

HEATER SIZES AVAILABLE	MODEL & SIZE
FR1-12 THRU FR1-36	1-PASS FR1
HP1-12 THRU HP1-36	1-PASS HP1
HP3-12 THRU HP3-36	3-PASS HP3
HP5-16 THRU HP5-36	5-PASS HP5
HP7-24 THRU HP7-36	7-PASS HP7

FAN SIZE
12" DIA. 12

CABINET MATERIAL	
A	EPOXY POWDER COATED CARBON STEEL
B	HERESITE PHENOLIC COATED CARBON STEEL
C	STAINLESS STEEL

EXCHANGER COATINGS	
1	HEAT RESISTANT ALUMINUM PAINT
2	HERESITE PHENOLIC COATING

CONNECTIONS	
A	2" NPT FEMALE
B	2" NPT MALE SCH. 80
C	2" 300# RF FLANGE

BASE MODEL	FAN SIZE	CABINET MATERIAL	EXCHANGER COATING	CONNECTION TYPE&SIZES	TUBE MATERIAL	MOTOR ENCLOSURE	MOTOR SPECS
FR1	12	A	1	A	1	1	A - D

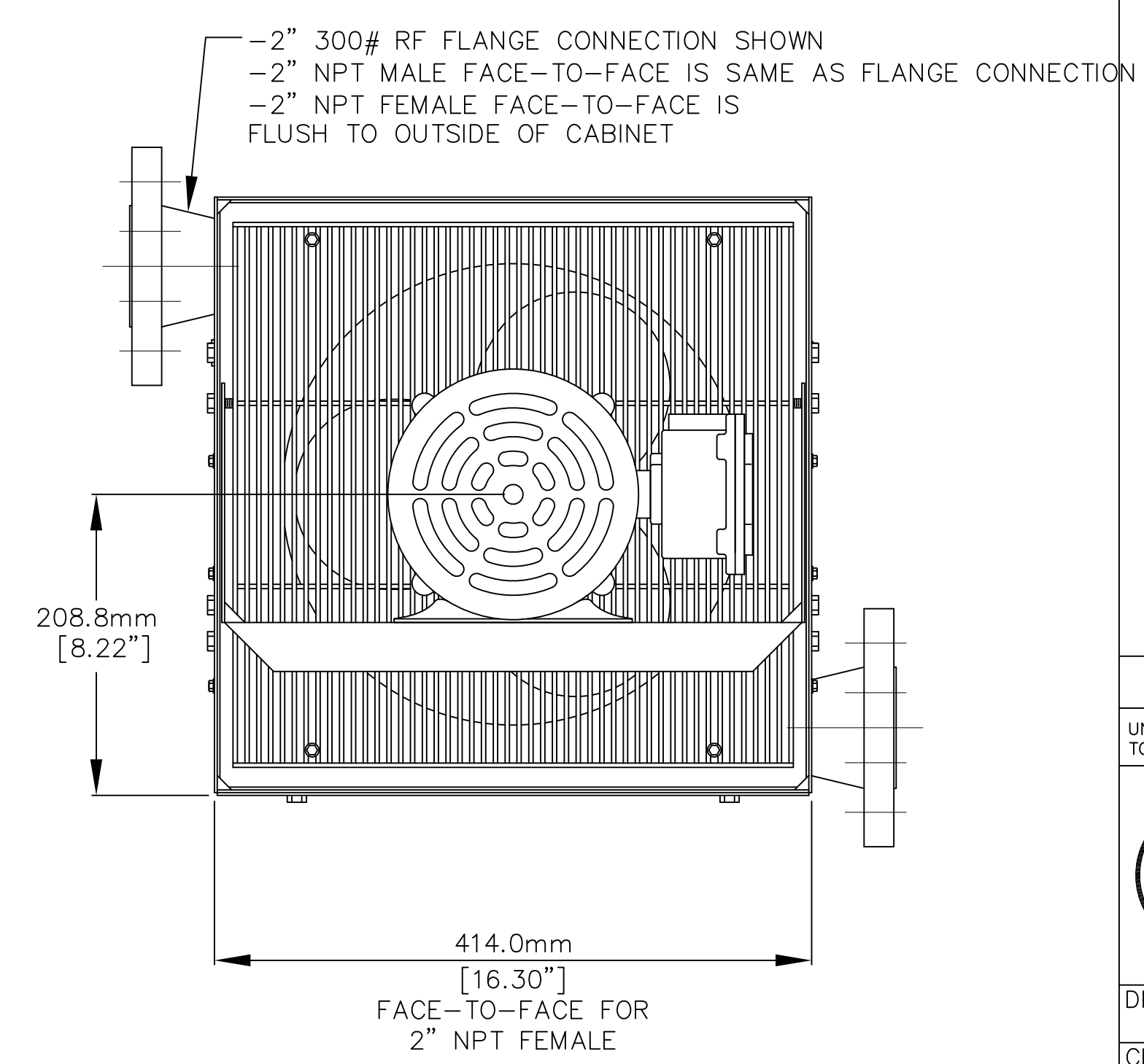
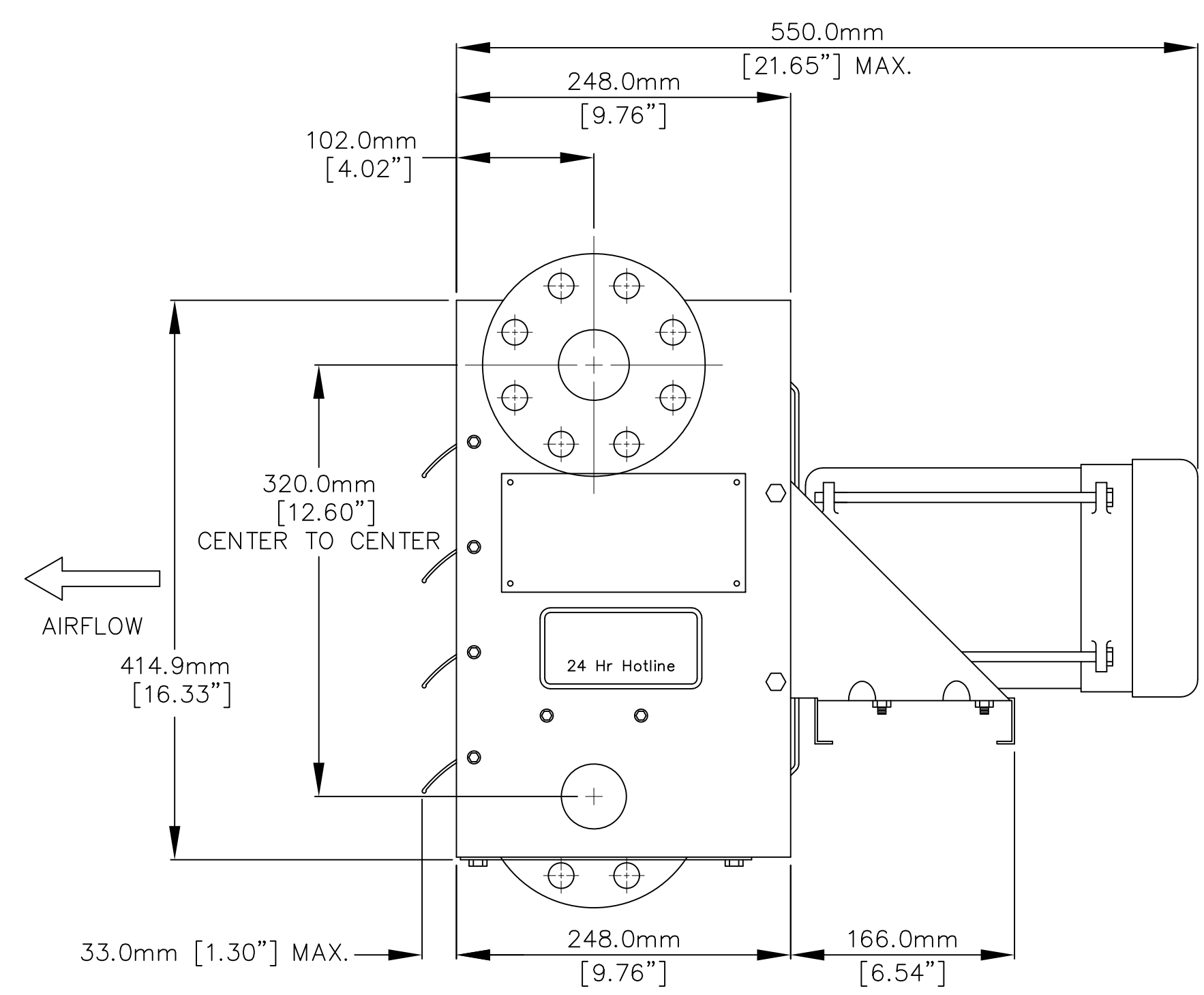
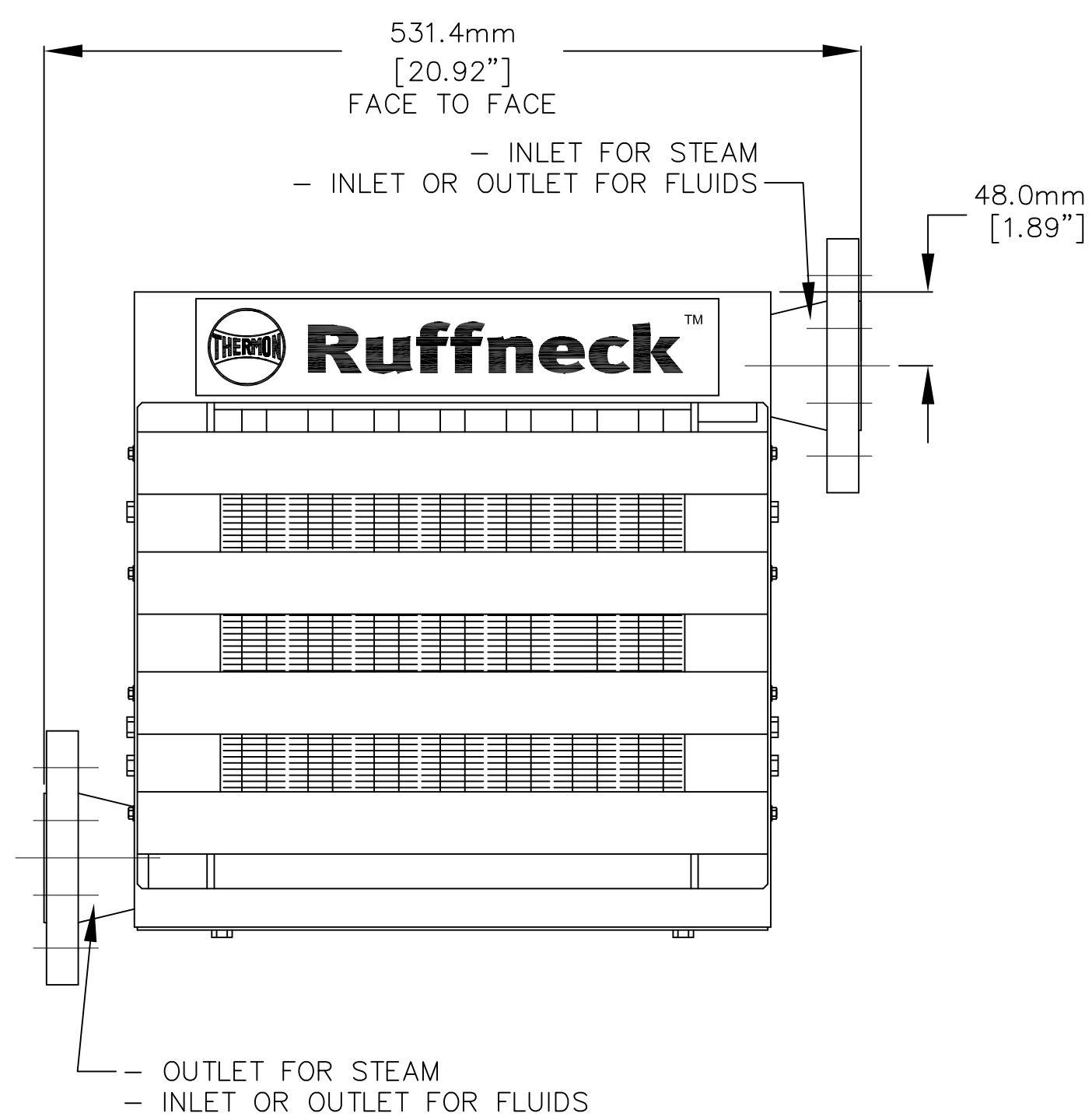
MOTOR ELECTRICAL SPECS			
	VOLTS	PHASE	HERTZ
A	115	1	60
B	208	1	60
C	208	3	60
D	230	1	60
E	230	3	60
F	460	1	60
G	460	3	60
H	575	3	60
I	220	1	50
J	380	3	50
K	440	3	50

MOTOR ENCLOSURE	
1	TOTALLY ENCLOSED
2	X-PROOF, GR C, D, E, F & G
3	CSA CERTIFIED HEATER*

FINNED TUBING					
TUBING	WALL THICKNESS	ROWS	FINS/INCH	MATERIAL	TYPE
5/8"	0.065"	3	10	AL	TW
TW=TENSION WOUND					
EX=EXTRUDED					
AL=ALUMINUM					

BUILT-IN DISCONNECT SWITCH

- NOTES:
- TOLERANCES ON DIMENSIONS ARE +/-2.0mm [+/-0.06"]
 - AIR DELIVERY: 997 CFM (AT 70°F AT SEA LEVEL)
 - AIR THROW AT 15PSI STREAM = 40' (12.2m)
 - NET WEIGHT: 75 lbs.
 - SHIPPING WEIGHT: 102 lbs.
 - MAX. OPERATING PRESSURE: 100 PSI FOR FR SERIES UP TO 400 PSI FOR HP SERIES
 - ADD 12 lbs TO FLANGED UNITS.



DATE	REVISION	BY	CHK



DRAWN BY: MTC	TITLE: INSTL DWG, HP1,HP3-12 FR1-12 HEATERS DRAWING NO.: FR_HP12
CHECKED BY: -	
SCALE: 1:4	
DATE: 25 OCT 2007	

BASE MODEL	FAN SIZE	CABINET MATERIAL	EXCHANGER COATING	CONNECTION TYPE&SIZES	TUBE MATERIAL	MOTOR ENCLOSURE	MOTOR SPECS
FR1	16	A	1	A	1	1	A

HEATER SIZES AVAILABLE	MODEL & SIZE
FR1-12 THRU FR1-36	1-PASS FR1
HP1-12 THRU HP1-36	1-PASS HP1
HP3-12 THRU HP3-36	3-PASS HP3
HP5-16 THRU HP5-36	5-PASS HP5
HP7-24 THRU HP7-36	7-PASS HP7

MOTOR ELECTRICAL SPECS			
	VOLTS	PHASE	HERTZ
A	115	1	60
B	208	1	60
C	208	3	60
D	230	1	60
E	230	3	60
F	460	1	60
G	460	3	60
H	575	3	60
I	220	1	50
J	380	3	50
K	440	3	50

CABINET MATERIAL	
A	EPOXY POWDER COATED CARBON STEEL
B	HERESITE PHENOLIC COATED CARBON STEEL
C	STAINLESS STEEL

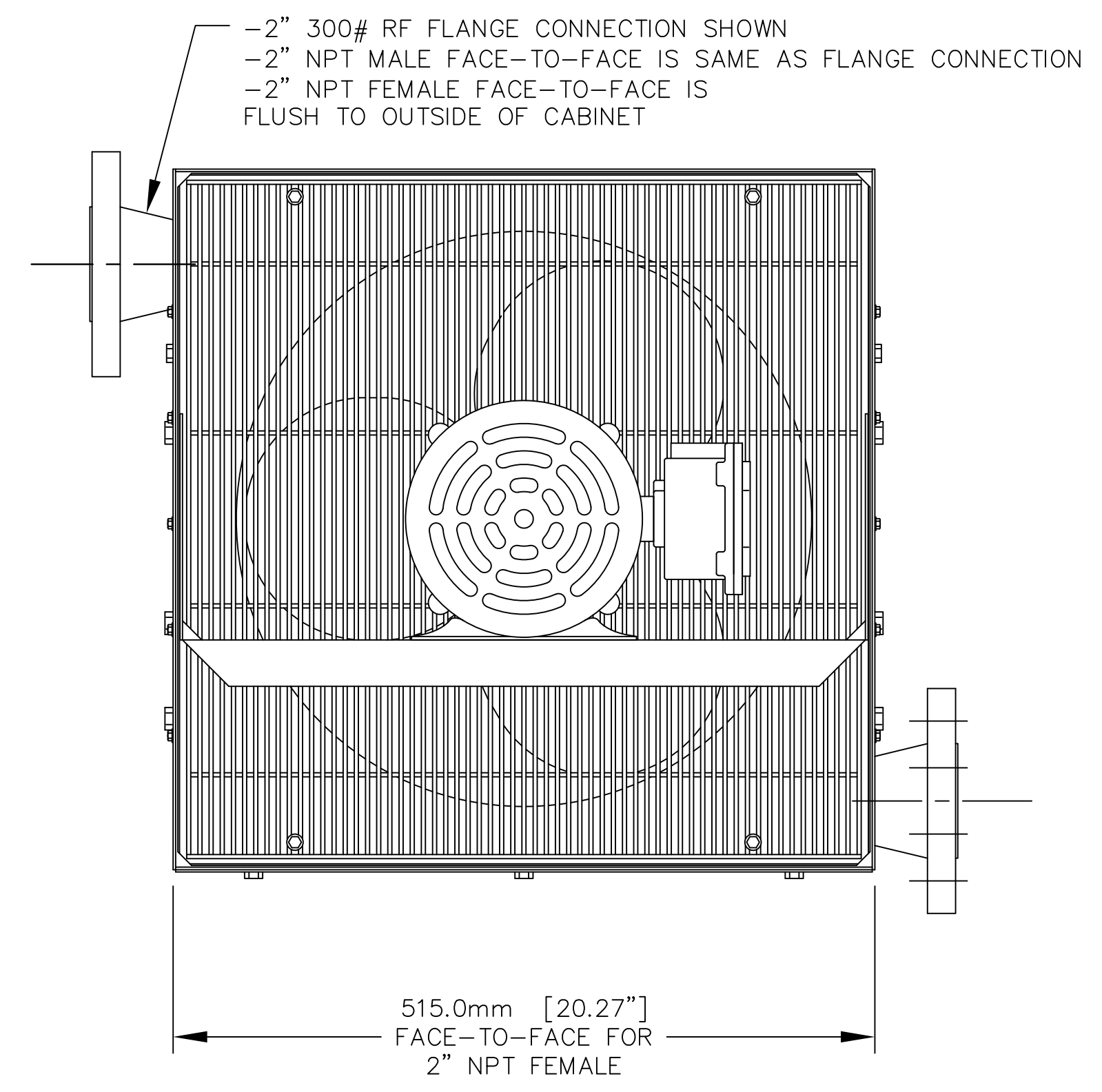
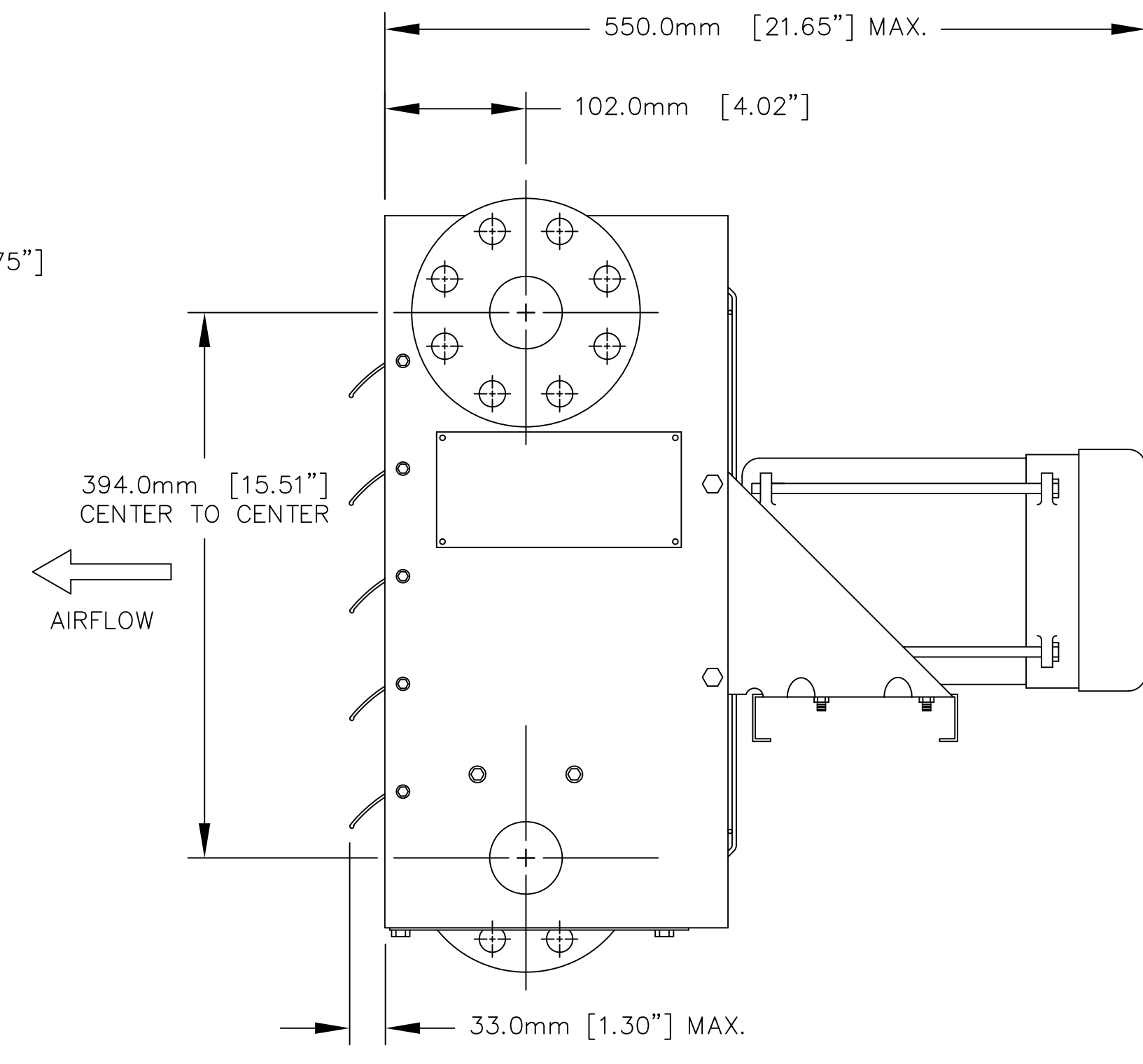
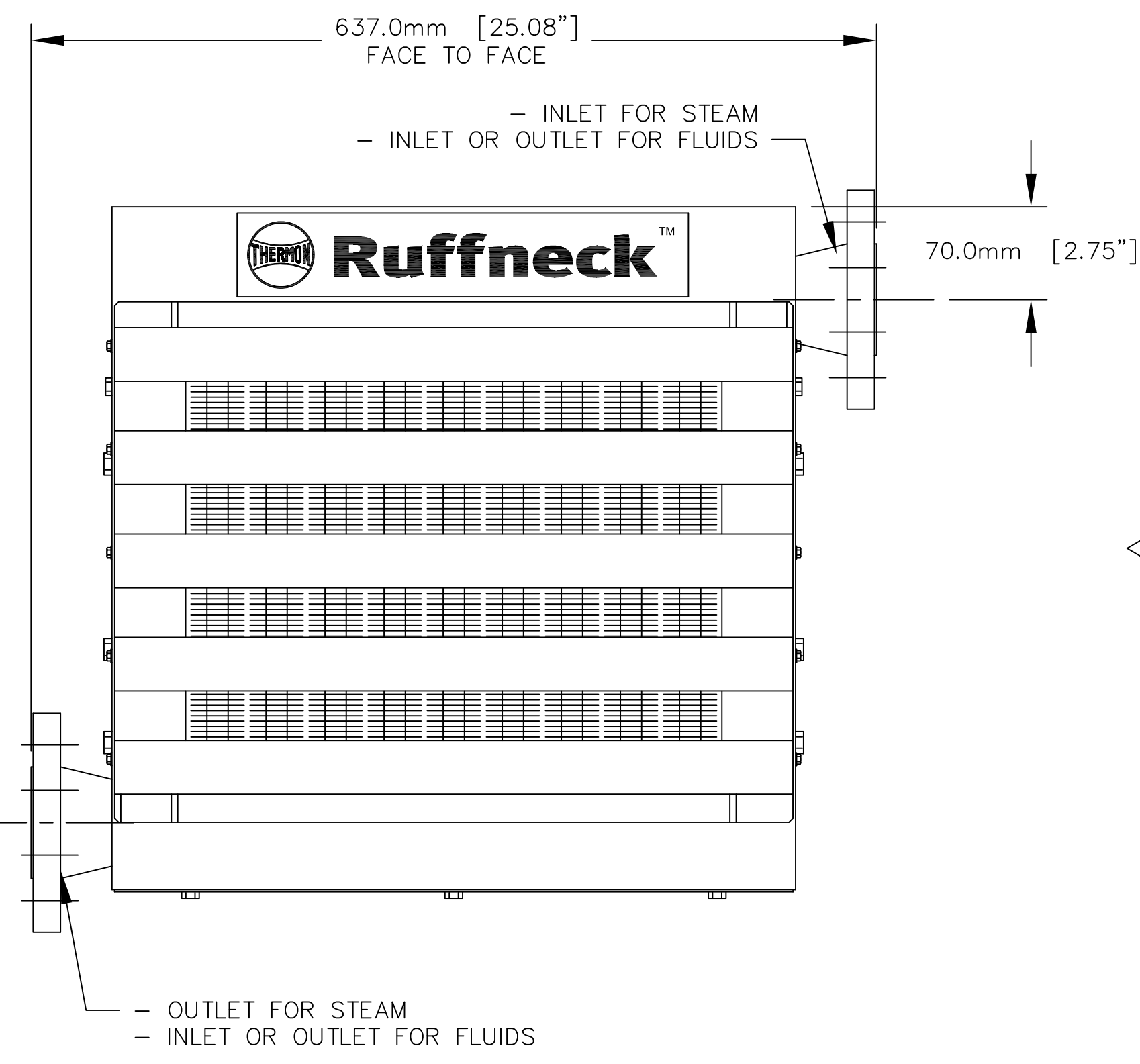
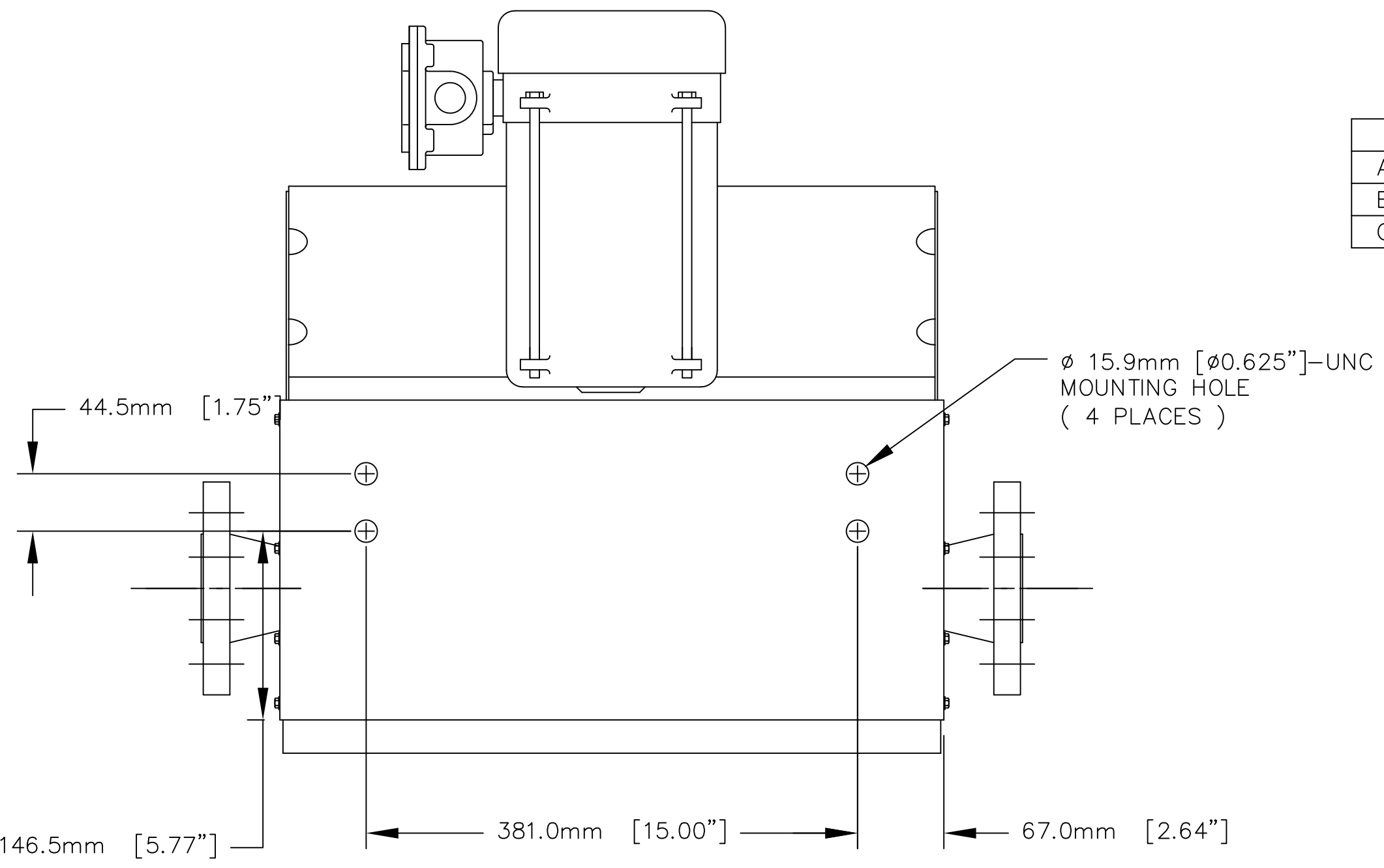
EXCHANGER COATINGS	
1	HEAT RESISTANT ALUMINUM PAINT
2	HERESITE PHENOLIC COATING

CONNECTIONS	
A	2" NPT FEMALE
B	2" NPT MALE SCH. 80
C	2" 300# RF FLANGE

MOTOR ENCLOSURE	
1	TOTALLY ENCLOSED
2	X-PROOF, GR C, D, E, F & G

FINNED TUBING						
TUBING	WALL THICKNESS	ROWS	FINS/INCH	MATERIAL	TYPE	
5/8"	0.065"	3	10	AL	TW	1
TW=TENSION WOUND						
EX=EXTRUDED						
AL=ALUMINUM						

- NOTES:
- TOLERANCES ON DIMENSIONS ARE +/-2.0mm [+/-0.06"]
 - AIR DELIVERY: 1588 CFM (AT 70°F AT SEA LEVEL)
 - AIR THROW AT 15PSI STREAM = 60' (18.3m)
 - NET WEIGHT: 109 lbs.
 - SHIPPING WEIGHT: 137 lbs.
 - MAX. OPERATING PRESSURE: 100 PSI FOR FR SERIES UP TO 400 PSI FOR HP SERIES
 - ADD 12 lbs TO FLANGED UNTS.

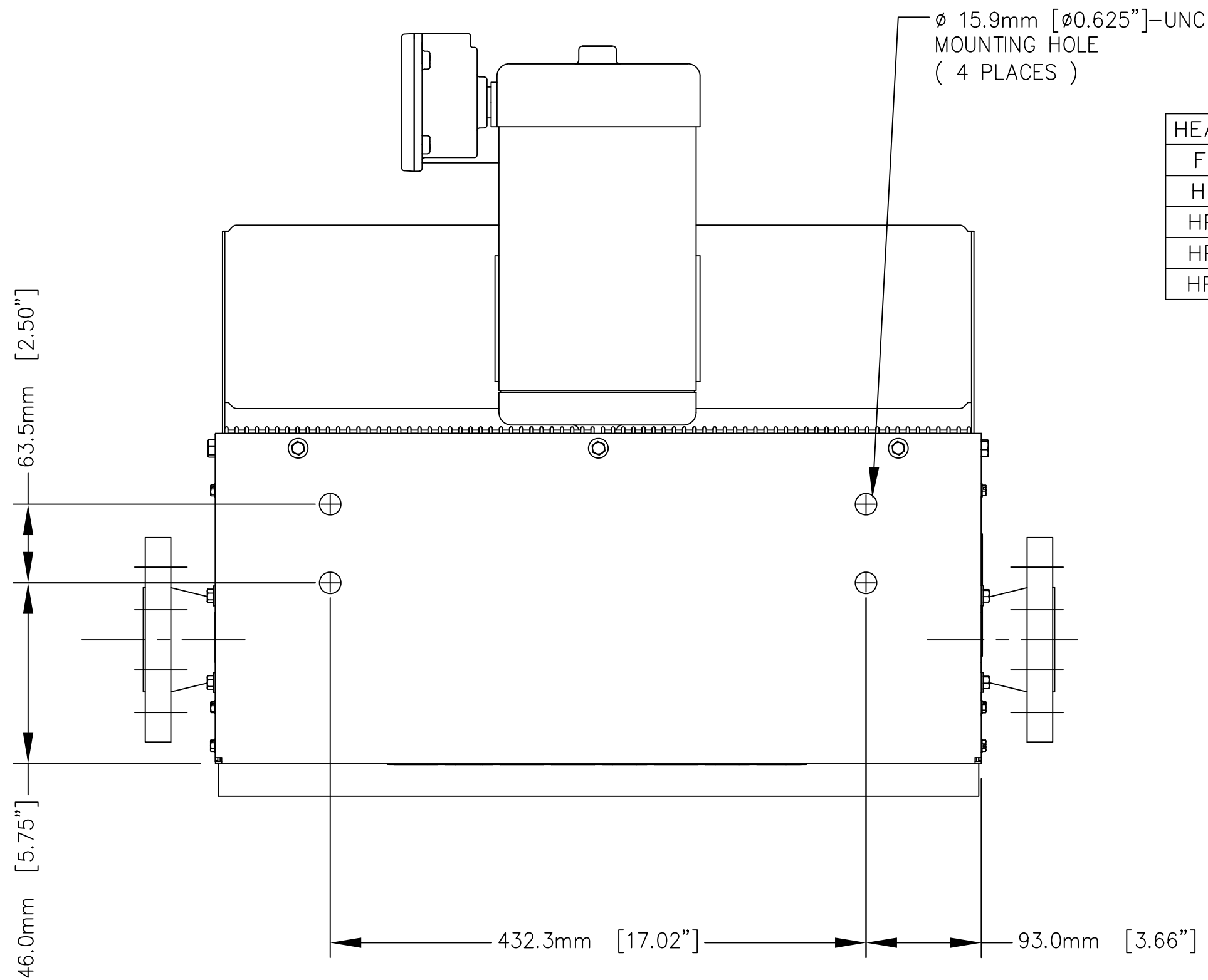


DATE	REVISION	BY	CHK

UNLESS OTHERWISE NOTED TOLERANCES ARE TO BE: ±1mm ±1/2° ANGLES



DRAWN BY: MTC	TITLE: INSTL DWG, HP1,HP3,HP5-16 FR1-16 HEATERS
CHECKED BY: -	
SCALE: 1:4	DRAWING NO.: FR_HP16
DATE: 12 NOV 2007	



HEATER SIZES AVAILABLE	MODEL & SIZE
FR1-12 THRU FR1-36	1-PASS FR1
HP1-12 THRU HP1-36	1-PASS HP1
HP3-12 THRU HP3-36	3-PASS HP3
HP5-16 THRU HP5-36	5-PASS HP5
HP7-24 THRU HP7-36	7-PASS HP7

FAN SIZE
20" DIA. 20

CABINET MATERIAL	
A	EPOXY POWDER COATED CARBON STEEL
B	HERESITE PHENOLIC COATED CARBON STEEL
C	STAINLESS STEEL

EXCHANGER COATINGS	
1	HEAT RESISTANT ALUMINUM PAINT
2	HERESITE PHENOLIC COATING

CONNECTIONS	
A	2" NPT FEMALE
B	2" NPT MALE SCH. 80
C	2" 300# RF FLANGE

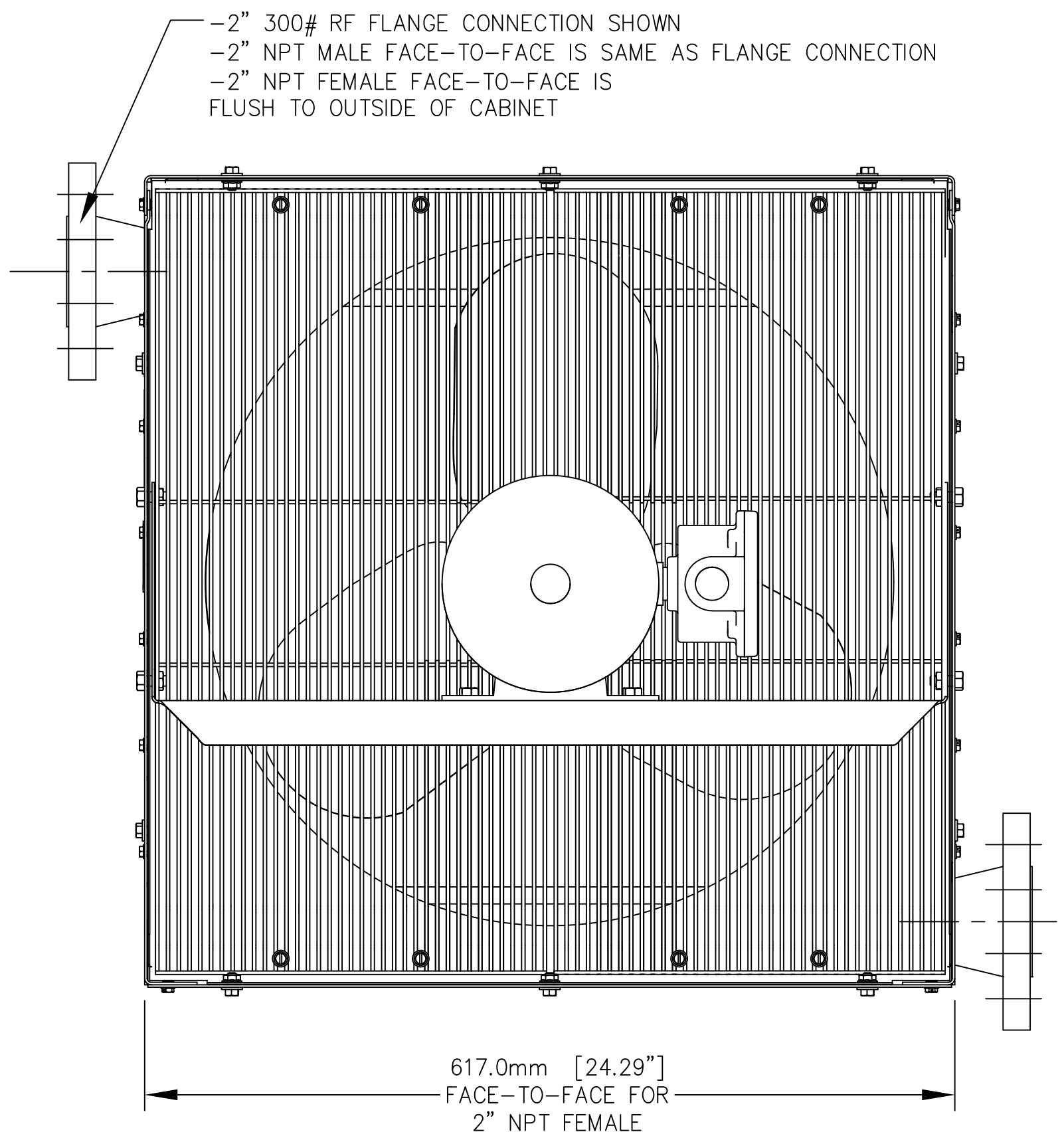
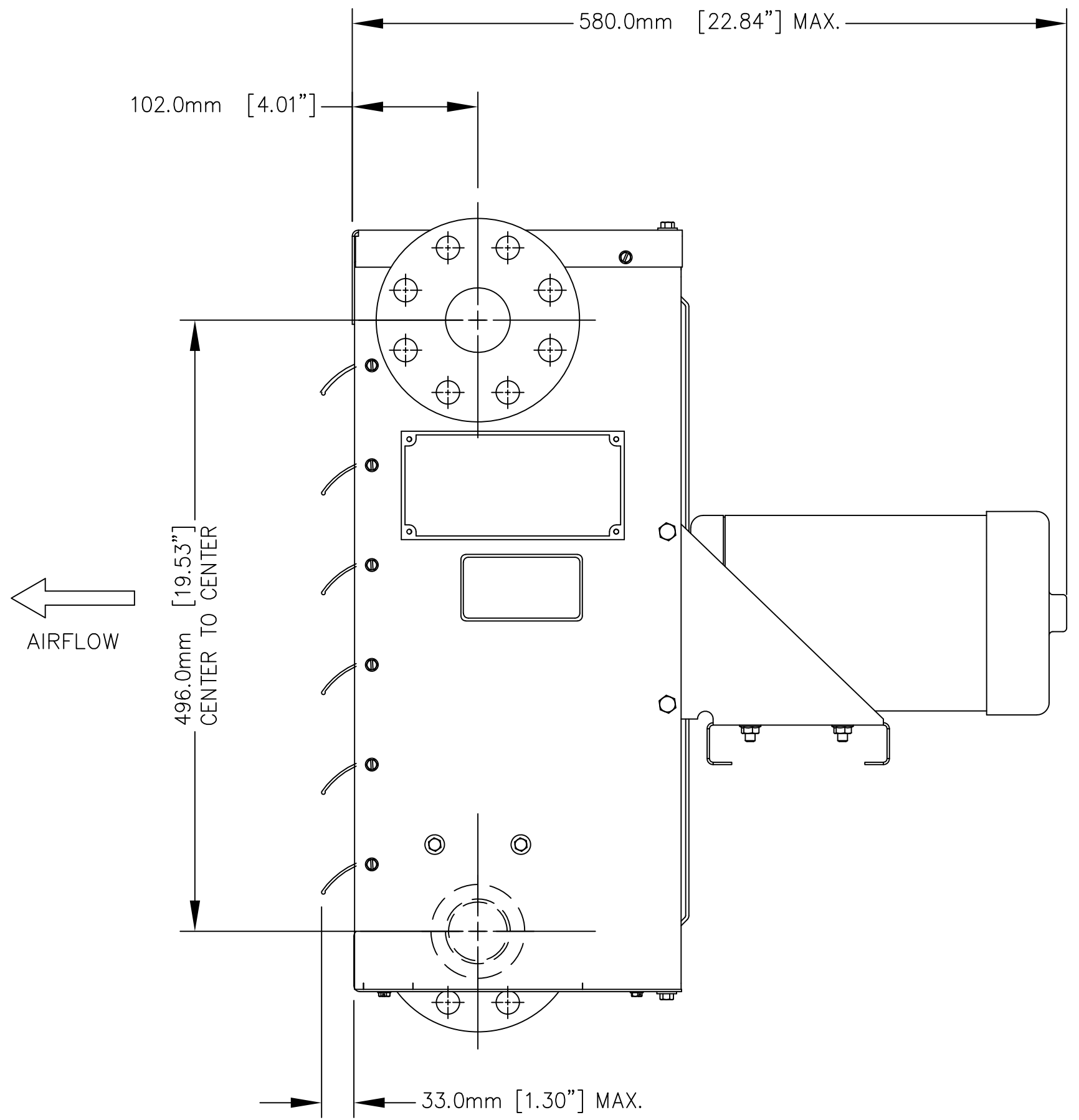
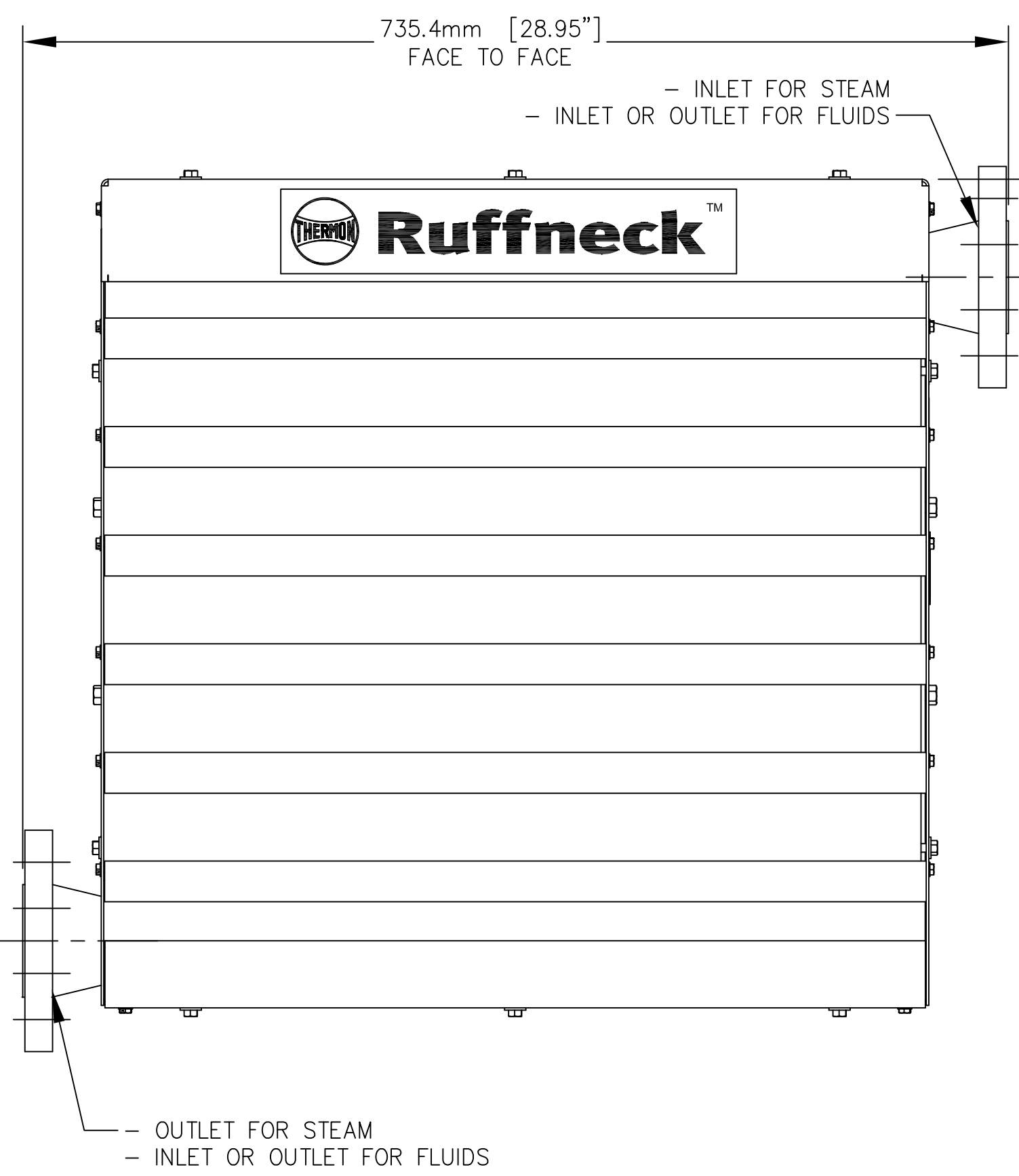
BASE MODEL	FAN SIZE	CABINET MATERIAL	EXCHANGER COATING	CONNECTION TYPE&SIZES	TUBE MATERIAL	MOTOR ENCLOSURE	MOTOR SPECS
FR1	20	A	1	A	1	1	A

MOTOR ELECTRICAL SPECS			
	VOLTS	PHASE	HERTZ
A	115	1	60
B	208	1	60
C	208	3	60
D	230	1	60
E	230	3	60
F	460	1	60
G	460	3	60
H	575	3	60
I	220	1	50
J	380	3	50
K	440	3	50

MOTOR ENCLOSURE	
1	TOTALLY ENCLOSED
2	X-PROOF, GR C, D, E, F & G

FINNED TUBING					
TUBING	WALL THICKNESS	ROWS	FINS/INCH	MATERIAL	TYPE
5/8"	0.065"	3	10	AL	TW 1
TW=TENSION WOUND					
EX=EXTRUDED					
AL=ALUMINUM					

- NOTES:
- TOLERANCES ON DIMENSIONS ARE +/-2.0mm [+/-0.06"]
 - AIR DELIVERY: 2780 CFM (AT 70°F AT SEA LEVEL)
 - AIR THROW AT 15PSI STREAM = 65' (19.8m)
 - NET WEIGHT: 138 lbs.
 - SHIPPING WEIGHT: 161 lbs.
 - MAX. OPERATING PRESSURE: 100 PSI FOR FR SERIES UP TO 400 PSI FOR HP SERIES
 - ADD 12 lbs TO FLANGED UNITS.
 - MOTOR: 1/2 HP

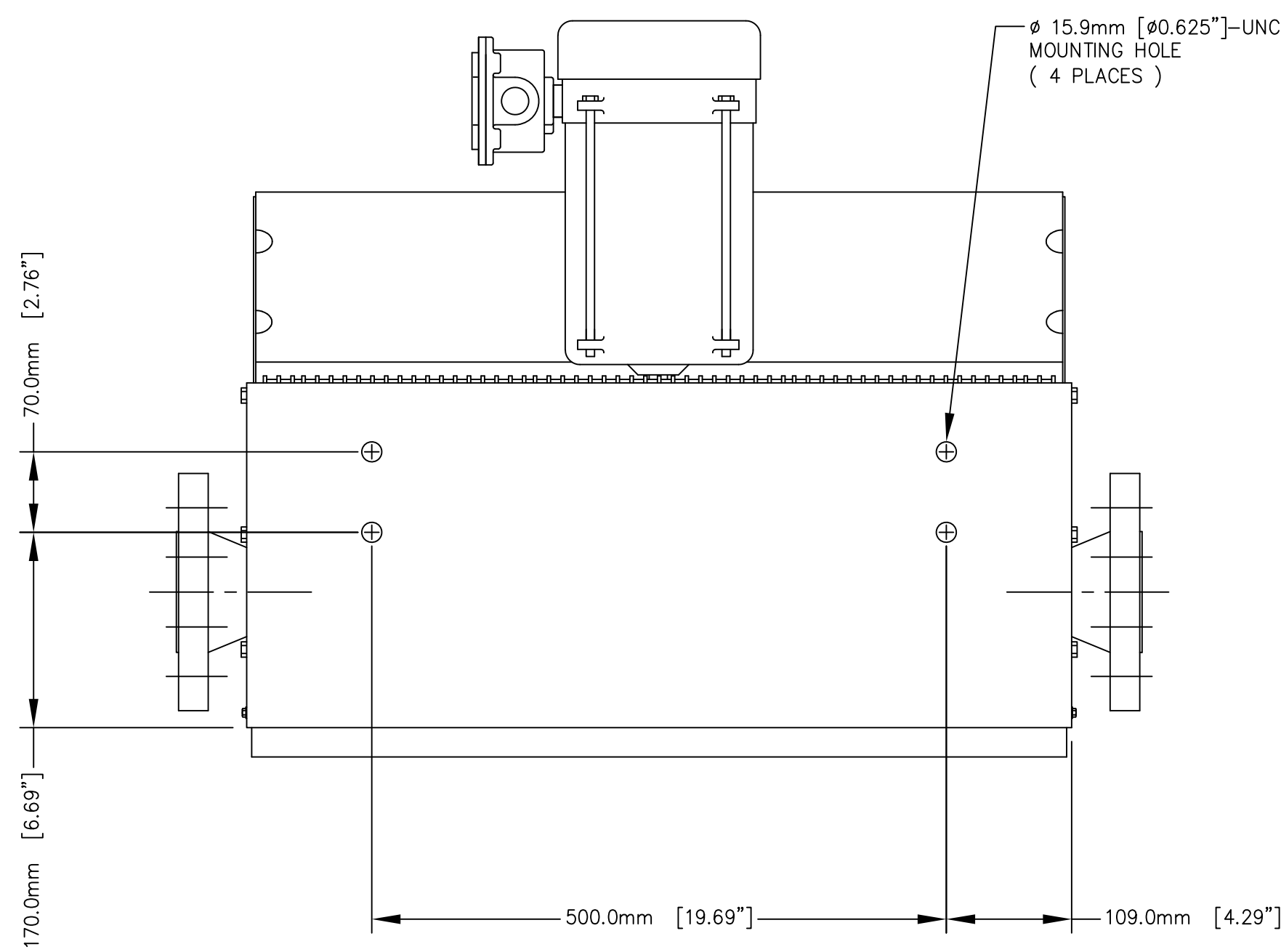


DATE	REVISION	BY	CHK

UNLESS OTHERWISE NOTED TOLERANCES ARE TO BE: ±1mm ±1/2° ANGLES 3.2/μm OR 125/μin



DRAWN BY: MTC	TITLE: INSTL DWG, HP1,HP3,HP5-20 FR1-20 HEATERS
CHECKED BY: -	
SCALE: 1:4	DRAWING NO.: FR_HP20
DATE: 12 NOV 2007	



BASE MODEL	FAN SIZE	CABINET MATERIAL	EXCHANGER COATING	CONNECTION TYPE&SIZES	TUBE MATERIAL	MOTOR ENCLOSURE	MOTOR SPECS
FR1	24	A	1	A	1	1	A

HEATER SIZES AVAILABLE		MODEL & SIZE	
FR1-12 THRU FR1-36	1-PASS	FR1	
HP1-12 THRU HP1-36	1-PASS	HP1	
HP3-12 THRU HP3-36	3-PASS	HP3	
HP5-16 THRU HP5-36	5-PASS	HP5	
HP7-24 THRU HP7-36	7-PASS	HP7	

FAN SIZE	
24" DIA.	24

CABINET MATERIAL	
A	EPOXY POWDER COATED CARBON STEEL
B	HERESITE PHENOLIC COATED CARBON STEEL
C	STAINLESS STEEL

EXCHANGER COATINGS	
1	HEAT RESISTANT ALUMINUM PAINT
2	HERESITE PHENOLIC COATING

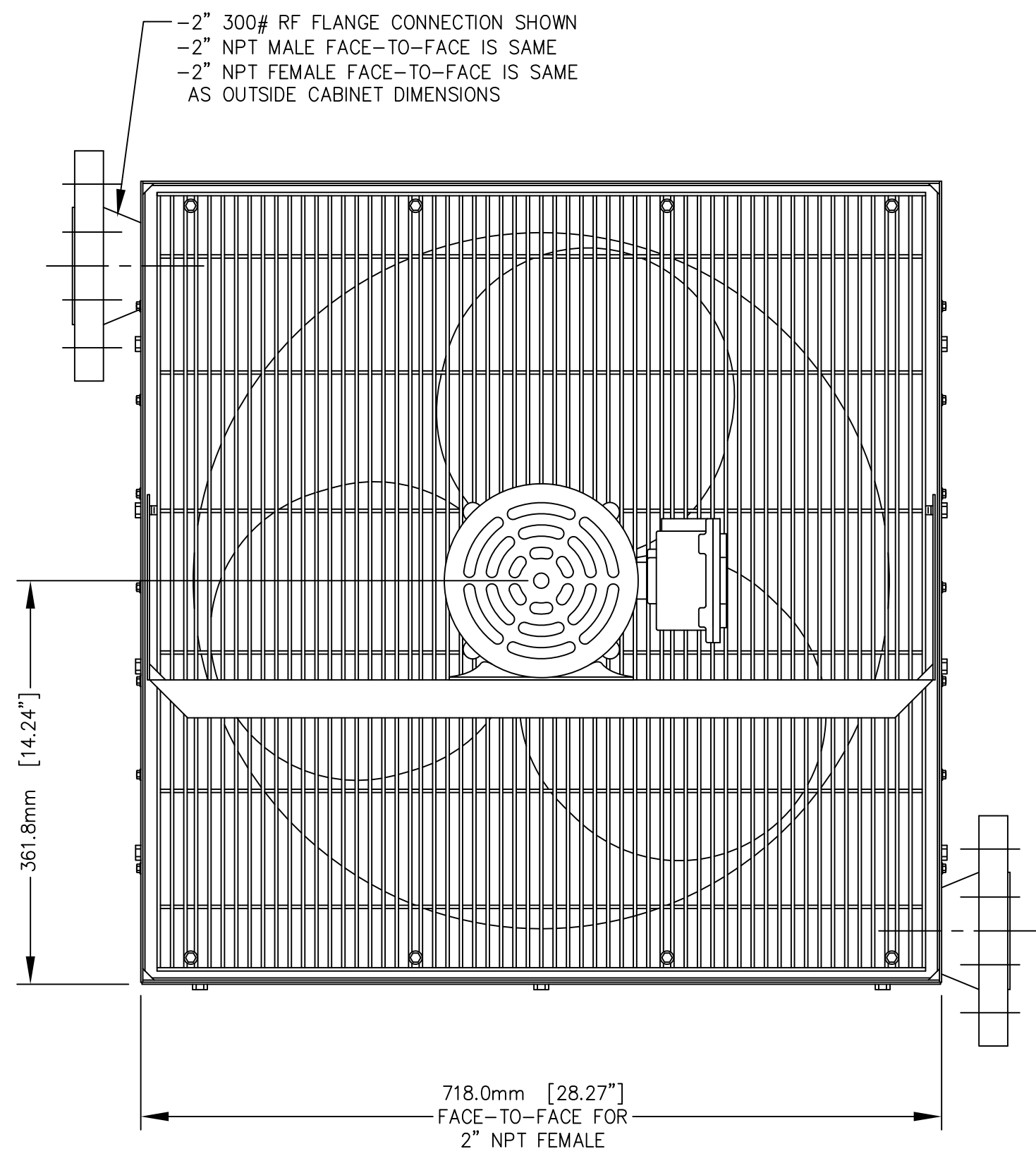
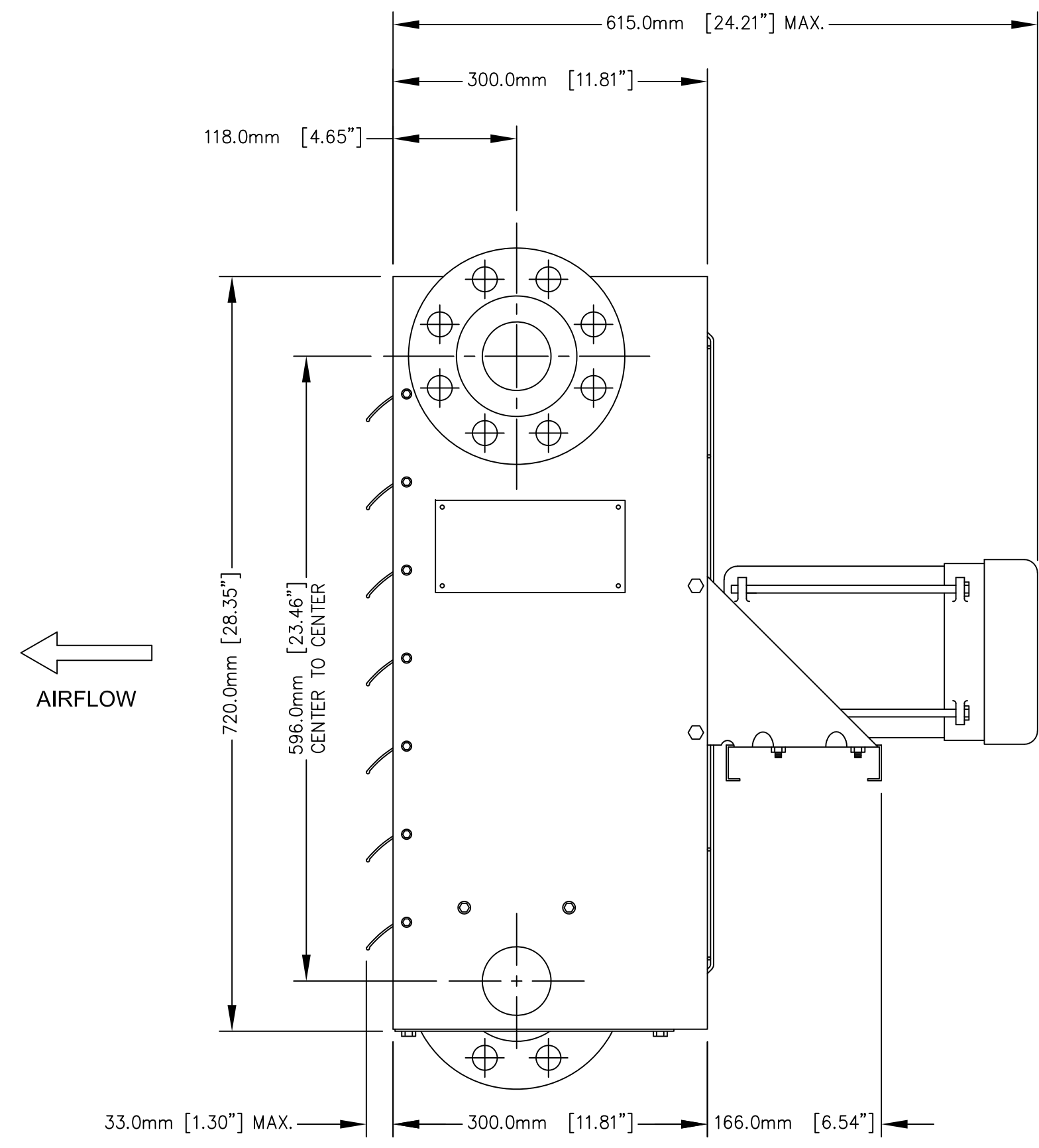
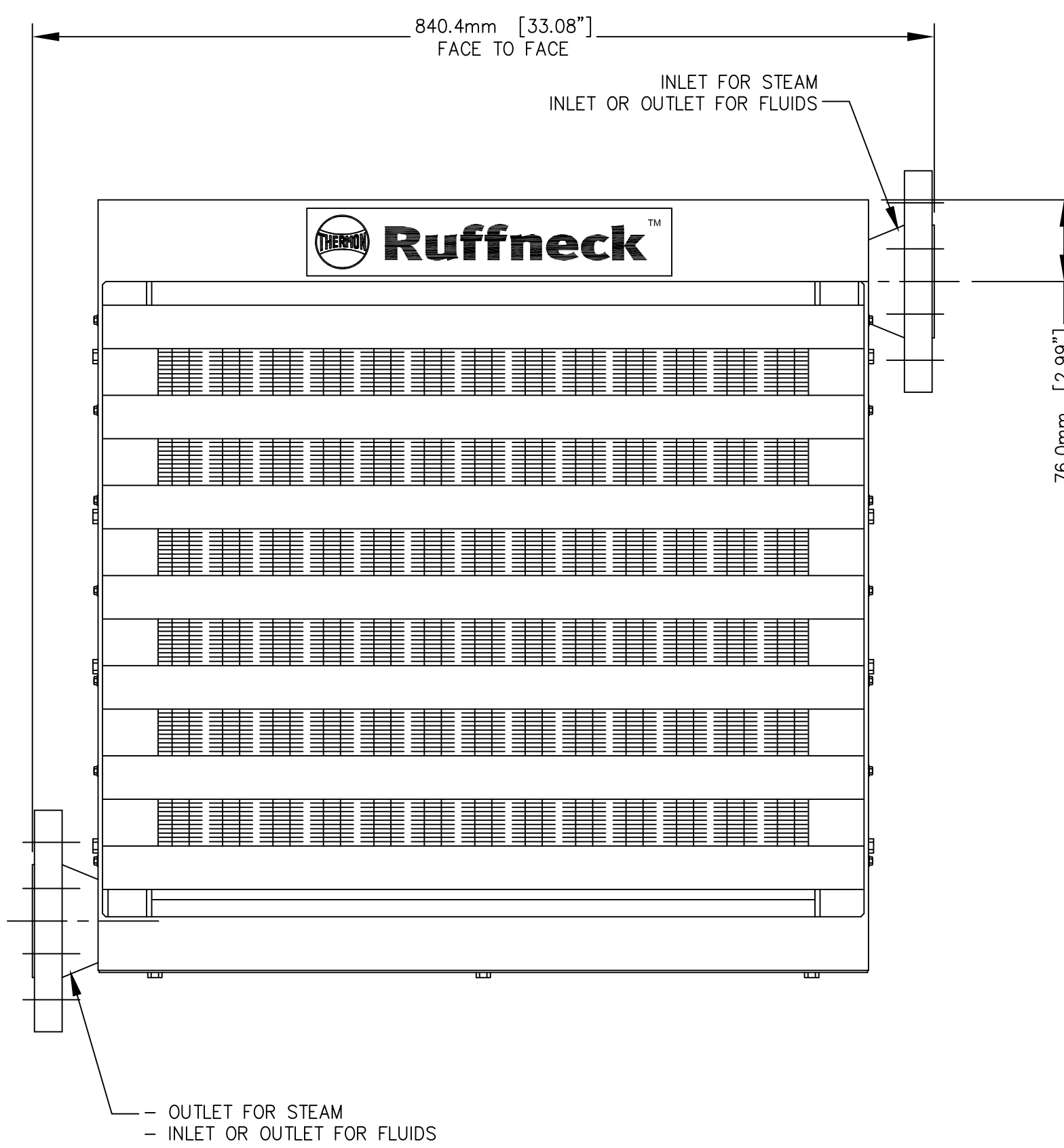
CONNECTIONS	
A	2" NPT FEMALE
B	2" NPT MALE SCH. 80
C	2" 300# RF FLANGE

MOTOR ELECTRICAL SPECS		
VOLTS	PHASE	HERTZ
A	115	1 60
B	208	1 60
C	208	3 60
D	230	1 60
E	230	3 60
F	460	1 60
G	460	3 60
H	575	3 60
I	220	1 50
J	380	3 50
K	440	3 50

MOTOR ENCLOSURE	
1	TOTALLY ENCLOSED
2	X-PROOF, GR C, D, E, F & G

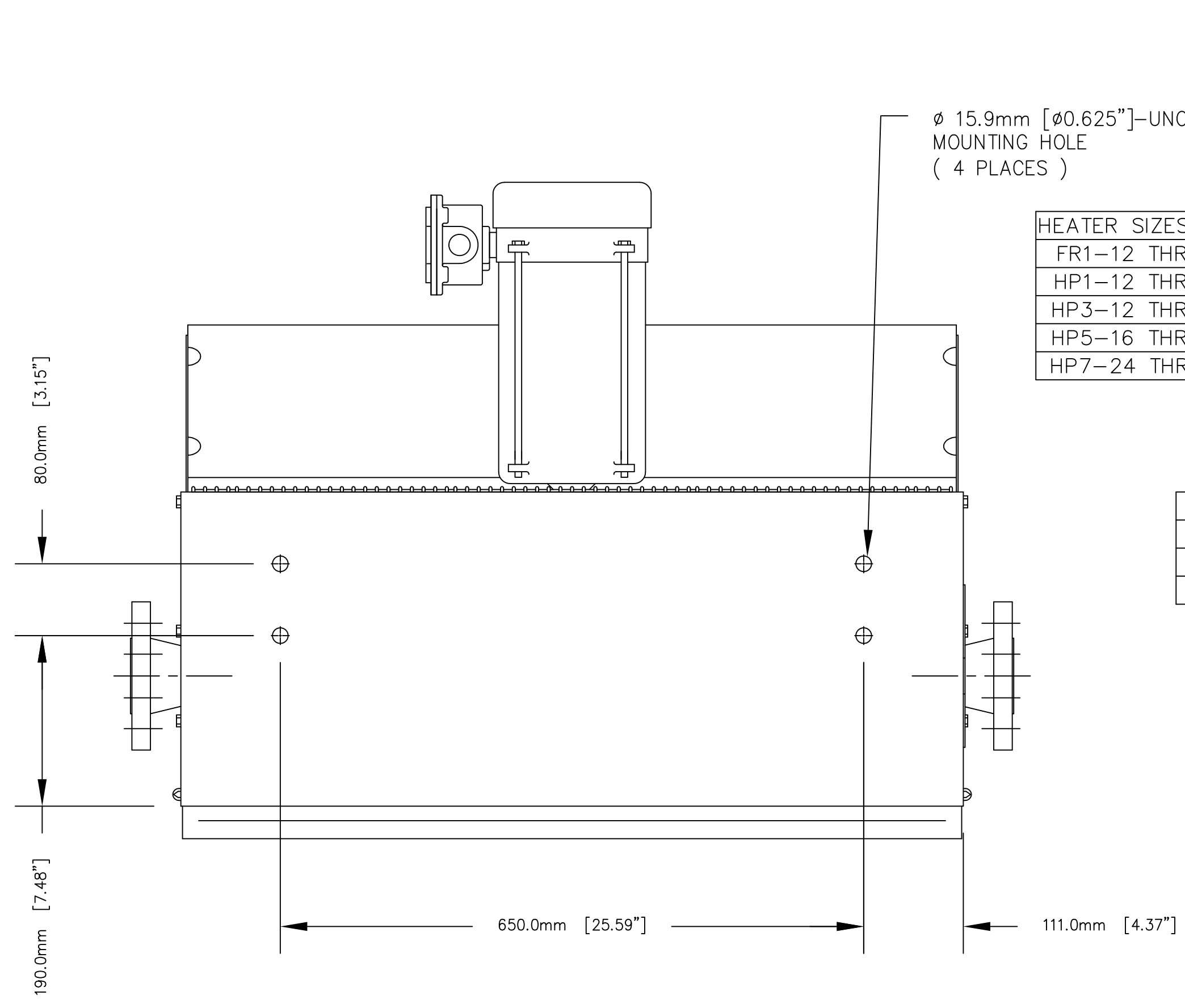
FINNED TUBING						
TUBING	AL	EX	THICKNESS	FINNINGS	IN/CM	TYPE
5/8"	0.065"	3	10	AL	TW	1
TW=TENSION WOUND						
EX=EXTRUDED						
AL=ALUMINUM						

- NOTES:
- TOLERANCES ON DIMENSIONS ARE +/-2.0mm [+/-0.06"]
 - AIR DELIVERY: 3405 CFM (AT 70° AT SEA LEVEL)
 - AIR THROW AT 15PSI STREAM = 70' (21.3m)
 - NET WEIGHT: 191 lbs.
 - SHIPPING WEIGHT: 224 lbs.
 - MAX. OPERATING PRESSURE: 100 PSI FOR FR SERIES UP TO 300 PSI FOR HP SERIES
 - ADD 12 lbs TO FLANGED UNITS.



DATE	REVISION	BY	CHK
UNLESS OTHERWISE NOTED TOLERANCES ARE TO BE:		±1mm	±1/2° ANGLES
		3.2/mm	OR 125/in

DRAWN BY:	MTC	TITLE:	INSTL DWG, HP1, HP3, HP5, HP7-24 FR1-24 HEATERS
CHECKED BY:	-	DRAWING NO.:	FR_HP24
SCALE:	1:5		
DATE:	13 NOV 2007		



HEATER SIZES AVAILABLE MODEL & SIZE			
FR1-12 THRU FR1-36	1-PASS	FR1	
HP1-12 THRU HP1-36	1-PASS	HP1	
HP3-12 THRU HP3-36	3-PASS	HP3	
HP5-16 THRU HP5-36	5-PASS	HP5	
HP7-24 THRU HP7-36	7-PASS	HP7	

FAN SIZE	
30" DIA.	30

CABINET MATERIAL	
A	EPOXY POWDER COATED CARBON STEEL
B	HERESITE PHENOLIC COATED CARBON STEEL
C	STAINLESS STEEL

EXCHANGER COATINGS	
1	HEAT RESISTANT ALUMINUM PAINT
2	HERESITE PHENOLIC COATING

CONNECTIONS	
A	2" NPT FEMALE
B	2" NPT MALE SCH. 80
C	2" 300# RF FLANGE

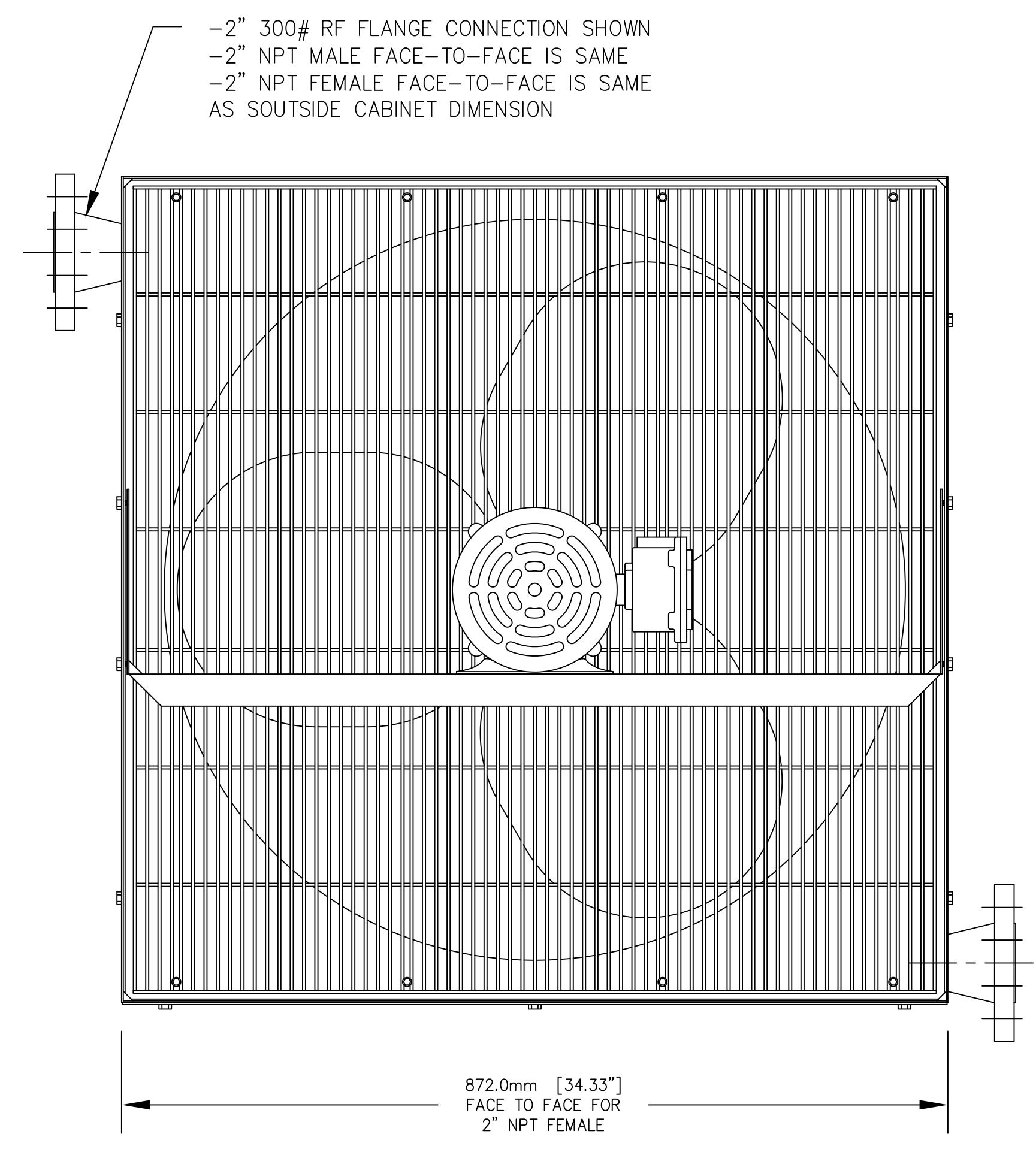
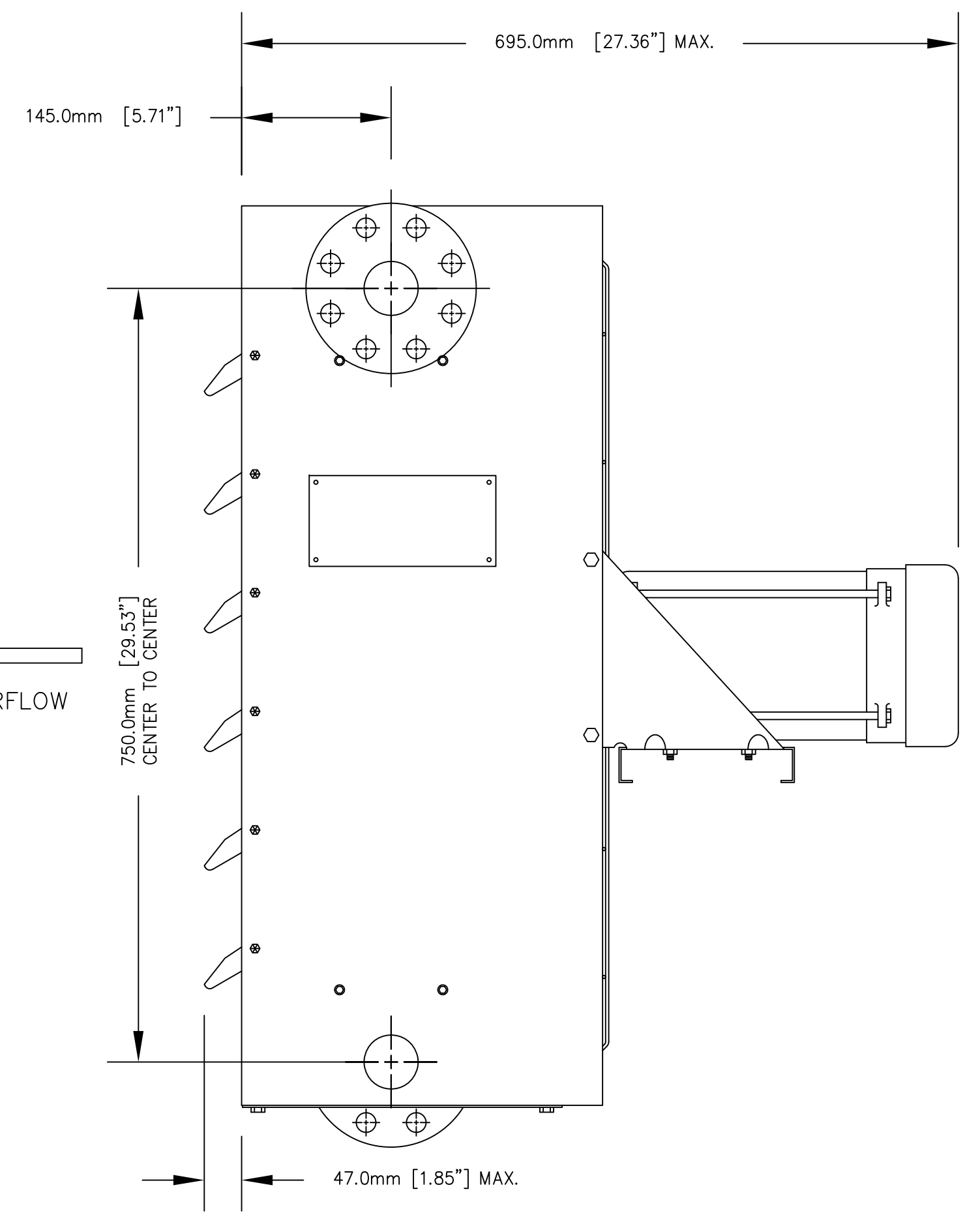
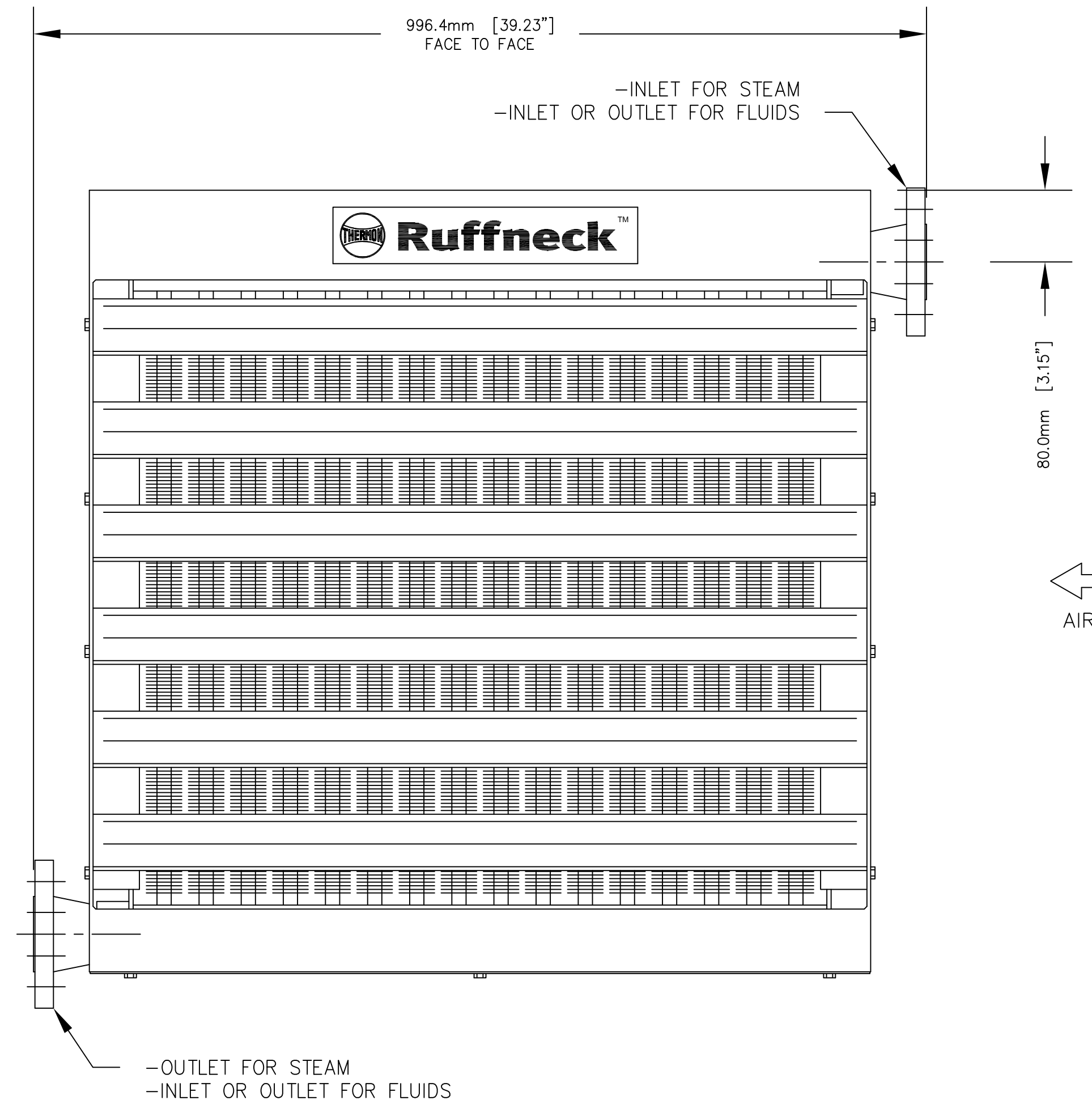
BASE MODEL	FAN SIZE	CABINET MATERIAL	EXCHANGER COATING	CONNECTION TYPE&SIZES	TUBE MATERIAL	MOTOR ENCLOSURE	MOTOR SPECS
FR1	30	A	1	A	1	1	A

MOTOR ELECTRICAL SPECS			
	VOLTS	PHASE	HERTZ
A	115	1	60
B	208	1	60
C	208	3	60
D	230	1	60
E	230	3	60
F	460	1	60
G	460	3	60
H	575	3	60
I	220	1	50
J	380	3	50
K	440	3	50

MOTOR ENCLOSURE	
1	TOTALLY ENCLOSED
2	X-PROOF, GR C, D, E, F & G

FINNED TUBING					
TUBING	WALL THICKNESS	ROWS	FINS/INCH	MATERIAL	TYPE
5/8"	0.065"	3	10	AL	TW
TW=TENSION WOUND					
EX=EXTRUDED					
AL=ALUMINUM					

- NOTES:
- TOLERANCES ON DIMENSIONS ARE +/-2.0mm [+/-0.06"]
 - AIR DELIVERY: 4569 CFM (AT 70°F AT SEA LEVEL)
 - AIR THROW AT 15PSI STREAM = 70' (21.3m)
 - NET WEIGHT: 286 lbs.
 - SHIPPING WEIGHT: 345 lbs.
 - MAX. OPERATING PRESSURE: 100 PSI FOR FR SERIES UP TO 300 PSI FOR HP SERIES
 - ADD 12 lbs TO FLANGED UNITS.



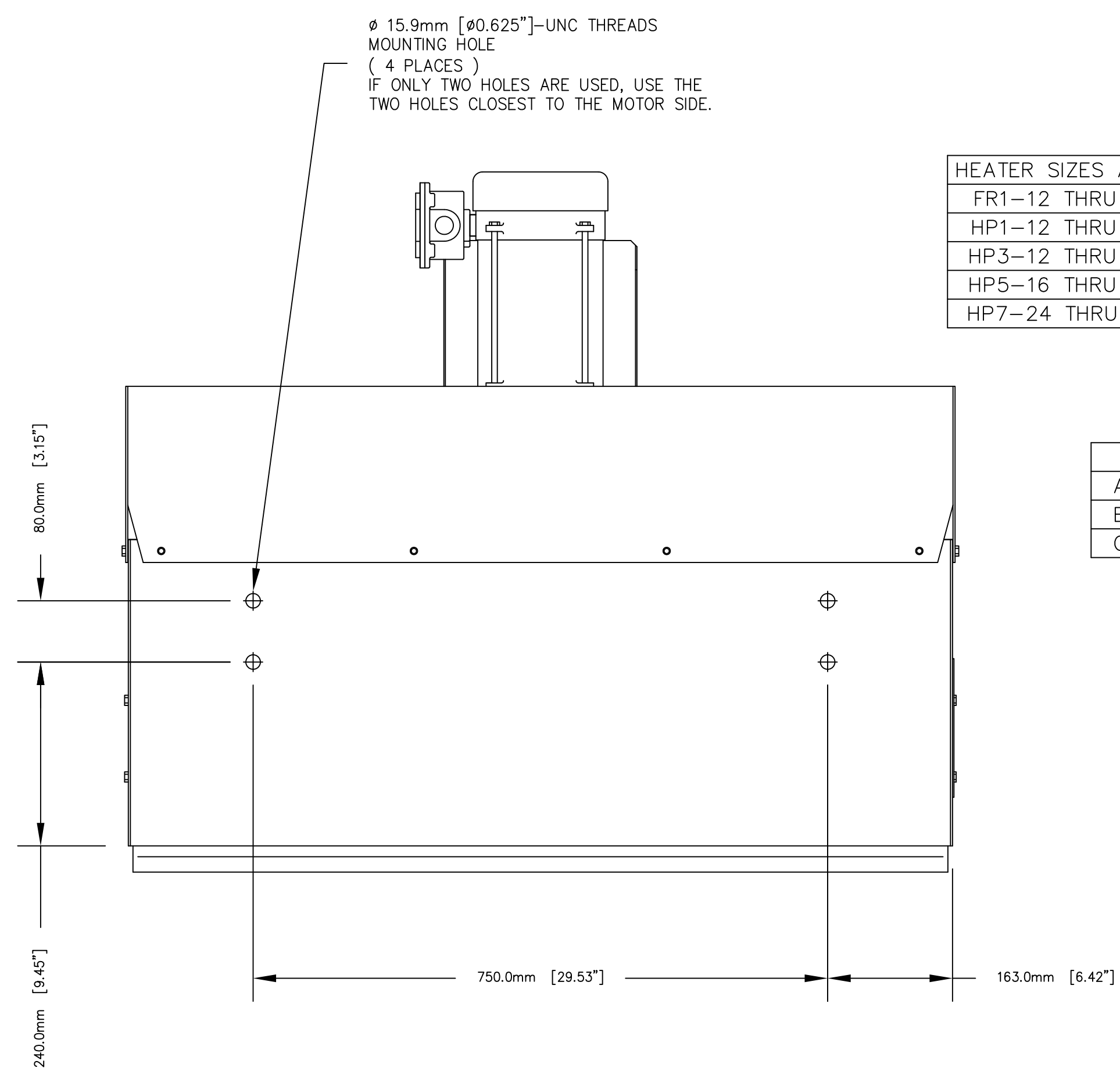
DATE	REVISION	BY	CHK

UNLESS OTHERWISE NOTED TOLERANCES ARE TO BE: ±1mm ±1/2° ANGLES

3.2/um OR 125/um



DRAWN BY: MTC	TITLE: INSTL DWG, HP1,HP3,HP5,HP7-30 FR1-30 HEATERS
CHECKED BY: -	DRAWING NO.: FR_HP30
SCALE: 1:5	
DATE: 27 NOV 2007	



HEATER SIZES AVAILABLE	MODEL & SIZE
FR1-12 THRU FR1-36	1-PASS FR1
HP1-12 THRU HP1-36	1-PASS HP1
HP3-12 THRU HP3-36	3-PASS HP3
HP5-16 THRU HP5-36	5-PASS HP5
HP7-24 THRU HP7-36	7-PASS HP7

FAN SIZE
36" DIA. 36

CABINET MATERIAL	
A	EPOXY POWDER COATED CARBON STEEL
B	HERESITE PHENOLIC COATED CARBON STEEL
C	STAINLESS STEEL

EXCHANGER COATINGS	
1	HEAT RESISTANT ALUMINUM PAINT
2	HERESITE PHENOLIC COATING

CONNECTIONS	
A	2" NPT FEMALE
B	2" NPT MALE SCH. 80
C	2" 300# RF FLANGE

* SEE NOTE 7.

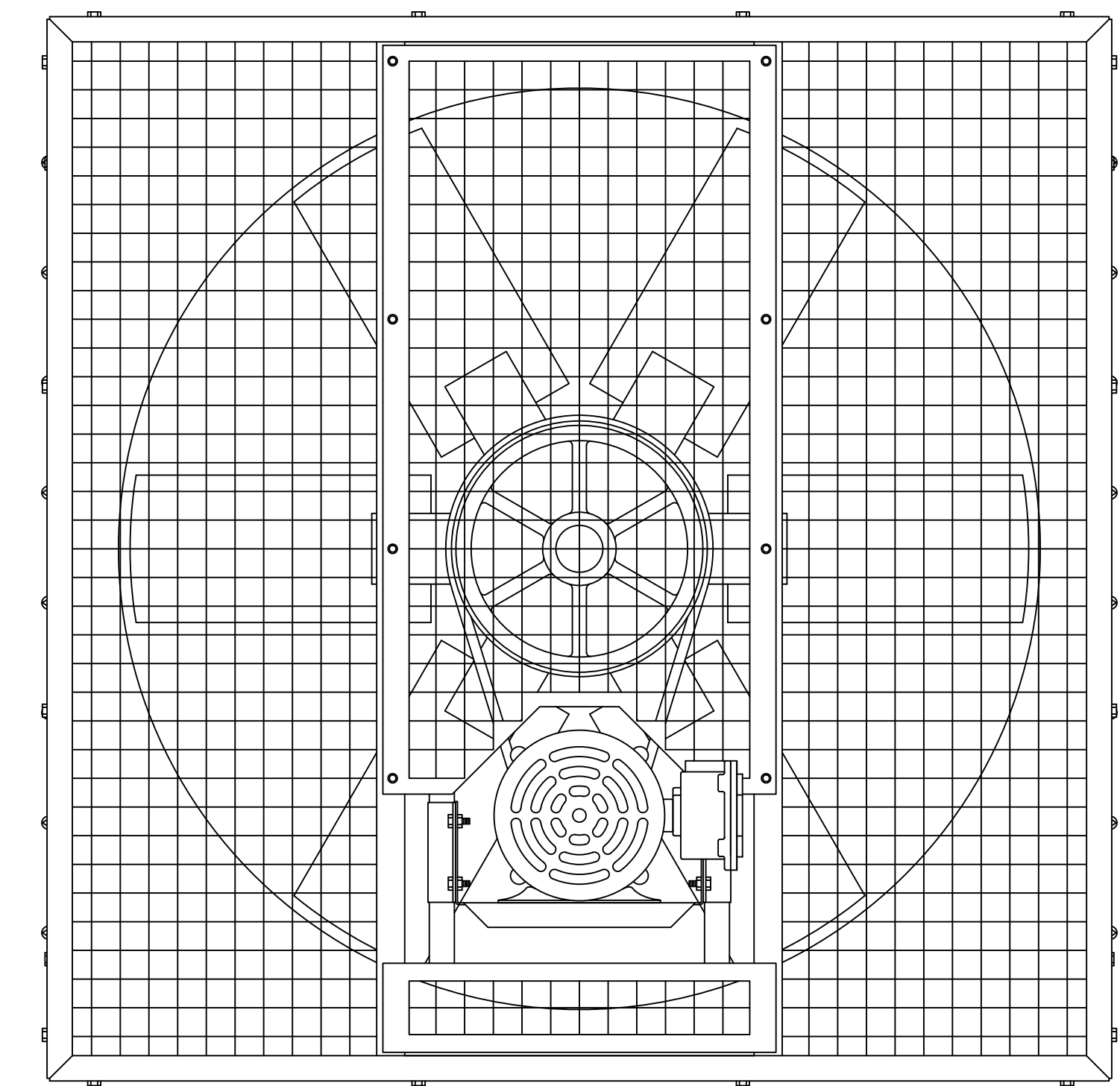
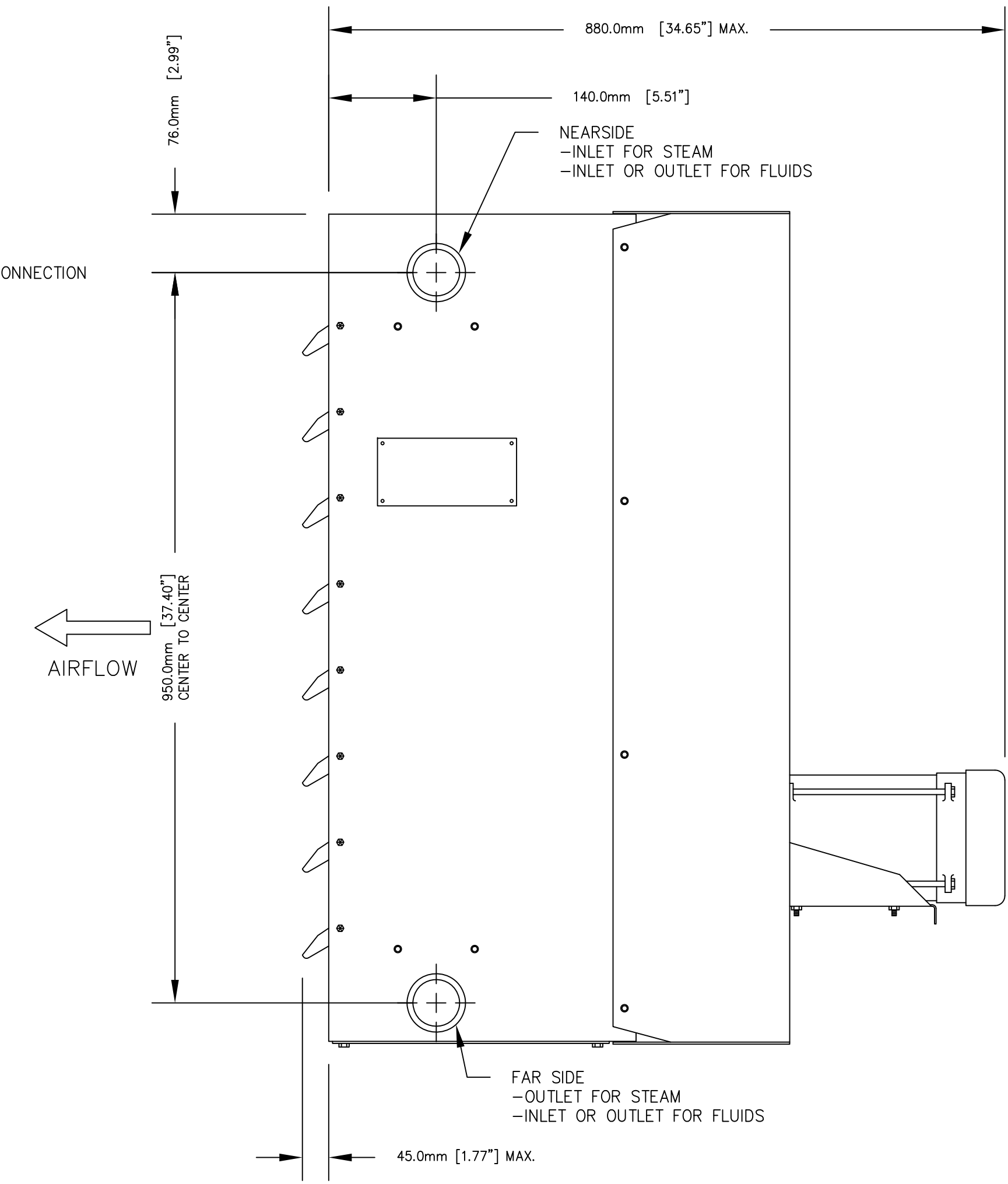
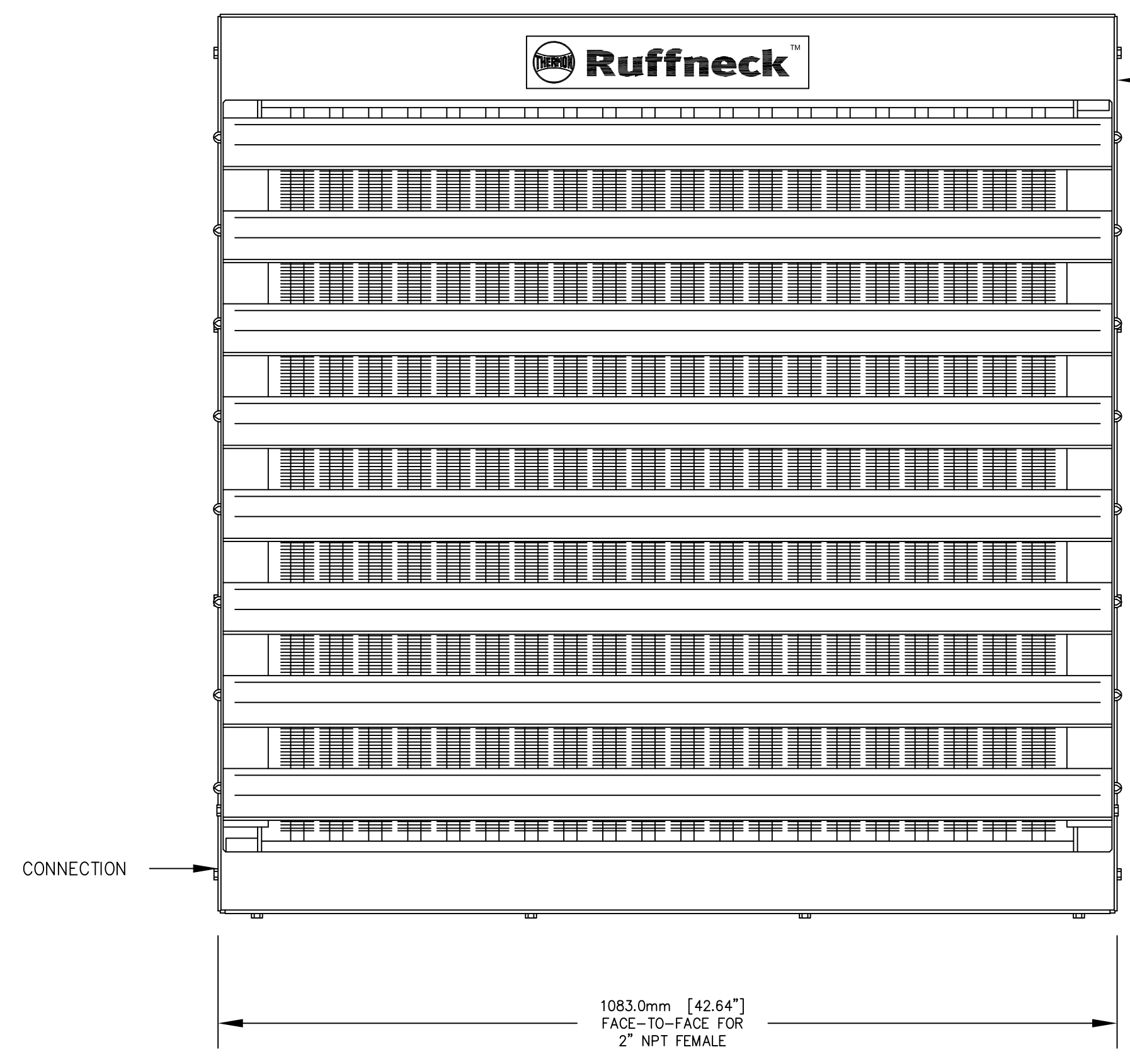
FINNED TUBING						
TUBING	WALL THICKNESS	ROWS	FINS/INCH	MATERIAL	TYPE	
5/8"	0.065"	3	10	AL	TW	1
TW=TENSION WOUND						
EX=EXTRUDED						
AL=ALUMINUM						

BASE MODEL	FAN SIZE	CABINET MATERIAL	EXCHANGER COATING	CONNECTION TYPE&SIZES	TUBE MATERIAL	MOTOR ENCLOSURE	MOTOR SPECS
FR1	36	A	1	A	1	1	A

MOTOR ELECTRICAL SPECS			
	VOLTS	PHASE	HERTZ
A	115	1	60
B	208	1	60
C	208	3	60
D	230	1	60
E	230	3	60
F	460	1	60
G	460	3	60
H	575	3	60
I	220	1	50
J	380	3	50
K	440	3	50

MOTOR ENCLOSURE	
1	TOTALLY ENCLOSED
2	X-PROOF, GR C, D, E, F & G

- NOTES:
- TOLERANCES ON DIMENSIONS ARE +/-2.0mm [+/-0.06"]
 - AIR DELIVERY: 7830 CFM (AT 70°F AT SEA LEVEL)
 - AIR THROW AT 15PSI STREAM = 65' (19.8m)
 - NET WEIGHT: 534 lbs.
 - SHIPPING WEIGHT: 597 lbs.
 - MAX. OPERATING PRESSURE: 100 PSI FOR FR SERIES UP TO 300 PSI FOR HP SERIES
 - 2" NPT FEMALE ONLY CONNECTION AVAILABLE FOR THIS SIZE OF HEATER.



DATE	REVISION	BY	CHK

UNLESS OTHERWISE NOTED TOLERANCES ARE TO BE: ±1mm ±1/2° ANGLES 3.2/um OR 125/um

DRAWN BY: MTC
 CHECKED BY: -
 SCALE: 1:6
 DATE: 28 NOV 2007

TITLE:
 INSTL DWG,
 HP1,HP3,HP5,HP7-36
 FR1-36 HEATERS
 DRAWING NO.: FR_HP36