JM1L-100M,H/3P	92	150	92	60	200	200	132	110	28.5	90	93	168	92	50	64	76	60	56	6.5	30	129	4.5
JM1L-100M,H/4P	122	150	92	90	200	200	132	104	28.5	90	93	168	92	50	64	76	60	56	6.5	30	129	4.5
JM1L-225M,H/3P	107	165	90	70	265	265	144	110	24	93	100	183	94	50	71.5	86.5	90	54	6.5	35	126	5.5
JM1L-225M,H/4P	142	165	103	105	265	265	144	127	24	93	100	183	94	50	710.5	86.5	70	54	6.5	35	126	5.5
JM1L-400M,H/3P	150	257	106.5	96	441	441	224	146.5	38	164	108.5	279	-	60	83.5	106.5	105	129	8.5	44	194	7
JM1L-400M,H/4P	198	257	106.5	144	441	441	224	146.5	38	164	108.5	279	-	60	83.5	106.5	70	129	8.5	44	194	7
JM1L-630M,H/3P	210	280	115.5	145	480	480	243	155	45.3	158	84	296	-	61	97	148	140	143	10	70	243	7
JM1L-630M,H/4P	280	280	115.5	210	480	480	243	155	45.5	158	84	296	-	61	97	148	210	143	10	70	243	7

Front panel connection



Back panel connection



Plug-in connection

