

DIRECT-ON-LINE (DOL) STARTERS

(CONTACTOR + OVERLOAD RELAY)

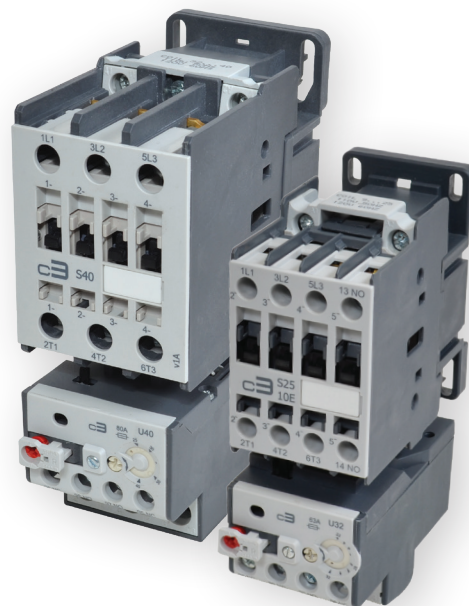
SERIES 620 PRODUCT PROFILE

The c3controls **Series 620 Direct-On-Line (DOL) Starters** are assemblies of a Series 300 Contactor and a Series 320 Overload Relay. The contactor provides the repeated On/Off switching for the motor. The overload relay includes Class 10 thermal trip elements for overload protection of the motor and motor branch circuit conductors. Small size, IP20 guarded terminals with dual terminal markings, and shared accessories will help reduce your total installed costs and enhance the features and performance of your equipment.

DELIVERING SUPERIOR PRODUCT QUALITY AND MANUFACTURING EXCELLENCE

✓ Proven	Our Series 620 DOL Starters are UL Listed and CE marked meeting global standards requirements.	
✓ Compact Size	Four (4) frame sizes for devices rated from 9A to 105A. Starter rated 15HP @ 460V (11kW @ 400V) are only 45mm (1-49/64") wide reducing panel area requirements – smaller enclosures can be used for lower installed costs.	
✓ Lower Cost	Snap-on front mounted and side mounted auxiliary contacts install without the use of tools for lower installed costs.	
✓ Visible Markings	High-visibility labels and markings. Dual IEC and NEMA terminal markings for easy wiring anywhere in the world.	
✓ Easy to Install	35mm DIN rail mounting for all contactors from 9A to 105A for fast and easy installation and removal, or panel mounting for more secure installation in high shock and vibration applications.	
✓ Visible Certifications	Our product certifications and electrical ratings are clearly marked on the outside of the devices for easy reference during installation.	
✓ Added Safety	IP20 guarded terminals with dual terminal markings prevent accidental contact with live parts.	
✓ 36-Month Warranty*	Every product is backed by our 36-Month Warranty—giving you confidence in the quality, reliability, and performance of components designed for 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

Convenience

- Factory assembly of a Series 300 Contactor and Series 320 Overload Relay provides the convenience of a single catalog number and shorter control panel bill of material.

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.

Integral Auxiliary

- Integral auxiliary contacts, 3 power poles + 1 auxiliary, are standard on all c3controls 9A to 25A non-reversing contactors.

Adjustable Current Setting

- Full load current adjustment ratio of approximately 1:1.5 enables overload relay to be set to exact Full Load Ampere (FLA) of motor.

Selectable Reset Mode

- Manual or automatic reset and test modes, and stop button all in a single device for convenient control circuit wiring.

Trip Test Function

- Trip test function comes standard on all c3controls Series 320-B2 to 320-B5 overload relays and allows for easier installation, testing, and troubleshooting.



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REVISION 07.2026

series
620

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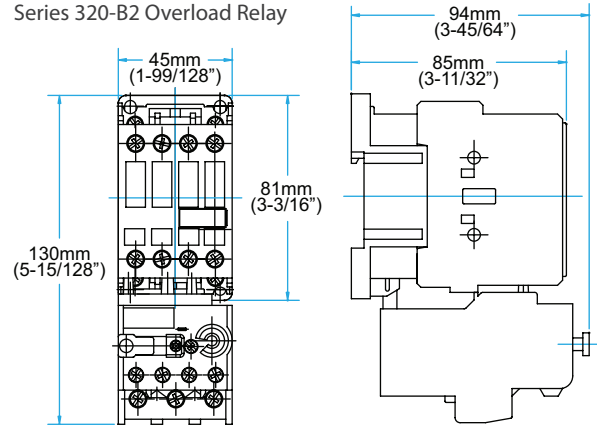
SPECIFICATIONS

STARTER CURRENT RATING CODE		S09~S25	S32~S40	S50~S80	S95~S105
	UNITS				
ELECTRICAL GENERAL					
Rated Operating Frequency	Hz	25 ~ 400			
Rated Control Frequencies	Hz	AC: 50Hz, 60Hz, 50/60Hz and DC			
ELECTRICAL UL/CSA APPLICATIONS					
Rated Operating Voltage, Ue	VAC	600			
Standard Short Circuit Current @ 600V AC	kA	5	5	10	10
Max. Fuse Size - varies by current adjustment range of overload relay	A	60	60	150	200
High Fault Short Circuit Current @ 600V AC	kA	100			
Max. Fuse Size (Class J) - varies by current adjustment range of overload relay	A	40	60	125	175
ELECTRICAL IEC APPLICATIONS					
Rated Insulation Voltage, Ui	V	1,000			
Rated Impulse Voltage, Uimp	kV	6			
Rated Operating Voltage, Ue	VAC	690			
COIL CHARACTERISTICS					
Rated Insulation Voltage, Ui	V	1,000			
Operating Limits		80 ~ 110% of Rated Coil Voltage			
ENVIRONMENTAL					
Ambient Operating Temperature	°C / °F	-25 to +55 / -13 to +131			
Ambient Storage Temperature	°C / °F	-40 to +70 / -104 to +158			
Altitude	m / ft.	2,000 / 6,528			
CONSTRUCTION - GENERAL					
Number of Poles		3			
Pollution Degree		3			
Trip Class		10			
INGRESS PROTECTION		IP20			
ROHS COMPLIANCE For RoHS compliance documentation by product, refer to www.c3controls.com .					

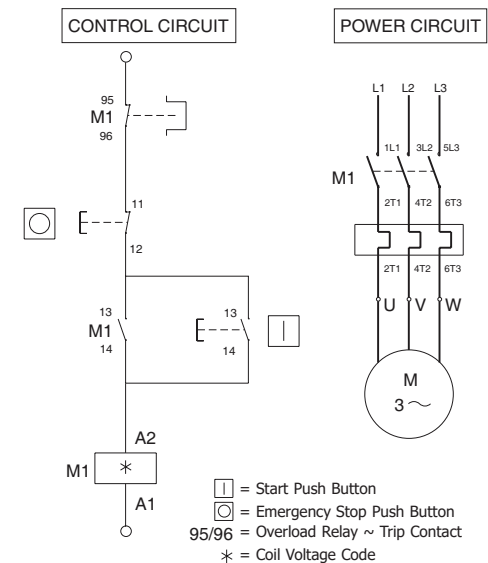
For complete ratings and detailed specifications refer to www.c3controls.com.

DIMENSIONS

Series 300-S09, 300-S12, 300-S18 or 300-S25 Contactor with Series 320-B2 Overload Relay



CIRCUIT DIAGRAMS



PROVEN

Conformity to Standards:

CONTACTORS

UL 508, 60947-4-1A

CSA C22.2 No. 14

IEC 60947-1, 60947-4-1

OVERLOAD RELAYS

UL 508, 60947-4-1A

CSA C22.2 No. 14

IEC 60947-1, 60947-4-1

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.



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