

2.1

NEMA Contactors and Starters

Freedom Full Voltage Controls

Catalog Number Selection

NEMA Freedom Line Enclosed Control

2

EC N 22 2 1 A A F -

Design
N = Freedom NEMA 2 = A200

Modification Codes
See Tab 15

Class	Page
01 = Non-reversing contactor—three-pole	V10-T2-8
Non-reversing contactor—two-pole	V10-T2-10
Non-reversing contactor—four-pole	V10-T2-12
Non-reversing contactor—five-pole	V10-T2-13
02 = Reversing contactor—three-pole	V10-T2-14
05 = Non-combination non-reversing starter	V10-T2-16
05 = Non-combination single-phase non-reversing starter	V10-T2-18
06 = Non-combination reversing starter	V10-T2-19
07 = Non-combination non-reversing starter with CPT	V10-T2-21
16 = Combination non-reversing starter—fusible disconnect	V10-T2-23
Combination non-reversing starter—non-fusible disconnect	V10-T2-25
Special enclosure combination non-reversing starter—fusible/non-fusible disconnect	V10-T2-27
17 = Combination reversing starter—fusible disconnect	V10-T2-29
Combination reversing starter—non-fusible disconnect	V10-T2-31
18 = Combination non-reversing starter—fusible disconnect with CPT	V10-T2-33
Combination non-reversing starter—non-fusible disconnect with CPT	V10-T2-35
22 = Combination non-reversing starter—circuit breaker	V10-T2-37
Special enclosure combination non-reversing starter—circuit breaker	V10-T2-40
23 = Combination reversing starter—circuit breaker	V10-T2-42
24 = Combination non-reversing starter—circuit breaker with CPT	V10-T2-45

NEMA Size		
A = Size 00	3 = Size 3	7 = Size 7
0 = Size 0	4 = Size 4	8 = Size 8
1 = Size 1	5 = Size 5	9 = Size 9
2 = Size 2	6 = Size 6	

Disconnect Fuse Clip Ratings		
A = None	G = 100A/600V R	N = 600A/600V R
B = 30A/250V R	H = 200A/250V R	P = 800A/600V L
C = 30A/600V R	J = 200A/600V R	Q = 1200A/600V L
D = 60A/250V R	K = 400A/250V R	R = 1600A/600V L
E = 60A/600V R	L = 400A/600V R	S = 2000A/600V L
F = 100A/250V R	M = 600A/250V R	T = By description

Circuit Breaker Ratings		
A = None	H = 150A	R = 3000A
B = 3A	J = 250A	T = By description
C = 7A	K = 400A	5 = 3A ①
D = 15A	L = 600A	6 = 7A ①
E = 30A	M = 800A	7 = 15A ①
F = 50A	N = 1000A	8 = 30A ①
W = 70A	P = 1200A	9 = 50A ①
G = 100A	Q = 2000A	I = 100A ①

Cover Control
Type 1 non-comb., Page V10-T2-5
All others, Page V10-T2-6
Contactors
3 = Three poles

Coil Voltage and/or Control Transformers
See code tables below

Enclosure Type
1 = Type 1—General purpose
2 = Type 3R—Rainproof
3 = Type 4—Watertight (painted steel)
4 = Type 4X—Watertight (304-Grade stainless steel)
5 = Type 4X—Corrosion (non-metallic)
6 = Type 7/9—Bolted hazardous location
7 = Type 7/9—Threaded hazardous location
8 = Type 12—Dust-tight
9 = Type 4X—316-Grade stainless steel

Magnetic Coil Codes (System Voltage) ②

Code	Magnet Coil	Code	Magnet Coil	Code	Magnet Coil
A	120/60–110/50	K	240/50	U	24/50
B	240/60–220/50	L	380/50	V	32/50
C	460/60–440/50	M	415/50	W	48/60
D	575/60–550/50	P	12 Vdc	X	104–120/60
E	208/60	Q	24 Vdc	Y	48/50
G	550/50	R	48 Vdc	Z	By description
H	277/60	S	125 Vdc		
J	208–240/60	T	24/60		

Control Power Transformer Codes (System Voltage)

Code	Primary	Secondary
B	240/480–220/440 wired for 240V	120/60–110/50
C	240/480–220/440 wired for 480V	120/60–110/50
D	600/60–550/50	120/60–110/50
E	208/60	120/60
H	277/60	120/60
L	380/50	110/50
M	415/50	110/50
Q	208/60	24
R	240/480–220/440 wired for 240V	24
S	240/480–220/440 wired for 480V	24
T	600/60	24
U	277/60	24
V	380/50	24
W	415/50	24
X	240/480/600 wired for 480V	120
Y	240/480/600 wired for 480V	24
Z	By description	—

Notes

- ① Use for 0–3, HMCP 600V applications only.
- ② When control power transformer modification codes (C1–C11) are used or when starter class includes CPT (that is ECN07, 18) see the table at right for system voltage code.

Cover Control

Non-Combination Starters

Control Power Transformer (CPT) may be required.

Combination Starters

- Cover control for combination starters uses 10250T style devices as standard
- Selector switches are maintained with lever operators
- Pushbuttons are momentary type with extended pushbutton
- The kit includes hardware and connecting wires (where possible)
- For factory installed control devices other than shown below, refer to modification codes, **Tab 15**

Product Selection

Type 1 Cover Control



Type 1 Non-Combination Cover Control

Description	Factory Installed Flange Control ① Position 9 Cover Control Code	Field Installation Kits Catalog Number
Non-Reversing		
No cover mounted pilot devices	A	C400GK0
START/STOP pushbuttons	B	C400GK1
With red RUN pilot light	C	C400GK12 ②
With red RUN/green OFF lights	D	C400GK16 ②
HAND/OFF/AUTO selector switch	H	C400GK3
With red RUN pilot light	J	C400GK32 ②
With red RUN/green OFF lights	K	C400GK36 ②
Red RUN pilot light	P	C400GK42 ②
Green OFF	Q	C400GK41 ②
Red RUN/green OFF pilot lights	R	C400GK46 ②
Reversing		
No cover mounted pilot devices	A	C400GK0
FOR/REV/STOP pushbuttons	B	C400GR1
With two red pilot lights	C	C400GR14 ②
UP/STOP/DOWN pushbuttons	E	C400GR2
With two red pilot lights	F	C400GR24 ②
Two red pilot lights	P	C400GK44 ②
One green pilot light	Q	C400GK41 ②

Notes

- ① For more available factory installed flange control, see **Page V10-T2-6**
- ② Add code letter from the table below to catalog number for voltage—kits only. Example: C400GK0**B**.

Rating	Code Letter	Rating	Code Letter	Rating	Code Letter
120V 60 Hz	A	277V 60 Hz	H	480V 60 Hz	C
208V 60 Hz	E	380V 50 Hz	L	600V 60 Hz	D
240V 60 Hz	B				