



Unit Identification: _____

Cat. No. **EC** -
 Table Reference 1 2 3 4 5 6 7 8

Wiring Diagram: _____ Figure: _____

Remarks: _____

1: Type of Starter

Catalog Letter	Design
N	NEMA (Freedom)
A	Advanced Design (Advantage)

2: Combination Classification

Class Number	Design
33	Multispeed, Non-Combination, 2 Speed 2 Winding
34	Multispeed, Non-Combination, 2 Speed 1 Winding, CT or VT
35	Multispeed, Non-Combination, 2 Speed 1 Winding, CH
36	Multispeed, Disconnect Switch, 2 Speed 2 Winding
37	Multispeed, Disconnect Switch, 2 Speed 1 Winding, CT or VT
38	Multispeed, Disconnect Switch, 2 Speed 1 Winding, CH
39	Multispeed, HMCP, 2 Speed 2 Winding
40	Multispeed, HMCP, 2 Speed 1 Winding, CT or VT
41	Multispeed, HMCP, 2 Speed 1 Winding, CH

3: Size of Starter

Suffix Number	Design Type
0 1 2 3 4 5 6	NEMA (Freedom) ①
1 2 3 4 5 6	Advanced Design (Advantage)

4: Enclosure Type

Suffix Number	Rating
1	NEMA 1, General Purpose
2	NEMA 3R, Rainproof
4	NEMA 4X, Stainless Steel Waterproof
8	NEMA 12, Dusttight

5: Magnet Coil ②

Suffix Letter	Voltage / Hertz	Suffix Letter	Voltage / Hertz
A	120/60 - 110/50	F ③	120/60
B	240/60 - 220/50	H	277/60
C	480/60 - 440/50	L	380/50
D	600/60 - 550/50	T	24/60
E	208/60	---	---

- ① ECN available Size 7, ECN 33 only
- ② Advantage only
- ③ All starters size 6 and above are furnished with a 120V coil and control transformer. Select primary voltage.

6: Cover Mounted Pilot Devices – 2 Speed

Suffix Letter	Description	Suffix Letter	Description
A	None	V	High/Off/Low Sel. Sw
B	Fast/Slow/Stop pb	W	with 2 (Red) pilots
C	with 2 (Red) pilots	X	with 2 (Red) 1 (Gn) pilots
D	with 2 (Red) 1 (Gn) pilots	Y	Advantage ACM (See Mods)
E	High/Low/Stop pushbutton	Z	By Description
F	with 2 (Red) pilots		
G	with 2 (Red) 1 (Gn) pilots		
H	Fast/Off/Slow Sel Sw		
J	with 2 (Red) pilots		
K	with 2 (Red) 1 (Gn) pilots		
P	with 2 Red pilots		
Q	with 1 Green pilot		
R	with 2 (Red) 1 (Gn) pilots		

7a: Disconnect Switch: Class 36, 37, 38 Only ④

Suffix Letter	Voltage/Amperes	Suffix Letter	Voltage/Amperes
A	Non-Fusible	K	400a/250V R
B	30a/250V R	L	400a/600V R
C	30a/600V R	M	600a/250V R
D	60a/250V R	N	600a/600V R
E	60a/600V R	T	By Description
F	100a/250V R		
G	100a/600V R		
H	200a/250V R		
J	200a/600V R		

7b: Motor Circuit Protector: Class 39, 40, 41 Only

Suffix Letter	Rating	Suffix Letter	Rating	Suffix Letter	Rating
A	None	E	30a	J	250a
B	3a	F	50a	K	400a
C	7a	G	100a	T	Describe
D	15a	H	150a		

8: Additional Modifications

Suffix	Description

④ For Classes 33, 34 and 35 non-combinations, position 7 is an "A".



**NON COMBINATION
MULTI-SPEED ENCLOSURES**

Size	Freedom ECN		Advantage ECA	
	NEMA 1	3R, 4X, 12	NEMA 1	3R, 4X, 12
Class 33: 2 Speed, 2 Winding				
0	2	6	---	---
1-2	3	7	7 1	7
3	4	8	8 1	8
4	9	9	9	9
Class 34: 2 Speed 1 Winding, Constant or Variable Torque				
0-2	3	7	7 1	9
3	9	9	9	9
4	E	E	9	9
Class 35: 2 Speed 1 Winding, Constant Horsepower				
0-2	3	7	9	9
3	9	9	9	9
4	E	E	E	E

1 Advantage utilizes a NEMA 12 enclosure

**NON COMBINATION
MULTI-SPEED DIMENSIONS**

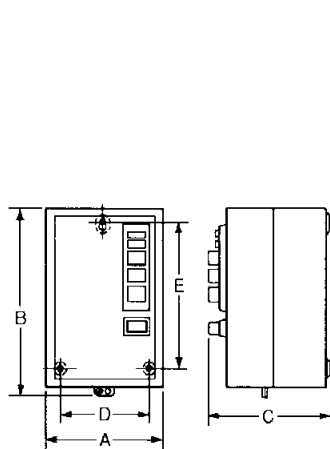
Box No.	Dimensions in Inches [mm]				
	Wide A	High B	Deep C	Mounting	
				Wide D	High E
1	5.62 [143]	10.09 [256]	5.71 [145]	4.50 [114]	8.00 [203]
2	7.73 [196]	13.21 [336]	6.75 [172]	6.00 [152]	10.75 [273]
3	12.65 [321]	14.40 [366]	7.31 [186]	9.75 [248]	11.25 [286]
4	11.66 [296]	26.51 [673]	8.89 [226]	9.00 [229]	23.38 [594]
5	9.84 [250]	13.31 [338]	7.51 [191]	5.50 [140]	12.50 [318]
6	12.01 [305]	14.39 [366]	7.51 [191]	8.00 [203]	13.50 [343]
7	16.26 [413]	14.37 [365]	7.51 [191]	11.00 [279]	13.50 [343]
8	14.25 [362]	29.10 [739]	9.29 [234]	9.00 [229]	27.50 [699]
9	25.50 [648]	29.10 [739]	9.31 [237]	20.00 [508]	27.50 [699]
10	20.00 [508]	47.85 [1215]	11.36 [289]	14.50 [368]	46.25 [1175]
E	28.00 [711]	61.75 [1569]	12.88 [327]	22.50 [572]	60.15 [1528]
E2	28.00 [711]	56.10 [1425]	12.76 [324]	22.50 [572]	54.50 [1384]

COMBINATION MULTI-SPEED ENCLOSURES

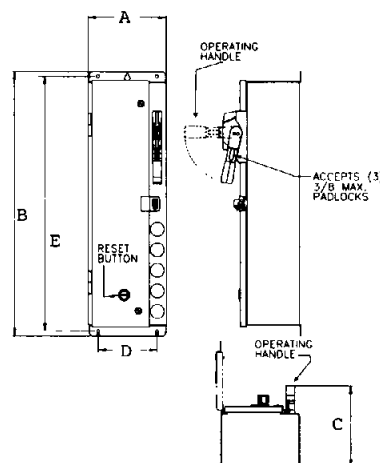
Size	Freedom ECN		Advantage ECA	
	NEMA 1	3R, 4X, 12	NEMA 1	3R, 4X, 12
Class 36: 2 Speed 2 Winding – With Disconnect Switch				
Class 39: 2 Speed 2 Winding – With HMCP				
0-2	B	B	B	B
3	C	C	C	C
4	D	D	D	D
Class 37: 2 Speed 1 Winding, Constant or Variable Torque – With Disconnect				
Class 38: 2 Speed 1 Winding, Constant Horsepower – With Disconnect				
Class 40: 2 Speed 1 Winding, Constant or Variable Torque – With HMCP				
Class 41: 2 Speed 1 Winding, Constant Hp – With HMCP				
0-2	B	B	B	B
3	C	C	C	C
4	E	E	E	E

**COMBINATION
MULTI-SPEED DIMENSIONS**

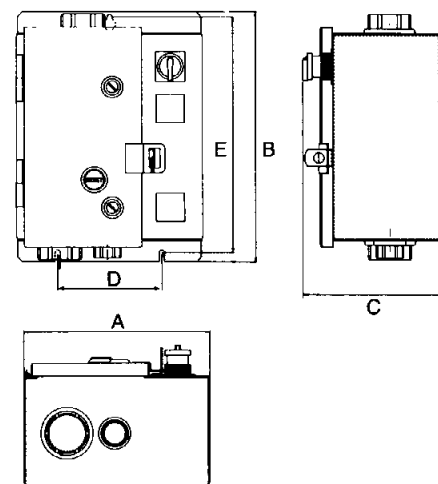
Box No.	Dimensions in Inches [mm]				
	Wide A	High B	Deep C	Mounting	
				Wide D	High E
A	10.50 [267]	27.06 [687]	8.87 [225]	4.38 [111]	24.50 [622]
B	15.50 [394]	23.06 [586]	8.87 [225]	10.20 [259]	20.50 [521]
C	20.50 [521]	30.50 [775]	10.64 [270]	14.50 [368]	27.87 [708]
D	29.50 [749]	35.00 [889]	10.95 [278]	24.00 [610]	32.37 [822]
E	28.00 [711]	61.75 [1569]	12.88 [327]	22.50 [572]	60.15 [1528]
E2	28.00 [711]	56.10 [1425]	12.76 [324]	22.50 [572]	54.50 [1384]



Boxes 1-4



Boxes A-E



Boxes 5, 6, 7, 9, 10