ENCLOSED CONTACTOR & OVERLOAD RELAY ASSEMBLIES

series E620

For compact starters that offer reliable protection for your motors and perform in the most demanding situations, c3controls Enclosed Direct-On-Line (DOL) Starters are what you need. Our Series E620 comes pre-assembled with our Series 300 Contactor, Series 320 Overload Relay, and 22mm IEC pilot devices, all within the protection of our durable polycarbonate enclosure. With its compact size and factory wiring, our Series E620 is engineered to save you panel space, cost, and valuable time during installation.

Section 8

PROVEN

Conformity to Standards:

CONTACTORS
UL 508, 60947-4-1
CSA C22.2 No. 14
IEC 60947-1, 60947-4-1

OVERLOAD RELAYS
UL 508, 60947-4-1
CSA C22.2 No. 14
IEC 60947-1, 60947-4-1

ENCLOSURES
UL 50
CSA C22.2 No. 94
IEC 60529

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)

UL Listed
CSA Certified

Visit www.c3controls.com to download product certifications.

ENCLOSED CONTACTOR & OVERLOAD RELAY ASSEMBLIES

c3controls offers a comprehensive line of Motor Control products designed and manufactured to meet the needs of the machine builder. We promise durable products at a price that gives you an edge. Check out all the features of our Series E620 Enclosed Contactor and Overload Relay Assemblies below!

DELIVERING SUPERIOR PRODUCT QUALITY AND MANUFACTURING EXCELLENCE

✓ **Proven**	Our Series E620 Enclosed DOL Starters are UL Listed and CE marked meeting global standards requirements.
✓ **Compact Size**	Four (4) frame sizes for devices rated from 9A to 65A. Starters 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.
✓ **Simple Customization**	Our Series E620 Enclosed DOL Starters come with various pilot device and wiring options for appropriate operator interface.
✓ **Polycarbonate Enclosures**	Available in two sizes, our polycarbonate enclosures come with a lift-off cover, and are rated Type 1, 4/4X, and IP66 for the most demanding applications—including wash-downs and corrosive environments.
✓ **Visible Markings**	High visibility labels and markings; dual IEC and NEMA terminal markings for ease of wiring anywhere in the world.
✓ **Lower Cost**	Snap-on front mounted and side mounted auxiliary contacts install without the use of tools for lower installed costs.
✓ **Environmentally Secure**	With 4/4X and IP66, our E620 line is built to last and withstand dust, corrosion, ice and rain.
✓ **Added Safety**	IP66 guarded terminals with dual terminal markings prevent accidental contact with live parts.
✓ **Limited Lifetime Warranty***	Every product is backed by our limited lifetime warranty—unmatched in the industry—bringing you quality components that perform in the most demanding applications.
✓ **Quick Shipment**	We assemble, test and ship within 3 days, including legend plates—and confirm every order ensuring accuracy.
✓ **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

"Once we switched to c3controls' Series 300 Contactors and Series 320 Overload Relays, we immediately reduced field failures and maintenance costs."

Craig Boozer, AVP Electrical/Technical Support • **Ice House America**

Type F Enclosure
(180mm x 130mm x 127mm)

Type G Enclosure
(255mm x 180mm x 177mm)

UNIQUE PRODUCT LINE FEATURES

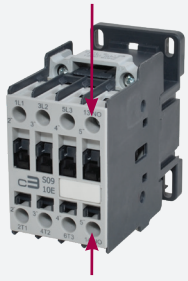
FACTORY ASSEMBLED AND WIRED

Factory assembled and wired starters and pilot devices provide the convenience of a single catalog number and a shorter control panel bill of material.

HIGH FAULT SCCR

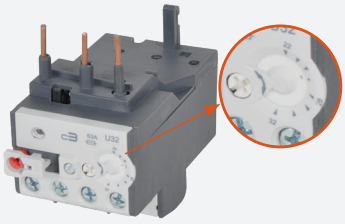
High fault short circuit current rating of 100kA @ 480V and 600V with Class J fuses, provides safety and reliability in high fault applications.

INTEGRAL AUXILIARY



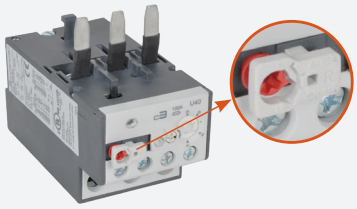
Integral auxiliary contacts, 3 power poles + 1 auxiliary, are standard on all c3controls 9A to 25A non-reversing contactors.

ADJUSTABLE CURRENT SETTING



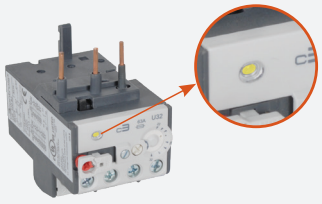
Full load current adjustment ratio of approximately 1:1.5 enables overload relay to be set to exact FLA of motor.

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

Motor Control Device Solutions

c3controls motor control devices are the perfect solution for manufacturers who want proper motor control and superior motor protection without having to overpay or compromise on quality. In fact, we engineer so much performance and flexibility into our products, we can deliver a remarkably better value than our competitors.

c3controls products deliver like no other.

Seamless Compatibility

Contactors, overload relays and motor protection circuit breakers are designed by c3controls to work together, with common connections and accessories, resulting in a high functioning compact starter.

LEADING THE INDUSTRY
with our compact miniature 10HP contactors and control relays. One frame size (AC or DC)—28% reduction in panel area.

Compact

The small size of c3controls motor control devices, plus features like common accessories, enable assembly into smaller control panels for lower installed costs.

Reliable Protection

Contactors provide the repeated on/off switching for the motor and are designed for motor, actuator, solenoid, and other power switching applications. Overload relays provide Trip Class 10 protection against overload and phase-loss conditions, and have ambient temperature compensation for motor protection in high temperature environments.

Ensures the protection of equipment and user.

Motor protection circuit breakers provide overload, phase-loss and short circuit protection, can be used by themselves as manual motor controllers or with contactors in group motor installations, and can achieve Type 2 coordination for optimum performance.

Type E self-protected combination manual motor controllers provide disconnecting means, branch circuit protection, motor control and motor overload protection all in a single device.

Proven

Our motor control devices are UL Listed and CE marked, meeting global standards requirements for use anywhere in the world.

NFPA 70 - National Electrical Code (NEC)

Understanding what functions are needed in your motor control circuit is critical when selecting motor control devices. Engineers benefit from the standards and codes established to ensure safety and protection to personnel and equipment.

More than just knowing the standards, c3controls, as a manufacturer of motor control products, has the application expertise you need to select the right products.

c3controls & Article 430 - Motors, Motor Circuits and Controllers

	To Supply	NEC Part	c3controls Product Series		
Motor disconnecting means		Part IX	 330	 630	 Type E: 330 630
Motor branch-circuit, short circuit, and ground-fault protection		Part IV			 Type E: 330 630
Motor circuit conductor		Part II			
Motor controller		Part VII	 300/310 330	 620 630	 Type E: 330 630
Motor control circuits		Part VI			
Motor overload protection		Part III	 320 330	 620 630	 Type E: 330 630
Motor		Part I			

Our motor control products align with Article 430 Part VII, Motor Controller, of the NFPA 70, the National Electrical Code.

IT'S EASY TO BUILD YOUR OWN ENCLOSED DOL STARTER

Simply pick the code number from each of the sections below and combine them to build your part number.

Enclosed Direct-On-Line (DOL) Starters

E620 – ____ ____ ____ – ____ – ____ ____ – ____ ____ – ____

I II III IV V VI VII VIII IX X

Example: To build one of our most popular Enclosed DOL Starters, the part number would be E620 + II + III + IV + V + VI + VII + VIII + IX + X or E620-GD10-52-FR-08-W3

I. ENCLOSED STARTER TYPE

CODE	DESCRIPTION	LIST
E620	Enclosed Series 620 DOL Starter: Series 300 Contactor + Series 320 Overload Relay	$ 38.00

II. NON-REVERSING CONTACTOR (3 NORMALLY OPEN POLES)

	MAX. Ie (A)		RATINGS FOR SWITCHING AC MOTORS - AC-2, AC-3										CONTACTOR CAT. NO.	
			kW (50Hz)				HP (60Hz)							
			3 PHASE				1 PHASE		3 PHASE					
CODE	AC-3	AC-1	230V	400/415V	500V	690V	115V	230V	200V	230V	460V	575V	PREFIX	LIST
G	9	25	2.2	4	5.5	5.5	1/2	1-1/2	3	3	5	7-1/2	300-S09N30	$ 53.00
H	12	25	3	5.5	7.5	7.5	3/4	2	3	3	7-1/2	10	300-S12N30	$ 79.00
J	18	32	4	7.5	10	10	1	3	5	5	10	15	300-S18N30	$ 87.00
K	25	45	7.5	11	15	15	2	3	7-1/2	7-1/2	15	15	300-S25N30	$ 99.00
L	32	60	9	15	18.5	18.5	3	5	10	10	20	25	300-S32N30	$130.00
M	40	60	11	18.5	25	30	3	5	10	15	30	25	300-S40N30	$178.00
N	50	90	15	22	30	35	3	7-1/2	15	15	40	40	300-S50N30	$284.00
P	65	110	18.5	30	40	45	5	10	20	20	50	50	300-S65N30	$350.00
Q	80	110	22	37	45	45	7-1/2	15	20	25	50	60	300-S80N30	$405.00

III. CONTACTOR COIL VOLTAGE CODE

AC COIL VOLTAGE CODES

VOLTAGE	12	24	48	110 / 120	208	220	230	240	277	400	400 ~ 415	480	500	550	600
50Hz	—	—	—	D	—	—	—	—	—	—	R	—	T	U	—
60Hz	—	—	—	D	L	—	—	F	P	—	—	R	—	—	T
50/60Hz	XB	XC	XJ	—	—	XAJ	XN	—	—	XAM	—	—	—	—	—

DC COIL VOLTAGE CODES

VOLTAGE	12	24	24 ~ 28	125	110 ~ 130	208 ~ 240	250	LIST
-S09 to -S25	ZB	ZC	—	ZQ	—	—	ZP	$ 35.00
-S32 to -S40	ZB	ZC	—	ZQ	—	—	ZP	$ 78.00
-S50 to -S105	—	—	EC	—	EL	EE	—	$282.00

IV. CONTACTOR AUXILIARY CONTACT CONFIGURATION

CODE	DESCRIPTION	LIST
00	Without Auxiliary Contacts (Contactor Codes L to Q)	—
10	1 Normally Open* (Contactor Codes G to K)	$ 18.00
01	1 Normally Closed* (Contactor Codes G to K)	$ 18.00
20	2 Normally Open* (Contactor Codes L to Q)	$ 31.00
11	1 Normally Open and 1 Normally Closed* (Contactor Codes L to Q)	$ 31.00

*NOTE: Integral right side mounted on Contactor Codes G to K, side mounted on Contactor Codes L to Q.

DISCOUNT SCHEDULE H

SEE OPPOSITE PAGE FOR PART BUILDER CHARTS V – X

ENCLOSED DOL STARTER PART BUILDER (CONT.)

V. OVERLOAD RELAY CURRENT ADJUSTMENT

CODE	INSTALLS ON CONTACTOR	CURRENT ADJUST. RANGE (A)	OVERLOAD RELAY CAT. NO.	LIST
43	G, H J, K L, M	0.28 ~ 0.40	320-B2C40	$ 62.00
44		0.40 ~ 0.63	320-B2C63	$ 62.00
45		0.56 ~ 0.80	320-B2C80	$ 62.00
46		0.80 ~ 1.2	320-B2D12	$ 62.00
47		1.2 ~ 1.8	320-B2D18	$ 62.00
48		1.8 ~ 2.8	320-B2D28	$ 62.00
49		2.8 ~ 4.0	320-B2D40	$ 62.00
50		4.0 ~ 6.3	320-B2D63	$ 62.00
51		5.6 ~ 8.0	320-B2D80	$ 62.00
52		7.0 ~ 10.0	320-B2U10	$ 62.00
53		8.0 ~ 12.5	320-B2U12	$ 62.00
54		10 ~ 15	320-B2U15	$ 62.00
55		11 ~ 17	320-B2U17	$ 62.00
56		15 ~ 23	320-B2U23	$ 62.00
57		22 ~ 32	320-B2U32	$ 62.00
58	L, M	25 ~ 40	320-B3U40	$ 94.00
59	N, P, Q	32 ~ 50	320-B4U50	$107.00
60		40 ~ 57	320-B4U57	$107.00
61		50 ~ 63	320-B4U63	$107.00
62		57 ~ 70	320-B4U70	$107.00

VI. POLYCARBONATE ENCLOSURE DIMENSION (TYPE 4X & IP66)

CODE	FOR CONTACTOR CODES	DIMENSION REF. / H x W x D	LIST
F	AC: G, H, J, K	1 / 180mm x 130mm x 127mm	$ 87.00
G	AC & DC: G, H, J, K, L, M, N, P, Q	2 / 255mm x 180mm x 177mm	$270.00

VII. 22MM IEC RESET PUSH BUTTON OPTIONS

CODE	CAP TYPE / COLOR	CAP MARKING	LIST
(Blank)	None	—	—
R	Flush / Blue	No Marking	$ 14.40
R102	Flush / Blue	R	$ 17.40

IX. 22MM IEC UNIBODY PILOT LIGHT OPTIONS

CODE	DESCRIPTION	LED/LENS COLOR	CAT. NO.	LEGEND PLATE†
(Blank)	None	—	—	—
A	Non-Relampable	Amber	W22UNR-***LA-WNLA	FAULT
G	Non-Relampable	Green	W22UNR-***LG-WNLG	RUN
R	Non-Relampable	Red	W22UNR-***LR-WNLR	RUN

NOTE: † The legend plate face color is black with white letters.
*** Represents the Unibody pilot light voltage code. Voltage code will be based on the contactor coil voltage.

X. WIRING OPTIONS

CODE	DESCRIPTION	FOR PILOT DEVICE CODES	FOR PILOT LIGHT CODES	WIRING DIAGRAM REF.†	LIST
WW	Without Wiring	ALL	ALL	—	—
W2	Two Wire Control Wiring	03, 04	(Blank), G*, R*	1a	$ 18.00
		04	A	1b	
		05, 06	(Blank), G*, R*	2a	
		06	A	2b	
W3	Three Wire Control Wiring*‡	01, 02, 08, 09	(Blank), G, R	3a	$ 18.00
		02, 09	A	3b	

NOTE: * Contactor Auxiliary Contact Configuration Codes 00 and 01 cannot be used.
‡ Use W3 for Remote Wiring, refer to the installation instructions for details.
† For wiring diagrams go to www.c3controls.com.

SEE TOP OF PAGE FOR PART BUILDER CHARTS IX – X

VIII. 22MM IEC PILOT DEVICE OPTIONS

CODE	DESCRIPTION	22MM CAT. NO.	LEGEND PLATE†	LIST
00	None	—	—	—
01	Momentary, Non-Illuminated Push Buttons:			$ 44.20
	Flush Green with 1NO Contact Block	W22PB-FG-10	START	
	Extended Red with 1NC Contact Block	W22PB-ER-01	STOP	
02	Momentary, Non-Illuminated Push Buttons with Pilot Light:			$ 63.20
	Flush Green with 1NO Contact Block	W22PB-FG-10	START	
	Extended Red with 1NC Contact Block	W22PB-ER-01	STOP	
	Unibody, Non-Relampable*	Refer to Chart IX	Refer to Chart IX	
03	Maintained, Non-Illuminated Selector Switch:			$ 27.20
	2-Position with 1NO Contact Block	W22S2-HW-10	OFF , ON	
04	Maintained, Non-Illuminated Selector Switch with Pilot Light:			$ 46.20
	2-Position with 1NO Contact Block	W22S2-HW-10	OFF , ON	
	Unibody, Non-Relampable*	Refer to Chart IX	Refer to Chart IX	
05	Maintained, Non-Illuminated Selector Switch:			$ 39.30
	3-Position with 2NO Contact Blocks	W22S3-HW-10/10	H , O , A	
06	Maintained, Non-Illuminated Selector Switch with Pilot Light:			$ 58.30
	3-Position with 2NO Contact Blocks	W22S3-HW-10/10	H , O , A	
	Unibody, Non-Relampable*	Refer to Chart IX	Refer to Chart IX	
07	Pilot Light:			$ 19.00
	Unibody, Non-Relampable*	Refer to Chart IX	Refer to Chart IX	
08	Momentary, Non-Illuminated Dual Push Buttons:			$ 40.20
	Extended Red (Bottom) with 1NC Contact Block and Flush Green (Top) with 1NO Contact Block	W22DPB-ERFG-01/10	—	
09	Momentary, Non-Illuminated Dual Push Buttons with Pilot Light:			$ 59.20
	Extended Red (Bottom) with 1NC Contact Block and Flush Green (Top) with 1NO Contact Block	W22DPB-ERFG-01/10	—	
	Unibody, Non-Relampable*	Refer to Chart IX	Refer to Chart IX	

NOTE: * Pilot lights only available if Contactor Coil Voltage Code (III) XC, D, XAJ, XN, F, ZC, ZQ, EC or EL is selected. Pilot light voltage will be 24V AC/DC, 110-130V AC/DC, or 220-240V AC to match contactor coil voltage. Pilot lights can only be used with a Contactor Code K with an auxiliary contact in Enclosure Code G.
† The legend plate face color is black with white letters.

Series E620 Enclosed Direct-On-Line (DOL) Starters

c3controls Series E620 Enclosed Direct-On-Line (DOL) Starters are assemblies of a Polycarbonate Enclosure, Series 300 Contactor, Series 320 Overload Relay, and Series 22mm IEC pilot devices. Our pilot devices and enclosures are rated for Type 4X and IP65. The contactor provides the repeated On/Off switching for the motor, and the overload relay includes Class 10 thermal trip elements for overload protection of the motor and motor branch circuit conductors. A variety of pilot devices are available, including non-illuminated momentary push buttons, non-illuminated momentary dual push buttons (flush green, extended red and blue reset), maintained selector switches (2- and 3-position), auxiliary contacts (NO and NC) and pilot lights (red, green and amber) for operation and indication. To save time and reduce installation cost, c3controls Series E620 are factory assembled and wired. We also offer the option of no pre-wiring.

Product features include:

- High fault short circuit rating of 100kA @ 480V and 600V with Class J fuses, provides safety and reliability in high fault applications.
- Visible trip indication on Series 320 provides clear indication of what device has tripped, simplifies troubleshooting in panels with many devices.
- Trip test function standard on Series 320-B2 to 320-B5 Starters, allows for easier testing, installation, and troubleshooting.
- Lower power consumption for Series 300-S32 to 300-S40 DC Contactors, reducing power supply size, saving space and money.
- Enhanced markings and high visibility labels for ease of troubleshooting and maintenance.
- Enclosed starters provide convenience of a single catalog number.
- Provides the same great features and benefits as our Enclosures, Series 300 Contactors, Series 320 Overload Relays and Series 22mm IEC pilot devices.
- Our compact, Polycarbonate enclosures come with a lift-off cover and are rated Type 1, 4/4X and IP66, making them suitable for the most demanding applications – including wash-downs and corrosive environments.
- Pilot devices installation and a variety of wiring options are available.
- Compact starter size reduces enclosure size resulting in space savings and lower installed costs.
- A wide variety of AC and DC operating coils for control circuit application flexibility. 50A to 80A DC operated devices feature electronic coil control.
- Universal ratings and markings: A, kW, and HP ratings as well as applicable 3rd party certification markings.
- Single phase sensitivity to protect motors against damaging phase loss conditions.
- The cover mounted Reset push button allows the starter to be reset from outside the enclosure.
- Ambient temperature compensation ensures reliable motor protection even in high temperature environments.
- Unobstructed access to the two contactor coil terminals on the line-side of the starter makes control circuit wiring simple.
- Shares common accessories with Series 300 Contactors, see Section 4 Pages 10-12.

UNIQUE PRODUCT FEATURES

Multi-Function Relays

Multi-function reset button enables the user to select the reset mode, manual or automatic, and whether or not to enable the test function.

When the reset button is pressed and the test function is enabled, the Normally Open (NO) contact closes and the Normally Closed (NC) contact opens to verify the control circuit functionality. In addition, the NC contact can be used in a "Stop" circuit. With the test function disabled, the NO and NC contacts do not change state when the reset button is pressed – preventing unauthorized personnel from operating the control circuit.

Multiple functions allow you to customize the overload relay operation to provide the performance and features you require for your application.

Factory Assembled and Wired

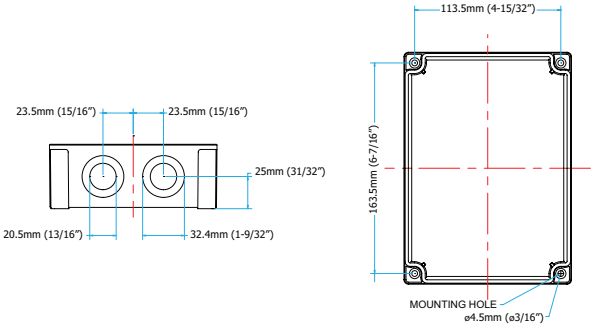
Convenient and reliable factory wired starters and pilot devices save time and reduce installation cost.

SPECIFICATIONS:

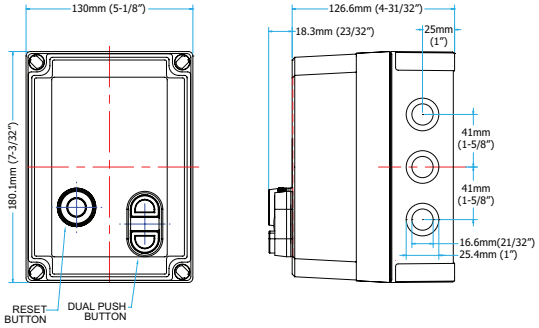
SERIES E620 ENCLOSED DIRECT-ON-LINE (DOL) STARTER SPECIFICATIONS

		STARTER CURRENT RATING CODE								
	UNITS	G	H	J	K	L	M	N	P	Q
ELECTRICAL GENERAL										
		For detailed contactor specifications by starter rating code, see Section 4 Page 13								
		For detailed overload relay specifications by catalog number prefix, see Section 6 Page 8								
Rated Operating Frequency	Hz	25 ~ 400								
Rated Control Frequencies	Hz	AC: 50Hz, 60Hz, 50/60Hz and DC								
ELECTRICAL UL/CSA APPLICATIONS										
		For detailed contactor specifications by starter rating code, see Section 4 Page 13								
		For detailed overload relay specifications by catalog number prefix, see Section 6 Page 8								
Rated Operating Voltage, Ue	VAC	600								
Standard Short Circuit Current Current @ 600V AC	kA	5						10		
Maximum Fuse Size varies by current adjustment range of overload relay	A	30	30	60	60	60	60	100	125	150
High Fault Short Circuit Current @ 600V AC	kA	100								
Maximum Fuse Size (Class J) – varies by current adjustment range of overload relay	A	25	25	40	40	50	60	90	100	125
ELECTRICAL IEC APPLICATIONS										
		For detailed contactor specifications by starter rating code, see Section 4 Page 13								
		For detailed overload relay specifications by catalog number prefix, see Section 6 Page 8								
Rated Insulation Voltage, Ui	V	1,000								
Rated Impulse Voltage, Uimp	kV	6						8		
Rated Operating Voltage, Ue	VAC	690								
COIL CHARACTERISTICS										
		For detailed contactor specifications by starter rating code, see Section 4 Page 14								
Rated Insulation Voltage, Ui	V	1,000								
Operating Limits		80 ~ 110% of Rated Coil Voltage								
MECHANICAL										
		For detailed contactor specifications by starter rating code, see Section 4 Page 15								
ENVIRONMENTAL										
		For detailed contactor specifications by starter rating code, see Section 4 Page 15								
		For detailed overload relay specifications by catalog number prefix, see Section 6 Page 8								
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								
Environmental Protection Ratings										
Main Terminals (with conductors connected)		IP20								
Coil Terminals		IP20								
Auxiliary Contact Terminals		IP20								
Enclosure										
Codes: F, G		Type 1, 4/4X and IP66								
Pilot Devices		Type 1, 2, 3, 3R, 4/4X, 12, 13 and IP65								
CONSTRUCTION - GENERAL										
		For detailed contactor specifications by starter rating code, see Section 4 Page 15								
		For detailed overload relay specifications by catalog number prefix, see Section 6 Page 9								
Number of Poles		3								
Pollution Degree		3								
Trip Class		10								
MATERIALS										
Pilot Devices		For detailed 22mm IEC pilot device specifications, see Section 15 Page 48								
Enclosure		Polycarbonate								
ROHS COMPLIANCE		For RoHS compliance documentation by product, refer to www.c3controls.com								

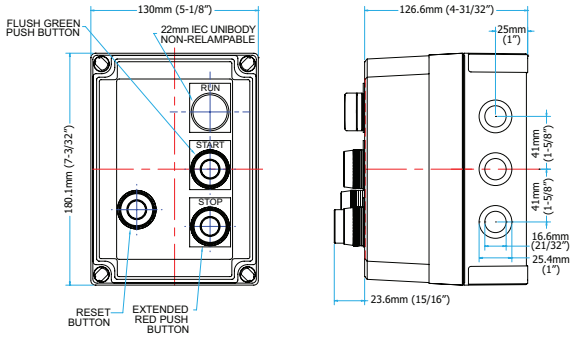
ENCLOSED DOL STARTER ASSEMBLIES: ENCLOSURE TYPE "F" - DIMENSION REF. 1



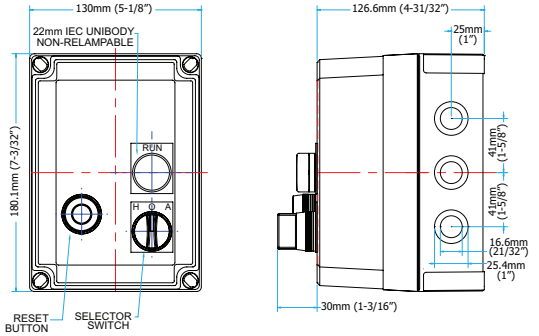
(shown with Contactor, Overload Relay, Reset Push Button and Dual Push Button)



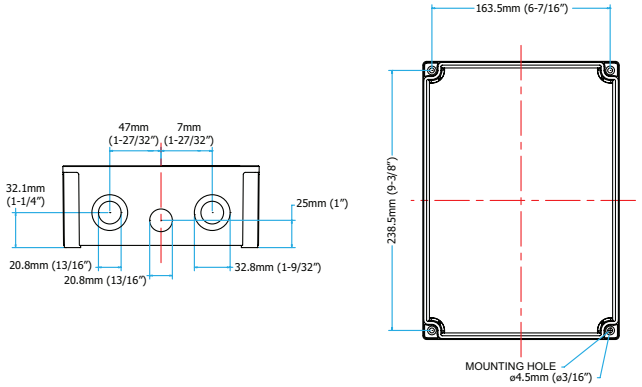
(shown with Contactor, Overload Relay, Reset Push Button, Pilot Light and 2 Push Buttons)



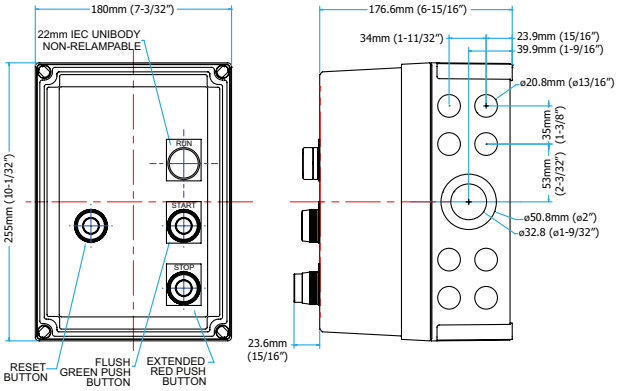
(shown with Contactor, Overload Relay, Reset Push Button, Pilot Light and Selector Switch)



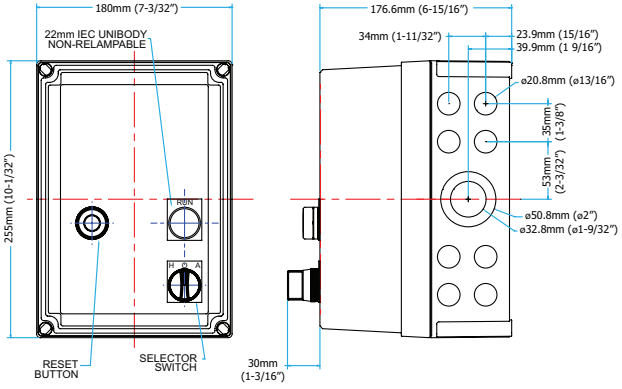
ENCLOSED DOL STARTER ASSEMBLIES: ENCLOSURE TYPE "G" - DIMENSION REF. 2



(shown with Contactor, Overload Relay, Reset Push Button, Pilot Light and 2 Push Buttons)



(shown with Contactor, Overload Relay, Reset Push Button, Pilot Light and Selector Switch)



NOTE: All dimensions are approximations, actual size may vary slightly. Visit www.c3controls.com to download CAD drawings.