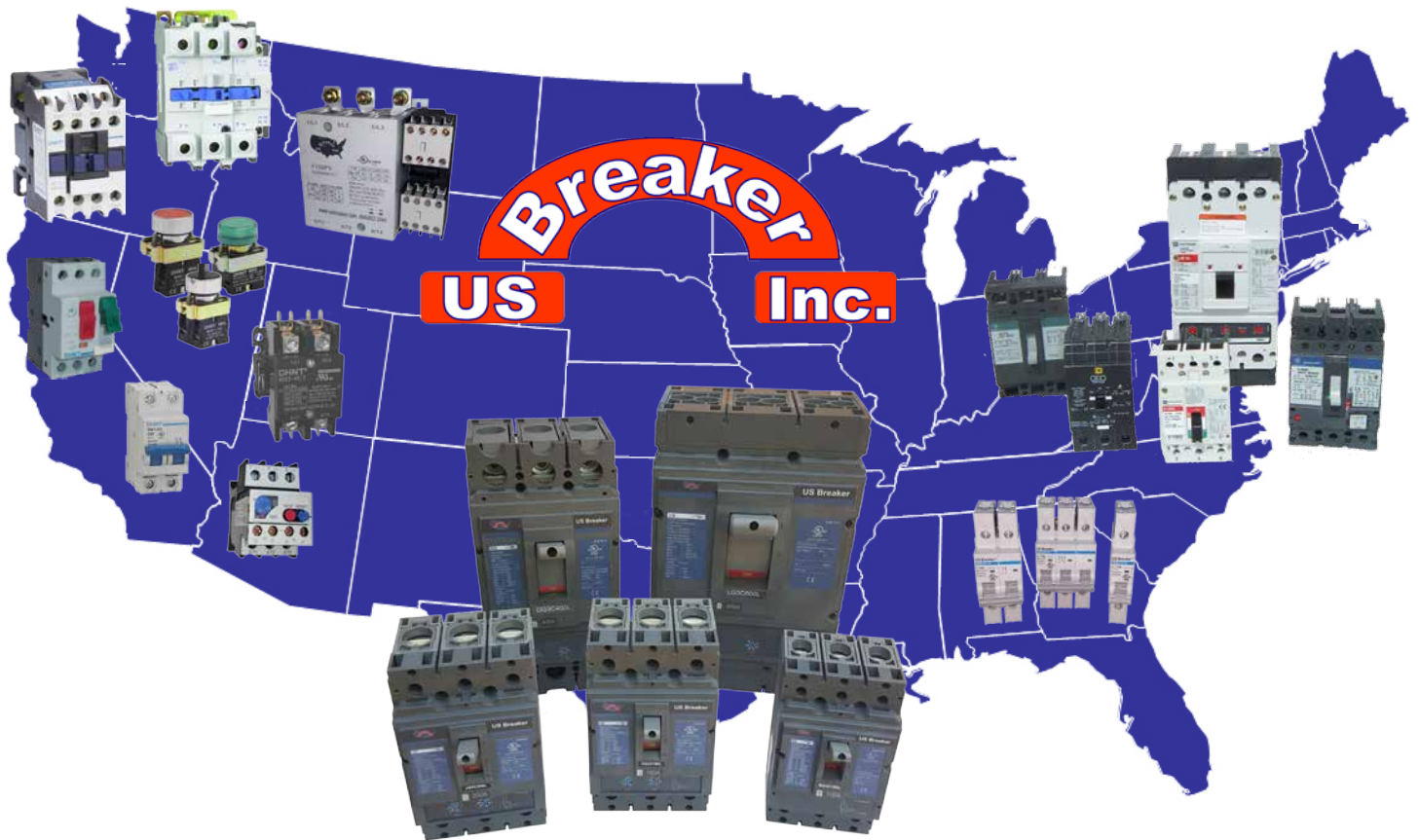


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Quick Selection Guide V-24



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DP Contactors



UL 1077 DIN Rail Breakers



115 - 400A Contactors



Pushbuttons & Lights



9 - 95A Contactors 3P-4P



Motor Starters



Overload Relays



UL 489 DIN Rail Breakers



UL 489 Circuit Breakers



Motor Controls



Contactors and Starters by US Breaker
- Square D Telemecanique LC1 Replacement Cross Ref.

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Overload Relays by US Breaker
- Square D Telemecanique LR2 Replacement Cross Ref.

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Motor Starter Protectors
- Square D Telemecanique GV2 Replacement Cross Ref.

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Pushbuttons , Switches & Lights
- Schneider Telemecanique ZB2 Replacement Cross Ref.

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Definite Purpose Contactors
- Universal Nema DP Replacements

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Circuit Breakers



UL 489 Circuit Breakers by US Breaker
- Schneider Square D Merlin Gerin Replacement Cross Ref.

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UL 489 DIN Rail Mounted Breakers by US Breaker
- Eaton, Schneider C60, or Allen Bradley Replacement Cross Ref.

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UL 1077 DIN Rail Mounted C & D Curve Breakers
- Schneider Merlin Gerin C60 Multi 9 Replacements Cross Ref.

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Original Replacement Breakers



Schneider Square D Manufactured Circuit Breakers

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NEC Based Component Selection Tables

Contactor and Overload Selection by Motor Hp

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Breaker Selection Based on Conductor/ Wire Size

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US Breaker Brand 3 Pole AC Contactors (Square D Telemecanique LC1 Replacement Cross Ref)

- ✓ UL Listed (US & CAN) File E481916, IEC 60947, and CE Marked
- ✓ Integral DIN Rail & Base Mounting in One Compact Footprint
- ✓ Superior ISO Quality Proven by Multiple Global Standard Certifications



NC1 D09-D18



NC1 D25-D32



NC1 D40-D65



NC1 D80-D95

9 - 32 Amp Contactors - NC1D (LC1D) 3P 600Vmax - Control Coil (Included)

Size NC1-	US Breaker- Brand Part #	Telemecanique Cross Reference		Description	3 Phase Hp		Auxiliaries		Price Each
		Direct	Similar ⁽¹⁾		240V	460V	NO	NC	
D09	NC1D0910 - V <u> </u>	LC1D0910	LC1D09	NC1-D09 Contactor 9A (Ith=20A) 3 Main + 1NO Aux	3	5	1	0	\$14.94
	NC1D0901 - V <u> </u>	LC1D0901	LC1D09	NC1-D09 Contactor 9A (Ith=20A) 3 Main + 1NC Aux	3	5	0	1	\$14.94
D12	NC1D1210 - V <u> </u>	LC1D1210	LC1D12	NC1-D12 Contactor 12A (Ith=20A) 3 Main + 1NO Aux	5	7.5	1	0	\$16.56
	NC1D1201 - V <u> </u>	LC1D1201	LC1D12	NC1-D12 Contactor 12A (Ith=20A) 3 Main + 1NC Aux	5	7.5	0	1	\$16.56
D18	NC1D1810 - V <u> </u>	LC1D1810	LC1D18	NC1-D18 Contactor 18A (Ith=32A) 3 Main + 1NO Aux	7.5	10	1	0	\$20.95
	NC1D1801 - V <u> </u>	LC1D1801	LC1D18	NC1-D18 Contactor 18A (Ith=32A) 3 Main + 1NC Aux	7.5	10	0	1	\$20.95
D25	NC1D2510 - V <u> </u>	LC1D2510	LC1D25	NC1-D25 Contactor 25A (Ith=40A) 3 Main + 1NO Aux	10	15	1	0	\$25.19
	NC1D2501 - V <u> </u>	LC1D2501	LC1D25	NC1-D25 Contactor 25A (Ith=40A) 3 Main + 1NC Aux	10	15	0	1	\$25.19
D32	NC1D3210 - V <u> </u>	LC1D3210	LC1D32	NC1-D32 Contactor 32A (Ith=50A) 3 Main + 1NO Aux	15	20	1	0	\$35.94
	NC1D3201 - V <u> </u>	LC1D3201	LC1D32	NC1-D32 Contactor 32A (Ith=50A) 3 Main + 1NC Aux	15	20	0	1	\$35.94

└─ Insert the AC control coil voltage of 24, 120 or 240 (example: NC1D0910-V**120**)

1) US Breaker 3 pole D09 - D32 contactors include a NO or NC aux contact in the 4th pole. Add an NC-F4-11 for a "similar" cross reference if an additional front aux is required.

40 - 95 Amp Contactors - NC1D (LC1D) 3P 600Vmax - Control Coil (Included)

Size NC1-	US Breaker- Brand Part #	Telemecanique Cross Reference		Description	3 Phase Hp		Auxiliaries		Price Each
		Direct	Direct		240V	460V	NO	NC	
D40	NC1D4011 - V <u> </u>	LC1D4011	LC1D40	NC1-D40 Contactor 40A (Ith=60A) 3 Main + 1NO/1NC	20	25	1	1	\$48.64
D50	NC1D5011 - V <u> </u>	LC1D5011	LC1D50	NC1-D50 Contactor 50A (Ith=80A) 3 Main + 1NO/1NC	20	30	1	1	\$59.53
D65	NC1D6511 - V <u> </u>	LC1D6511	LC1D65	NC1-D65 Contactor 65A (Ith=80A) 3 Main + 1NO/1NC	25	40	1	1	\$67.02
D80	NC1D8011 - V <u> </u>	LC1D8011	LC1D80	NC1-D80 Contactor 80A (Ith=95A) 3 Main + 1NO/1NC	30	40	1	1	\$83.94
D95	NC1D9511 - V <u> </u>	LC1D9511	LC1D95	NC1-D95 Contactor 95A (Ith=110A) 3 Main + 1NO/1NC	30	50	1	1	\$109.28

└─ Insert the AC control coil voltage of 24, 120 or 240 (example: NC1D0910-V**120**)

US Breaker Brand 3 Pole 115 - 400A Contactors

115 - 400 Amp Contactors - Series F (LC1F) 3P 600V max - Control Coil (Included)



F185-P3



F400-P3

Size Ref	US Breaker- Brand Part #	Telemecanique.		Description	3 Phase Hp		Auxiliaries		Price Each
		Direct Cross Ref			240V	460V	NO	NC	
F115	F115 P3 V <u> </u>	LC1F115		3 Pole Contactor 115A (Ith=200A) with Control Coil	40	75	-	-	\$161.00
F150	F150 P3 V <u> </u>	LC1F150		3 Pole Contactor 150A (Ith=200A) with Control Coil	50	100	-	-	\$269.41
F185	F185 P3 V <u> </u>	LC1F185		3 Pole Contactor 185A (Ith=275A) with Control Coil	60	100	-	-	\$382.32
F265	F265 P3 V <u> </u>	LC1F265		3 Pole Contactor 265A (Ith=315A) with Control Coil	100	150	-	-	\$475.10
F330	F330 P3 V <u> </u>	LC1F330		3 Pole Contactor 330A (Ith= 380A) with Control Coil	125	200	-	-	\$533.79
F400	F400 P3 V <u> </u>	LC1F400		3 Pole Contactor 400A (Ith= 450A) with Control Coil	150	250	-	-	\$638.40

└─ Insert the AC control coil voltage of 120, 240 or 480 (example: F115 P3 V**120**)



US Breaker Brand 4 Pole AC Contactors (Square D Telemecanique LC1 Replacement Cross Ref)



NC1D1208



NC1D2504



NC1D6508



NC1D9508

9 - 65 Amp Contactors - NC1D (LC1D) 4P 600Vmax - Control Coil (Included)

Size NC1-	US Breaker- Brand Part #	Telemecanique Cross Reference		Description	Main Contacts		Price Each
		Direct	Similar ⁽¹⁾		NO	NC	
D09 - D12	NC1D1204 - V	LC1D12004	LC1DT25	NC1-D12 Contactor 12A (Ith=20A) 4 NO Main Contacts	4	0	\$24.91
	NC1D1208 - V	LC1D12008	LC1D128	NC1-D12 Contactor 12A (Ith=20A) 2NO/2NC Main Contacts	2	2	\$24.91
D18 - D25	NC1D2504 - V	LC1D25004	LC1DT40	NC1-D25 Contactor 25A (Ith=40A) 4 NO Main Contacts	4	0	\$42.90
	NC1D2508 - V	LC1D25008	LC1D258	NC1-D25 Contactor 25A (Ith=40A) 2NO/2NC Main Contacts	2	2	\$42.90
D40 - D65	NC1D6504 - V	LC1D65004	LC1DT80A	NC1-D65 Contactor 65A (Ith=80A) 4 NO Main Contacts	4	0	\$95.16
	NC1D6508 - V	LC1D65008	-	NC1-D65 Contactor 65A (Ith=80A) 2NO/2NC Main Contacts	2	2	\$95.16

└─ Insert the AC control coil voltage of 24, 120 or 240 (example: NC1D1204-V120)

1) US Breaker 4 pole D12 - D65 contactors include four fully rated poles. Add an NC-F4-11 for a "similar" cross reference if an additional front auxiliary contact is required.

80 - 95 Amp Contactors - NC1D (LC1D) 4P 600Vmax - Control Coil (Included)

Size NC1-	US Breaker- Brand Part #	Telemecanique Cross Reference		Description	Main Contacts		Price Each
		Direct	Direct		NO	NC	
D95	NC1D9504 - V	LC1D80004	LC1D80004	NC1-D95 Contactor 95A (Ith=110A) 4 NO Main Contacts	4	0	\$149.97
	NC1D9508 - V	LC1D80008	LC1D80008	NC1-D95 Contactor 95A (Ith=110A) 2NO/2NC Main Contacts	2	2	\$149.97

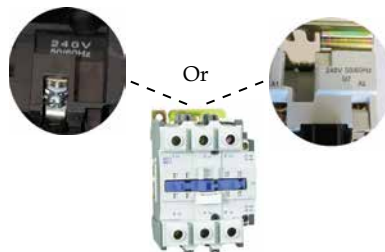
└─ Insert the AC control coil voltage of 24, 120 or 240 (example: NC1D6504-V120)

How to Identify Contactor Control Coil Voltages

- ✓ The Control Voltage is Marked Near the A1-A2 Terminals and is Also Measured Between the A1-A2 Terminals
- ✓ The Main Power Voltage can be anything up to 600V, but the control coil circuit voltage needs to match.



D09 to D32 Sizes



D40 to D95 Sizes



F115 to F400 Sizes

Telemecanique Typical Coil Identification	AC Volts	24V	48V	110V	120V	208V	220V	230V	240V	440V	480V
		Code	B7	E7	F7	G6	L6	M7	P7	U6	R5

- Please contact US Breaker for other NC1D & Series F family contactor coil voltages.
- Telemecanique part numbers are provided to assist product selection. Proper engineering evaluation is required for each customer application.



NC Family Contactor Accessories (Square D Telemecanique Replacement Cross Ref)

Auxiliary Contacts for NC1D09 - NC1D95 & F115 - F400 Contactors



NCF411



NCF422

US Breaker- Brand Part #	Telemecanique Cross Reference		Description	Price Each
	Direct	Similar		
NC F4 20	LA1DN 20	LADN 20	2 NO Front Mount Aux (Ui=690V, Ith=10A, AC15=380VA) for all NC/F Contactors 9A - 400A	\$7.41
NC F4 11	LA1DN 11	LADN 11	1NO/1NC Front Mount Aux (Ui=690V, Ith=10A, AC15=380VA) for all NC/F Contactors 9A - 400A	\$7.41
NC F4 02	LA1DN 02	LADN 02	2NC Front Mount Aux (Ui=690V, Ith=10A, AC15=380VA) for all NC/F Contactors 9A - 400A	\$7.41
NC F4 40	LA1DN 40	LADN 40	4NO Front Mount Aux (Ui=690V, Ith=10A, AC15=380VA) for all NC/F Contactors 9A - 400A	\$11.73
NC F4 31	LA1DN 31	LADN 31	3NO/1NC Front Mount Aux (Ui=690V, Ith=10A, AC15=380VA) for all NC/F Contactors 9A - 400A	\$11.73
NC F4 13	LA1DN 13	LADN 13	1NO/3NC Front Mount Aux (Ui=690V, Ith=10A, AC15=380VA) for all NC/F Contactors 9A - 400A	\$11.73
NC F4 04	LA1DN 04	LADN 04	4NC Front Mount Aux (Ui=690V, Ith=10A, AC15=380VA) for all NC/F Contactors 9A - 400A	\$11.73
NC F4 22	LA1DN 22	LADN 22	2NO/2NC Front Mount Aux (Ui=690V, Ith=10A, AC15=380VA) for all NC/F Contactors 9A - 400A	\$11.73
NCF1 11C	LA8DN 11	LA8DN 11	1NO/1NC Side Mount Aux (Ui=690V, Ith=10A, AC15=380VA) for NC Contactors only 9A - 95A	\$9.90

Front Mounted Time Delay Blocks for NC1D09 - NC1D95 & F115 - F400 Contactors



NCF111C

US Breaker- Brand Part #	Telemecanique Cross Reference		Description	Price Each
	Direct	Similar		
NC F5 T2	LA2DT2	LADT2	NC/F 9A to 400A Time Delay Block 0.1 - 30s Making Time Delay with 1NO/1NC Contacts	\$27.06
NC F5 D2	LA3DR2	LADR2	NC/F 9A to 400A Time Delay Block 0.1 - 30s Breaking Time Delay with 1NO/1NC Contacts	\$27.06

Mechanical Interlocks for Reversing Contactor Application



NCF5T2



NCMI0932A

US Breaker- Brand Part #	Description	Price Each
NC MI 09 32A	Mechanical Interlock for Reversing Application of NC1D Sizes D09, D12, D18, D25, & D32	\$8.95
NC MI 40 65A P	Mechanical Interlock for NC1 D40, D50 & D65 Molded Base 3P Contactors	\$12.95
NC MI 80 95A P	Mechanical Interlock for NC1 D80 & D95 3P or D40 & D65 4P Molded Base Contactors	\$13.98
NC MI 80 95 4P	Mechanical Interlock for NC1 D80 - D95 4 Pole Molded Base Contactors	\$14.66
NC MI 150	Mechanical Interlock for F115 - F150 Contactors	\$22.00
NC MI 185	Mechanical Interlock for F185 Contactors	\$31.90
NC MI 265	Mechanical Interlock for F265 Contactors	\$34.88

Coil Surge Suppressors for NC1 D09 - D32 Contactors



NCSR2A

US Breaker- Brand Part #	Description	Price Each
NCSR2A120240	Surge Suppressor for NC D09 to D32 Contactor Coils from 100V - 250Vac	\$12.98
NCSR2A24	Surge Suppressor for NC D09 to D32 Contactor Coils from 24V - 48Vac	\$12.98

DIN Rail



DIN-9

US Breaker- Brand Part #	Description	Price Each
DIN-9	Standard 35mm Mount Din Rail - 9.8 inch piece	\$2.98

Enclosure For US Breaker NC1 D09 - D32 Contactors & Starters (Enclosure Only for On-site DOL Starter Assembly Program)



NC-NQ2-AS2-32

- ✓ CHNT UL Listed Metal General Purpose Enclosure with Built in DIN Rail Mount
- ✓ Sold as Enclosure Only for Field Customization and Inventory Reduction
- ✓ Kit Includes Enclosure with Start/Stop Pushbutton and Internal Wiring

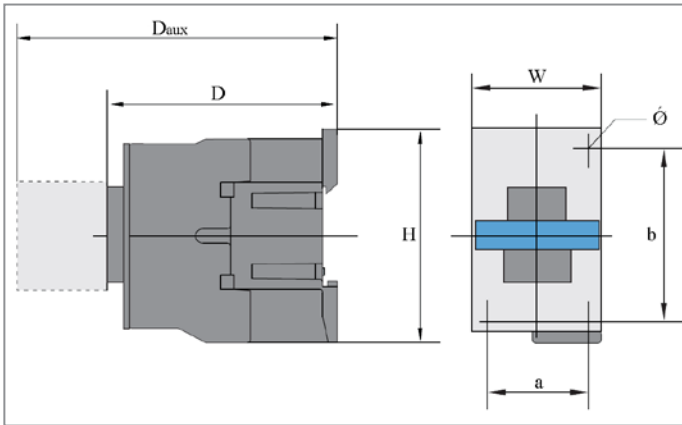
US Breaker Part #	Description	Price
NC-NQ2-AS2-32	UL Metal Enclosure with On/Off Buttons for NC1D09 - NC1D32 Contactors	\$29.94

- Enclosure is sold separately. Please select your contactor and overload relay for field installation.



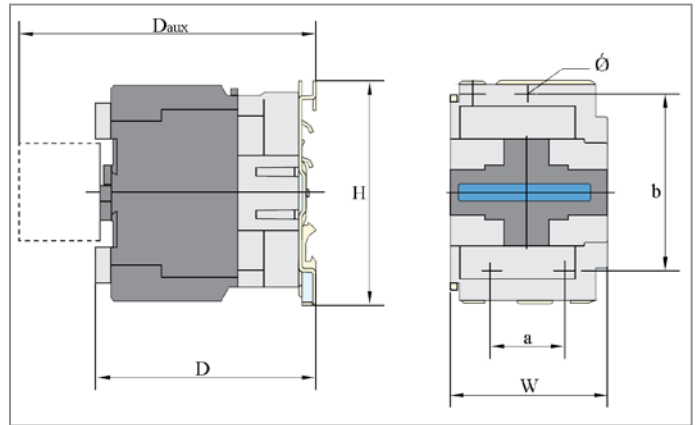
NC1D Contactor Dimensions (in.)

NC1-D09 to NC1-D32



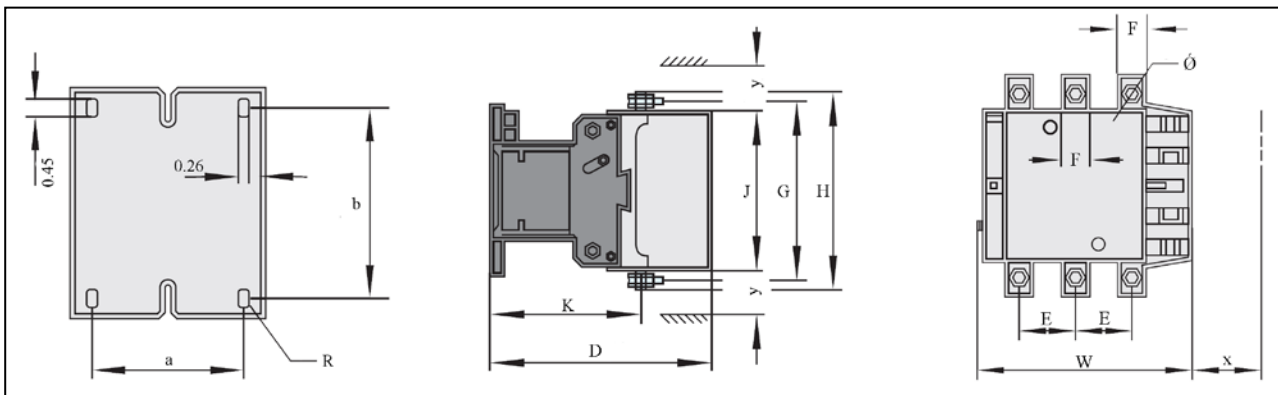
NC1D Dim (in)	H	W	D	Daux	a	b	Ø
NC1 D09 to D12	3.0	1.9	3.2	4.7	1.3-1.4	2.0-2.4	0.18
NC1 D18	3.0	1.9	3.4	4.9	1.3-1.4	2.0-2.4	0.18
NC1 D25	3.4	2.2	3.7	5.3	1.6	1.9	0.18
NC1 D32	3.4	2.2	3.9	5.5	1.6	1.9	0.18

NC1-D40 to NC1-D95



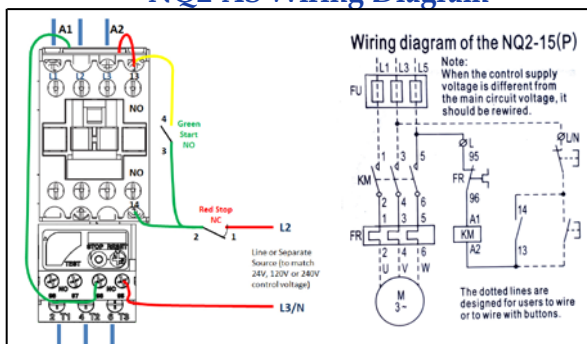
NC1D Dim (in)	H	W	D	Daux	a	b	Ø
NC1 D4011 to D6511	5.1	3.0	4.6	6.1	1.6	3.9	0.26
NC1 D6504 & D6508	5.1	3.3	4.6	6.1	1.6	3.9	0.26
NC1 D8011 to D9511	5.1	3.4	5.0	6.5	1.6	3.9-4.3	0.26
NC1 D9504 & D9508	5.1	3.8	5.0	6.5	1.6	3.9-4.3	0.26

Series F Contactor Dimensions

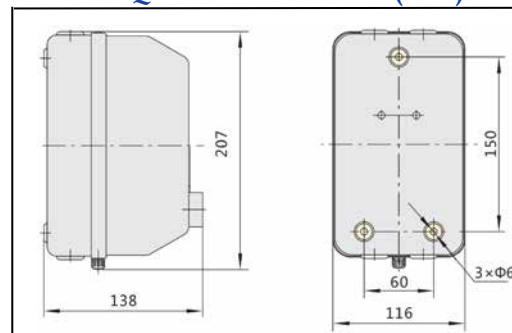


3P Dim (in)	H	W	D	E	F	G	J	K	a	b	x	y <500V	y >500V	Ø - Bolt	Torque
F115	6.4	6.6	6.8	1.5	0.8	5.8	4.9	4.2	3.1	4.3-4.7	5.2	0.4	0.6	M6	3 N•M
F150	6.7	6.6	6.8	1.6	0.8	5.9	4.9	4.2	3.1	4.3-4.7	5.2	0.4	0.6	M8	6 N•M
F185	6.9	6.7	7.2	1.6	0.8	6.1	5.0	4.5	3.1	4.3-4.7	5.2	0.4	0.6	M8	6 N•M
F265	8.0	8.0	8.5	1.9	1.0	7.0	5.8	5.6	3.8	4.3-4.7	5.8	0.4	0.6	M10	10 N•M
F330	8.2	8.5	8.7	1.9	1.0	7.1	6.2	5.7	3.8	4.3-4.7	5.8	0.4	0.6	M10	10 N•M
F400	8.2	8.5	8.7	1.9	1.0	7.1	6.2	5.7	3.1	6.7-7.1	5.8	0.4	0.6	M10	10 N•M

NQ2-AS Wiring Diagram



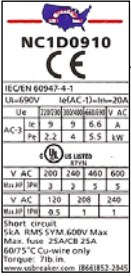
NQ2-AS Dimensions (mm)





Contactor Technical Data

D09 - D95 Sizes

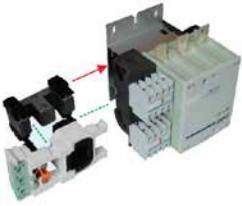


NC1D Type		NC1-D09	NC1-D12	NC1-D18	NC1-D25	NC1-D32	NC1-D40	NC1-D50	NC1-D65	NC1-D80	NC1-D95	
Thermal Current Ith (AC-1 IEC) Amps	660V	20	20	32	40	50	60	80	80	95	110	
Inductive Current (AC-3 IEC) Amps	380/400V	9	12	18	25	32	40	50	65	80	95	
UL Power Rating 3 Phase (Hp)	240V	3	5	7.5	10	15	20	20	25	30	30	
	460V	5	7.5	10	15	20	25	30	40	40	50	
	600V	5	7.5	10	15	20	25	30	40	40	50	
UL Power Rating 1 Phase (Hp)	120V	0.5	0.75	1	2	3	3	5	5	7.5	7.5	
	240V	1	2	3	5	5	7.5	10	15	20	20	
IEC Power Rating (KW)	380/400V	4	5.5	7.5	11	15	18.5	22	30	37	45	
Wire Size - Inflexible	AWG	(1-2) #16-12		(1-2) #16-10		(1-2) #14-8		(1) #10-4 or (2) #12-8		(1) #8-2 or (2) #10-6		
		Elec.	1,000,000	1,000,000	1,000,000	1,000,000	800,000	800,000	800,000	800,000	600,000	600,000
Operations (AC-3)		Mech.	10,000,000	10,000,000	10,000,000	10,000,000	8,000,000	8,000,000	8,000,000	8,000,000	6,000,000	6,000,000



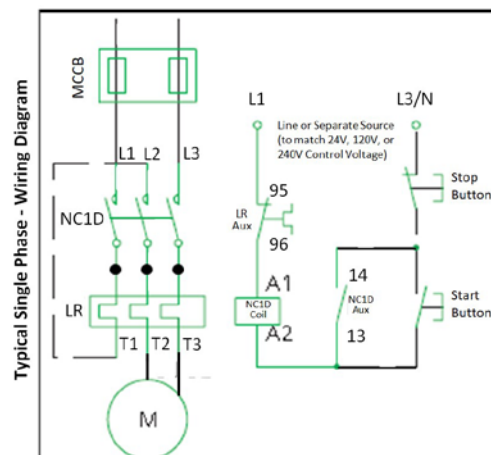
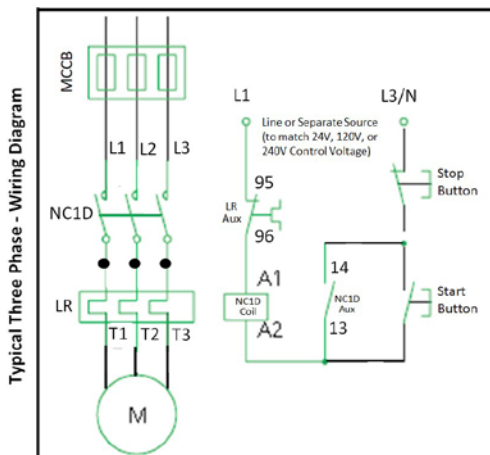
NC1D Type		NC1-D09	NC1-D12	NC1-D18	NC1-D25	NC1-D32	NC1-D40	NC1-D50	NC1-D65	NC1-D80	NC1-D95
Coil Power	Start-up (VA)	70	70	70	110	110	200	200	200	200	200
	Holding (VA)	8	8	8	11	11	20	20	20	20	20
	Power (W)	1.8 - 2.7	1.8 - 2.7	1.8 - 2.7	3 - 4	3 - 4	6 - 10	6 - 10	6 - 10	6 - 10	6 - 10
Operation Range of Rated Voltage	Pick-up Voltage	85% - 110%									
	Drop-out Voltage	20% - 75%									

F115 - F400 Sizes



Series F Type		F115	F150	F185	F265	F330	F400
Thermal Current Ith (AC-1) Amps	660V	200	200	275	315	380	450
Inductive Current IEC (AC-3) Amps	400V	115	150	185	265	330	400
UL Power Rating (Hp)	240V	40	50	60	100	125	150
	460V	75	100	100	150	200	250
	600V	75	100	100	150	200	300
IEC Power Rating (KW)	400V	55	75	90	132	160	200
Operations	Elec.	1,200,000	1,200,000	1,000,000	800,000	800,000	800,000
	Mech.	10,000,000	10,000,000	6,000,000	6,000,000	6,000,000	6,000,000

Series F Type		F115	F150	F185	F265	F330	F400
Coil Power	Start-up (VA)	660	660	966	840	1500	1500
	Holding (VA)	60	60	75	100	10	20
Operation Range of Rated Voltage	Pick-up Voltage	85% - 110%					
	Drop-out Voltage	20% - 75%					





US Breaker Contactor Cross References



NC1 D09-D18



NC1 D25-D32



NC1 D40-D65



NC1 D80-D95



F185

3P Contactors - Allen Bradley 100, Cutler Hammer CE & ABB A-Line

US Breaker Brand Part #	Price Each	Aux		Hp (3-phase)		Dim (in) (H x W x D)	Type	Contactor Cross Reference (Similar Designs)				
		NO	NC	240V	460V			Allen Bradley 100-C	Allen Bradley 100-A	Cutler Hammer CE	ABB	
NC1D0910 - V__	\$14.94	1	0	3	5	3.0 x 1.9 x 3.2	DIN Rail or Base Mount	100-C09*10	100-A09ND3 ²⁾	CE15ANS3	A9-30-10	
NC1D0901 - V__	\$14.94	0	1	3	5	3.0 x 1.9 x 3.2		100-C09*01	-	-	A9-30-01	
NC1D1210 - V__	\$16.56	1	0	5	7.5	3.0 x 1.9 x 3.2		100-C12*10	100-A12ND3 ²⁾	CE15GNS3 / CE15CNS3	A12-30-10	
NC1D1201 - V__	\$16.56	0	1	5	7.5	3.0 x 1.9 x 3.2		100-C12*01	-	-	A12-30-01	
NC1D1810 - V__	\$20.95	1	0	7.5	10	3.0 x 1.9 x 3.4		100-C16*10	100-A18ND3 ²⁾	CE15DNS3	A16-30-10	
NC1D1801 - V__	\$20.95	0	1	7.5	10	3.0 x 1.9 x 3.4		100-C16*01	-	-	A16-30-01	
NC1D2510 - V__	\$25.19	1	0	10	15	3.4 x 2.2 x 3.7		100-C23*10	100-A24ND3 ²⁾	CE15ENS3	A26-30-10	
NC1D2501 - V__	\$25.19	0	1	10	15	3.4 x 2.2 x 3.7		100-C23*01	-	-	A26-30-01	
NC1D3210 - V__	\$35.94	1	0	15	20	3.4 x 2.2 x 3.9		100-C30*10	100-A30N*3	CE15FNS3	A30-30-10	
NC1D4011 - V__	\$48.64	1	1	20	25	5.1 x 3.0 x 4.6		100-C37*00 (or *10)	100-A38N*3	CE15GNS3	A40-30-10	
NC1D5011 - V__	\$59.53	1	1	20	30	5.1 x 3.0 x 4.6		100-C43*00 (or *10)	100-A45N*3	CE15HNS3	A50-30-11	
NC1D6511 - V__	\$67.02	1	1	25	40	5.1 x 3.0 x 4.6		100-C60*00 (or *10)	100-A60N*3	CE15JNS3	A63-30-11	
NC1D8011 - V__	\$83.94	1	1	30	40	5.1 x 3.4 x 5.0		100-C72*00 (or *10)	100-A75N*3	CE15KNS3	A75-30-11	
NC1D9511 - V__	\$109.28	1	1	30	50	5.1 x 3.4 x 5.0		100-C85*00 (or *10)	-	CE15LN3	A95-30	
F115 P3 V__	\$161.00	-	-	40	75	6.4 x 6.6 x 6.8		Base Mount	100-D115	100-B110N*3 ¹⁾	CE15MN3 ^{1,3)}	AF116-30 ¹⁾
F150 P3 V__	\$269.41	-	-	50	100	6.7 x 6.6 x 6.8			100-D140	-	CE15NN3 ^{1,3)}	AF140-30 ¹⁾
F185 P3 V__	\$382.32	-	-	60	100	6.9 x 6.7 x 7.2	100-D180		100-B180N*3 ¹⁾	CE15PN3 ^{1,3)}	AF146-30 ¹⁾	
F265-P3-V__	\$475.10	-	-	100	150	8.0 x 8.0 x 8.5	100-D210 or 100-D250		100-B250N*3 ¹⁾	CE15RN3 ^{1,3)}	AF205-30 ¹⁾	
F330-P3-V__	\$533.79	-	-	125	200	8.2 x 8.5 x 8.7	100-D300		100-B300N*3 ¹⁾	CE15SN3 ^{1,3)}	AF265-30 ¹⁾	
F400 P3 V__	\$638.40	-	-	150	250	8.2 x 8.5 x 8.7	-		100-B400N*3 ¹⁾	CE15TN3 ^{1,3)}	AF305-30 ¹⁾	

Insert the AC control coil voltage of 24, 120 or 240 (example: NC1D0910-V120 replaces Allen Bradley's 100-C09*10 with a 120V control coil)

3P Contactors - Sprecher & Schuh, Telemecanique LC1 & Siemens 3TF

US Breaker Brand Part #	Price Each	Aux		Hp (3-phase)		Dim (in) (H x W x D)	Type	Contactor Cross Reference (Similar Designs)				
		NO	NC	240V	460V			Sprecher & Schuh CA3	Telemecanique LC1	Telemecanique LC1	Siemens 3TF	
NC1D0910 - V__	\$14.94	1	0	3	5	3.0 x 1.9 x 3.2	DIN Rail or Base Mount	CA3-9 -10	LC1 D09 10	LC1-D093 . A65	3TF40 10-0A	
NC1D0901 - V__	\$14.94	0	1	3	5	3.0 x 1.9 x 3.2		CA3-9 -01	LC1 D09 01	LC1-D099 . A65	3TF40 01-0A	
NC1D1210 - V__	\$16.56	1	0	5	7.5	3.0 x 1.9 x 3.2		CA3-12 -10	LC1 D12 10	LC1-D123 . A65	3TF41 10-0A	
NC1D1201 - V__	\$16.56	0	1	5	7.5	3.0 x 1.9 x 3.2		CA3-12 -01	LC1 D12 01	LC1-D129 . A65	3TF41 01-0A	
NC1D1810 - V__	\$20.95	1	0	7.5	10	3.0 x 1.9 x 3.4		CA3-16 -10	LC1 D18 10	LC1-D173 . A65	3TF42 10-0A	
NC1D1801 - V__	\$20.95	0	1	7.5	10	3.0 x 1.9 x 3.4		CA3-16 -01	LC1 D18 01	LC1-D179 . A65	3TF42 01-0A	
NC1D2510 - V__	\$25.19	1	0	10	15	3.4 x 2.2 x 3.7		CA3-23 -10	LC1 D25 10	LC1-D253 . A65	3TF43 10-0A	
NC1D2501 - V__	\$25.19	0	1	10	15	3.4 x 2.2 x 3.7		CA3-23 -01	LC1 D25 01	LC1-D259 . A65	3TF43 01-0A	
NC1D3210 - V__	\$35.94	1	0	15	20	3.4 x 2.2 x 3.9		CA3-30 -10	LC1 D32 10	LC1-D323 . A65	3TF44 11-0A ¹⁾	
NC1D4011 - V__	\$48.64	1	1	20	25	5.1 x 3.0 x 4.6		CA3-37 -N-11	LC1 D40 11	LC1-D403	3TF45 11-0A	
NC1D5011 - V__	\$59.53	1	1	20	30	5.1 x 3.0 x 4.6		CA3-43 -N-11	LC1 D50 11	LC1-D503	3TF46 11-0A	
NC1D6511 - V__	\$67.02	1	1	25	40	5.1 x 3.0 x 4.6		CA3-60 -N-11	LC1 D65 11	LC1-D633	3TF47 11-0A	
NC1D8011 - V__	\$83.94	1	1	30	40	5.1 x 3.4 x 5.0		CA3-72 -N-11	LC1 D80 11	LC1-D803	-	
NC1D9511 - V__	\$109.28	1	1	30	50	5.1 x 3.4 x 5.0		-	LC1 D95 11	-	3TF48 11-0A	
F115 P3 V__	\$161.00	-	-	40	75	6.4 x 6.6 x 6.8		Base Mount	-	LC1F115	LC1FF43	3TF50 ^{1,3)}
F150 P3 V__	\$269.41	-	-	50	100	6.7 x 6.6 x 6.8			-	LC1F150	-	3TF51 ¹⁾
F185 P3 V__	\$382.32	-	-	60	100	6.9 x 6.7 x 7.2	-		LC1F185	LC1FG43	3TF52 ¹⁾	
F265-P3-V__	\$475.10	-	-	100	150	8.0 x 8.0 x 8.5	-		LC1F265	LC1FH43	3TF53 ¹⁾	
F330-P3-V__	\$533.79	-	-	125	200	8.2 x 8.5 x 8.7	-		LC1F330	-	3TF55 ¹⁾	
F400 P3 V__	\$638.40	-	-	150	250	8.2 x 8.5 x 8.7	-		LC1F400	LC1FJ43	3TF56 ¹⁾	

Insert the AC control coil voltage of 24, 120 or 240 (example: NC1D0910-V120 replaces Telemecanique's LC1D0910 with a 120V control coil)

1) Add an additional NC-F4-11 or NC-F4-22 if auxiliary contacts are required for cross references to US Breaker's F115 thru F400 contactors.

Add an additional NC-F4-11 for cross references to Siemens 3TF44 11-0A if the Normally Closed auxiliary contact is used.

2) Allen Bradley 100-A09 thru -A24 include a fully rated 4th pole. US Breaker's cross ref includes a standard auxiliary rated contact. See the NC1D1204 or NC1D2504 for a fully rated 4th pole.

3) US Breaker F115 - F400 contactors are supplied with bus extensions (without lugs) as standard.



US Breaker Brand Overload Relays for NC1D Contactors (Square D Telemecanique LR2 Replacement Cross Ref)

- ✓ UL Listed (US & CAN) File E342546, IEC 60947, and CE Marked
- ✓ Class 10 Ambient Compensated Overload with Phase Loss Protection
- ✓ Direct Mounts to NC1 Contactor or Individual Mounting Bracket
- ✓ Includes 1NO/1NC Auxiliary Contact
- ✓ Adjustable Amperage Ranges with Automatic and Manual Reset



Overload Relays - For NC1 D09 - D32 Contactors - 0.63 to 32 Amps



LR25



LR36

US Breaker- Brand Part #	Telemecanique Cross Reference		Description	Price Each
	Direct	Similar		
LR 25 A01	LR2 D1305	LRD05	.63-1.0A Adjustable Overload Mounts to NC1- D09, D12, D18, D25 or D32 Contactor	\$20.94
LR 25 A1x6	LR2 D1306	LRD06	1.0-1.6A Adjustable Overload Mounts to NC1- D09, D12, D18, D25 or D32 Contactor	\$20.94
LR 25 A2x5	LR2 D1307	LRD07	1.6-2.5A Adjustable Overload Mounts to NC1- D09, D12, D18, D25 or D32 Contactor	\$20.94
LR 25 A04	LR2 D1308	LRD08	2.5-4A Adjustable Overload Mounts to NC1- D09, D12, D18, D25 or D32 Contactor	\$20.94
LR 25 A06	LR2 D1310	LRD10	4-6A Adjustable Overload Mounts to NC1- D09, D12, D18, D25 or D32 Contactor	\$20.94
LR 25 A08	LR2 D1312	LRD12	5.5-8A Adjustable Overload Mounts to NC1- D09, D12, D18, D25 or D32 Contactor	\$20.94
LR 25 A10	LR2 D1314	LRD14	7-10A Adjustable Overload Mounts to NC1- D09, D12, D18, D25 or D32 Contactor	\$20.94
LR 25 A13	LR2 D1316	LRD16	9-13A Adjustable Overload Mounts to NC1- D09, D12, D18, D25 or D32 Contactor	\$21.80
LR 25 A18	LR2 D1321	LRD21	12-18A Adjustable Overload Mounts to NC1- D12, D18, D25 or D32 Contactor	\$21.80
LR 25 A25	LR2 D1322	LRD22	17-25A Adjustable Overload Mounts to NC1- D18, D25 or D32 Contactor	\$21.80
LR 36 A32	LR2 D2353	LRD32	23-32A Adjustable Overload Mounts to NC1-D32 Contactor	\$27.38

Overload Relays - For NC1 D40 - D95 Contactors - 23 to 93 Amps



LR93

US Breaker- Brand Part #	Telemecanique Cross Reference		Description	Price Each
	Direct	Direct		
LR 93 A32	LR2 D3353	LRD3353	23-32A Adjustable Overload Mounts to NC1- D40,, D50, D65, D80, D95 Contactor	\$41.23
LR 93 A40	LR2 D3355	LRD3355	30-40A Adjustable Overload Mounts to NC1- D40,, D50, D65, D80, D95 Contactor	\$41.23
LR 93 A50	LR2 D3357	LRD3357	37-50A Adjustable Overload Mounts to NC1- D40,, D50, D65, D80, D95 Contactor	\$41.23
LR 93 A65	LR2 D3359	LRD3359	48-65A Adjustable Overload Mounts to NC1- D40,, D50, D65, D80, D95 Contactor	\$45.22
LR 93 A70	LR2 D3361	LRD3361	55-70A Adjustable Overload Mounts to NC1- D40,, D50, D65, D80, D95 Contactor	\$45.22
LR 93 A80	LR2 D3363	LRD3363	63-80A Adjustable Overload Mounts to NC1- D40,, D50, D65, D80, D95 Contactor	\$45.22
LR 93 A93	-	-	80-93A Adjustable Overload Mounts to NC1- D40,, D50, D65, D80, D95 Contactor	\$47.59

Overload Relay Individual Mounting Adapters 0.63 to 93A

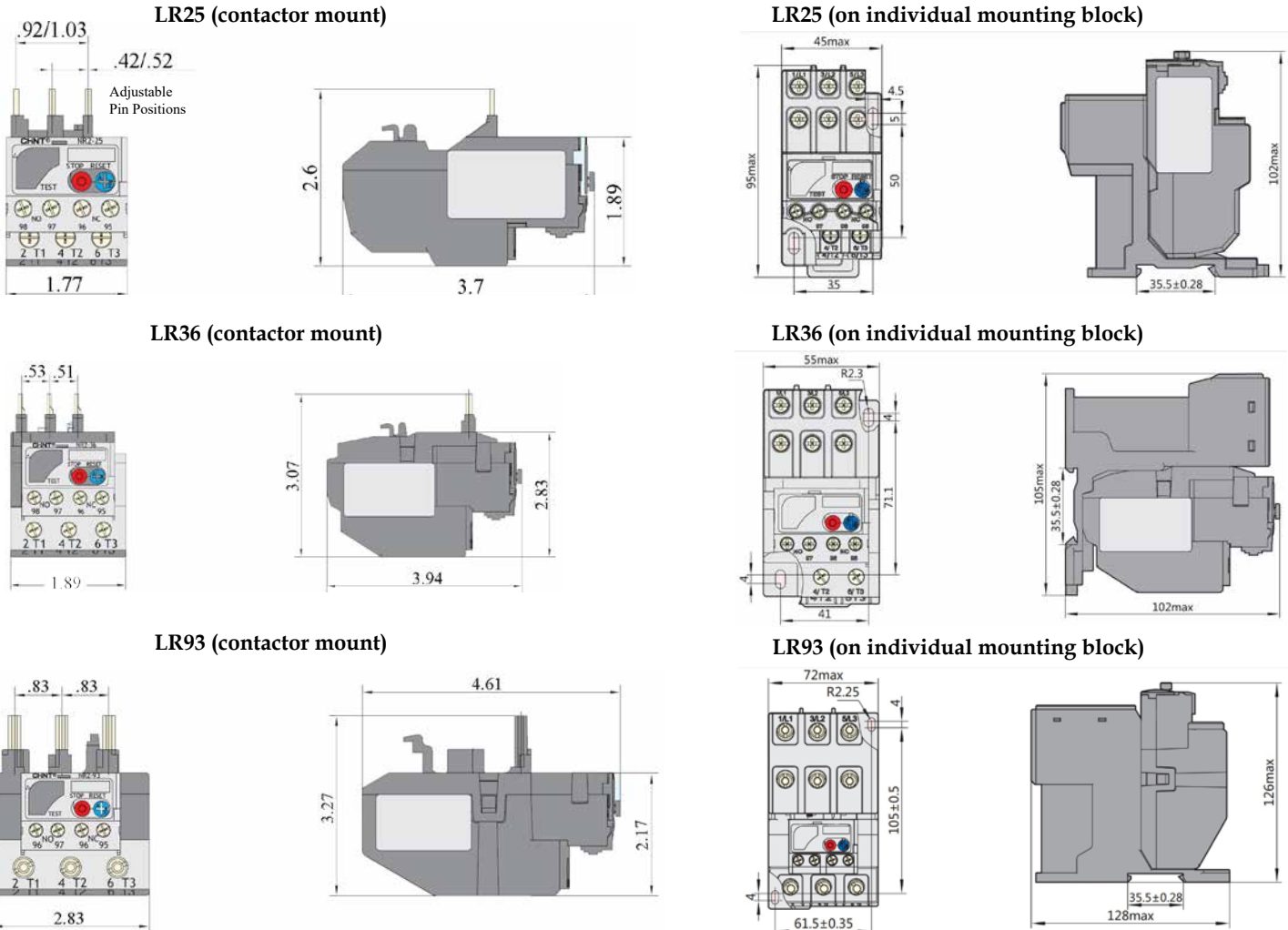


US Breaker- Brand Part #	Telemecanique Cross Reference		Description	Price Each
	Direct	Similar		
LR D13	LA7D1064	-	LR 25 Overload Relay Base for Individual DIN Rail Mounting all LR25 Overloads	\$7.46
LR D23	LA7D2064	-	LR 36 Overload Relay Base for Individual DIN Rail Mounting all LR36 Overloads	\$12.49
LR D33	LA7D3064	-	LR 93 Overload Relay Base for Individual DIN Rail Mounting all LR93 Overloads	\$18.89

- Manufacturer cross references are provided to assist product selection. Proper engineering evaluation is required for each customer application.
- Series LR overload relays are intended and UL listed for use with NC1D & Series F family contactors.



Overload Relay Dimensions (in.)



Operation

Pin Adjustment:
 - Click to align different sized contactors

Stop:
 - The NC aux opens while pressed then resumes position
 - The NO aux does not change

Reset:
 - Out for manual reset
 - Push in & twist holds the button in for auto reset

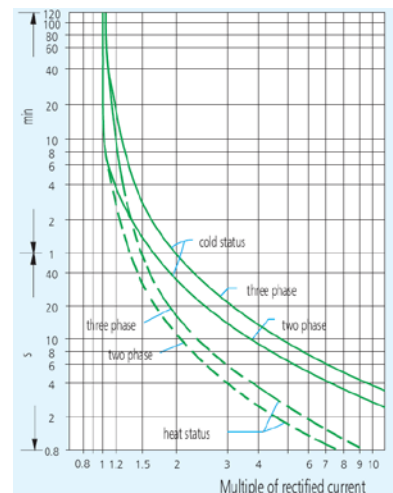
Amperage Adjustment:
 (behind window)

Test Button (behind window):
 - Push until it clicks
 - NO aux has continuity
 - NC aux is open
 - Reset resumes normal function

Normally Open Aux:
 - No continuity in its natural state

Normally Closed Aux:
 - Has continuity in its natural state

Overload Protection Curve





US Breaker CHNT Brand Motor Starter Protectors (Square D Telemecanique GV2 Replacement Cross Ref)



- ✓ UL508 Listed, CSA C22.2, IEC 60947-2, IEC60947-4-1, and CE Marked
- ✓ Rated 600V UL & 690V IEC Covering Current Ranges From 0.16 to 25A
- ✓ Lockable in the Off Position with Field Installable Accessories
- ✓ 3 Pole Manual Motor Starter Protectors Include a Manual Disconnect, CI-10 Ambient Compensated Overload Relay and Instantaneous Magnet Trip in One Compact Unit

Motor Starter Protectors - Series GV NS2 - 0.1 to 25A



GV25NS2



GVNS2MC

US Breaker- Part Number	Telemecanique Cross Ref		Allen-Bradley Cross Ref	Description	Price Each
	Direct	Similar	Similar ¹⁾		
GV 25 NS2 Ax16	GV2-M01	GV2-ME01	140M-C2E-A16	0.1 - 0.16 Amp Adjustable Motor Starter Protector UL Listed CI-10	\$37.48
GV 25 NS2 Ax25	GV2-M02	GV2-ME02	140M-C2E-A25	0.16 - 0.25 Amp Adjustable Motor Starter Protector UL Listed CI-10	\$37.48
GV 25 NS2 Ax40	GV2-M03	GV2-ME03	140M-C2E-A40	0.25 - 0.4 Amp Adjustable Motor Starter Protector UL Listed CI-10	\$37.48
GV 25 NS2 Ax63	GV2-M04	GV2-ME04	140M-C2E-A63	0.4 - 0.63 Amp Adjustable Motor Starter Protector UL Listed CI-10	\$37.48
GV 25 NS2 A01	GV2-M05	GV2-ME05	140M-C2E-B10	0.63 - 1 Amp Adjustable Motor Starter Protector UL Listed CI-10	\$37.48
GV 25 NS2 A1x6	GV2-M06	GV2-ME06	140M-C2E-B16	1 - 1.6 Amp Adjustable Motor Starter Protector UL Listed CI-10	\$37.48
GV 25 NS2 A2x5	GV2-M07	GV2-ME07	140M-C2E-B25	1.6 - 2.5 Amp Adjustable Motor Starter Protector UL Listed CI-10	\$37.48
GV 25 NS2 A04	GV2-M08	GV2-ME08	140M-C2E-B40	2.5 - 4 Amp Adjustable Motor Starter Protector UL Listed CI-10	\$37.48
GV 25 NS2 A6x3	GV2-M10	GV2-ME10	140M-C2E-B63	4 - 6.3 Amp Adjustable Motor Starter Protector UL Listed CI-10	\$37.48
GV 25 NS2 A10	GV2-M14	GV2-ME14	140M-C2E-C10	6 - 10 Amp Adjustable Motor Starter Protector UL Listed CI-10	\$40.98
GV 25 NS2 A14	GV2-M16	GV2-ME16	140M-C2E-C16 (10-16A)	9 - 14 Amp Adjustable Motor Starter Protector UL Listed CI-10	\$40.98
GV 25 NS2 A18	GV2-M20	GV2-ME20	140M-C2E-C20 (14.5-20A)	13 - 18 Amp Adjustable Motor Starter Protector UL Listed CI-10	\$40.98
GV 25 NS2 A23	GV2-M21	GV2-ME21	140M-C2E-A25 (18-25A)	17 - 23 Amp Adjustable Motor Starter Protector UL Listed CI-10	\$40.98
GV 25 NS2 A25	GV2-M22	GV2-ME22	140M-C2E-C25 (18-25A)	20 - 25 Amp Adjustable Motor Starter Protector UL Listed CI-10	\$40.98

¹⁾ Allen-Bradley cross referenced model numbers have a rotary on/off handle instead of push buttons.

Accessories for Series GV NS2 Starters



GVNS2AE



GVNS2AU

US Breaker- Part Number	Telemecanique Cross Ref		Description	Price Each
	Direct	Similar		
GV NS2 AE11	GV2-AE11	GV-AE11	1NO/1NC Top Mount Aux Cont (Ui=250V, Ith=2.5A, AC15=120VA) for all GV25NS2	\$9.99
GV NS2 AE20	GV2-AE20	GV-AE20	2NO Top Mount Aux Cont (Ui=250V, Ith=2.5A, AC15=120VA) for all GV25NS2	\$9.99
GV NS2 AU11	GV2-AN11	GV-AN11	1NO/1NC Side Mount Aux Cont (Ui=690V, Ith=6A, AC15=720VA) for all GV25NS2	12.49
GV NS2 AU20	GV2-AN20	GV-AN20	2NO Side Mount Aux Cont (Ui=690V, Ith=6A, AC15=720VA) for all GV25NS2	\$12.49
GV NS2 UV110	GV2-AU116	GV-AU115	GV NS2 127 Vac Under Voltage Trip for all GV25NS2	\$23.79
GV NS2 UV220	GV2-AU226	GV-AU225	GV NS2 220 - 240 Vac Under Voltage Trip for all GV25NS2	\$23.79
GV NS2 SH110	GV2-AS116	GV-AS115	GV NS2 127 Vac Shunt Trip for all GV25NS2	\$23.79
GV NS2 SH220	GV2-AS226	GV-AS226	GV NS2 220 - 240 Vac Shunt Trip for all GV25NS2	\$23.79
GV NS2 FA1001	GV2-AD1001	GV-AD1001	GV NS2 1NO Fault Signal Contact + 1NC Auxiliary Contact for all GV25NS2	\$14.96
GV NS2 FA1010	GV2-AD1010	GV-AD1010	GV NS2 1NO Fault Signal Contact + 1NO Auxiliary Contact for all GV25NS2	\$14.96
GV NS2 FA0110	GV2-AD0110	GV-AD0110	GV NS2 1NC Fault Signal Contact + 1NO Auxiliary Contact for all GV25NS2	\$14.96
GV NS2 FA0101	GV2-AD0101	GV-AD0101	GV NS2 1NC Fault Signal Contact + 1NC Auxiliary Contact for all GV25NS2	\$14.96
GV NS2 MC	GV2-MC02	GV2-MC02	GV NS2 IP55 Waterproof Enclosure for all GV25NS2	\$19.95
GV NS2 MC01	-	-	GV NS2 IP55 Waterproof Enclosure with Emergency Stop Pushbutton for all GV25NS2	\$23.93

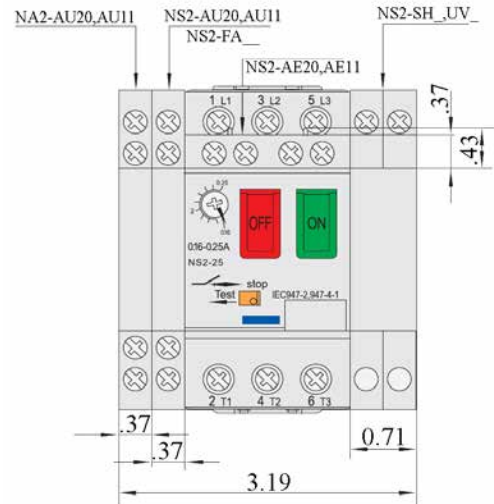
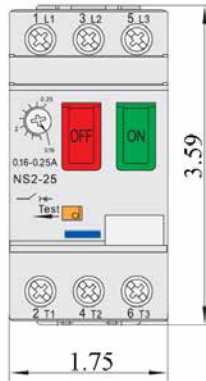
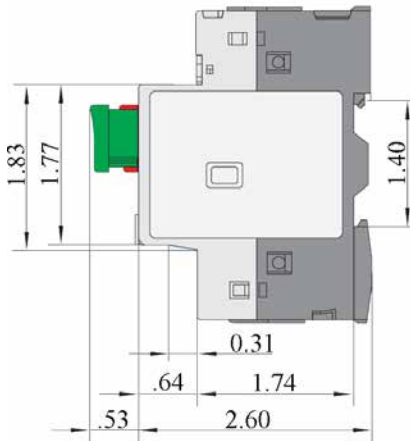
Starter Technical Data

GV 25 NS2 Amps		-Ax16	-Ax25	-Ax40	-Ax63	-A01	-A1x6	-A2x5	-A04	-A6x3	-A10	-A14	-A18	-A23	-A25
Thermal Setting	-	.1 - .16 A	.16 - .25 A	.25 - .4 A	.4 - .63 A	.63 - 1 A	1 - 1.6 A	1.6 - 2.5 A	2.5 - 4 A	4 - 6.3 A	6 - 10 A	9 - 14 A	13 - 18 A	17 - 23 A	20 - 25 A
Maximum UL Hp Rating - 1Ph	115V	-	-	-	-	-	-	-	1/8 Hp	1/4 Hp	1/2 Hp	3/4 Hp	1 Hp	1 1/2 Hp	2 Hp
	230V	-	-	-	-	-	1/10 Hp	1/6 Hp	1/3 Hp	1/2 Hp	1 1/2 Hp	2 Hp	3 Hp	3 Hp	3 Hp
Maximum UL Hp Rating - 3Ph	200V	-	-	-	-	-	-	1/2 Hp	3/4 Hp	1 1/2 Hp	2 Hp	3 Hp	5 Hp	5 Hp	5 Hp
	230V	-	-	-	-	-	-	1/2 Hp	1 Hp	1 1/2 Hp	3 Hp	3 Hp	5 Hp	7 1/2 Hp	7 1/2 Hp
	460V	-	-	-	-	1/2 Hp	3/4 Hp	1 Hp	2 Hp	3 Hp	5 Hp	10 Hp	10 Hp	15 Hp	15 Hp
	575V	-	-	-	-	1/2 Hp	1 Hp	1 1/2 Hp	3 Hp	5 Hp	7 1/2 Hp	10 Hp	15 Hp	20 Hp	20 Hp
Short Circuit Icu (x1000)	IEC-230V	100	100	100	100	100	100	100	100	100	100	100	100	50	50
	IEC-500V	100	100	100	100	100	100	100	100	50	10	6	6	4	4
	UL-600V	5	5	5	5	5	5	5	5	5	5	5	5	5	5

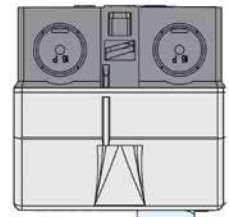
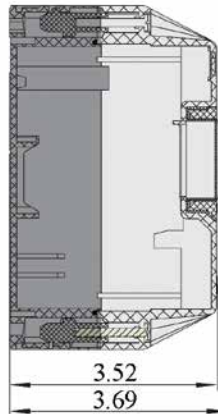
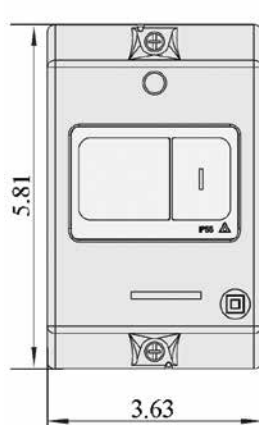
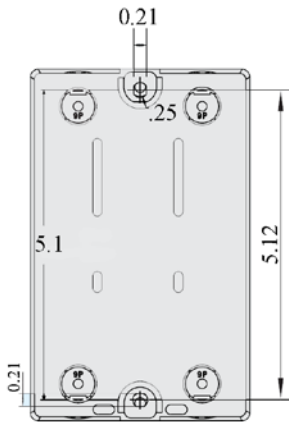


Starter Dimensions (in.)

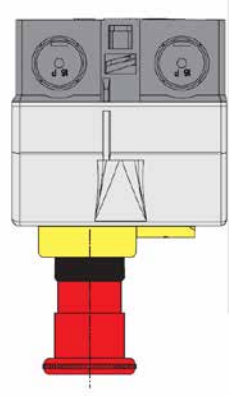
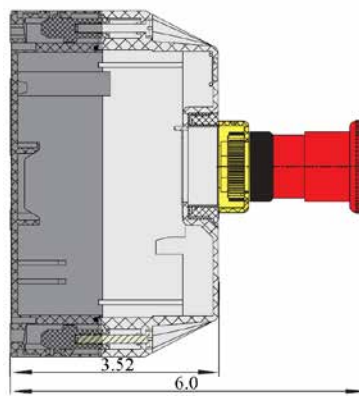
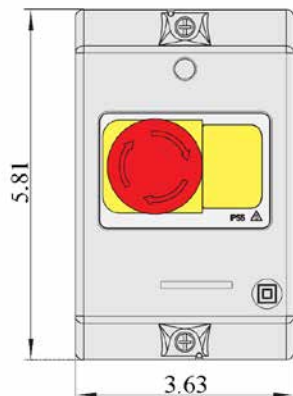
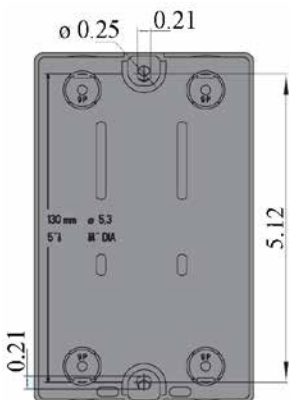
GV25 NS2 - Ax16 to A25



Enclosure GV NS2 MC



Enclosure GV NS2 MC01



- Telemecanique part numbers are provided to assist product selection. Proper engineering evaluation is required for each customer application.
- Series GV NS2 accessories are intended and UL listed for use with series GV NS2 starters.



US Breaker CHNT Brand 22mm Pushbuttons, Switches & LED Lights (Schneider Telemecanique XB2 ZB2 Replacement Cross Ref)

- ✓ Standards: UL508 Recognized, CSA C22.2, IEC 60947, and CE Marked
- ✓ Features Metal Shroud with Anti-Rotation Mounting
- ✓ Add on Contact Blocks for Modular Configuration
- ✓ Superior Quality Through ISO Certified Manufacturing and Testing



ZNP2-BA31



ZNP2-BS442



ZNP2-BL8325



ZNP2-BV64



ZNP2-BD21



ZNP2-BV63



ZNP2-BE101

Pushbuttons - Series Z NP2 (ZB2) - Metal Shroud (Contact Block Included)

US Breaker-Part Number	Schneider Telemecanique Cross Reference - Direct	Description	Color	Contacts		Price Each
				NO	NC	
ZNP2 BA21	XB2BA21 (ZB2BA2+ZB2BZ009+ZB2BE101)	Flush Pushbutton - Self Restoring	Black	1	0	\$5.99
ZNP2 BA31	XB2BA31 (ZB2BA3+ZB2BZ009+ZB2BE101)	Flush Pushbutton - Self Restoring	Green	1	0	\$5.99
ZNP2 BA42	XB2BA42 (ZB2BA4+ZB2BZ009+ZB2BE102)	Flush Pushbutton - Self Restoring	Red	0	1	\$5.99
ZNP2 BA51	XB2BA51 (ZB2BA5+ZB2BZ009+ZB2BE101)	Flush Pushbutton - Self Restoring	Yellow	1	0	\$5.99
ZNP2 BS442	XB2BS442 (ZB2BS44+ZB2BZ009+ZB2BE102)	Extended Mushroom Head Button - 30 Deg Twist Release	Red	0	1	\$10.24
ZNP2 BL8325	XB2BL8325 (ZB2BL832+ZB2BZ105)	Flush 2 Way Pushbutton - I/O Symbols - Self Restore	Red/ Green	1	1	\$11.79

Illuminated LED Pushbuttons - Series Z NP2 (ZB2) - Metal Shroud (Contact Block Included)

US Breaker-Part Number	Schneider Telemecanique Cross Reference - Direct	Description	Color	Contacts		Price Each
				NO	NC	
ZNP2 BW3361 V110	XB2BW3361 (ZB2BW33+ZB2BW061-110V)	Illuminated LED Pushbutton Self Restoring 110Vac	Green	1	-	\$10.29
ZNP2 BW3461 V110	XB2BW3461 (ZB2BW34+ZB2BW061-110V)	Illuminated LED Pushbutton Self Restoring 110Vac	Red	1	-	\$10.29
ZNP2 BW3561 V110	XB2BW3561 (ZB2BW35+ZB2BW061-110V)	Illuminated LED Pushbutton Self Restoring 110Vac	Yellow	1	-	\$10.29
ZNP2 BW3361 V24	XB2BW3361 (ZB2BW33+ZB2BW061-24V)	Illuminated LED Pushbutton Self Restoring 24Vac/dc	Green	1	-	\$10.29
ZNP2 BW3461 V24	XB2BW3461 (ZB2BW34+ZB2BW061-24V)	Illuminated LED Pushbutton Self Restoring 24Vac/dc	Red	1	-	\$10.29
ZNP2 BW3561 V24	XB2BW3561 (ZB2BW35+ZB2BW061-24V)	Illuminated LED Pushbutton Self Restoring 24Vac/dc	Yellow	1	-	\$10.29

Selector Switches - Series Z NP2 (ZB2) - Metal Shroud (Contact Block Included)

US Breaker-Part Number	Schneider Telemecanique Cross Reference - Direct	Description	Color	Contacts		Price Each
				NO	NC	
ZNP2 BD21	XB2BD21 (ZB2BD2+ZB2BZ009+ZB2BE101)	2 Position Selector Switch - Maintained Position	Black	1	0	\$9.49
ZNP2 BD41	XB2BD41 (ZB2BD4+ZB2BZ009+ZB2BE101)	2 Position Selector Switch - Self Restoring to Side	Black	1	0	\$10.28
ZNP2 BD33	XB2BD33 (ZB2BD3+ZB2BZ009+2 ZB2BE101)	3 Position Selector Switch - Maintained Position	Black	2	0	\$12.49
ZNP2 BD53	XB2BD53 (ZB2BD5+ZB2BZ009+2 ZB2BE101)	3 Position Selector Switch - Self Restoring to Center	Black	2	0	\$12.99

Indicating LED Lights - Series Z NP2 (ZB2) - Metal Shroud

US Breaker-Part Number	Schneider Telemecanique Cross Reference - Direct	Description	Color	Contacts		Price Each
				NO	NC	
ZNP2 BV61 V110 LED	XB2BV61 (ZB2BV013+ZB2BV6-110V)	LED Metallic Indicating Light Direct Type- 110Vac	White	-	-	\$10.49
ZNP2 BV63 V110 LED	XB2BV63 (ZB2BV033+ZB2BV6-110V)	LED Metallic Indicating Light Direct Type- 110Vac	Green	-	-	\$10.49
ZNP2 BV64 V110 LED	XB2BV64 (ZB2BV043+ZB2BV6-110V)	LED Metallic Indicating Light Direct Type- 110Vac	Red	-	-	\$10.49
ZNP2 BV65 V110 LED	XB2BV65 (ZB2BV053+ZB2BV6-110V)	LED Metallic Indicating Light Direct Type- 110Vac	Yellow	-	-	\$10.49
ZNP2 BV66 V110 LED	XB2BV66 (ZB2BV063+ZB2BV6-110V)	LED Metallic Indicating Light Direct Type- 110Vac	Blue	-	-	\$10.49
ZNP2 BV63 V24 LED	XB2BV63 (ZB2BV033+ZB2BV6-24V)	LED Metallic Indicating Light Direct Type- 24Vac/dc	Green	-	-	\$10.49
ZNP2 BV64 V24 LED	XB2BV64 (ZB2BV043+ZB2BV6-24V)	LED Metallic Indicating Light Direct Type- 24Vac/dc	Red	-	-	\$10.49
ZNP2 BV65 V24 LED	XB2BV65 (ZB2BV053+ZB2BV6-24V)	LED Metallic Indicating Light Direct Type- 24Vac/dc	Yellow	-	-	\$10.49

Add on Contact Blocks for ZNP2 Pushbuttons and Switches (up to 4 per operator)

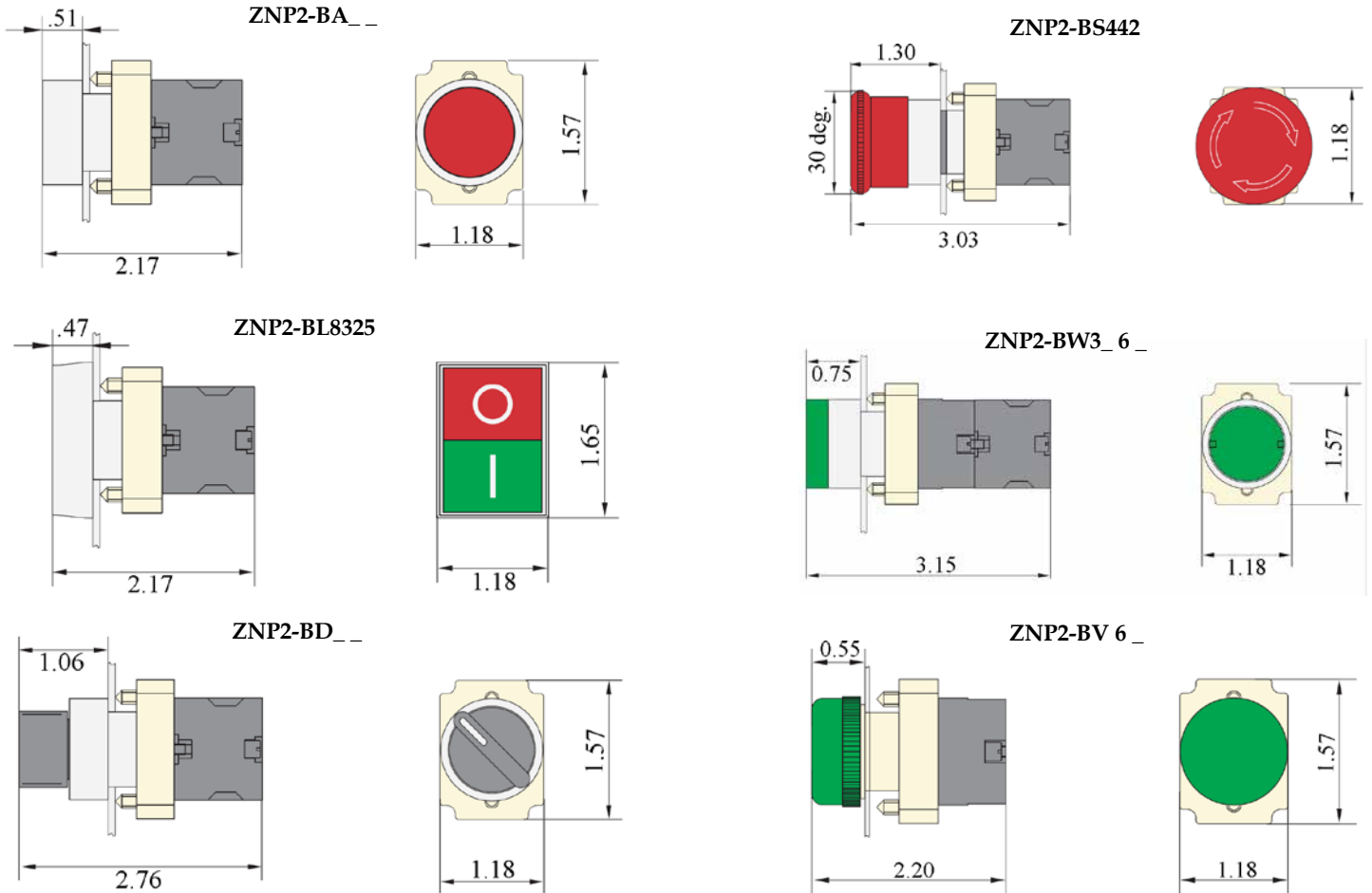
US Breaker-Part Number	Schneider Telemecanique Cross Reference - Direct	Description	Color	Contacts		Price Each
				NO	NC	
ZNP2 BE101	ZB2 BE101	Add on NO Contact Block for All Pushbuttons/ Switches	-	1	0	\$3.00
ZNP2 BE102	ZB2 BE102	Add on NC Contact Block for All Pushbuttons/ Switches	-	0	1	\$3.00



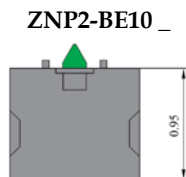
Push Button, Light & Switch Technical Data

ZNP2 Application		415V	240V	120V
Rated Working Current Ie Amps	AC-15	1.9	3	-
	DC-13	-	0.27	0.55
Power Supply Ie Amps	LED Lamp	< 20ma		
Resistive Current Ith (AC-1) Amps	All Types	10A		
Rated Insulation Voltage Ui Volts	All Types	400V		
Mechanical Operations	Pushbuttons Flush & Mush.	1,000,000		
	Lighted Pushbuttons	300,000		
	Other Types	100,000		
Electrical Operations	Pushbuttons Flush & Mush.	500,000 AC, 200,000 DC		
	Other Types	100,000		
IEC Rated Degree of Protection	All Types	IP65		

Push Button, Light & Switch Dimensions (in.)



		Contact Arrangement
O	X	1 NO (Left or Right)
X	O	1 NC (Left or Right)
O	X	1 NO &
X	O	1 NC



			Contact Arrangement
X	O	O	1 NO (Left)
O	X	O	2 NC wired in series
O	O	X	1 NO (Right)
X	X	O	1 NC (Right)
O	X	X	1 NC (Left)
X	O	X	2 NO wired in parallel

- Telemecanique part numbers are provided to assist product selection. Proper engineering evaluation is required for each customer application.
- Series Z NP2 pilot devices are UL recognized components. ZNP2 contact blocks are for use with ZNP2 push buttons and selector switches.



US Breaker CHNT Brand Definite Purpose DP Contactors (Universal DP Contactor Replacements)

- ✓ Standards: UL508 Recognized Component (US & Canada)
- ✓ Industry Standard Mounting Base Simplifies Replacement
- ✓ Superior Quality Through ISO Certified Manufacturing and Testing



D40NCK3 P1



D40NCK3 P2



D40NCK3 P3



D60NCK3 P3

Definite Purpose Contactors - Series D NCK (DP) - 110/120Vac Control Coil

Poles	Amp Size	US Breaker- Part Number	Cross Reference				Description	Price Each
			Tyco (Prod Un)	Siemens	Square D	GE		
1P	40	D40 NCK3 P1 V120	3100-15T19	45GG10AFA	8910DP41V02	-	DP Contactor 1P + Shunt 40A	\$9.08
	30	D30 NCK3 P2 V120	3100-20T6	45EG20AF	8910DP32V02	CR453CC2AAA	DP Contactor 2P 30A	\$11.89
2P	40	D40 NCK3 P2 V120	3100-20T18	45GG20AF	8910DP42V02	CR453CE2ABB	DP Contactor 2P 40A	\$15.98
	25	D25 NCK3 P3 V120	3100-30T8	42AF35AF	8910DPA23V02	CR453AB2AAA	DP Contactor 3P 25A	\$19.64
3P	40	D40 NCK3 P3 V120	3100-30T10	42CF35AF	8910DPA43V02	CR453AD2AAA	DP Contactor 3P 40A	\$23.39
	60	D60 NCK3 P3 V120	3100-30T17	42EF35AF	8910DPA63V02	CR453FF2AAA	DP Contactor 3P 60A	\$39.99

Definite Purpose Contactors - Series D NCK (DP) - 24Vac Control Coil

Poles	Amp Size	US Breaker- Part Number	Cross Reference				Description	Price Each
			Tyco (Prod Un)	Siemens	Square D	GE		
2P	30	D30 NCK3 P2 V24	3100-20Q6	45EG20AJ	8910DP32V14	CR453CC2HAA	DP Contactor 2P 30A	\$11.89
	40	D40 NCK3 P2 V24	3100-20Q18	45GG20AJ	8910DP42V14	CR453CE2HBB	DP Contactor 2P 40A	\$15.98
3P	25	D25 NCK3 P3 V24	3100-30Q8	42AF35AJ	8910DPA23V14	CR453AB2HAA	DP Contactor 3P 25A	\$19.64
	40	D40 NCK3 P3 V24	3100-30Q10	42CF35AJ	8910DPA43V14	CR453AD2HAA	DP Contactor 3P 40A	\$23.39
	60	D60 NCK3 P3 V24	3100-30Q17	42EF35AJ	8910DPA63V14	CR453FF2HAA	DP Contactor 3P 60A	\$39.99

Definite Purpose Contactors - Series D NCK (DP) - 220/240Vac Control Coil

Poles	Amp Size	US Breaker- Part Number	Cross Reference				Description	Price Each
			Tyco (Prod Un)	Siemens	Square D	GE		
2P	30	D30 NCK3 P2 V240	3100-20U6	45EG20AG	8910DP32V09	CR453CC2BAA	DP Contactor 2P 30A	\$11.89
	40	D40 NCK3 P2 V240	3100-20U18	45GG20AG	8910DP42V09	CR453CE2BBB	DP Contactor 2P 40A	\$15.98
3P	25	D25 NCK3 P3 V240	3100-30U8	42AF35AG	8910DPA23V09	CR453AB2BAA	DP Contactor 3P 25A	\$19.64
	40	D40 NCK3 P3 V240	3100-30U10	42CF35AG	8910DPA43V09	CR453AD2BAA	DP Contactor 3P 40A	\$23.39
	60	D60 NCK3 P3 V240	3100-30U17	42EF35AG	8910DPA63V09	CR453FF2BAA	DP Contactor 3P 60A	\$39.99

DP Contactor Technical Data

Number of Poles & Amp Size		1 Pole		2 Pole		3 Pole	
		40A	30A	40A	25A	40A	60A
Resistive Current (A)	600V	50	40	50	32	50	75
Full Load Amps (A)	240/277V	40	30	40	25	40	60
	480V	32	25	32	20	32	40
Locked Rotor Amps (A)	240/277V	240	200	240	150	240	360
	480V	200	150	200	110	150	214
Horse Power (Hp)	240/277V	-	-	-	-	-	20
	480V	-	-	-	-	-	30

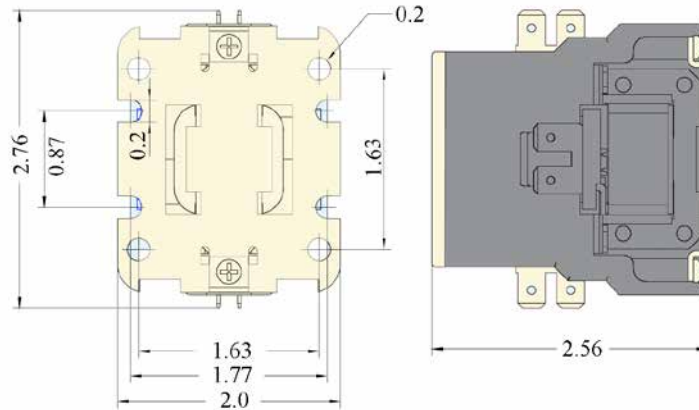
DP Contactor Coil Characteristics

Number of Poles & Amp Size		1 Pole		2 Pole		3 Pole	
		40A	30A	40A	25A	40A	60A
Power Consumption (VA)	Inrush	55	55	55	51	51	83
	Holding	13	13	13	12	12	6
Operating Range (V)	Pick Up	85 - 110%					
	Drop Out	20 - 65%					

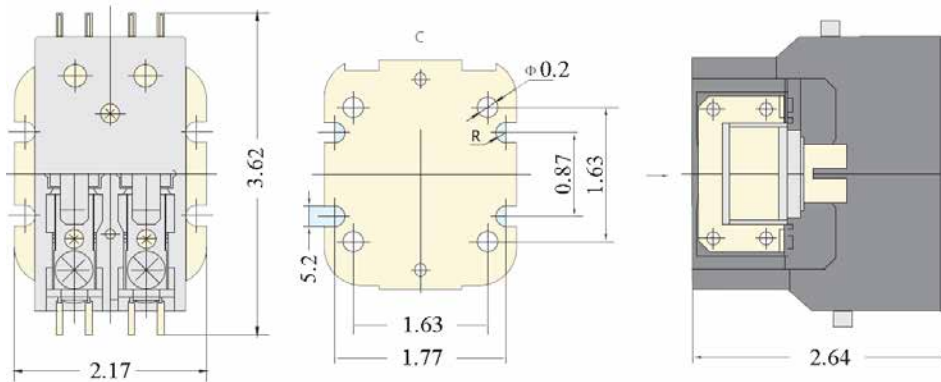


DP Contactor Dimensions (in.)

1 Pole 25 - 40A

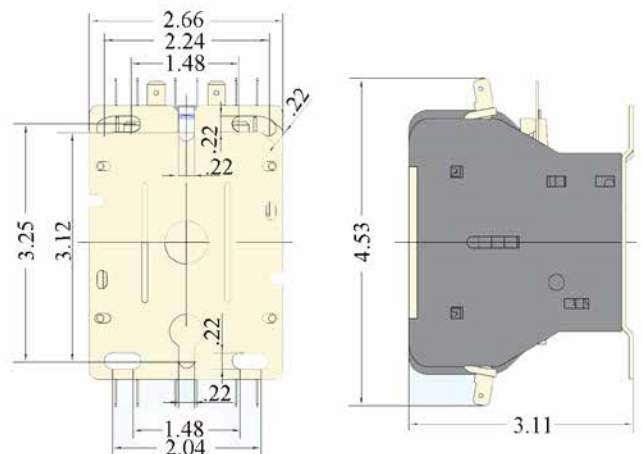
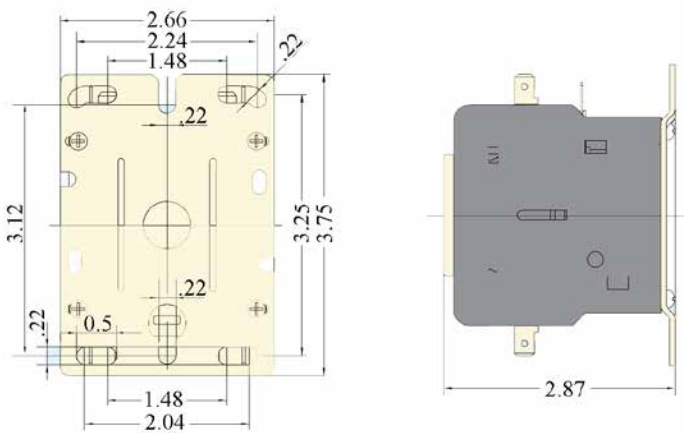


2 Pole 25 - 40A



3 Pole 25 - 40A

3 Pole 50 - 60A



- Proper engineering evaluation is required for each customer application.
- Series D NCK definite purpose contactors are UL recognized components.
- Manufacturer cross references are provided to assist product selection. Most mounting plates have common mounting holes but sizes may vary.



Technology Leading UL489 Circuit Breakers at Fantastic Prices! (Schneider Square D & Merlin Gerin Replacement Cross Ref)

Click-in-Place Field Installable Accessories Save on Inventory

Safety Minded Isolated Current Chambers Use Double Break Technology to Reduce Let-Thru Current in a Fault

15 - 600 Amp

Adjustable Amperage Reduces Inventory & Improves Coordination

Global Certifications in One Product (UL File # E481916)

Highly Reliable UL489 Listed Cutting Edge Design Backed by a 2 Year Warranty

Flexible Mounting Options with Removable Lugs & Forward or Reverse Feed

Compact Size and Interchangeable Mounting with Many Square D Frames

Schneider Square D & US Breaker Designs Allow for Backup Sourcing at the Lowest Price!

100A- 400A Match:

- Mounting Holes
- Width
- Faceplate Cutout
- Double Break Contacts
- A Click-in-Place Accessory Feature
- Adjustability



Square D Compared to US Breaker HD/HG



Square D Compared to US Breaker JD/JG



UL489 Molded Case Circuit Breakers by US Breaker (600V max)



E Frame



H & J Frame



D Frame



L Frame

15 - 100A 3P E Frame

(Includes 6 Lugs 14 - 3/0)

Amps	Thermal	Magnetic
15	15	150
20	20	200
25	25	250
30	30	300
35	35	350
40	40	400
50	50	500
60	60	600
70	70	700
80	80	800
90	90	900
100	100	1000

Standard AIC (22KA@480V)

US Breaker ED Part #	Square D Similar Cross Ref ⁽¹⁾	Price
ED3C015L	BDL36015	\$119.68
ED3C020L	BDL36020	\$119.68
ED3C025L	BDL36025	\$119.68
ED3C030L	BDL36030	\$119.68
ED3C035L	BDL36035	\$129.11
ED3C040L	BDL36040	\$129.11
ED3C050L	BDL36050	\$129.11
ED3C060L	BDL36060	\$129.11
ED3C070L	BDL36070	\$139.79
ED3C080L	BDL36080	\$139.79
ED3C090L	BDL36090	\$139.79
ED3C100L	BDL36100	\$139.79

High AIC (35KA@480V)

US Breaker EG Part #	Square D Similar Cross Ref ⁽¹⁾	Price
EG3C015L	BGL36015	\$149.46
EG3C020L	BGL36020	\$149.46
EG3C025L	BGL36025	\$149.46
EG3C030L	BGL36030	\$149.46
EG3C035L	BGL36035	\$156.69
EG3C040L	BGL36040	\$156.69
EG3C050L	BGL36050	\$156.69
EG3C060L	BGL36060	\$156.69
EG3C070L	BGL36070	\$163.33
EG3C080L	BGL36080	\$163.33
EG3C090L	BGL36090	\$163.33
EG3C100L	BGL36100	\$163.33

100 - 150A 3P H Frame

(Includes 6 Lugs 8 - 350kcmil)

Amps	Thermal	Magnetic
100	(80 - 100)	(700 - 1200)
125	(100 - 125)	(875 - 1500)
150	(120 - 150)	(1050 - 1800)

Standard AIC (25KA@480V)

US Breaker HD Part #	Square D Direct Cross Ref ⁽²⁾	Price
HD3C100L	HDL36100	\$209.77
HD3C125L	HDL36125	\$248.89
HD3C150L	HDL36150	\$248.89

High AIC (42KA@480V)

US Breaker HG Part #	Square D Direct Cross Ref ⁽²⁾	Price
HG3C100L	HGL36100	\$279.22
HG3C125L	HGL36125	\$309.88
HG3C150L	HGL36150	\$309.88

175 - 250A 3P J Frame

(Includes 6 Lugs 8 - 350 kcmil)

Amps	Thermal	Magnetic
175	(140 - 175)	(875 - 1750)
200	(160 - 200)	(1000 - 2000)
225	(180 - 225)	(1125 - 2250)
250	(200 - 250)	(1250 - 2750)

Standard AIC (25KA@480V)

US Breaker JD Part #	Square D Direct Cross Ref ⁽²⁾	Price
JD3C175L	JDL36175	\$258.89
JD3C200L	JDL36200	\$258.89
JD3C225L	JDL36225	\$258.89
JD3C250L	JDL36250	\$339.33

High AIC (42KA@480V)

US Breaker JG Part #	Square D Direct Cross Ref ⁽²⁾	Price
JG3C175L	JGL36175	\$329.82
JG3C200L	JGL36200	\$329.82
JG3C225L	JGL36225	\$329.82
JG3C250L	JGL36250	\$419.89

250 - 400A 3P D Frame

(Includes 6 Lugs 3/0 - 500 kcmil)

Amps	Thermal	Magnetic
250	(200 - 250)	(1250 - 2500)
300	(240 - 300)	(1500 - 3000)
350	(280 - 350)	(1750 - 3500)
400	(320 - 400)	(2000 - 4000)

Standard AIC (35KA@480V)

US Breaker DG Part #	Square D Direct Cross Ref ⁽³⁾	Price
-	-	-
DG3C300L	LGL36300U31X	\$449.16
DG3C350L	LGL36350U31X	\$449.16
DG3C400L	LGL36400U31X	\$449.16

High AIC (50KA@480V)

US Breaker DJ Part #	Square D Direct Cross Ref ⁽³⁾	Price
DJ3C250L	LJL36250U31X	\$549.56
DJ3C300L	LJL36300_	\$587.42
DJ3C350L	LJL36350_	\$587.42
DJ3C400L	LJL36400_	\$587.42

400 - 600A 3P L Frame

(Includes 6 Lugs (2) 3/0 - 400 kcmil)

Amps	Thermal	Magnetic
400	-	-
500	(400 - 500)	(2500 - 5000)
600	(480 - 600)	(3000 - 6000)

Standard AIC (42KA@480V)

US Breaker LG Part #	Square D Similar Cross Ref ⁽¹⁾	Price
-	-	-
LG3C500L	-	\$958.80
LG3C600L	LGL36600U31X	\$958.80

High AIC (65KA@480V)

US Breaker LC Part #	Square D Similar Cross Ref ⁽¹⁾	Price
LC3C400L	LCL36400	\$1097.00
LC3C500L	LCL36500	\$1097.00
LC3C600L	LCL36600	\$1097.00

1) **Similar** Cross Ref is an electrical equivalent with slightly different dimensions and mounting holes. The LGL36600U31X is electronic and LG3C600L is electromechanical.
 2) **Direct** Cross Ref is an electrical equivalent with the same width, mounting holes and faceplate cutout.
 3) **Direct** LGL / LJL replacements have the same width, mounting holes and faceplate cutout. US Breaker frames are electromechanical and the DJ frame is 50KA@480V (vs 65KA).
 • Square D part numbers are provided to assist product selection. Proper engineering evaluation is required for each customer application.



Circuit Breaker Technical Data



Frame Size		100A		250A				400A		600A	
Circuit Breaker Frame		ED	EG	HD	HG	JD	JG	DG	DJ	LG	LC
Rated Current		15 - 100		100 - 150		175 - 250		250 - 400		400 - 600	
Max Voltage	AC 50/60 Hz	600/347V						600V			
	DC	600V									
AIC - UL489 Interrupting Capacity (KA rms)	240Vac	50	100	50	100	50	100	65	100	65	100
	480Vac	22	35	25	42	25	42	35	50	42	65
	600/347Vac	14	20	14	20	14	20	14	25	18	30
	600Vac	-									
	500Vdc (2P)	20	35	20	35	20	35	35	50	35	50
600Vdc (3P)											
(K)AIC - IEC 60947-2 (Icu = 100% Ics)	380 / 415Vac	50	100	50	100	50	100	65	100	65	100
T-M Trip Unit Adjustments	Thermal Adj.	Fixed		Adjustable (0.8, 0.9 or 1.0) x In							
	Magnetic Adj.	Fixed - (10) x In		Adj. (7 - 12) x In		Adjustable (5 - 10) x In					
Dimensions & Weight	L x W x D (in)	6.5 x 3.5 x 3.3		7.2 x 4.1 x 3.5				11.2 x 5.5 x 4.6		12.3 x 7.7 x 5.4	
	Weight (lb)	3.7		4.4				13.5		25.4	
Wire Terminals (75C Cu Only)	Wire Range	#14 - 3/0 AWG		#8 - 350 kcmil				3/0 - 500 kcmil		(2) 3/0 - 400 kcmil	
	Torque (in-lb)	89		230				310		310	

Connection Accessories - UL489 Circuit Breakers

Wire Lugs*

Frame	Type	Part #	Holes	Wire Size Per Hole	Price Ea
E	Standard	XWL1EE1H	1	#14 - 3/0 AWG	\$13.44
	Optional	XWL1EE3H	3	#14 - #3 AWG	\$16.80
	Optional	XWL1EE3H	6	#14 - #6 AWG	
H, J	Standard	XWL1HJ1H	1	#8 AWG - 350 Kcmil	\$13.44
	Optional	XWL1HJ6H	6	#12 - #6 AWG	
D	Standard	XWL1DD1H	1	3/0 AWG - 500 Kcmil	\$33.60
	Optional	XWL1DD2H	2	3/0 AWG - 250 Kcmil	\$33.60
L	Standard	XWL1LL2H	2	3/0 AWG - 400 Kcmil	\$42.00



* All wire lugs are rated for 75C Cu * Catalog number represents 1 unit. * 6 wire lugs include a terminal shield

Plug-In Kit*



Frame	Part #	Price
E	XPB1EE	\$184.80
H, J	XPB1HJ	\$252.00
D	XPB1DD	\$588.00

* Complete Kit Including 6 Breaker Stabs and Base



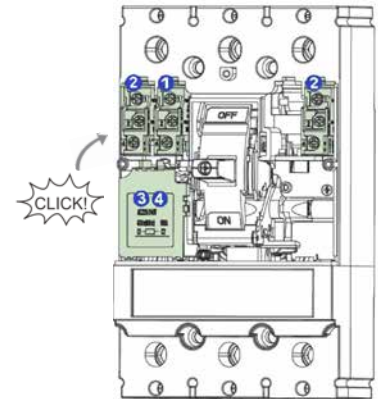
Rear Connection Kit*

Frame	Part #	Price
E	XRC1EE	\$63.84
H, J	XRC1HJ	\$75.60
D	XRC1DD	\$168.00
L	XRC1LL	\$235.20

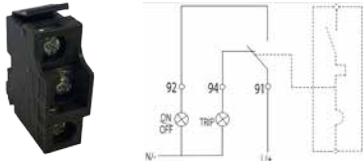
* Complete Breaker Kit (2 short - 2 long - 2 short)

Internal Accessories - UL489 Circuit Breakers

- ✓ Click-in-Place Accessories!
- ✓ UL Listed for Field Installation!



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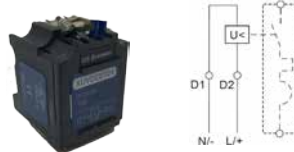


Alarm Switch (1 per breaker)

Frames	Switch Part #	Contacts		Price
		NO	NC	
E, H, J, D, L	XAL1EL	1	1	\$16.80

Rated Operation: 5A@240Vac, 2A@480Vac, 0.25A@110-220Vdc

3

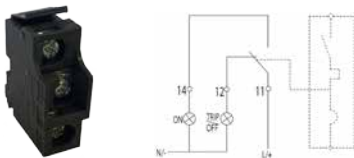


Under Voltage Release

Frame	110 - 127Vac	220 - 240Vac	24 - 30Vdc	Price
E	XUVAEE120	XUVAEE240	XUVDEE024	\$33.60
H, J, D	XUVAHD120	XUVAHD240	XUVDHD024	\$36.96
L	XUVALL120	XUVALL240	XUVDLL024	\$42.00

Voltage: Pickup Ue 80-110%, Drop Out Ue 35-70%, Auto Interrupts 10-60ms

2



Aux Switch (up to 2 per breaker)

Frames	Switch Part #	Contacts		Price
		NO	NC	
E, H, J, D, L	XAU1EL	1	1	\$16.80

Rated Operation: 5A@240Vac, 2A@480Vac, 0.25A@110-220Vdc

4



Shunt Trip

Frame	100 - 130Vac	220 - 240Vac	480 - 500Vac	Price	24Vdc	Price
E	XSTAE120	XSTAE240	XSTAE480	\$33.60	XSTDEE024	\$42.00
H, J, D	XSTAHD120	XSTAHD240	XSTAHD480	\$43.68	XSTDHD024	\$50.40
L	XSTALL120	XSTALL240	XSTALL480	\$53.76	XSTDLL024	\$58.80

Pickup Voltage: Us 70 - 110%, Auto Interrupts 10-60ms

External Accessories - UL489 Circuit Breakers

Close Coupled Operator (Gray/Green -Nema 4/4X, IP55)



Frame	Part #	Price
E	XCCGEE00	\$86.94
H, J	XCCGHJ00	\$89.94
D	XCCGDD00	\$96.60
L	XCCGLL00	\$99.97



Lock (off position)

Frame	Part #	Price
E	XPLFEE	\$13.44
H, J	XPLFHJ	\$13.44
D	XPLFDD	\$13.44
L	XPLFLL	\$13.44

Through the Door Variable Depth Operator Lockable - (Nema 1, 3R, 12, 4/4X)



Frame	Assembly Including the Shaft Length Shown			
	6 inch	Price	12 inch	Price
E	XVDGEE06	\$94.60	XVDGEE12	\$99.80
H, J	XVDGHJ06	\$97.60	XVDGHJ12	\$102.80
D	XVDGDD06	\$111.92	XVDGDD12	\$116.92
L	XVDGLL06	\$114.92	XVDGLL12	\$119.92



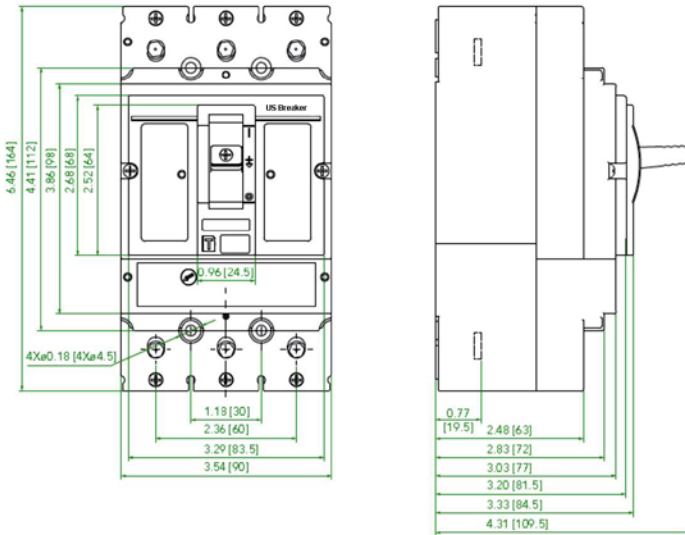
Mechanical Interlock

Frame	Part #	Price
E	XMIXEE	\$33.60
H, J	XMIXHJ	\$33.60
D	XMIXDD	\$33.60
L	XMIXLL	\$33.60

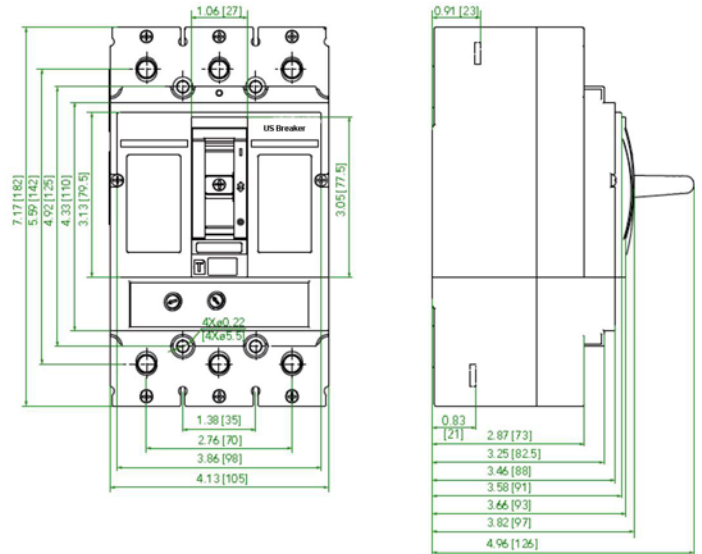


Circuit Breaker Dimensions

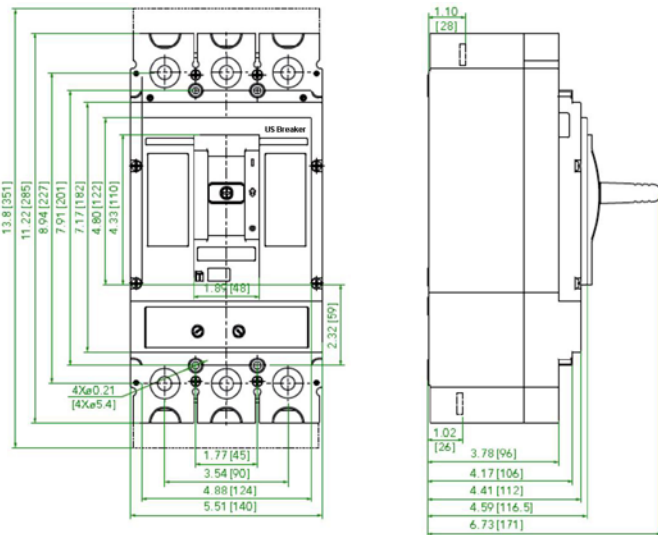
E Frame 3P 15 - 100A



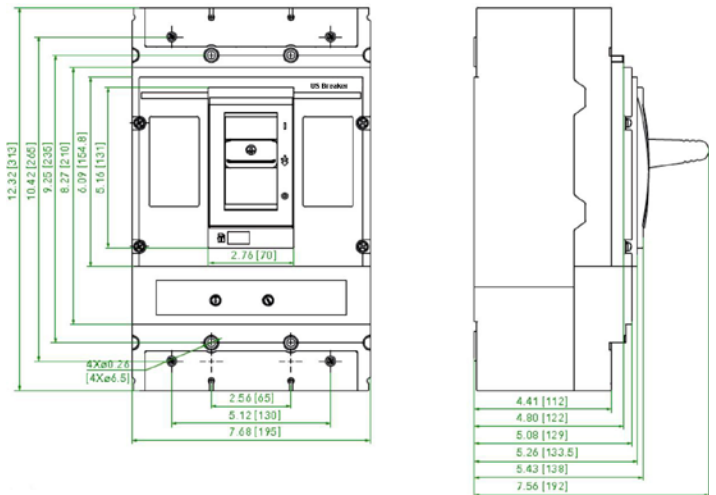
H & J Frame 3P 100 - 250A



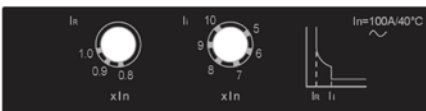
D Frame 3P 250 - 400A



L Frame 3P 400 - 600A



Example: JD3C200L In = 200 Amps



Ir Thermal Setting
 8 (x In) => 160 Amp
 9 (x In) => 180 Amp
 1 (x In) => 200 Amp

Ii Magnetic Setting
 5 (x In) => 1000A
 6 (x In) => 1200A
 7 (x In) => 1400A

In=100A/40°C
 8 (x In) => 1600A
 9 (x In) => 1800A
 10 (x In) => 2000A

Trip Unit Adjustments

Circuit Breaker Frame	ED	EG	HD	HG	JD	JG	DG	DJ	LG	LC
Rated Current In	15 - 100		100 - 150		175 - 250		250 - 400		400 - 600	
Thermal Adj.	Fixed=In		Adjustable = (0.8, 0.9 or 1.0) x In							
Magnetic Adj.	Fixed=(10) x In		Adj=(7-12) x In		Adjustable = (5-10) x In					



Cross References to US Breaker's UL489 3P 480V MCCB's

Direct Replacement Cross Ref: Merlin Gerin Compact NS100 N, NS160 N, NS250 N & NS400 N

US Breaker- Brand Part #	Merlin Gerin Cross Reference		Description: Complete Breaker (Frame, Trip & Terminals)	Price Each
	Frame	Trip Unit		
HG3C100L	NS100N	TM100D	US Breaker 3P 100 Amp 42KA@480V UL489 HG Circuit Breaker	\$279.22
HG3C125L	NS160N	TM125D	US Breaker 3P 125 Amp 42KA@480V UL489 HG Circuit Breaker	\$309.88
HG3C150L	NS160N	TM150D ¹⁾	US Breaker 3P 150 Amp 42KA@480V UL489 HG Circuit Breaker	\$309.88
JG3C200L	NS250N	TM200D	US Breaker 3P 200 Amp 42KA@480V UL489 JG Circuit Breaker	\$329.82
JG3C250L	NS250N	TM250D	US Breaker 3P 250 Amp 42KA@480V UL489 JG Circuit Breaker	\$419.89
DJ3C250L	NS400N	STR23SE 250A ²⁾	US Breaker 3P 250 Amp 50KA@480V UL489 DJ Circuit Breaker	\$549.56
DG3C400L	NS400N	STR23SE 400A ²⁾	US Breaker 3P 400 Amp 35KA@480V UL489 DG Circuit Breaker	\$449.16

• US Breaker accessories are intended and UL listed for use with US Breaker Circuit Breakers only.

Direct Replacement Cross Ref: Merlin Gerin / Schneider NSF150 N, NSF250 N & NSJ400 N

US Breaker- Brand Part #	Merlin Gerin Cross Reference		Description: Complete Breaker (Frame, Trip & Terminals)	Price Each
	Frame	Trip Unit		
HG3C100L	NSF150 N	TM 100	US Breaker 3P 100 Amp 42KA@480V UL489 HG Circuit Breaker	\$279.22
HG3C125L	NSF150 N	TM 125	US Breaker 3P 125 Amp 42KA@480V UL489 HG Circuit Breaker	\$309.88
HG3C150L	NSF150 N	TM 150	US Breaker 3P 150Amp 42KA@480V UL489 HG Circuit Breaker	\$309.88
JG3C175L	NSF250 N	TM 175	US Breaker 3P 175 Amp 42KA@480V UL489 JG Circuit Breaker	\$329.82
JG3C200L	NSF250 N	TM 200	US Breaker 3P 200 Amp 42KA@480V UL489 JG Circuit Breaker	\$329.82
JG3C225L	NSF250 N	TM 225	US Breaker 3P 225 Amp 42KA@480V UL489 JG Circuit Breaker	\$329.82
JG3C250L	NSF250 N	TM 250	US Breaker 3P 250 Amp 42KA@480V UL489 JG Circuit Breaker	\$419.89
DJ3C250L	NSJ400 N	STR23SP 250A ²⁾	US Breaker 3P 250 Amp 50KA@480V UL489 DJ Circuit Breaker	\$549.56
DG3C400L	NSJ400 N	STR23SP 400A ²⁾	US Breaker 3P 400 Amp 35KA@480V UL489 DG Circuit Breaker	\$449.16

• US Breaker accessories are intended and UL listed for use with US Breaker Circuit Breakers only.

Electrical Replacement Cross Ref. (Different Dimensions): GE, Eaton, Square D & Siemens

Amps (3 Pole)	US Breaker Brand Part #	Dim (in) (H x W x D)	Short Circuit (KAIC)		Cross Reference (Electrical Replacements - different dimensions)				Price Each
			240V	480V	General Electric	Eaton Cutler Hammer	Square D	Siemens	
15	ED3C015L	6.5 x 3.5 x 3.3	50	22	TED134015WL	EHD3015L	FAL34015	ED43B015L ³⁾	\$119.68
20	ED3C020L	6.5 x 3.5 x 3.3	50	22	TED134020WL	EHD3020L	FAL34020	ED43B020L ³⁾	\$119.68
25	ED3C025L	6.5 x 3.5 x 3.3	50	22	TED134025WI	EHD3025L	FAL34025	ED43B025L ³⁾	\$119.68
30	ED3C030L	6.5 x 3.5 x 3.3	50	22	TED134030WL	EHD3030L	FAL34030	ED43B030L ³⁾	\$119.68
35	ED3C035L	6.5 x 3.5 x 3.3	50	22	TED134035WL	EHD3035L	FAL34035	ED43B035L ³⁾	\$124.11
40	ED3C040L	6.5 x 3.5 x 3.3	50	22	TED134035WL	EHD3040L	FAL34040	ED43B040L ³⁾	\$124.11
50	ED3C050L	6.5 x 3.5 x 3.3	50	22	TED134050WL	EHD3050L	FAL34050	ED43B050L ³⁾	\$124.11
60	ED3C060L	6.5 x 3.5 x 3.3	50	22	TED134060WL	EHD3060L	FAL34060	ED43B060L ³⁾	\$124.11
70	ED3C070L	6.5 x 3.5 x 3.3	50	22	TED134070WL	EHD3070L	FAL34070	ED43B070L ³⁾	\$138.79
80	ED3C080L	6.5 x 3.5 x 3.3	50	22	TED134080WL	EHD3080L	FAL34080	ED43B080L ³⁾	\$138.79
90	ED3C090L	6.5 x 3.5 x 3.3	50	22	TED134090WL	EHD3090L	FAL34090	ED43B090L ³⁾	\$138.79
100	ED3C100L	6.5 x 3.5 x 3.3	50	22	TED134100WL	EHD3100L	FAL34100	ED43B100L ³⁾	\$138.79
125	HD3C125L	7.2 x 4.1 x 3.5	50	25	TED134125WL (or THED)	FD3125L ³⁾	KAL36125	ED43B125L	\$248.89
150	HD3C150L	7.2 x 4.1 x 3.5	50	25	TED134150WL (or THED)	FD3150L ³⁾	KAL36150	FD63B150 ⁴⁾	\$248.89
175	JG3C175L	7.2 x 4.1 x 3.5	100	42	SFHA36AT0250 + ²⁾	JD3175L	KAL36175	FD63B175	\$329.82
200	JG3C200L	7.2 x 4.1 x 3.5	100	42	SFHA36AT0250 + ²⁾	JD3200L	KAL36200	FD63B200	\$329.82
225	JG3C225L	7.2 x 4.1 x 3.5	100	42	SFHA36AT0250 + ²⁾	JD3225	KAL36225	FD63B225	\$329.82
250	JG3C250L	7.2 x 4.1 x 3.5	100	42	SFHA36AT0250 + ²⁾	JD3250	KAL36250	FD63B250	\$419.89
300	DG3C300L	11.2 x 5.5 x 4.6	65	35	SGHA36AT0400 + ²⁾	KD3300	LAL36300	JD63B300	\$449.16
400	DG3C400L	11.2 x 5.5 x 4.6	65	35	SGHA36AT0400 + ²⁾	KD3400	LAL36400	JD63B400	\$449.16
500	LG3C500L	12.3 x 7.7 x 5.4	65	42	SGHA36AT0600 + ²⁾	LD3500	LCL36500 ⁴⁾	LD63B500	\$938.80
600	LG3C600L	12.3 x 7.7 x 5.4	65	42	SGHA36AT0600 + ²⁾	LD3600	LCL36600 ⁴⁾	LD63B600	\$938.80

1) Merlin Gerin's part is a 160A (international), US Breaker offers the HG3C150L at 150A or JG3C175L at 175A.

2) US Breaker offers an electromechanical trip unit and the comparison model has a electronic trip. An extra rating plug is not required with US Breaker frames.

3) US Breaker has equal or higher AIC rating at 480V. Use US Breakers EG frame for Siemens ED4 and HG for Eatons FD3125L & FD3150L if a higher AIC rating is needed at 240V.

4) Use US Breakers LC frame for equivalent AIC ratings with Square D's LCL36500 or LCL36600 and US Breakers HG3C150L for higher AIC ratings than Siemens FD63B150.



US Breaker Brand UL489 480V/277V DIN Rail Breakers (Schneider C60, Eaton & Allen-Bradley Replacement Cross Ref)



- ✓ UL Listed (US & CAN) File E481916, IEC60947-2 & CE Marked
- ✓ Matches 0.7 in/Pole Width of Schneider, Eaton, and Allen-Bradley Breakers
- ✓ Standard DIN Rail Mount with Universal 45mm Faceplate Opening
- ✓ 1 - 30 Amp, 1, 2 & 3P, 10KA @ 480/277Vac, Standard C Trip Curve



UL489 DIN Rail Circuit Breakers: 1, 2 & 3P, 1 - 30Amp



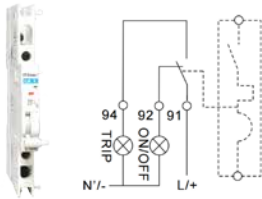
Poles	Amps	US Breaker Part #	Cross References ¹⁾			Description	Price
			Eaton	Schneider C60	Allen Bradley		
1	1	C60X1C01	FAZ-C1/1-NA	M9F42101	1489-M1C010	UL489 DIN Rail Breaker 1P 1A 10KA @ 277V	\$14.27
	2	C60X1C02	FAZ-C2/1-NA	M9F42102	1489-M1C020	UL489 DIN Rail Breaker 1P 2A 10KA @ 277V	\$14.27
	3	C60X1C03	FAZ-C3/1-NA	M9F42103	1489-M1C030	UL489 DIN Rail Breaker 1P 3A 10KA @ 277V	\$14.27
	4	C60X1C04	FAZ-C4/1-NA	M9F42104	1489-M1C040	UL489 DIN Rail Breaker 1P 4A 10KA @ 277V	\$14.27
	5	C60X1C05	FAZ-C5/1-NA	M9F42105	1489-M1C050	UL489 DIN Rail Breaker 1P 5A 10KA @ 277V	\$14.27
	6	C60X1C06	FAZ-C6/1-NA	M9F42106	1489-M1C060	UL489 DIN Rail Breaker 1P 6A 10KA @ 277V	\$14.27
	8	C60X1C08	FAZ-C8/1-NA	M9F42108	1489-M1C080	UL489 DIN Rail Breaker 1P 8A 10KA @ 277V	\$14.27
	10	C60X1C10	FAZ-C10/1-NA	M9F42110	1489-M1C100	UL489 DIN Rail Breaker 1P 10A 10KA @ 277V	\$14.27
	15	C60X1C15	FAZ-C15/1-NA	M9F42115	1489-M1C150	UL489 DIN Rail Breaker 1P 15A 10KA @ 277V	\$14.27
	20	C60X1C20	FAZ-C20/1-NA	M9F42120	1489-M1C200	UL489 DIN Rail Breaker 1P 20A 10KA @ 277V	\$14.27
	25	C60X1C25	FAZ-C25/1-NA	M9F42125	1489-M1C250	UL489 DIN Rail Breaker 1P 25A 10KA @ 277V	\$14.27
	30	C60X1C30	FAZ-C30/1-NA	M9F42130	1489-M1C300	UL489 DIN Rail Breaker 1P 30A 10KA @ 277V	\$14.27
2	1	C60X2C01	FAZ-C1/2-NA	M9F42201	1489-M2C010	UL489 DIN Rail Breaker 2P 1A 10KA @ 480/277V	\$28.08
	2	C60X2C02	FAZ-C2/2-NA	M9F42202	1489-M2C020	UL489 DIN Rail Breaker 2P 2A 10KA @ 480/277V	\$28.08
	3	C60X2C03	FAZ-C3/2-NA	M9F42203	1489-M2C030	UL489 DIN Rail Breaker 2P 3A 10KA @ 480/277V	\$28.08
	4	C60X2C04	FAZ-C4/2-NA	M9F42204	1489-M2C040	UL489 DIN Rail Breaker 2P 4A 10KA @ 480/277V	\$28.08
	5	C60X2C05	FAZ-C5/2-NA	M9F42205	1489-M2C050	UL489 DIN Rail Breaker 2P 5A 10KA @ 480/277V	\$28.08
	6	C60X2C06	FAZ-C6/2-NA	M9F42206	1489-M2C060	UL489 DIN Rail Breaker 2P 6A 10KA @ 480/277V	\$28.08
	8	C60X2C08	FAZ-C8/2-NA	M9F42208	1489-M2C080	UL489 DIN Rail Breaker 2P 8A 10KA @ 480/277V	\$28.08
	10	C60X2C10	FAZ-C10/2-NA	M9F42210	1489-M2C100	UL489 DIN Rail Breaker 2P 10A 10KA @ 480/277V	\$28.08
	15	C60X2C15	FAZ-C15/2-NA	M9F42215	1489-M2C150	UL489 DIN Rail Breaker 2P 15A 10KA @ 480/277V	\$28.08
	20	C60X2C20	FAZ-C20/2-NA	M9F42220	1489-M2C200	UL489 DIN Rail Breaker 2P 20A 10KA @ 480/277V	\$28.08
	25	C60X2C25	FAZ-C25/2-NA	M9F42225	1489-M2C250	UL489 DIN Rail Breaker 2P 25A 10KA @ 480/277V	\$28.08
	30	C60X2C30	FAZ-C30/2-NA	M9F42230	1489-M2C300	UL489 DIN Rail Breaker 2P 30A 10KA @ 480/277V	\$28.08
3	1	C60X3C01	FAZ-C1/3-NA	M9F42301	1489-M3C010	UL489 DIN Rail Breaker 3P 1A 10KA @ 480/277V	\$41.99
	2	C60X3C02	FAZ-C2/3-NA	M9F42302	1489-M3C020	UL489 DIN Rail Breaker 3P 2A 10KA @ 480/277V	\$41.99
	3	C60X3C03	FAZ-C3/3-NA	M9F42303	1489-M3C030	UL489 DIN Rail Breaker 3P 3A 10KA @ 480/277V	\$41.99
	4	C60X3C04	FAZ-C4/3-NA	M9F42304	1489-M3C040	UL489 DIN Rail Breaker 3P 4A 10KA @ 480/277V	\$41.99
	5	C60X3C05	FAZ-C5/3-NA	M9F42305	1489-M3C050	UL489 DIN Rail Breaker 3P 5A 10KA @ 480/277V	\$41.99
	6	C60X3C06	FAZ-C6/3-NA	M9F42306	1489-M3C060	UL489 DIN Rail Breaker 3P 6A 10KA @ 480/277V	\$41.99
	8	C60X3C08	FAZ-C8/3-NA	M9F42308	1489-M3C080	UL489 DIN Rail Breaker 3P 8A 10KA @ 480/277V	\$41.99
	10	C60X3C10	FAZ-C10/3-NA	M9F42310	1489-M3C100	UL489 DIN Rail Breaker 3P 10A 10KA @ 480/277V	\$41.99
	15	C60X3C15	FAZ-C15/3-NA	M9F42315	1489-M3C150	UL489 DIN Rail Breaker 3P 15A 10KA @ 480/277V	\$41.99
	20	C60X3C20	FAZ-C20/3-NA	M9F42320	1489-M3C200	UL489 DIN Rail Breaker 3P 20A 10KA @ 480/277V	\$41.99
	25	C60X3C25	FAZ-C25/3-NA	M9F42325	1489-M3C250	UL489 DIN Rail Breaker 3P 25A 10KA @ 480/277V	\$41.99
	30	C60X3C30	FAZ-C30/3-NA	M9F42330	1489-M3C300	UL489 DIN Rail Breaker 3P 30A 10KA @ 480/277V	\$41.99

¹⁾ US Breaker's C60X are rated 10KA@480/277V & 10KA@240V (DC/current limiting tests pending), Square D's 1, 2 & 3P M9F are also rated 10KA@480/277V but 14KA@240V.



Internal Accessories - UL489 Circuit Breakers

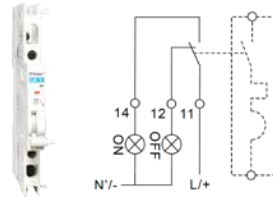
✓ UL Listed for Field Installation!



Alarm Switch (NO/NC)

Part #	Contacts		Price
	NO	NC	
CAL1	1	1	\$12.94

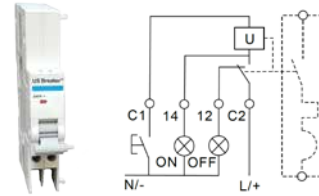
Rated Operation: 6A@240Vac, 3A@480Vac,
6A@24 Vdc, 2A@48Vac, 1A@125Vdc, 0.5@250Vdc



Aux Switch (NO/NC)

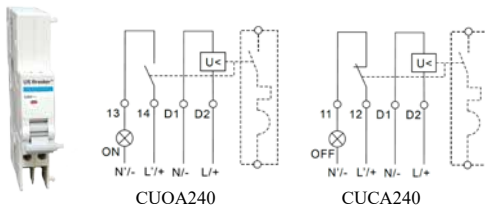
Part #	Contacts		Price
	NO	NC	
CAU1	1	1	\$16.88

Rated Operation: 6A@240Vac, 3A@480Vac,
6A@24 Vdc, 2A@48Vac, 1A@125Vdc, 0.5@250Vdc



Shunt Trip & Aux Combo

Part #	Voltage AC	Voltage DC	Contacts		Price
			NO	NC	
CSAC110415	110 - 415 Vac	110 - 130Vdc	1	1	\$25.79
CSAC1224	12 - 24 Vac	12 - 24 Vdc	1	1	\$25.79

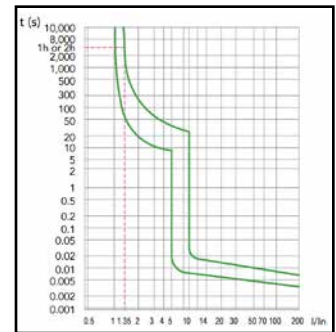


Under Voltage Release & Aux Combo

Part #	Voltage	Contacts		Price
		NO	NC	
CU0A240	240Vac	1	-	\$25.79
CUCA240	240Vac	-	1	\$25.79

Technical Data (C- Curve 5-10 x)

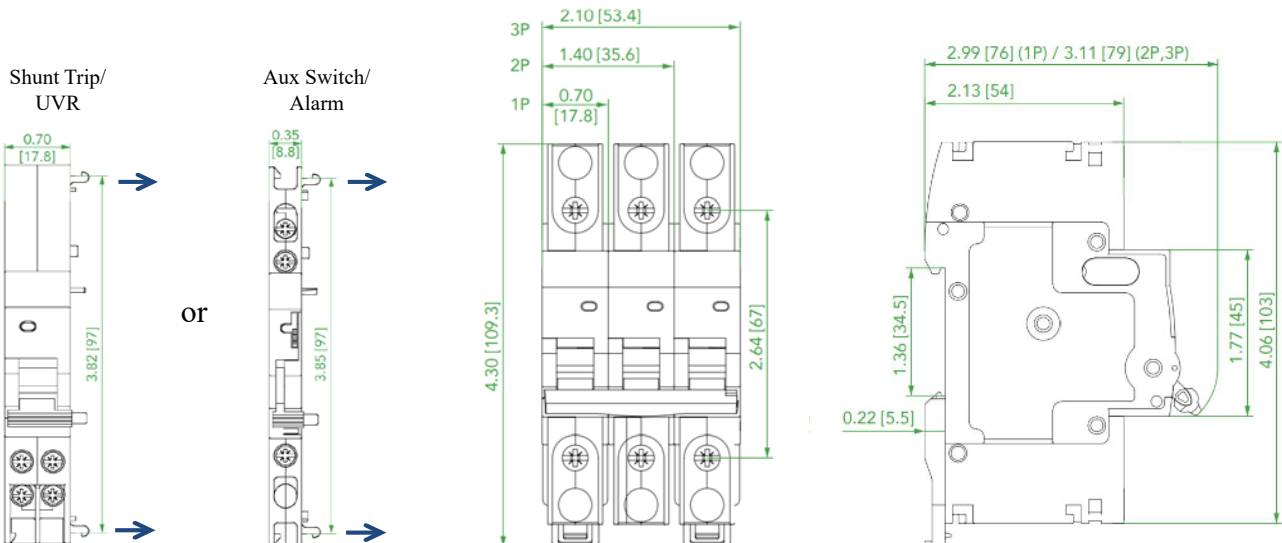
US Breaker UL489 Frame		1P	2P	3P
Rated Voltage	(50/ 60 Hz)	277Vac	480/277Vac	
AIC- UL489 Interrupting Capacity (A rms)	120Vac	10,000	-	
	240Vac		10,000	
	277Vac		-	
	480V/277Vac		10,000	
Operations	Mech.	20,000		
	Elec.	6,000		
Wire AWG	Single Wire	# 14 - 4		
	Two Wire	(1) #14-6 + (1) #14-10		



Lock Off

Part #	Price
CPLF	\$16.88

Circuit Breaker Dimensions - in (mm)



• US Breaker C60X accessories are the only ones intended and UL listed for use with C60X breakers. Proper engineering evaluation is required for each application.



US Breaker CHNT Brand UL1077 DIN Rail Breakers (Schneider Merlin Gerin Multi 9 C60 Replacement Cross Ref)



- ✓ UL 1077 Supplementary Protectors are Globally Rated Including IEC60947-2/ CE
- ✓ Standard C (5 - 10X In) & High Inrush D (10 - 14X In) Trip Curves are Available
- ✓ Universal 35mm Built-in DIN Rail Mount with 45mm Faceplate Opening
- ✓ Compact 0.71 Inch/Pole Width and 3.4 Inch Height
- ✓ Ratings: 1 - 63A 1, 2 & 3P, 5KA @ 480/277V



C Curve - Supplementary Protection Breakers

Poles	Amps	US Breaker's C Curve Part #	Multi 9 C60 N / sp Direct Cross Ref.	Price
1	1	M63 NB1 P1 C1	MG 24425	\$7.14
	2	M63 NB1 P1 C2	MG 24426	\$7.14
	3	M63 NB1 P1 C3	MG 24427	\$7.14
	4	M63 NB1 P1 C4	MG 24428	\$7.14
	6	M63 NB1 P1 C6	MG 24430	\$7.14
	10	M63 NB1 P1 C10	MG 24432	\$7.14
	16	M63 NB1 P1 C16	MG 24434	\$7.14
	20	M63 NB1 P1 C20	MG 24435	\$7.14
	25	M63 NB1 P1 C25	MG 24436	\$7.14
	32	M63 NB1 P1 C32	MG 24437	\$7.14
	40	M63 NB1 P1 C40	MG 24438 / M9F22140	\$7.14
	50	M63 NB1 P1 C50	MG 24439 / M9F22150	\$7.14
	63	M63 NB1 P1 C63	MG 24440 / M9F22163	\$7.14
2	1	M63 NB1 P2 C1	MG 24442	\$14.39
	2	M63 NB1 P2 C2	MG 24443	\$14.39
	3	M63 NB1 P2 C3	MG 24444	\$14.39
	4	M63 NB1 P2 C4	MG 24445	\$14.39
	6	M63 NB1 P2 C6	MG 24447	\$14.39
	10	M63 NB1 P2 C10	MG 24449	\$14.39
	16	M63 NB1 P2 C16	MG 24451	\$14.39
	20	M63 NB1 P2 C20	MG 24452	\$14.39
	25	M63 NB1 P2 C25	MG 24453	\$14.39
	32	M63 NB1 P2 C32	MG 24454	\$14.39
	40	M63 NB1 P2 C40	MG 24455 / M9F22240	\$14.39
	50	M63 NB1 P2 C50	MG 24456 / M9F22250	\$14.39
	63	M63 NB1 P2 C63	MG 24457 / M9F22263	\$14.39
3	1	M63 NB1 P3 C1	MG 24459	\$21.38
	2	M63 NB1 P3 C2	MG 24460	\$21.38
	3	M63 NB1 P3 C3	MG 24461	\$21.38
	4	M63 NB1 P3 C4	MG 24462	\$21.38
	6	M63 NB1 P3 C6	MG 24464	\$21.38
	10	M63 NB1 P3 C10	MG 24466	\$21.38
	16	M63 NB1 P3 C16	MG 24468	\$21.38
	20	M63 NB1 P3 C20	MG 24469	\$21.38
	25	M63 NB1 P3 C25	MG 24470	\$21.38
	32	M63 NB1 P3 C32	MG 24471	\$21.38
	40	M63 NB1 P3 C40	MG 24472 / M9F22340	\$21.38
	50	M63 NB1 P3 C50	MG 24473 / M9F22350	\$21.38
	63	M63 NB1 P3 C63	MG 24474 / M9F22363	\$21.38

D (K) Curve - Supplementary Protection Breakers

Poles	Amps	US Breaker's D Curve Part #	Multi 9 C60 N / sp Direct Cross Ref.	Price
1	1	M63 NB1 P1 D1	MG 24500	\$7.14
	2	M63 NB1 P1 D2	MG 24501	\$7.14
	3	M63 NB1 P1 D3	MG 24502	\$7.14
	4	M63 NB1 P1 D4	MG 24503	\$7.14
	6	M63 NB1 P1 D6	MG 24504	\$7.14
	10	M63 NB1 P1 D10	MG 24506	\$7.14
	16	M63 NB1 P1 D16	MG 24508	\$7.14
	20	M63 NB1 P1 D20	MG 24509	\$7.14
	25	M63 NB1 P1 D25	MG 24510	\$7.14
	32	M63 NB1 P1 D32	MG 24511	\$7.14
	40	M63 NB1 P1 D40	MG 24512 / M9F23140	\$7.14
	50	M63 NB1 P1 D50	MG 24513 / M9F23150	\$7.14
	63	M63 NB1 P1 D63	MG 24514 / M9F23163	\$7.14
2	1	M63 NB1 P2 D1	MG 24516	\$14.39
	2	M63 NB1 P2 D2	MG 24517	\$14.39
	3	M63 NB1 P2 D3	MG 24518	\$14.39
	4	M63 NB1 P2 D4	MG 24519	\$14.39
	6	M63 NB1 P2 D6	MG 24520	\$14.39
	10	M63 NB1 P2 D10	MG 24522	\$14.39
	16	M63 NB1 P2 D16	MG 24524	\$14.39
	20	M63 NB1 P2 D20	MG 24525	\$14.39
	25	M63 NB1 P2 D25	MG 24526	\$14.39
	32	M63 NB1 P2 D32	MG 24527	\$14.39
	40	M63 NB1 P2 D40	MG 24528 / M9F23240	\$14.39
	50	M63 NB1 P2 D50	MG 24529 / M9F23250	\$14.39
	63	M63 NB1 P2 D63	MG 24530 / M9F23263	\$14.39
3	1	M63 NB1 P3 D1	MG 24532	\$21.38
	2	M63 NB1 P3 D2	MG 24533	\$21.38
	3	M63 NB1 P3 D3	MG 24534	\$21.38
	4	M63 NB1 P3 D4	MG 24535	\$21.38
	6	M63 NB1 P3 D6	MG 24536	\$21.38
	10	M63 NB1 P3 D10	MG 24538	\$21.38
	16	M63 NB1 P3 D16	MG 24540	\$21.38
	20	M63 NB1 P3 D20	MG 24541	\$21.38
	25	M63 NB1 P3 D25	MG 24542	\$21.38
	32	M63 NB1 P3 D32	MG 24543	\$21.38
	40	M63 NB1 P3 D40	MG 24544 / M9F23340	\$21.38
	50	M63 NB1 P3 D50	MG 24545 / M9F23350	\$21.38
	63	M63 NB1 P3 D63	MG 24546 / M9F23363	\$21.38

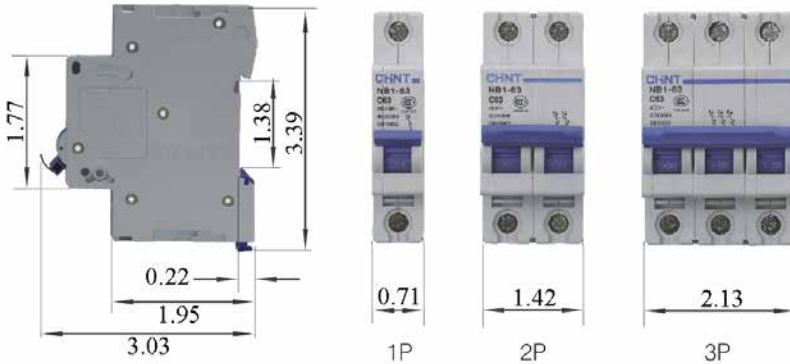


DIN Rail Mountable Circuit Breakers (Merlin Gerin Multi 9 C60N Replacement Cross Ref)

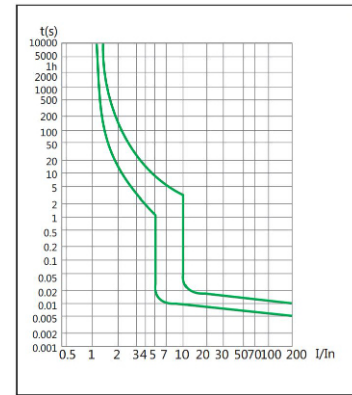
Accessories for Supplementary Protection Circuit Breakers

US Breaker-Part Number	Merlin Gerin C60N Cross Ref.	Description	Price
MNB1XF9	MG26925	Side Mounted Aux Contact 1NO/1NC for 1P, 2P or 3P Breakers	\$12.75
MNB1S9	MG26972	Side Mounted Shunt Trip 220Vac for 1P, 2P or 3P Breakers	\$15.00

Circuit Breaker Dimensions (in.)



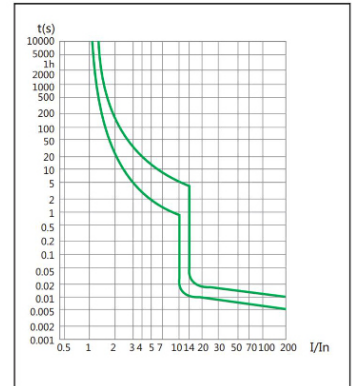
Trip Curve C (5-10X)



Circuit Breaker Technical Data

Series M NB1 Poles		1P	2P	3P
Short Circuit (AIC)	480 Vac (C/D curve)	-	5,000	5,000
	277 Vac (C/D curve)	5,000	-	-
	125 Vdc (C curve)	-	10,000	-
	110 Vdc (C curve)	10,000	-	-
Operations	Mech.	20,000	20,000	20,000
	Elec.	4,000	4,000	4,000
Dimensions (in)	Width	0.71	1.42	2.13
	Height	3.39	3.39	3.39
	Depth	3.03	3.03	3.03
Wire Range	AWG Cu (torque)	#16 - #6 (17.8 lb in)		

Trip Curve D (10-14x)



Accessory Technical Data

M NB1 Accessories		MNB1XF9	MB1S9
Rated Current	240V	6A	6A
	415V	3A	3A
Operations	Elec.	5,000	4,000
Dimensions (in)	Width	0.35	0.71
	Height	3.19	3.37
	Depth	2.87	2.83



MNB1S9



MNB1XF9

- Merlin Gerin part numbers are provided to assist in product selection. Proper engineering evaluation is required for each customer application.
- Series M NB1 accessories are intended and UL recognized for use with series M NB1 breakers.



Square D Original Circuit Breakers

QOB (Bolt-On) Frame - New • 1, 2 & 3P • 15 - 100A • Up to 240Vac



Poles	Amps	Part Number	Description	Lugs	Height	Width	Depth	Price
1	15	QOB115	Square D QOB 1P 15A 10KA @ 120V - New	1	3.5	0.8	2.9	\$\$
1	20	QOB120	Square D QOB 1P 20A 10KA @ 120V - New	1	3.5	0.8	2.9	\$\$
1	30	QOB130	Square D QOB 1P 30A 10KA @ 120V - New	1	3.5	0.8	2.9	\$\$
2	15	QOB215	Square D QOB 2P 15A 10KA @ 120/240V - New	2	3.5	1.5	2.9	\$\$
2	20	QOB220	Square D QOB 2P 20A 10KA @ 120/240V - New	2	3.5	1.5	2.9	\$\$
2	30	QOB230	Square D QOB 2P 30A 10KA @ 120/240V - New	2	3.5	1.5	2.9	\$\$
2	40	QOB240	Square D QOB 2P 40A 10KA @ 120/240V - New	2	3.5	1.5	2.9	\$\$
2	60	QOB260	Square D QOB 2P 60A 10KA @ 120/240V - New	2	3.5	1.5	2.9	\$\$
2	100	QOB2100	Square D QOB 2P 100A 10KA @ 120/240V - New	2	3.5	1.5	2.9	\$\$
3	20	QOB320	Square D QOB 3P 20A 10KA @ 240V - New	3	3.5	2.3	2.9	\$\$
3	30	QOB330	Square D QOB 3P 30A 10KA @ 240V - New	3	3.5	2.3	2.9	\$\$
3	40	QOB340	Square D QOB 3P 40A 10KA @ 240V - New	3	3.5	2.3	2.9	\$\$
3	50	QOB350	Square D QOB 3P 50A 10KA @ 240V - New	3	3.5	2.3	2.9	\$\$
3	60	QOB360	Square D QOB 3P 60A 10KA @ 240V - New	3	3.5	2.3	2.9	\$\$
3	100	QOB3100	Square D QOB 3P 100A 10KA @ 240V - New	3	3.5	2.3	2.9	\$\$

EDB (Bolt-On) Frame - New • 1, 2 & 3P • 15 - 125A • Up to 480/277Vac



Poles	Amps	Part Number	Description	Lugs	Height	Width	Depth	Price
1	15	EDB14015	Square D EDB 1P 15A 18KA @ 277V - New	1	5.7	1.0	4.1	\$\$
1	20	EDB14020	Square D EDB 1P 20A 18KA @ 277V - New	1	5.7	1.0	4.1	\$\$
1	30	EDB14030	Square D EDB 1P 30A 18KA @ 277V - New	1	5.7	1.0	4.1	\$\$
2	15	EDB24015	Square D EDB 2P 15A 18KA @ 480/277V - New	2	5.7	2.0	4.1	\$\$
2	20	EDB24020	Square D EDB 2P 20A 18KA @ 480/277V - New	2	5.7	2.0	4.1	\$\$
2	30	EDB24030	Square D EDB 2P 30A 18KA @ 480/277V - New	2	5.7	2.0	4.1	\$\$
3	15	EDB34015	Square D EDB 3P 15A 18KA @ 480/277V - New	3	5.7	3.0	4.1	\$\$
3	20	EDB34020	Square D EDB 3P 20A 18KA @ 480/277V - New	3	5.7	3.0	4.1	\$\$
3	30	EDB34030	Square D EDB 3P 30A 18KA @ 480/277V - New	3	5.7	3.0	4.1	\$\$
3	40	EDB34040	Square D EDB 3P 40A 18KA @ 480/277V - New	3	5.7	3.0	4.1	\$\$
3	50	EDB34050	Square D EDB 3P 50A 18KA @ 480/277V - New	3	5.7	3.0	4.1	\$\$
3	60	EDB34060	Square D EDB 3P 60A 18KA @ 480/277V - New	3	5.7	3.0	4.1	\$\$
3	70	EDB34070	Square D EDB 3P 70A 18KA @ 480/277V - New	3	5.7	3.0	4.1	\$\$
3	80	EDB34080	Square D EDB 3P 80A 18KA @ 480/277V - New	3	5.7	3.0	4.1	\$\$
3	90	EDB34090	Square D EDB 3P 90A 18KA @ 480/277V - New	3	5.7	3.0	4.1	\$\$
3	100	EDB34100	Square D EDB 3P 100A 18KA @ 480/277V - New	3	5.7	3.0	4.1	\$\$
3	125	EDB34125	Square D EDB 3P 125A 18KA @ 480/277V - New	3	5.7	3.0	4.1	\$\$

EGB (Bolt-On) Frame - New • 1, 2 & 3P • 15 - 100A • Up to 480/277Vac



Poles	Amps	Part Number	Description	Lugs	Height	Width	Depth	Price
1	20	EGB14020	Square D EGB 1P 20A 35KA @ 277V - New	1	5.7	1.0	4.1	\$\$
3	20	EGB34020	Square D EGB 3P 20A 35KA @ 480/277V - New	3	5.7	3.0	4.1	\$\$
3	30	EGB34030	Square D EGB 3P 30A 35KA @ 480/277V - New	3	5.7	3.0	4.1	\$\$
3	100	EGB34100	Square D EGB 3P 100A 35KA @ 480/277V - New	3	5.7	3.0	4.1	\$\$

HDL Frame - New • 2 & 3P • 15 - 150A • Up to 600Vac *



Poles	Amps	Part Number	Description	Lugs	Height	Width	Depth	Price
3	30	HDL36030	Square D HDL 3P 30A 18KA @ 480V - New	6	6.4	4.1	3.4	\$\$
3	60	HDL36060	Square D HDL 3P 60A 18KA @ 480V - New	6	6.4	4.1	3.4	\$\$
3	100	HDL36100	Square D HDL 3P 100A 18KA @ 480V - New	6	6.4	4.1	3.4	\$\$

JDL Frame - New • 2 & 3P • 70 - 250A • Up to 600Vac *

Poles	Amps	Part Number	Description	Lugs	Height	Width	Depth	Price
3	200	JDL36200	Square D JDL 3P 200A 18KA @ 480V - New	6	7.5	4.1	3.4	\$\$

* Also see US Breaker brand alternatives on page 18.



Square D Original Circuit Breakers

LGL Frame - New • 3P • 250 - 600A • Up to 600Vac*



LGL 3P

Poles	Amps	Part Number	Description	Lugs	Height	Width	Depth	Price
3	400	LGL36400U31X	Square D LGA I-line 3P 400A 35KA @ 480V - New	3	13.4	5.5	4.3	\$\$

*Also see US Breaker brand alternatives on page 18.

See Page 19 for US Breaker Brand LGL Replacements

Square D (I-Line) Original Circuit Breakers

BDA (I-Line) Frame - New • 1, 2 & 3P • 15 - 125A • Up to 600/347Vac



BDA 3P

Poles	Amps	Part Number	Description	Lugs	Height	Width	Depth	Price
3	15	BDA36015	Square D BDA I-line 3P 15A 18KA @ 480V - New	3	5.4	4.5	3.5	\$\$
3	20	BDA36020	Square D BDA I-line 3P 20A 18KA @ 480V - New	3	5.4	4.5	3.5	\$\$
3	30	BDA36030	Square D BDA I-line 3P 30A 18KA @ 480V - New	3	5.4	4.5	3.5	\$\$
3	40	BDA36040	Square D BDA I-line 3P 40A 18KA @ 480V - New	3	5.4	4.5	3.5	\$\$
3	50	BDA36050	Square D BDA I-line 3P 50A 18KA @ 480V - New	3	5.4	4.5	3.5	\$\$
3	60	BDA36060	Square D BDA I-line 3P 60A 18KA @ 480V - New	3	5.4	4.5	3.5	\$\$
3	80	BDA36080	Square D BDA I-line 3P 80A 18KA @ 480V - New	3	5.4	4.5	3.5	\$\$
3	100	BDA36100	Square D BDA I-line 3P 100A 18KA @ 480V - New	3	5.4	4.5	3.5	\$\$

HDA (I-Line) Frame - New • 2 & 3P • 15 - 150A • Up to 600Vac



HDA 3P

Poles	Amps	Part Number	Description	Lugs	Height	Width	Depth	Price
3	60	HDA36060	Square D HDA I-line 3P 60A 18KA @ 480V - New	3	6.4	4.5	3.4	\$\$
3	100	HDA36100	Square D HDA I-line 3P 100A 18KA @ 480V - New	3	6.4	4.5	3.4	\$\$
3	150	HDA36150	Square D HDA I-line 3P 150A 18KA @ 480V - New	3	6.4	4.5	3.4	\$\$

HGA (I-Line) Frame - New • 2 & 3P • 15 - 150A • Up to 600Vac



HGA 3P

Poles	Amps	Part Number	Description	Lugs	Height	Width	Depth	Price
3	60	HGA36060	Square D HGA I-line 3P 60A 35KA @ 480V - New	3	6.4	4.5	3.4	\$\$
3	100	HGA36100	Square D HGA I-line 3P 100A 35KA @ 480V - New	3	6.4	4.5	3.4	\$\$
3	150	HGA36150	Square D HGA I-line 3P 150A 35KA @ 480V - New	3	6.4	4.5	3.4	\$\$

JDA (I-Line) Frame - New • 2 & 3P • 150 - 250A • Up to 600Vac



JDA 3P

Poles	Amps	Part Number	Description	Lugs	Height	Width	Depth	Price
3	200	JDA36200	Square D JDA I-line 3P 200A 18KA @ 480V - New	3	7.5	4.5	3.4	\$\$
3	250	JDA36250	Square D JDA I-line 3P 250A 18KA @ 480V - New	3	7.5	4.5	3.4	\$\$

JGA (I-Line) Frame - New • 2 & 3P • 150 - 250A • Up to 600Vac



JGA 3P

Poles	Amps	Part Number	Description	Lugs	Height	Width	Depth	Price
3	200	JGA36200	Square D JGA I-line 3P 200A 35KA @ 480V - New	3	7.5	4.5	3.4	\$\$
3	250	JGA36250	Square D JGA I-line 3P 250A 35KA @ 480V - New	3	7.5	4.5	3.4	\$\$

LGA (I-Line) Frame - New • 3P • 250 - 600A • Up to 600Vac



LGA 3P

Poles	Amps	Part Number	Description	Lugs	Height	Width	Depth	Price
3	400	LGA36400U31X	Square D LGA I-line 3P 400A 35KA @ 480V - New	3	13.4	5.9	4.3	\$\$
3	600	LGA36600U31X	Square D LGA I-line 3P 600A 35KA @ 480V - New	3	13.4	5.9	4.3	\$\$

MGA (I-Line) Frame - New • 2 & 3P • 300 - 800A • Up to 600Vac



MGA 3P

Poles	Amps	Part Number	Description	Lugs	Height	Width	Depth	Price
3	800	MGA36800	Square D MGA I-line 3P 800A 35KA @ 480V - New	3	12.8	9.0	8.1	\$\$

FA (BDA or HDA) & KA (JGA) I-Line Replacement Models by Square D

\$\$ - Visit www.usbreaker.com for Square D original breaker pricing and catalog pdf's.



Contactor & Overload Selection Data

Motor Application - Sizing & Selection by Hp

208V 3 Phase Motor

Hp	Amps (FLA)	US Breaker Contactor	US Breaker Overload Relay (Adjustable)
1/2	2.4	NC1D0910-V	LR-25-A04 (2.5-4 A)
3/4	3.5	NC1D0910-V	LR-25-A04 (2.5-4 A)
1	4.6	NC1D0910-V	LR-25-A06 (4-6 A)
1 1/2	6.6	NC1D0910-V	LR-25-A08 (5.5-8 A)
2	7.5	NC1D0910-V	LR-25-A10 (7-10 A)
3	10.6	NC1D1210-V	LR-25-A13 (9-13 A)
5	16.7	NC1D1810-V	LR-25-A18 (12-18 A)
7 1/2	24.2	NC1D3210-V	LR-36-A32 (23-32 A)
10	30.8	NC1D4011-V	LR-93-A40 (30-40 A)
15	46.2	NC1D5011-V	LR-93-A50 (37-50 A)
20	59.4	NC1D6511-V	LR-93-A65 (48-65 A)
25	74.8	NC1D8011-V	LR-93-A80 (63-80 A)
30	88	NC1D9511-V	LR-93-A93 (80-93 A)

Insert the AC control coil voltage of 24, 120 or 240 (example: NC1D0910-V120)

230V 3 Phase Motor

Hp	Amps (FLA)	US Breaker Contactor	US Breaker Overload Relay (Adjustable)
1/2	2.2	NC1D0910-V	LR-25-A2x5 (1.6-2.5 A)
3/4	3.2	NC1D0910-V	LR-25-A04 (2.5-4 A)
1	4.2	NC1D0910-V	LR-25-A06 (4-6 A)
1 1/2	6.0	NC1D0910-V	LR-25-A08 (5.5-8 A)
2	6.8	NC1D0910-V	LR-25-A08 (5.5-8 A)
3	9.6	NC1D1210-V	LR-25-A13 (9-13 A)
5	15.2	NC1D1810-V	LR-25-A18 (12-18 A)
7 1/2	22	NC1D2510-V	LR-25-A25 (17-25 A)
10	28	NC1D3210-V	LR-36-A32 (23-32 A)
15	42	NC1D5011-V	LR-93-A50 (37-50 A)
20	54	NC1D6511-V	LR-93-A65 (48-65 A)
25	68	NC1D8011-V	LR-93-A80 (63-80 A)
30	80	NC1D9511-V	LR-93-A93 (80-93 A)

460V 3 Phase Motor

Hp	Amps (FLA)	US Breaker Contactor	US Breaker Overload Relay (Adjustable)
1/2	1.1	NC1D0910-V	LR-25-A1x6 (1-1.6 A)
3/4	1.6	NC1D0910-V	LR-25-2x5 (1.6-2.5 A)
1	2.1	NC1D0910-V	LR-25-A2x5 (1.6-2.5 A)
1 1/2	3.0	NC1D0910-V	LR-25-A04 (2.5-4 A)
2	3.4	NC1D0910-V	LR-25-A04 (2.5-4 A)
3	4.8	NC1D0910-V	LR-25-A06 (4-6 A)
5	7.6	NC1D0910-V	LR-25-A10 (7-10 A)
7 1/2	11	NC1D1210-V	LR-25-A13 (9-13 A)
10	14	NC1D1810-V	LR-25-A18 (12-18 A)
15	21	NC1D2510-V	LR-25-A25 (17-25 A)
20	27	NC1D3210-V	LR-36-A32 (23-32 A)
25	34	NC1D4011-V	LR-93-A40 (30-40 A)
30	40	NC1D5011-V	LR-93-A50 (37-50 A)
40	52	NC1D6511-V	LR-93-A65 (48-65A)
50	65	NC1D9511-V	LR-93-A80 (63-80A)
60	77	F115-P3-V	LR-93-A93 (80- 93A)+LRD33-

Insert the AC control coil voltage

115V Single Phase Motors

Hp	Amps (FLA)	US Breaker Contactor	US Breaker Overload Relay (Adjustable) ⁽¹⁾
1/2	9.8	NC1D1210-V	LR-25-A13 (9-13 A)
3/4	13.8	NC1D1810-V	LR-25-A18 (12-18 A)
1	16	NC1D1810-V	LR-25-A18 (12-18 A)
1 1/2	20	NC1D2510-V	LR-25-A25 (17-25 A)
2	24	NC1D3210-V	LR-36-A32 (23-32 A)
3	34	NC1D4011-V	LR-93-A40 (30-40 A)
5	56	NC1D6511-V	LR-93-A65 (48-65A)
7.5	80	NC1D9511-V	LR-93-A93 (80-93A)

Insert the AC control coil voltage

230V Single Phase Motors

Hp	Amps (FLA)	US Breaker Contactor	US Breaker Overload Relay (Adjustable) ⁽¹⁾
3/4	6.9	NC1D0910-V	LR-25-A08 (5.5-8 A)
1	8	NC1D1210-V	LR-25-A10 (7-10 A)
2	12	NC1D1810-V	LR-25-A18 (12-18 A)
3	17	NC1D2510-V	LR-25-A25 (17-25 A)
5	28	NC1D3210-V	LR-36-A32 (23-32 A)
7.5	40	NC1D5011-V	LR-93-A50 (37-50 A)
10	50	NC1D6511-V	LR-93-A65 (48-65A)

Insert the AC control coil voltage

Circuit Breaker Amperage for Motor Short Circuit Protection

- US Breaker C60X, E, H, J, D or L frame thermal-magnetic (inverse time) breakers

250% of motor full load amps max

Single phase motor

AC polyphase other than wound rotor

Squirrel cage motor

Synchronous motor (200% max if low torque/ speed unloaded start-up)

150% of motor full load amps max

Wound rotor motor

DC (constant voltage) motor

1) 3 phase FLA values are based on NEC Table 430.250 (2020) for induction type squirrel cage & wound rotor motors. Single phase are based on NEC 430.248. Circuit breaker sizing is based on NEC Table 430.52 (2020). See NEC 430.54 for exceptions.

2) US Breaker LR overloads include single phase protection. For single phase motors, loop the 1st pole/ phase back up and through the 2nd pole to balance the load.



Branch Circuit Breaker Selection & Wire Sizing

Allowable Wire Ampacities (Guidelines for Circuit Breaker Selection)
Based on Table 310.16 (2020) of the National Electrical Code® (NEC) NFPA70®

Calculated Load "Next Size Up" per NEC Branch Circuit Calculation ⁽¹⁾	US Breaker Part # Standard AIC	US Breaker Part # High AIC	Minimum Insulated Copper Wire Size Based on Type (up to 3 Conductors in a raceway or cable) ⁽²⁾		
			60°C (140°F): TW, UF	75°C (167°F): RHW, THHW, THW, THWN, XHHW, ZW	90°C (194°F): FEP, FEPB, MI, RHH, RHW-2, SA, SIS, TBS, THHN, THHW, THW-2, THWN-2, USE-2, XHH, XHHW, XHHW-2, ZW-2
15	ED3C015L	EG3C015L	14 AWG *	14 AWG *	*
20	ED3C020L	EG3C020L	12 AWG *	14 AWG *	14 AWG *
25	ED3C025L	EG3C025L	10 AWG *	12 AWG *	14 AWG *
30	ED3C030L	EG3C030L	10 AWG *	10 AWG *	12 AWG *
35	ED3C035L	EG3C035L	8 AWG	10 AWG *	10 AWG *
40	ED3C040L	EG3C040L	8 AWG	8 AWG	10 AWG *
50	ED3C050L	EG3C050L	6 AWG	8 AWG	8 AWG
60	ED3C060L	EG3C060L	4 AWG	6 AWG	6 AWG
70	ED3C070L	EG3C070L	4 AWG	4 AWG	6 AWG
80	ED3C080L	EG3C080L	3 AWG	4 AWG	4 AWG
90	ED3C090L	EG3C090L	2 AWG	3 AWG	4 AWG
100	ED3C100L	EG3C100L	1 AWG	3 AWG	3 AWG
110	HD3C125L (Set 110A)	HG3C125L (Set 110A)	1 AWG	2 AWG	3 AWG
125	HD3C125L	HG3C125L	1/0 AWG	1 AWG	2 AWG
150	HD3C150L	HG3C150L	3/0 AWG	1/0 AWG	1/0 AWG
175	JD3C175L	JG3C175L	4/0 AWG	2/0 AWG	2/0 AWG
200	JD3C200L	JG3C200L	250 KCMIL	3/0 AWG	3/0 AWG
225	JD3C225L	JG3C225L	300 KCMIL	4/0 AWG	3/0 AWG
250	JD3C250L	JG3C250L	350 KCMIL	250 KCMIL	4/0 AWG
300	DG3C300L	DJ3C300L	500 KCMIL	350 KCMIL	300 KCMIL
350	DG3C350L	DJ3C350L	600 KCMIL	500 KCMIL	350 KCMIL
400	DG3C400L	DJ3C400L	750 KCMIL	600 KCMIL	500 KCMIL
500	LG3C500L	LC3C500L	1500 KCMIL	900 KCMIL	700 KCMIL
600	LG3C600L	LC3C600L	-	1500 KCMIL	1000 KCMIL

Note: The table above is for branch circuit protection and is not designed for motor loads. These are general references to the National Electrical Code® (NEC) NFPA70® to assist standard 80% rated circuit breaker selection. Proper engineering evaluation is required for each customer application.

(1) **Load Calculations** for standard 80% rated protective devices: For Branch-Circuit application up to 600V, referencing NEC 210.19(A) including footnotes & exceptions, select the next standard amperage up after final load calculations and adjustment factors. The load is considered the greater of the following "general rule of thumb" or the maximum load calculation after correction & adjustment factors per NEC 310.15.

$$\text{Total Load} = 125\% \text{ of continuous loads (per NEC 310.14)} + 100\% \text{ of non-continuous loads}$$

Branch-Circuit Load calculations found in Article 220 Part II include the following useful references:

- Section 220.12 Lighting load for non-dwelling occupancies.
- Section 220.14 Other loads - all occupancies.
- Section 220.16 Loads for addition to existing installations.
- Section 310.15 Ampacity tables including but not limited to ambient temperature correction and adjustment factors for conductors.

(2) **Wire Selection** is based on table 310.16 (2020). The following additional NEC references should also be applied:

- *Section 240.4(D) Overcurrent Protection Limitations (unless otherwise specifically permitted elsewhere in the NEC NFPA70® Code, the overcurrent protection for conductor types marked with an asterisk shall not exceed 15A for #14 copper, 20A for #12 copper, or 30A for #10 copper, after any correction factors for ambient temperature and number of conductors have been applied).
- Section 310.15(B) Ampacity correction factors for ambient temperatures other than 30C (86 Deg F).
- Section 310.15(C)(1) Ambient compensation for more than 3 current carrying conductors.
- Section 310.16 Conditions of Use: Such as conductor voltages between 0 - 2000V, conductors rated 60C, 75C or 90C, wiring installed in a 30C ambient temp, and having not more than 3 current carrying conductors.



DIN Rail
UL489 & UL1077



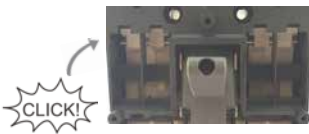
15 - 600 Amp

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