



## Overview

### Applicable scope

The new NXC 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.

### Parameters

- Rated operation current Ie: 6A~630A
- Rated operation voltage Ue: 220V~690V
- Rated insulation voltage: 690V (NXC-06M~100), 1000V (NXC-120~630)
- Number of poles: 3P and 4P (only for NXC-06M~16M,NXC-09-12.25.40.)
- Coil control method: AC (NXC-06(M)~225), DC (NXC-06M~16M), AC/DC (NXC-265~630)
- Installation method: NXC-06M~100 rail and screw installation, NXC-120~630 screw installation

### 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	NXC-06M~12M:IP20;NXC06~38: front IP20,NXC-40~100: IP10; NXC-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
Atmospheric 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.

## Description

### NXC AC contactor

NXC	-	12	/N	230V	50Hz
Model		Rated current	Special function	Coil voltage	Frequency
		06, 09, 12, 16, 18, 22, 25, 32, 38, 40, 50, 65, 75, 85, 100, 120, 160, 185, 225, 265, 330, 400, 500, 630	/N: Reversible contactor None: Standard contactor	24V, 36V, 48V, 110V, 127V, 220V, 230V,240V, 380V, 415V, 440V, 480V, 660V (AC: 06A~225A; AC/DC: 265A~630A)	50Hz, 60Hz, 50/60Hz

Note: 06A-100A products contain one NO auxiliary contact and one NC auxiliary contact; 120A-630A products contain two NO auxiliary contacts and two NC auxiliary contacts

Contactor model		NXC-25	NXC-32	NXC-38	NXC-40	NXC-50	NXC-65	NXC-75	NXC-85	NXC-100	
											
Conventional thermal current Ith (A)		40	50	50	60	80	80	90	100	125	
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-1	40	50	50	60	80	80	90	100	125
		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	32	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	AC-3 (kW)	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>			
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	Model	NXR-25	NXR-38		NXR-100						
Built-in auxiliary contact	3P	1 NO+1 NC									
	4P										

Control circuit		Contactor model	NXC-25	NXC-32	NXC-38	NXC-40	NXC-50	NXC-65	NXC-75	NXC-85	NXC-100	
Main circuit connection	Cabling (mm <sup>2</sup> )	Prefabricated flexible wire	1	1.5~10			6~25			10~50		
			2	1.5~6			4~10			6~25		
		Hard wire	1	1.5~6			6~25			10~50		
			2	1.5~6			4~10			6~25		
	Size of fastening screw			M4			M8			M8		
	Tightening torque (N-m)			1.85			6					
Control circuit connection	Cabling (mm <sup>2</sup> )	Prefabricated flexible wire	1	1~1.5								
			2	1~1.5								
		Hard wire	1	1~1.5								
			2	1~1.5								
	Size of fastening screw			M3.5								
	Tightening torque (N-m)			1.2								

Contactor model		NXC-25	NXC-32	NXC-38	NXC-40	NXC-50	NXC-65	NXC-75	NXC-85	NXC-100
Coil control power supply	AC 50Hz	24, 36, 48, 110, 127, 220, 230, 240, 380, 415			24, 36, 42, 48, 110, 127, 220, 230, 240, 277, 380, 400, 440, 480, 600					
Control voltage	Pull-in	(75%~120%) Us								
	Release	(20%~70%) Us								
Coil average power (VA)	Start	50~70			160~210			250~300		
	Hold	11.4			36.6			36.6		
Heat dissipation (W)	AC	1~3			4~8			6~10		
	DC									