

# AC CONTACTOR

# Introduction

HiELEK is committed to providing high-quality modular contactors and impulse relay products for high-level customers worldwide. The HCH8 series modular contactors, HIR impulse relay and HJC1 AC Contactor have passed the authoritative test by TUV Rheinland Laboratories in Germany and have obtained CE, CB, CCC certifications!

HiELEK respects the spirit of craftsmen. The main founders of the company have more than 15 years of senior technical and quality work experience in the industry. Holding the spirit of concentration and focus, we only have a goal make excellent modular contactors . We determined to be a global leader in manufacturing modular contactor !

Our employees continue to learning and working hard, take science and technology as guidance, and continue to innovate for development , serving the society as the running goals, and taking innovation and pragmatism as the business philosophy, also continuously strengthen scientific management, develop rapidly, become a professional enterprise with modern management, and gradually move to international market.

Only with extreme quality products that would be standing in the market! We are welcome you and willing to work with you together push forward the wider application of modular contactors and impulse relay in future.



## HJC1 AC contactor



### 1 Applicable scope

The new HJC1 AC Contactors feature a novel appearance and a compact structure. They are mainly used for frequent starts and control of AC motors as well as remote circuit making /breaking. They can also be combined with appropriate thermal overload relays to form electromagnetic starters.

Compliant standards :IEC/EN 60947-1,IEC/EN 60947-4-1,IEC/EN 60947-5-1.

### 2 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	HJC1-06~32: IP20; HJC1-40~95: IP10;
Ambient temperature	Operation temperature limits: -35℃~+70℃ Normal operation temperature range: -5℃~+40℃ The 24-hour average temperature should not exceed +35℃ For use beyond the normal operation temperature range
Altitude	Not exceeding 2000 m above sea level
Atmospheric conditions	The relative humidity should not exceed 50% at the upper temperature limit of +70℃ A higher relative humidity is allowed at a lower temperature, e.g. 90% at +20℃ 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 $\pm 5^\circ$

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Main circuit parameter			Technical performance
Rated insulation voltage Ui (V)			690V
Rated impulse withstand voltage Uimp (kV)			8kV
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)
Electrical life (cycles)	HJC1-09~18		1.2×10 <sup>6</sup>
	HJC1-25~32		1.2×10 <sup>7</sup>
	HJC1-40~65		1.2×10 <sup>6</sup>
	HJC1-80~95		0.8×10 <sup>6</sup>
Mechanical life (cycles)	HJC1-09~18		1.2×10 <sup>7</sup>
	HJC1-25~32		1×10 <sup>7</sup>
	HJC1-40~65		0.9×10 <sup>7</sup>
	HJC1-80~95		0.65×10 <sup>7</sup>
Main contact			3 NO
Matching thermal overload relay	HJC1-09~25		HJR2-25
	HJC1-32~40		HJR2-36
	HJC1-50~95		HJR2-93
Built-in auxiliary contact	3P		1 NO+1 NC
	4P		-
Coil control power supply	HJC1-09~18		24,110 ,220 , 230 , 240,415
	HJC1-25~95		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	HJC1-09~18	40~60
		HJC1-25~32	50~70
		HJC1-40~65	160~120
		HJC1-80~95	190~250
	Hold	HJC1-09~18	9.5
		HJC1-25~32	8~11.4
		HJC1-40~65	13~24
		HJC1-80~95	17~30
Heat dissipation(W)	AC	HJC1-09~32	1~3
		HJC1-40~65	4~8
		HJC1-80~95	6~10
	DC		-

### 3 Contactor model

Contactor model		Conventional thermal current I <sub>th</sub> (A)	Rated operation current I <sub>e</sub> (A)		Rated control power AC-3(kW)
			AC-3	AC-4	
HJC1-09	220V/230V/240V	20	9	9	2.2
	380V/400V/415V	20	9	9	4
	660V/690V	20	6.6	6.6	5.5
HJC1-12	220V/230V/240V	25	12	12	3
	380V/400V/415V	25	12	12	5.5
	660V/690V	25	8.9	8.9	7.5
HJC1-18	220V/230V/240V	32	18	18	4
	380V/400V/415V	32	18	18	7.5
	660V/690V	32	12	12	10
HJC1-25	220V/230V/240V	40	25	25	5.5
	380V/400V/415V	40	25	25	11
	660V/690V	40	18	18	15
HJC1-32	220V/230V/240V	50	32	32	7.5
	380V/400V/415V	50	32	32	15
	660V/690V	50	22	22	18.5
HJC1-40	220V/230V/240V	60	40	40	11
	380V/400V/415V	60	40	40	18.5
	660V/690V	60	34	34	30
HJC1-50	220V/230V/240V	80	50	50	15
	380V/400V/415V	80	50	50	22
	660V/690V	80	39	39	37
HJC1-65	220V/230V/240V	80	65	65	18.5
	380V/400V/415V	80	65	65	30
	660V/690V	80	42	42	37
HJC1-80	220V/230V/240V	100	80	80	22
	380V/400V/415V	100	85	85	37
	660V/690V	100	49	49	45
HJC1-95	220V/230V/240V	100	100	100	25
	380V/400V/415V	100	100	100	45
	660V/690V	100	49	49	45

## HJC1 AC Contactor

### 4 Contactor wiring

Contactor wiring				HJC1-09~12	HJC1-18~25	HJC1-32~40	HJC1-50~65	HJC1-80~95
Main circuit connection	Cable connection (mm2)	Prefabricated flexible wire	1	1~4	1.5~6	1.5~10	6~25	10~35
			2	1~2.5	1.5~4	1.5~6	4~10	6~16
		Hard wire	1	1~4	1.5~6	1.5~6	6~25	10~35
			2	1~4	1.5~6	1.5~6	4~10	6~16
	Size of fastening screw			M3.5	M3.5	M4	M8	M8
	Tightening torque (N·m)			0.8	0.8	1.2	6	6
Cable circuit connection	Cable connection (mm2 )	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				

### 5 Accessory selection table

#### 5.1 dust cover

Contactor	Optional accessory
HJC1-09~18	HJC-1 dust cover
HJC1-25~32	HJC-2 dust cover
HJC1-40~65	HJC-3 dust cover
HJC1-80~95	HJC-4 dust cover







## 5.2 Air delay head

N meaning :power on time delay

F meaning: Power off time delay

Contactor	Optional accessory	Accessory model	Contact combination	Delay range (s)
HJC full series	La2 air delay head	LA2-NO	1NO+1NC	0.1~3
		LA2-N2	1NO+1NC	0.1~30
		LA2-N4	1NO+1NC	10~180
		LA2-FO	1NO+1NC	0.1~3
		LA2-F2	1NO+1NC	0.1~30
		LA2-F4	1NO+1NC	10~180



## 5.3 Auxiliary contact

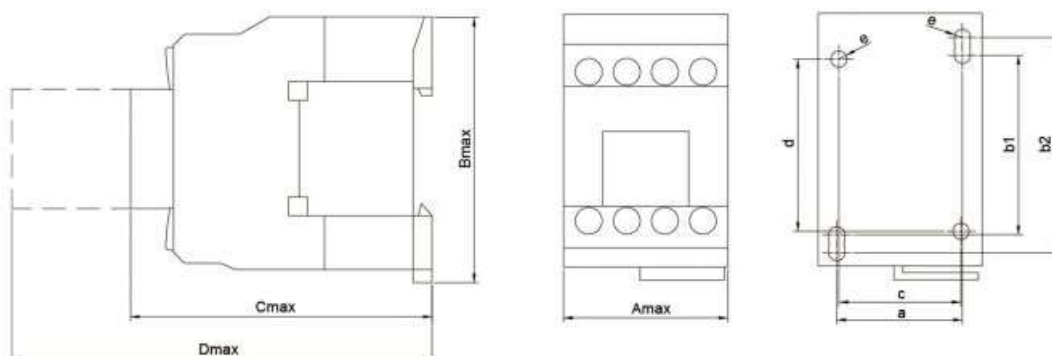
Contactor	Optional accessory	Accessory model	Contact combination
HJC1-09~95	F4 top-mounted	F411	1NO+1NC
		F402	2NC
		F420	2NO
		F422	2NO+2NC
		F413	1NO+3NC
		F431	3NO+1NC
		F440	4NO
		F404	4NC

\*Built-in 1NO and 1NC auxiliary contacts

## HJC1 AC Contactor

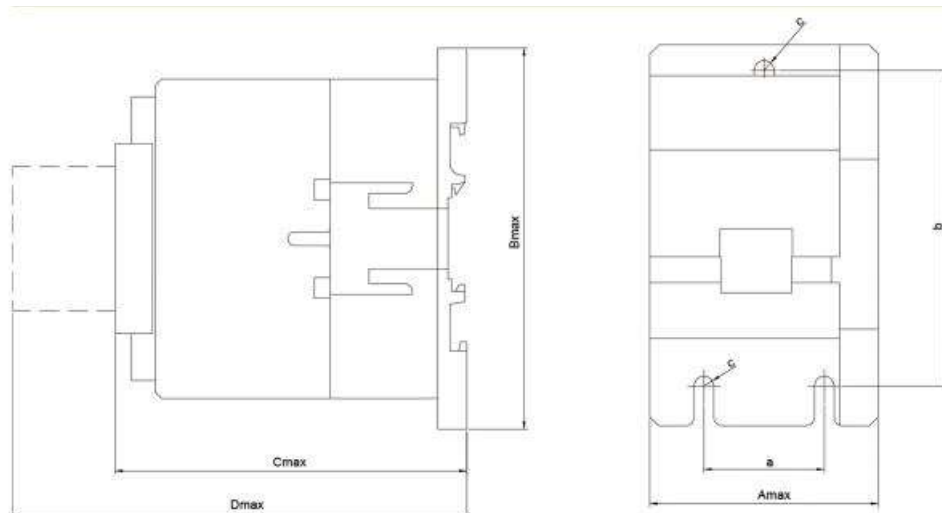
### 6 Product dimensions (mm)

#### HJC1-09~32



Contactor model	Amax	Bmax	Cmax	Dmax	a	b1/b2	c	d	e
HJC1-09~18	45	75	85	117	35	50/60	34	48	Ø 5
HJC1-25~32	45	85	92	124	35	50/60	34	48	Ø 5

#### HJC1-40~95



Contactor model	Amax	Bmax	Cmax	Dmax	a	b	c
HJC1-40~65	77	127	117	151	40	100/110	Ø 6.5
HJC1-80~95	86	127	125	160	40	100/110	Ø 6.5