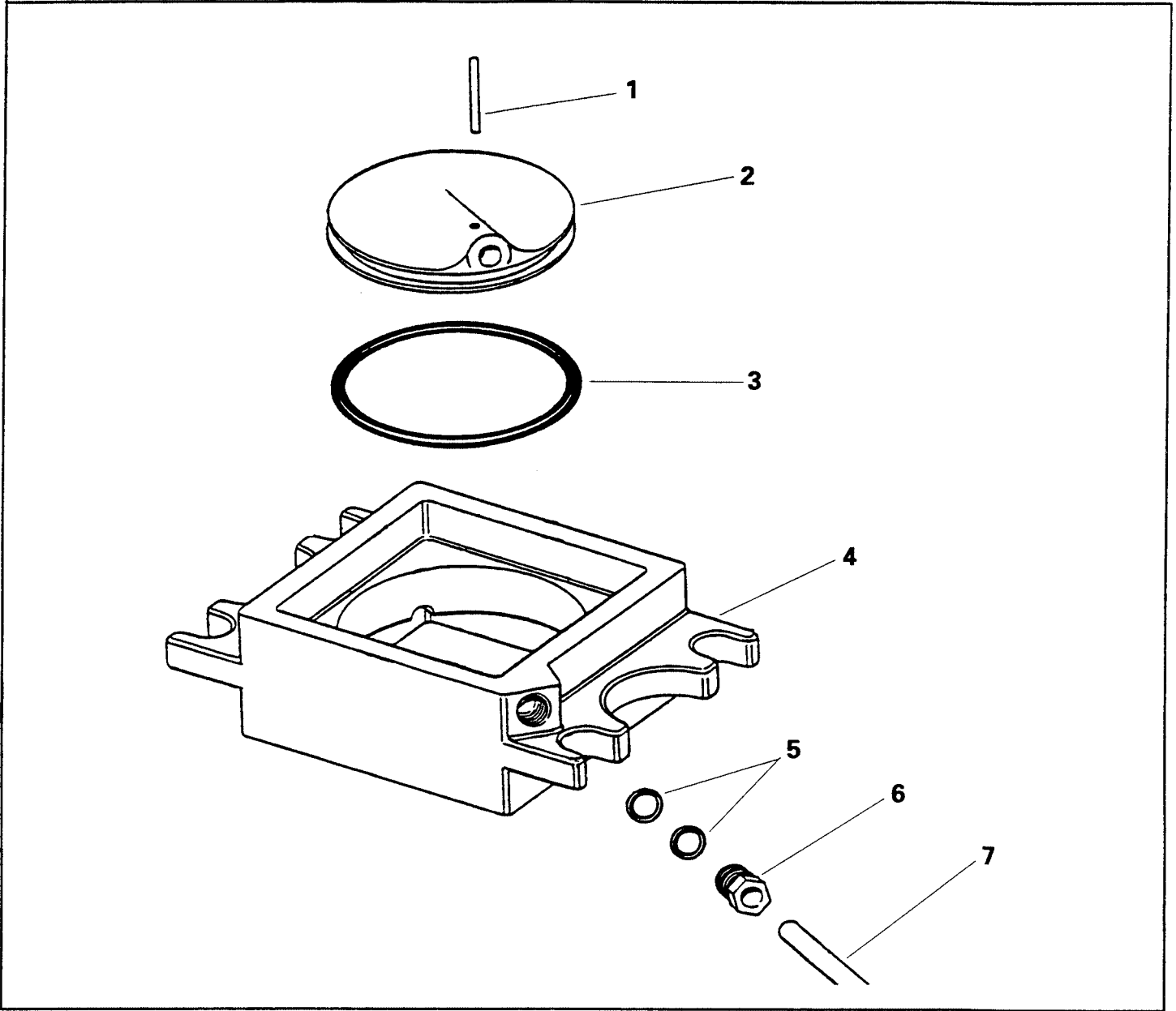
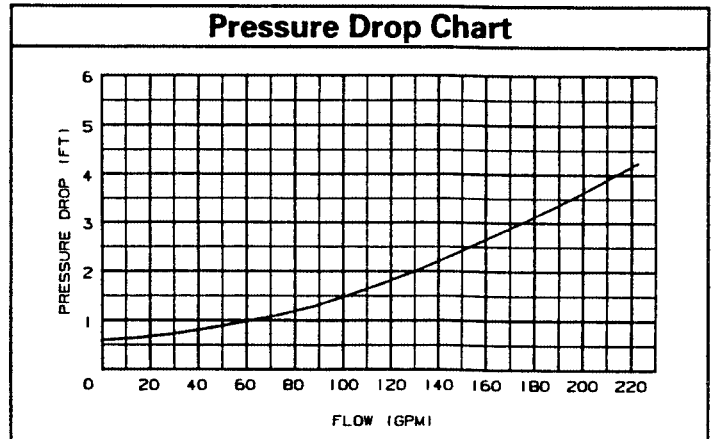


# AURORA MODEL 220/680 ISOLATION VALVE

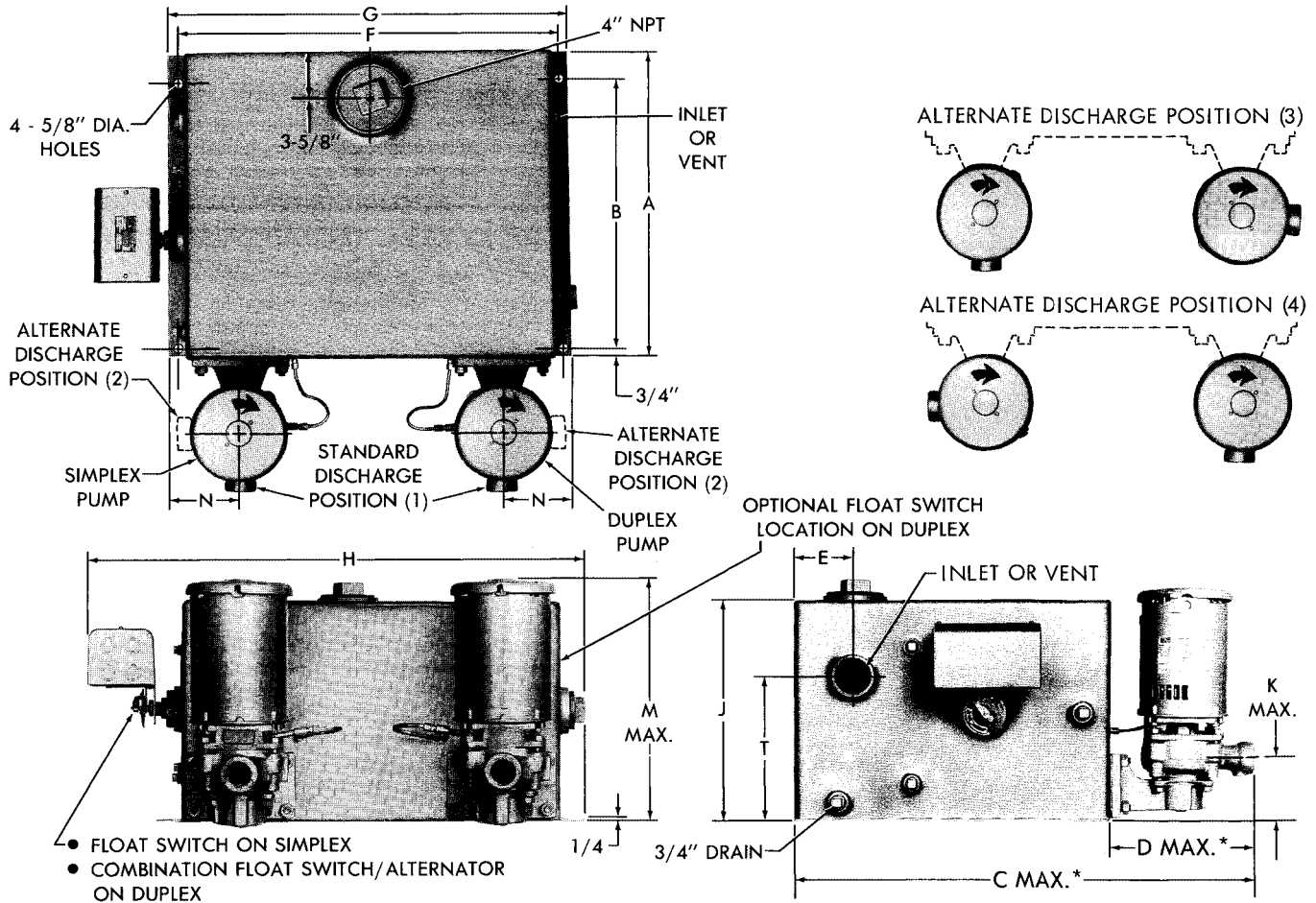


Materials of Construction		
No.	Item	Material
1	Dowel Pin	316 S.S.
2	Valve	85-5-5-5 CDA•836
3	O-Ring	Buna N
4	Housing	85-5-5-5 CDA•836
5	O-Ring	Buna N
6	5/16 Inverted Flare Tube Fitting	85-5-5-5 CDA•836
7	Valve-Stem 5/16 Round Rod	316 S.S.



# AURORA MODEL 221S & 222S STEEL CONDENSATE UNIT (25, 35, 55, GAL.) SIMPLEX AND DUPLEX

SECTION 220 PAGE 201  
DATED SEPTEMBER 1989  
SUPERSEDES PAGE 201  
DATED JULY 1982

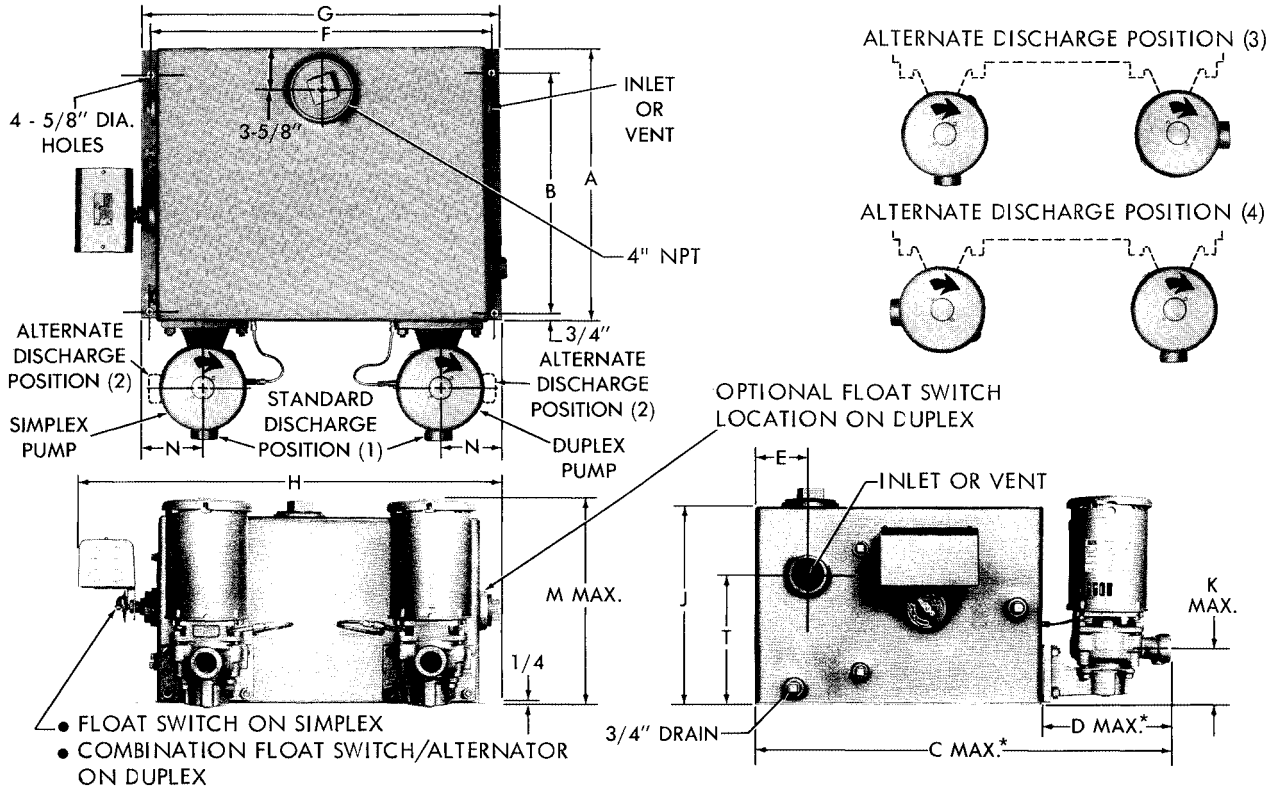


UNIT NUMBER SIMPLEX	UNIT NUMBER SIMPLEX	UNIT NUMBER DUPLEX	UNIT NUMBER DUPLEX	H																	
				A	B	C* MAX.	D* MAX.	E	F	G	ALT.	SWITCH	J	K MAX.	M MAX.	N	T	INLET & VENT	REC. GAL. CAP.		
3500 RPM	1750 RPM	3500 RPM	1750 RPM																		
15S10S2 TO 15S75S2	15S10S4 TO 15S30S4	15S10D2 TO 15S75D2	15S10D4 TO 15S30D4	21-3/4	18-1/2	38-5/16	16-9/16	4	28	29-1/2	34	33-1/2	15-1/4	4-9/16	18-1/8	5-3/4	10	2	25		
20S10S2 TO 20S75S2	20S10S4 TO 20S30S4	20S10D2 TO 20S75D2	20S10D4 TO 20S30D4	21-3/4	18-1/2	38-5/16	16-9/16	4	28	29-1/2	34	33-1/2	15-1/4	4-9/16	18-1/2	5-3/4	10	2	25		
25S10S2 TO 25S75S2	25S10S4 TO 25S30S4	25S10D2 TO 25S75D2	25S10D4 TO 25S30D4	24	20-1/2	40-9/16	16-9/16	4-3/4	30	31-1/2	36	35-1/2	16-1/4	4-9/16	18-1/2	5-3/4	10-3/4	3	35		
30S10S2 TO 30S75S2	30S10S4 TO 30S30S4	30S10D2 TO 30S75D2	30S10D4 TO 30S30D4	24	20-1/2	40-9/16	16-9/16	4-3/4	30	31-1/2	36	35-1/2	16-1/4	5-5/16	19-5/16	5-3/4	10-3/4	3	35		
40S10S2 TO 40S75S2	40S10S4 TO 40S25S4	40S10D2 TO 40S75D2	40S10D4 TO 40S25D4	28	26-1/2	44-9/16	16-9/16	4-3/4	30	31-1/2	36	35-1/2	17-1/2	5	19	5-3/4	14	3	55		

**NOTES**

1. FOR DISCHARGE SIZE AND PRESSURE SEE BULLETIN 220.
  2. ALL DIMENSIONS IN INCHES.
  3. NOT FOR CONSTRUCTION PURPOSES UNLESS CERTIFIED.
  4. DUPLEX UNIT WITH MECHANICAL ALTERNATOR ILLUSTRATED.
  5. ALL CONNECTIONS ARE THREADED.
  6. CONDUIT BOX AND/OR CAPACITOR NOT SHOWN AS LOCATION AND DIMENSIONS VARY WITH EACH MOTOR MANUFACTURER.
  7. ALL SIMPLEX RECEIVERS HAVE A BLANKED OFF SUCTION OPENING AVAILABLE FOR POSSIBLE FUTURE CONVERSION TO DUPLEX CONSTRUCTION.
  8. DIMENSIONS MAY VARY + 1/4 INCH.
  9. FOR GALVANIZED STEEL SUBSTITUTE "G" FOR FIRST "S" IN UNIT NUMBER. (EXAMPLE: 15S10S2 WOULD BE 15G10S2)
- \* WHEN ISOLATION VALVE IS FURNISHED DIMENSION INCREASES BY 2 INCHES.

# AURORA MODEL 221S & 222S CONDENSATE UNIT (70, 125, 200 GAL.) SIMPLEX AND DUPLEX



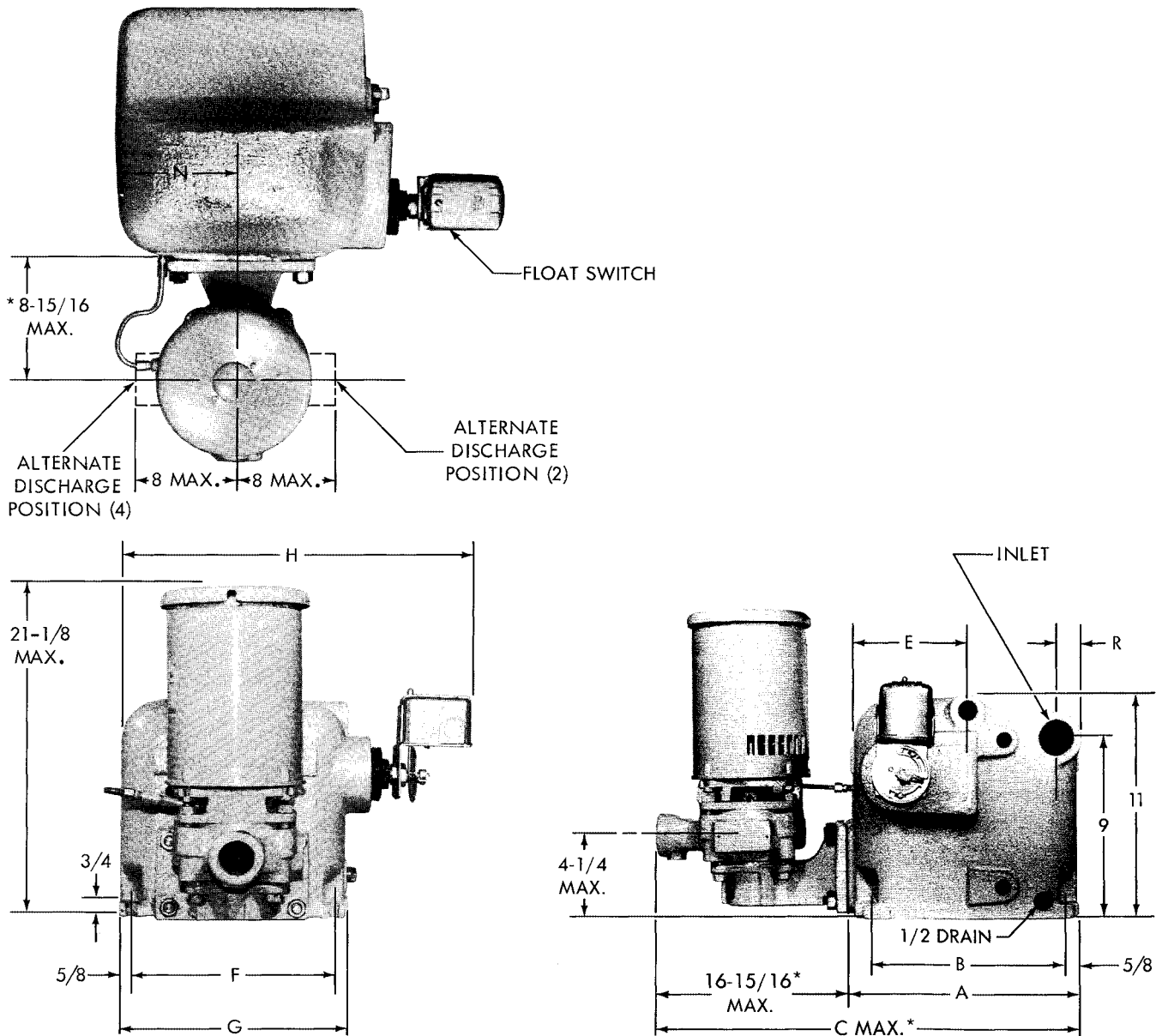
UNIT NUMBER SIMPLEX	UNIT NUMBER SIMPLEX	UNIT NUMBER DUPLEX	UNIT NUMBER DUPLEX	H															
				A	B	C* MAX.	D* MAX.	E	F	G	ALT. SWITCH	J	K MAX.	M MAX.	N	T	INLET & VENT	REC. GAL. CAP.	
50S10S2 TO 50S60S2	50S10S4 TO 50S20S4	50S10D2 TO 50S60D2	50S10D4 TO 50S20D4	32-1/4	29-1/2	47	14-3/4	4-3/4	33	34-1/2	39	38-1/2	18-1/2	5-7/16	19-1/2	5-3/4	15-1/4	3	70
60S10S2 TO 60S55S2	60S10S4 TO 60S20S4	60S10D2 TO 60S55D2	60S10D4 TO 60S20D4	32-1/4	29-1/2	45-1/4	13	4-3/4	33	34-1/2	39	38-1/2	18-1/2	5-5/8	20	5-3/4	15-1/4	3	70
70S10S2 TO 70S50S2	70S10S4 TO 70S20S4	70S10D2 TO 70S50D2	70S10D4 TO 70S20D4	37-1/4	34-1/2	50-1/4	13	4-3/4	38	39-1/2	44	43-1/2	23	5-5/8	20	5-3/4	19-1/4	3	125
80S10S2 TO 80S50S2	80S10S4 TO 80S20S4	80S10D2 TO 80S50D2	80S10D4 TO 80S20D4	37-1/4	34-1/2	50-1/4	13	4-3/4	38	39-1/2	44	43-1/2	23	5-5/8	20	5-3/4	19-1/4	3	125
90S10S2 TO 90S50S2	90S10S4 TO 90S20S4	90S10D2 TO 90S50D2	90S10D4 TO 90S20D4	37-1/4	34-1/2	50-1/4	13	4-3/4	38	39-1/2	44	43-1/2	23	5-5/8	20-5/8	5-3/4	19-1/4	3	125
100S15S2 TO 100S45S2	100S10S4 TO 100S20S4	100S15D2 TO 100S45D2	100S10D4 TO 100S20D4	37-1/4	34-1/2	51-7/16	14-3/16	4-3/4	38	39-1/2	44	43-1/2	23	5-5/8	20-5/8	5-3/4	19-1/4	3	125
110S20S2 TO 110S35S2	N/A	100S20D2 TO 110S35D2	N/A	48	45-1/4	64-1/2	16-1/2	4-3/4	50	51-1/2	56	55-1/2	23-3/4	7-3/4	23	5-3/4	19-1/4	4	200
120S20S2 TO 120S35S2	N/A	120S20D2 TO 120S35D2	N/A	48	45-1/4	64-1/2	16-1/2	4-3/4	50	51-1/2	56	55-1/2	23-3/4	7-3/4	23	5-3/4	19-1/4	4	200

- NOTES
- FOR DISCHARGE SIZE AND PRESSURE SEE BULLETIN 220.
  - ALL DIMENSIONS IN INCHES.
  - NOT FOR CONSTRUCTION PURPOSES UNLESS CERTIFIED.
  - DUPLEX UNIT WITH MECHANICAL ALTERNATOR ILLUSTRATED.
  - ALL CONNECTIONS ARE THREADED.
  - CONDUIT BOX AND/OR CAPACITOR NOT SHOWN AS LOCATION AND DIMENSIONS VARY WITH EACH MOTOR MANUFACTURER.
  - ALL SIMPLEX RECEIVERS HAVE A BLANKED OFF SUCTION OPENING AVAILABLE FOR POSSIBLE FUTURE CONVERSION TO DUPLEX CONSTRUCTION.
  - DIMENSIONS MAY VARY ± 1/4 INCH.
  - FOR GALVANIZED STEEL SUBSTITUTE "G" FOR FIRST "S" IN UNIT NUMBER. (EXAMPLE: 50S10S2 WOULD BE 50G10S2).
- \* WHEN ISOLATION VALVE IS FURNISHED DIMENSION INCREASES BY 2 INCHES.

# AURORA MODEL 221

## CAST IRON CONDENSATE UNIT (6 GAL.)

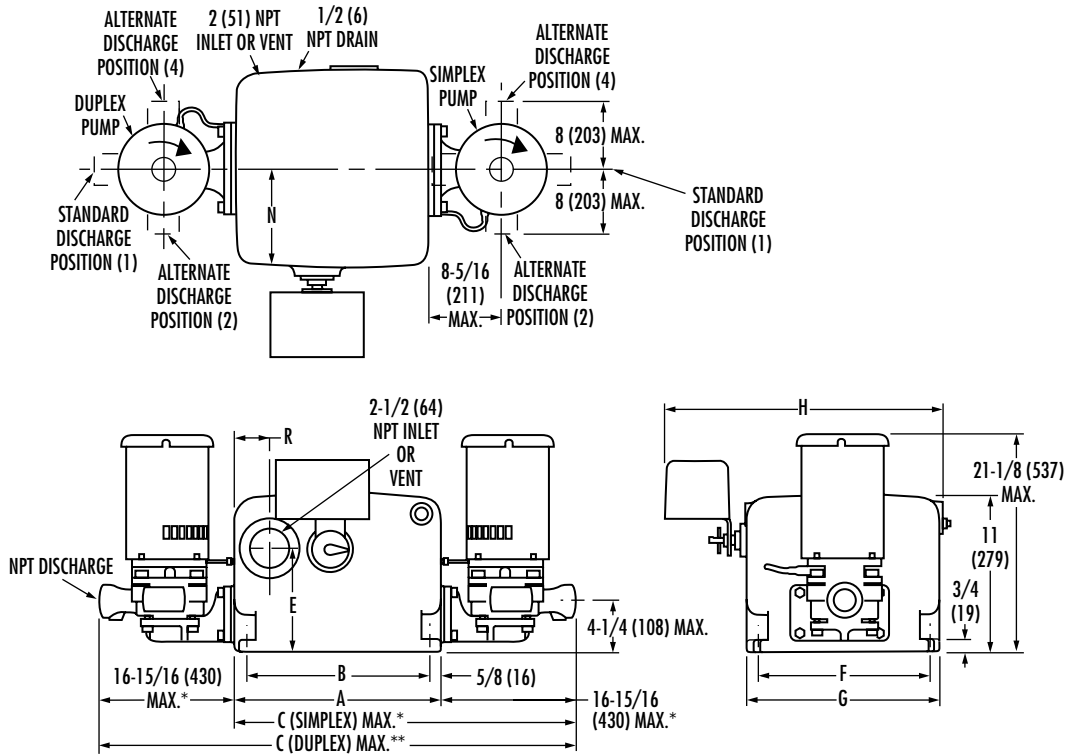
### SIMPLEX



UNIT NO.		A	B	SIMP.*	E	F	G	H	N	R	INLET SIZE	REC. GAL. CAP.
3500 RPM	1750 RPM											
3C10S2 TO 3C75S2	3C10S4 TO 3C30S4	11-1/2	10-1/4	28-7/16	5-3/4	10-1/4	11-1/2	17-3/4	5-3/4	1-5/16	1-1/2	6

**NOTES**

1. FOR DISCHARGE SIZE AND PRESSURE SEE BULLETIN 220.
  2. ALL DIMENSIONS IN INCHES.
  3. NOT FOR CONSTRUCTION PURPOSES UNLESS CERTIFIED.
  4. CONDUIT BOX AND/OR CAPACITOR NOT SHOWN AS LOCATION AND DIMENSIONS VARY WITH EACH MOTOR MANUFACTURER.
  5. ALL CONNECTIONS ARE THREADED.
  6. DIMENSIONS MAY VARY ± 1/4.
- FOR DIMENSIONS MARKED "MAX." REFER TO SECTION 320.  
 \* WHEN ISOLATION VALVE IS FURNISHED DIMENSION INCREASES BY 2 INCHES.



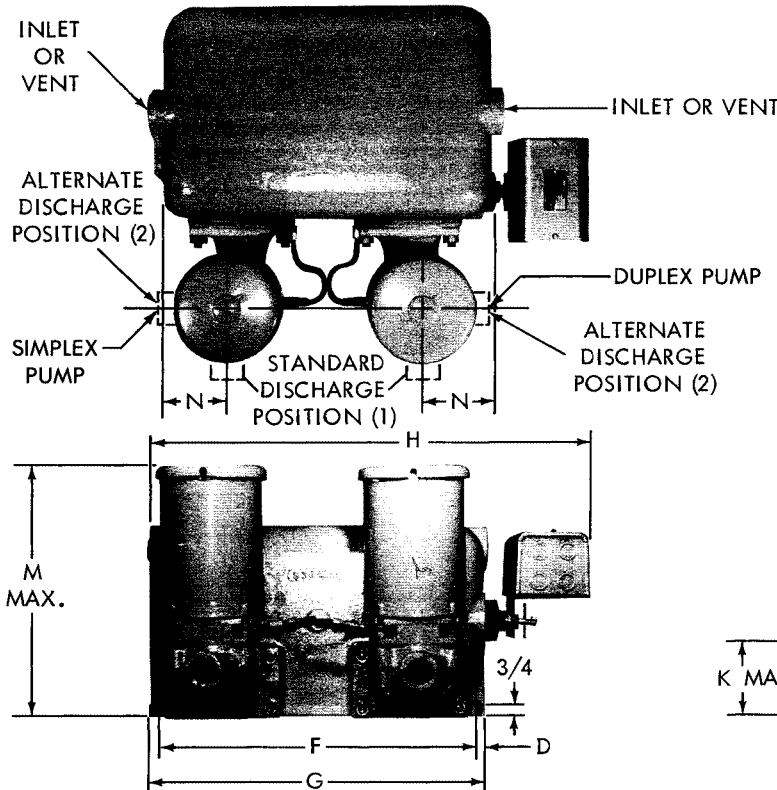
UNIT NUMBER													REC. GAL. CAP.
3500 RPM	1750 RPM	A	B	C		E	F	G	H	N	R		
				* SIMP	** DUP								
6C10S2 TO 6C75S2	6C10S4 TO 6C30S4	15-1/2 (394)	14-1/4 (362)	32-7/16 (824)	-	7-1/4 (184)	14-1/4 (362)	15-1/2 (394)	21 (533)	7-3/4 (197)	2-1/4 (57)	10 (38)	
3C10D2 TO 3C75D2	3C10D4 TO 3C30D4	15-1/2 (394)	14-1/4 (362)	-	49-3/8 (1254)	7-1/4 (184)	14-1/4 (362)	15-1/2 (394)	21-3/4 (553)	7-3/4 (197)	2-1/4 (57)	10 (38)	
6C10D2 TO 6C75D2	6C10D4 TO 6C30D4	15-1/2 (394)	14-1/4 (362)	-	49-3/8 (1254)	7-1/4 (184)	14-1/4 (362)	15-1/2 (394)	21-3/4 (553)	7-3/4 (197)	2-1/4 (57)	10 (38)	

**NOTES:**

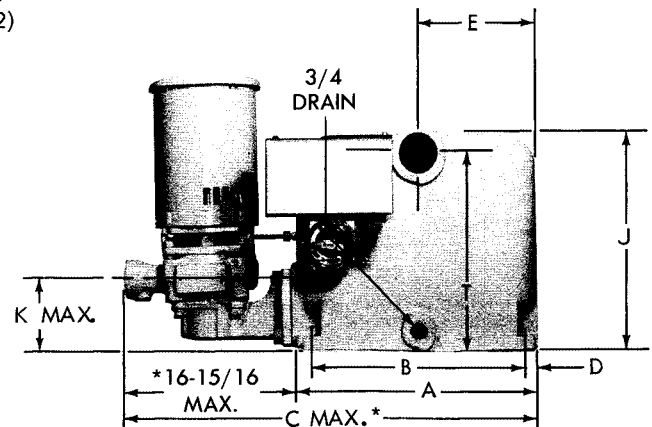
1. Dimensions may vary  $\pm 8"$  (6.4).
2. Not for construction purposes unless certified.
3. For discharge size and pressure see Bulletin 220.
4. Duplex unit with mechanical alternator illustrated.
5. All connections are threaded.
6. Conduit box and/or capacitor not shown as location and dimensions vary with each motor manufacturer.
7. All simplex receivers have a blanked off suction opening available for possible future conversion to duplex construction.
8. For dimensions marked "Max.," refer to Section 320.
9. All dimensions in inches and (mm).
  - \* When isolation valve is furnished, dimension increases by 2 inches (50.8).
  - \*\* When isolation valve is furnished dimension increases by 4 inches (101.6).

# AURORA MODEL 221 & 222 CAST IRON CONDENSATE UNIT (15, 25, 35 GAL.) SIMPLEX AND DUPLEX

SECTION 220 PAGE 205  
DATED SEPTEMBER 1989  
SUPERSEDES PAGE 205  
DATED JULY 1983



SWITCH		
QTY.	SWITCH DESCRIPTION	UNIT CONSTRUCTION
1	FLOAT SWITCH	SIMPLEX
1	ALTERNATOR	DUPLEX
2	FLOAT SWITCH	OPTIONAL DUPLEX

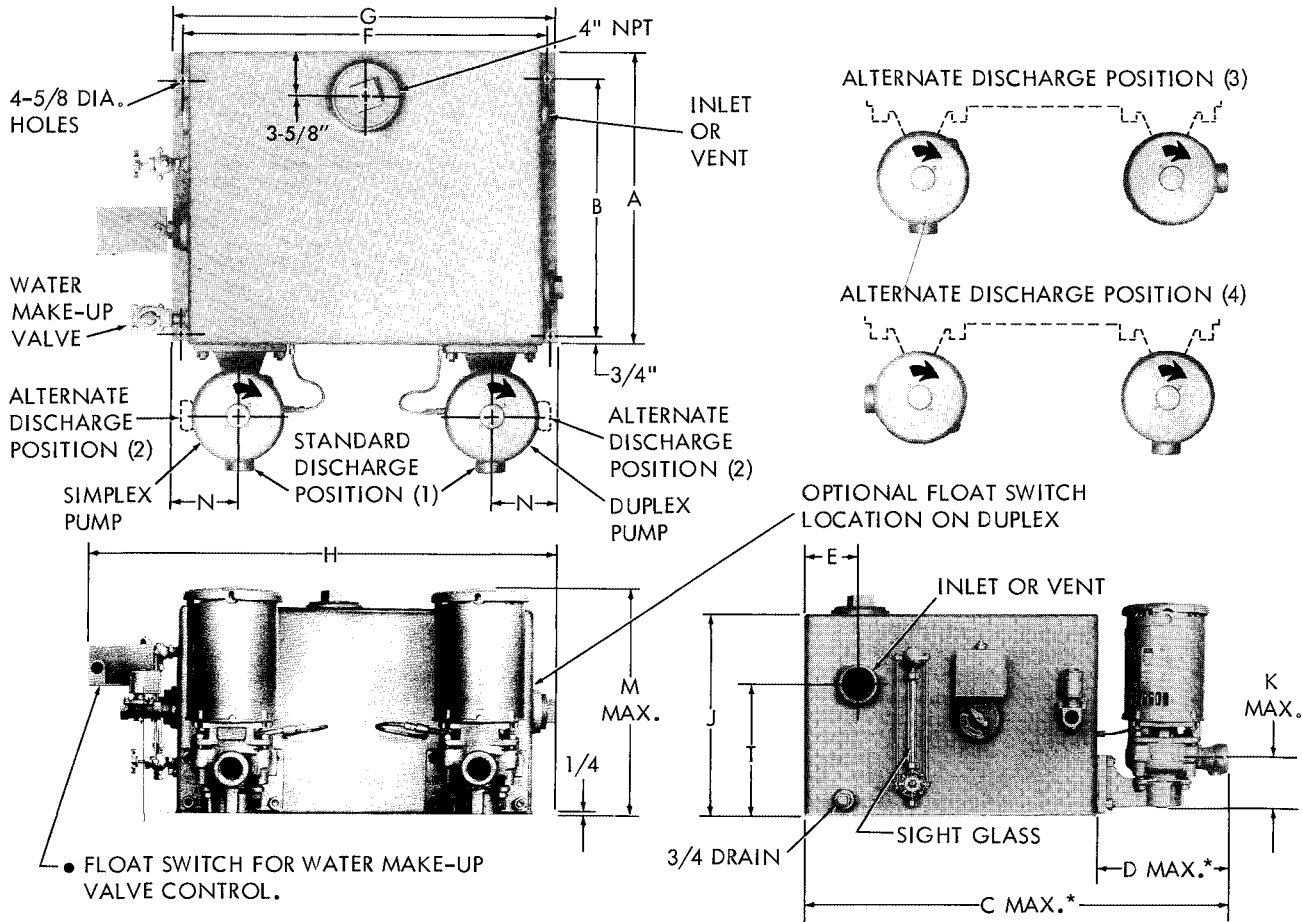


UNIT NUMBER SIMPLEX		UNIT NUMBER DUPLEX		MAX.															
3500 RPM	1750 RPM	3500 RPM	1750 RPM	A	B	C*	D	E	F	G	H	J	K	M	N	T	INLET & VENT	REC. GAL. CAP.	
10C10S2 TO 10C75S2	10C10S4 TO 10C30S4	10C10D2 TO 10C75D2	10C10D4 TO 10C30D4	14	12-3/4	30-15/16	5/8	7	20-3/4	22	28-1/4	12-1/2	4-1/4	21-1/8	4-15/16	10-15/16	2	15	
15C10S2 TO 15C75S2	15C10S4 TO 15C30S4	15C10D2 TO 15C75D2	15C10D4 TO 15C30D4	20	18-3/4	36-15/16	5/8	10	24-3/4	26	32-1/4	12	4-1/4	21-1/8	5-1/4	10-7/16	2	25	
20C10S2 TO 20C75S2	20C10S4 TO 20C30S4	20C10D2 TO 20C75D2	20C10D4 TO 20C30D4	20	18-3/4	36-15/16	5/8	10	24-3/4	26	32-1/4	12	4-1/4	21-1/8	5-1/4	10-7/16	2	25	
25C10S2 TO 25C75S2	25C10S4 TO 25C30S4	25C10D2 TO 25C75D2	25C10D4 TO 25C30D4	22	20-3/4	38-15/16	5/8	11	26-3/4	28	34-1/4	14-3/16	4-1/4	21-1/8	5-1/4	12	3	35	
30C10S2 TO 30C75S2	30C10S4 TO 30C30S4	30C10D2 TO 30C75D2	30C10D4 TO 30C30D4	22	20-3/4	38-15/16	5/8	11	26-3/4	28	34-1/4	14-3/16	4-1/4	21-1/8	5-1/4	12	3	35	

- NOTES
- FOR DISCHARGE SIZE AND PRESSURE SEE BULLETIN 220.
  - ALL DIMENSIONS IN INCHES.
  - NOT FOR CONSTRUCTION PURPOSES UNLESS CERTIFIED.
  - DUPLEX UNIT WITH MECHANICAL ALTERNATOR ILLUSTRATED.
  - ALL CONNECTIONS ARE THREADED.
  - CONDUIT BOX AND/OR CAPACITOR NOT SHOWN AS LOCATION AND DIMENSIONS VARY WITH EACH MOTOR MANUFACTURER.

- ALL SIMPLEX RECEIVERS HAVE A BLANKED OFF SUCTION OPENING AVAILABLE FOR POSSIBLE FUTURE CONVERSION TO DUPLEX CONSTRUCTION.
- DIMENSIONS MAY VARY  $\pm 1/4$ ".
- FOR DIMENSIONS MARKED "MAX." REFER TO SECTION 320.
- WHEN ISOLATION VALVE IS FURNISHED DIMENSION INCREASES BY 2 INCHES.

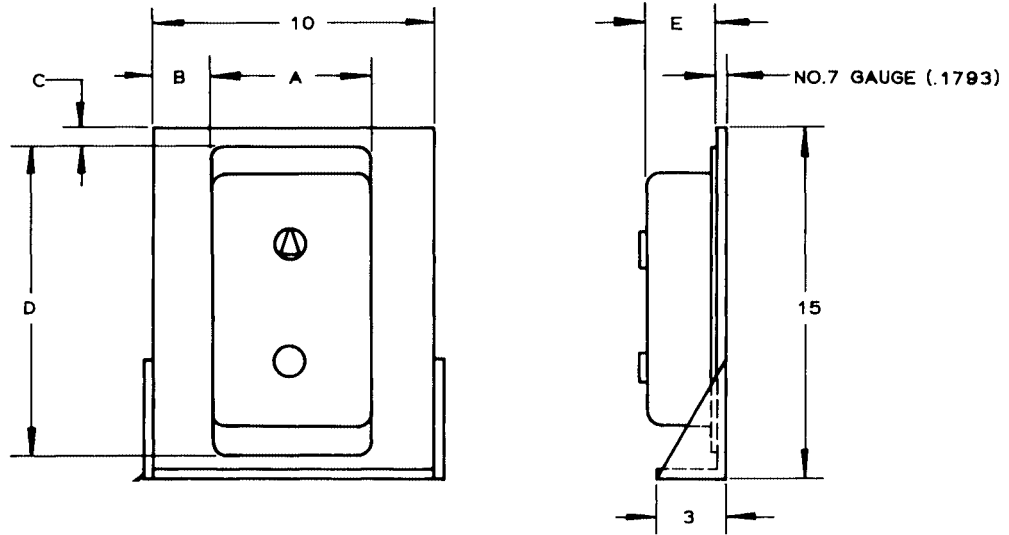
# AURORA MODEL BFSX, BFDX, BFDL STEEL BOILER-FEED UNIT 15PSI (25, 35, 55, 70, 125, 200 GAL.) SIMPLEX, DUPLEX, AND DUAL



UNIT NUMBER SIMPLEX	UNIT NUMBER SIMPLEX	UNIT NUMBER DUPLEX	UNIT NUMBER DUPLEX	UNIT NUMBER DUAL	UNIT NUMBER DUAL													INLET & VENT	REC. GAL. CAP.	
3500 RPM	1750 RPM	3500 RPM	1750 RPM	3500 RPM	1750 RPM	A	B	C* MAX.	D* MAX.	E	F	G	H	J	K MAX.	M MAX.	N	T		
BFSX15S2 TO BFSX20S2	BFSX15S4 TO BFSX20S4	BFDX15S2 TO BFDX20S2	BFDX15S4 TO BFDX20S4	N/A	N/A	21-3/4	18-1/2	36-1/2	14-3/4	4	28	29-1/2	33-1/2	15-1/4	3-3/4	17-9/16	5-3/4	10	2	25
BFSX25S2 TO BFSX40S2	BFSX25S4 TO BFSX40S4	BFDX25S2 TO BFDX40S2	BFDX25S4 TO BFDX40S4	BFDL15S2	BFDL15S4	24	20-1/2	38-3/4	14-3/4	4-3/4	30	31-1/2	35-1/2	16-1/4	3-3/4	17-9/16	5-3/4	10-3/4	3	35
BFSX50S2 TO BFSX60S2	BFSX50S4 TO BFSX60S4	BFDX50S2 TO BFDX60S2	BFDX50S4 TO BFDX60S4	BFDL20S2 TO BFDL30S2	BFDL20S4 TO BFDL30S4	28	26-1/2	42-3/4	14-3/4	4-3/4	30	31-1/2	35-1/2	17-1/2	3-3/4	17-9/16	5-3/4	14	3	55
BFSX70S2 TO BFSX80S2	BFSX70S4 TO BFSX80S4	BFDX70S2 TO BFDX80S2	BFDX70S4 TO BFDX80S4	BFDL40S2	BFDL40S4	32-1/4	29-1/2	47	14-3/4	4-3/4	33	34-1/2	38-1/2	18-1/2	3-3/4	17-9/16	5-3/4	15-1/4	3	70
BFSX100S2 TO BFSX125S2	BFSX100S4 TO BFSX125S4	BFDX100S2 TO BFDX125S2	BFDX100S4 TO BFDX125S4	BFDL50S2 TO BFDL60S2	BFDL50S4 TO BFDL60S4	37-1/4	34-1/2	52	14-3/4	4-3/4	38	39-1/2	43-1/2	23	3-3/4	17-9/16	5-3/4	19-1/4	3	125
BFSX150S2 TO BFSX200S2	BFSX150S4 TO BFSX200S4	BFDX150S2 TO BFDX200S2	BFDX150S4 TO BFDX200S4	BFDL70S2 TO BFDL100S2	BFDL70S4 TO BFDL100S4	48	45-1/4	62-3/4	14-3/4	4-3/4	50	51-1/2	55-1/2	23-3/4	3-3/4	17-9/16	5-3/4	19-1/4	4	200

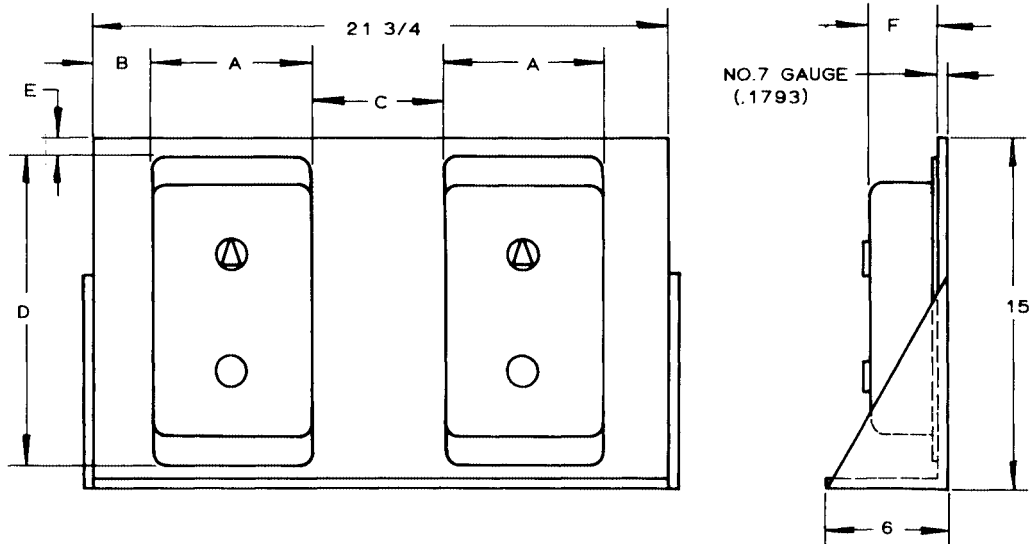
- NOTES
1. DISCHARGE SIZE - 3/4" NPT FOR 1750 RPM & 1" NPT FOR 3500 RPM PUMPS.
  2. ALL DIMENSIONS IN INCHES.
  3. NOT FOR CONSTRUCTION PURPOSES UNLESS CERTIFIED.
  4. DUPLEX UNIT WITH FLOAT SWITCH OPERATED WATER MAKE UP VALVE ILLUSTRATED.
  5. ALL CONNECTIONS ARE THREADED.
  6. CONDUIT BOX AND/OR CAPACITOR NOT SHOWN AS LOCATION AND DIMENSIONS VARY WITH EACH MOTOR MANUFACTURER.
  7. ALL SIMPLEX RECEIVERS HAVE A BLANKED OFF SUCTION OPENING AVAILABLE FOR POSSIBLE FUTURE CONVERSION TO DUPLEX CONSTRUCTION.
  8. DIMENSIONS MAY VARY ± 1/4 INCH.
  9. FOR GALVANIZED STEEL SUBSTITUTE "G" FOR LAST "S" IN UNIT NUMBER. (EXAMPLE: BFSX15S2 WOULD BE BFSX15G2.)
  10. ABOVE SELECTIONS ARE FOR LOW PRESSURE (15 PSI DISCHARGE) BOILER FEED UNITS ONLY.
- \* WHEN ISOLATION VALVE IS FURNISHED DIMENSION INCREASES BY 2 INCHES.

### CLASS 14 CONTROL PANEL (MAGNETIC STARTER) (SIMPLEX) NEMA 1, 4, 7, 9 & 12



NEMA	A	B	C	D	E
1	6-1/4	1-7/8	1/16	11	4-3/8
4	7-3/4	1-1/8	1/8	13	5-7/16
7	9-3/8	5/16	9/16	12-7/8	6-13/16
9	9-3/8	5/16	5/16	12-7/8	6-13/16
12	7-3/4	1-1/8	1/8	13	5-7/16

### CLASS 14 CONTROL PANEL (MAGNETIC STARTERS) (DUPLEX) NEMA 1, 4, 7, 9 & 12

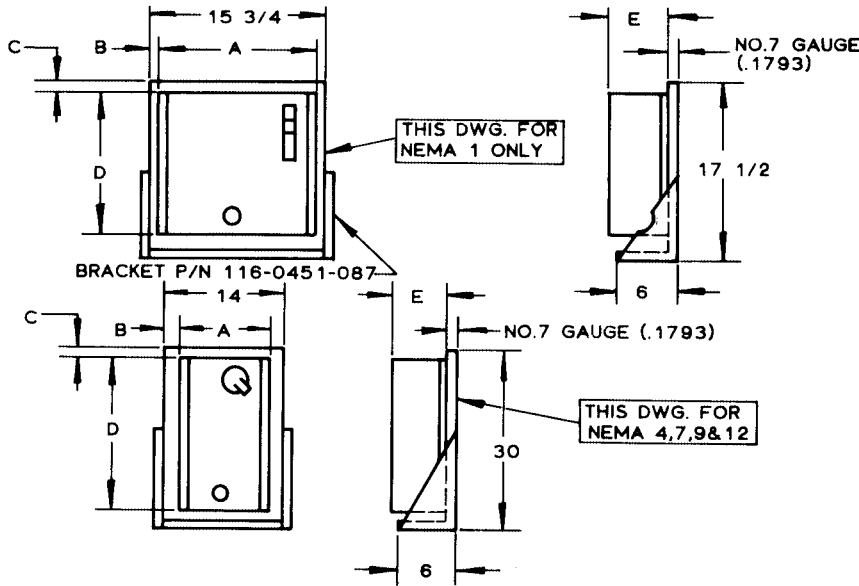


NEMA	A	B	C	D	E	F
1	6-1/4	1-7/8	5-1/2	11	1/16	4-3/8
4	7-3/4	1-1/8	4	13	1/8	5-7/16
7	9-3/8	5/16	2-3/8	12-7/8	9/16	6-13/16
9	9-3/8	5/16	2-3/8	12-7/8	9/16	6-13/16
12	7-3/4	1-1/8	4	13	1/8	5-7/16



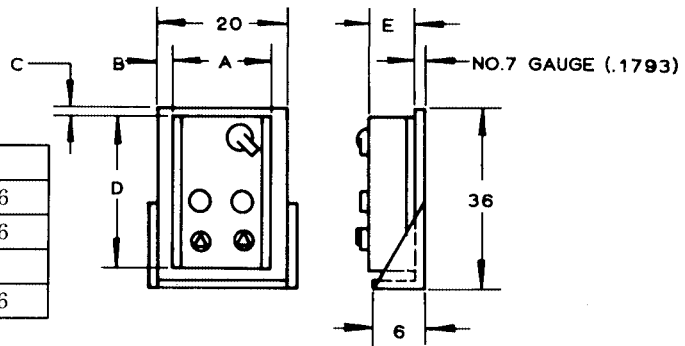
# AURORA MODEL 221 & 222 MOTOR CONTROLS

## CLASS 18 COMBINATION STARTER (SIMPLEX) NEMA 1, 4, 7, 9 & 12



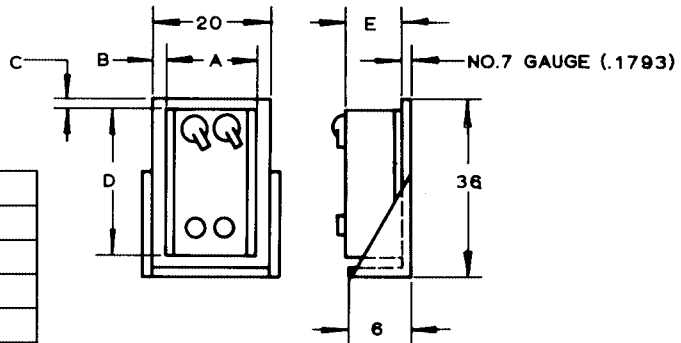
NEMA	A	B	C	D	E
1	15-3/8	3/16	1	14	6-3/4
4	10-11/16	1-21/32	5/8	27-1/2	6-7/8
7 & 9	9-11/16	2-5/32	1	25-1/2	9
12	10-11/16	1-21/32	5/8	27-1/2	6-7/8

## CLASS 84 DUPLEX & DUAL CONTROL FUSIBLE SINGLE MANUAL DISCONNECT NEMA 1, 3, 4 & 12



NEMA	A	B	C	D	E
1	18-1/16	31/32	5/8	33-1/16	6-9/16
3	18-1/16	31/32	5/8	33-1/16	7-9/16
4	18	31/32	5/8	33-1/16	6-3/8
12	18-1/16	31/32	5/8	33-1/16	7-9/16

## CLASS 84 DUPLEX & DUAL CONTROL CIRCUIT BREAKER DOUBLE MANUAL DISCONNECT NEMA 1, 3, 4 & 12



NEMA	A	B	C	D	E
1	18-1/16	31/32	5/8	33-1/16	6-9/16
3	18-1/16	31/32	5/8	33-1/16	7-9/16
4	18	31/32	5/8	33-1/16	6-3/8
12	18-1/16	31/32	5/8	33-1/16	7-9/16