MINI **CONTACTORS** & **CONTROL RELAYS**

SERIES 300 & 310 PRODUCT PROFILE

c3controls Series **300 Mini Contactors and Control Relays** are a compact family of control devices for switching motors and other logic control circuits. Our **Series 310 Mini Reversing Contactors** are ideal for reversing motors in applications where panel space is a premium and device modularity is required to satisfy virtually any application requirement. Common accessories enable the devices to be customized for each application.

DELIVERING SUPERIOR PRODUCT QUALITY AND MANUFACTURING EXCELLENCE

✓ **Proven**	Our Series 300/310 Miniature Contactors and Control Relays are UL Listed and CE marked, meeting global standards requirements.
✓ **Lower Cost**	Snap-on, front mounted auxiliary contacts install without the use of tools for lower installed costs.
✓ **Convenient**	Wide variety of AC and DC operating coils for control circuit application flexibility.
✓ **Easy to Install**	35mm DIN rail mounting for all contactors and control relays for fast and easy installation and removal or panel mounting for more secure installation in high shock and vibration applications.
✓ **Simplified Installation**	Can be installed/mounted in multiple orientations, including upside down.
✓ **Modular Design**	Modular design allows Series 320 Overload Relays to be easily installed and allows use with the complete range of Series 330 Motor Protection Circuit Breakers and accessories.
✓ **Visible Certifications**	Our product certifications and electrical ratings are clearly marked on the outside of the devices for easy reference during installation.
✓ **Environmentally Friendly**	Environmentally friendly contacts are cadmium free and non-metallic materials are asbestos, halogen, and cadmium free. All c3controls products are compliant to the RoHS directives.
✓ **Added Safety**	IP20 guarded terminals with dual terminal markings prevent accidental contact with live parts.
✓ **Lifetime Warranty***	Every product is backed by our lifetime warranty—unmatched in the industry—bringing you quality components that perform in the most demanding applications.
✓ **Guaranteed Same-Day Shipping***	Product availability reduces inventory, and improves cash-flow—saving you money. With c3controls any order for standard catalog items received by 6:00pm ET is guaranteed to ship same-day.
✓ **Advantage Pricing**	Our approach to product development, manufacturing, and focus on servicing the OEM and Electrical Equipment Builder reduces cost. The result—the best value in the industry.

*See c3controls Terms & Conditions

UNIQUE PRODUCT LINE FEATURES

High Fault SCCR

- High fault short circuit current rating of 100kA @ 480V and 600V with Class J fuses, provides safety and reliability in high fault applications.

Compact Size

- Leading the industry with our compact miniature 10HP contactors and control relays. One frame size (AC or DC) reduces panel area for lower installed costs – 28% reduction in panel area compared to standard devices.

Integral Auxiliary

- Integral auxiliary contacts, 1 NO or 1 NC, are standard on all c3controls miniature non-reversing contactors.

Seamless Compatibility

- Miniature Reversing Contactors are compatible with direct mounted Series 320-B1 Overload Relays and Series 330 Motor Protection Circuit Breakers.

Common Accessories

- Designing starter assemblies and panels is easy! No more remembering which auxiliary works with each contactor. Our complete range of Series 300 Miniature Contactors and Control Relays share common accessories, reducing inventory and simplifying installation and assembly.

Quick Identification

- Enhanced markings, improved identification labels, and dual IEC and NEMA terminal markings ensure quick identification of product from all angles simplifying troubleshooting in panels with many devices.

LIFETIME WARRANTY ***SAME-DAY SHIPPING*** ***ADVANTAGE PRICING***

c3controls®
PO Box 496 • Beaver, PA 15009
724.775.7926 • www.c3controls.com

series 300 miniature series 310 miniature MINI CONTACTORS & CONTROL RELAYS

SPECIFICATIONS

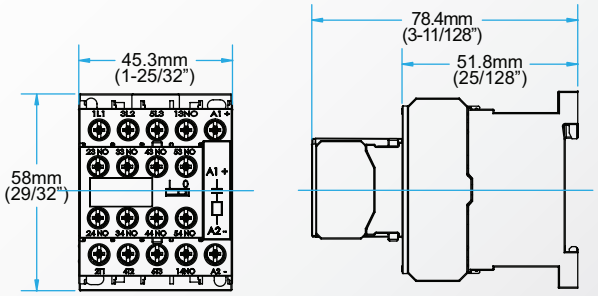
		M07	MO9	M12	M16
	UNITS				
ELECTRICAL GENERAL					
Rated Operating Frequency	Hz	25 ~ 400			
Rated Coil Frequencies		AC: 50Hz, 60Hz, 50/60Hz and DC			
ELECTRICAL UL/CSA APPLICATIONS					
Rated Operating Voltage, Ue	VAC	600			
General Purpose Current Rating	A	18	20	22	22
RATED 1 PHASE OPERATING CURRENT, Ie					
115V	A	7.2	7.2	9.8	16
230V	A	6.9	8	12	12
RATED 1 PHASE OPERATING POWER, PE					
115V	HP	1/3	1/3	1/2	1
230V	HP	3/4	1	2	2
RATED 3 PHASE OPERATING CURRENT, Ie					
200V	A	6.9	7.8	11	11
230V	A	6	6.8	9.6	9.6
460V	A	7.6	7.6	11	14
575V	A	6.1	9	9	11
RATED 3 PHASE OPERATING POWER, Pe					
200V	HP	1-1/2	2	3	3
230V	HP	1-1/2	3	3	5
460V	HP	5	5	7-1/2	10
575V	HP	5	7-1/2	7-1/2	10
Standard Short Circuit Current	kA	5			
Maximum Fuse Size	A	30	30	30	40
High Fault Short Circuit Current	kA	100			
Maximum Fuse Size (Class J)	A	15	15	15	20
ELECTRICAL IEC APPLICATIONS					
Rated Insulation Voltage, Ui	V	690			
Rated Operating Voltage, Ue	VAC	690			
Rated Thermal Current, Ith	A	18	20	22	22
RATED AC-1 OPERATING CURRENT, Ie					
At 55° C (131° F)	A	18	20	22	22
RATED AC-3 OPERATING CURRENT, Ie					
220 ~ 240V	A	6.8	9.6	—	—
380 ~ 400V	A	6.3	8.1	11	14.8
415 ~ 440V	A	7	9	12	16
500V	A	5	9	12	12
660 ~ 690V	A	3.5	6.7	9	9
RATED AC-3 OPERATING POWER, Pe					
220 ~ 240V	kW	1.5	2.2	3	4
380 ~ 400V	kW	3	4	5.5	7.5
415 ~ 440V	kW	3	4	5.5	7.5
500V	kW	3	5.5	7.5	7.5
660 ~ 690V	kW	3	5.5	7.5	7.5
RATED AC-4 OPERATING CURRENT, Ie					
220 ~ 240V; 380 ~ 400V; 415 ~ 440V	A	2.5	4	4	5
MAXIMUM ELECTRICAL SWITCHING RATE					
AC-1; AC-4	Ops./Hr.	300			
AC-3	Ops./Hr.	600			
Electrical Endurance, AC-3 at Max. Rated 3 Phase Operating Power (@ 400V)	Ops. (mil.)	1.4	1.3	1.2	1.1

ROHS COMPLIANCE For RoHS compliance documentation by product, refer to www.c3controls.com.

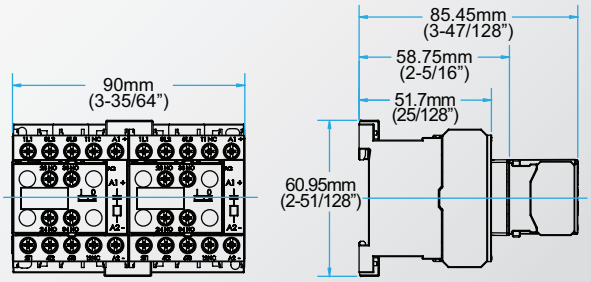
For complete ratings and detailed specifications refer to www.c3controls.com.

DIMENSIONS

Non-Reversing Contactor or Control Relay
(includes Auxiliary Contacts & Surge Suppressor)



Reversing Contactor
(includes Auxiliary Contacts & Surge Suppressor)



PROVEN

Conformity to Standards:

MINIATURE CONTACTORS

UL 508, 60947-4-1A

CSA C22.2 No. 14
IEC 60947-1, 60947-4-1

MINIATURE CONTROL RELAYS

UL 508
CSA C22.2 No. 14
IEC 60947-1, 60947-5-1

Certifications:

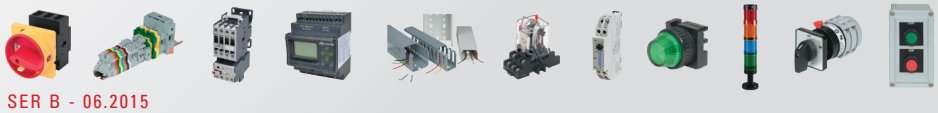
UL File #: E236197 (Guide NLDX, NLDX7), E68568 (Guide NKCR, NKCR7)

CE Marked (per EU Low Voltage Directive 2006/95/EC and RoHS Directive 2011/65/EU)

UL File #: E68568 (Guide NKCR, NKCR7)

CE Marked (per EU Low Voltage Directive 2006/95/EC and RoHS Directive 2011/65/EU)

Visit c3controls.com to download product certifications.



SER B - 06.2015

c3controls®

Copyright © 2015 c3controls. All Rights Reserved.