# **▲** Safety Warning

- Only professional technicians are allowed for installation and maintenance
- [2] Installation in any damp, condensed-phase environment with inflammable and explosive gas is forbidden.
- 3) When the product is being installed or maintained, the power must be switched off.
- 4 You are prohibited from touching the conductive part when the product is operating.

## 1 Use Purpose

contactor.

NXC series AC contactor is mainly used in AC 50Hz (or 60Hz) circuits with rated operating voltage up to 690V. It can be used to frequently start and control AC motor or connect and disconnect circuit remotely under 400V (380V) AC-3 application category. It can also be used with proper thermal overload relay to act as electromagnetic starter.

## 2 Main Technical Parameters

2.1 See Table 1 for installation and operation conditions of the contactor.2.2 See Table 2 for the key technical parameters and performance of the

Table 1 Installation and operation conditions

	Ambient temp (°C)	The limiting working temperature is – 3.5 °C $\sim$ + 70 °C, the normal working temperature is – 5 $\sim$ + 70 °C, and the average temperature within 24 hours is not more than + 35 °C. If it is not in the normal operating temperature range, the capacity reduction shall be considered.						
Installation and operation	Hot and humid atmospheric conditions	Relative humidity should not exceed 50% at temperature up to +70°C, higher relative humidity is allowed under lower temperature, for example up to 90% at +20°C. User should take special measures against condensation due to temperature change.						
conditions	Altitude	Not higher than 2000m						
	Pollution class	Class 3						
	Insta <b>ll</b> ation category	ш						
	Insta <b>ll</b> ation conditions	The angle between the installation surface and the vertical surface should not be greater than ±5°.						
	Impact vibration	The product should be installed and used at places free from significant shaking,impact and vibration.						

01

#### Table 2 Main technical parameters

	Mod	el		NXC- 09M			NXC- 06	NXC- 09	NXC- 12	NXC- 16	NXC- 18	NXC- 22
	220/	AC-3	6	9	12	16	6	9	12	16	18	22
Rated	230V	AC-4	0	,	12	10	0	,	12	10	10	22
operating	380/	AC-3	6	9	12	16	6	9	12	16	18	22
current Ie(A)	400V	AC-4	0	,	9	12	0	,	12	12	10	18
IE(A)	660/	AC-3	3.8	4.9	4.9	6.7	3.8	6.6	8.9	8.9	12	14
	690V	AC-4	3.0	4.9	4.9	4.9	3.0	0.0	0.9	0.9	12	12
	therma <b>l</b> h(A)		20		22	2	10	2	:5	3	2	
Rated ins	ulatio Ui(V)	n vo <b>l</b> tage	690									
		withstand np(kV)	6 8									
Rated	duty:	system								systen y syste		
	ited sh rent Iq	nort-circuit (kA)		50								
Power		220/230V	1.5	2.2	3	4	1.5	2.2	3	3	4	5.5
controlla 3-phase r		380/400V	2.2	4	5.5	7.5	2.2	4	5.5	7.5	7.5	11
(AC-3)		660/690V	3	4	4	7.5	3	5.5	7.5	7.5	10	11
Arcing	distan	ce (mm)		- 1	3				1	.0		
Electrica (×10° tir		AC-3					1:	20				
400V		AC-4	See attachment "Electrical life curve"									
Mechanic	al life(	×10¹times)					12	:00				
Operati frequer		AC-3					61	00				
(times)		AC-4	150									
Endosure	Enclosure protection class				s IP20							
Model o	f matc	hing fuse	gG20 gG25 gG20 gG25 gG32						32			

Continued Table 2

Mod	el			NXC- 12M			NXC- 09	NXC- 12	NXC- 16	NXC- 18	NXC- 22
Rated current different mo		20		2	25		0	2	5	3	2
Coordinatio	n type		Type "2" coordination								
Model of m thermal overl		NXR-12				NXR-25					
Parameters of auxiliary	AC-15	Ue/Ie: AC380V/400V/1.5A Ith: 10A									
circuit	DC-13	Ue/Ie: DC220V/0.3A									
Coil power	Pick-up (VA)	20~40 40~60									
Hold (VA)		9.0 9.5									

Table 2 Main technical parameters

	Mode	si.	NXC-	NXC-	NXC-	NXC-	NXC-	NXC-	NXC-	NXC-	NXC-
	Wodel			32	38	40	50	65	75	85	100
	220/	AC-3	25	32	38	40	50	65	75	85	100
Rated	230V	AC-4	2.5	32	50	70	30	03	,,,	03	100
operating	380/	AC-3	25	32	38	40	50	65	75	85	100
current Ie(A)	400V	AC-4	23	32	32	40	30	0.5	/3	0.0	100
Ie(A)	660/	AC-3	18	22	22	34	39	42	42	49	49
	690V	AC-4	18	22	22	34	35	42	42	45	45
	tiona <b>l</b> rent Itl	therma <b>l</b> n(A)	40	40 50 60 80 90 100 110							110
Rated ins	u <b>l</b> atio Ui(V)	n vo <b>l</b> tage					690				
	pu <b>l</b> se v ge Uim	withstand p(kV)	8								
Rated	duty s	system	8 hour duty system, uninterrupted duty system, intermittent duty system, short term duty system								
	ited sh ent Iq	ort-circuit (kA)	50								

0

#### Continued Table 2

Mode	el	NXC- 25	NXC- 32	NXC- 38	NXC- 40	NXC- 50	NXC- 65	NXC- 75	NXC- 85	NXC- 100	
Power of	220/230V	5.5 7.5 9		11	15	18.5	22	22	25		
controllable 3-phase motor	380/400V	11	15	18.5	18.5	22	30	37	37	45	
(AC-3)kW	660/690V	15	18.5	18.5	30	37	37	37	45	45	
Arcing distan	ce (mm)			1	.0				12		
Electrical life (×10° times)	AC-3		120			100			80		
400V	AC-4		See	e attacl	hment	"Elec	trica <b>l l</b> i	fe curv	e"		
Mechanical life(	×10 <sup>4</sup> times)		1000			900			650		
Operation frequency	AC-3					600					
(times/h)	AC-4	150 120									
Enclosure prote	ction c <b>l</b> ass		IP20				IP	10			
Model of mate	hing fuse	gG40	gG	50	gG63	gG80		gG	100	gG125	
Rated current different mo		40	5	0	63	8	0	100 12			
Coordinatio	n type			Ту	ype "2" coordination						
Model of ma thermal overlo		NXR-	25/ N)	(R-38			NXR	-100			
Parameters of	AC-15		U	le/Ie: .	AC380	V/400\	//1.5A	Ith: 10	Α		
auxiliary circuit	DC-13			-	Ue/Ie: DC220V/0.3A						
Coil power	Pick-up (VA)	50~70				160-	~210		200~280		
	Hold (VA)	11.4			36.6				36.6		

## **3** Installation

3.1 See Figure 1 and Table 3 for the installation and overall dimensions of NXC-06M~16M series AC contactors. See label on the box for model, specifications and weight.

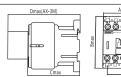


Figure 1 Installation and overall dimensions of NXC-06M~16M series AC contactor

Table 3 Overall and installation dimensions

Model	O	utline d	imensic	ns	Installation dimensions				
Model	Amax	Bmax	Cmax	Dmax	a	b	Φ		
NXC-06M~16M	45.5	59	58	94	35±0.35	50±0.48	4.2		
NXC-06M/4~16M/4	45.5	59	58	94	35±0.35	50±0.48	4.2		
NXC-06M/Z~16M/Z	45.5	59	70	106	35±0.35	50±0.48	4.2		
NXC-06M/4/Z~16M/4/Z	45.5	59	70	106	35±0.35	50±0.48	4.2		

**3.2** See Figure 2 and Table 4 for the installation and overall dimensions of NXC-06M/N~16M/N series directional AC contactors. See label on the box for model, specifications and weight.

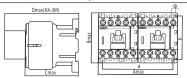


Figure 2 Installation and overall dimensions of NXC-06M/N~16M/N series directional AC contactors

Table 4 Installation and overall dimensions and wiring capacity

						L	Init: mn		
Model	Οι	ıtline di	imensio	ns	Installation dimensions				
iviodei	Amax	Bmax	Cmax	Dmax	a	b	Φ		
NXC-06M/N~16M/N	91	64	58	94	80±0.7	50±0.	48 4.2		
NXC-06M/4/N~16M/4/N	91	64	58	94	80±0.7	50±0.	48 4.2		
NXC-06M/Z/N~16M/Z/N	91	64	70	106	80±0.7	50±0.	48 4.2		
NXC-06M/4/Z/ N~16M/4/Z/N	91	64	70	106	80±0.7	50±0.	48 4.2		
Main Control Circuit circuit 0.8 N.m	Phillips	mm²	mm²	OF Mm²	mm²	mm²	mm²		
		1~2.5	1~2.5	1~2.5	1~1.5				

3.3 See Figure 3 and Table 5 for the installation and outline dimensions of NXC-06~38 series AC contactors. See label on the box for model, specifications and weight.

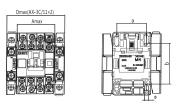






Figure 3 Installation and outline dimensions of NXC-06~38 series AC contactors

Table 6 Outline and installation dimensions

									OIII.	1111111
Model		(	Outlin	e dime	nsions	s		Installatio	on dimensi	ons
wodei	Amax	Bmax	Cmax	Dmax	Emax	Fmax	Gmax	а	b	Φ
NXC-06~16	45.5	75	88	70	126.5	146.5	90	35±0.31	48±0.31	4.5
NXC-18~22	45.5	75	88	70	126.5	146.5	90	35±0.31	48±0.31	4.5
NXC-25~38	56.5	87	93	81	131.5	151.5	95	40±0.31	48±0.31	4.5

3.4 See Figure 4 and Table 6 for the installation and overall dimensions and wiring capacity of NXC-06/N~38/N series AC contactors. See label on the box for model, specifications and weight.





0

04

05

0.0





Figure 4 outline and installation diagram of NXC-06/N~38/N series reversible AC contactor

Table 6 Installation and overall dimensions and wiring capacity

NXC-06/N-16/N	106	75	88	126.5	146.5	95±0.31	48±0.31	4.5
NXC-08/N-38/N	126	87	93	131.5	151.5	111±0.31	48±0.31	4.5
NXC-25/N-38/N	126	87	93	131.5	151.5	111±0.31	48±0.31	4.5
NXC-25/N-38/N	126	87	95	131.5	151.5	11±0.31	48±0.31	4.5
NXC-3-38	NXC-3-32	NXC-3-32	15±0	15±0	15±0	15±0	15±0	15±0
NXC-3-38	NXC-3-38	NXC-3-38	15±0	15±0	15±0	15±0	15±0	
NXC-3-38	NXC-3-38	NXC-3-38	15±0	15±0	15±0	15±0	15±0	
NXC-3-38	NXC-3-38	NXC-3-38	15±0	15±0	15±0	15±0		
NXC-3-38	NXC-3-38	15±0	15±0	15±0	15±0			
NXC-3-38	NXC-3-38	15±0	15±0	15±0	15±0			
NXC-3-38	NXC-3-38	15±0	15±0	15±0	15±0			
NXC-3-38	NXC-3-38	NXC-3-38	15±0	15±0	15±0	15±0		
NXC-3-38	NXC-3-38	NXC-3-38	15±0	15±0	15±0			
NXC-3-38	NXC-3-38	NXC-3-38	15±0	15±0	15±0			
NXC-3-38	NXC-3-38	NXC-3-38	NXC-3-38	NXC-3-38				
NXC-3-38	NXC-3-38	NXC-3-38	NXC-3-38	NXC-3-38				
NXC-3-38	NXC-3-38	NXC-3-38	NXC-3-38	NXC-3-38				
NXC-3-38	NXC-3-38	NXC-3-38	NXC-3-38	NXC-3-38				
NXC-3-38	NXC-3-38	NXC-3-38	NXC-3-38	NXC-3-38				
NXC-3-38	NXC-3-38	NXC-3-38	NXC-3-38	NXC-3-38				
NXC-3-38	NXC-3-38	NXC-3-38	NXC-3-38	NXC-3-38	NXC-3-38			
NXC-3-38	N							

3.5 See Figure 5 and Table 7 for the installation and overall dimensions of NXC-40~100 series AC contactors. See label on the box for model, specifications and weight.

08

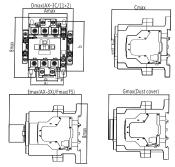


Figure 5 outline and installation diagram of NXC-40 ~ 100 series AC contactor

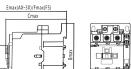
Table 7 Installation and overall dimensions

Unit: mn

Model		(	Overal	l dime	ons Installation dimension					15	
	Amax	Bmax	Cmax	Dmax	Emax	Fmax	Gmax	a1	a2	b	Φ
NXC-40~65	77	129	118	102	156.5	176.5	121	40±0.28	64±0.32	105±0.57	6.5
NXC-75~100	87	132	127	112	165.5	185.5	129	40±0.28	74±0.32	105±0.57	6.5

3.6 See Figure 6 and Table 8 for the installation and overall dimensions and wiring capacity of NXC-40/N~100/N series AC contactors. See label on the box for model, specifications and weight.NXC-40/N~100/N

0.9



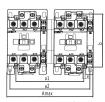


Figure 6 Installation and overall dimensions of NXC-40/N~100/N series AC contactors

Table 8 Installation and overall dimensions and wiring capacity

Model	Amax	Bmax	Cmax	Emax	Fmax	a1	a2	b	Φ
NXC-40/ N~65/N	169	129	118	156.5	176.5	131±0.72	155±0.8	105±0.57	6.5
NXC-75/ N~100/N	189	132	127	165.5	185.5	141.5±0.72	175.5±0.8	105±0.57	6.5

circuit   NOC-75-100 10-35   G-16		Main	NXC-40-100 M8 6Nm	4000	NXC-40~65	6~25	mm <sup>2</sup> 4~10	mm² 6~25	mm² 4~10	6~25	mm² 4~10	
Control open and a samula and manimum	ı				NXC-75~100	10~35	6~16	10~35	6~16	10~35	6~16	
		竹桌			N9Y-40-100			mm² 1~15	mm² 1~15	mm* 1~15	mm² 1~1.5	A> 3.5mm,L <8r





Add: dout, CHIMT Road, CHIMT Industrial Zone,North Baixiang, Yueqing, Zhejjang 232602,PR.China E-mail: global-sale:@chint.com Website: http://en.chint.com

Zhejiang Chint Electrics Co., Ltd.

NXC-06M~100 AC Contactor User Instruction



## 4 Maintenance

Check if the contactor can operate reliably every month. Method: Check if the contactor inclines 5° forward upon pick-up and inclines 5° backward upon pick-up and inclines 5° backward upon pick-up.

Conduct maintenance every month. **Note: Do not disassemble,** assemble and repair the product at will. Replace the product if it is found to be damaged.

Table 9 Analysis and Troubleshooting of Faults

Symptoms	Cause analysis	Troubleshooting method
The product	Inconsistency between control power voltage and coil voltage.	Use control power supply that complies with coil voltage.
does not operation or does not operate	Insufficient operation circuit power capacity or disconnection or wrong connection exists in the circuit.	Check the circuit to ensure correct connection.
reliably	Coil burnt; mechanical movable parts jammed.	Replace the coil, remove foreign objects or replace the product.
Noise	There are foreign objects on the polar face of magnet yoke or armature.	Clean the polar face of the iron core
INOISE	The voltage of control power is too low.	Use control power supply that complies with coil voltage.
The product does not	Contact welding	Replace the product.
release or release slowly.	There is oil or dust on the polar face of the iron core.	Clean the polar face of the iron core.

### 5 Environmental Protection

In order to protect the environment, the product or product parts should be disposed of according to the industrial waste treatment process, or be sent to the recycling station for assortment, dismantling and recycling according to local regulations.

NXC-06(M)
NXC-06(M)
NXC-16(M)
NXC-16(M)
NXC-16(M)
NXC-16(M)
NXC-12, 16
NXC-12, 16
NXC-12, 16
NXC-32, 38
NXC-40
NXC-55
NXC-55
NXC-55
NXC-55
NXC-75
NXC

## Example:

Asynchronous motor P=5.5kW, Ue=400(380)V, Ie=11A, Ic=6kIe=66A, 200000 times of operation is required, so according to the curve, the rated value of AC contactor should be NXC-32.

CHNT
QC PASS

NXC-06M~100
AC Contactor
IEC/EN 60947-4-1

Check 01

Test date: Please see the packing

CHNT CHINT ELECTRICS (NO:2020.04)

NXC-06M~100 AC Contactor

**User Instruction** 

Standard: IEC/EN 60947-4-1

11

12

13

ZHEJIANG CHINT ELECTRICS CO.,LTD.