C440 Electronic Overload Relay

C440 – Overview

Eaton's new solid-state overload relay (SSOL) is the most compact, high featured, economical product in its class. Designed on a global platform, the new SSOL covers the entire power control spectrum including NEMA, IEC and DP contactors. The NEMA and DP versions are offered with the C440 designation while the IEC offering includes the XTOE version. The electronic design provides reliable, accurate and



value driven protection, and communications capabilities in a single compact device. It is the flexible choice for any application requiring easy-touse, reliable protection.

- Reliable, accurate, solid-state motor protection
- Easy to select, install and maintain
- Compact size and flexible, intelligent design
- Global product offering—available with NEMA, IEC and DP power control

C440 Electronic Overload Relays for Direct Mount to Freedom Series Contactors

For Use with Contactor ①	Overload Range (Amps)	Catalog Number
CN15AN3_B	0.33-1.65	C440A1A1P6SF00
	1-5	C440A1A005SF00
	4-20	C440A1A020SF00
CN15BN3_B	0.33-1.65	C440A1A1P6SF0
	1-5	C440A1A005SF0
	4-20	C440A1A020SF0
CN15DN3_B	0.33-1.65	C440A1A1P6SF1
	1-5	C440A1A005SF1
	4-20	C440A1A020SF1
	9-45	C440A1A045SF1
CN15GN3_B	1–5	C440A1A005SF2
	4-20	C440A1A020SF2
	9-45	C440A1A045SF2
CN15KN3_	20-100	C440B1A100SF3
CN15NN3_	1-5 @	C440A1A005SAX
CN15SN3_	1-5 @	C440A1A005SAX
	Contactor © CN15AN3_B CN15BN3_B CN15DN3_B CN15GN3_B CN15GN3_B CN15GN3_B CN15KN3_ CN15KN3_	Contactor ① Range (Amps) CN15AN3_B 0.33-1.65 1-5 4-20 CN15BN3_B 0.33-1.65 1-5 4-20 CN15DN3_B 0.33-1.65 1-5 4-20 CN15DN3_B 0.33-1.65 1-5 4-20 CN15DN3_B 0.33-1.65 1-5 4-20 SCN15DN3_B 1-5 4-20 9-45 CN15GN3_B 1-5 4-20 9-45 CN15GN3_B 100 CN15KN3_ 20-100

C440 Electronic Overload Relays with Ground Fault for Direct Mount to Freedom Series Contactors

For Use with Freedom NEMA Contactor Size	For Use with Contactor ①	Overload Range (Amps)	Catalog Number
00	CN15AN3_B	0.33-1.65	C440A2A1P6SF00
		1-5	C440A2A005SF00
		4-20	C440A2A020SF00
0	CN15BN3_B	0.33-1.65	C440A2A1P6SF0
		1-5	C440A2A005SF0
		4-20	C440A2A020SF0
1	CN15DN3_B	0.33-1.65	C440A2A1P6SF1
		1-5	C440A2A005SF1
		4-20	C440A2A020SF1
		9-45	C440A2A045SF1
2	CN15GN3_B	1–5	C440A2A005SF2
		4-20	C440A2A020SF2
		9-45	C440A2A045SF2
3	CN15KN3_	20-100	C440B2A100SF3
4	CN15NN3_	1-5 @	C440A2A005SAX
5	CN15SN3_	1-5 @	C440A2A005SAX

C440 Electronic Overload Relays for Separate Mount

Overload Range	Frame Size	Overload Relay Catalog Number	With Ground Fault Catalog Number
0.33–1.65	45 mm	C440A1A1P6SAX	C440A2A1P6SAX
1-5		C440A1A005SAX	C440A2A005SAX
4-20		C440A1A020SAX	C440A2A020SAX
9-45		C440A1A045SAX	C440A2A045SAX
20-100	55 mm	C440B1A100SAX	C440B2A100SAX

Notes

 CN15 contactor listed is non-reversing with a 120 Vac coil. For more options, see Tab 33 in the Controls Catalog.

 $^{\odot}$ Starters available with 60–300A CTs and C440A1A005SAX overload relay.



Type AN19/59 Freedom Series Starters

Type AN19/59 Freedom Series Starters with C440 Electronic Overload Relays

Non-Reversing and Reversing

	Continuous	Maximum UL Horsepower Single-Phase Three-Phase						Three-Pole Non-Reversing 102	Three-Pole Reversing 02	
NEMA Size	Ampere Rating	Current Rating (Amps)	115V 230V		208V 240V 480V		480V	600V	Catalog Number	Catalog Number
00	9	11	1/3	1	1-1/2	1-1/2	2	2	AN19AN0_ 5E _	AN59AN0_5E_
0	18	21	1	2	3	3	5	5	AN19BN0_ 5E _	AN59BN0_5E_
1	27	32	2	3	7-1/2	7-1/2	10	10	AN19DN0_5E_	AN59DN0_5E_
2	45	52	3	7-1/2	10	15	25	25	AN19GN0_ 5E _	AN59GN0_5E_
3	90	104	_	_	25	30	50	50	AN19KN0_5E_	AN59KN0_5E_
43	135	156	_	_	40	50	100	100	AN19NN0_5E_	AN59NN0_5E_
53	270	311	_	_	75	100	200	200	AN19SN0_5E_	AN59SN0_5E_

Type AN19/59 Freedom Series Starters with C440 with Ground Fault Electronic Overload Relays

Non-Reversing and Reversing

Continuous	Maximum UL Horsepower						Three-Pole	Three-Pole	
Ampere	Current Rating	Single-	Phase	e Three-Phase		Non-Reversing 🔍	Reversing 12		
Rating	(Amps)	115V	230V	208V	240V	480V	600V	Catalog Number	Catalog Number
9	11	1/3	1	1-1/2	1-1/2	2	2	AN19AN0_ 5G _	AN59AN0_5G_
18	21	1	2	3	3	5	5	AN19BN0_5G_	AN59BN0_5G_
27	32	2	3	7-1/2	7-1/2	10	10	AN19DN0_5G_	AN59DN0_5G_
45	52	3	7-1/2	10	15	25	25	AN19GN0_5G_	AN59GN0_5G_
90	104	_	_	25	30	50	50	AN19KN0_5G _	AN59KN0_5G_
135	156	_	_	40	50	100	100	AN19NN0_5G _	AN59NN0_5G_
270	311	_	_	75	100	200	200	AN19SN0_5G _	AN59SN0_5G_
	Rating 9 18 27 45 90 135	Ampere Rating Current Rating (Amps) 9 11 18 21 27 32 45 52 90 104 135 156	Continuous Ampere Rating Service Limit Current Rating (Amps) Single- 115V 9 11 1/3 18 21 1 27 32 2 45 52 3 90 104 135 156	Continuous Ampere Rating Service Limit Current Rating (Amps) Single-Phase 115V 230V 9 11 1/3 1 18 21 1 2 27 32 2 3 45 52 3 7-1/2 90 104 — — 135 156 — —	Continuous Ampere Rating Service Limit Current Rating (Amps) Single-Phase 115V Three-P 230V 9 11 1/3 1 1-1/2 18 21 1 2 3 27 32 2 3 7-1/2 45 52 3 7-1/2 10 90 104 25 135 156 40	Continuous Ampere Rating Service Limit Current Rating (Amps) Single-Phase 115V Three-Phase 208V 240V 9 11 1/3 1 1-1/2 1-1/2 18 21 1 2 3 3 27 32 2 3 7-1/2 7-1/2 45 52 3 7-1/2 10 15 90 104 — — 25 30 135 156 — — 40 50	Continuous Ampere Rating Service Limit Current Rating (Amps) Single-Plase 115V Three-Plase 208V Three-Plase 240V 480V 9 11 1/3 1 1-1/2 1-1/2 2 18 21 1 2 3 3 5 27 32 2 3 7-1/2 7-1/2 10 45 52 3 7-1/2 10 15 25 90 104 - 25 30 50 135 156 - 40 50 100	Continuous Ampere Rating Service Limit Current Rating (Amps) Single-Phase Three-Phase 8000 6000 <th< td=""><td>Continuous Ampere Rating Service Limit Current Rating Single-Phase Three-Phase Non-Reversing ©© 9 11 15V 230V 208V 240V 480V 600V Catalog Number 9 11 1/3 1 1-1/2 1-1/2 2 2 AN19AN0_56_ 18 21 1 2 3 3 5 5 AN19BN0_56_ 27 32 2 3 7-1/2 7-1/2 10 10 AN19DN0_56_ 45 52 3 7-1/2 10 15 25 AN19GN0_56_ 90 104 - 25 30 50 AN19KN0_56_ 135 156 - 40 50 100 AN19NN_56_</td></th<>	Continuous Ampere Rating Service Limit Current Rating Single-Phase Three-Phase Non-Reversing ©© 9 11 15V 230V 208V 240V 480V 600V Catalog Number 9 11 1/3 1 1-1/2 1-1/2 2 2 AN19AN0_56_ 18 21 1 2 3 3 5 5 AN19BN0_56_ 27 32 2 3 7-1/2 7-1/2 10 10 AN19DN0_56_ 45 52 3 7-1/2 10 15 25 AN19GN0_56_ 90 104 - 25 30 50 AN19KN0_56_ 135 156 - 40 50 100 AN19NN_56_

NEMA Sizo

Coil Suffix Codes

Suffix	Coil Volts and Hertz	Suffix	Coil Volts and Hertz
A	120/60 or 110/50	L	380-415/50
В	240/60 or 220/50	Ν	550/50
C	480/60 or 440/50	Т	24/60, 24/50
D	600/60 or 550/50	U	24/50
E	208/60	V	32/50
Н	277/60	W	48/60
J	208-240/60	Y	48/50
к	240/50		

C440 FLA Range (FVNR and FVR Starters Only)

FI A Rango

NEIVIA SIZE	FLA Kange				
00	1P6	0.33–1.65A	020	4.0–20A	
	005	1.0-5.0A	_	_	
0	1 P 6	0.33–1.65A	020	4.0–20A	
	005	1.0-5.0A	—	—	
1	1 P 6	0.33–1.65A	020	4.0-20A	
	005	1.0-5.0A	045	9.0-45A	
2	005	1.0-5.0A	045	9.0-45A	
	020	4.0-20A	_	_	
3	100	20–100A	—	_	
43	_	_	300	60-300A	
53	300	60–300A	_	_	

Notes

Powering Business Worldwide

^① Underscore (_) indicates coils suffix required, see Coil Suffix table above.

⁽²⁾ Underscore (_) indicates OLR designation required, see Coil Suffix table above.

③ Size 4 and 5 starters available with 60–300A panel mounted CTs. Please use (1–5A) overload relays with these CTs. Starters are not shipped as assembled units.

Eaton Corporation Electrical Group

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