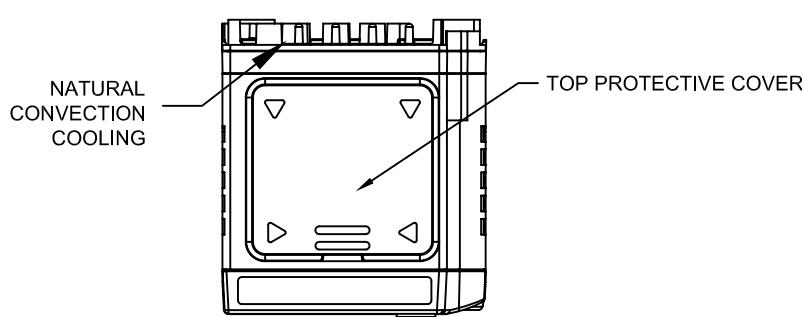
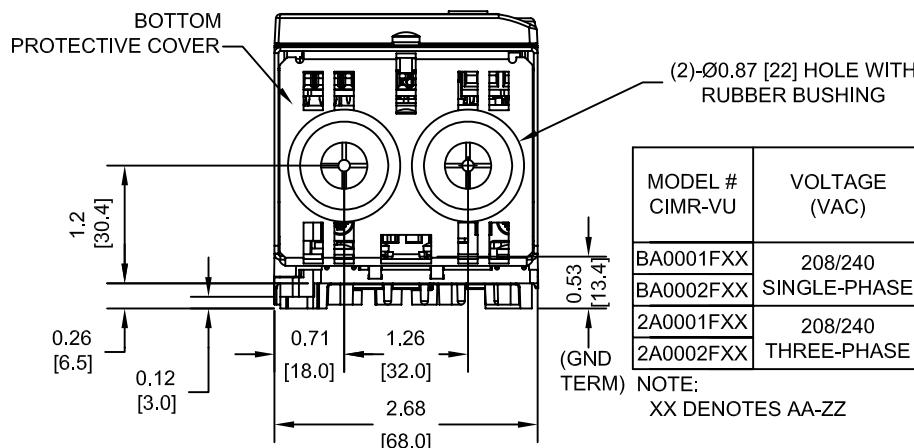
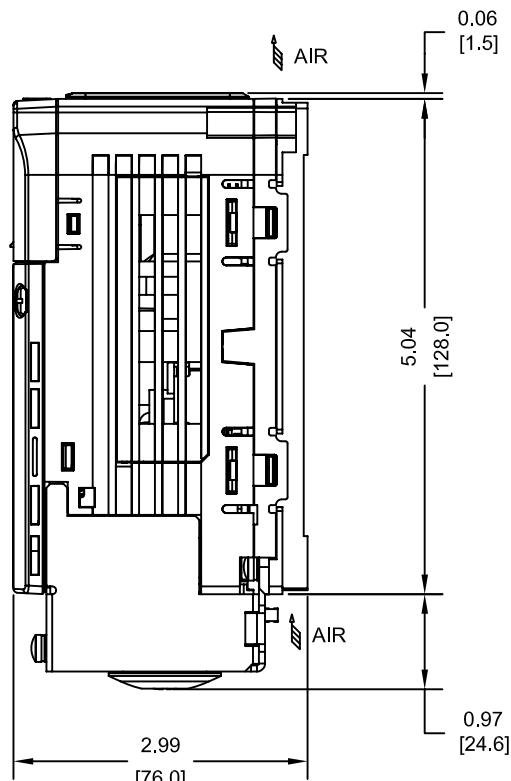
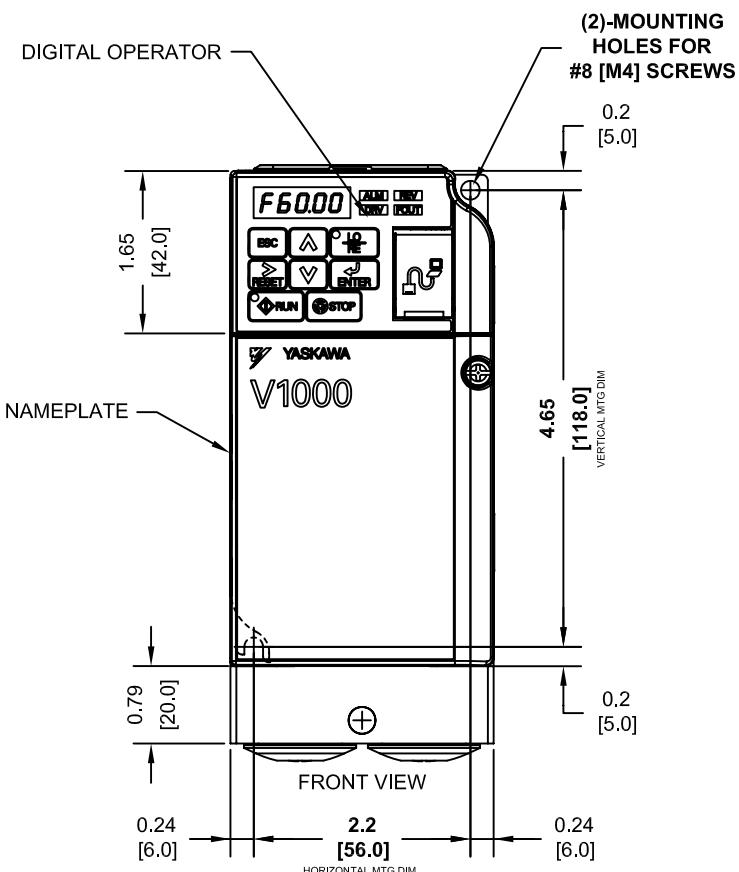


1 2 3 4 5 6 7 8



NOTE:
PROTECTIVE COVERS ARE FACTORY INSTALLED TO THE TOP AND BOTTOM OF THE DRIVE TO MEET IP20 & NEMA TYPE 1 REQUIREMENTS, RESULTING IN AN AMBIENT TEMPERATURE RATING OF 104F(40C). REMOVE THESE COVERS WHEN OPERATING THE DRIVE WITHIN A PANEL TO OBTAIN THE MAXIMUM SURROUNDING AIR TEMPERATURE RATING OF 122F(50C). REMOVING THESE COVERS RESULTS IN AN ENCLOSURE RATING OF IP00.

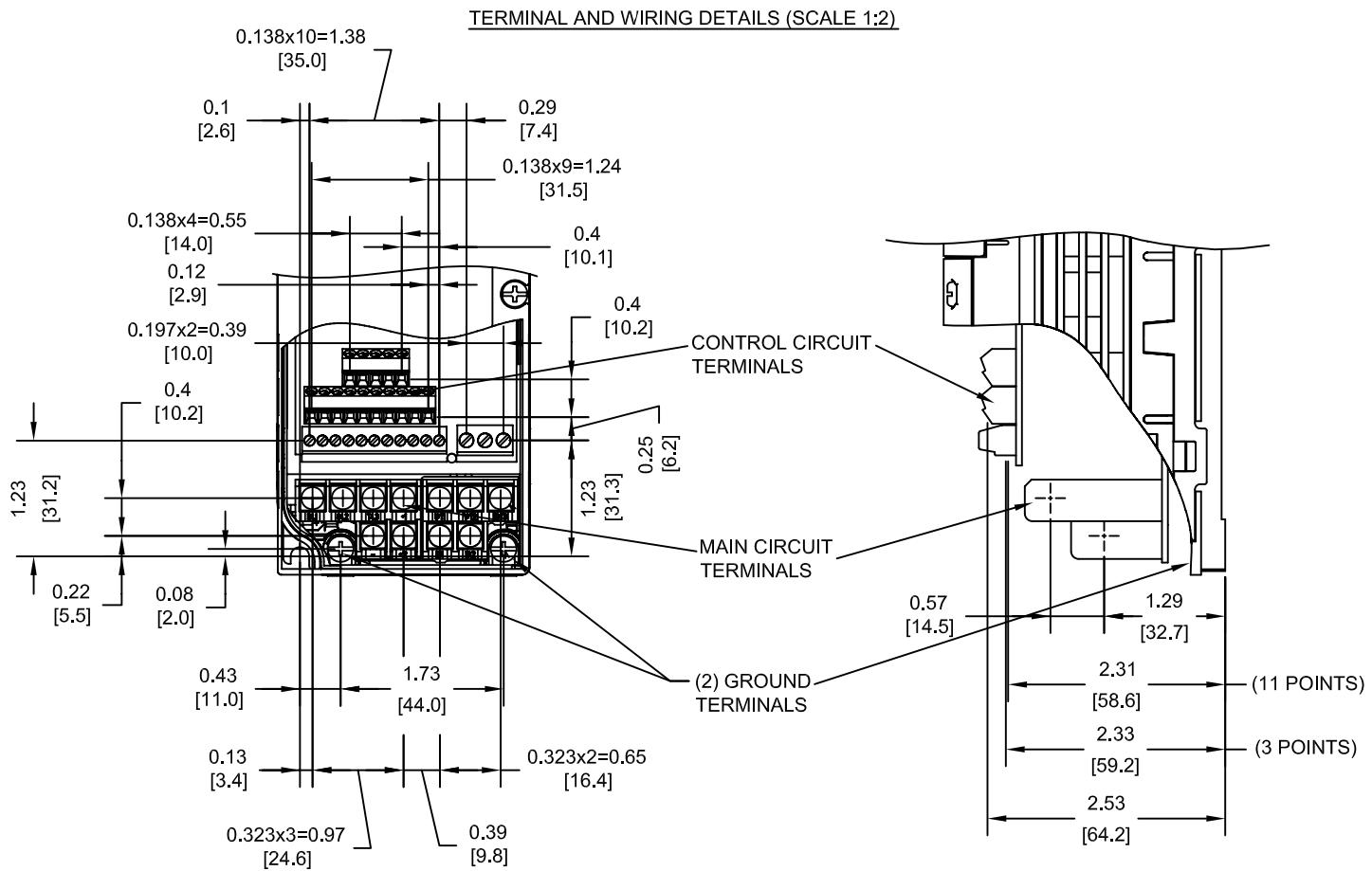


MODEL # CIMR-VU	VOLTAGE (VAC)	OUTPUT CURRENT (A)		WEIGHT LBS (Kg)	HEAT LOSS (W)				
		ND	HD		INT	EXT	TOT	INT	EXT
BA0001FXX	208/240 SINGLE-PHASE	1.2	0.8	1.8 (0.8)	8.5	5.0	13.5	7.4	4.3
BA0002FXX		1.9	1.6	1.8 (0.8)	9.7	7.6	17.3	8.9	7.9
2A0001FXX	208/240 THREE-PHASE	1.2	0.8	1.8 (0.8)	8.0	5.0	13.0	7.3	4.3
2A0002FXX		1.9	1.6	1.8 (0.8)	9.5	7.6	17.1	8.8	7.9

INT=INTERNAL COMPONENTS
EXT=EXTERNAL HEATSINK
TOT=TOTAL

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:	YASKAWA The Drive for Quality™		DRAWN: J. MATTAS CHECKED: M. RUCINSKI TECH: J. CAIRO APPROVED: T. SASADA	DATE: 8-9-07 DATE: 5-7-08 DATE: 2-11-08 DATE: 5-27-08	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 1 NEMA TYPE 1 ENCLOSURE BA0001F TO 0002F, 2A0001F TO 0002F
UNITS: IN [mm]	SCALE: 1:2	ORIGINAL DESIGN: -	SIZE: A	REVISION: R00	PAGE: 1 of 3
DRAWING #: DD.V1K.FR1.N1					



TERMINAL AND WIRE SPECIFICATIONS FOR
MAIN CIRCUIT AND GROUND

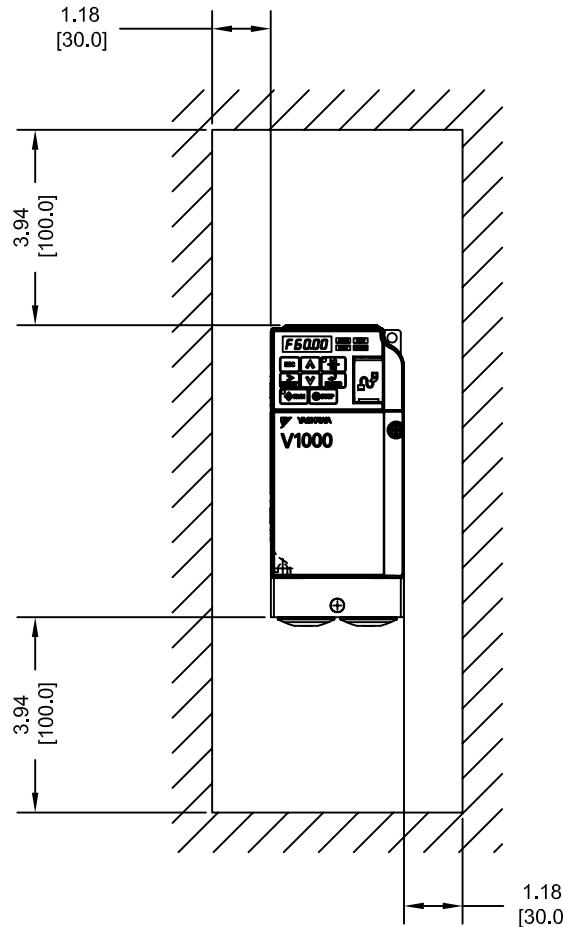
MODEL # CIMR-VU	TERMINAL SCREW	CLAMPING TORQUE lb.in.(N.m.)	WIRE RANGE AWG(mm ²)
BA0001F	M3.5	7.1 TO 8.9 (0.8 TO 1.0)	22-14 (0.33-2.0)
BA0002F	M3.5	7.1 TO 8.9 (0.8 TO 1.0)	22-14 (0.33-2.0)
2A0001F	M3.5	7.1 TO 8.9 (0.8 TO 1.0)	22-14 (0.33-2.0)
2A0002F	M3.5	7.1 TO 8.9 (0.8 TO 1.0)	22-14 (0.33-2.0)

NOTE: RATINGS APPLY TO BOTH FACTORY AND FIELD WIRING
REFER TO APPLICABLE CODES FOR PROPER WIRE TYPE AND SIZE

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

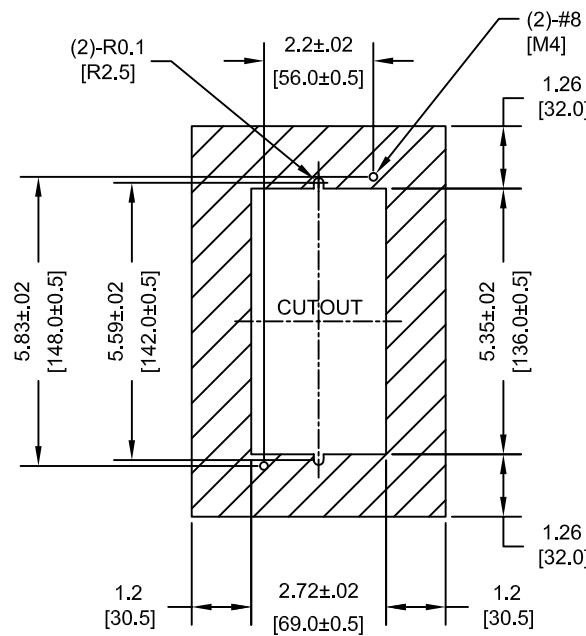
TOLERANCES / REFERENCES:	 YASKAWA The Drive for Quality™		DRAWN: J. MATTAS DATE: 8-9-07	REVISION: R00	PAGE: 2 of 3
THIS DOCUMENT AND INFORMATION CONTAINED IN IT ARE CONFIDENTIAL, AND CANNOT BE COPIED OR DISCLOSED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN CONSENT OF YASKAWA ELECTRIC AMERICA INC.		CHECKED: M. RUCINSKI DATE: 5-7-08	TECH: J. CAIRO DATE: 2-11-08	APPROVED: T. SASADA DATE: 5-27-08	DRAWING #: DD.V1K.FR1.N1
UNITS: IN [mm]	SCALE: BY VIEW	ORIGINAL DESIGN: -	DATE: -	SIZE: A	REVISION: R00

MINIMUM INSTALLATION CLEARANCES (SCALE 1:4)



NOTE:
FOR SIDE-BY-SIDE MOUNTING
CONSULT MANUAL

PANEL CUTOUT FOR EXTERNAL HEATSINK
MOUNTING CONFIGURATION (SCALE 1:4)



- NOTES:
1. EXTERNAL HEATSINK
CONFIGURATION REQUIRES
MOUNTING KIT
 2. EXPOSED HEATSINK
RECOMMENDED CLEARANCE
 $D=1.18"$ MINUS PANEL THICKNESS

TOLERANCES / REFERENCES:



THIS DOCUMENT AND INFORMATION CONTAINED
IN IT ARE CONFIDENTIAL, AND CANNOT BE
COPIED OR DISCLOSED IN WHOLE OR IN PART
WITHOUT THE EXPRESS WRITTEN CONSENT
OF YASKAWA ELECTRIC AMERICA INC.

UNITS: IN [mm] SCALE: BY VIEW

DRAWN: J. MATTAS

DATE

8-9-07

CHECKED:

DATE

5-7-08

TECH:

DATE

2-11-08

APPROVED:

DATE

5-27-08

ORIGINAL DESIGN:

DATE

-

-

DRAWING #:

-

SIZE

A

REVISION

R00

PAGE

3 of 3

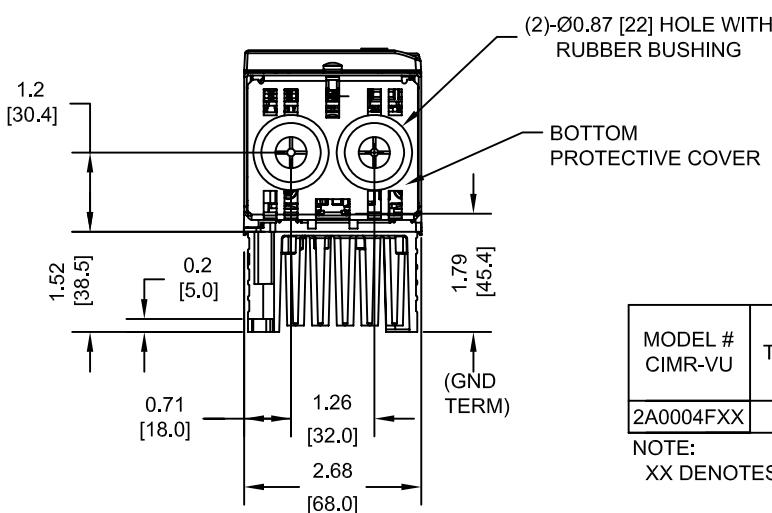
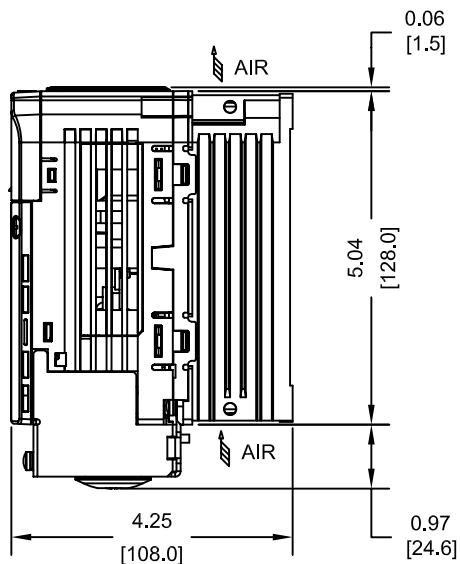
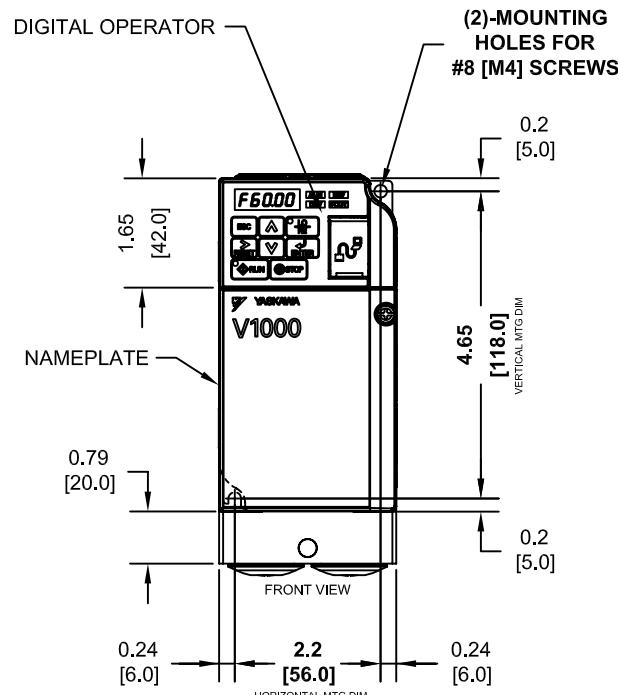
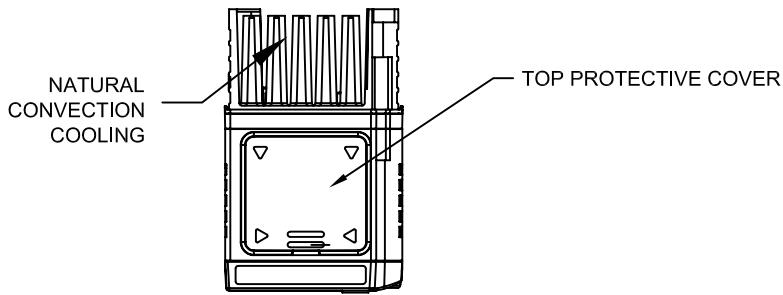
DD.V1K.FR1.N1

TITLE: V1000 DIMENSION DRAWING

FRAME SIZE 1

NEMA TYPE 1 ENCLOSURE

BA0001F TO 0002F, 2A0001F TO 0002F

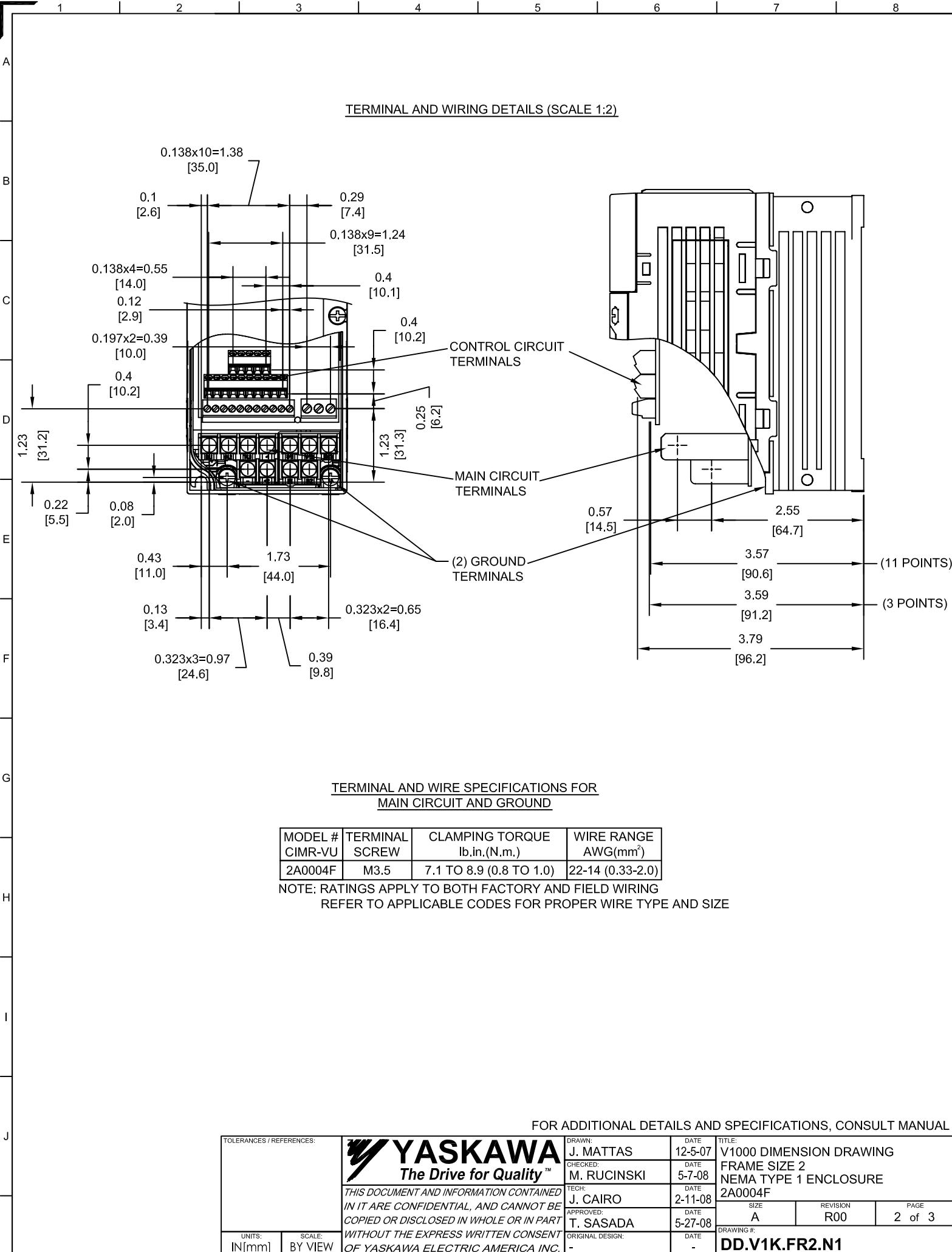


MODEL # CIMR-VU	VOLTAGE THREE PHASE (VAC)	OUTPUT CURRENT (A)		WEIGHT LBS (Kg)	HEAT LOSS (W)					
		ND	HD		ND (Fc=2kHz)			HD (Fc=8kHz)		
		INT	EXT		INT	EXT	TOT	INT	EXT	
2A0004FXX	208/240	3.5	3.0	2.4 (1.1)	13.6	15.8	29.4	11.5	16.2	27.7

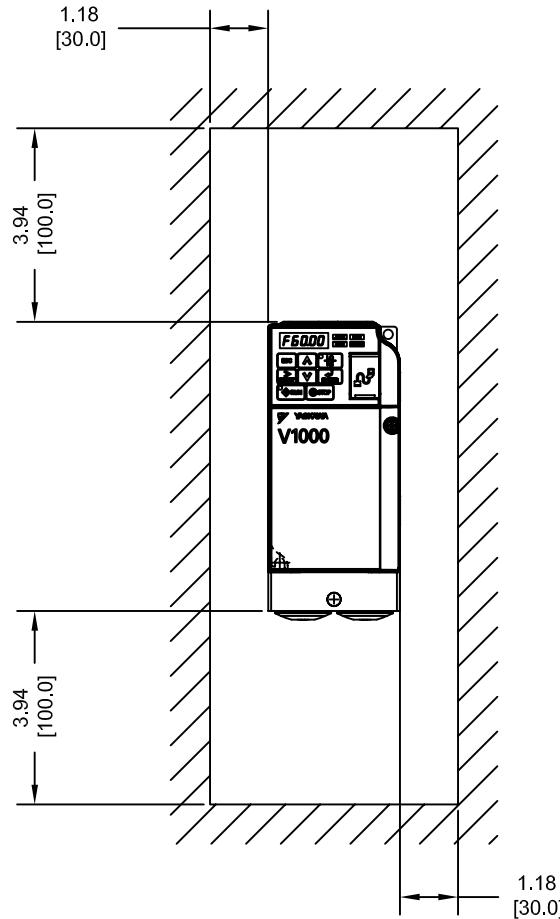
NOTE:
XX DENOTES AA-ZZ

INT=INTERNAL COMPONENTS
EXT=EXTERNAL HEATSINK
TOT=TOTAL

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL									
TOLERANCES / REFERENCES:		YASKAWA The Drive for Quality™		DRAWN: J. MATTAS CHECKED: M. RUCINSKI		DATE: 12-5-07 DATE: 5-7-08		TITLE: V1000 DIMENSION DRAWING FRAME SIZE 2 NEMA TYPE 1 ENCLOSURE 2A0004F	
UNITS: IN [mm]		SCALE: 1:3		TECH: J. CAIRO		APPROVED: T. SASADA		SIZE A PAGE 1 of 3	
-	-	-	-	-	-	-	-	DRAWING #: DD.V1K.FR2.N1	-

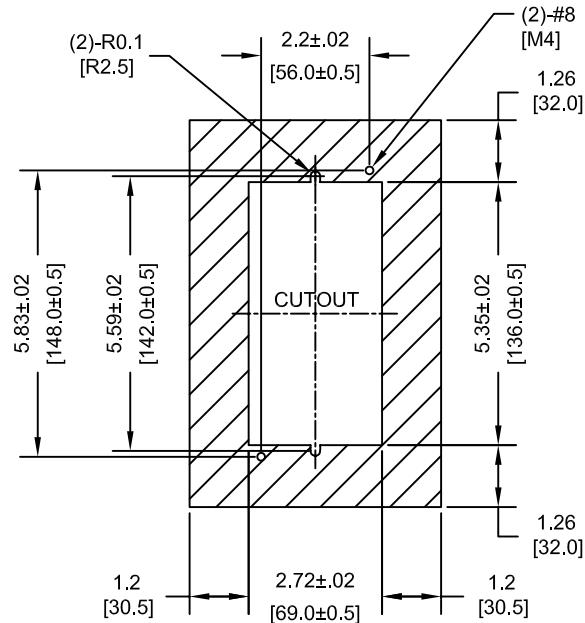


MINIMUM INSTALLATION CLEARANCES (SCALE 1:4)



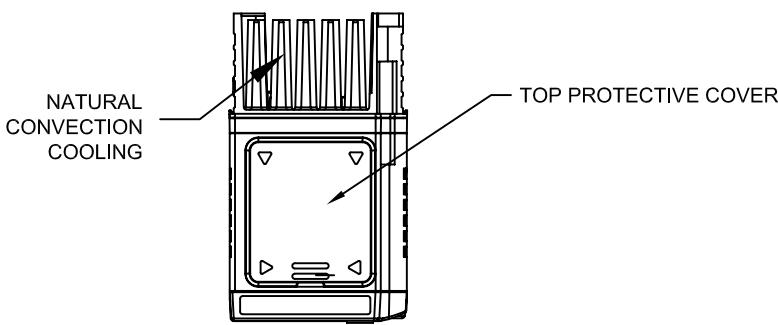
NOTE:
FOR SIDE-BY-SIDE MOUNTING
CONSULT MANUAL

PANEL CUTOUT FOR EXTERNAL HEATSINK
MOUNTING CONFIGURATION (SCALE 1:4)

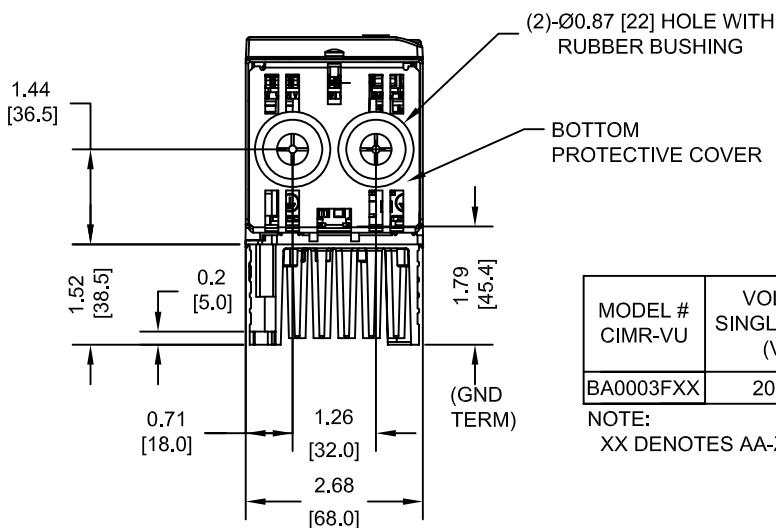
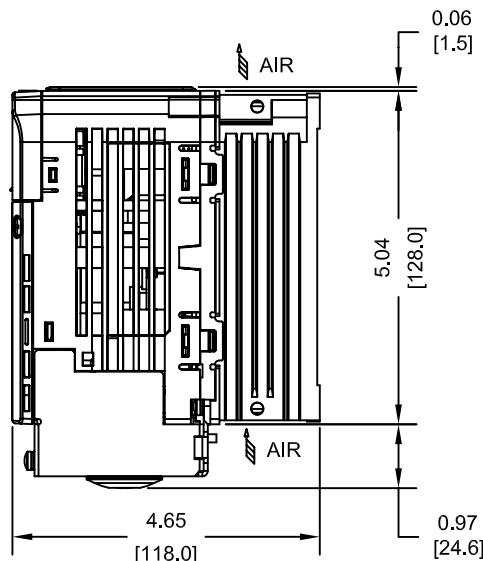
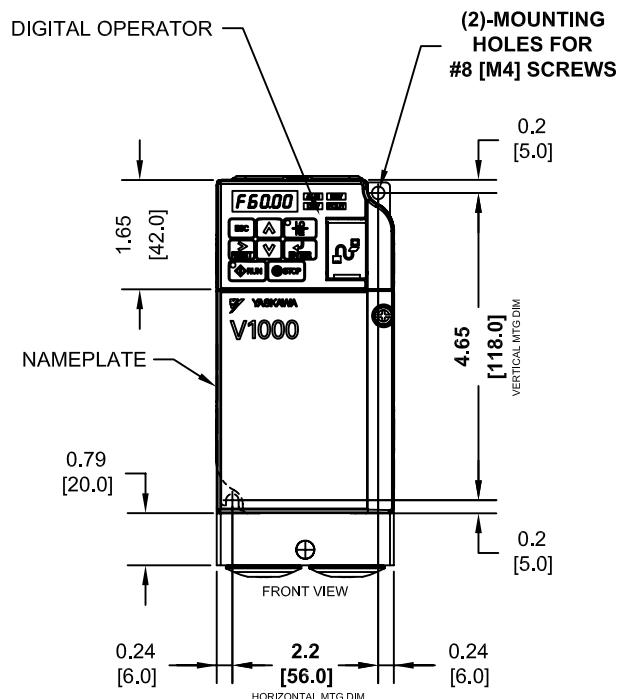


- NOTES:**
1. EXTERNAL HEATSINK
CONFIGURATION REQUIRES
MOUNTING KIT
 2. EXPOSED HEATSINK
RECOMMENDED CLEARANCE
 $D=1.97"$ MINUS PANEL THICKNESS

TOLERANCES / REFERENCES:		YASKAWA The Drive for Quality™	DRAWN: J. MATTAS	DATE: 12-5-07	TITLE: V1000 DIMENSION DRAWING	
			CHECKED: M. RUCINSKI	DATE: 5-7-08	FRAME SIZE 2	
TECH: J. CAIRO	APPROVED: T. SASADA	DATE: 2-11-08	ORIGINAL DESIGN: -	DATE: 5-27-08	NEMA TYPE 1 ENCLOSURE	2A0004F
UNITS: IN [mm]	SCALE: BY VIEW				SIZE A	REVISION R00
					PAGE 3 of 3	DRAWING #: DD.V1K.FR2.N1



NOTE:
PROTECTIVE COVERS ARE FACTORY INSTALLED TO THE TOP AND BOTTOM OF THE DRIVE TO MEET IP20 & NEMA TYPE 1 REQUIREMENTS, RESULTING IN AN AMBIENT TEMPERATURE RATING OF 104F(40C). REMOVE THESE COVERS WHEN OPERATING THE DRIVE WITHIN A PANEL TO OBTAIN THE MAXIMUM SURROUNDING AIR TEMPERATURE RATING OF 122F(50C). REMOVING THESE COVERS RESULTS IN AN ENCLOSURE RATING OF IP00.



MODEL # CIMR-VU	VOLTAGE SINGLE PHASE (VAC)	OUTPUT CURRENT (A)		WEIGHT LBS (Kg)	HEAT LOSS (W)					
		ND	HD		INT	EXT	TOT	INT	EXT	
BA0003FXX	208/240	3.2	3.0	2.6 (1.2)	14.4	14.6	29.0	11.5	16.1	27.6

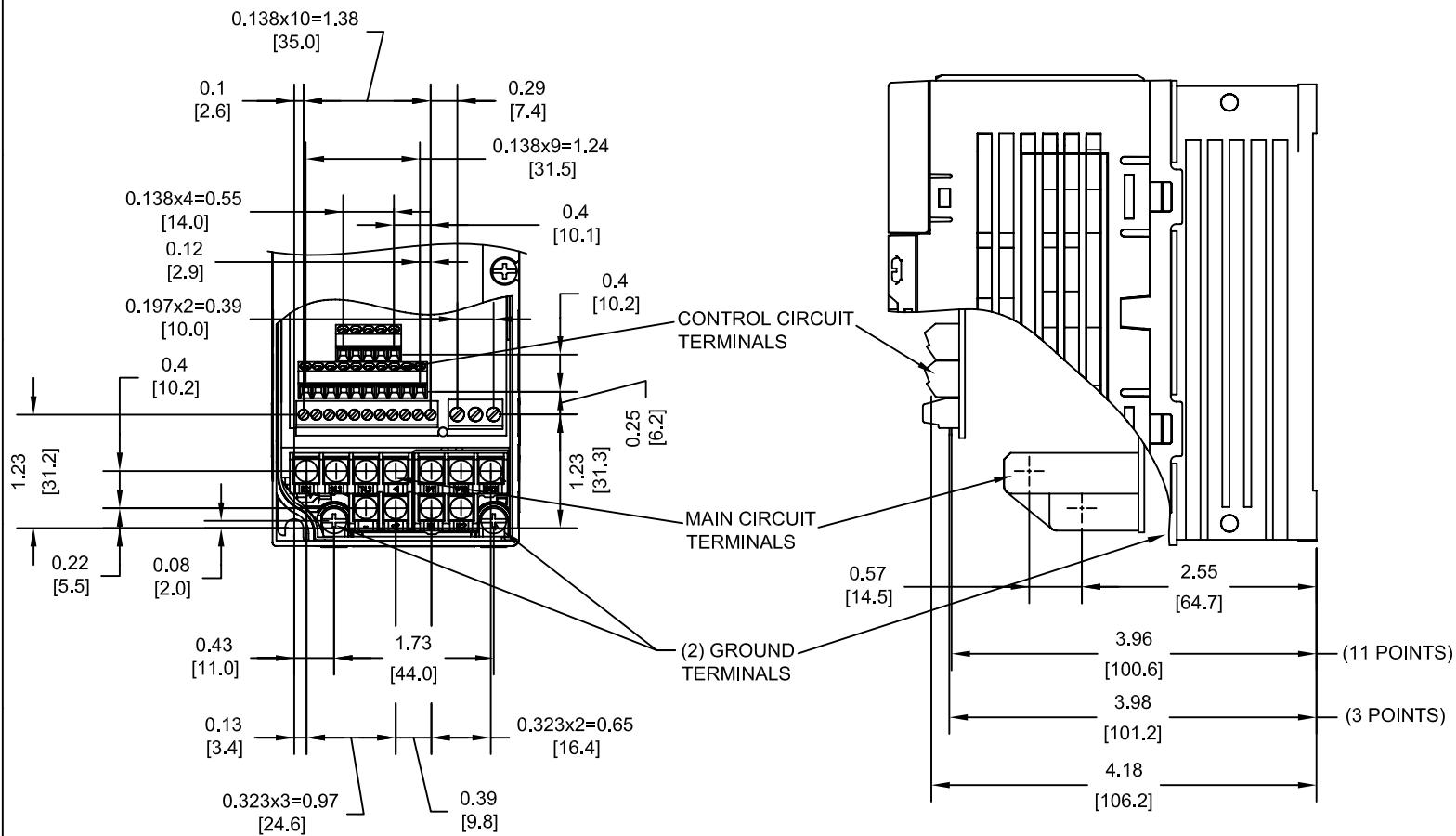
NOTE:
XX DENOTES AA-ZZ

INT=INTERNAL COMPONENTS
EXT=EXTERNAL HEATSINK
TOT=TOTAL

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:		 YASKAWA The Drive for Quality™		DRAWN: J. MATTAS		DATE 12-6-07		TITLE: V1000 DIMENSION DRAWING		
		CHECKED: M. RUCINSKI		DATE 5-7-08		FRAME SIZE 3				
		TECH: J. CAIRO		DATE 2-12-08		NEMA TYPE 1 ENCLOSURE				
		APPROVED: T. SASADA		DATE 5-27-08		BA0003F				
UNITS: IN [mm]	SCALE: 1:3	ORIGINAL DESIGN: -		DATE -		SIZE A	REVISION R00	PAGE 1 of 3		
DRAWING #: DD.V1K.FR3.N1										

TERMINAL AND WIRING DETAILS (SCALE 1:2)



TERMINAL AND WIRE SPECIFICATIONS FOR
MAIN CIRCUIT AND GROUND

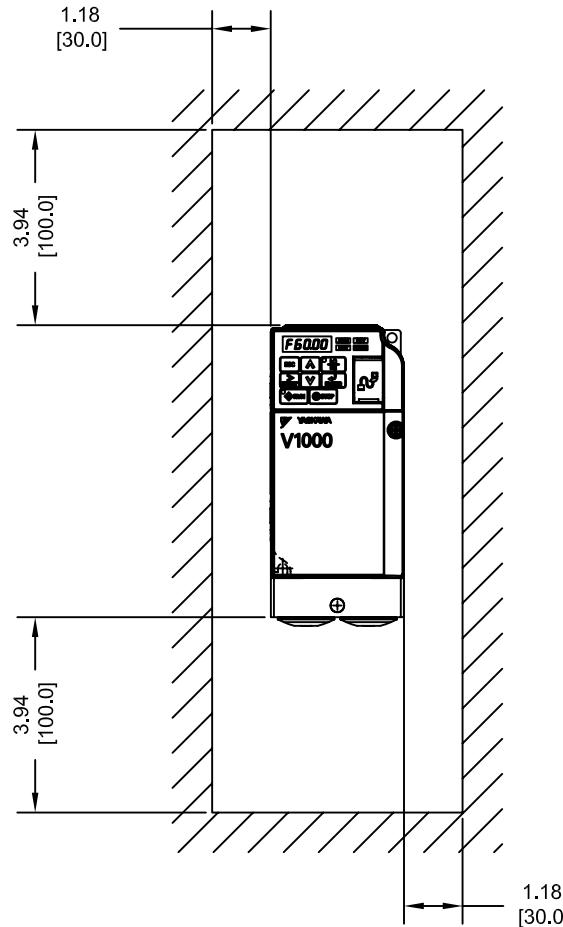
MODEL # CIMR-VU	TERMINAL SCREW	CLAMPING TORQUE lb.in.(N.m.)	WIRE RANGE AWG(mm ²)
BA0003F	M3.5	7.1 TO 8.9 (0.8 TO 1.0)	22-14 (0.33-2.0)

NOTE: RATINGS APPLY TO BOTH FACTORY AND FIELD WIRING
REFER TO APPLICABLE CODES FOR PROPER WIRE TYPE AND SIZE

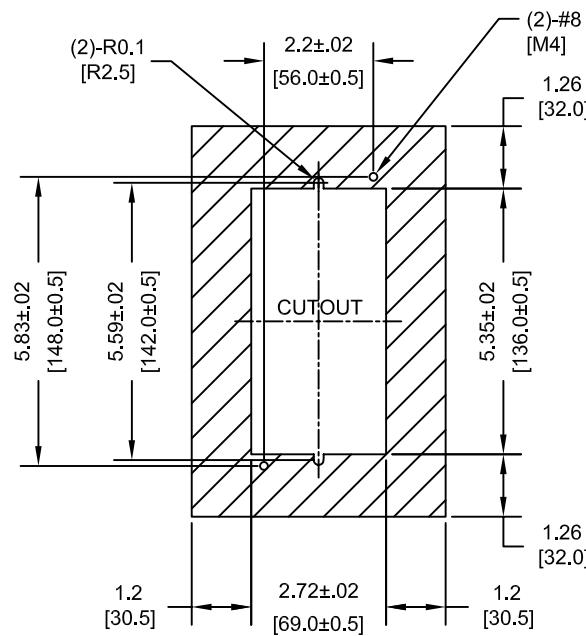
FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:	YASKAWA The Drive for Quality™		DRAWN: J. MATTAS DATE: 12-6-07	REVISION: R00	PAGE: 2 of 3
THIS DOCUMENT AND INFORMATION CONTAINED IN IT ARE CONFIDENTIAL, AND CANNOT BE COPIED OR DISCLOSED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN CONSENT OF YASKAWA ELECTRIC AMERICA INC.		CHECKED: M. RUCINSKI DATE: 5-7-08	TECH: J. CAIRO DATE: 2-12-08	APPROVED: T. SASADA DATE: 5-27-08	DRAWING #: DD.V1K.FR3.N1
UNITS: IN [mm]	SCALE: BY VIEW	ORIGINAL DESIGN: -	DATE: -	SIZE: A	REVISION: R00

MINIMUM INSTALLATION CLEARANCES (SCALE 1:4)



PANEL CUTOUT FOR EXTERNAL HEATSINK
MOUNTING CONFIGURATION (SCALE 1:4)



TOLERANCES / REFERENCES:



THIS DOCUMENT AND INFORMATION CONTAINED
IN IT ARE CONFIDENTIAL, AND CANNOT BE
COPIED OR DISCLOSED IN WHOLE OR IN PART
WITHOUT THE EXPRESS WRITTEN CONSENT
OF YASKAWA ELECTRIC AMERICA INC.

UNITS: IN [mm] SCALE: BY VIEW

DRAWN:
J. MATTAS

DATE
12-6-07

TITLE:
V1000 DIMENSION DRAWING
FRAME SIZE 3
NEMA TYPE 1 ENCLOSURE
BA0003F

CHECKED:
M. RUCINSKI

DATE
5-7-08

TECH:
J. CAIRO

DATE
2-12-08

APPROVED:
T. SASADA

DATE
5-27-08

ORIGINAL DESIGN:
-

DATE
-

SIZE
A

REVISION
R00

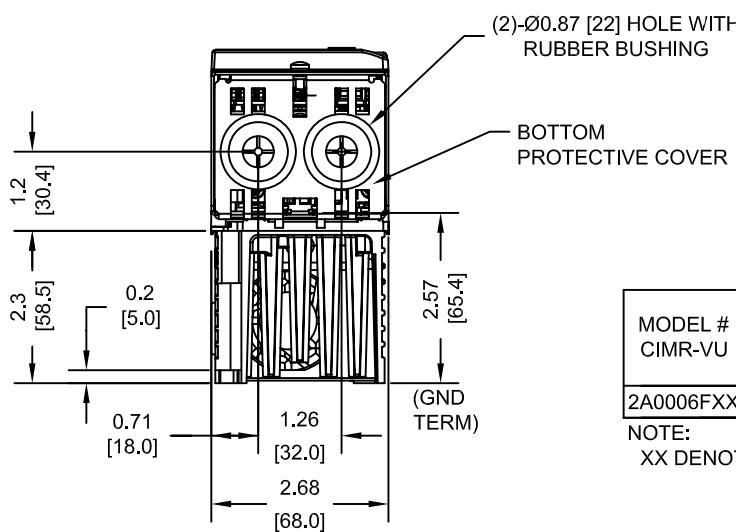
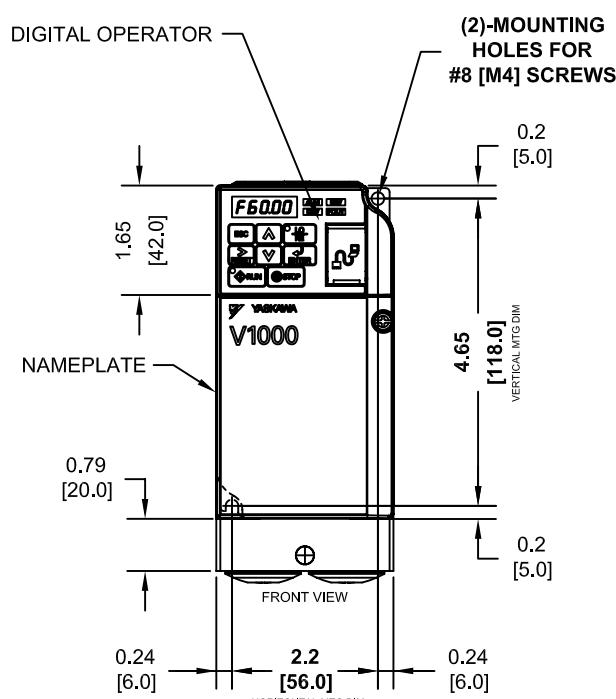
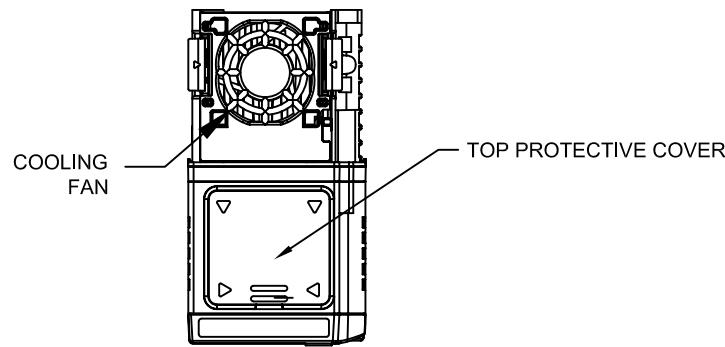
PAGE
3 of 3

DRAWING #:

DD.V1K.FR3.N1

NOTE:

PROTECTIVE COVERS ARE FACTORY INSTALLED TO THE TOP AND BOTTOM OF THE DRIVE TO MEET IP20 & NEMA TYPE 1 REQUIREMENTS, RESULTING IN AN AMBIENT TEMPERATURE RATING OF 104F(40C). REMOVE THESE COVERS WHEN OPERATING THE DRIVE WITHIN A PANEL TO OBTAIN THE MAXIMUM SURROUNDING AIR TEMPERATURE RATING OF 122F(50C). REMOVING THESE COVERS RESULTS IN AN ENCLOSURE RATING OF IP00.



MODEL # CIMR-VU	VOLTAGE THREE PHASE (VAC)	OUTPUT CURRENT (A)		WEIGHT LBS (Kg)	HEAT LOSS (W)					
		ND	HD		ND	EXT	TOT	INT	EXT	TOT
2A0006FXX	208/240	6.0	5.0	2.9 (1.3)	17.2	27.5	44.7	15.9	27.4	43.3

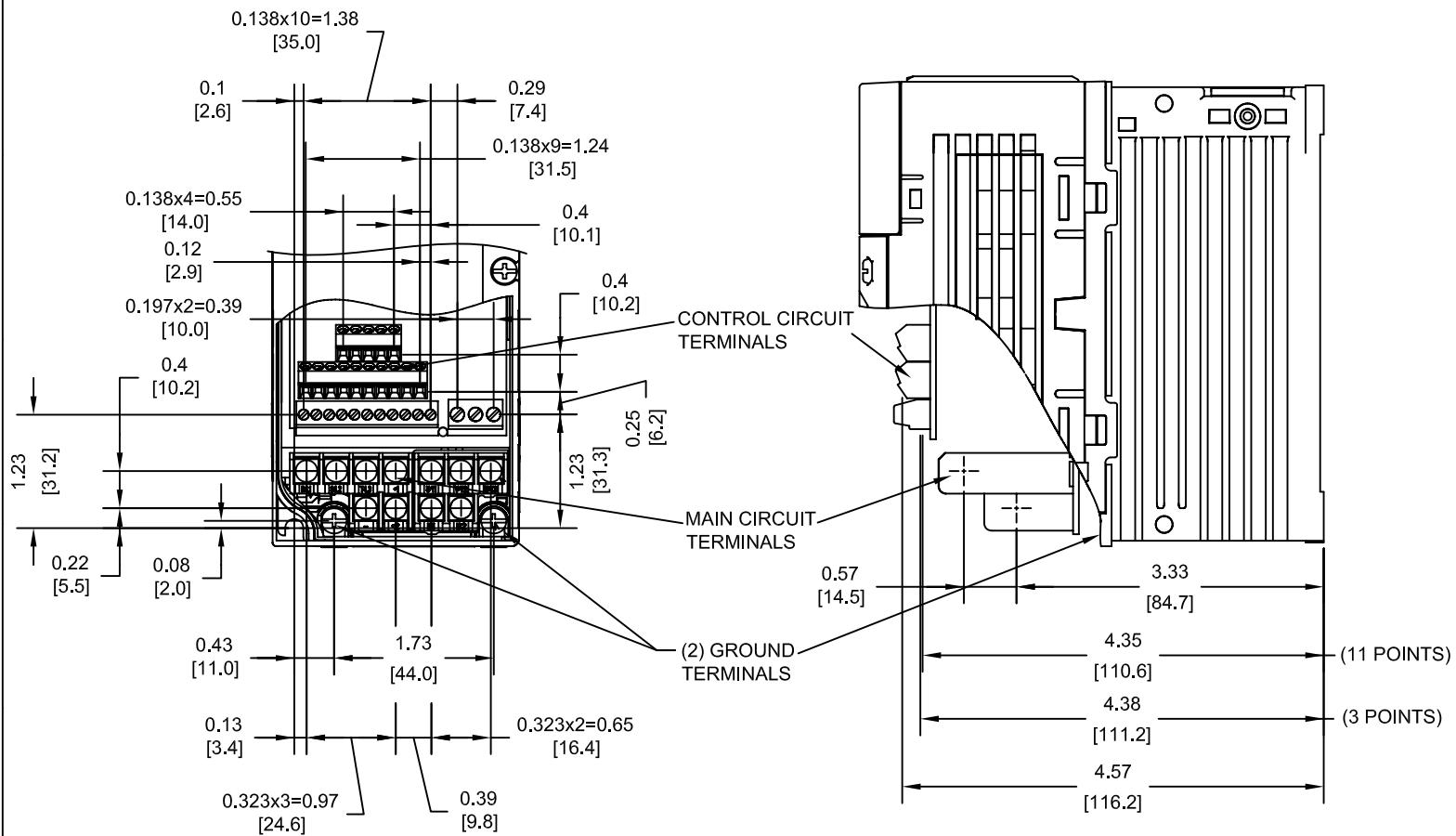
NOTE:
XX DENOTES AA-ZZ

INT=INTERNAL COMPONENTS
EXT=EXTERNAL HEATSINK
TOT=TOTAL

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:		 YASKAWA The Drive for Quality™		DRAWN: J. MATTAS CHECKED: M. RUCINSKI TECH: J. CAIRO APPROVED: T. SASADA	DATE: 12-6-07 DATE: 5-7-08 DATE: 2-18-08 DATE: 5-27-08	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 4 NEMA TYPE 1 ENCLOSURE 2A0006F
UNITS: IN [mm]	SCALE: 1:3	SIZE A	REVISION R00	PAGE 1 of 3		
		DRAWING #: DD.V1K.FR4.N1				

TERMINAL AND WIRING DETAILS (SCALE 1:2)



TERMINAL AND WIRE SPECIFICATIONS FOR
MAIN CIRCUIT AND GROUND

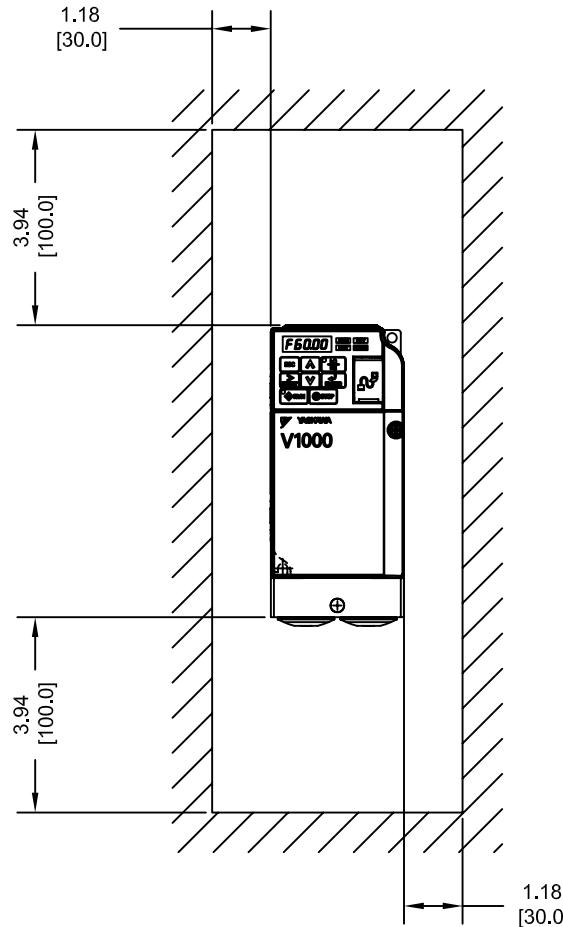
MODEL # CIMR-VU	TERMINAL SCREW	CLAMPING TORQUE lb.in.(N.m.)	WIRE RANGE AWG(mm ²)
2A0006F	M3.5	7.1 TO 8.9 (0.8 TO 1.0)	22-14 (0.33-2.0)

NOTE: RATINGS APPLY TO BOTH FACTORY AND FIELD WIRING
REFER TO APPLICABLE CODES FOR PROPER WIRE TYPE AND SIZE

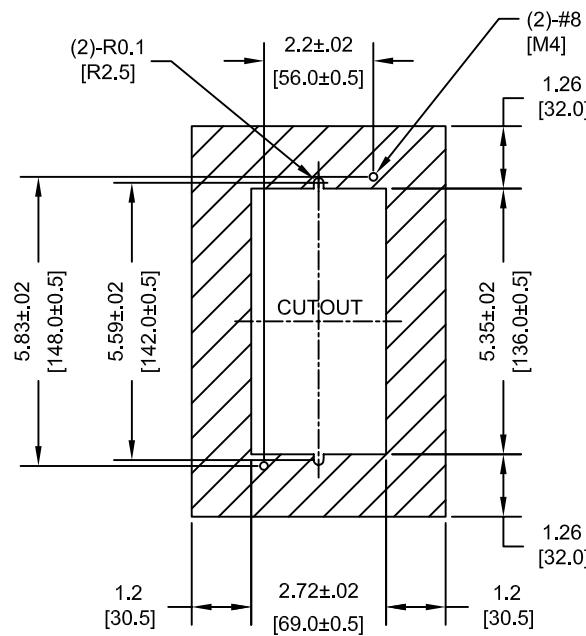
FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:	YASKAWA The Drive for Quality™		DRAWN: J. MATTAS DATE: 12-6-07	REVISION: R00	PAGE: 2 of 3
THIS DOCUMENT AND INFORMATION CONTAINED IN IT ARE CONFIDENTIAL, AND CANNOT BE COPIED OR DISCLOSED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN CONSENT OF YASKAWA ELECTRIC AMERICA INC.		CHECKED: M. RUCINSKI DATE: 5-7-08	TECH: J. CAIRO DATE: 2-18-08	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 4 NEMA TYPE 1 ENCLOSURE 2A0006F	
UNITS: IN[mm]	SCALE: BY VIEW	APPROVED: T. SASADA DATE: 5-27-08	ORIGINAL DESIGN: -	DRAWING #: DD.V1K.FR4.N1	

MINIMUM INSTALLATION CLEARANCES (SCALE 1:4)



PANEL CUTOUT FOR EXTERNAL HEATSINK
MOUNTING CONFIGURATION (SCALE 1:4)



NOTES:

1. EXTERNAL HEATSINK
CONFIGURATION REQUIRES
MOUNTING KIT
2. EXPOSED HEATSINK
RECOMMENDED CLEARANCE
 $D=2.76"$ MINUS PANEL THICKNESS

TOLERANCES / REFERENCES:



THIS DOCUMENT AND INFORMATION CONTAINED
IN IT ARE CONFIDENTIAL, AND CANNOT BE
COPIED OR DISCLOSED IN WHOLE OR IN PART
WITHOUT THE EXPRESS WRITTEN CONSENT
OF YASKAWA ELECTRIC AMERICA INC.

UNITS:
IN [mm]

SCALE:
BY VIEW

DRAWN:
J. MATTAS

DATE

12-6-07

TITLE:

V1000 DIMENSION DRAWING
FRAME SIZE 4
NEMA TYPE 1 ENCLOSURE
2A0006F

CHECKED:
M. RUCINSKI

DATE

5-7-08

SIZE

A

REVISION

R00

PAGE

3 of 3

TECH:
J. CAIRO

DATE

2-18-08

APPROVED:
T. SASADA

DATE

5-27-08

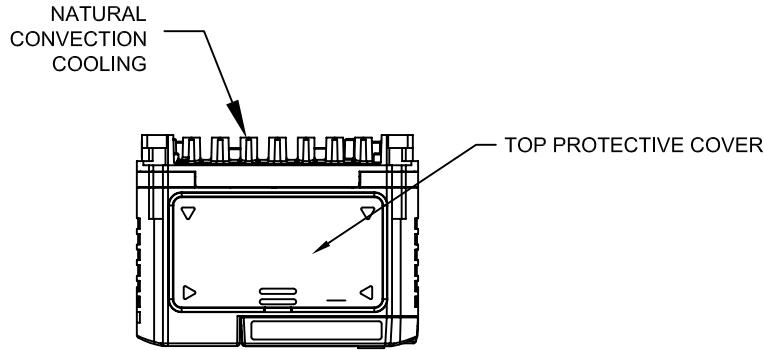
ORIGINAL DESIGN:
-

DATE

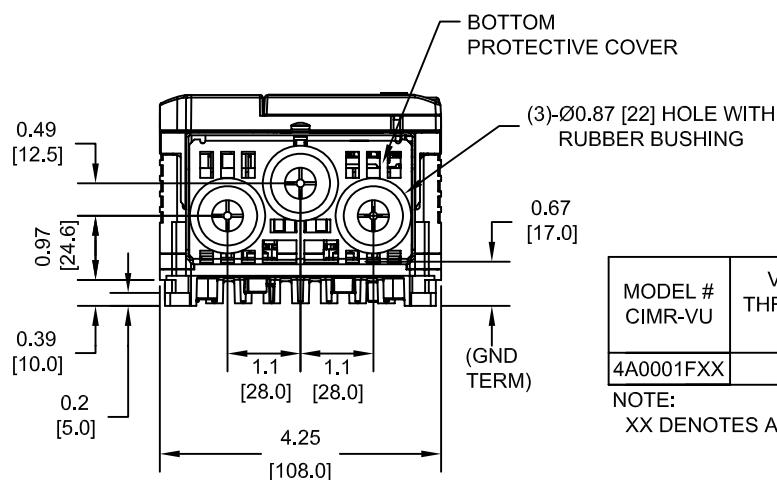
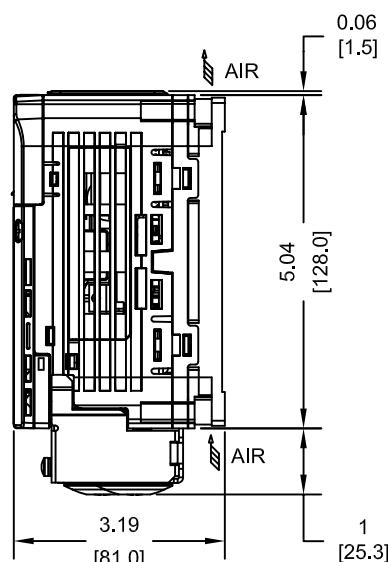
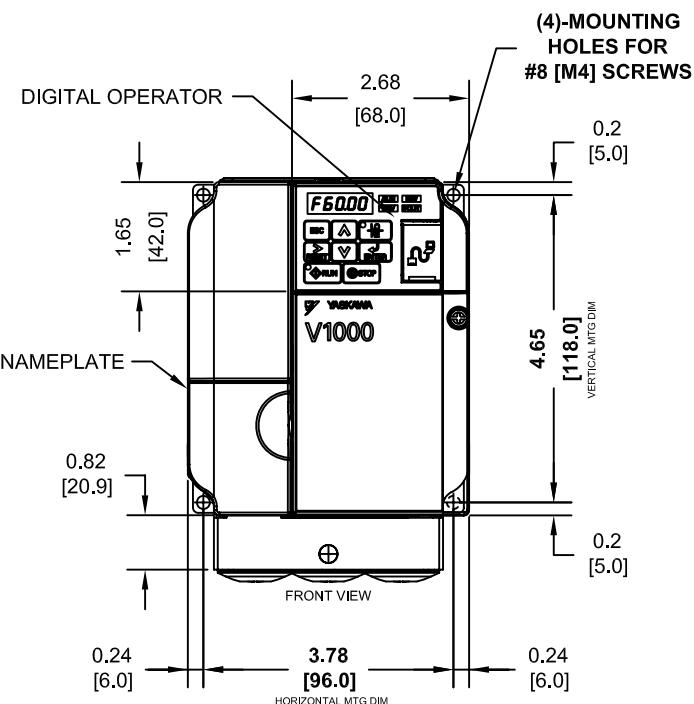
-

DRAWING #:

DD.V1K.FR4.N1



NOTE:
PROTECTIVE COVERS ARE FACTORY INSTALLED TO THE TOP AND BOTTOM OF THE DRIVE TO MEET IP20 & NEMA TYPE 1 REQUIREMENTS, RESULTING IN AN AMBIENT TEMPERATURE RATING OF 104F(40C). REMOVE THESE COVERS WHEN OPERATING THE DRIVE WITHIN A PANEL TO OBTAIN THE MAXIMUM SURROUNDING AIR TEMPERATURE RATING OF 122F(50C). REMOVING THESE COVERS RESULTS IN AN ENCLOSURE RATING OF IP00.



MODEL # CIMR-VU	VOLTAGE THREE PHASE (VAC)	OUTPUT CURRENT (A)		WEIGHT LBS (Kg)	HEAT LOSS (W)					
		ND	HD		INT	EXT	TOT	INT	EXT	
4A0001FXX	380/480	1.2	1.2	2.6 (1.2)	9.6	10.0	19.6	11.5	19.2	30.7

NOTE:
XX DENOTES AA-ZZ

INT=INTERNAL COMPONENTS
EXT=EXTERNAL HEATSINK
TOT=TOTAL

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:



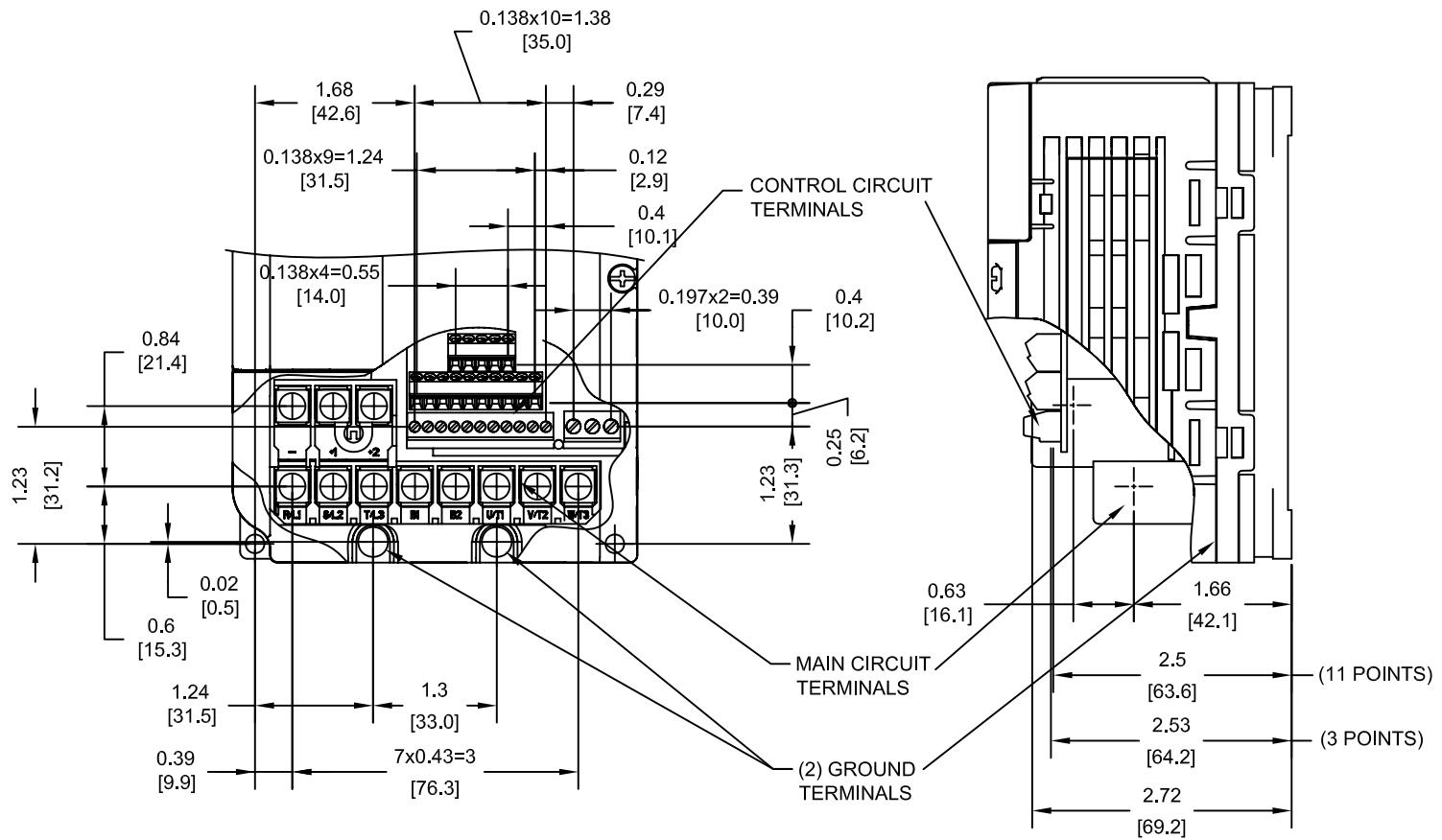
THIS DOCUMENT AND INFORMATION CONTAINED
IN IT ARE CONFIDENTIAL, AND CANNOT BE
COPIED OR DISCLOSED IN WHOLE OR IN PART
WITHOUT THE EXPRESS WRITTEN CONSENT
OF YASKAWA ELECTRIC AMERICA INC.

UNITS:
IN [mm]

SCALE:
1:3

DRAWN: J. MATTAS	DATE: 12-7-07	TITLE: 1000 DIMENSION DRAWING
CHECKED: M. RUCINSKI	DATE: 5-7-08	FRAME SIZE 5
TECH: J. CAIRO	DATE: 2-18-08	NEMA TYPE 1 ENCLOSURE
APPROVED: T. SASADA	DATE: 5-27-08	4A0001F
ORIGINAL DESIGN: -	DATE: -	SIZE A
		REVISION R00
		PAGE 1 of 3
DRAWING #: DD.V1K.FR5.N1		

TERMINAL AND WIRING DETAILS (SCALE 1:2)



TERMINAL AND WIRE SPECIFICATIONS FOR
MAIN CIRCUIT AND GROUND

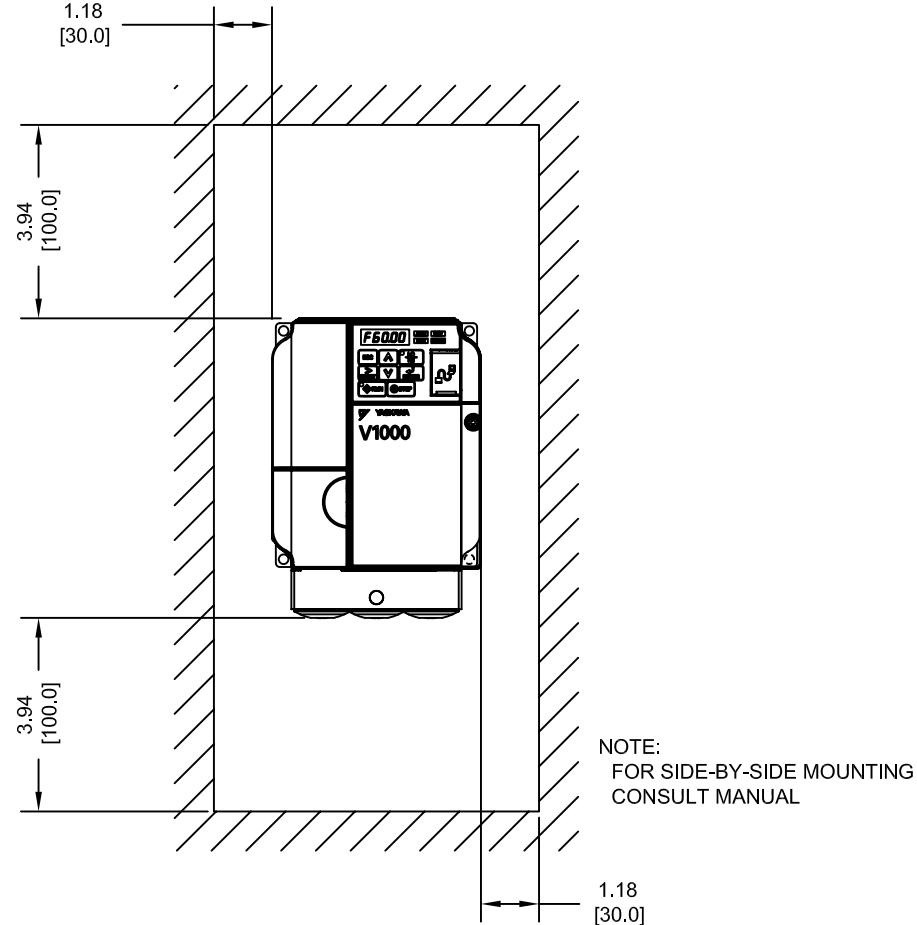
MODEL # CIMR-VU	TERMINAL SCREW	CLAMPING TORQUE lb.in.(N.m.)	WIRE RANGE AWG(mm ²)
4A0001F	M4	10.6 TO 13.3 (1.2 TO 1.5)	22-10 (0.33-5.5)

NOTE: RATINGS APPLY TO BOTH FACTORY AND FIELD WIRING
REFER TO APPLICABLE CODES FOR PROPER WIRE TYPE AND SIZE

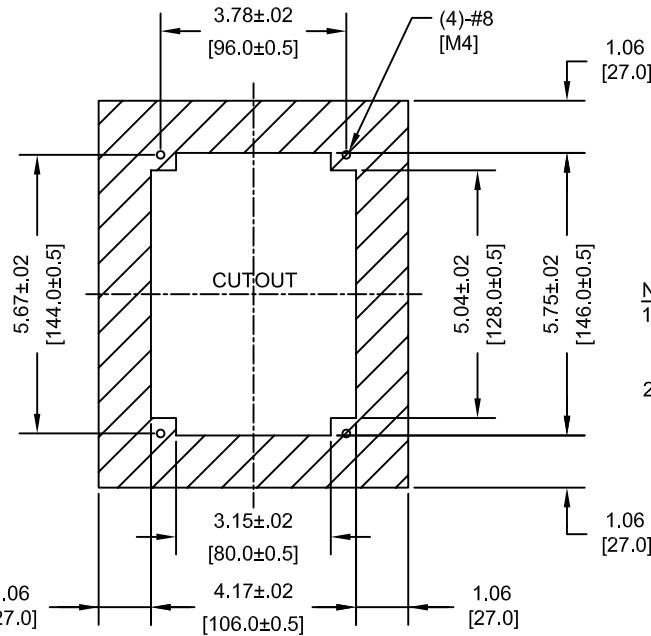
FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:	YASKAWA The Drive for Quality™		DRAWN: J. MATTAS	DATE: 12-7-07	TITLE: V1000 DIMENSION DRAWING	
			CHECKED: M. RUCINSKI	DATE: 5-7-08	FRAME SIZE 5	
			TECH: J. CAIRO	DATE: 2-18-08	NEMA TYPE 1 ENCLOSURE	
			APPROVED: T. SASADA	DATE: 5-27-08	4A0001F	
UNITS: IN[mm]	SCALE: BY VIEW		ORIGINAL DESIGN: -	SIZE A	REVISION R00	PAGE 2 of 3
DRAWING #: DD.V1K.FR5.N1						

MINIMUM INSTALLATION CLEARANCES (SCALE 1:4)



PANEL CUTOUT FOR EXTERNAL HEATSINK
MOUNTING CONFIGURATION (SCALE 1:4)



NOTES:

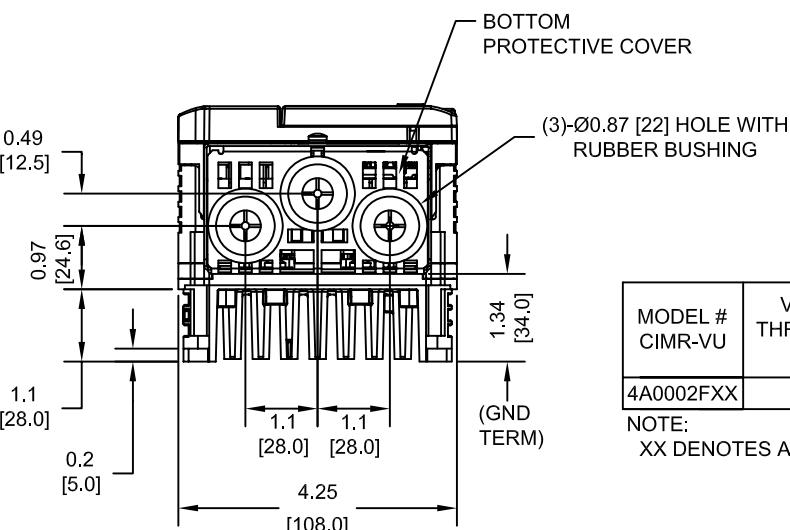
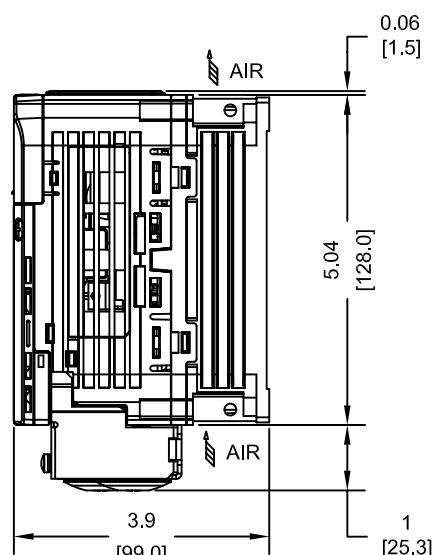
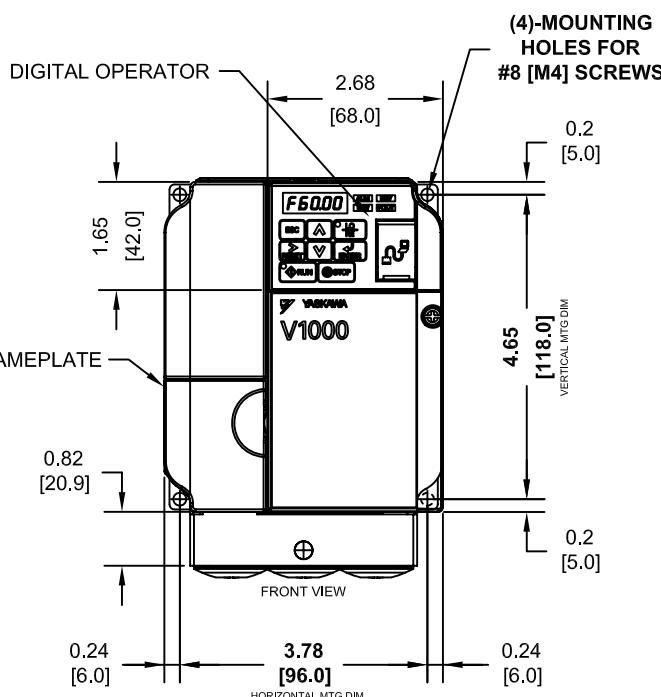
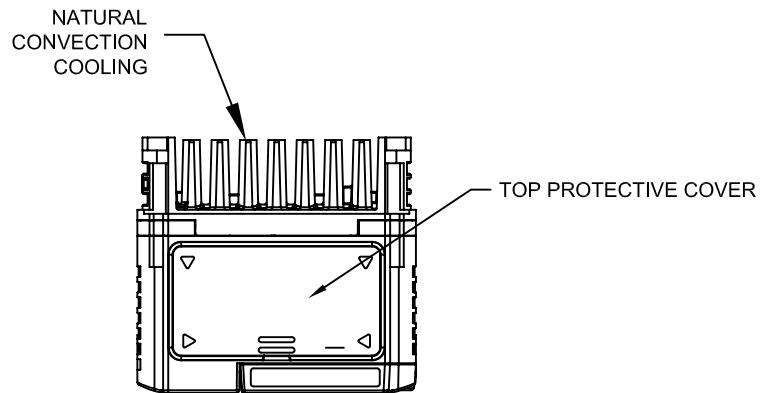
1. EXTERNAL HEATSINK CONFIGURATION REQUIRES MOUNTING KIT
2. EXPOSED HEATSINK RECOMMENDED CLEARANCE D=1.18" MINUS PANEL THICKNESS

TOLERANCES / REFERENCES:		YASKAWA <i>The Drive for Quality™</i>		DRAWN: J. MATTAS CHECKED: M. RUCINSKI TECH: J. CAIRO APPROVED: T. SASADA ORIGINAL DESIGN: -	DATE: 12-7-07 DATE: 5-7-08 DATE: 2-18-08 DATE: 5-27-08 DATE: -	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 5 NEMA TYPE 1 ENCLOSURE 4A0001F
UNITS: IN [mm]	SCALE: BY VIEW	THIS DOCUMENT AND INFORMATION CONTAINED IN IT ARE CONFIDENTIAL, AND CANNOT BE COPIED OR DISCLOSED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN CONSENT OF YASKAWA ELECTRIC AMERICA INC.		SIZE A	REVISION R00	PAGE 3 of 3
				DRAWING #: DD.V1K.FR5.N1		

1 2 3 4 5 6 7 8

NOTE:

PROTECTIVE COVERS ARE FACTORY INSTALLED TO THE TOP AND BOTTOM OF THE DRIVE TO MEET IP20 & NEMA TYPE 1 REQUIREMENTS, RESULTING IN AN AMBIENT TEMPERATURE RATING OF 104F(40C). REMOVE THESE COVERS WHEN OPERATING THE DRIVE WITHIN A PANEL TO OBTAIN THE MAXIMUM SURROUNDING AIR TEMPERATURE RATING OF 122F(50C). REMOVING THESE COVERS RESULTS IN AN ENCLOSURE RATING OF IP00.



MODEL # CIMR-VU	VOLTAGE THREE PHASE (VAC)	OUTPUT CURRENT (A)		WEIGHT LBS (Kg)	HEAT LOSS (W)					
		ND	HD		INT	EXT	TOT	INT	EXT	TOT
4A0002FXX	380/480	2.1	1.8	3.1 (1.4)	13.9	18.5	32.4	14.8	28.9	43.7

NOTE:
XX DENOTES AA-ZZ

INT=INTERNAL COMPONENTS
EXT=EXTERNAL HEATSINK
TOT=TOTAL

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:

YASKAWA
The Drive for Quality™

THIS DOCUMENT AND INFORMATION CONTAINED
IN IT ARE CONFIDENTIAL, AND CANNOT BE
COPIED OR DISCLOSED IN WHOLE OR IN PART
WITHOUT THE EXPRESS WRITTEN CONSENT
OF YASKAWA ELECTRIC AMERICA INC.

UNITS: IN [mm]

SCALE: 1:3

DRAWN: J. MATTAS 12-11-07

CHECKED: M. RUCINSKI 5-7-08

TECH: J. CAIRO 3-24-08

APPROVED: T. SASADA 5-27-08

ORIGINAL DESIGN: -

DATE: TITLE: V1000 DIMENSION DRAWING

FRAME SIZE 6

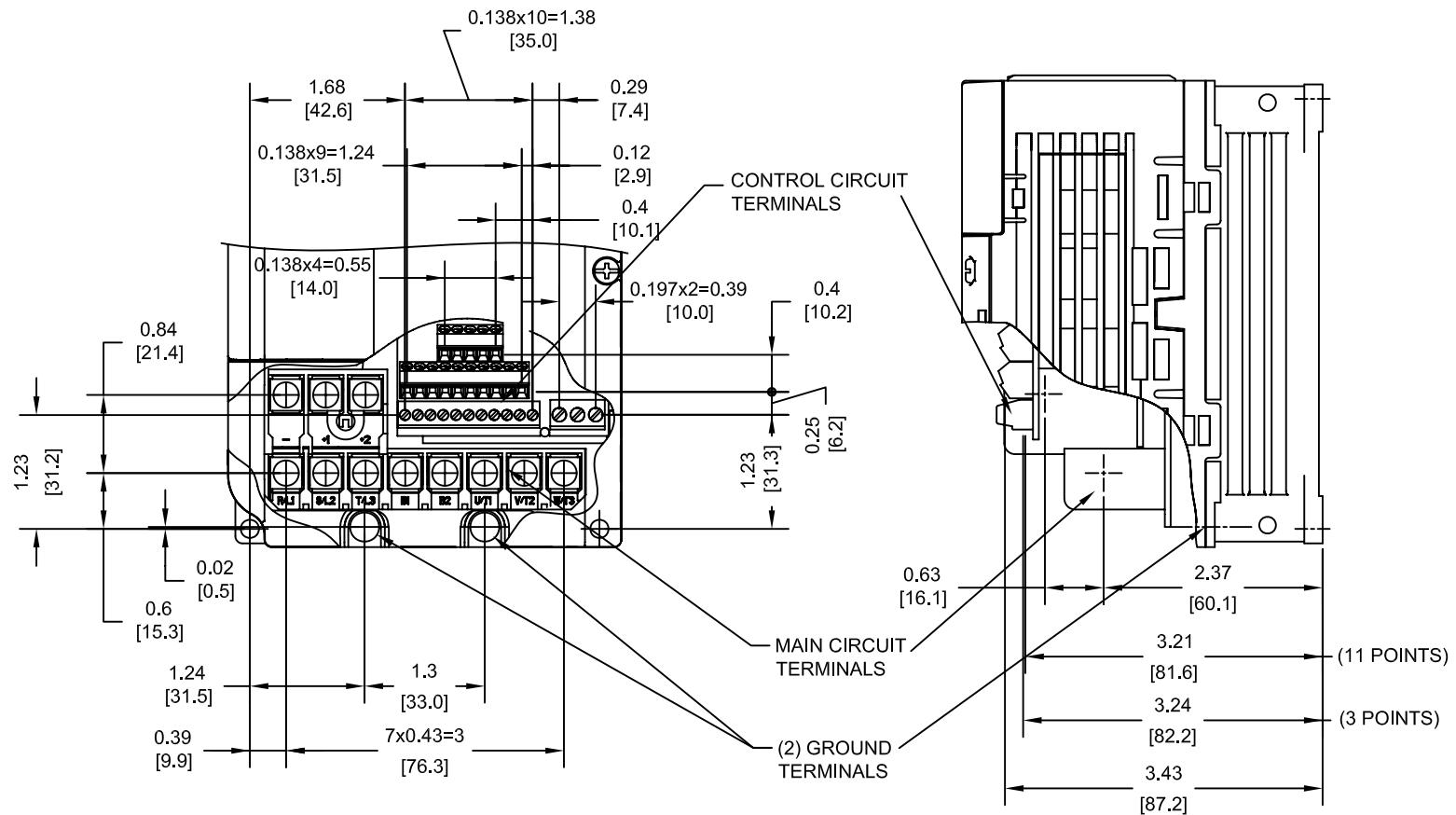
NEMA TYPE 1 ENCLOSURE

4A0002F

SIZE A REVISION R00 PAGE 1 of 3

DRAWING #: DD.V1K.FR6.N1

TERMINAL AND WIRING DETAILS (SCALE 1:2)



TERMINAL AND WIRE SPECIFICATIONS FOR
MAIN CIRCUIT AND GROUND

MODEL # CIMR-VU	TERMINAL SCREW	CLAMPING TORQUE lb.in.(N.m.)	WIRE RANGE AWG(mm ²)
4A0002F	M4	10.6 TO 13.3 (1.2 TO 1.5)	22-10 (0.33-5.5)

NOTE: RATINGS APPLY TO BOTH FACTORY AND FIELD WIRING
REFER TO APPLICABLE CODES FOR PROPER WIRE TYPE AND SIZE

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:



THIS DOCUMENT AND INFORMATION CONTAINED
IN IT ARE CONFIDENTIAL, AND CANNOT BE
COPIED OR DISCLOSED IN WHOLE OR IN PART
WITHOUT THE EXPRESS WRITTEN CONSENT
OF YASKAWA ELECTRIC AMERICA INC.

UNITS:
IN[mm]

SCALE:
BY VIEW

DRAWN:
J. MATTAS

CHECKED:
M. RUCINSKI

TECH:
J. CAIRO

APPROVED:
T. SASADA

ORIGINAL DESIGN:
-

DATE:
12-11-07

DATE:
5-7-08

DATE:
3-24-08

DATE:
5-27-08

DATE:
-

TITLE:
V1000 DIMENSION DRAWING

FRAME SIZE 6

NEMA TYPE 1 ENCLOSURE

4A0002F

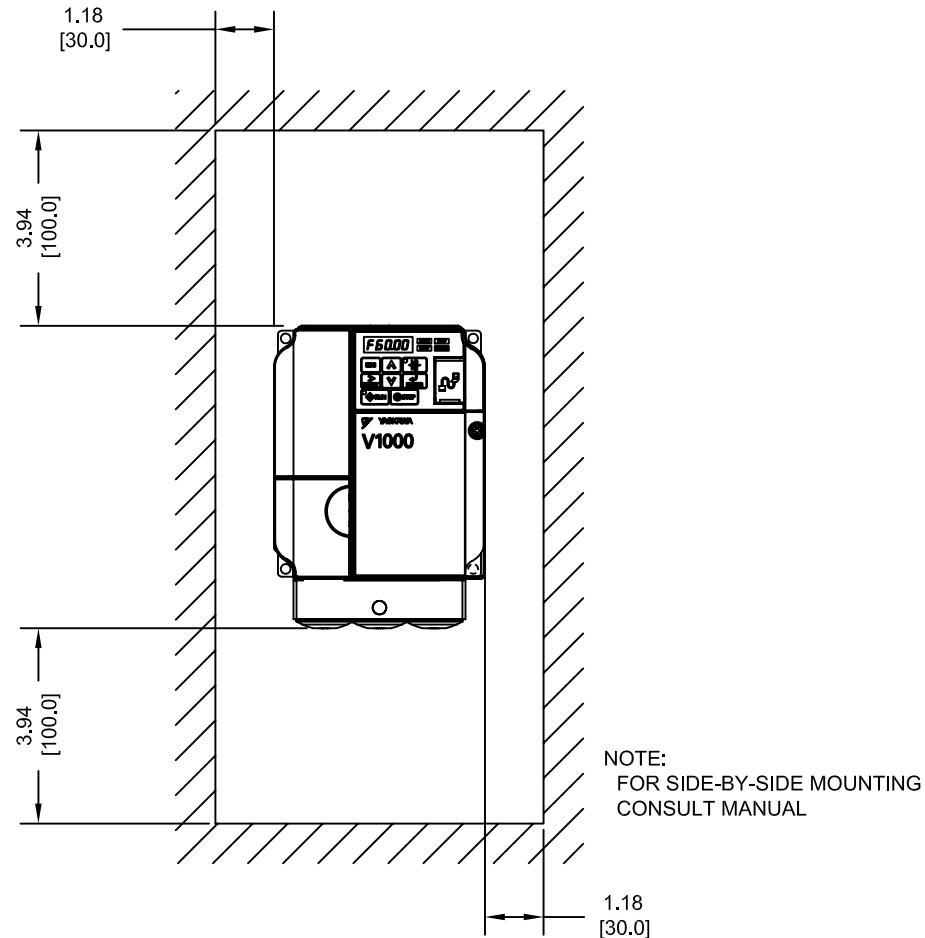
SIZE
A

REVISION
R00

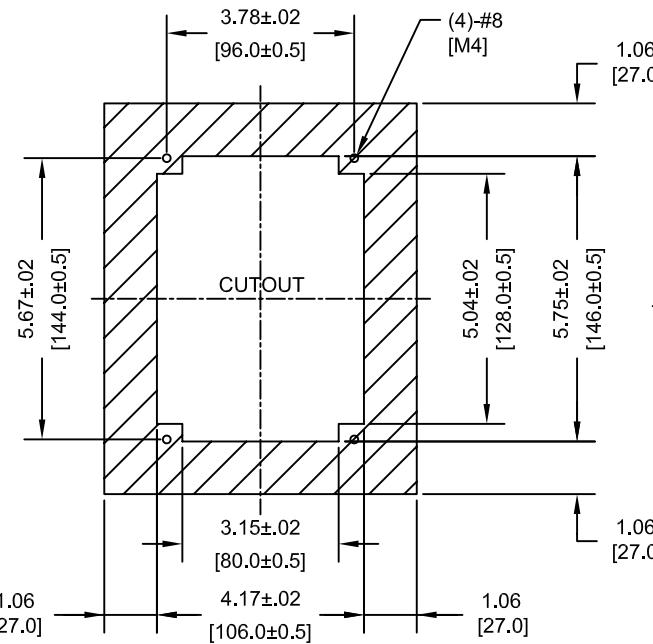
PAGE
2 of 3

DRAWING #: DD.V1K.FR6.N1

MINIMUM INSTALLATION CLEARANCES (SCALE 1:4)



PANEL CUTOUT FOR EXTERNAL HEATSINK
MOUNTING CONFIGURATION (SCALE 1:4)



- NOTES:
1. EXTERNAL HEATSINK
CONFIGURATION REQUIRES
MOUNTING KIT
 2. EXPOSED HEATSINK
RECOMMENDED CLEARANCE
 $D=1.57"$ MINUS PANEL THICKNESS

TOLERANCES / REFERENCES:



THIS DOCUMENT AND INFORMATION CONTAINED
IN IT ARE CONFIDENTIAL, AND CANNOT BE
COPIED OR DISCLOSED IN WHOLE OR IN PART
WITHOUT THE EXPRESS WRITTEN CONSENT
OF YASKAWA ELECTRIC AMERICA INC.

UNITS:
IN [mm]

SCALE:
BY VIEW

DRAWN:
J. MATTAS

DATE

12-11-07

TITLE:

V1000 DIMENSION DRAWING
FRAME SIZE 6
NEMA TYPE 1 ENCLOSURE
4A0002F

CHECKED:
M. RUCINSKI

DATE

5-7-08

TECH:
J. CAIRO

DATE

3-24-08

APPROVED:
T. SASADA

DATE

5-27-08

ORIGINAL DESIGN:
-

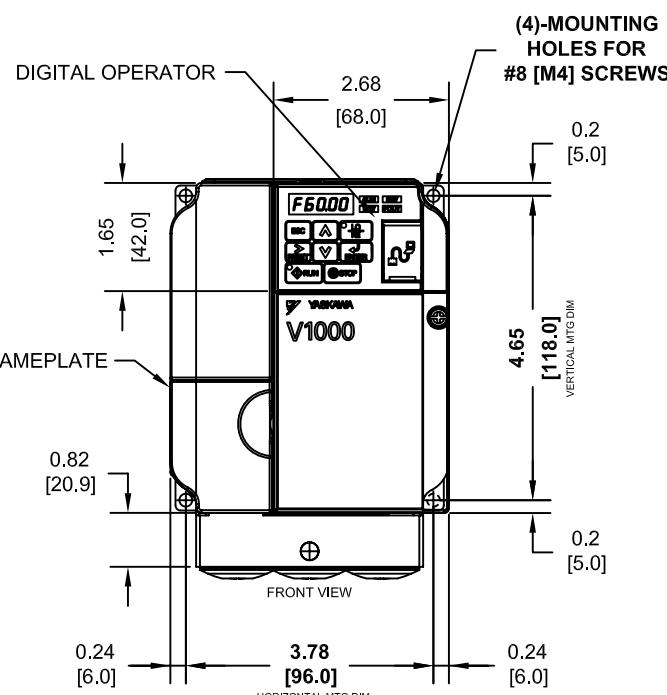
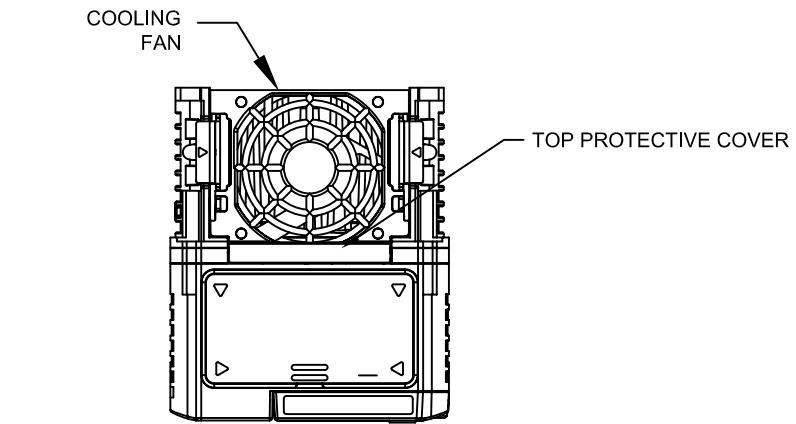
DATE

-

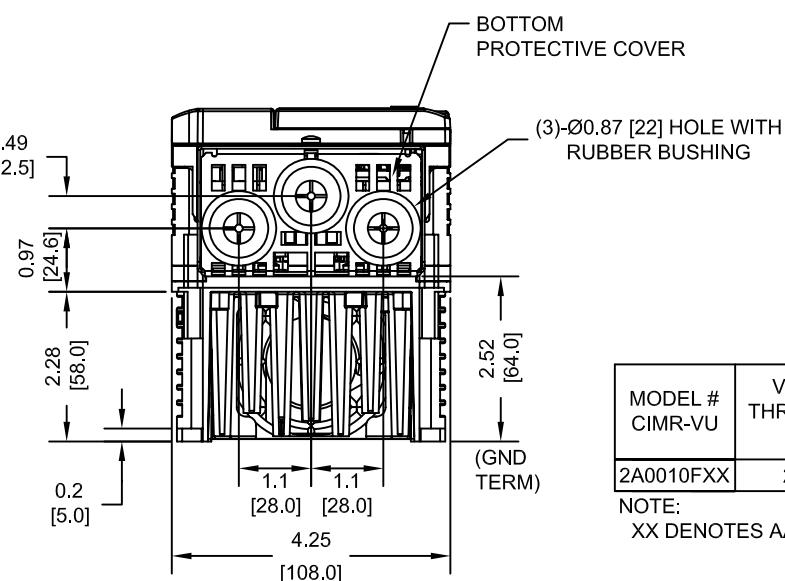
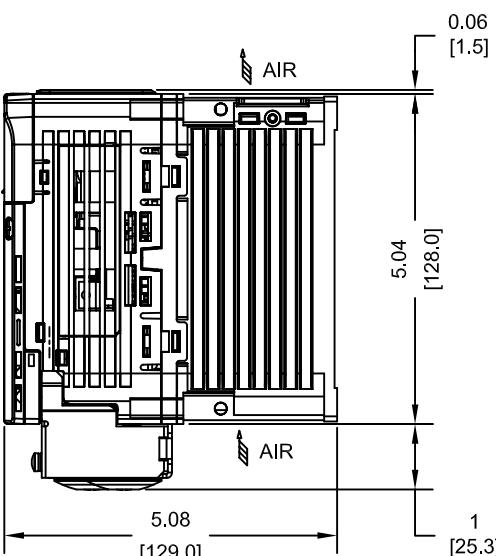
SIZE A
REVISION R00
PAGE 3 of 3

DRAWING #: DD.V1K.FR6.N1

1 2 3 4 5 6 7 8



NOTE:
PROTECTIVE COVERS ARE FACTORY INSTALLED TO THE TOP AND BOTTOM OF THE DRIVE TO MEET IP20 & NEMA TYPE 1 REQUIREMENTS, RESULTING IN AN AMBIENT TEMPERATURE RATING OF 104F(40C). REMOVE THESE COVERS WHEN OPERATING THE DRIVE WITHIN A PANEL TO OBTAIN THE MAXIMUM SURROUNDING AIR TEMPERATURE RATING OF 122F(50C). REMOVING THESE COVERS RESULTS IN AN ENCLOSURE RATING OF IP00.



MODEL # CIMR-VU	VOLTAGE THREE PHASE (VAC)	OUTPUT CURRENT (A)		WEIGHT LBS (Kg)	HEAT LOSS (W)					
		ND (Fc=2kHz) HD (Fc=8kHz)								
		INT	EXT	TOT	INT	EXT	TOT	INT	EXT	TOT
2A0010FXX	208/240	9.6	8.0	4.2 (1.9)	25.8	51.7	77.5	23.8	54.8	78.6

NOTE:
XX DENOTES AA-ZZ

INT=INTERNAL COMPONENTS
EXT=EXTERNAL HEATSINK
TOT=TOTAL

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:

YASKAWA
The Drive for Quality™

THIS DOCUMENT AND INFORMATION CONTAINED
IN IT ARE CONFIDENTIAL, AND CANNOT BE
COPIED OR DISCLOSED IN WHOLE OR IN PART
WITHOUT THE EXPRESS WRITTEN CONSENT
OF YASKAWA ELECTRIC AMERICA INC.

UNITS:
IN [mm]

SCALE:
1:3

DRAWN: J. MATTAS 12-11-07

CHECKED: M. RUCINSKI 5-7-08

TECH: J. CAIRO 3-24-08

APPROVED: T. SASADA 5-27-08

ORIGINAL DESIGN: -

DATE: -

TITLE: V1000 DIMENSION DRAWING

FRAME SIZE 7

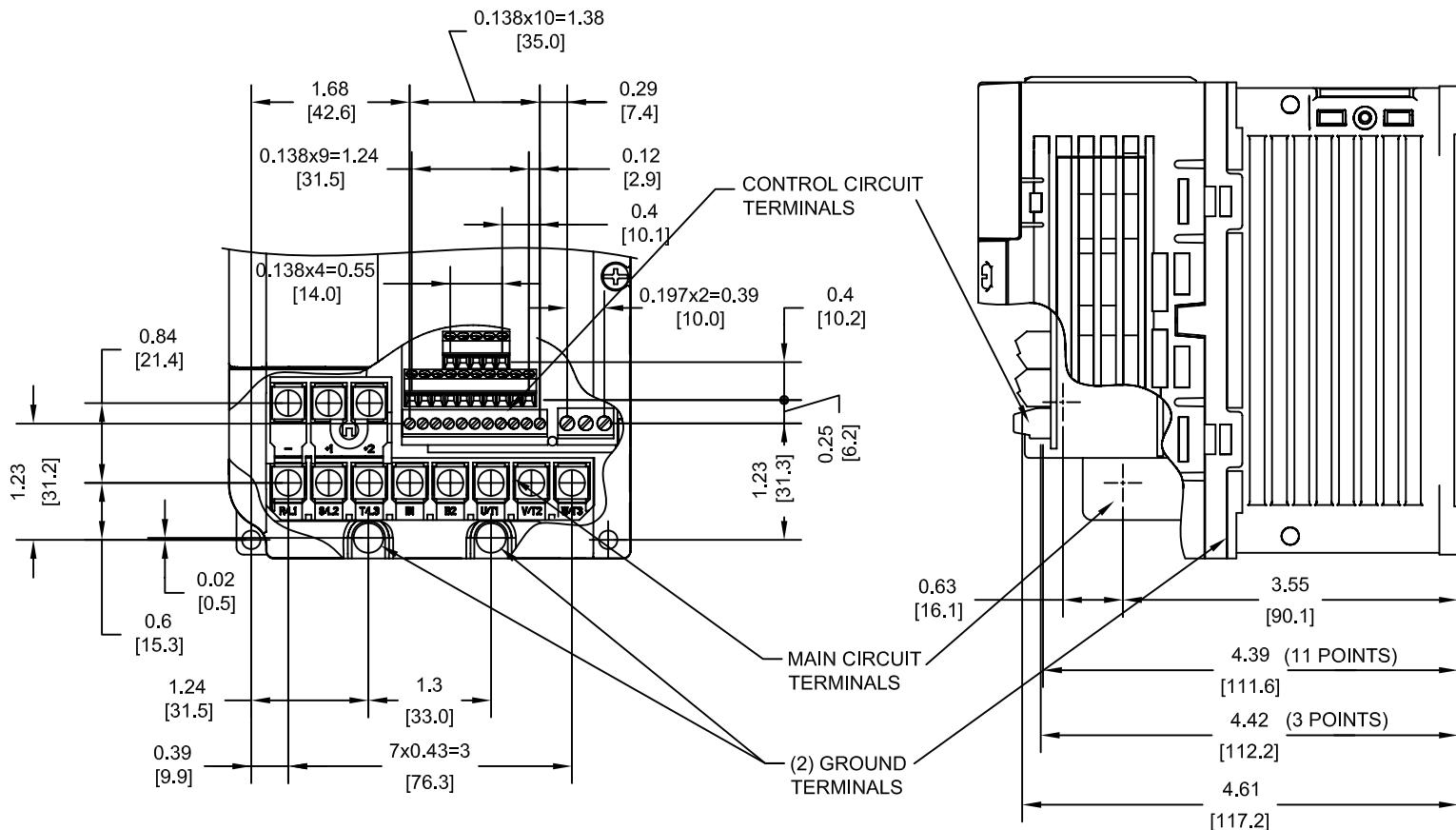
NEMA TYPE 1 ENCLOSURE

2A0010F

SIZE A REVISION R00 PAGE 1 of 3

DRAWING #: DD.V1K.FR7.N1

TERMINAL AND WIRING DETAILS (SCALE 1:2)



TERMINAL AND WIRE SPECIFICATIONS FOR MAIN CIRCUIT AND GROUND

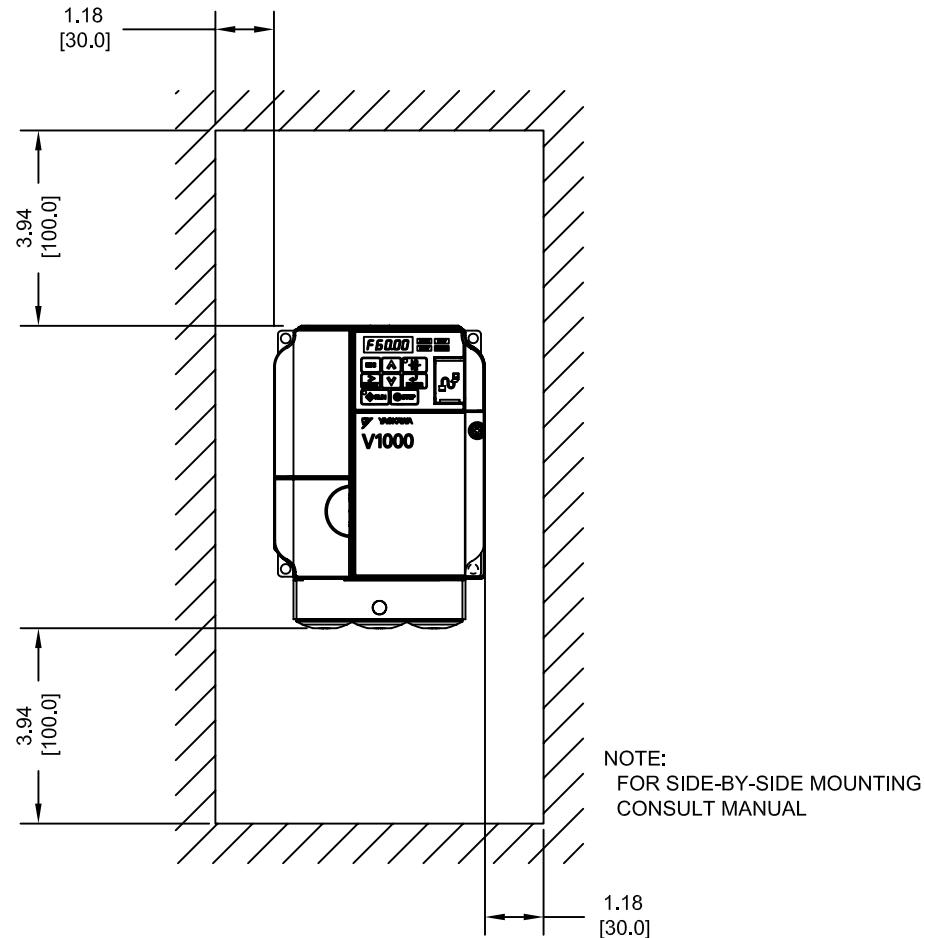
MODEL # CIMR-VU	TERMINAL SCREW	CLAMPING TORQUE lb.in.(N.m.)	WIRE RANGE AWG(mm ²)
2A0010F	M4	10.6 TO 13.3 (1.2 TO 1.5)	22-10 (0.33-5.5)

**NOTE: RATINGS APPLY TO BOTH FACTORY AND FIELD WIRING
REFER TO APPLICABLE CODES FOR PROPER WIRE TYPE AND SIZE**

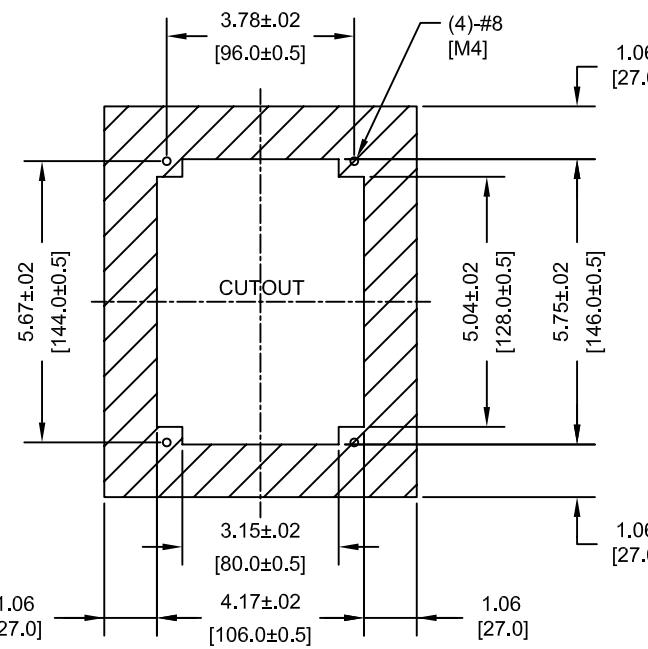
FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:		YASKAWA The Drive for Quality™			DRAWN: J. MATTAS DATE: 12-11-07	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 7 NEMA TYPE 1 ENCLOSURE 2A0010F
		CHECKED: M. RUCINSKI DATE: 5-7-08	SIZE: A	REVISION: R00	PAGE: 2 of 3	
		TECH: J. CAIRO DATE: 3-24-08				
		APPROVED: T. SASADA DATE: 5-27-08				
		ORIGINAL DESIGN: -	DATE: -	DRAWING #: DD.V1K.FR7.N1		
UNITS: IN[mm]	SCALE: BY VIEW					

MINIMUM INSTALLATION CLEARANCES (SCALE 1:4)

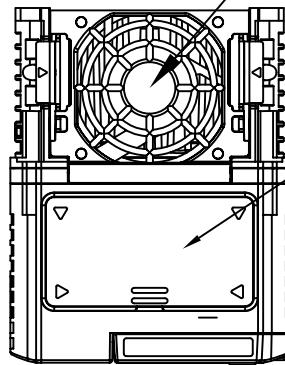


PANEL CUTOUT FOR EXTERNAL HEATSINK
MOUNTING CONFIGURATION (SCALE 1:4)



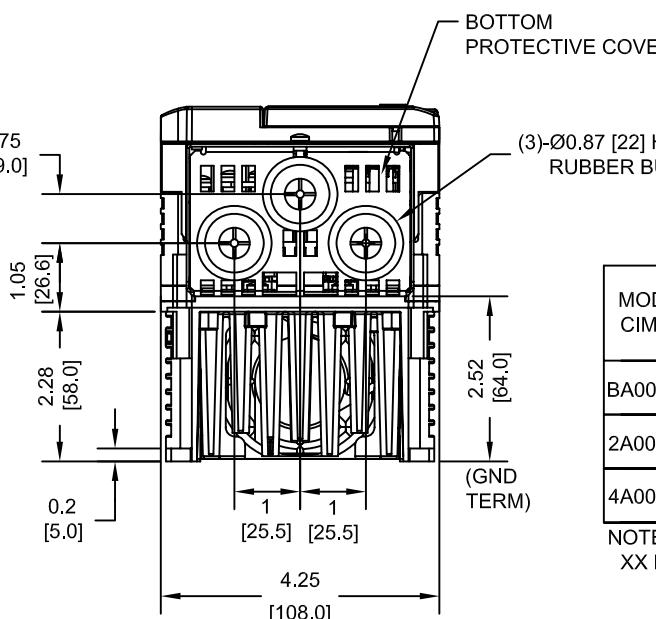
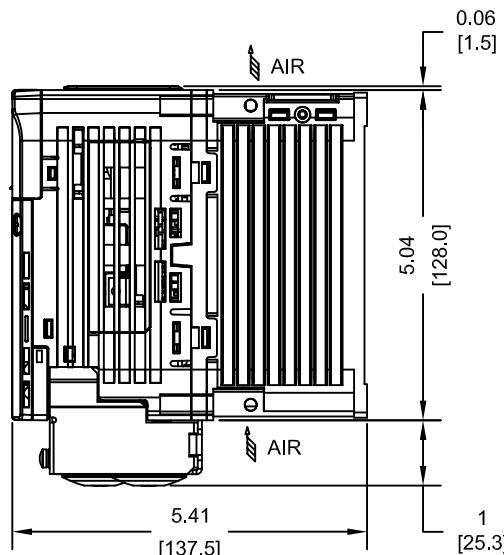
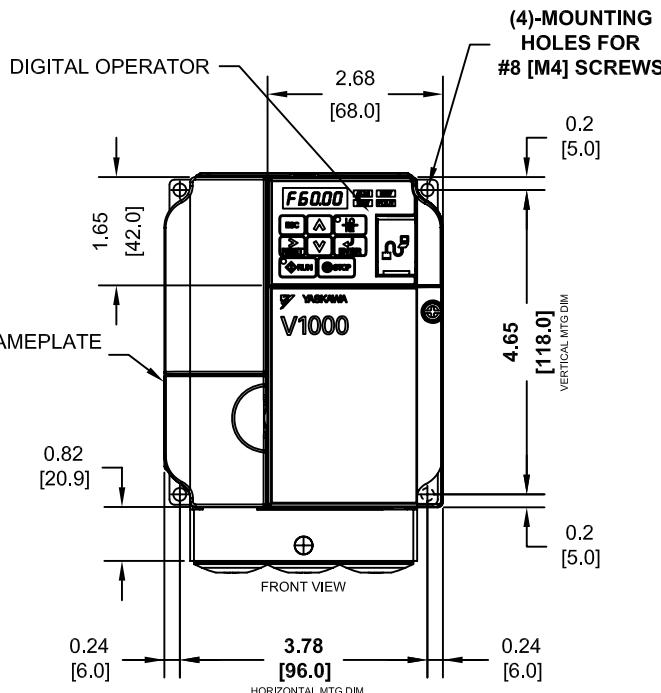
- NOTES:
1. EXTERNAL HEATSINK CONFIGURATION REQUIRES MOUNTING KIT
 2. EXPOSED HEATSINK RECOMMENDED CLEARANCE D=2.76" MINUS PANEL THICKNESS

TOLERANCES / REFERENCES:	YASKAWA The Drive for Quality™		DRAWN: J. MATTAS CHECKED: M. RUCINSKI TECH: J. CAIRO APPROVED: T. SASADA	DATE: 12-11-07 DATE: 5-7-08 DATE: 3-24-08 DATE: 5-27-08	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 7 NEMA TYPE 1 ENCLOSURE 2A0010F
UNITS: IN [mm]	SCALE: BY VIEW	ORIGINAL DESIGN: -	SIZE A	REVISION R00	PAGE 3 of 3
		DRAWING #: DD.V1K.FR7.N1			



2A0012F: COOLING FAN
BA0006F: NATURAL CONVECTION
4A0004F: NATURAL CONVECTION

NOTE:
PROTECTIVE COVERS ARE FACTORY INSTALLED TO THE TOP AND BOTTOM OF THE DRIVE TO MEET IP20 & NEMA TYPE 1 REQUIREMENTS, RESULTING IN AN AMBIENT TEMPERATURE RATING OF 104F(40C). REMOVE THESE COVERS WHEN OPERATING THE DRIVE WITHIN A PANEL TO OBTAIN THE MAXIMUM SURROUNDING AIR TEMPERATURE RATING OF 122F(50C). REMOVING THESE COVERS RESULTS IN AN ENCLOSURE RATING OF IP00.



MODEL # CIMR-VU	VOLTAGE (VAC)	OUTPUT CURRENT (A)		WEIGHT LBS (Kg)	HEAT LOSS (W)					
		ND (Fc=2kHz)			HD (Fc=8kHz)					
		INT	EXT		INT	EXT	TOT	INT	EXT	
BA0006FXX	208/240 SINGLE PHASE	6.0	5.0	4.2 (1.9)	19.4	30.1	49.5	16.8	33.7	50.5
2A0012FXX	208/240 THREE PHASE	12.0	11.0	4.2 (1.9)	30.4	61.3	91.7	29.9	70.7	100.6
4A0004FXX	380/480 THREE PHASE	4.1	3.4	4.2 (1.9)	16.8	30.5	47.3	17.9	42.3	60.2

NOTE:
XX DENOTES AA-77

INT=INTERNAL COMPONENTS
EXT=EXTERNAL HEATSINK
TOT=TOTAL

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES



YASKAWA
The Drive for Quality™

THIS DOCUMENT AND INFORMATION CONTAINED
IN IT ARE CONFIDENTIAL, AND CANNOT BE
COPIED OR DISCLOSED IN WHOLE OR IN PART
WITHOUT THE EXPRESS WRITTEN CONSEN

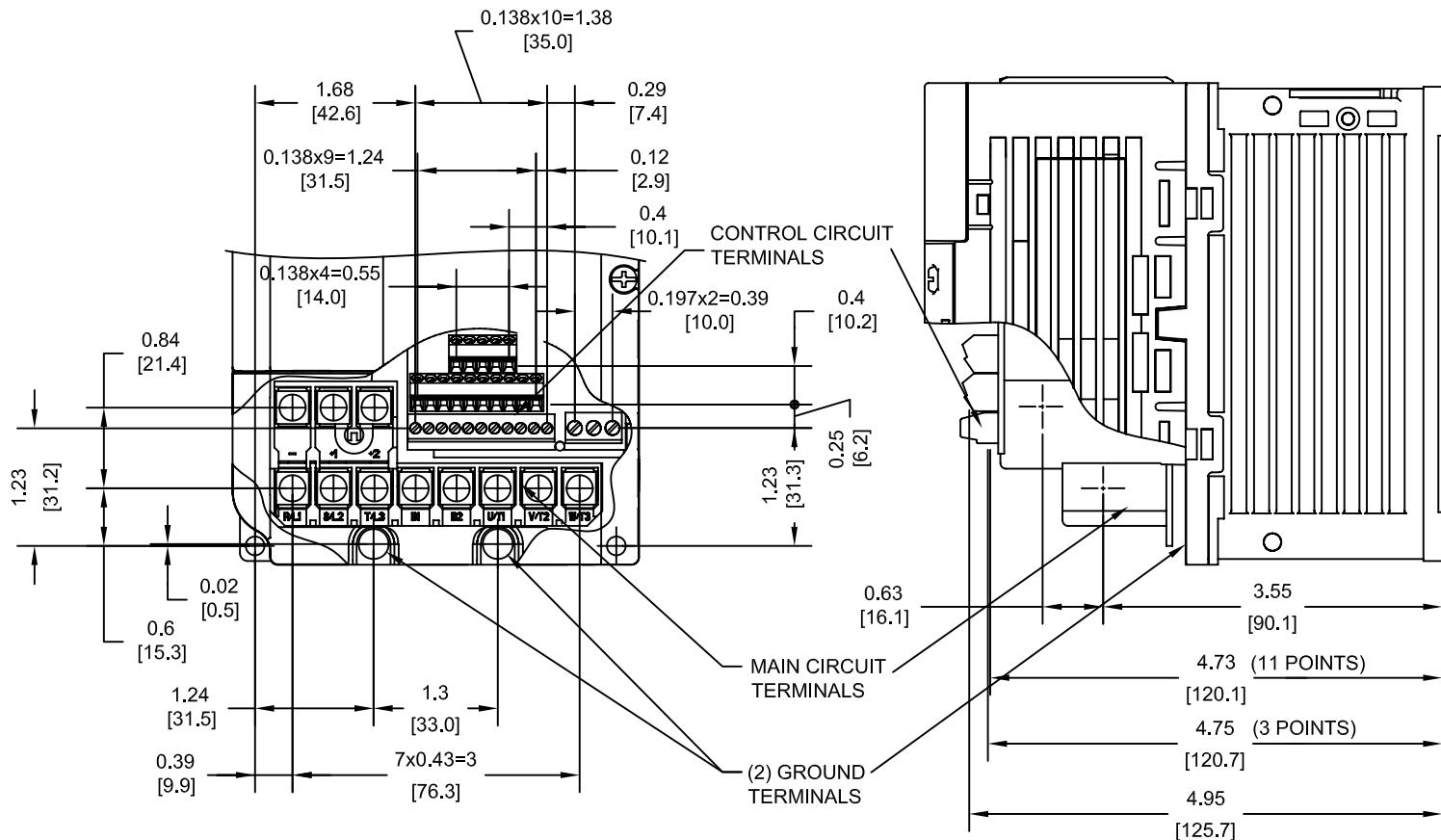
UNITS:
IN [mm]

**DO NOT DISCLOSED IN WHOLE OR IN PART
WITHOUT THE EXPRESS WRITTEN CONSEN
OF YASKAWA ELECTRIC AMERICA INC.**

T. SASADA	5-27-00	DRAWING #:
ORIGINAL DESIGN:	DATE	DD.V1K.FR8.N1
-	-	

DD.V1K.FR8.N1

TERMINAL AND WIRING DETAILS (SCALE 1:2)



TERMINAL AND WIRE SPECIFICATIONS FOR
MAIN CIRCUIT AND GROUND

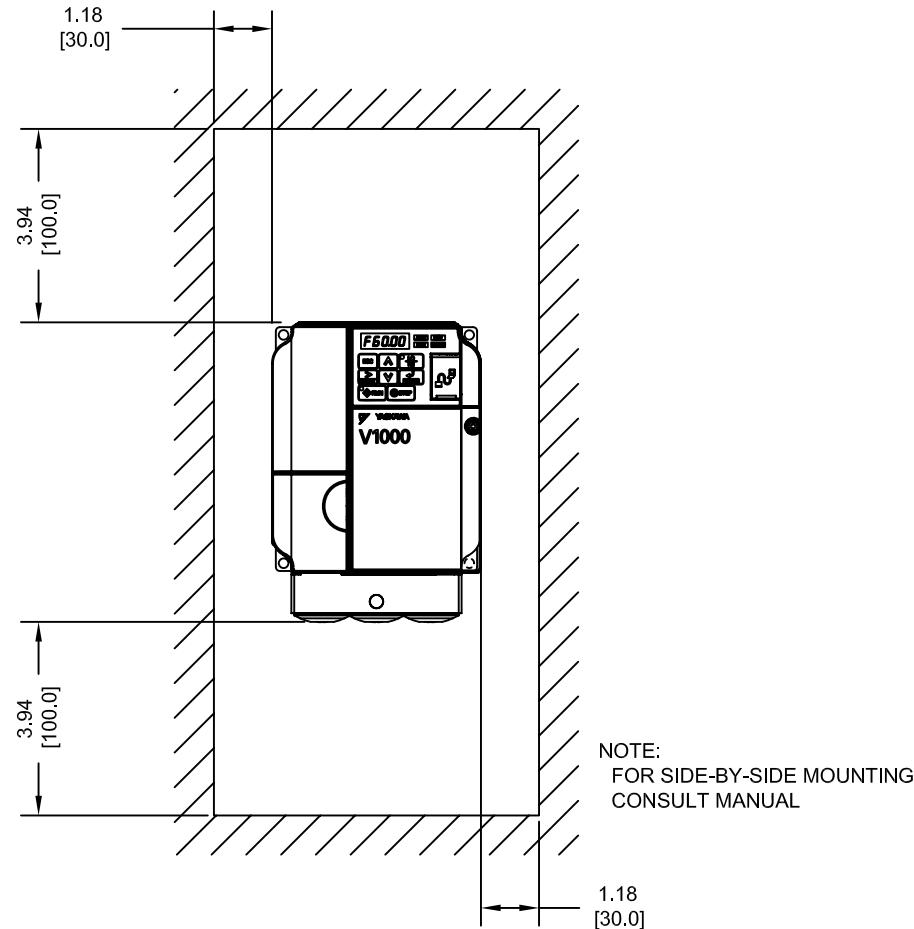
MODEL # CIMR-VU	TERMINAL SCREW	CLAMPING TORQUE lb.in.(N.m.)	WIRE RANGE AWG(mm ²)
BA0006F	M4	10.6 TO 13.3 (1.2 TO 1.5)	22-10 (0.33-5.5)
2A0012F	M4	10.6 TO 13.3 (1.2 TO 1.5)	22-10 (0.33-5.5)
4A0004F	M4	10.6 TO 13.3 (1.2 TO 1.5)	22-10 (0.33-5.5)

NOTE: RATINGS APPLY TO BOTH FACTORY AND FIELD WIRING
REFER TO APPLICABLE CODES FOR PROPER WIRE TYPE AND SIZE

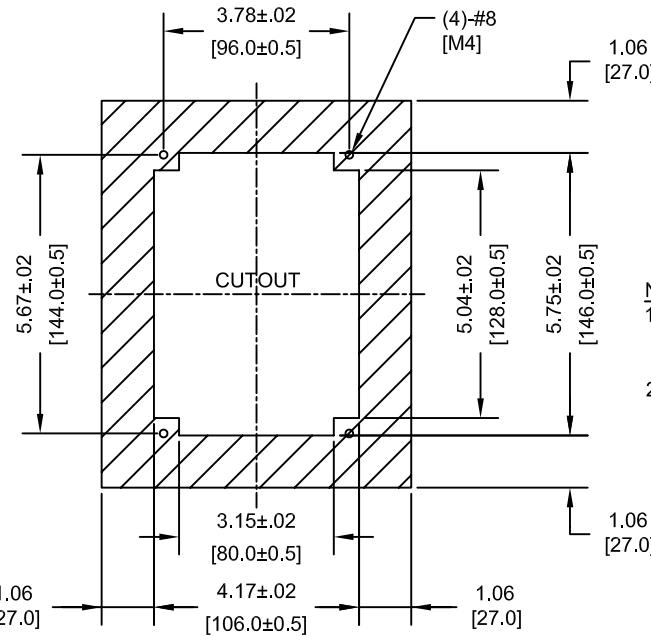
FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:	YASKAWA The Drive for Quality™		DRAWN: J. MATTAS DATE: 12-12-07	REVISION: R00	PAGE: 2 of 3
THIS DOCUMENT AND INFORMATION CONTAINED IN IT ARE CONFIDENTIAL, AND CANNOT BE COPIED OR DISCLOSED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN CONSENT OF YASKAWA ELECTRIC AMERICA INC.	CHECKED: M. RUCINSKI DATE: 5-7-08	TECH: J. CAIRO DATE: 3-24-08	APPROVED: T. SASADA DATE: 5-27-08	SIZE: A	DRAWING #: DD.V1K.FR8.N1
UNITS: IN[mm]	SCALE: BY VIEW	ORIGINAL DESIGN: -	DATE: -		

MINIMUM INSTALLATION CLEARANCES (SCALE 1:4)

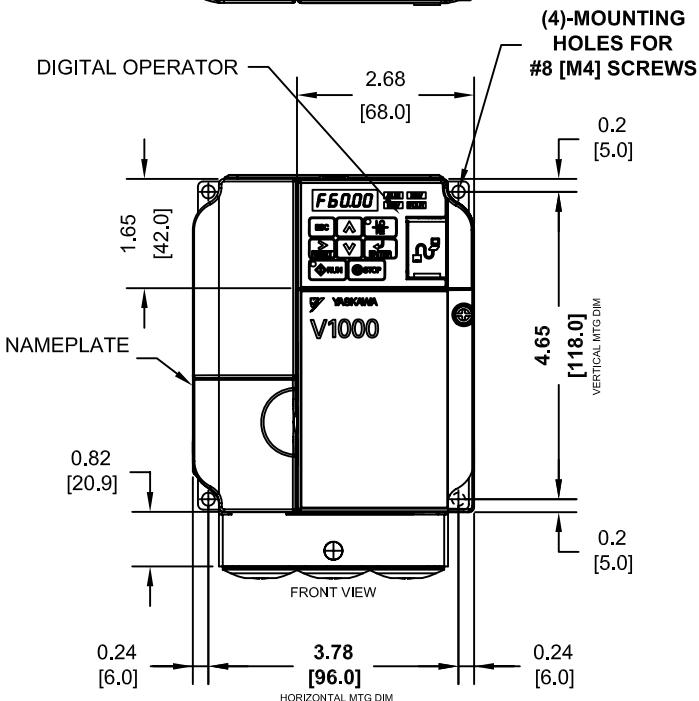
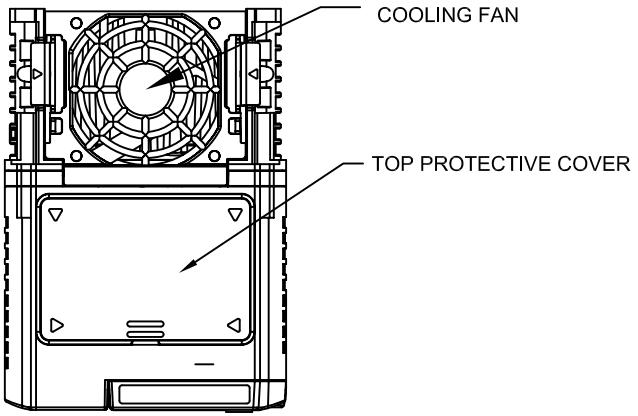


PANEL CUTOUT FOR EXTERNAL HEATSINK
MOUNTING CONFIGURATION (SCALE 1:4)

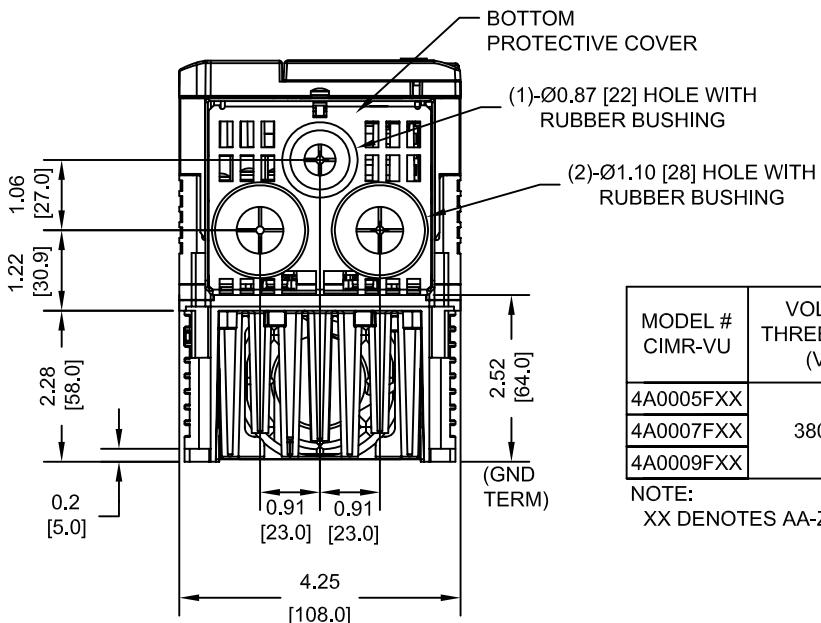
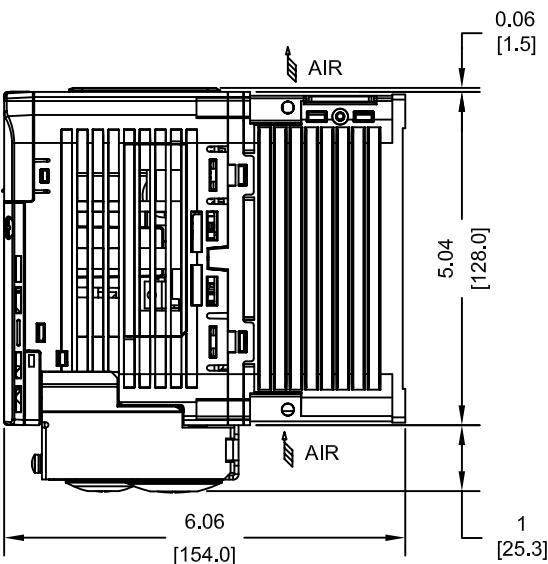


- NOTES:**
1. EXTERNAL HEATSINK CONFIGURATION REQUIRES MOUNTING KIT
 2. EXPOSED HEATSINK RECOMMENDED CLEARANCE D=2.76" MINUS PANEL THICKNESS

TOLERANCES / REFERENCES:		YASKAWA <i>The Drive for Quality™</i>		DRAWN: J. MATTAS CHECKED: M. RUCINSKI TECH: J. CAIRO APPROVED: T. SASADA	DATE: 12-12-07 DATE: 5-7-08 DATE: 3-24-08 DATE: 5-27-08 DATE: -	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 8 NEMA TYPE 1 ENCLOSURE BA0006F, 2A0012F & 4A0004F
THIS DOCUMENT AND INFORMATION CONTAINED IN IT ARE CONFIDENTIAL, AND CANNOT BE COPIED OR DISCLOSED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN CONSENT OF YASKAWA ELECTRIC AMERICA INC.				ORIGINAL DESIGN: -	SIZE A	REVISION R00
UNITS: IN [mm]	SCALE: BY VIEW				PAGE 3 of 3	DRAWING #: DD.V1K.FR8.N1



NOTE:
PROTECTIVE COVERS ARE FACTORY INSTALLED TO THE TOP AND BOTTOM OF THE DRIVE TO MEET IP20 & NEMA TYPE 1 REQUIREMENTS, RESULTING IN AN AMBIENT TEMPERATURE RATING OF 104F(40C). REMOVE THESE COVERS WHEN OPERATING THE DRIVE WITHIN A PANEL TO OBTAIN THE MAXIMUM SURROUNDING AIR TEMPERATURE RATING OF 122F(50C). REMOVING THESE COVERS RESULTS IN AN ENCLOSURE RATING OF IP00.



MODEL # CIMR-VU	VOLTAGE THREE PHASE (VAC)	OUTPUT CURRENT (A)		WEIGHT LBS (Kg)	HEAT LOSS (W)						
					ND (Fc=2kHz)			HD (Fc=8kHz)			
		ND	HD		INT	EXT	TOT	INT	EXT	TOT	
4A0005FXX	380/480	5.4	4.8	4.2 (1.9)	21.8	44.5	66.3	26.2	70.7	96.9	
4A0007FXX		6.9	5.5	4.2 (1.9)	28.4	58.5	86.9	30.7	81.0	111.7	
4A0009FXX		8.8	7.2	4.2 (1.9)	31.4	63.7	95.1	32.9	84.6	117.5	

NOTE:
XX DENOTES AA-ZZ

INT=INTERNAL COMPONENTS
EXT=EXTERNAL HEATSINK
TOT=TOTAL

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:

YASKAWA
The Drive for Quality™

THIS DOCUMENT AND INFORMATION CONTAINED
IN IT ARE CONFIDENTIAL, AND CANNOT BE
COPIED OR DISCLOSED IN WHOLE OR IN PART
WITHOUT THE EXPRESS WRITTEN CONSENT
OF YASKAWA ELECTRIC AMERICA INC.

UNITS:
IN [mm]

SCALE:
1:3

DRAWN:

J. MATTAS

DATE:

12-18-07

TITLE:

V1000 DIMENSION DRAWING
FRAME SIZE 9
NEMA TYPE 1 ENCLOSURE
4A0005F, 4A0007F & 4A0009F

CHECKED:

M. RUCINSKI

DATE:

5-7-08

TECH:

J. CAIRO

DATE:

3-24-08

APPROVED:

T. SASADA

DATE:

5-27-08

ORIGINAL DESIGN:

-

DATE:

-

SIZE

A

REVISION

R00

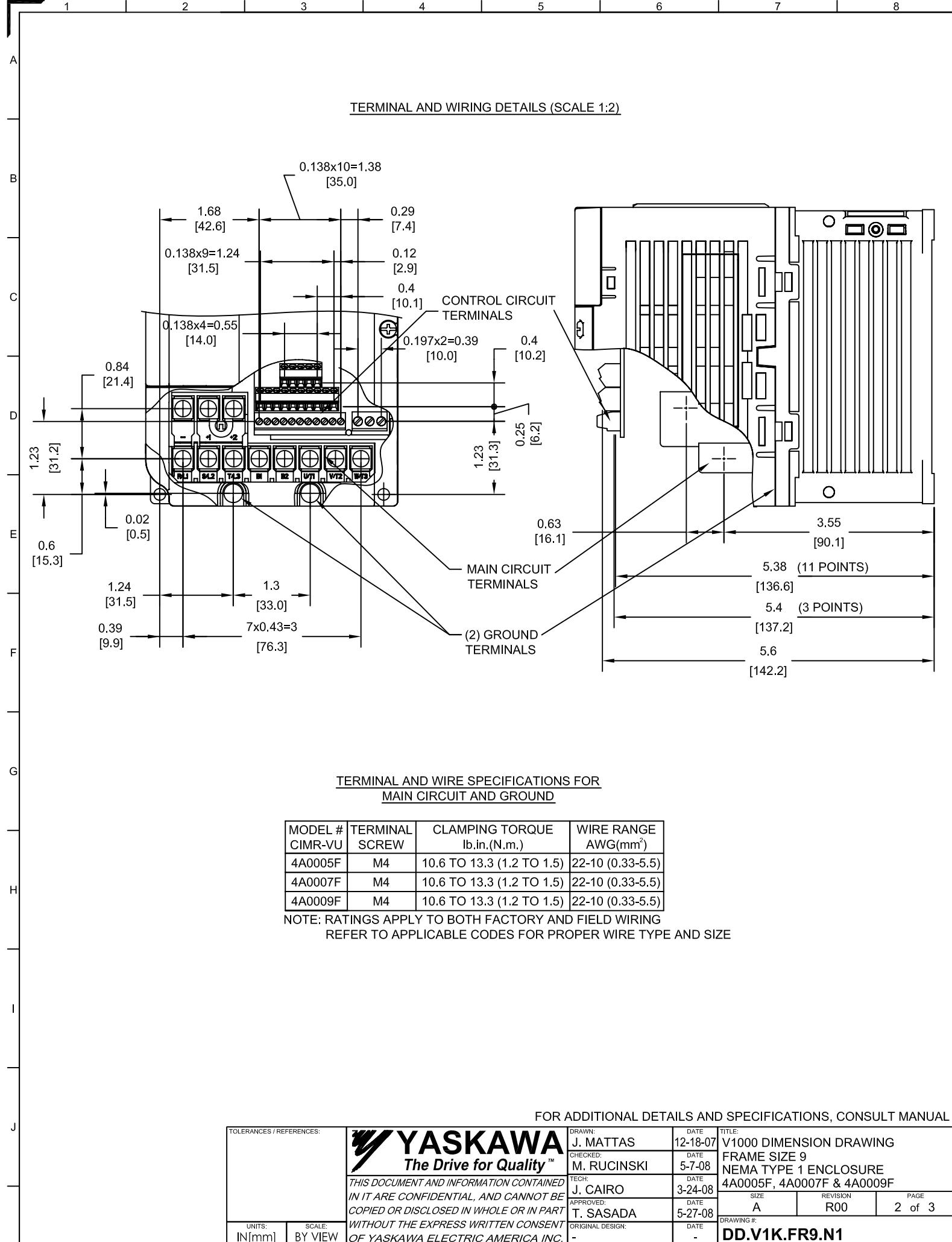
PAGE

1

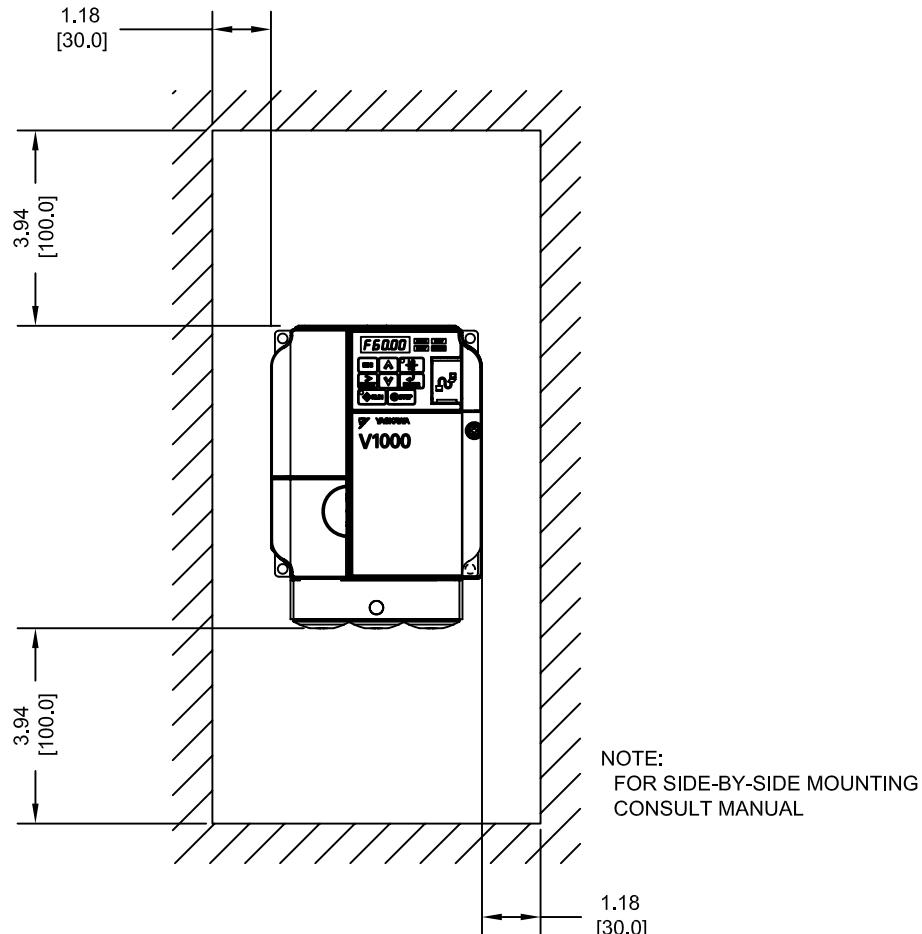
of 3

DRAWING #:

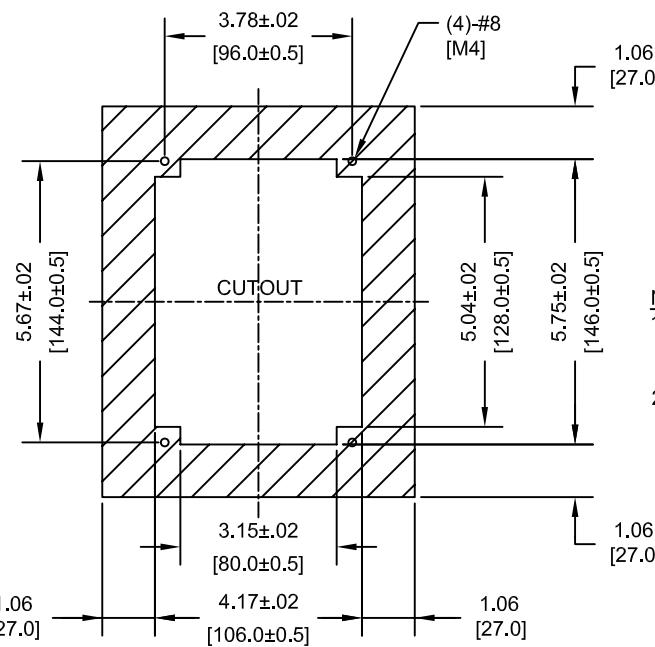
DD.V1K.FR9.N1



MINIMUM INSTALLATION CLEARANCES (SCALE 1:4)



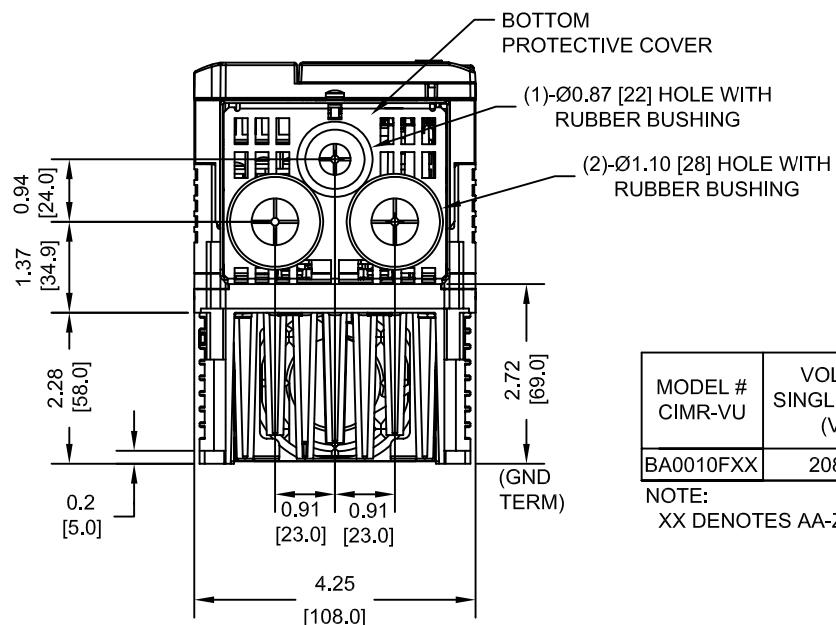
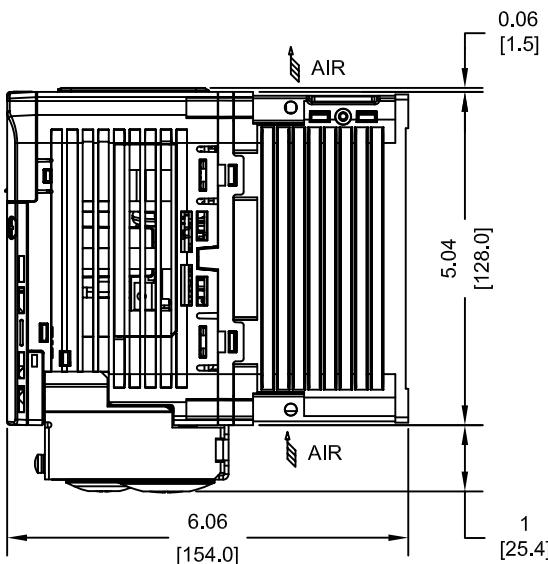
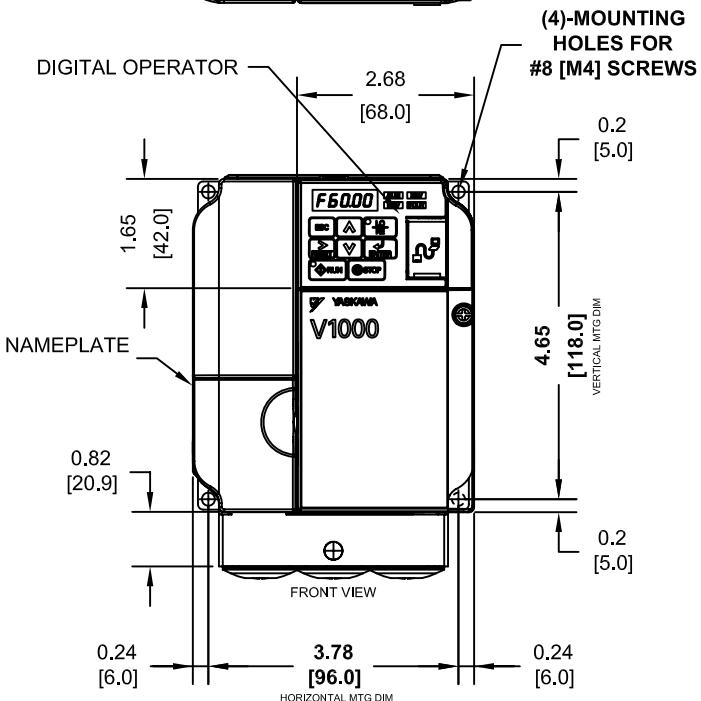
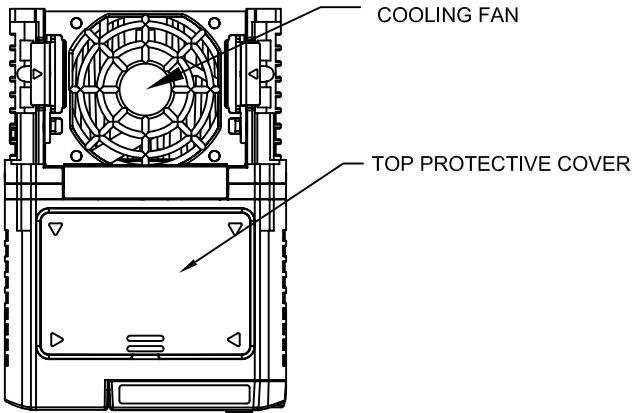
**PANEL CUTOUT FOR EXTERNAL HEATSINK
MOUNTING CONFIGURATION (SCALE 1:4)**



NOTES:

1. EXTERNAL HEATSINK
CONFIGURATION REQUIRES
MOUNTING KIT
2. EXPOSED HEATSINK
RECOMMENDED CLEARANCE
D=2.76" MINUS PANEL THICKNESS

TOLERANCES / REFERENCES:		YASKAWA The Drive for Quality™		DRAWN: J. MATTAS	DATE: 12-18-07	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 9 NEMA TYPE 1 ENCLOSURE 4A0005F, 4A0007F & 4A0009F		
		CHECKED: M. RUCINSKI	DATE: 5-7-08	TECH: J. CAIRO	DATE: 3-24-08	SIZE: A	REVISION: R00	PAGE: 3 of 3
		APPROVED: T. SASADA	DATE: 5-27-08	ORIGINAL DESIGN: -	DATE: -	DRAWING #: DD.V1K.FR9.N1		
UNITS: IN[mm]	SCALE: BY VIEW							



MODEL # CIMR-VU	VOLTAGE SINGLE PHASE (VAC)	OUTPUT CURRENT (A)		WEIGHT LBS (Kg)	HEAT LOSS (W)											
		ND	HD		INT		EXT		TOT		INT		EXT		TOT	
BA0010FXX	208/240	9.6	8.0	4.4 (2.0)	29.8	51.7	81.5	25.9	54.8	80.7						

NOTE:
XX DENOTES AA-ZZ

INT=INTERNAL COMPONENTS
EXT=EXTERNAL HEATSINK
TOT=TOTAL

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:

YASKAWA
The Drive for Quality™

THIS DOCUMENT AND INFORMATION CONTAINED
IN IT ARE CONFIDENTIAL, AND CANNOT BE
COPIED OR DISCLOSED IN WHOLE OR IN PART
WITHOUT THE EXPRESS WRITTEN CONSENT
OF YASKAWA ELECTRIC AMERICA INC.

UNITS:
IN [mm]

SCALE:
1:3

DRAWN:

J. MATTAS

DATE:

12-19-07

TITLE:

V1000 DIMENSION DRAWING
FRAME SIZE 10
NEMA TYPE 1 ENCLOSURE
BA0010F

CHECKED:

M. RUCINSKI

DATE:

5-7-08

TECH:

J. CAIRO

DATE:

3-24-08

APPROVED:

T. SASADA

DATE:

5-27-08

ORIGINAL DESIGN:

-

DATE:

-

SIZE

A

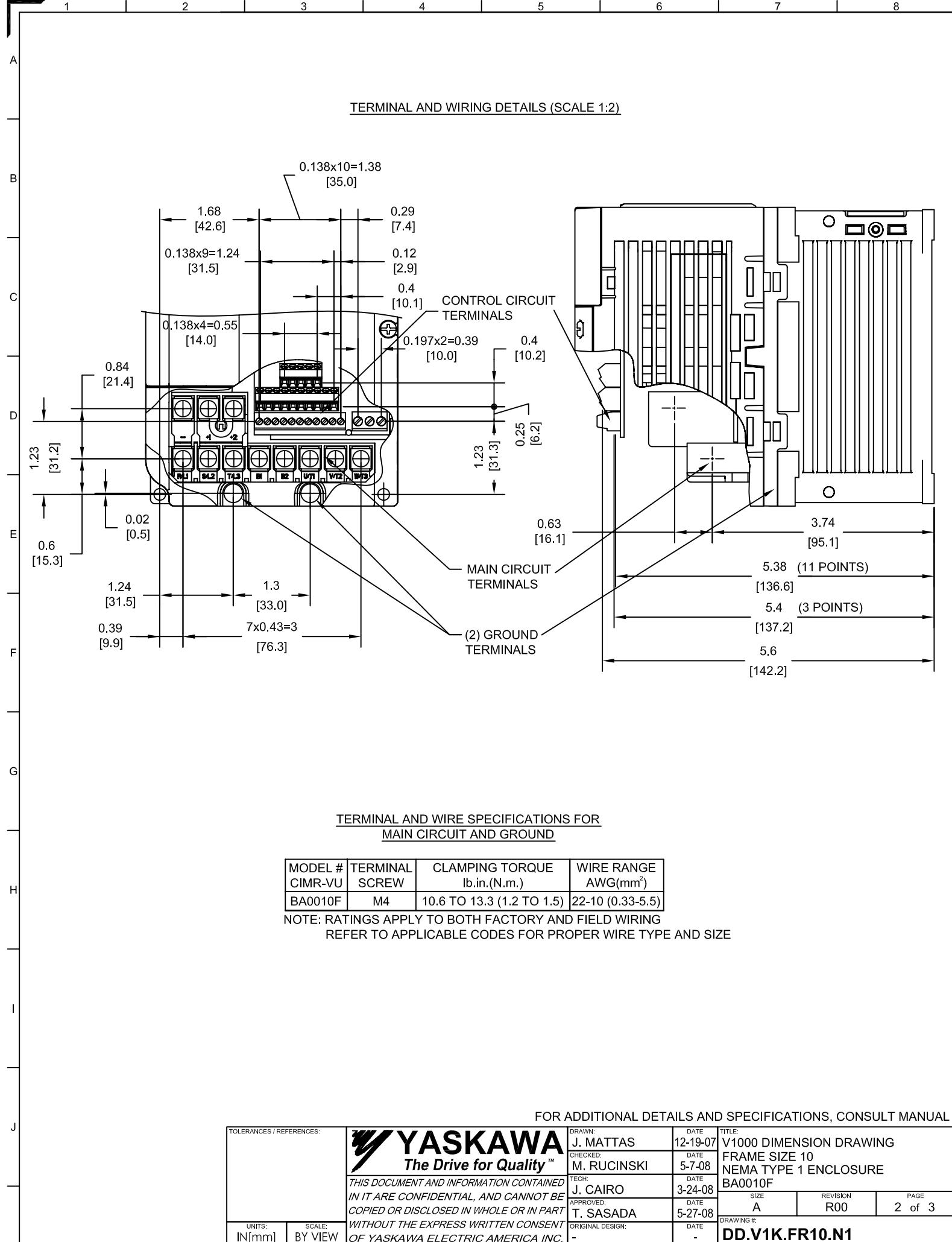
REVISION

R00

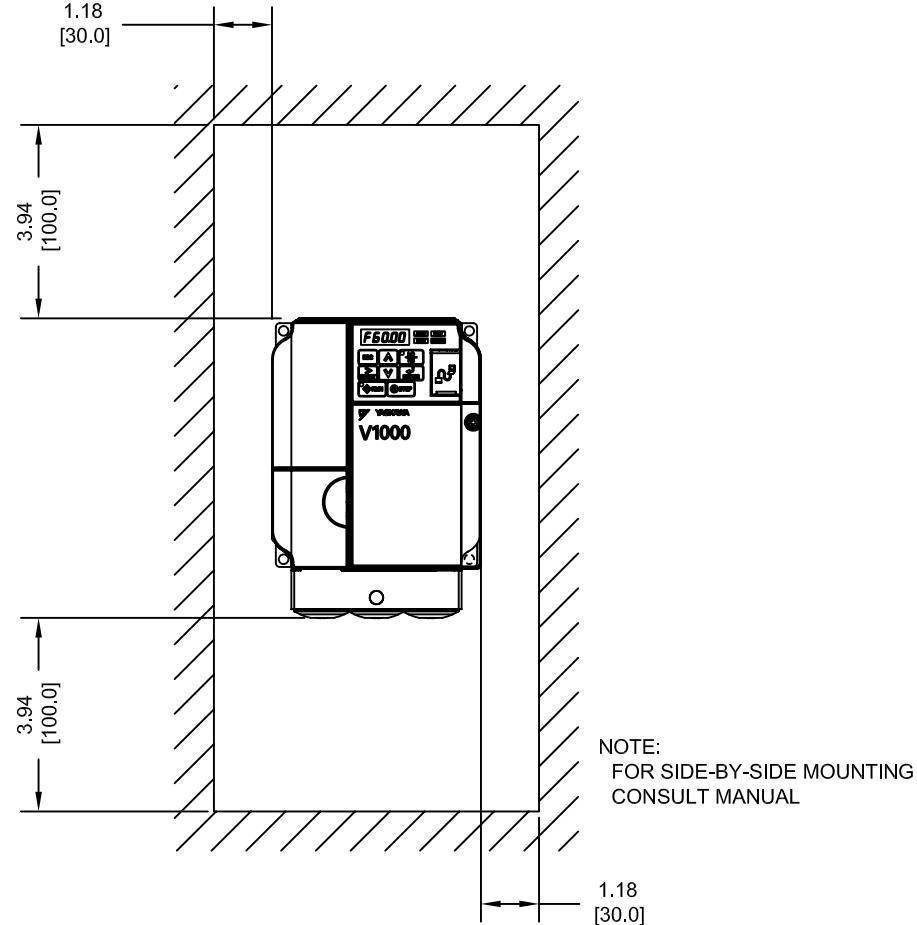
PAGE

1 of 3

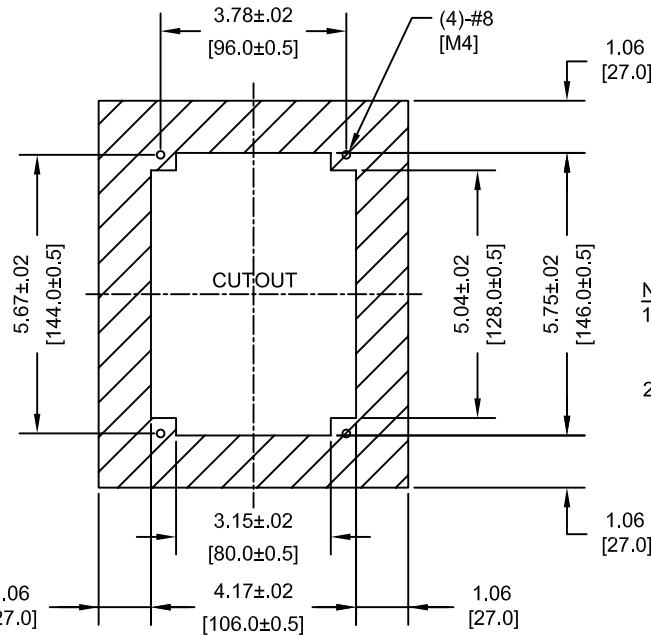
DRAWING #:
DD.V1K.FR10.N1



MINIMUM INSTALLATION CLEARANCES (SCALE 1:4)



PANEL CUTOUT FOR EXTERNAL HEATSINK
MOUNTING CONFIGURATION (SCALE 1:4)

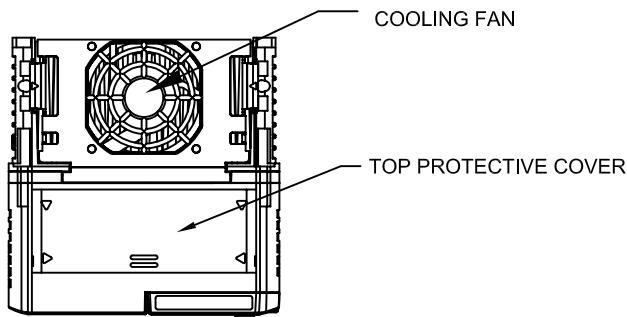


NOTES:

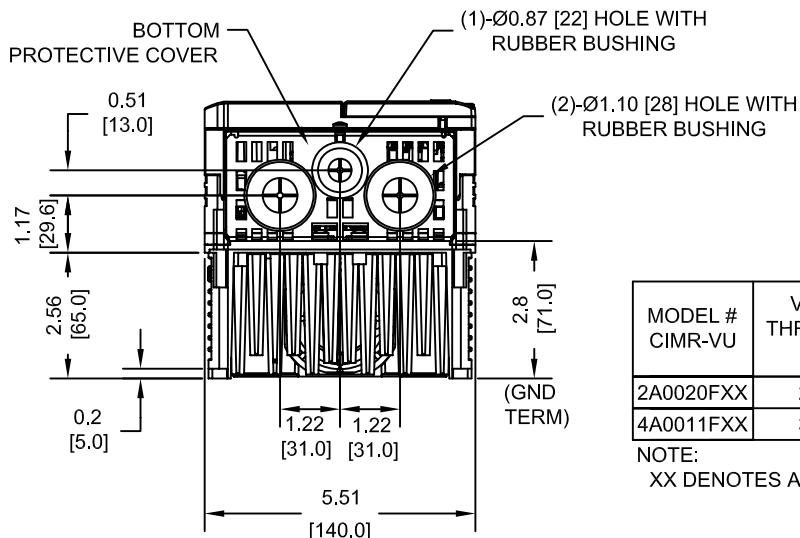
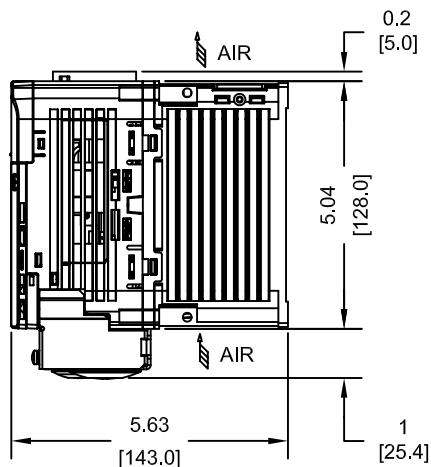
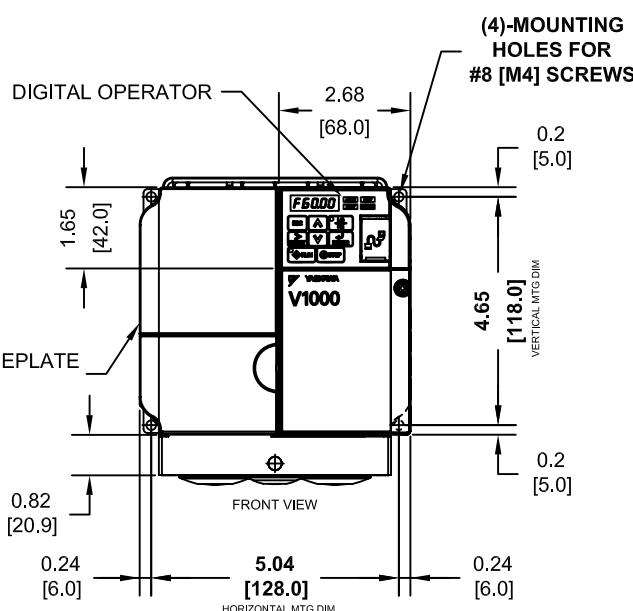
1. EXTERNAL HEATSINK CONFIGURATION REQUIRES MOUNTING KIT
2. EXPOSED HEATSINK RECOMMENDED CLEARANCE D=2.76" MINUS PANEL THICKNESS

TOLERANCES / REFERENCES:		 YASKAWA The Drive for Quality™	DRAWN: J. MATTAS	DATE: 12-19-07	TITLE: V1000 DIMENSION DRAWING	
					FRAME SIZE 10	NEMA TYPE 1 ENCLOSURE
THIS DOCUMENT AND INFORMATION CONTAINED IN IT ARE CONFIDENTIAL, AND CANNOT BE COPIED OR DISCLOSED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN CONSENT OF YASKAWA ELECTRIC AMERICA INC.		CHECKED: M. RUCINSKI	TECH: J. CAIRO	APPROVED: T. SASADA	ORIGINAL DESIGN: -	BA0010F
UNITS: IN [mm]	SCALE: BY VIEW				DATE: 5-27-08	PAGE 3 of 3
		DRAWING #: DD.V1K.FR10.N1				

1 2 3 4 5 6 7 8



NOTE:
PROTECTIVE COVERS ARE FACTORY INSTALLED TO THE TOP AND BOTTOM OF THE DRIVE TO MEET IP20 & NEMA TYPE 1 REQUIREMENTS, RESULTING IN AN AMBIENT TEMPERATURE RATING OF 104F(40C). REMOVE THESE COVERS WHEN OPERATING THE DRIVE WITHIN A PANEL TO OBTAIN THE MAXIMUM SURROUNDING AIR TEMPERATURE RATING OF 122F(50C). REMOVING THESE COVERS RESULTS IN AN ENCLOSURE RATING OF IP00.



MODEL # CIMR-VU	VOLTAGE THREE PHASE (VAC)	OUTPUT CURRENT (A)		WEIGHT LBS (Kg)	HEAT LOSS (W)						
		ND (Fc=2kHz)			HD (Fc=8kHz)		INT		EXT		
		ND	HD		INT	EXT	TOT	INT	EXT	TOT	
2A0020FXX	208/240	19.6	17.5	5.7 (2.6)	46.3	98.7	145.0	43.3	110.5	153.8	
4A0011FXX	380/480	11.1	9.2	5.7 (2.6)	46.0	81.7	127.7	41.5	107.2	148.7	

NOTE:
XX DENOTES AA-ZZ

INT=INTERNAL COMPONENTS
EXT=EXTERNAL HEATSINK
TOT=TOTAL

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:

YASKAWA
The Drive for Quality™

THIS DOCUMENT AND INFORMATION CONTAINED
IN IT ARE CONFIDENTIAL, AND CANNOT BE
COPIED OR DISCLOSED IN WHOLE OR IN PART
WITHOUT THE EXPRESS WRITTEN CONSENT
OF YASKAWA ELECTRIC AMERICA INC.

UNITS:
IN [mm]

SCALE:
1:4

DRAWN:
J. MATTAS

DATE:
1-7-08

TITLE:
V1000 DIMENSION DRAWING

CHECKED:
M. RUCINSKI

DATE:
5-7-08

FRAME SIZE 11

TECH:
J. CAIRO

DATE:
3-24-08

NEMA TYPE 1 ENCLOSURE

APPROVED:
T. SASADA

DATE:
5-27-08

2A0020F & 4A0011F

ORIGINAL DESIGN:
-

DATE:
-

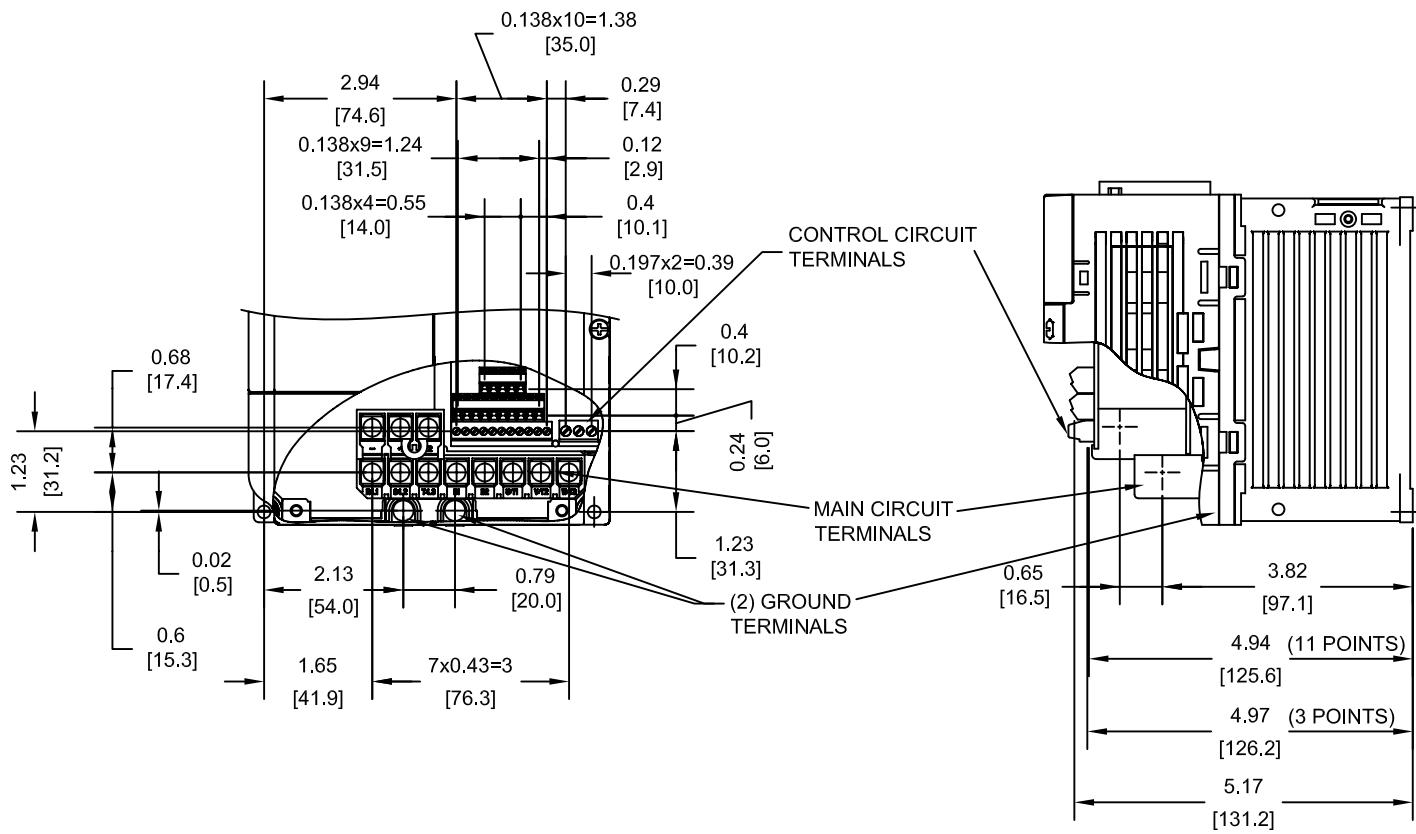
SIZE
A

REVISION
R00

PAGE
1 of 3

DRAWING #:
DD.V1K.FR11.N1

1 2 3 4 5 6 7 8

TERMINAL AND WIRING DETAILS (SCALE 1:3)TERMINAL AND WIRE SPECIFICATIONS FOR
MAIN CIRCUIT AND GROUND

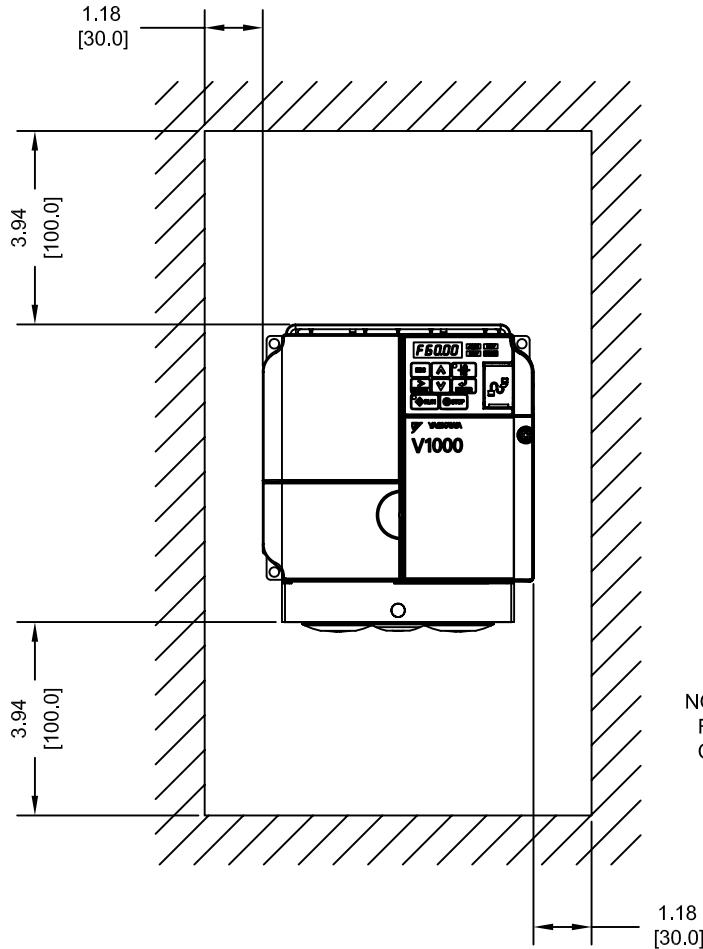
MODEL #	TERMINAL SCREW	CLAMPING TORQUE lb.in.(N.m.)	WIRE RANGE AWG(mm ²)
CIMR-VU	M4	10.6 TO 13.3 (1.2 TO 1.5)	22-10 (0.33-5.5)
2A0020F	M4	10.6 TO 13.3 (1.2 TO 1.5)	22-10 (0.33-5.5)
4A0011F	M4	10.6 TO 13.3 (1.2 TO 1.5)	22-10 (0.33-5.5)

NOTE: RATINGS APPLY TO BOTH FACTORY AND FIELD WIRING
REFER TO APPLICABLE CODES FOR PROPER WIRE TYPE AND SIZE

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

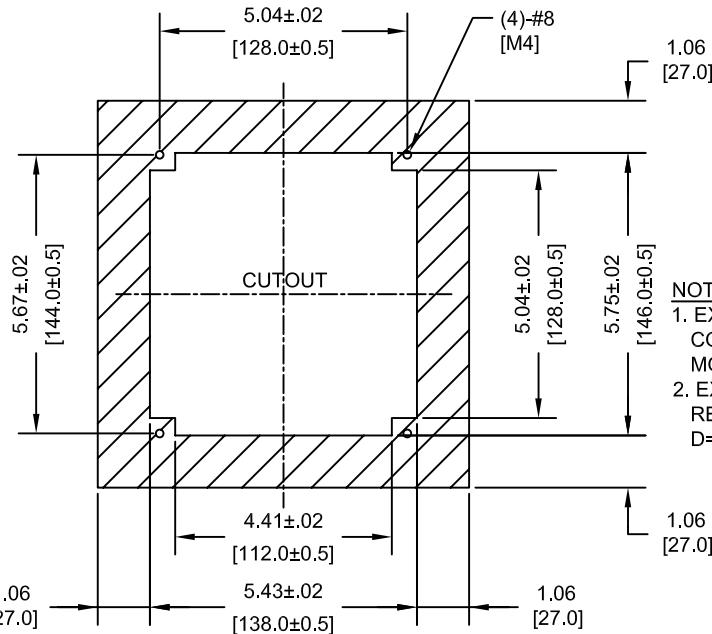
TOLERANCES / REFERENCES:		YASKAWA The Drive for Quality™		DRAWN: J. MATTAS	DATE 1-7-08	TITLE: V1000 DIMENSION DRAWING		
				CHECKED: M. RUCINSKI	DATE 5-7-08	FRAME SIZE 11		
				TECH: J. CAIRO	DATE 3-24-08	NEMA TYPE 1 ENCLOSURE		
				APPROVED: T. SASADA	DATE 5-27-08	2A0020F & 4A0011F		
UNITS: IN[mm]	SCALE: BY VIEW			ORIGINAL DESIGN: -	DATE -	SIZE A	REVISION R00	PAGE 2 of 3
DRAWING #: DD.V1K.FR11.N1								

MINIMUM INSTALLATION CLEARANCES (SCALE 1:4)



NOTE:
FOR SIDE-BY-SIDE MOUNTING
CONSULT MANUAL

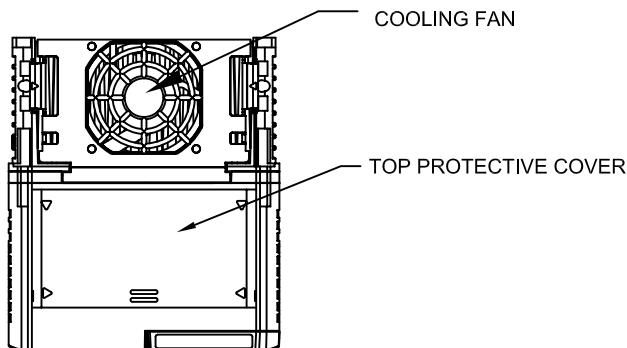
PANEL CUTOUT FOR EXTERNAL HEATSINK
MOUNTING CONFIGURATION (SCALE 1:4)



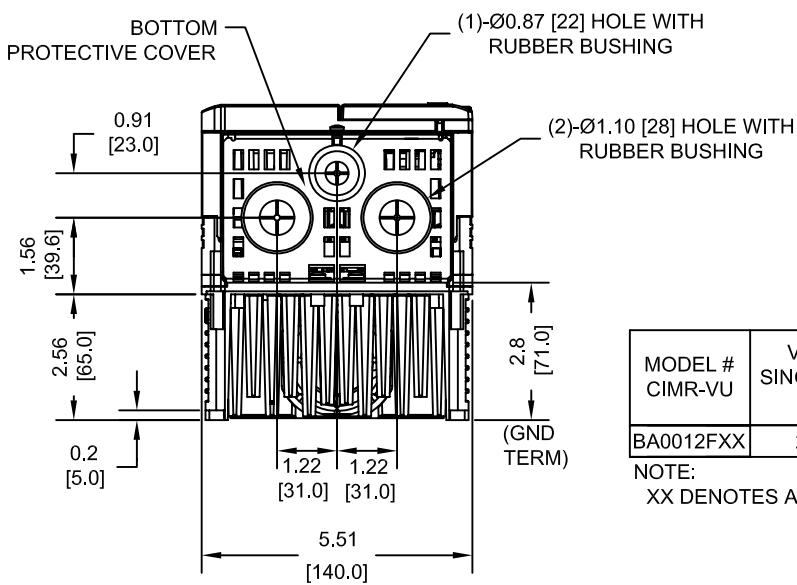
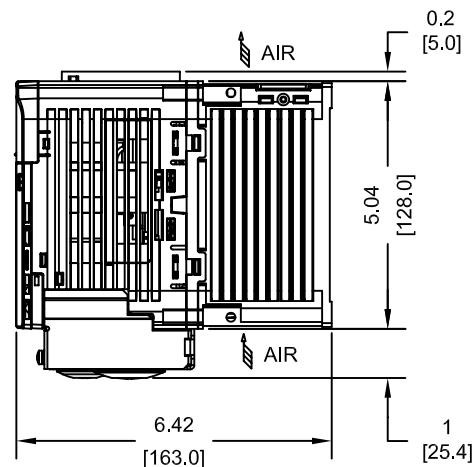
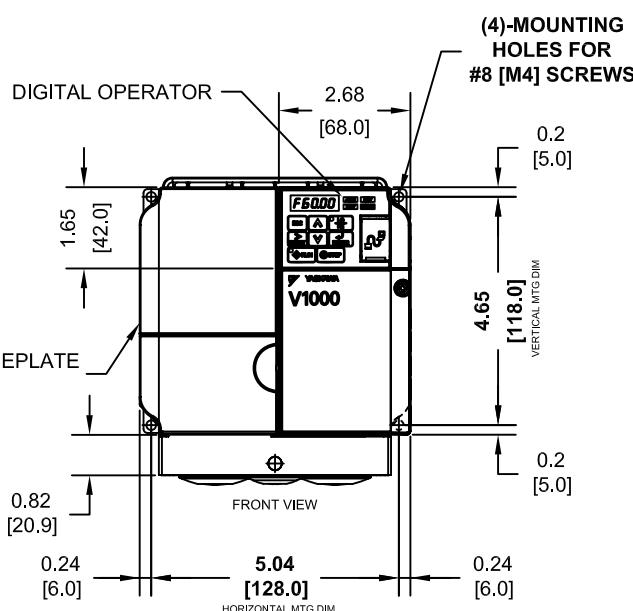
- NOTES:
1. EXTERNAL HEATSINK
CONFIGURATION REQUIRES
MOUNTING KIT
 2. EXPOSED HEATSINK
RECOMMENDED CLEARANCE
 $D=2.76"$ MINUS PANEL THICKNESS

TOLERANCES / REFERENCES:		YASKAWA The Drive for Quality™		DRAWN: J. MATTAS CHECKED: M. RUCINSKI TECH: J. CAIRO APPROVED: T. SASADA	DATE: 1-7-08 DATE: 5-7-08 DATE: 3-24-08 DATE: 5-27-08	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 11 NEMA TYPE 1 ENCLOSURE 2A0020F & 4A0011F
THIS DOCUMENT AND INFORMATION CONTAINED IN IT ARE CONFIDENTIAL, AND CANNOT BE COPIED OR DISCLOSED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN CONSENT OF YASKAWA ELECTRIC AMERICA INC.				ORIGINAL DESIGN: -	DATE: -	SIZE A REVISION R00 PAGE 3 of 3
UNITS: IN [mm]	SCALE: BY VIEW			DRAWING #: DD.V1K.FR11.N1		

1 2 3 4 5 6 7 8



NOTE:
PROTECTIVE COVERS ARE FACTORY INSTALLED TO THE TOP AND BOTTOM OF THE DRIVE TO MEET IP20 & NEMA TYPE 1 REQUIREMENTS, RESULTING IN AN AMBIENT TEMPERATURE RATING OF 104F(40C). REMOVE THESE COVERS WHEN OPERATING THE DRIVE WITHIN A PANEL TO OBTAIN THE MAXIMUM SURROUNDING AIR TEMPERATURE RATING OF 122F(50C). REMOVING THESE COVERS RESULTS IN AN ENCLOSURE RATING OF IP00.



MODEL # CIMR-VU	VOLTAGE SINGLE PHASE (VAC)	OUTPUT CURRENT (A)		WEIGHT LBS (Kg)	HEAT LOSS (W)					
					ND (Fc=2kHz)		HD (Fc=8kHz)			
		INT	EXT		INT	EXT	INT	EXT	TOT	
BA0012FXX	208/240	12.0	11.0	5.7 (2.6)	37.1	61.3	98.4	34.1	70.7	104.8

NOTE:
XX DENOTES AA-ZZ

INT=INTERNAL COMPONENTS
EXT=EXTERNAL HEATSINK
TOT=TOTAL

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:

YASKAWA
The Drive for Quality™

THIS DOCUMENT AND INFORMATION CONTAINED
IN IT ARE CONFIDENTIAL, AND CANNOT BE
COPIED OR DISCLOSED IN WHOLE OR IN PART
WITHOUT THE EXPRESS WRITTEN CONSENT
OF YASKAWA ELECTRIC AMERICA INC.

UNITS:
IN [mm]

SCALE:
1:4

DRAWN:
J. MATTAS

DATE:
1-8-08

TITLE:
V1000 DIMENSION DRAWING

CHECKED:
M. RUCINSKI

DATE:
5-7-08

FRAME SIZE 12

TECH:
J. CAIRO

DATE:
3-25-08

NEMA TYPE 1 ENCLOSURE

APPROVED:
T. SASADA

DATE:
5-27-08

BA0012F

ORIGINAL DESIGN:
-

DATE:
-

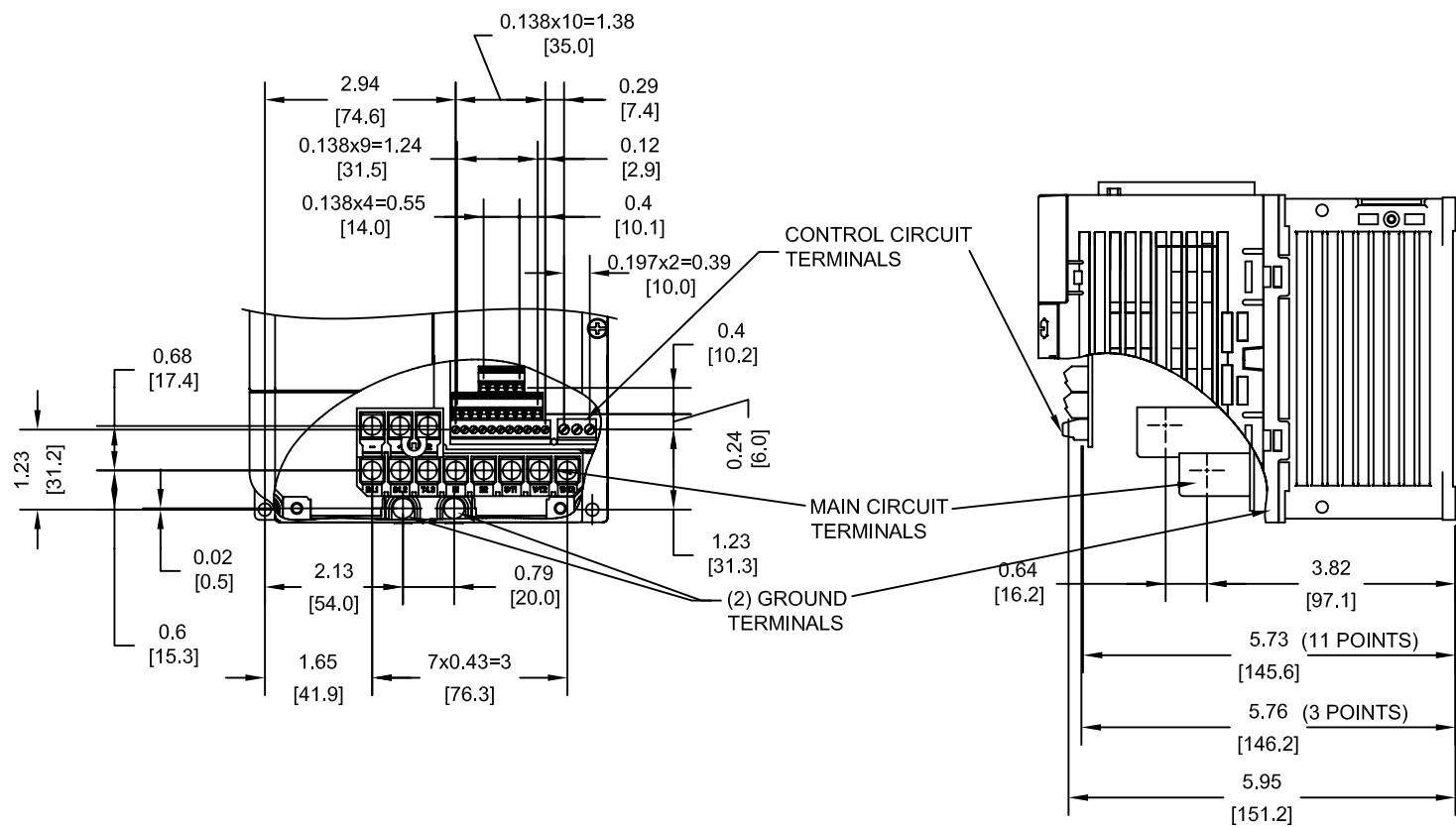
SIZE
A

REVISION
R00

PAGE
1 of 3

DRAWING #:
DD.V1K.FR12.N1

1 2 3 4 5 6 7 8

TERMINAL AND WIRING DETAILS (SCALE 1:3)TERMINAL AND WIRE SPECIFICATIONS FOR
MAIN CIRCUIT AND GROUND

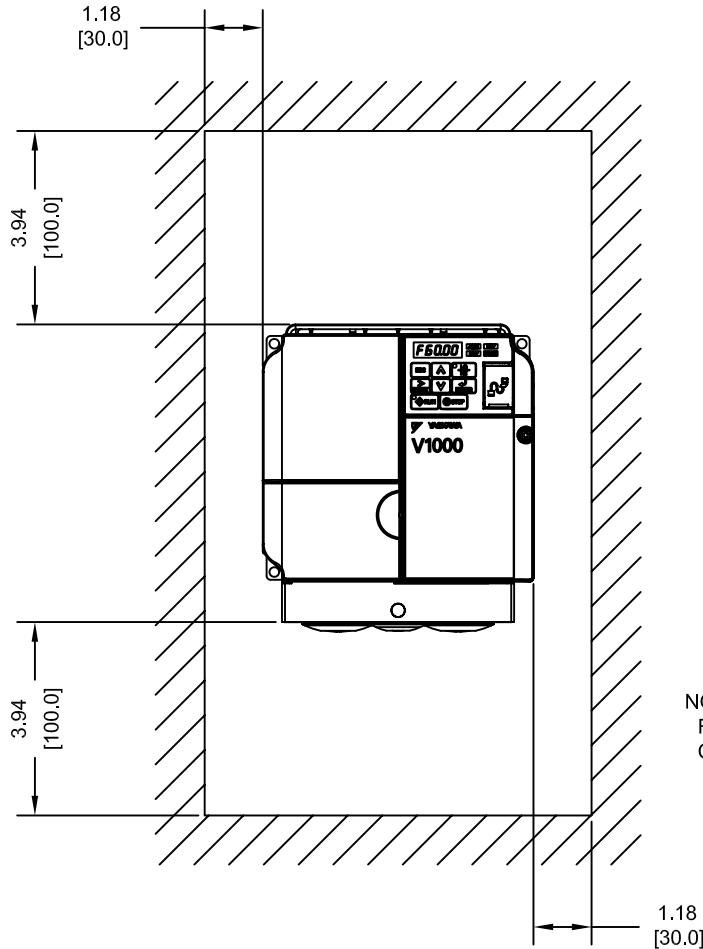
MODEL #	TERMINAL SCREW	CLAMPING TORQUE lb.in.(N.m.)	WIRE RANGE AWG(mm ²)
CIMR-VU	M4	10.6 TO 13.3 (1.2 TO 1.5)	22-10 (0.33-5.5)

NOTE: RATINGS APPLY TO BOTH FACTORY AND FIELD WIRING
REFER TO APPLICABLE CODES FOR PROPER WIRE TYPE AND SIZE

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

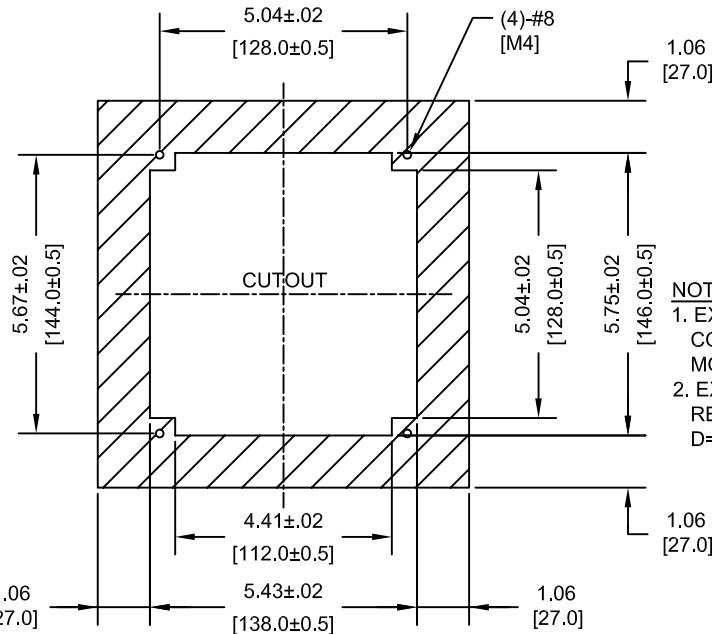
TOLERANCES / REFERENCES:	YASKAWA The Drive for Quality™	DRAWN: J. MATTAS CHECKED: M. RUCINSKI TECH: J. CAIRO APPROVED: T. SASADA ORIGINAL DESIGN: -	DATE: 1-8-08 DATE: 5-7-08 DATE: 3-25-08 DATE: 5-27-08 DATE: -	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 12 NEMA TYPE 1 ENCLOSURE BA0012F
UNITS: IN [mm]	SCALE: BY VIEW		SIZE A REVISION R00 PAGE 2 of 3	DRAWING #: DD.V1K.FR12.N1

MINIMUM INSTALLATION CLEARANCES (SCALE 1:4)



NOTE:
FOR SIDE-BY-SIDE MOUNTING
CONSULT MANUAL

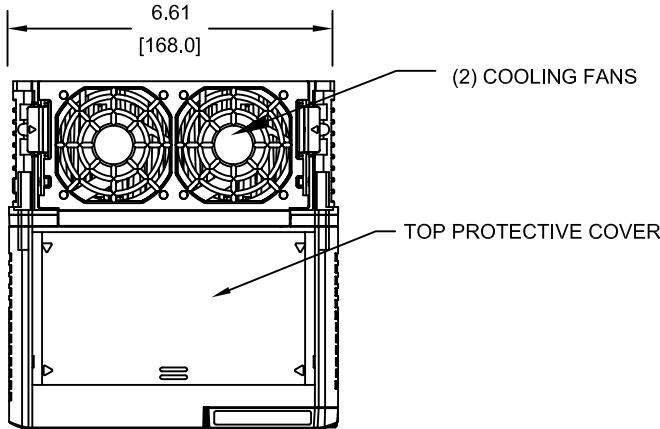
PANEL CUTOUT FOR EXTERNAL HEATSINK
MOUNTING CONFIGURATION (SCALE 1:4)



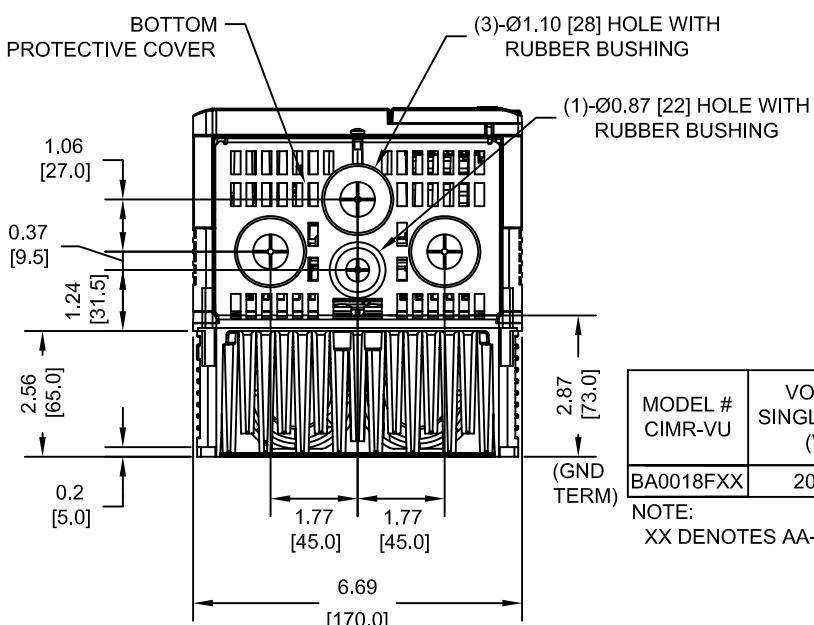
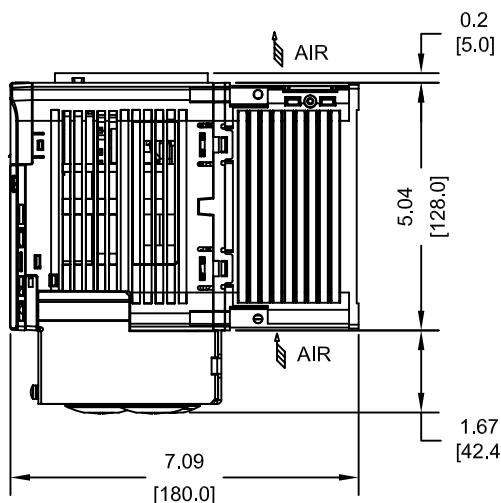
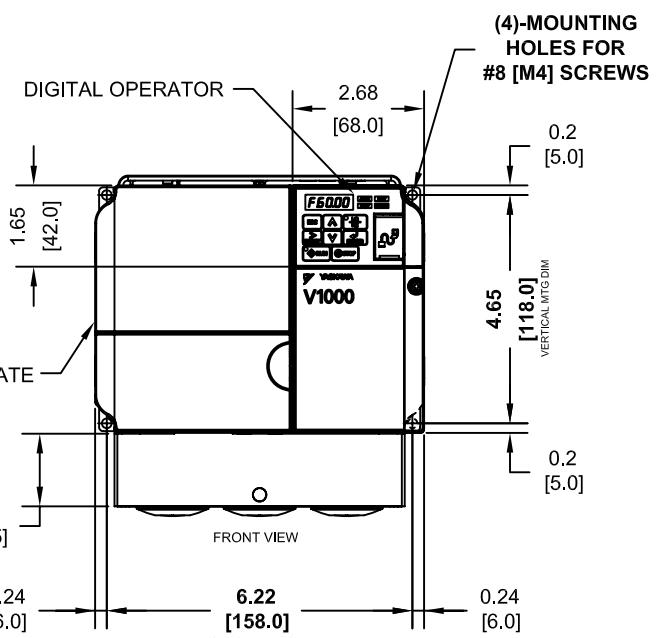
- NOTES:
1. EXTERNAL HEATSINK
CONFIGURATION REQUIRES
MOUNTING KIT
 2. EXPOSED HEATSINK
RECOMMENDED CLEARANCE
 $D=2.76"$ MINUS PANEL THICKNESS

TOLERANCES / REFERENCES:		 YASKAWA The Drive for Quality™	DRAWN: J. MATTAS CHECKED: M. RUCINSKI TECH: J. CAIRO APPROVED: T. SASADA	DATE: 1-8-08 DATE: 5-7-08 DATE: 3-25-08 DATE: 5-27-08	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 12 NEMA TYPE 1 ENCLOSURE BA0012F	
UNITS: IN [mm]	SCALE: BY VIEW					
		THIS DOCUMENT AND INFORMATION CONTAINED IN IT ARE CONFIDENTIAL, AND CANNOT BE COPIED OR DISCLOSED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN CONSENT OF YASKAWA ELECTRIC AMERICA INC.	ORIGINAL DESIGN: -	SIZE A	REVISION R00	PAGE 3 of 3
				DRAWING #: DD.V1K.FR12.N1		

1 2 3 4 5 6 7 8



NOTE:
PROTECTIVE COVERS ARE FACTORY INSTALLED TO THE TOP AND BOTTOM OF THE DRIVE TO MEET IP20 & NEMA TYPE 1 REQUIREMENTS, RESULTING IN AN AMBIENT TEMPERATURE RATING OF 104F(40C). REMOVE THESE COVERS WHEN OPERATING THE DRIVE WITHIN A PANEL TO OBTAIN THE MAXIMUM SURROUNDING AIR TEMPERATURE RATING OF 122F(50C). REMOVING THESE COVERS RESULTS IN AN ENCLOSURE RATING OF IP00.



MODEL # CIMR-VU	VOLTAGE SINGLE PHASE (VAC)	OUTPUT CURRENT (A)		WEIGHT LBS (Kg)	HEAT LOSS (W)					
					ND (Fc=2kHz)			HD (Fc=8kHz)		
		INT	EXT	TOT	INT	EXT	TOT	INT	EXT	TOT
BA0018FXX	208/240	-	17.5	7.3 (3.3)	-	-	-	51.4	110.5	161.9

NOTE:
XX DENOTES AA-ZZ

INT=INTERNAL COMPONENTS
EXT=EXTERNAL HEATSINK
TOT=TOTAL

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:

YASKAWA
The Drive for Quality™

THIS DOCUMENT AND INFORMATION CONTAINED
IN IT ARE CONFIDENTIAL, AND CANNOT BE
COPIED OR DISCLOSED IN WHOLE OR IN PART
WITHOUT THE EXPRESS WRITTEN CONSENT
OF YASKAWA ELECTRIC AMERICA INC.

UNITS:
IN [mm]

SCALE:
1:4

DRAWN:
J. MATTAS

CHECKED:
M. RUCINSKI

TECH:
J. CAIRO

APPROVED:
T. SASADA

ORIGINAL DESIGN:
-

DATE:
3-17-08

DATE:
5-7-08

DATE:
3-25-08

DATE:
5-27-08

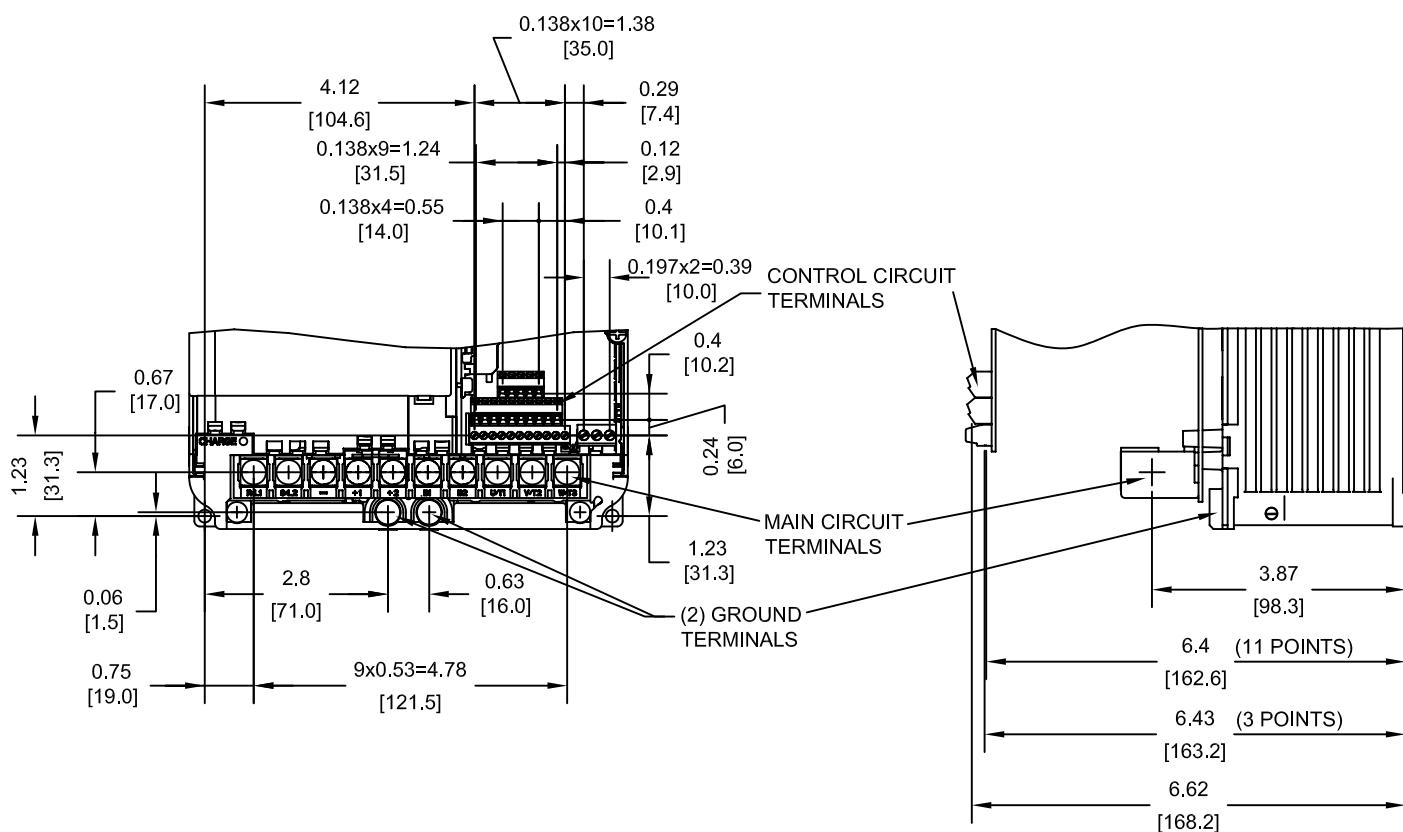
DATE:
-

TITLE:
V1000 DIMENSION DRAWING
FRAME SIZE 13
NEMA TYPE 1 ENCLOSURE
BA0018F

SIZE A	REVISION R00	PAGE 1 of 3
DRAWING #: DD.V1K.FR13.N1		

1 2 3 4 5 6 7 8

TERMINAL AND WIRING DETAILS (SCALE 1:3)



TERMINAL AND WIRE SPECIFICATIONS FOR
MAIN CIRCUIT AND GROUND

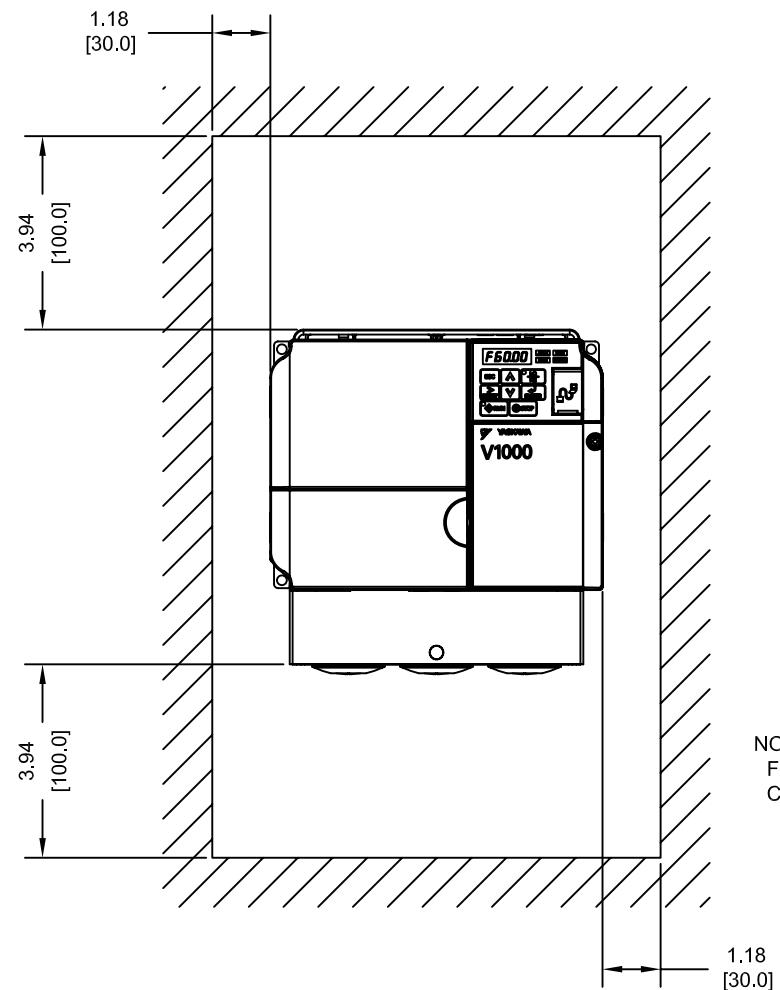
MODEL #	TERMINAL SCREW	CLAMPING TORQUE lb.in.(N.m.)	WIRE RANGE AWG(mm ²)
CIMR-VU BA0018F	M5	22.1 (2.5)	12-8 (3.5-8)

NOTE: RATINGS APPLY TO BOTH FACTORY AND FIELD WIRING
REFER TO APPLICABLE CODES FOR PROPER WIRE TYPE AND SIZE

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

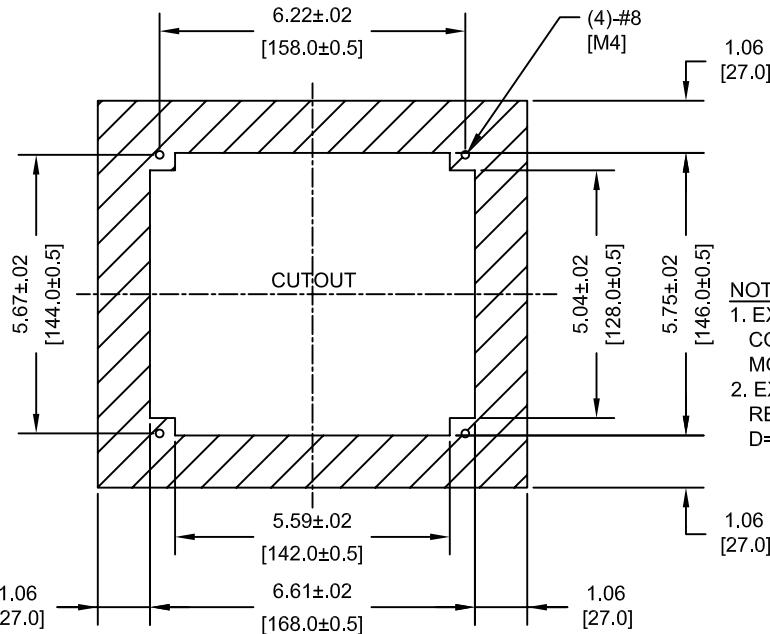
TOLERANCES / REFERENCES:		YASKAWA <i>The Drive for Quality™</i>		DRAWN: J. MATTAS 3-17-08	DATE: 3-17-08	TITLE: V1000 DIMENSION DRAWING		
				CHECKED: M. RUCINSKI	DATE: 5-7-08	FRAME SIZE 13		
				TECH: J. CAIRO	DATE: 3-25-08	NEMA TYPE 1 ENCLOSURE		
				APPROVED: T. SASADA	DATE: 5-27-08	BA0018F		
UNITS: IN [mm]	SCALE: BY VIEW			ORIGINAL DESIGN: -	DATE: -	SIZE: A	REVISION: R00	PAGE: 2 of 3
DRAWING #: DD.V1K.FR13.N1								

MINIMUM INSTALLATION CLEARANCES (SCALE 1:4)



NOTE:
FOR SIDE-BY-SIDE MOUNTING
CONSULT MANUAL

PANEL CUTOUT FOR EXTERNAL HEATSINK
MOUNTING CONFIGURATION (SCALE 1:4)



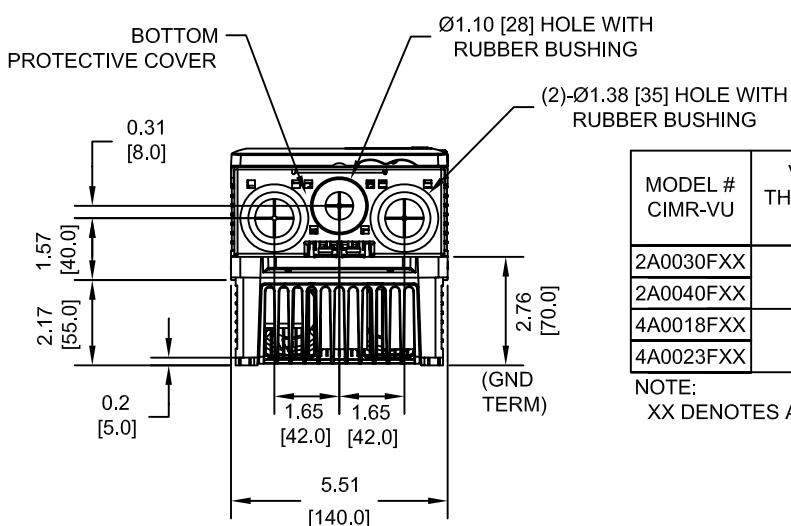
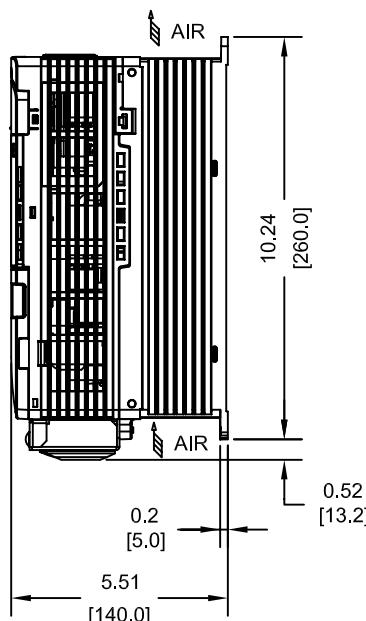
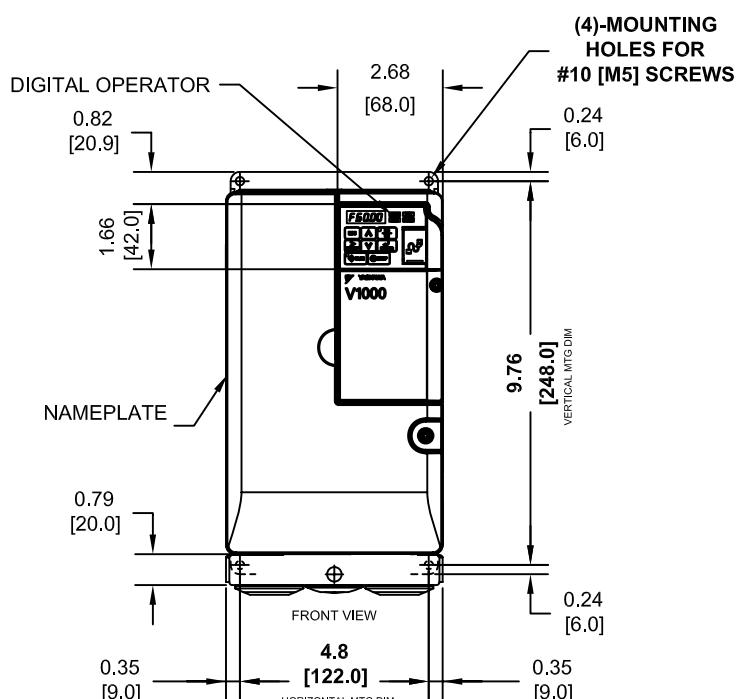
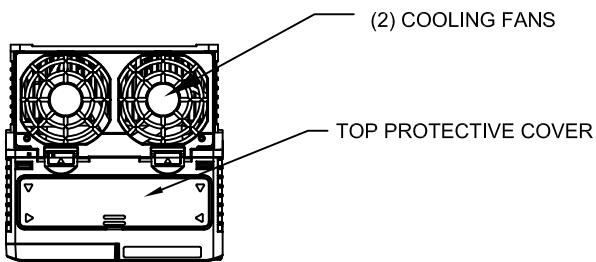
- NOTES:
1. EXTERNAL HEATSINK CONFIGURATION REQUIRES MOUNTING KIT
 2. EXPOSED HEATSINK RECOMMENDED CLEARANCE D=2.76" MINUS PANEL THICKNESS

TOLERANCES / REFERENCES:		YASKAWA The Drive for Quality™		DRAWN: J. MATTAS CHECKED: M. RUCINSKI TECH: J. CAIRO APPROVED: T. SASADA	DATE: 3-17-08 DATE: 5-7-08 DATE: 3-25-08 DATE: 5-27-08	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 13 NEMA TYPE 1 ENCLOSURE BA0018F
THIS DOCUMENT AND INFORMATION CONTAINED IN IT ARE CONFIDENTIAL, AND CANNOT BE COPIED OR DISCLOSED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN CONSENT OF YASKAWA ELECTRIC AMERICA INC.				ORIGINAL DESIGN: -	DATE: -	SIZE A REVISION R00 PAGE 3 of 3
UNITS: IN [mm]	SCALE: BY VIEW			DRAWING #: DD.V1K.FR13.N1		

1 2 3 4 5 6 7 8

NOTE:

PROTECTIVE COVERS ARE FACTORY INSTALLED TO THE TOP AND BOTTOM OF THE DRIVE TO MEET IP20 & NEMA TYPE 1 REQUIREMENTS, RESULTING IN AN AMBIENT TEMPERATURE RATING OF 104F(40C). REMOVE THESE COVERS WHEN OPERATING THE DRIVE WITHIN A PANEL TO OBTAIN THE MAXIMUM SURROUNDING AIR TEMPERATURE RATING OF 122F(50C). REMOVING THESE COVERS RESULTS IN AN ENCLOSURE RATING OF IP00.



MODEL # CIMR-VU	VOLTAGE THREE PHASE (VAC)	OUTPUT CURRENT (A)		WEIGHT LBS (Kg)	HEAT LOSS (W)					
		ND	HD		INT	EXT	TOT	INT	EXT	TOT
2A0030FXX	208/240	30.0	25.0	8.4 (3.8)	88.9	246.4	335.3	72.2	231.5	303.7
2A0040FXX		40.0	33.0	8.4 (3.8)	112.8	266.7	379.5	82.8	248.5	321.3
4A0018FXX	380/480	17.5	14.8	8.4 (3.8)	80.1	181.2	261.3	62.7	166.0	228.7
4A0023FXX		23.0	18.0	8.4 (3.8)	107.7	213.4	321.1	78.1	207.1	285.2

NOTE:
XX DENOTES AA-ZZ

INT=INTERNAL COMPONENTS
EXT=EXTERNAL HEATSINK
TOT=TOTAL

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:

YASKAWA
The Drive for Quality™

THIS DOCUMENT AND INFORMATION CONTAINED
IN IT ARE CONFIDENTIAL, AND CANNOT BE
COPIED OR DISCLOSED IN WHOLE OR IN PART
WITHOUT THE EXPRESS WRITTEN CONSENT
OF YASKAWA ELECTRIC AMERICA INC.

UNITS:
IN [mm]

SCALE:
1:5

DRAWN:
J. MATTAS

CHECKED:
M. RUCINSKI

TECH:
J. CAIRO

APPROVED:
T. SASADA

ORIGINAL DESIGN:
-

DATE:
1-24-08

DATE:
5-7-08

DATE:
3-25-08

DATE:
5-27-08

DATE:
-

TITLE:
V1000 DIMENSION DRAWING

FRAME SIZE 14

NEMA TYPE 1 ENCLOSURE

2A0030F, 2A0040F, 4A0018F, 4A0023F

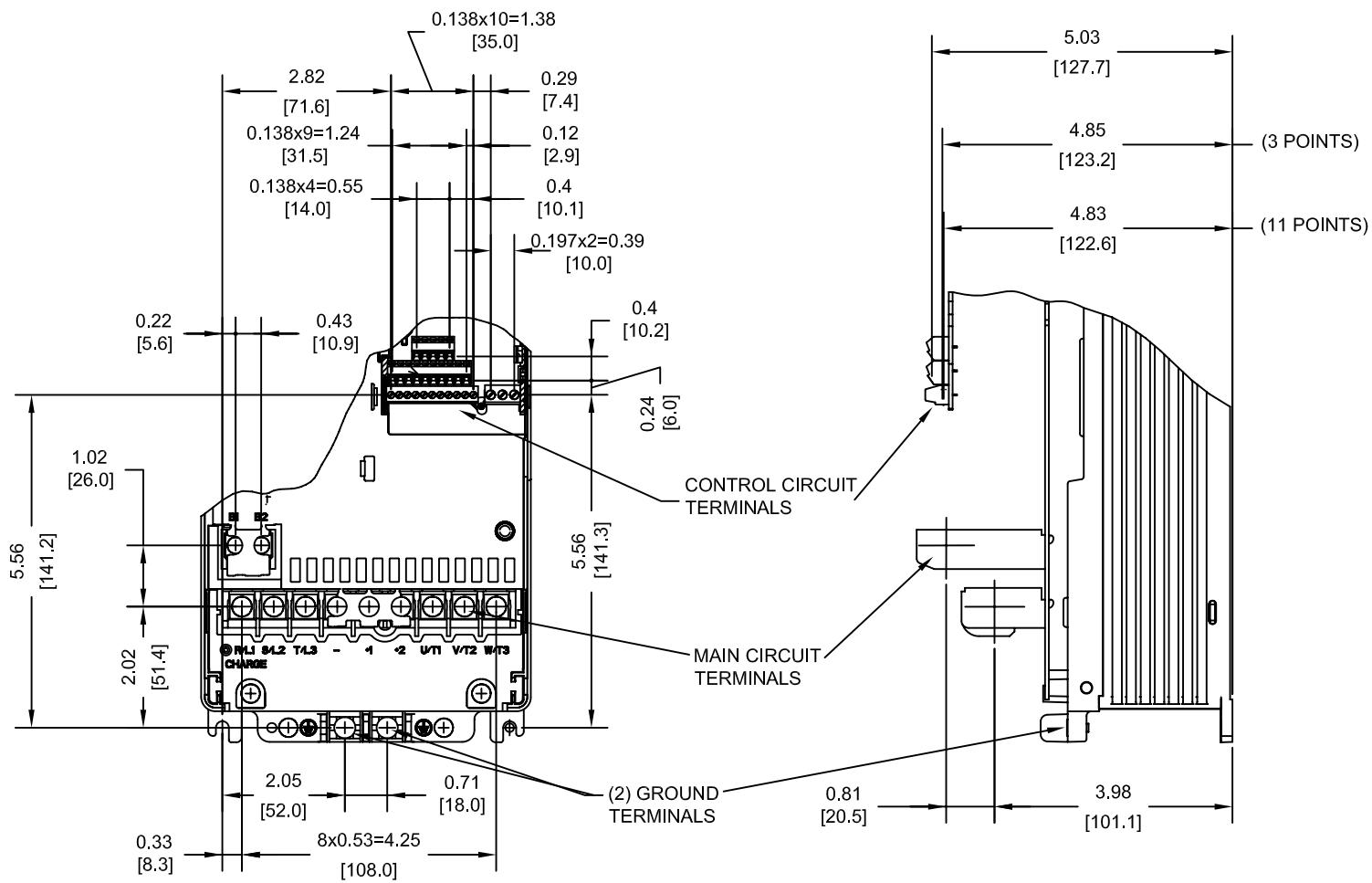
SIZE
A

REVISION
R00

PAGE
1 of 3

DRAWING #:
DD.V1K.FR14.N1

TERMINAL AND WIRING DETAILS (SCALE 1:3)



TERMINAL AND WIRE SPECIFICATIONS FOR
MAIN CIRCUIT AND GROUND

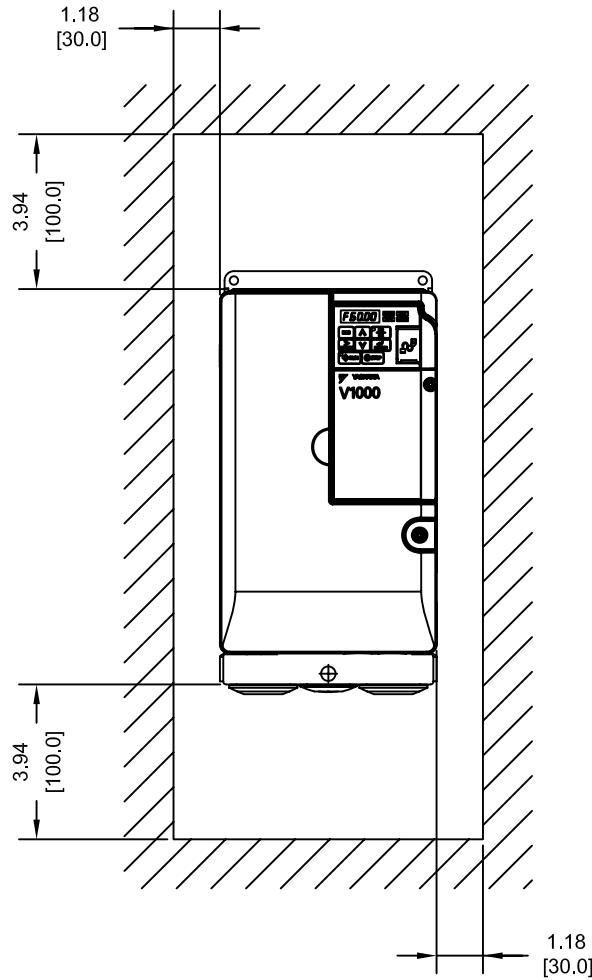
MODEL # CIMR-VU	TERMINAL SYMBOL	TERMINAL SCREW	CLAMPING TORQUE lb.in.(N.m.)	WIRE RANGE AWG(mm)
2A0030F	R/L1, S/L2, T/L3, ⊖, ⊕1, ⊕2, U/T1, V/T2, W/T3	M4	20.4 (2.3)	12-6 (3.5-14)
	B1, B2	M4	20.4 (2.3)	12-10 (3.5-5.5)
	⊖	M5	17.7-22.1 (2.0-2.5)	10-6 (5.5-14)
2A0040F	R/L1, S/L2, T/L3, ⊖, ⊕1, ⊕2, U/T1, V/T2, W/T3	M4	20.4 (2.3)	12-6 (3.5-14)
	B1, B2	M4	20.4 (2.3)	12-10 (3.5-5.5)
	⊖	M5	17.7-22.1 (2.0-2.5)	10-6 (5.5-14)
4A0018F	R/L1, S/L2, T/L3, ⊖, ⊕1, ⊕2, U/T1, V/T2, W/T3	M4	20.4 (2.3)	12-6 (3.5-14)
	B1, B2	M4	20.4 (2.3)	12-10 (3.5-5.5)
	⊖	M5	17.7-22.1 (2.0-2.5)	10-6 (5.5-14)
4A0023F	R/L1, S/L2, T/L3, ⊖, ⊕1, ⊕2, U/T1, V/T2, W/T3	M4	20.4 (2.3)	12-6 (3.5-14)
	B1, B2	M4	20.4 (2.3)	12-10 (3.5-5.5)
	⊖	M5	17.7-22.1 (2.0-2.5)	10-6 (5.5-14)

NOTE: RATINGS APPLY TO BOTH FACTORY AND FIELD WIRING
REFER TO APPLICABLE CODES FOR PROPER WIRE TYPE AND SIZE

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

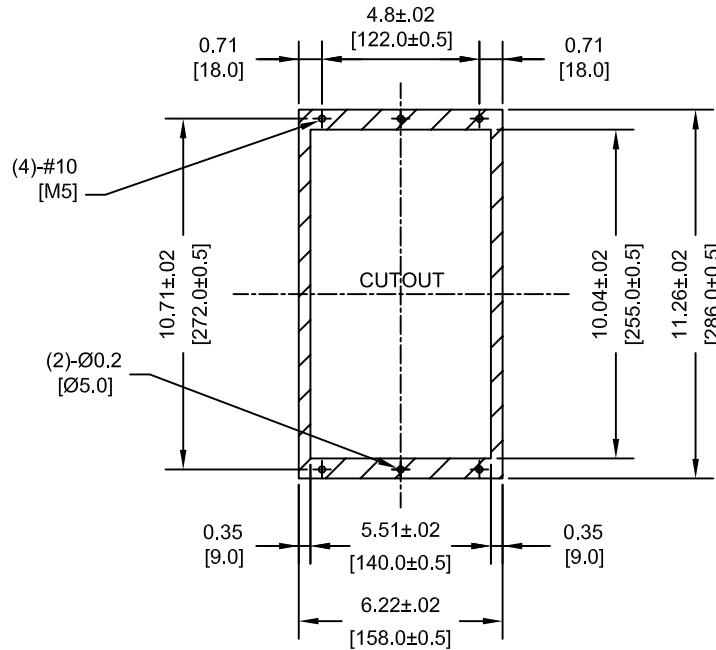
TOLERANCES / REFERENCES:	YASKAWA The Drive for Quality™		DRAWN: J. MATTAS 1-24-08	DATE: 1-24-08	TITLE: V1000 DIMENSION DRAWING	
			CHECKED: M. RUCINSKI 5-7-08	DATE: 5-7-08	FRAME SIZE 14	
			TECH: J. CAIRO 3-25-08	DATE: 3-25-08	NEMA TYPE 1 ENCLOSURE	
			APPROVED: T. SASADA 5-27-08	DATE: 5-27-08	SIZE: A	REVISION: R00
UNITS: IN [mm]	SCALE: BY VIEW		ORIGINAL DESIGN: -	DATE: -	PAGE: 2 of 3	DRAWING #: DD.V1K.FR14.N1

MINIMUM INSTALLATION CLEARANCES (SCALE 1:5)



NOTE:
FOR SIDE-BY-SIDE MOUNTING
CONSULT MANUAL

PANEL CUTOUT FOR EXTERNAL HEATSINK
MOUNTING CONFIGURATION (SCALE 1:6)



NOTES:

1. EXTERNAL HEATSINK
CONFIGURATION REQUIRES
MOUNTING KIT
2. EXPOSED HEATSINK
RECOMMENDED CLEARANCE
 $D=2.36"$ MINUS PANEL THICKNESS

TOLERANCES / REFERENCES:



THIS DOCUMENT AND INFORMATION CONTAINED
IN IT ARE CONFIDENTIAL, AND CANNOT BE
COPIED OR DISCLOSED IN WHOLE OR IN PART
WITHOUT THE EXPRESS WRITTEN CONSENT
OF YASKAWA ELECTRIC AMERICA INC.

UNITS:
IN [mm]

SCALE:
BY VIEW

DRAWN:
J. MATTAS
CHECKED:
M. RUCINSKI
TECH:
J. CAIRO
APPROVED:
T. SASADA

DATE:
1-24-08
DATE:
5-7-08
DATE:
3-25-08
DATE:
5-27-08

ORIGINAL DESIGN:
-

DATE:
1-24-08
DATE:
5-7-08
DATE:
3-25-08
DATE:
5-27-08

REVISION:
R00

PAGE:
3 of 3

TITLE:
V1000 DIMENSION DRAWING

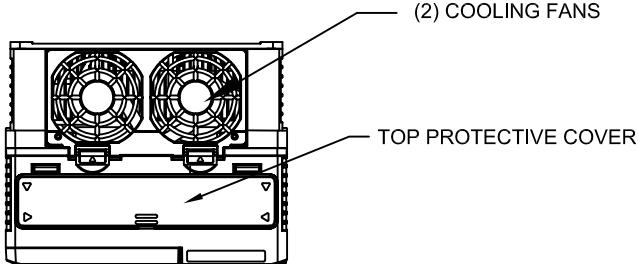
FRAME SIZE 14
NEMA TYPE 1 ENCLOSURE
2A0030F, 2A0040F, 4A0018F, 4A0023F

SIZE
A

REVISION
R00

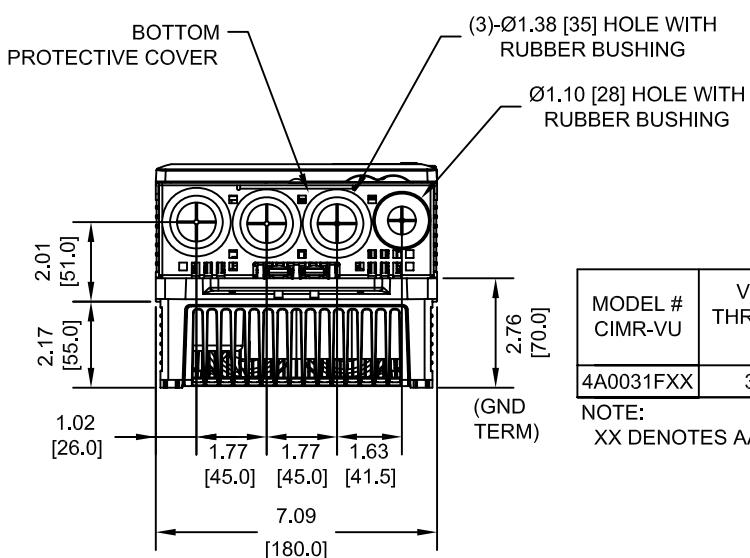
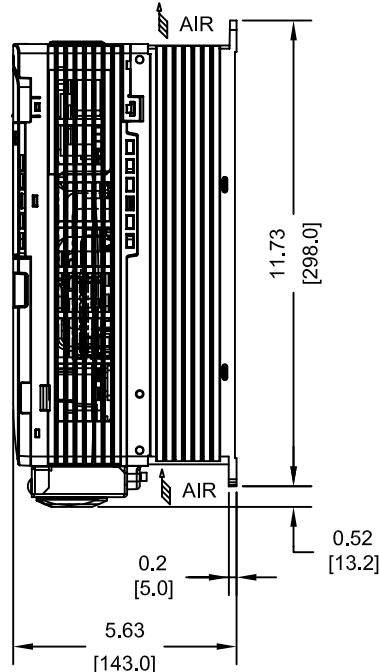
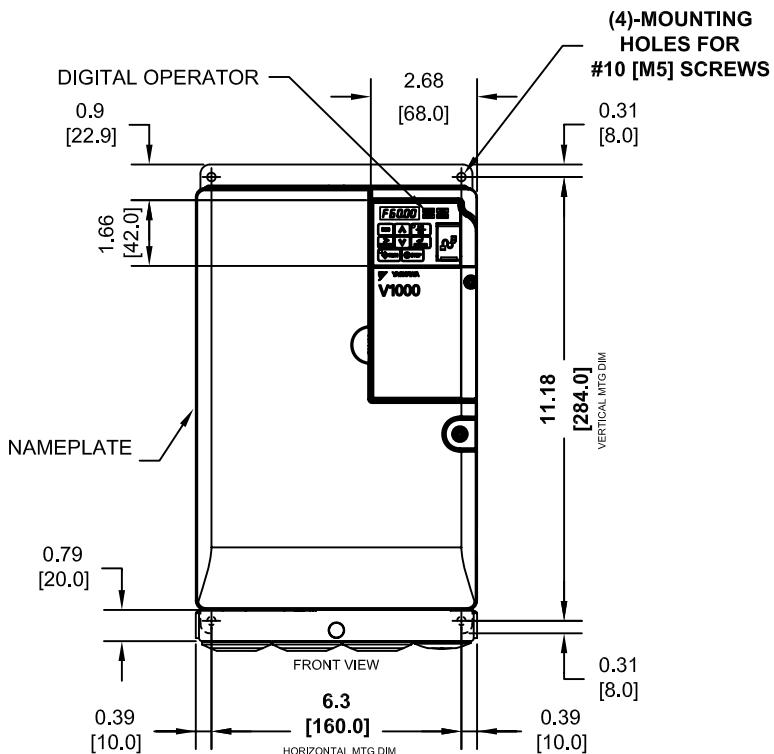
PAGE
3 of 3

DRAWING #:
DD.V1K.FR14.N1



NOTE:

PROTECTIVE COVERS ARE FACTORY INSTALLED TO THE TOP AND BOTTOM OF THE DRIVE TO MEET IP20 & NEMA TYPE 1 REQUIREMENTS, RESULTING IN AN AMBIENT TEMPERATURE RATING OF 104F(40C). REMOVE THESE COVERS WHEN OPERATING THE DRIVE WITHIN A PANEL TO OBTAIN THE MAXIMUM SURROUNDING AIR TEMPERATURE RATING OF 122F(50C). REMOVING THESE COVERS RESULTS IN AN ENCLOSURE RATING OF IP00.



MODEL # CIMR-VU	VOLTAGE THREE PHASE (VAC)	OUTPUT CURRENT (A)		WEIGHT LBS (Kg)	HEAT LOSS (W)					
		ND	HD		INT	EXT	TOT	INT	EXT	TOT
4A0031FXX	380/480	31.0	24.0	11.4 (5.2)	146.1	287.5	433.6	105.9	266.9	372.8

NOTE:
XX DENOTES AA-ZZ

INT=INTERNAL COMPONENTS
EXT=EXTERNAL HEATSINK
TOT=TOTAL

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:



THIS DOCUMENT AND INFORMATION CONTAINED
IN IT ARE CONFIDENTIAL, AND CANNOT BE
COPIED OR DISCLOSED IN WHOLE OR IN PART
WITHOUT THE EXPRESS WRITTEN CONSENT
OF YASKAWA ELECTRIC AMERICA INC.

UNITS: IN [mm]

SCALE: 1:5

DRAWN: J. MATTAS

CHECKED: M. RUCINSKI

TECH: J. CAIRO

APPROVED: T. SASADA

ORIGINAL DESIGN:

DATE: 2-5-08

DATE: 5-7-08

DATE: 3-27-08

DATE: 5-27-08

DATE: -

TITLE: V1000 DIMENSION DRAWING

FRAME SIZE 15

NEMA TYPE 1 ENCLOSURE

4A0031F

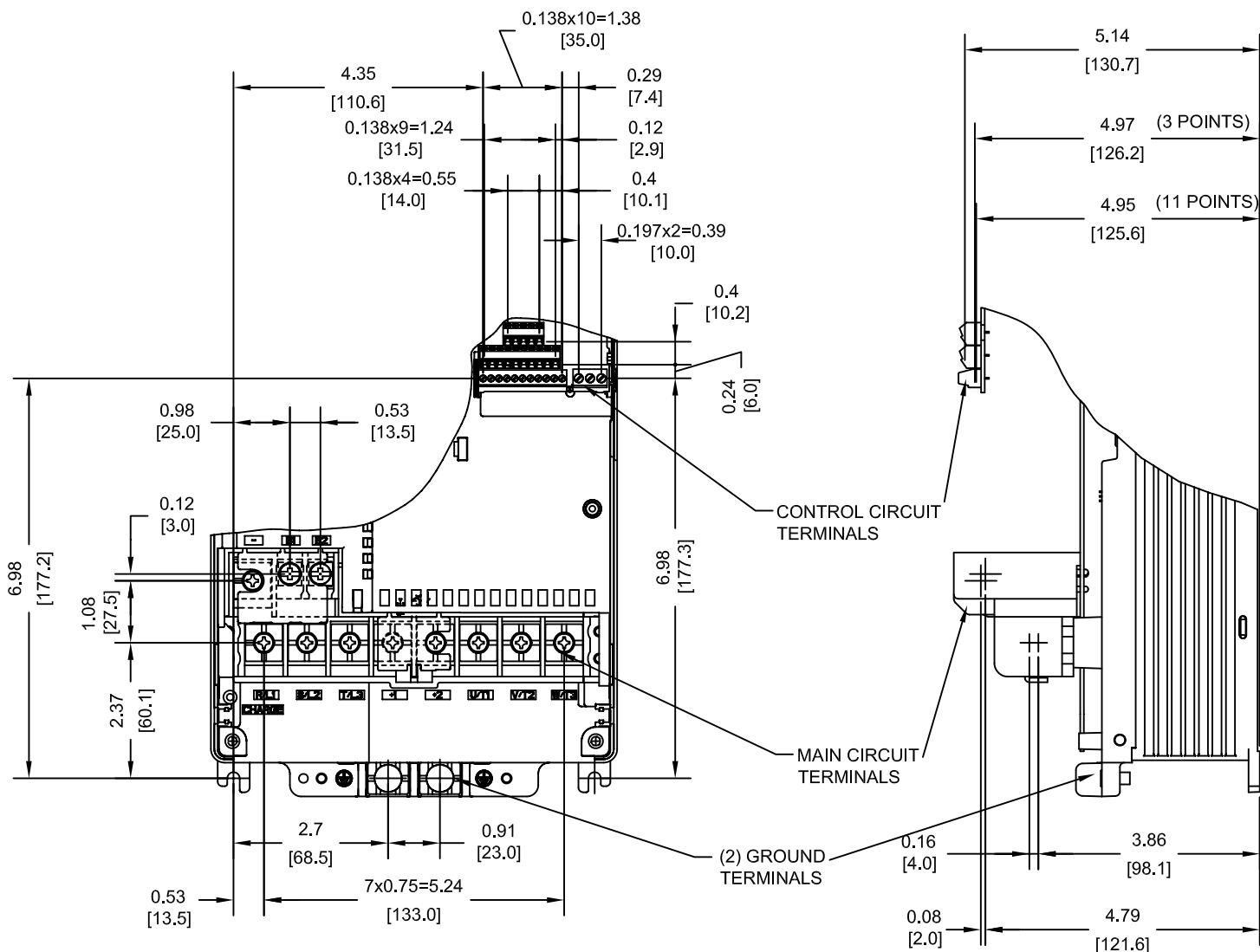
SIZE A

REVISION R00

PAGE 1 of 3

DRAWING #: DD.V1K.FR15.N1

TERMINAL AND WIRING DETAILS (SCALE 1:3)



TERMINAL AND WIRE SPECIFICATIONS FOR
MAIN CIRCUIT AND GROUND

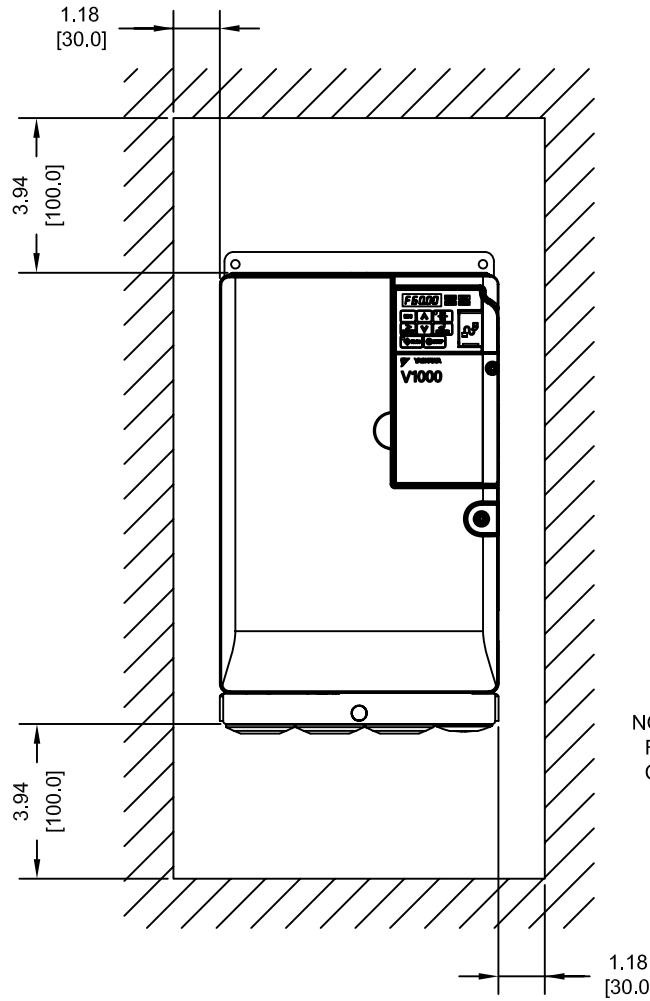
MODEL # CIMR-VU	TERMINAL SYMBOL	TERMINAL SCREW	CLAMPING TORQUE lb.in.(N.m.)	WIRE RANGE AWG(mm ²)
4A0031F	R/L1, S/L2, T/L3, O, ⊕1, ⊕2, U/T1, V/T2, W/T3, B1, B2	M5	17.7 TO 22.1 (2.0 TO 2.5)	10-6 (5.5-14)
	⊖	M6	35.4 TO 53.1 (4 TO 6)	10-6 (5.5-14)

NOTE: RATINGS APPLY TO BOTH FACTORY AND FIELD WIRING
REFER TO APPLICABLE CODES FOR PROPER WIRE TYPE AND SIZE

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

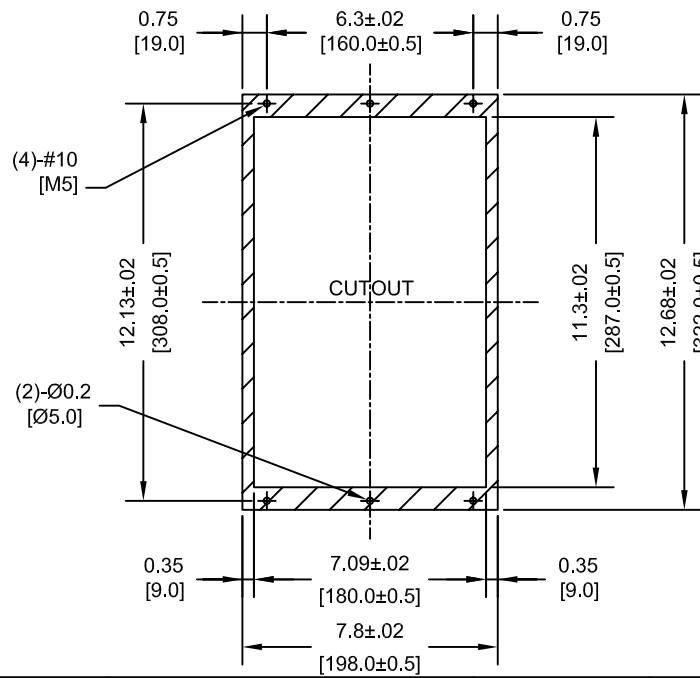
TOLERANCES / REFERENCES:	 YASKAWA <i>The Drive for Quality™</i>		DRAWN: J. MATTAS DATE: 2-5-08	DATE: 5-7-08	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 15 NEMA TYPE 1 ENCLOSURE 4A0031F	
			CHECKED: M. RUCINSKI	TECH: J. CAIRO	APPROVED: T. SASADA	SIZE A REVISION R00 PAGE 2 of 3
UNITS: IN [mm]	SCALE: BY VIEW	THIS DOCUMENT AND INFORMATION CONTAINED IN IT ARE CONFIDENTIAL, AND CANNOT BE COPIED OR DISCLOSED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN CONSENT OF YASKAWA ELECTRIC AMERICA INC.		ORIGINAL DESIGN: -	DRAWING #: DD.V1K.FR15.N1	

MINIMUM INSTALLATION CLEARANCES (SCALE 1:5)



NOTE:
FOR SIDE-BY-SIDE MOUNTING
CONSULT MANUAL

PANEL CUTOUT FOR EXTERNAL HEATSINK
MOUNTING CONFIGURATION (SCALE 1:6)



- NOTES:**
1. EXTERNAL HEATSINK
CONFIGURATION REQUIRES
MOUNTING KIT
 2. EXPOSED HEATSINK
RECOMMENDED CLEARANCE
 $D=2.36"$ MINUS PANEL THICKNESS

TOLERANCES / REFERENCES:



THIS DOCUMENT AND INFORMATION CONTAINED
IN IT ARE CONFIDENTIAL, AND CANNOT BE
COPIED OR DISCLOSED IN WHOLE OR IN PART
WITHOUT THE EXPRESS WRITTEN CONSENT
OF YASKAWA ELECTRIC AMERICA INC.

DRAWN:
J. MATTAS
DATE
2-5-08
CHECKED:
M. RUCINSKI
DATE
5-7-08
TECH:
J. CAIRO
DATE
3-27-08
APPROVED:
T. SASADA
DATE
5-27-08
ORIGINAL DESIGN:
-

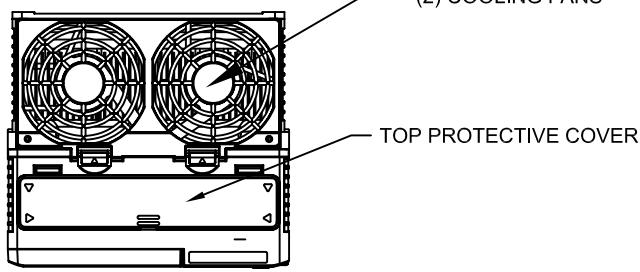
DATE
2-5-08
DATE
5-7-08
DATE
3-27-08
DATE
5-27-08
DATE
-

TITLE:
V1000 DIMENSION DRAWING
FRAME SIZE 15
NEMA TYPE 1 ENCLOSURE
4A0031F
SIZE
A
REVISION
R00
PAGE
3 of 3

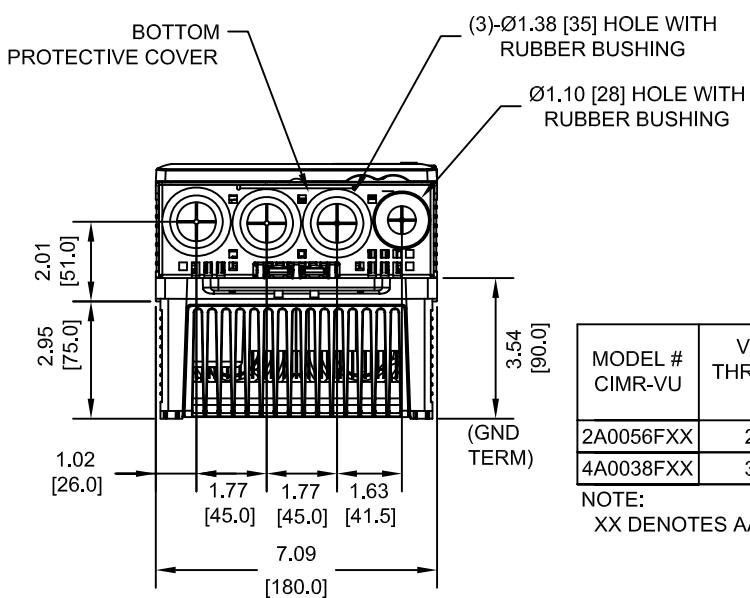
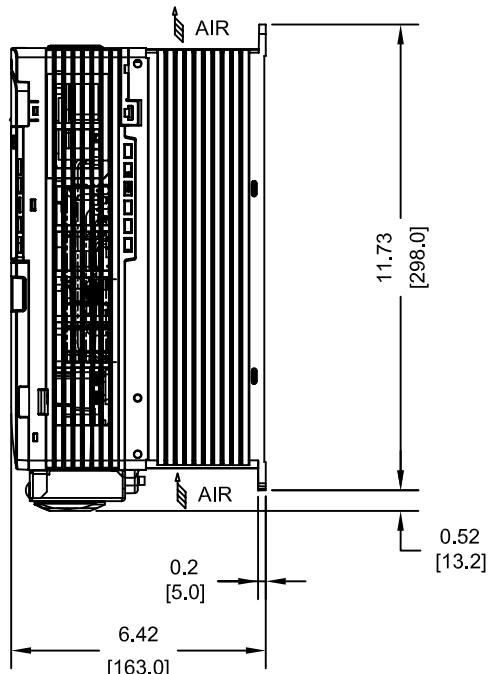
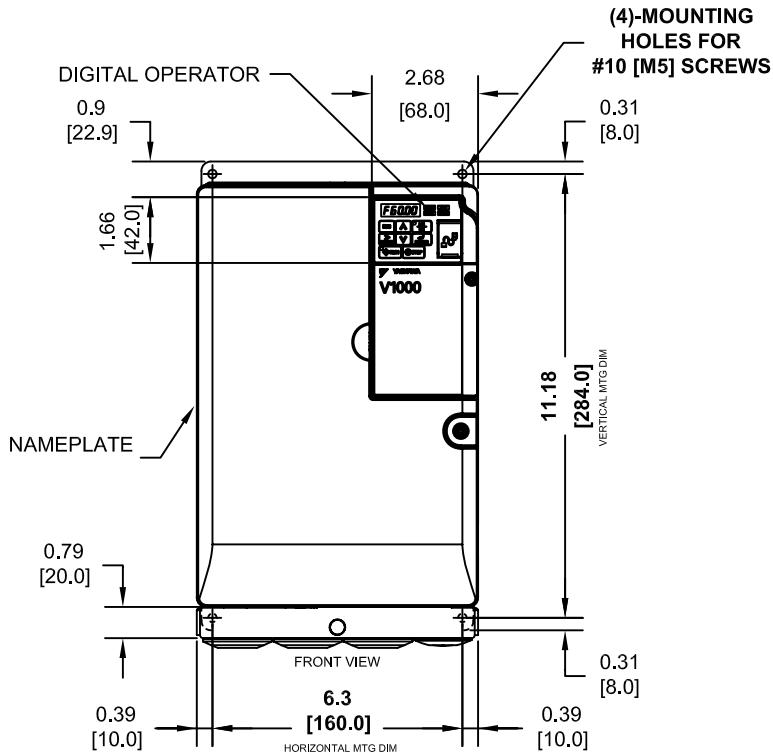
DRAWING #:
DD.V1K.FR15.N1

UNITS:
IN [mm]

SCALE:
BY VIEW



NOTE:
PROTECTIVE COVERS ARE FACTORY INSTALLED TO THE TOP AND BOTTOM OF THE DRIVE TO MEET IP20 & NEMA TYPE 1 REQUIREMENTS, RESULTING IN AN AMBIENT TEMPERATURE RATING OF 104F(40C). REMOVE THESE COVERS WHEN OPERATING THE DRIVE WITHIN A PANEL TO OBTAIN THE MAXIMUM SURROUNDING AIR TEMPERATURE RATING OF 122F(50C). REMOVING THESE COVERS RESULTS IN AN ENCLOSURE RATING OF IP00.



MODEL # CIMR-VU	VOLTAGE THREE PHASE (VAC)	OUTPUT CURRENT (A)		WEIGHT LBS (Kg)	HEAT LOSS (W)					
		ND	HD		INT	EXT	TOT	INT	EXT	TOT
2A0056FXX	208/240	56.0	47.0	12.1 (5.5)	151.8	357.9	509.7	117.6	347.6	465.2
4A0038FXX	380/480	38.0	31.0	12.1 (5.5)	155.8	319.2	475.0	126.6	319.1	445.7

NOTE:
XX DENOTES AA-ZZ

INT=INTERNAL COMPONENTS
EXT=EXTERNAL HEATSINK
TOT=TOTAL

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:



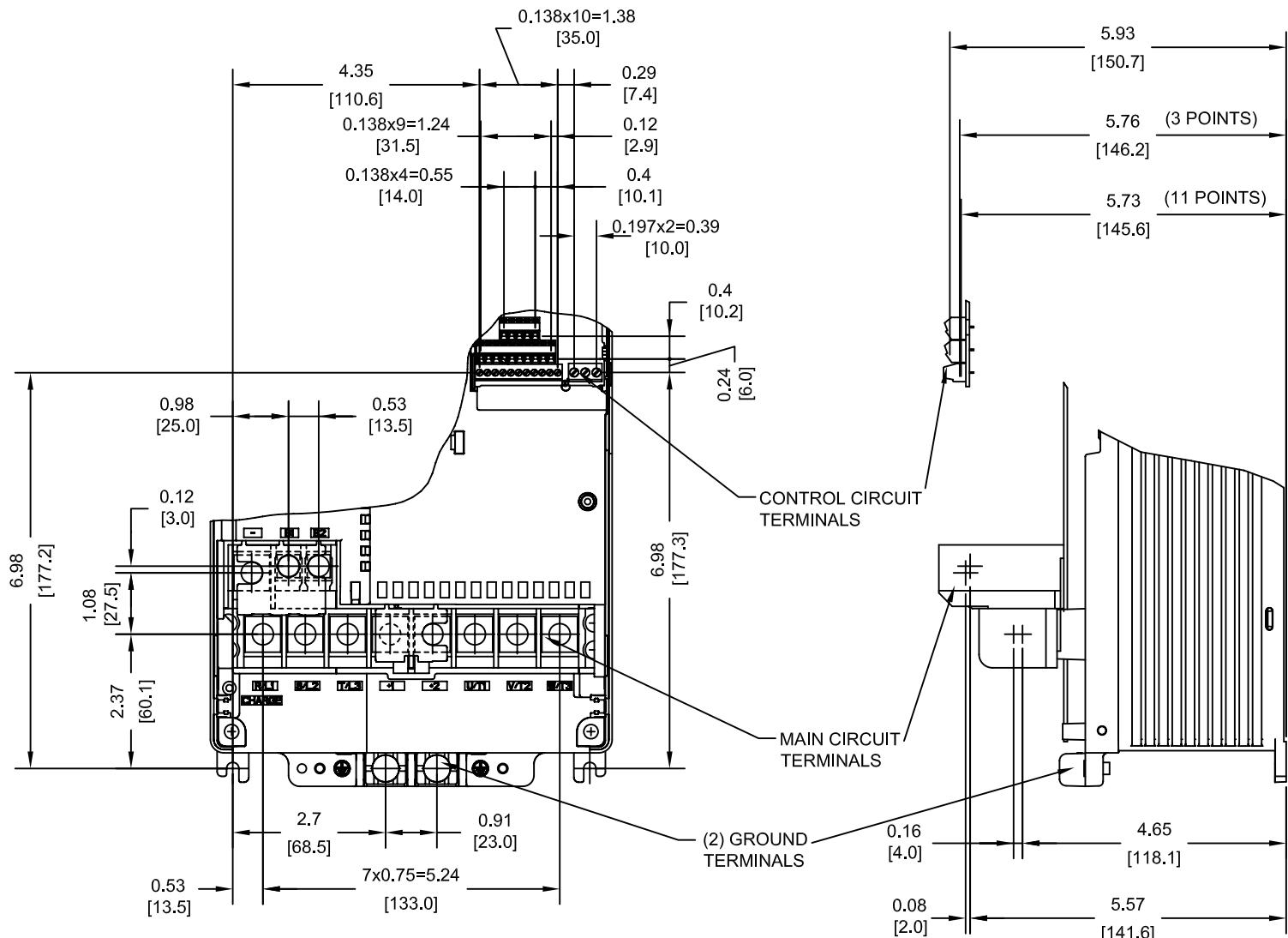
THIS DOCUMENT AND INFORMATION CONTAINED
IN IT ARE CONFIDENTIAL, AND CANNOT BE
COPIED OR DISCLOSED IN WHOLE OR IN PART
WITHOUT THE EXPRESS WRITTEN CONSENT
OF YASKAWA ELECTRIC AMERICA INC.

UNITS:
IN [mm]

SCALE:
1:5

DRAWN: J. MATTAS	DATE: 2-7-08	TITLE: V1000 DIMENSION DRAWING
CHECKED: M. RUCINSKI	DATE: 5-7-08	FRAME SIZE 16
TECH: J. CAIRO	DATE: 3-27-08	NEMA TYPE 1 ENCLOSURE
APPROVED: T. SASADA	DATE: 5-27-08	2A0056F AND 4A0038F
ORIGINAL DESIGN: -	DATE: -	SIZE A
		REVISION R00
		PAGE 1 of 3
	DRAWING #: DD.V1K.FR16.N1	

TERMINAL AND WIRING DETAILS (SCALE 1:3)



TERMINAL AND WIRE SPECIFICATIONS FOR
MAIN CIRCUIT AND GROUND

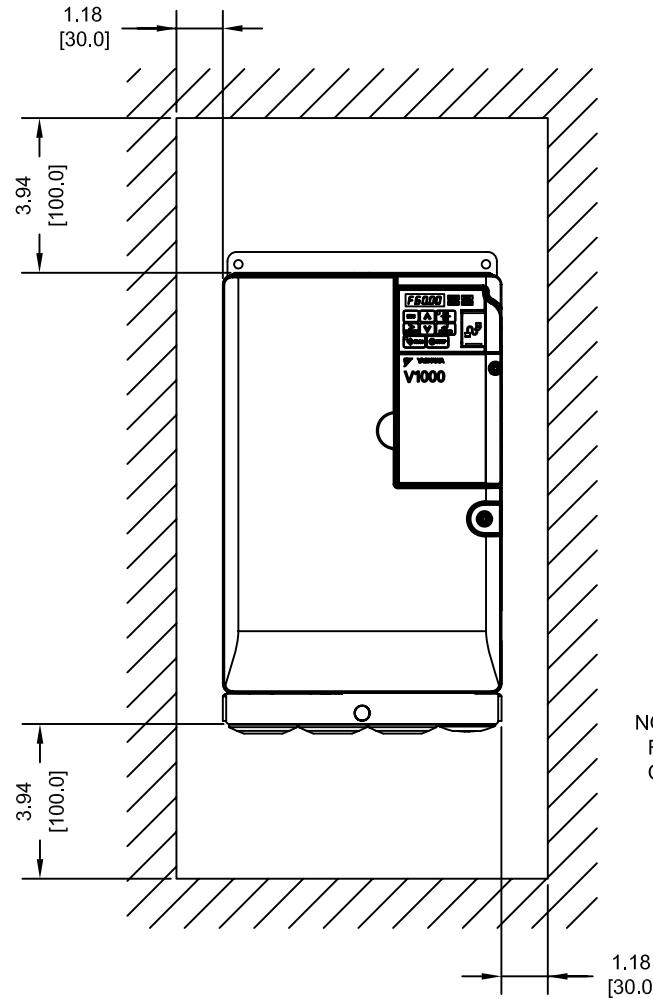
MODEL # CIMR-VU	TERMINAL SYMBOL	TERMINAL SCREW	CLAMPING TORQUE lb.in.(N.m.)	WIRE RANGE AWG(mm ²)
2A0056F	R/L1, S/L2, T/L3, O, ⊕1, ⊕2, U/T1, V/T2, W/T3	M6	35.4 TO 53.1 (4 TO 6)	6-4 (14-22)
	B1, B2	M5	17.7 TO 22.1 (2 TO 2.5)	10-6 (5.5-14)
	O	M6	35.4 TO 53.1 (4 TO 6)	6-4 (14-22)
4A0038F	R/L1, S/L2, T/L3, O, ⊕1, ⊕2, U/T1, V/T2, W/T3, B1, B2	M5	17.7 TO 22.1 (2 TO 2.5)	10-6 (5.5-14)
	O	M6	35.4 TO 53.1 (4 TO 6)	10-6 (5.5-14)

NOTE: RATINGS APPLY TO BOTH FACTORY AND FIELD WIRING
REFER TO APPLICABLE CODES FOR PROPER WIRE TYPE AND SIZE

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

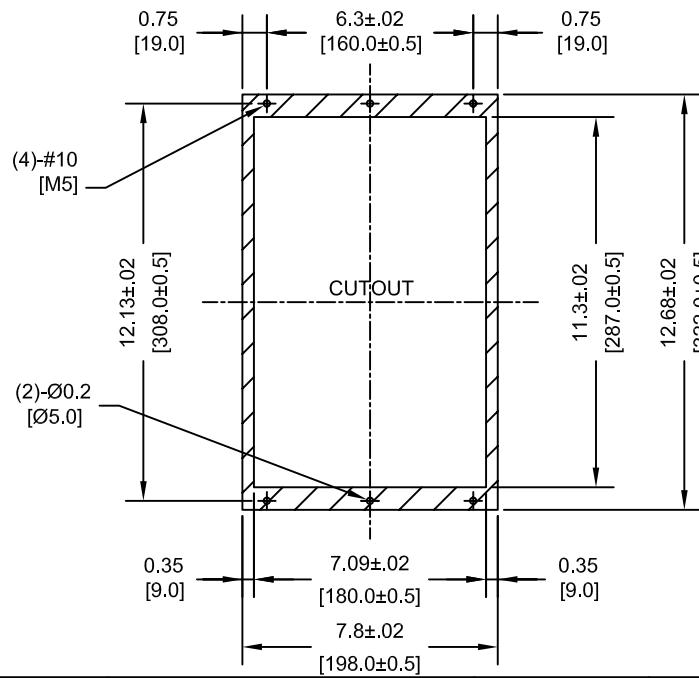
TOLERANCES / REFERENCES:	YASKAWA The Drive for Quality™		DRAWN: J. MATTAS DATE: 2-7-08	REVISION: R00	PAGE: 2 of 3
THIS DOCUMENT AND INFORMATION CONTAINED IN IT ARE CONFIDENTIAL, AND CANNOT BE COPIED OR DISCLOSED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN CONSENT OF YASKAWA ELECTRIC AMERICA INC.	CHECKED: M. RUCINSKI DATE: 5-7-08	TECH: J. CAIRO DATE: 3-27-08	APPROVED: T. SASADA DATE: 5-27-08	SIZE: A	DRAWING #: DD.V1K.FR16.N1
UNITS: IN [mm]	SCALE: BY VIEW	ORIGINAL DESIGN: -	DATE: -		

MINIMUM INSTALLATION CLEARANCES (SCALE 1:5)



NOTE:
FOR SIDE-BY-SIDE MOUNTING
CONSULT MANUAL

PANEL CUTOUT FOR EXTERNAL HEATSINK
MOUNTING CONFIGURATION (SCALE 1:6)



- NOTES:
1. EXTERNAL HEATSINK CONFIGURATION REQUIRES MOUNTING KIT
 2. EXPOSED HEATSINK RECOMMENDED CLEARANCE D=3.15" MINUS PANEL THICKNESS

TOLERANCES / REFERENCES:



THIS DOCUMENT AND INFORMATION CONTAINED
IN IT ARE CONFIDENTIAL, AND CANNOT BE
COPIED OR DISCLOSED IN WHOLE OR IN PART
WITHOUT THE EXPRESS WRITTEN CONSENT
OF YASKAWA ELECTRIC AMERICA INC.

DRAWN: J. MATTAS 2-7-08

CHECKED: M. RUCINSKI 5-7-08

TECH: J. CAIRO 3-27-08

APPROVED: T. SASADA 5-27-08

ORIGINAL DESIGN: -

DATE: 2-7-08

DATE: 5-7-08

DATE: 3-27-08

DATE: 5-27-08

DATE: -

TITLE: V1000 DIMENSION DRAWING

FRAME SIZE 16

NEMA TYPE 1 ENCLOSURE

2A0056F AND 4A0038F

SIZE A

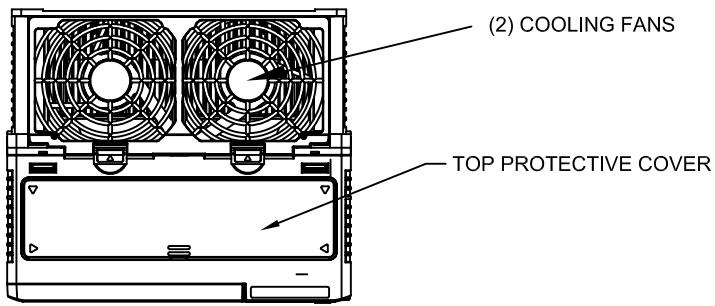
REVISION R00

PAGE 3 of 3

DRAWING #: DD.V1K.FR16.N1

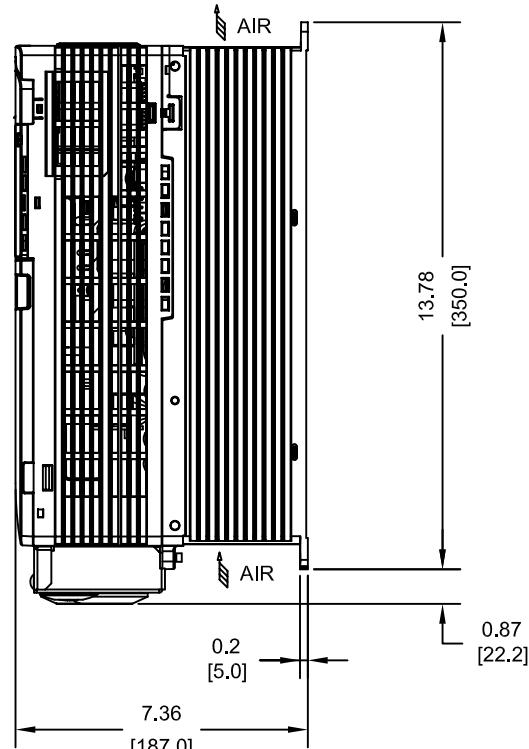
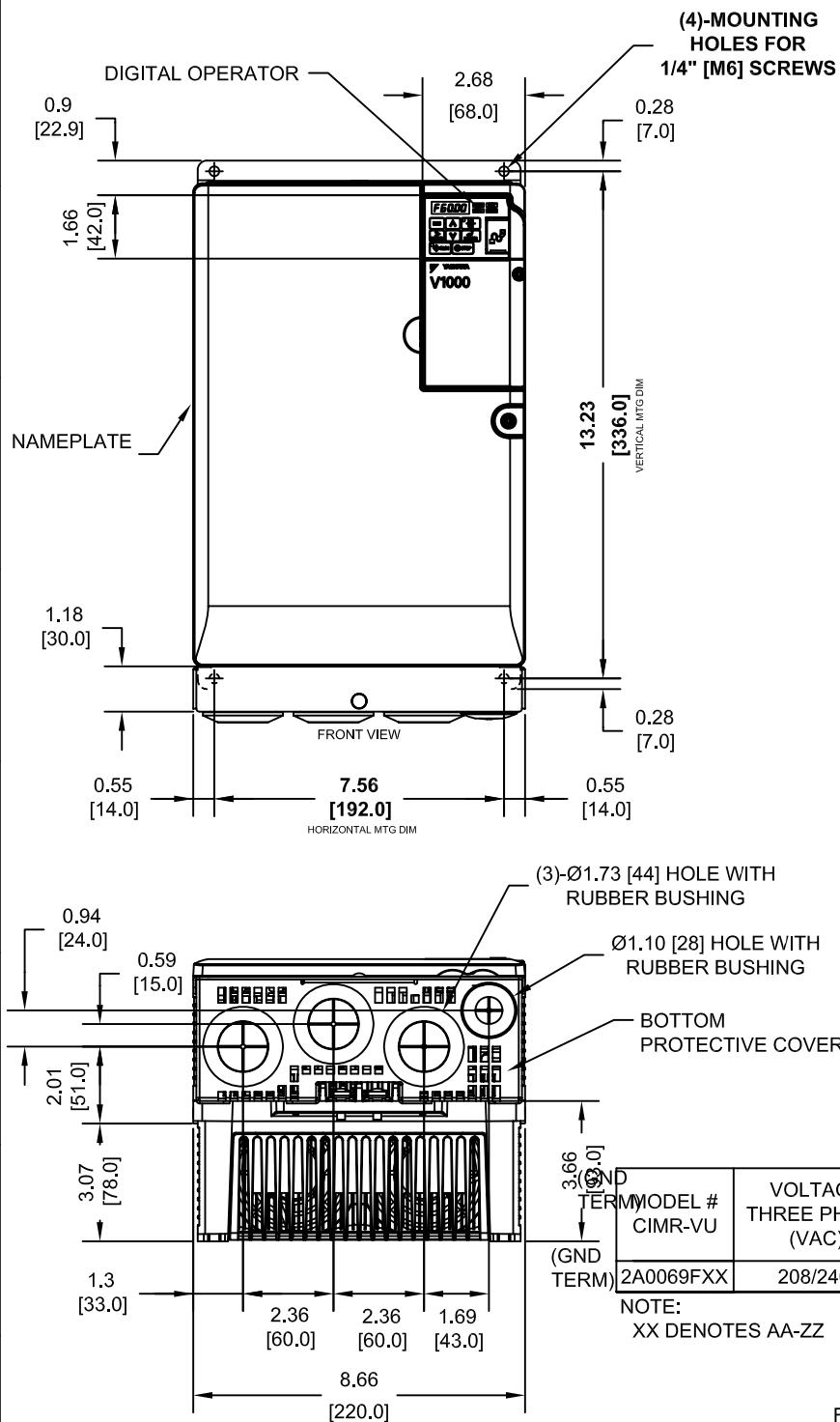
UNITS: IN [mm]

SCALE: BY VIEW



NOTE:

PROTECTIVE COVERS ARE FACTORY INSTALLED TO THE TOP AND BOTTOM OF THE DRIVE TO MEET IP20 & NEMA TYPE 1 REQUIREMENTS, RESULTING IN AN AMBIENT TEMPERATURE RATING OF 104F(40C). REMOVE THESE COVERS WHEN OPERATING THE DRIVE WITHIN A PANEL TO OBTAIN THE MAXIMUM SURROUNDING AIR TEMPERATURE RATING OF 122F(50C). REMOVING THESE COVERS RESULTS IN AN ENCLOSURE RATING OF IP00.



MODEL #	VOLTAGE THREE PHASE (VAC)	OUTPUT CURRENT (A)		WEIGHT LBS (Kg)	HEAT LOSS (W)		
		ND	HD		ND (Fc=2kHz)	HD (Fc=8kHz)	
CIMR-VU	208/240	69.0	60.0	20.2 (9.2)	184.5	461.7	646.2
					151.4	437.7	589.1

INT=INTERNAL COMPONENTS
EXT=EXTERNAL HEATSINK
TOT=TOTAL

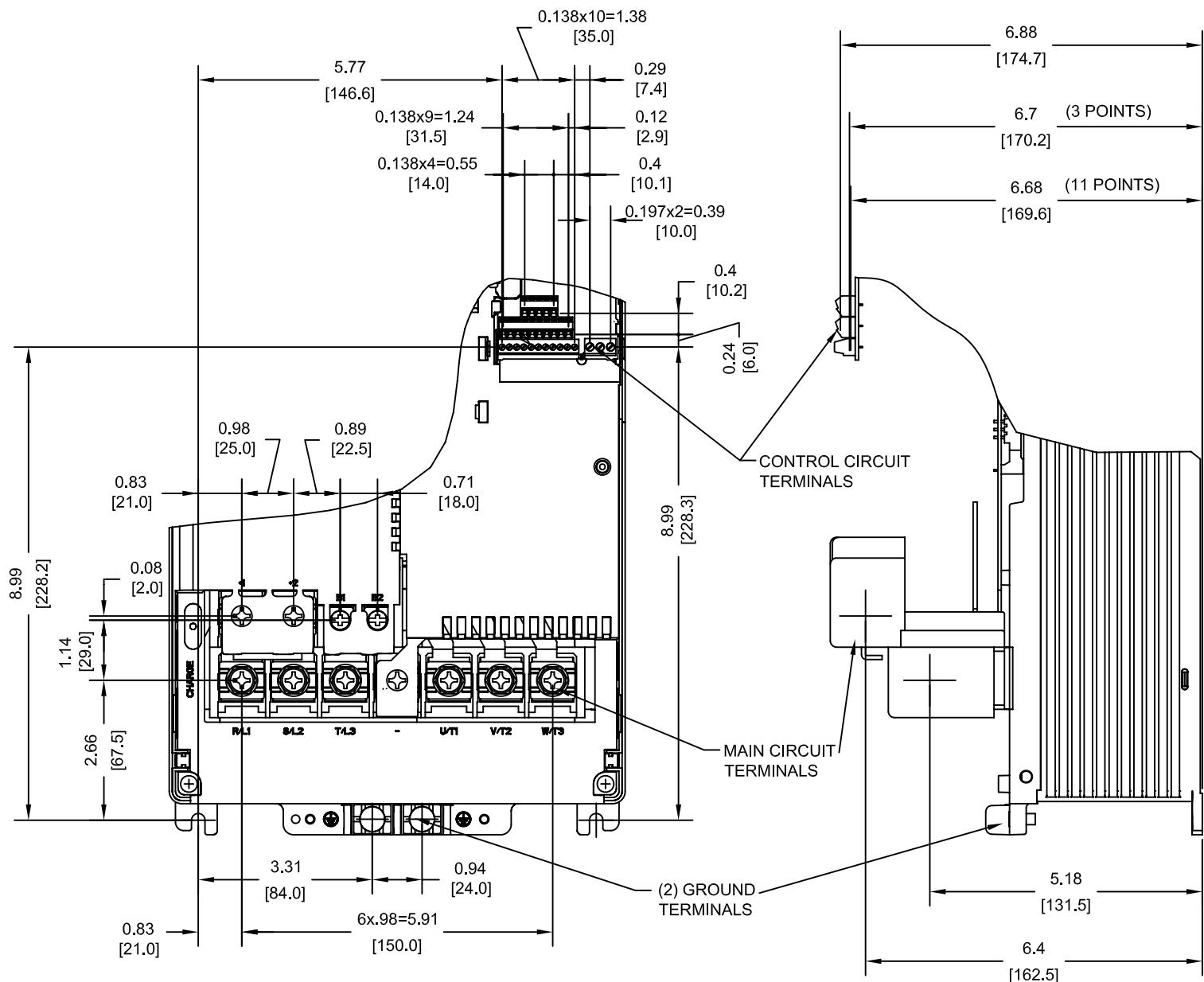
FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL							
TOLERANCES / REFERENCES:		YASKAWA The Drive for Quality™		DRAWN: J. MATTAS CHECKED: M. RUCINSKI		DATE: 2-12-08 DATE: 5-7-08	
				TITLE: V1000 DIMENSION DRAWING FRAME SIZE 17 NEMA TYPE 1 ENCLOSURE 2A0069F			
TECH:		APPROVED:		SIZE		REVISION	PAGE
J. CAIRO		T. SASADA		A	R00	1	of 3
				ORIGINAL DESIGN:	DATE		
				-	-		
DRAWING #: DD.V1K.FR17.N1							

TOLERANCES / REFERENCES:

UNITS: IN [mm]

SCALE: 1:5

TERMINAL AND WIRING DETAILS (SCALE 1:3)



TERMINAL AND WIRE SPECIFICATIONS FOR
MAIN CIRCUIT AND GROUND

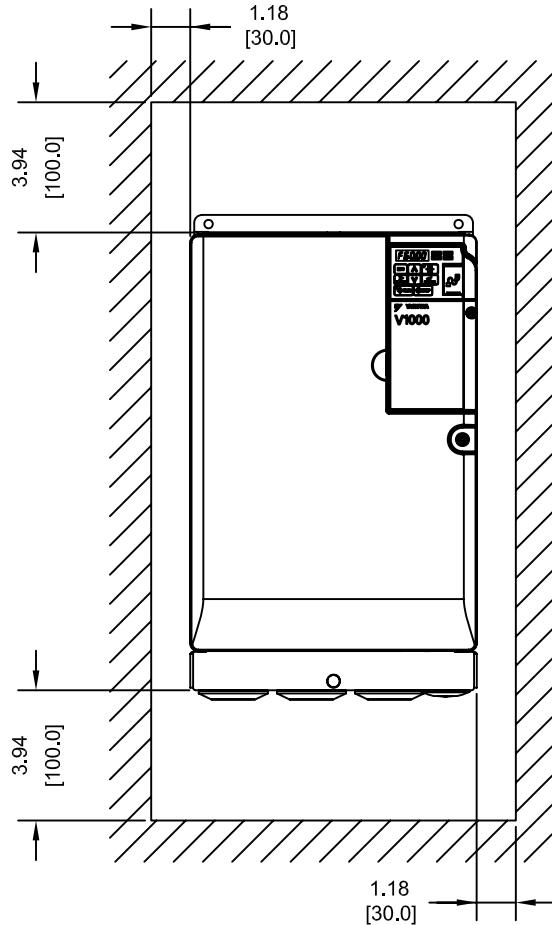
MODEL # CIMR-VU	TERMINAL SYMBOL	TERMINAL SCREW	CLAMPING TORQUE lb.in.(N.m.)	WIRE RANGE AWG(mm ²)
2A0069F	R/L1, S/L2, T/L3, ⊖, +1,+2, U/T1, V/T2, W/T3	M8	79.7 TO 97.4 (9 TO 11)	10-2 (5.5-38)
	B1, B2	M5	17.7 TO 22.1 (2 TO 2.5)	8-6 (8-14)
	⊖	M6	35.4 TO 53.1 (4 TO 6)	8-4 (8-22)

NOTE: RATINGS APPLY TO BOTH FACTORY AND FIELD WIRING
REFER TO APPLICABLE CODES FOR PROPER WIRE TYPE AND SIZE

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

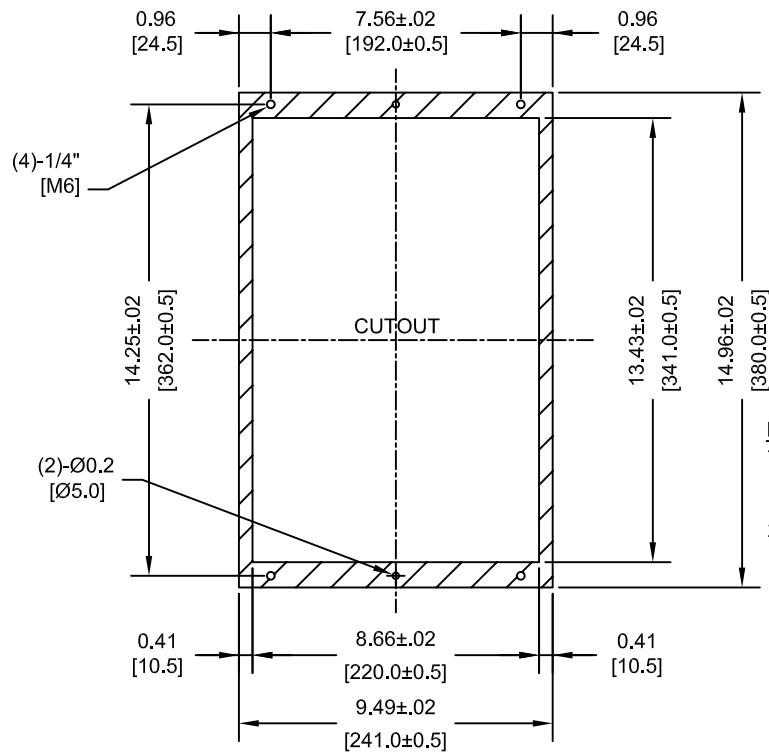
TOLERANCES / REFERENCES:	YASKAWA The Drive for Quality™		DRAWN: J. MATTAS DATE: 2-12-08	REVISION: R00	PAGE: 2 of 3
THIS DOCUMENT AND INFORMATION CONTAINED IN IT ARE CONFIDENTIAL, AND CANNOT BE COPIED OR DISCLOSED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN CONSENT OF YASKAWA ELECTRIC AMERICA INC.	CHECKED: M. RUCINSKI DATE: 5-7-08	TECH: J. CAIRO DATE: 3-27-08	APPROVED: T. SASADA DATE: 5-27-08	SIZE: A	DRAWING #: DD.V1K.FR17.N1
UNITS: IN [mm]	SCALE: BY VIEW	ORIGINAL DESIGN: -	DATE: -		

MINIMUM INSTALLATION CLEARANCES (SCALE 1:6)



NOTE:
FOR SIDE-BY-SIDE MOUNTING
CONSULT MANUAL

PANEL CUTOUT FOR EXTERNAL HEATSINK
MOUNTING CONFIGURATION (SCALE 1:6)



- NOTES:
1. EXTERNAL HEATSINK
CONFIGURATION REQUIRES
MOUNTING KIT
 2. EXPOSED HEATSINK
RECOMMENDED CLEARANCE
 $D=3.35"$ MINUS PANEL THICKNESS

TOLERANCES / REFERENCES:	 YASKAWA The Drive for Quality™		DRAWN: J. MATTAS	DATE 2-12-08	TITLE: V1000 DIMENSION DRAWING		
	THIS DOCUMENT AND INFORMATION CONTAINED IN IT ARE CONFIDENTIAL, AND CANNOT BE COPIED OR DISCLOSED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN CONSENT OF YASKAWA ELECTRIC AMERICA INC.		CHECKED: M. RUCINSKI	DATE 5-7-08	FRAME SIZE 17 NEMA TYPE 1 ENCLOSURE 2A0069F		
			TECH: J. CAIRO	DATE 3-27-08			
			APPROVED: T. SASADA	DATE 5-27-08			
UNITS: IN[mm]	SCALE: BY VIEW	ORIGINAL DESIGN: -	REVISION: R00	PAGE: 3 of 3	DRAWING #: DD.V1K.FR17.N1		