

MODEL # CIMR-VU	VOLTAGE (VAC)	OUTPUT CURRENT (A)		WEIGHT LBS (Kg)	HEAT LOSS (W)					
		ND	HD		ND (Fc=2kHz)			HD (Fc=8kHz)		
					INT	EXT	TOT	INT	EXT	TOT
BA0001BXX	208/240	1.2	0.8	1.3 (0.6)	8.5	5.0	13.5	7.4	4.3	11.7
BA0002BXX	SINGLE-PHASE	1.9	1.6	1.3 (0.6)	9.7	7.6	17.3	8.9	7.9	16.8
2A0001BXX	208/240	1.2	0.8	1.3 (0.6)	8.0	5.0	13.0	7.3	4.3	11.6
2A0002BXX	THREE-PHASE	1.9	1.6	1.3 (0.6)	9.5	7.6	17.1	8.8	7.9	16.7

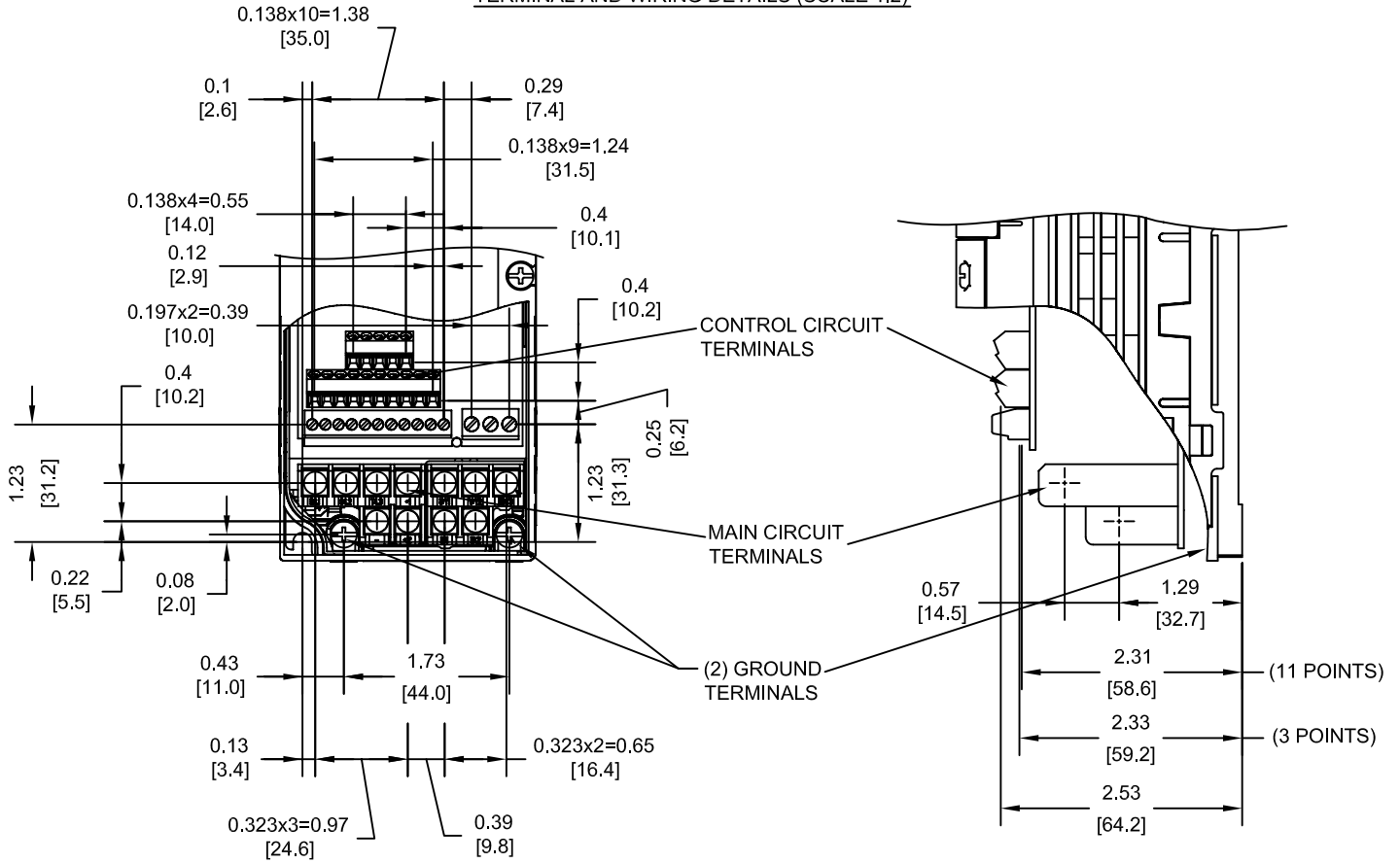
NOTE:
XX DENOTES AA-ZZ

INT=INTERNAL COMPONENTS
EXT=EXTERNAL HEATSINK
TOT=TOTAL

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:		<p>YASKAWA The Drive for Quality™</p> <p>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.</p>	DRAWN: J. MATTAS DATE 1-19-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 1 OPEN ENCLOSURE (IP20 RATING) BA0001B TO 0002B, 2A0001B TO 0002B
UNITS: IN [mm]	SCALE: 1:2		CHECKED: J. PIOTROWSKI DATE 8-21-09	DATE 8-21-09
			TECH: J. CAIRO DATE 8-24-09	DATE 8-24-09
			APPROVED: T. SASADA DATE 8-28-09	DATE 8-28-09
		ORIGINAL DESIGN: -	DATE -	DRAWING #: DD.V1K.FR1.IP20
			SIZE A	REVISION R00
			PAGE 1 of 3	

TERMINAL AND WIRING DETAILS (SCALE 1:2)



TERMINAL AND WIRE SPECIFICATIONS FOR MAIN CIRCUIT AND GROUND

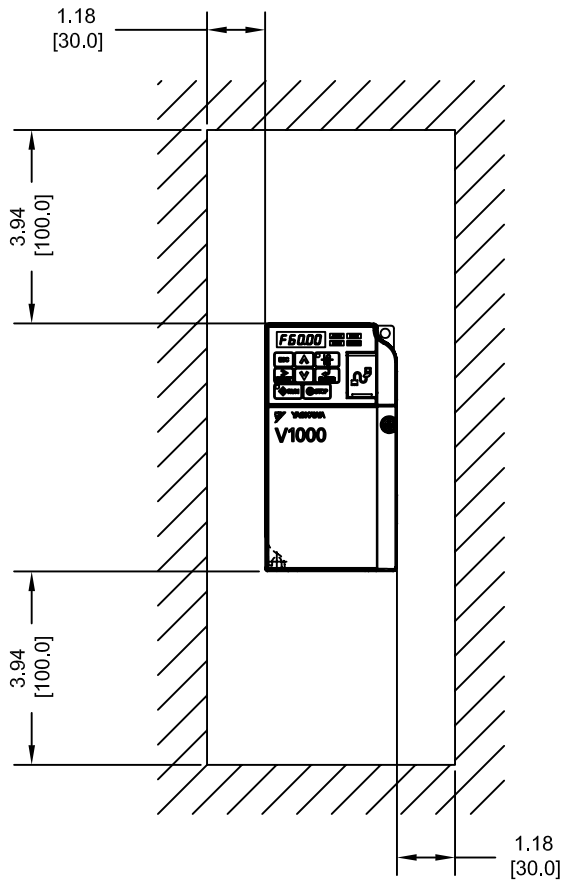
MODEL # CIMR-VU	TERMINAL SCREW	CLAMPING TORQUE lb.in.(N.m.)	WIRE RANGE AWG(mm ²)
BA0001B	M3.5	7.1 TO 8.9 (0.8 TO 1.0)	22-14 (0.33-2.0)
BA0002B	M3.5	7.1 TO 8.9 (0.8 TO 1.0)	22-14 (0.33-2.0)
2A0001B	M3.5	7.1 TO 8.9 (0.8 TO 1.0)	22-14 (0.33-2.0)
2A0002B	M3.5	7.1 TO 8.9 (0.8 TO 1.0)	22-14 (0.33-2.0)

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

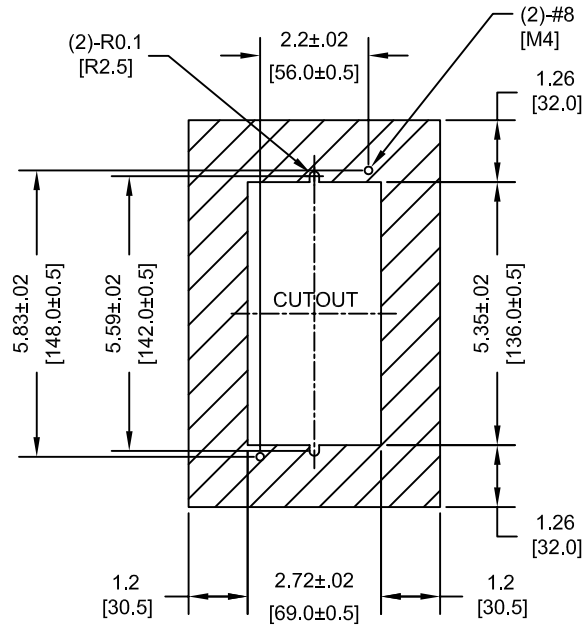
TOLERANCES / REFERENCES:	<p>YASKAWA The Drive for Quality™</p> <p><i>THIS DOCUMENT AND INFORMATION CONTAINED IN IT ARE CONFIDENTIAL, AND CANNOT BE COPIED OR DISCLOSED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN CONSENT OF YASKAWA ELECTRIC AMERICA INC.</i></p>	DRAWN: J. MATTAS	DATE 1-19-09	TITLE: V1000 DIMENSION DRAWING		
		CHECKED: J. PIOTROWSKI	DATE 8-21-09	FRAME SIZE 1		
		TECH: J. CAIRO	DATE 8-24-09	OPEN ENCLOSURE (IP20 RATING)		
		APPROVED: T. SASADA	DATE 8-28-09	BA0001B TO 0002B, 2A0001B TO 0002B		
UNITS: IN [mm]	SCALE: BY VIEW	ORIGINAL DESIGN: -	DATE -	SIZE A	REVISION R00	PAGE 2 of 3
			DRAWING #: DD.V1K.FR1.IP20			

MINIMUM INSTALLATION CLEARANCES (SCALE 1:4)



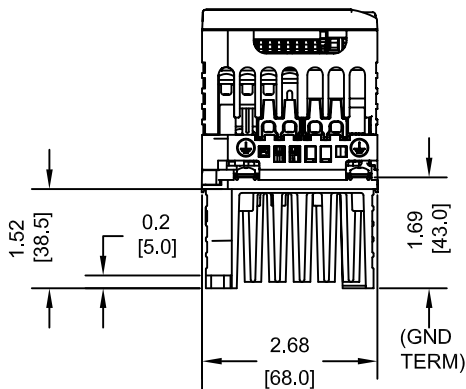
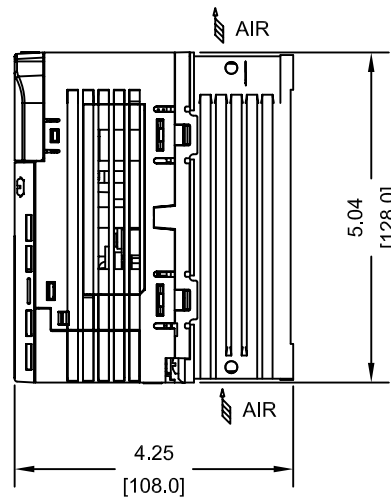
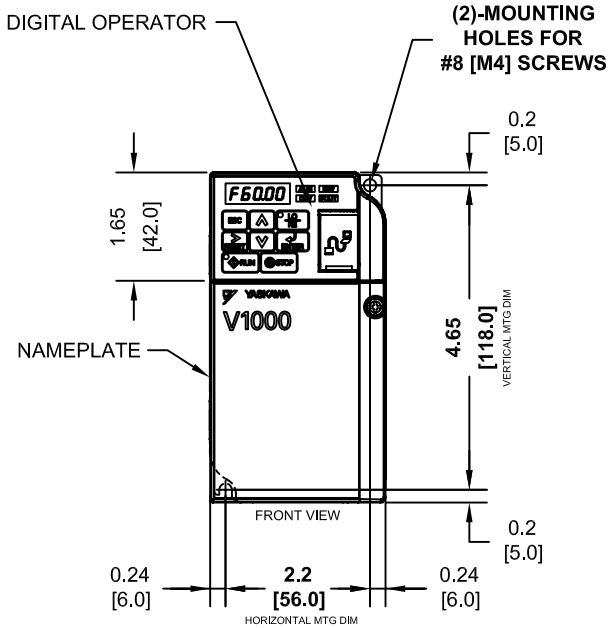
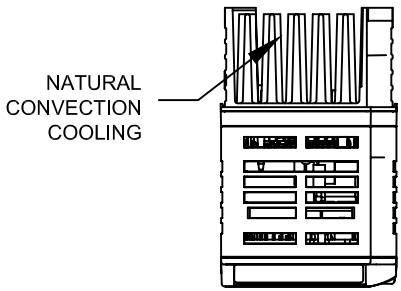
NOTE:
FOR SIDE-BY-SIDE MOUNTING
CONSULT MANUAL

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:		<p>YASKAWA The Drive for Quality™</p> <p>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.</p>	DRAWN: J. MATTAS	DATE: 1-19-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 1 OPEN ENCLOSURE (IP20 RATING) BA0001B TO 0002B, 2A0001B TO 0002B
			CHECKED: J. PIOTROWSKI	DATE: 8-21-09	SIZE: A REVISION: R00 PAGE: 3 of 3
			TECH: J. CAIRO	DATE: 8-24-09	
			APPROVED: T. SASADA	DATE: 8-28-09	
UNITS: IN [mm]	SCALE: BY VIEW	ORIGINAL DESIGN:	DATE:		DRAWING #: DD.V1K.FR1.IP20



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	TOT	INT	EXT	TOT	INT	EXT	TOT
2A0004BXX	208/240	3.5	3.0	2.0 (0.9)	13.6	15.8	29.4	11.5	16.2	27.7

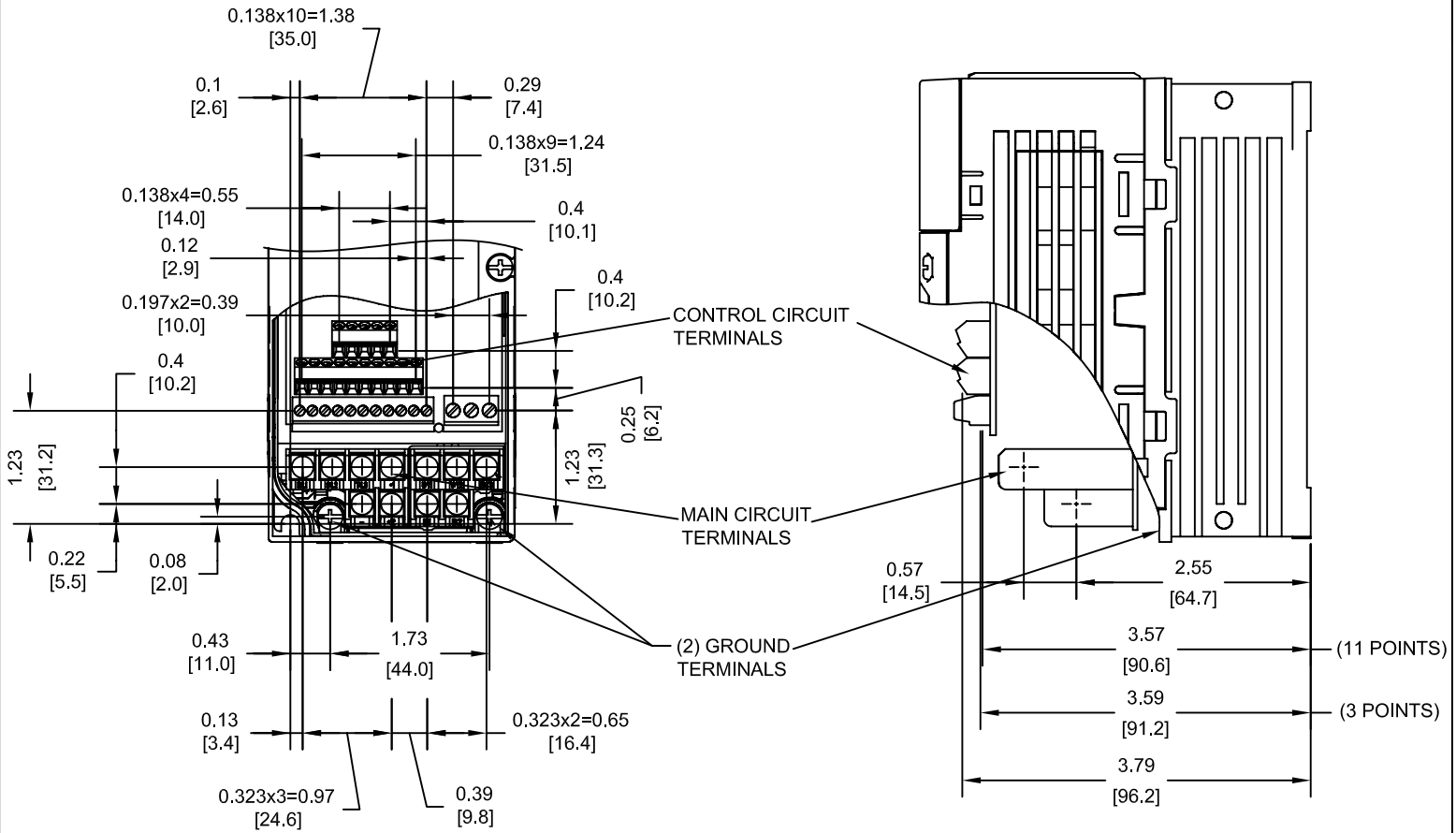
NOTE:
XX DENOTES AA-ZZ

INT=INTERNAL COMPONENTS
EXT=EXTERNAL HEATSINK
TOT=TOTAL

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:		<p>YASKAWA The Drive for Quality™</p> <p><i>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.</i></p>	DRAWN: J. MATTAS DATE 1-19-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 2 OPEN ENCLOSURE (IP20 RATING) 2A0004B		
UNITS: IN [mm]	SCALE: 1:3		CHECKED: J. PIOTROWSKI DATE 8-21-09	DATE 8-24-09		
			TECH: J. CAIRO DATE 8-28-09	DATE 8-28-09		
			APPROVED: T. SASADA DATE 8-28-09	DATE -		
		ORIGINAL DESIGN: -	DATE -	SIZE A	REVISION R00	PAGE 1 of 3
		DRAWING #: DD.V1K.FR2.IP20				

TERMINAL AND WIRING DETAILS (SCALE 1:2)



TERMINAL AND WIRE SPECIFICATIONS FOR
 MAIN CIRCUIT AND GROUND

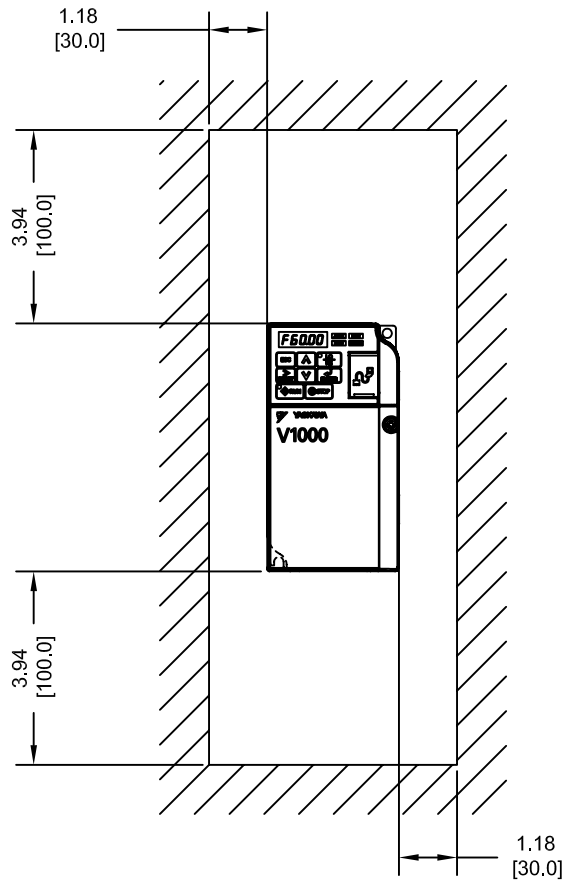
MODEL #	TERMINAL SCREW	CLAMPING TORQUE lb.in.(N.m.)	WIRE RANGE AWG(mm ²)
2A0004B	M3.5	7.1 TO 8.9 (0.8 TO 1.0)	22-14 (0.33-2.0)

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

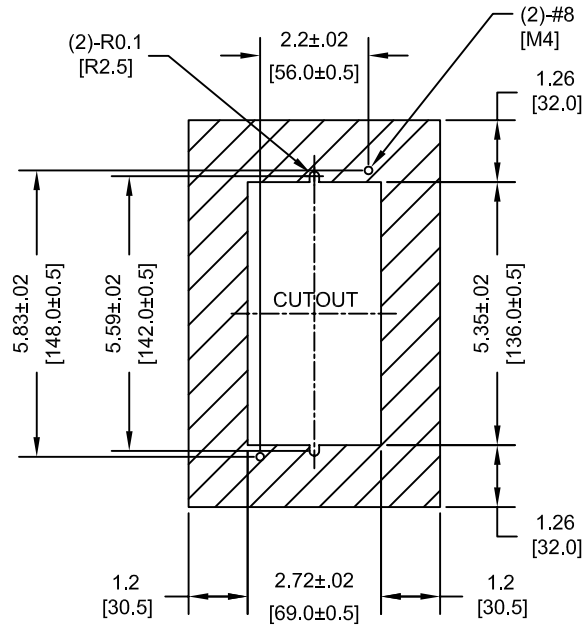
FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:		DRAWN: J. MATTAS	DATE: 1-19-09	TITLE: V1000 DIMENSION DRAWING		
		CHECKED: J. PIOTROWSKI	DATE: 8-21-09	FRAME SIZE 2		
		TECH: J. CAIRO	DATE: 8-24-09	OPEN ENCLOSURE (IP20 RATING)		
		APPROVED: T. SASADA	DATE: 8-28-09	2A0004B		
UNITS: IN [mm]	SCALE: BY VIEW	ORIGINAL DESIGN: -	DATE: -	SIZE: A	REVISION: R00	PAGE: 2 of 3
			DRAWING #: DD.V1K.FR2.IP20			

MINIMUM INSTALLATION CLEARANCES (SCALE 1:4)



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

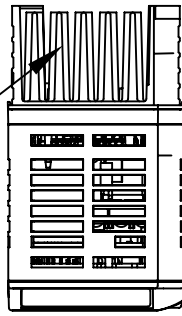


NOTES:

- EXTERNAL HEATSINK CONFIGURATION REQUIRES MOUNTING KIT
- EXPOSED HEATSINK RECOMMENDED CLEARANCE $D=1.97''$ MINUS PANEL THICKNESS

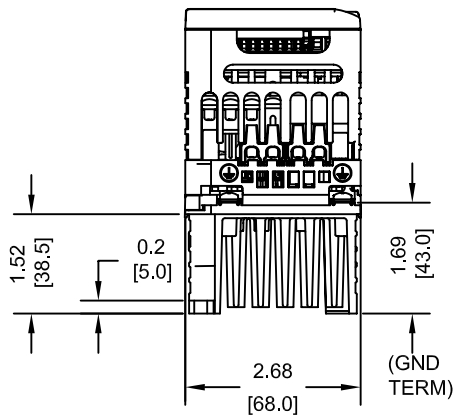
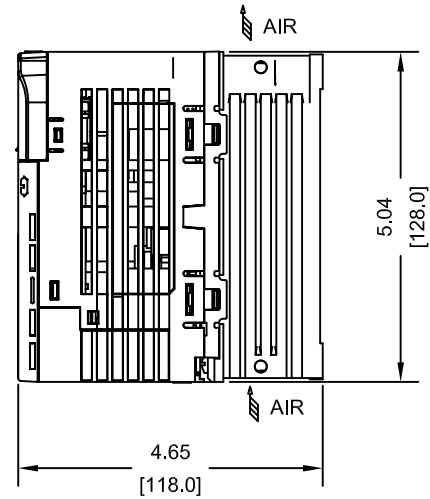
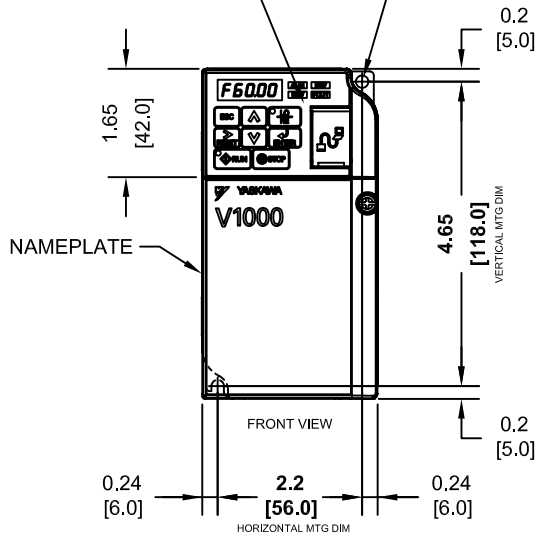
TOLERANCES / REFERENCES:		<p>YASKAWA The Drive for Quality™</p> <p>THIS DOCUMENT AND INFORMATION CONTAINED IN IT ARE CONFIDENTIAL, AND CANNOT BE COPIED OR DISCLOSED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN CONSENT OF YASKAWA ELECTRIC AMERICA INC.</p>	DRAWN: J. MATTAS DATE: 1-19-09	DATE: 1-19-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 2 OPEN ENCLOSURE (IP20 RATING) 2A0004B
			CHECKED: J. PIOTROWSKI DATE: 8-21-09	DATE: 8-21-09	
			TECH: J. CAIRO DATE: 8-24-09	DATE: 8-24-09	
			APPROVED: T. SASADA DATE: 8-28-09	DATE: 8-28-09	
UNITS: IN [mm]	SCALE: BY VIEW	ORIGINAL DESIGN:			SIZE: A REVISION: R00 PAGE: 3 of 3
			DRAWING #:		DD.V1K.FR2.IP20

NATURAL
CONVECTION
COOLING



DIGITAL OPERATOR

(2)-MOUNTING
HOLES FOR
#8 [M4] SCREWS



MODEL # CIMR-VU	VOLTAGE SINGLE PHASE (VAC)	OUTPUT CURRENT (A)		WEIGHT LBS (Kg)	HEAT LOSS (W)					
		ND	HD		ND (Fc=2kHz)			HD (Fc=8kHz)		
					INT	EXT	TOT	INT	EXT	TOT
BA0003BXX	208/240	3.2	3.0	2.2 (1.0)	14.4	14.6	29.0	11.5	16.1	27.6

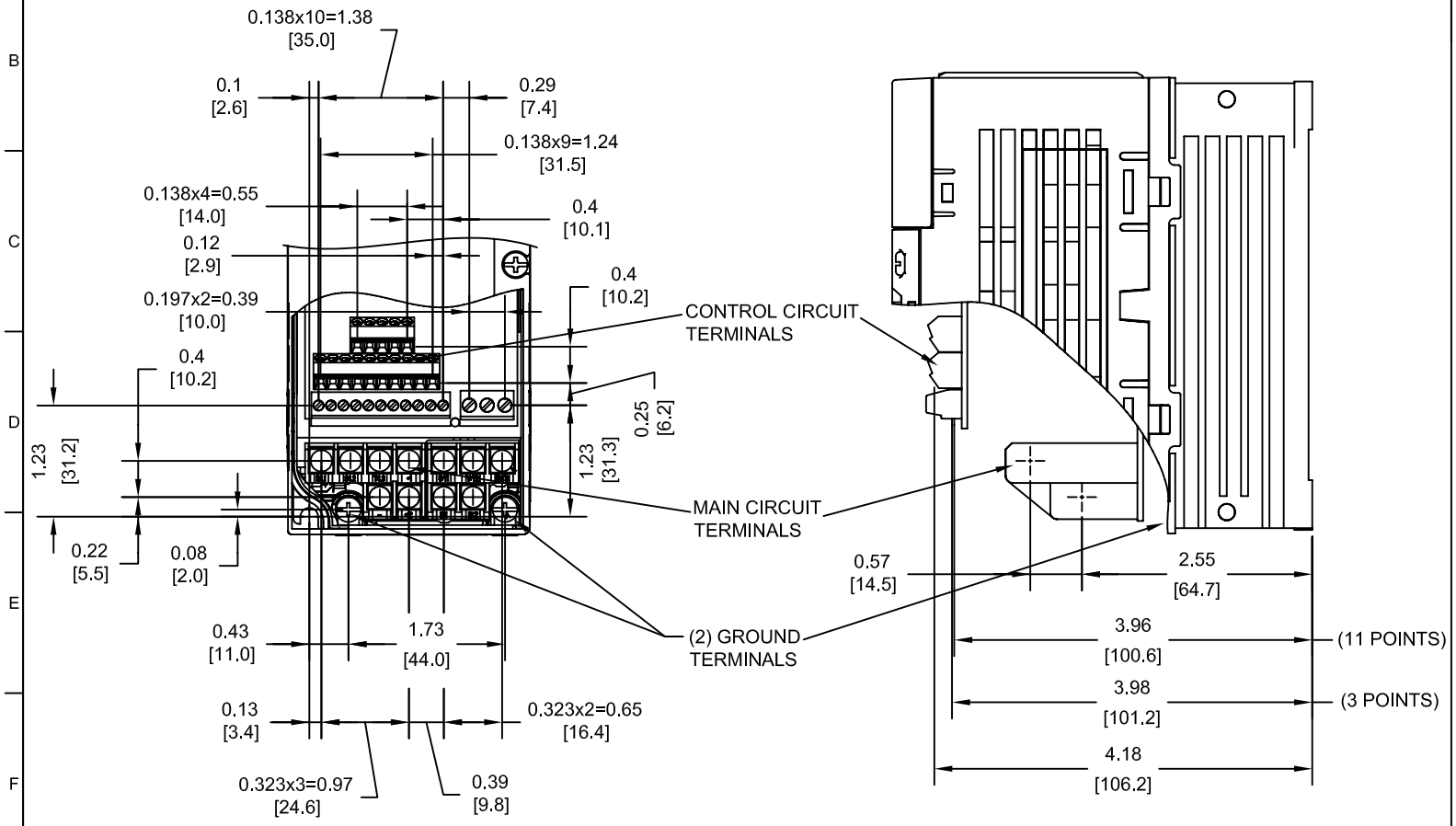
NOTE:
XX DENOTES AA-ZZ

INT=INTERNAL COMPONENTS
EXT=EXTERNAL HEATSINK
TOT=TOTAL

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:		<p>YASKAWA The Drive for Quality™</p> <p>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.</p>	DRAWN: J. MATTAS DATE 1-20-09	DATE 1-20-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 3 OPEN ENCLOSURE (IP20 RATING) BA0003B		
UNITS: IN [mm]			CHECKED: J. PIOTROWSKI DATE 8-21-09	DATE 8-21-09	SIZE A	REVISION R00	PAGE 1 of 3
SCALE: 1:3			APPROVED: T. SASADA DATE 8-28-09	DATE 8-28-09	DRAWING #: DD.V1K.FR3.IP20		

TERMINAL AND WIRING DETAILS (SCALE 1:2)



TERMINAL AND WIRE SPECIFICATIONS FOR
MAIN CIRCUIT AND GROUND

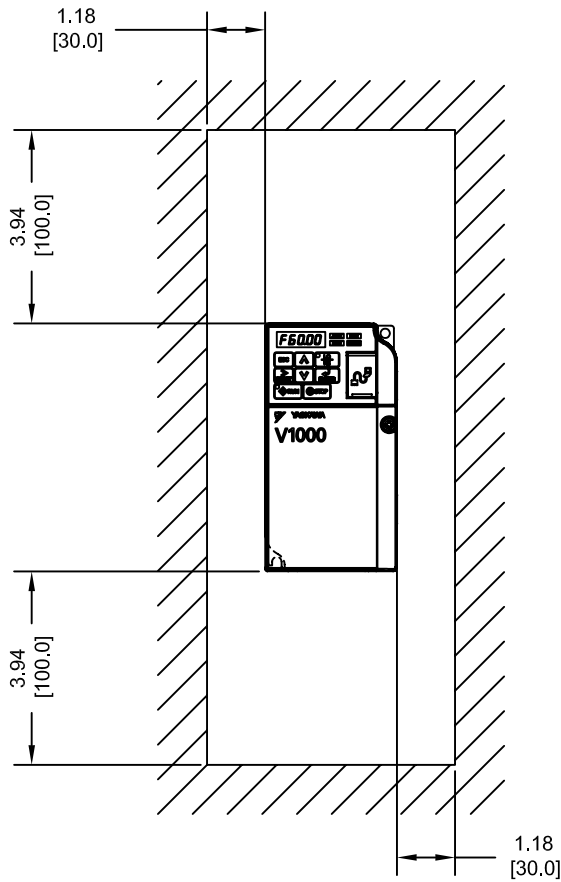
MODEL #	TERMINAL SCREW	CLAMPING TORQUE lb.in.(N.m.)	WIRE RANGE AWG(mm ²)
BA0003B	M3.5	7.1 TO 8.9 (0.8 TO 1.0)	22-14 (0.33-2.0)

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

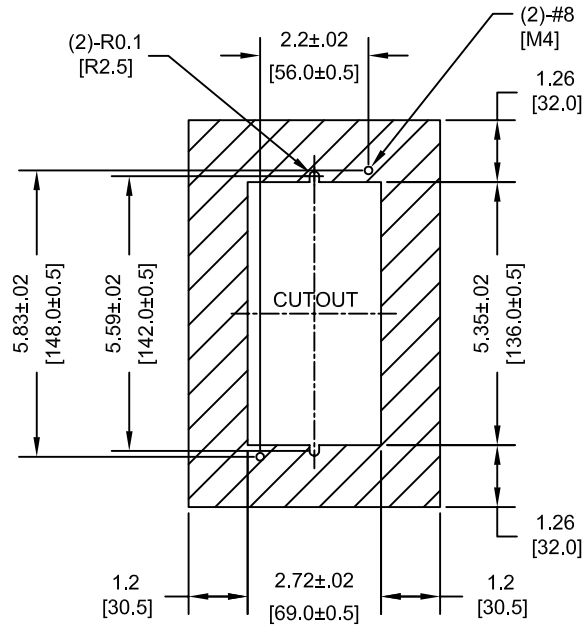
TOLERANCES / REFERENCES:			DRAWN: J. MATTAS DATE 1-20-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 3 OPEN ENCLOSURE (IP20 RATING) BA0003B		
THIS DOCUMENT AND INFORMATION CONTAINED IN IT ARE CONFIDENTIAL, AND CANNOT BE COPIED OR DISCLOSED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN CONSENT OF YASKAWA ELECTRIC AMERICA INC.			CHECKED: J. PIOTROWSKI DATE 8-21-09	DATE 8-21-09	SIZE A REVISION R00 PAGE 2 of 3	
			TECH: J. CAIRO DATE 8-24-09	DATE 8-24-09		
			APPROVED: T. SASADA DATE 8-28-09	DATE 8-28-09	DRAWING #: DD.V1K.FR3.IP20	
UNITS: IN [mm]	SCALE: BY VIEW	ORIGINAL DESIGN: -	DATE -			

MINIMUM INSTALLATION CLEARANCES (SCALE 1:4)



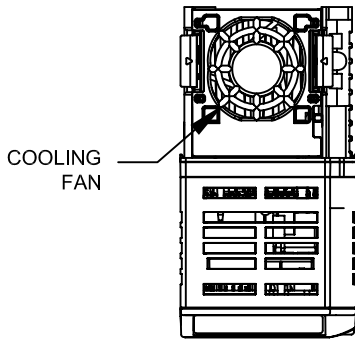
NOTE:
FOR SIDE-BY-SIDE MOUNTING
CONSULT MANUAL

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



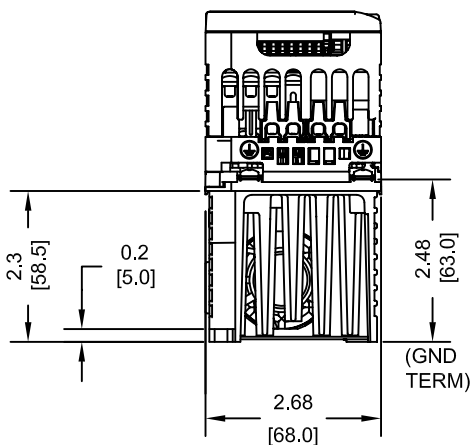
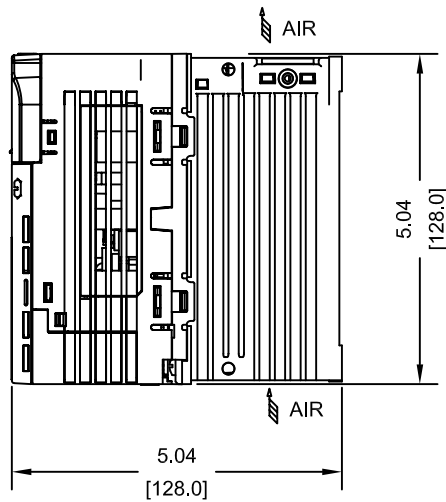
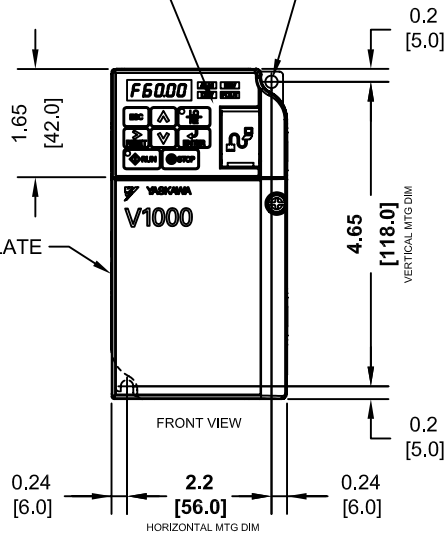
NOTES:
1. EXTERNAL HEATSINK
CONFIGURATION REQUIRES
MOUNTING KIT
2. EXPOSED HEATSINK
RECOMMENDED CLEARANCE
D=1.97" MINUS PANEL THICKNESS

TOLERANCES / REFERENCES:		<p>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.</p>	DRAWN: J. MATTAS	DATE: 1-20-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 3 OPEN ENCLOSURE (IP20 RATING) BA0003B		
			CHECKED: J. PIOTROWSKI	DATE: 8-21-09			
			TECH: J. CAIRO	DATE: 8-24-09			
			APPROVED: T. SASADA	DATE: 8-28-09			
UNITS: IN [mm]	SCALE: BY VIEW	ORIGINAL DESIGN:			SIZE: A	REVISION: R00	PAGE: 3 of 3
					DRAWING #: DD.V1K.FR3.IP20		



COOLING FAN

DIGITAL OPERATOR
(2)-MOUNTING HOLES FOR #8 [M4] SCREWS



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
2A0006BXX	208/240	6.0	5.0	2.4 (1.1)	17.2	27.5	44.7	15.9	27.4	43.3

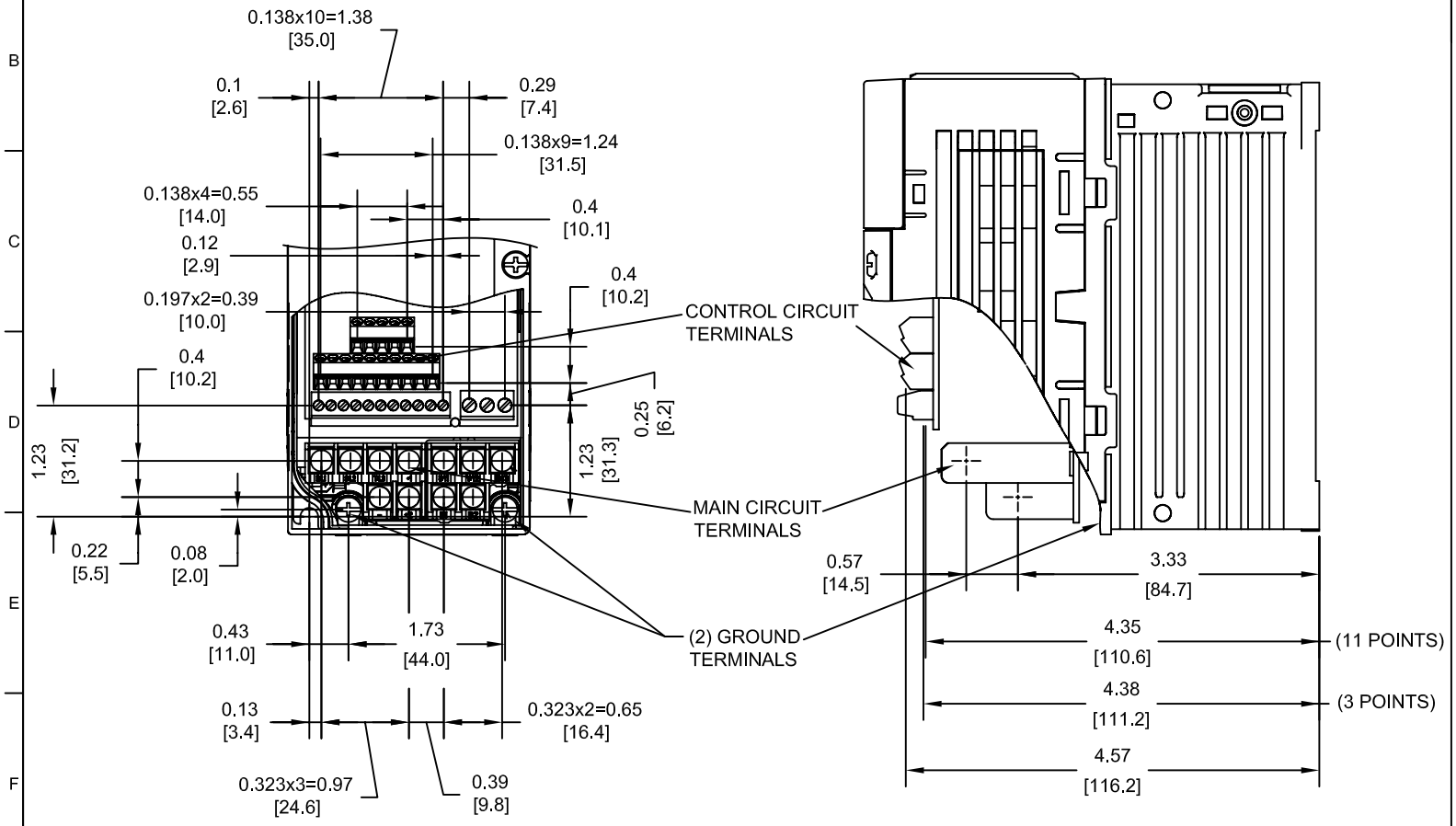
NOTE:
XX DENOTES AA-ZZ

INT=INTERNAL COMPONENTS
EXT=EXTERNAL HEATSINK
TOT=TOTAL

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:		<p>YASKAWA The Drive for Quality™</p> <p><i>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.</i></p>	DRAWN: J. MATTAS DATE 1-20-09	DATE 1-20-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 4 OPEN ENCLOSURE (IP20 RATING) 2A0006B		
UNITS: IN [mm]	SCALE: 1:3		CHECKED: J. PIOTROWSKI DATE 8-21-09	DATE 8-21-09			
			TECH: J. CAIRO DATE 8-24-09	DATE 8-24-09			
			APPROVED: T. SASADA DATE 8-28-09	DATE 8-28-09			
		ORIGINAL DESIGN: -	DATE -	DRAWING #: DD.V1K.FR4.IP20	SIZE A	REVISION R00	PAGE 1 of 3

TERMINAL AND WIRING DETAILS (SCALE 1:2)



TERMINAL AND WIRE SPECIFICATIONS FOR
MAIN CIRCUIT AND GROUND

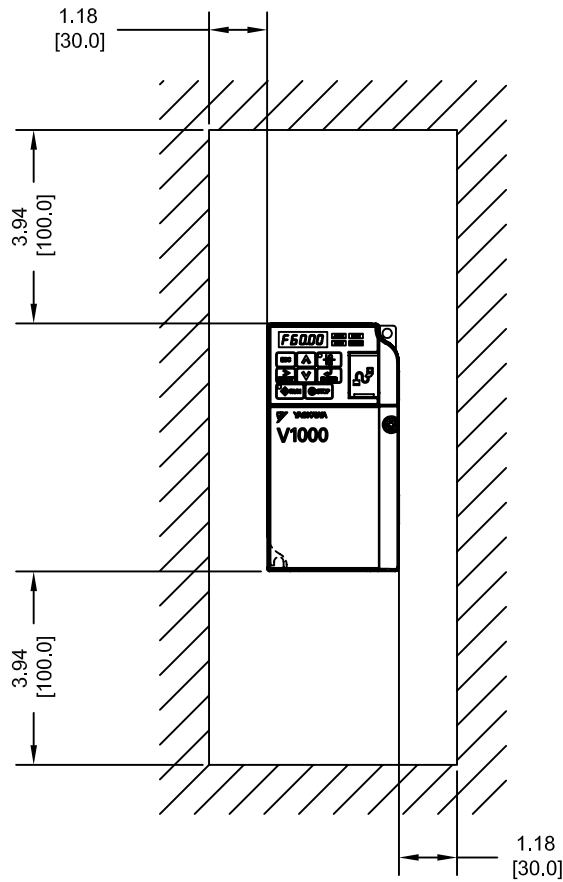
MODEL #	TERMINAL SCREW	CLAMPING TORQUE lb.in.(N.m.)	WIRE RANGE AWG(mm ²)
2A0006B	M3.5	7.1 TO 8.9 (0.8 TO 1.0)	22-14 (0.33-2.0)

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

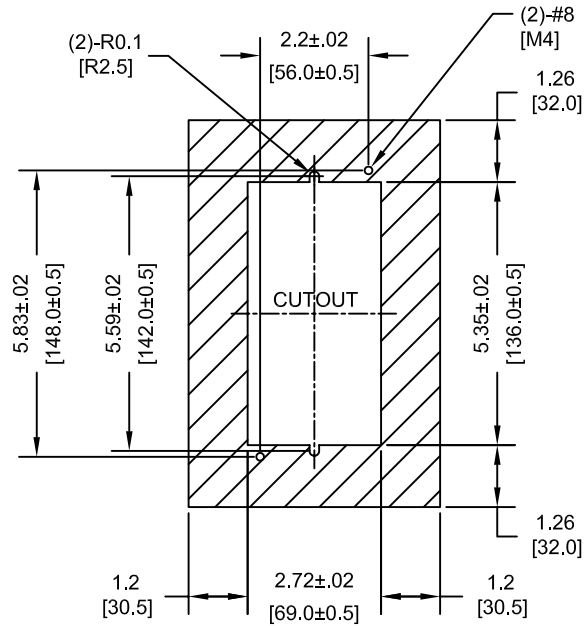
FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:		<p>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.</p>	DRAWN: J. MATTAS DATE 1-20-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 4 OPEN ENCLOSURE (IP20 RATING) 2A0006B		
UNITS: IN [mm]			CHECKED: J. PIOTROWSKI DATE 8-21-09	SIZE A	REVISION R00	PAGE 2 of 3
SCALE: BY VIEW			TECH: J. CAIRO DATE 8-24-09	APPROVED: T. SASADA DATE 8-28-09	DRAWING #: DD.V1K.FR4.IP20	
			ORIGINAL DESIGN: -	DATE -		

MINIMUM INSTALLATION CLEARANCES (SCALE 1:4)



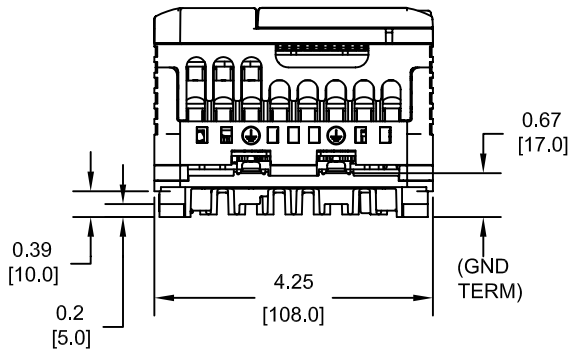
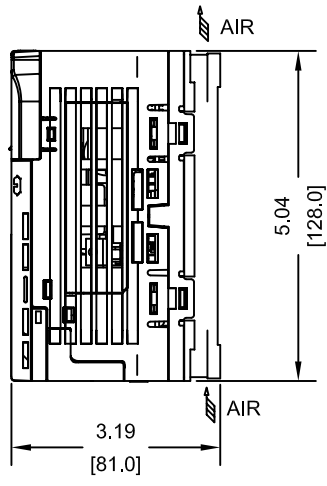
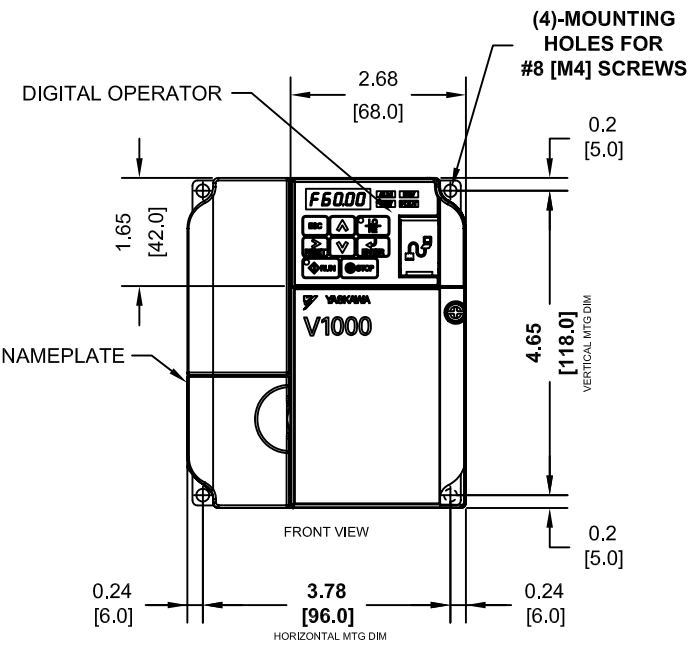
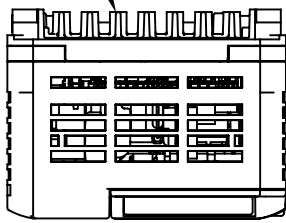
PANEL CUTOUT FOR EXTERNAL HEATSINK MOUNTING CONFIGURATION (SCALE 1:4)



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

TOLERANCES / REFERENCES:		<p>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.</p>	DRAWN: J. MATTAS	DATE: 1-20-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 4 OPEN ENCLOSURE (IP20 RATING) 2A0006B		
			CHECKED: J. PIOTROWSKI	DATE: 8-21-09			
			TECH: J. CAIRO	DATE: 8-24-09			
			APPROVED: T. SASADA	DATE: 8-28-09			
UNITS: IN [mm]	SCALE: BY VIEW	ORIGINAL DESIGN:		DATE:	SIZE: A	REVISION: R00	PAGE: 3 of 3
			DRAWING #:		DD.V1K.FR4.IP20		

NATURAL CONVECTION COOLING



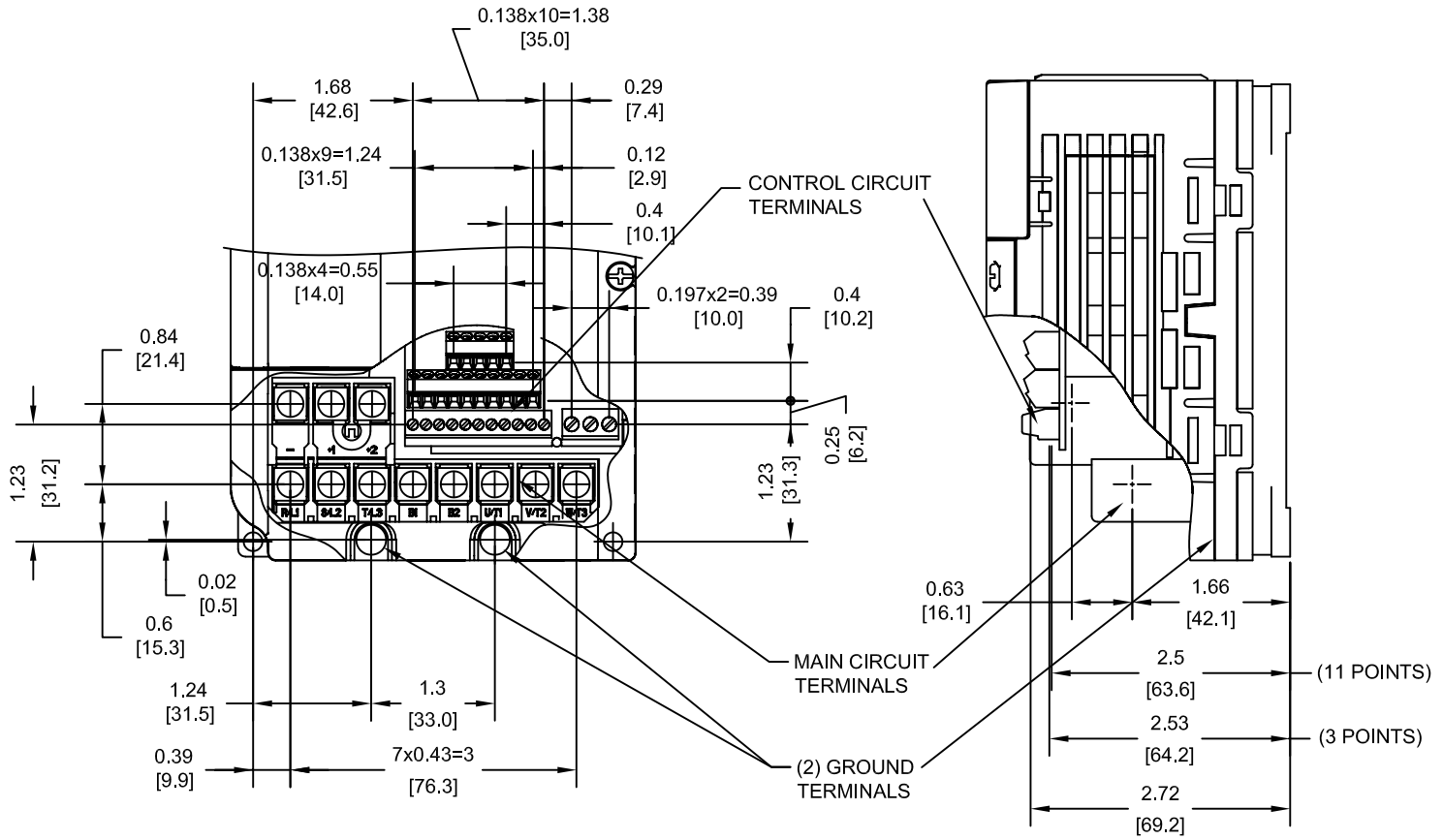
MODEL # CIMR-VU	VOLTAGE THREE PHASE (VAC)	OUTPUT CURRENT (A)		WEIGHT LBS (Kg)	HEAT LOSS (W)					
		ND	HD		ND (Fc=2kHz)			HD (Fc=8kHz)		
		INT	EXT	TOT	INT	EXT	TOT	INT	EXT	TOT
4A0001BXX	380/480	1.2	1.2	2.2 (1.0)	9.6	10.0	19.6	11.5	19.2	30.7

NOTE:
XX DENOTES AA-ZZ
INT=INTERNAL COMPONENTS
EXT=EXTERNAL HEATSINK
TOT=TOTAL

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:		<p>YASKAWA The Drive for Quality™</p> <p><i>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.</i></p>	DRAWN: J. MATTAS DATE: 1-21-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 5 OPEN ENCLOSURE (IP20 RATING) 4A0001B
UNITS: IN [mm]	SCALE: 1:3		CHECKED: J. PIOTROWSKI DATE: 8-21-09	SIZE: A REVISION: R00 PAGE: 1 of 3
			APPROVED: T. SASADA DATE: 8-28-09	DRAWING #: DD.V1K.FR5.IP20

TERMINAL AND WIRING DETAILS (SCALE 1:2)



TERMINAL AND WIRE SPECIFICATIONS FOR
MAIN CIRCUIT AND GROUND

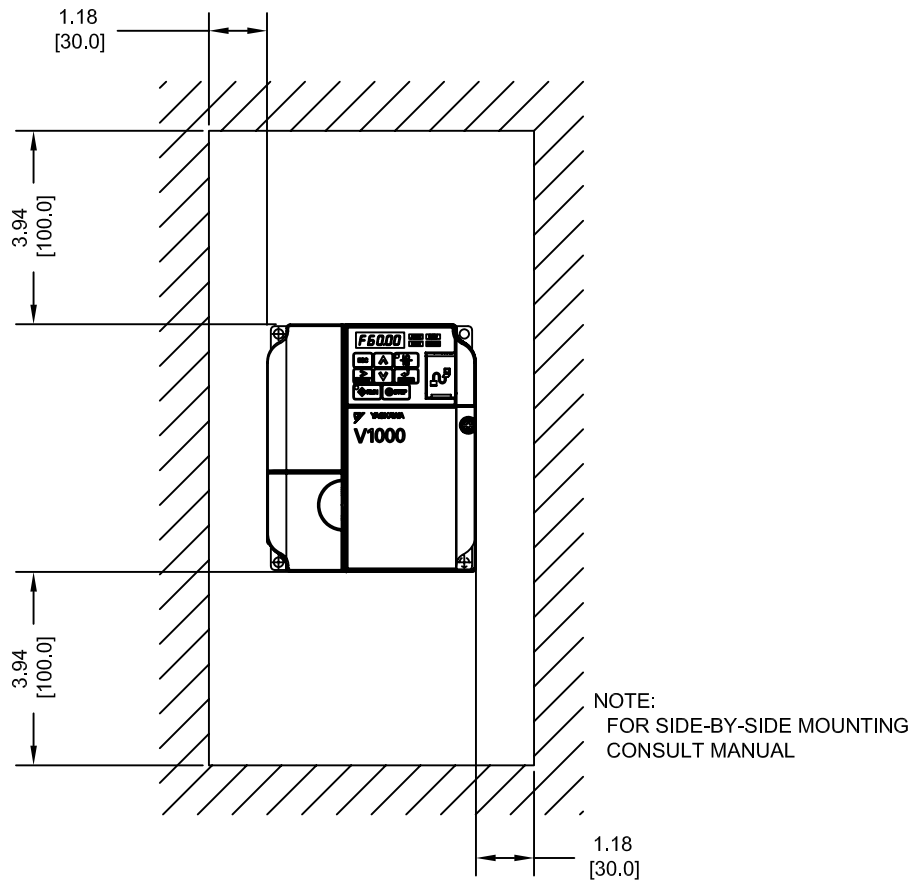
MODEL #	TERMINAL SCREW	CLAMPING TORQUE lb.in.(N.m.)	WIRE RANGE AWG(mm ²)
4A0001B	M4	10.6 TO 13.3 (1.2 TO 1.5)	22-10 (0.33-5.5)

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

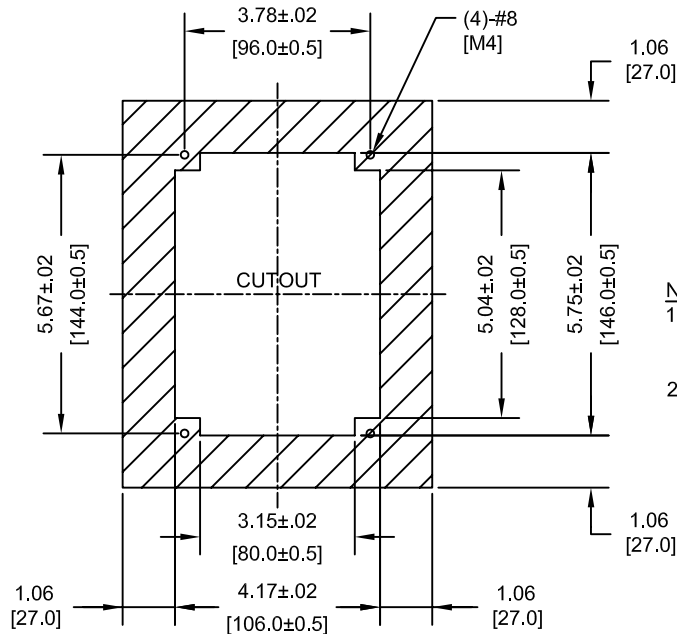
FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:		<p>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.</p>	DRAWN: J. MATTAS DATE 1-21-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 5 OPEN ENCLOSURE (IP20 RATING) 4A0001B		
			CHECKED: J. PIOTROWSKI DATE 8-21-09	TECH: J. CAIRO DATE 8-24-09	SIZE A	REVISION R00
			APPROVED: T. SASADA DATE 8-28-09	ORIGINAL DESIGN: - DATE -	PAGE 2 of 3	DRAWING #: DD.V1K.FR5.IP20
UNITS: IN [mm]	SCALE: BY VIEW					

MINIMUM INSTALLATION CLEARANCES (SCALE 1:4)



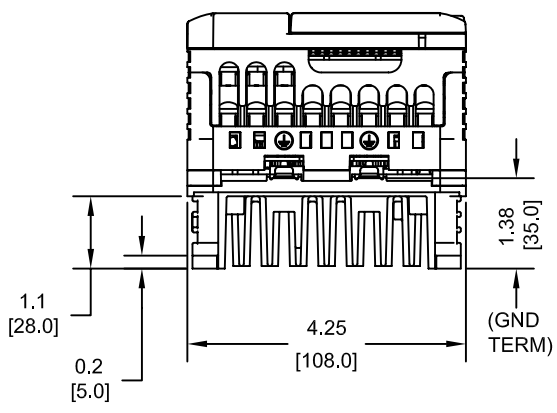
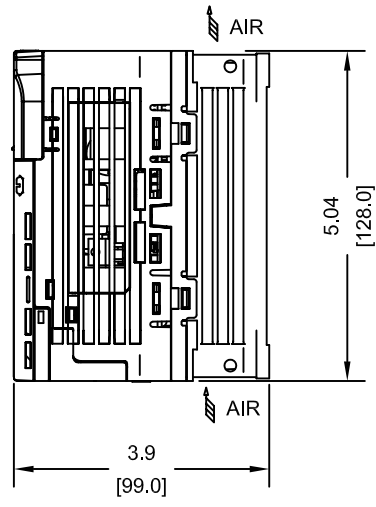
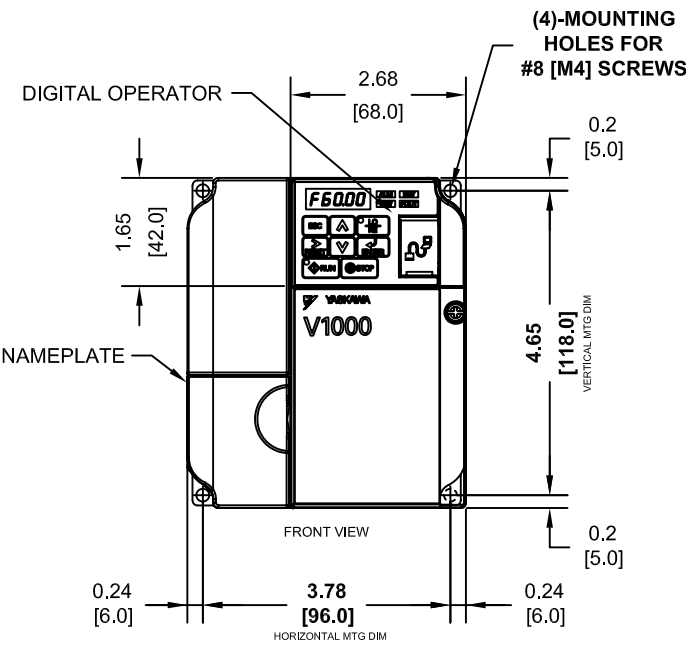
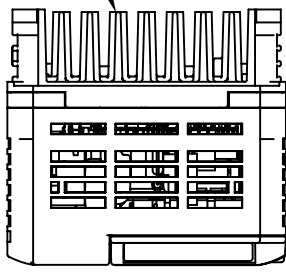
PANEL CUTOUT FOR EXTERNAL HEATSINK MOUNTING CONFIGURATION (SCALE 1:4)



- NOTES:
- EXTERNAL HEATSINK CONFIGURATION REQUIRES MOUNTING KIT
 - EXPOSED HEATSINK RECOMMENDED CLEARANCE $D=1.18''$ MINUS PANEL THICKNESS

TOLERANCES / REFERENCES:		<p>YASKAWA The Drive for Quality™</p> <p>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.</p>	DRAWN: J. MATTAS DATE: 1-21-09	DATE: 1-21-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 5 OPEN ENCLOSURE (IP20 RATING) 4A0001B
			CHECKED: J. PIOTROWSKI DATE: 8-21-09	DATE: 8-21-09	
			TECH: J. CAIRO DATE: 8-24-09	DATE: 8-24-09	
			APPROVED: T. SASADA DATE: 8-28-09	DATE: 8-28-09	
UNITS: IN [mm]	SCALE: BY VIEW	ORIGINAL DESIGN:			SIZE: A REVISION: R00 PAGE: 3 of 3
			DRAWING #:		DD.V1K.FR5.IP20

NATURAL
CONVECTION
COOLING



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
4A0002BXX	380/480	2.1	1.8	2.6 (1.2)	13.9	18.5	32.4	14.8	28.9	43.7

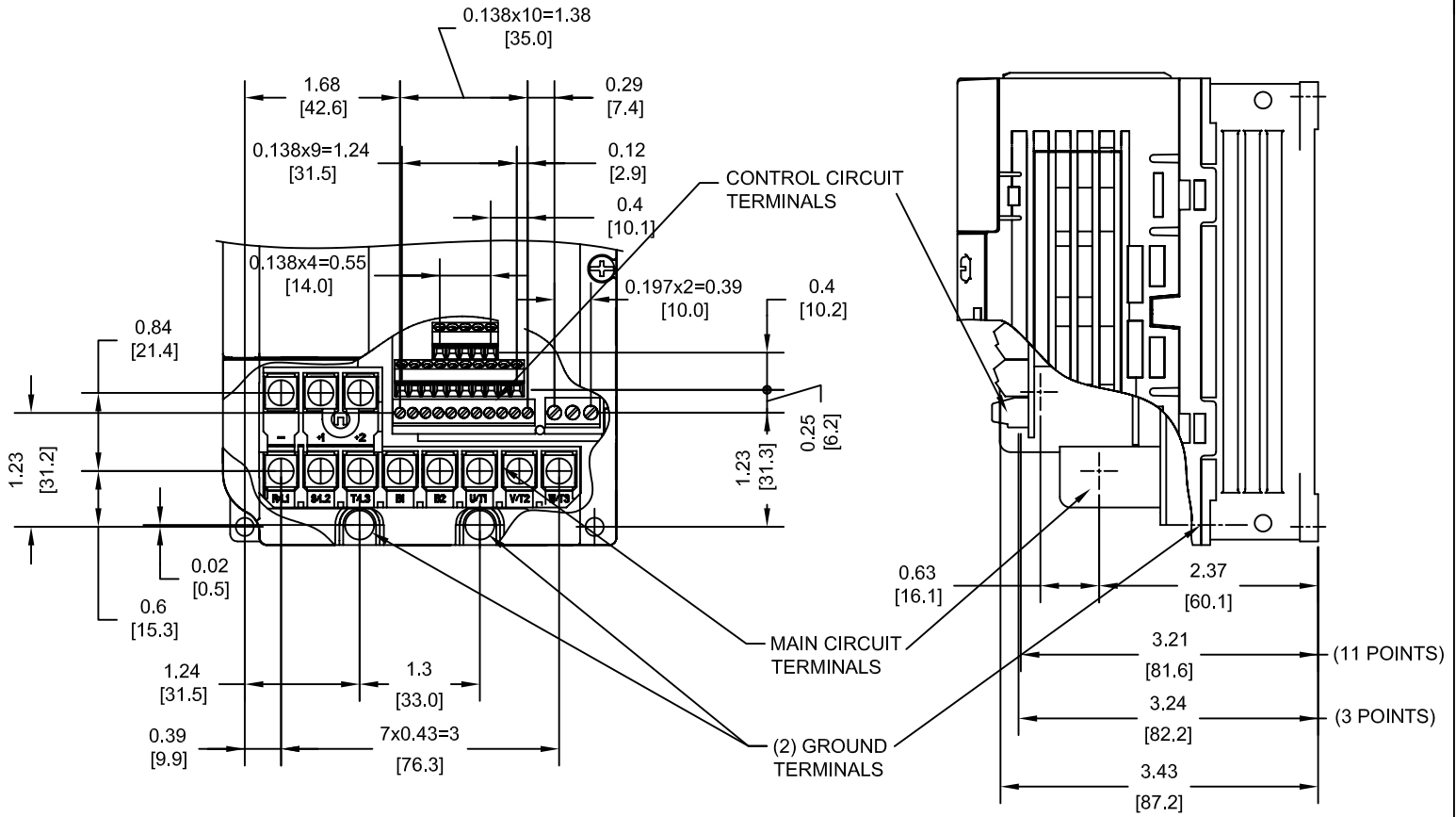
NOTE:
XX DENOTES AA-ZZ

INT=INTERNAL COMPONENTS
EXT=EXTERNAL HEATSINK
TOT=TOTAL

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:		<p>YASKAWA The Drive for Quality™</p> <p><i>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.</i></p>	DRAWN: J. MATTAS DATE: 1-21-09	DATE: 1-21-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 6 OPEN ENCLOSURE (IP20 RATING) 4A0002B
UNITS: IN [mm]	SCALE: 1:3		CHECKED: J. PIOTROWSKI DATE: 8-21-09	DATE: 8-21-09	
			APPROVED: T. SASADA DATE: 8-28-09	DATE: 8-28-09	
		ORIGINAL DESIGN: -	DATE: -	DRAWING #: DD.V1K.FR6.IP20	SIZE: A REVISION: R00 PAGE: 1 of 3

TERMINAL AND WIRING DETAILS (SCALE 1:2)



TERMINAL AND WIRE SPECIFICATIONS FOR
MAIN CIRCUIT AND GROUND

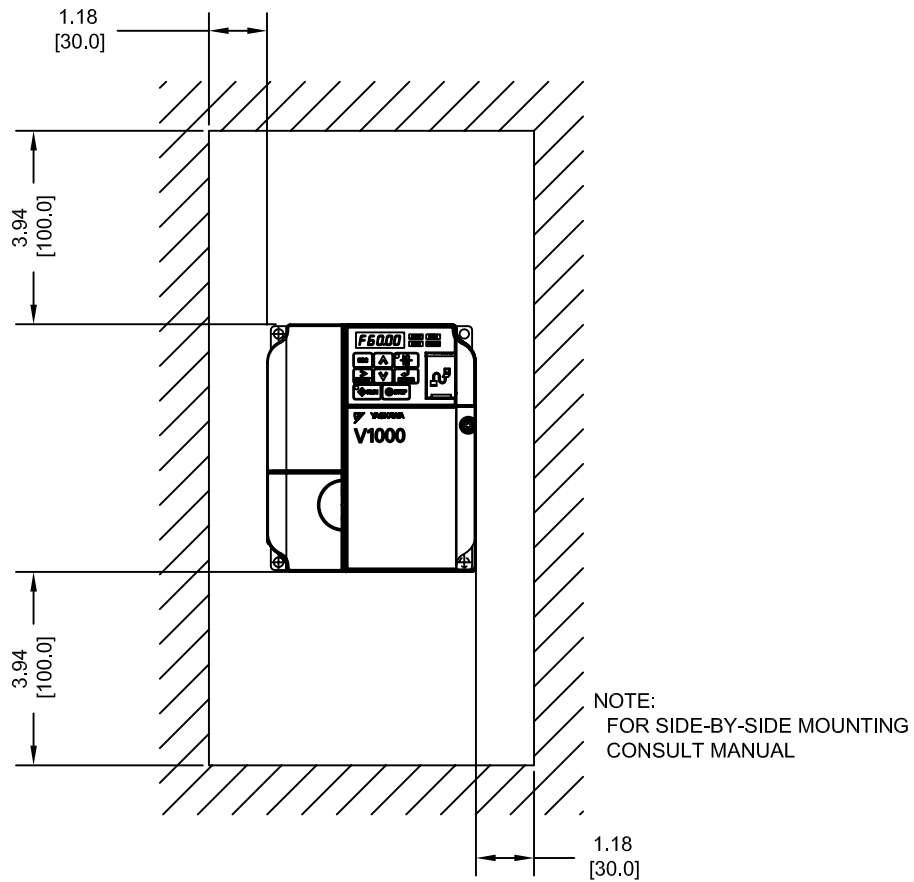
MODEL # CIMR-VU	TERMINAL SCREW	CLAMPING TORQUE lb.in.(N.m.)	WIRE RANGE AWG(mm ²)
4A0002B	M4	10.6 TO 13.3 (1.2 TO 1.5)	22-10 (0.33-5.5)

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

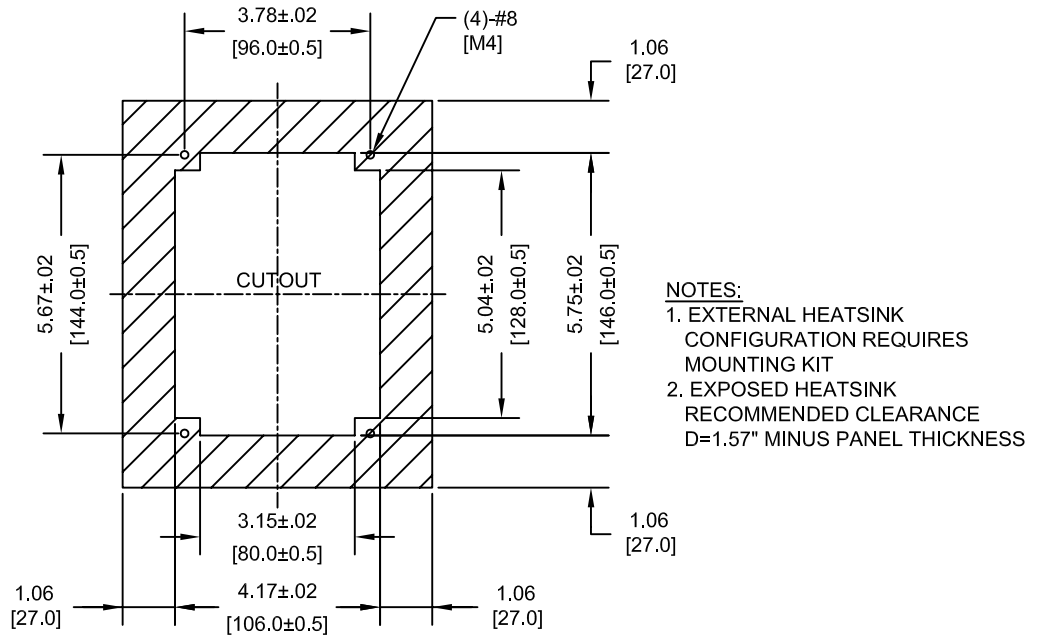
FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:		<p>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.</p>	DRAWN: J. MATTAS DATE 1-21-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 6 OPEN ENCLOSURE (IP20 RATING) 4A0002B		
			CHECKED: J. PIOTROWSKI DATE 8-21-09	TECH: J. CAIRO DATE 8-24-09	SIZE A	REVISION R00
			APPROVED: T. SASADA DATE 8-28-09	ORIGINAL DESIGN: - DATE -	PAGE 2 of 3	DRAWING #: DD.V1K.FR6.IP20
UNITS: IN[mm]	SCALE: BY VIEW					

MINIMUM INSTALLATION CLEARANCES (SCALE 1:4)

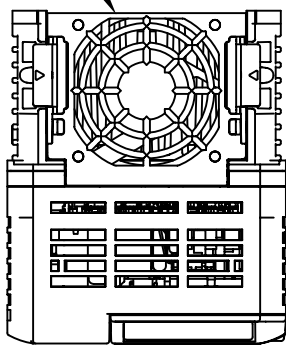


PANEL CUTOUT FOR EXTERNAL HEATSINK MOUNTING CONFIGURATION (SCALE 1:4)



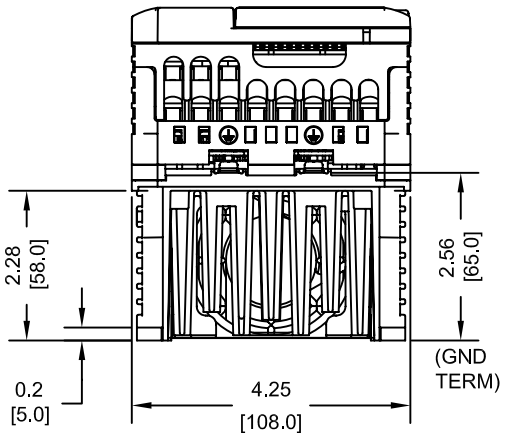
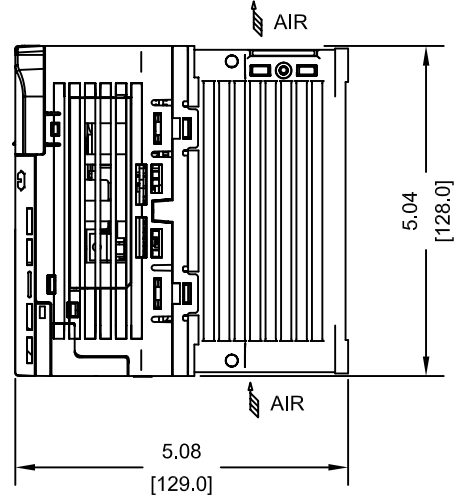
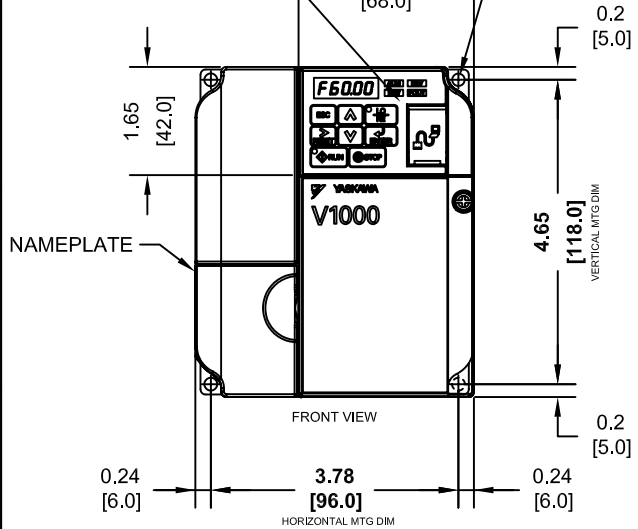
TOLERANCES / REFERENCES:		<p>YASKAWA The Drive for Quality™</p> <p>THIS DOCUMENT AND INFORMATION CONTAINED IN IT ARE CONFIDENTIAL, AND CANNOT BE COPIED OR DISCLOSED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN CONSENT OF YASKAWA ELECTRIC AMERICA INC.</p>	DRAWN: J. MATTAS DATE 1-21-09	DATE 1-21-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 6 OPEN ENCLOSURE (IP20 RATING) 4A0002B	
			CHECKED: J. PIOTROWSKI DATE 8-21-09	DATE 8-21-09		
			TECH: J. CAIRO DATE 8-24-09	DATE 8-24-09		
			APPROVED: T. SASADA DATE 8-28-09	DATE 8-28-09		
UNITS: IN [mm]	SCALE: BY VIEW	ORIGINAL DESIGN: -	DATE -	SIZE A	REVISION R00	PAGE 3 of 3
			DRAWING #:		DD.V1K.FR6.IP20	

COOLING FAN



(4)-MOUNTING HOLES FOR #8 [M4] SCREWS

DIGITAL OPERATOR



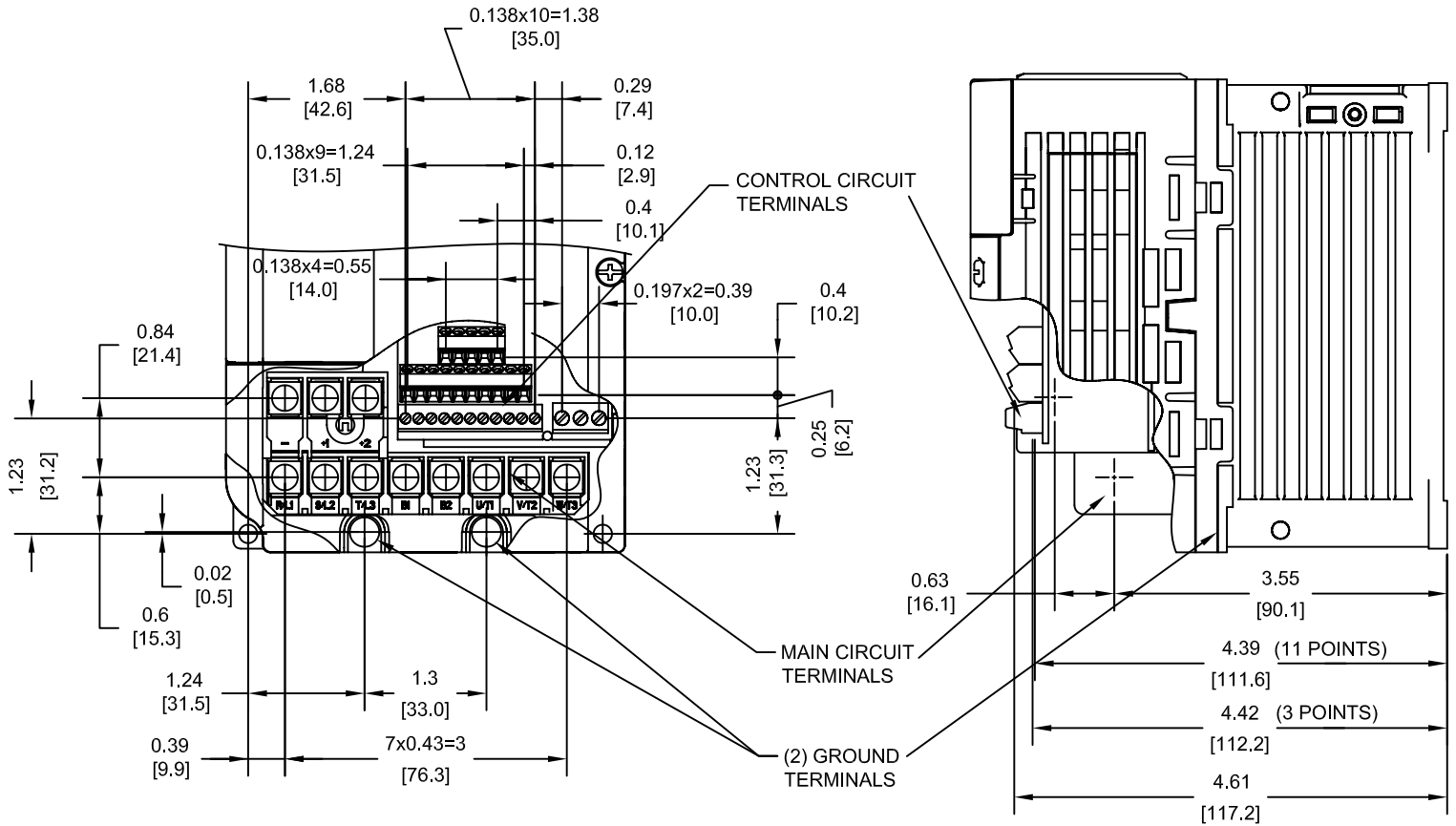
MODEL # CIMR-VU	VOLTAGE THREE PHASE (VAC)	OUTPUT CURRENT (A)		WEIGHT LBS (Kg)	HEAT LOSS (W)					
		ND	HD		ND (Fc=2kHz)			HD (Fc=8kHz)		
					INT	EXT	TOT	INT	EXT	TOT
2A0010BXX	208/240	9.6	8.0	3.7 (1.7)	25.8	51.7	77.5	23.8	54.8	78.6

NOTE:
XX DENOTES AA-ZZ
INT=INTERNAL COMPONENTS
EXT=EXTERNAL HEATSINK
TOT=TOTAL

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:		<p>YASKAWA The Drive for Quality™</p> <p><i>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.</i></p>	DRAWN: J. MATTAS DATE: 1-22-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 7 OPEN ENCLOSURE (IP20 RATING) 2A0010B
UNITS: IN [mm]	SCALE: 1:3		CHECKED: J. PIOTROWSKI DATE: 8-21-09	SIZE: A REVISION: R00 PAGE: 1 of 3
			TECH: J. CAIRO DATE: 8-24-09	DRAWING #: DD.V1K.FR7.IP20
			APPROVED: T. SASADA DATE: 8-28-09	

TERMINAL AND WIRING DETAILS (SCALE 1:2)



TERMINAL AND WIRE SPECIFICATIONS FOR
MAIN CIRCUIT AND GROUND

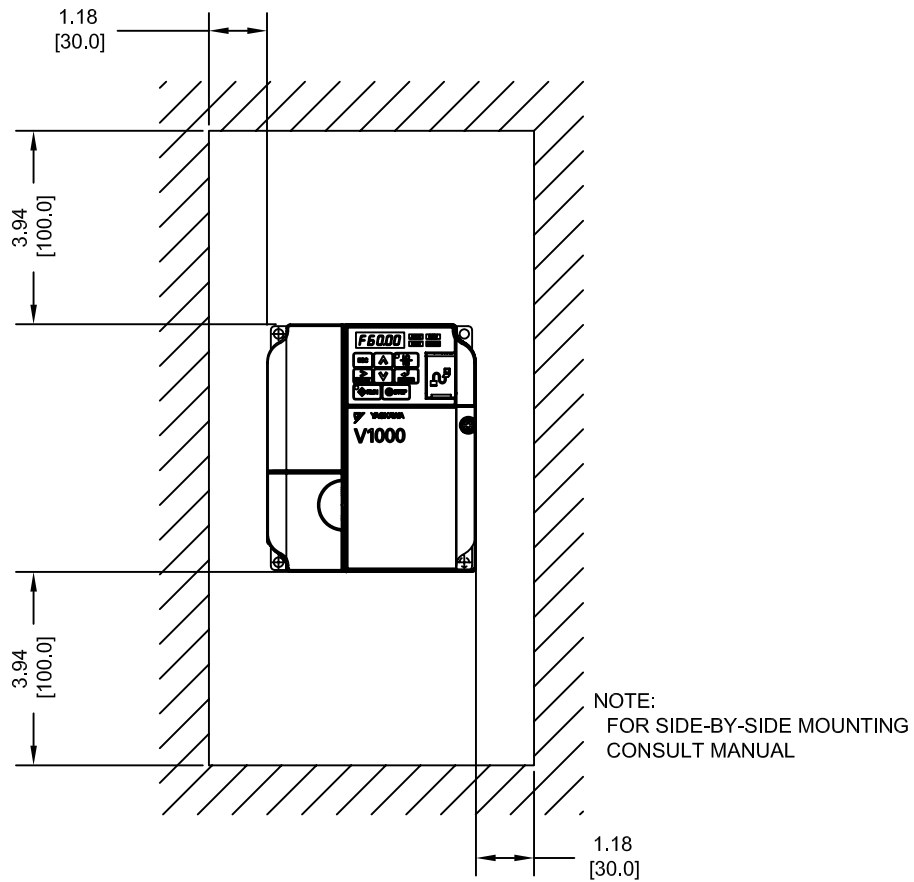
MODEL #	TERMINAL SCREW	CLAMPING TORQUE lb.in.(N.m.)	WIRE RANGE AWG(mm ²)
CIMR-VU	M4	10.6 TO 13.3 (1.2 TO 1.5)	22-10 (0.33-5.5)

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

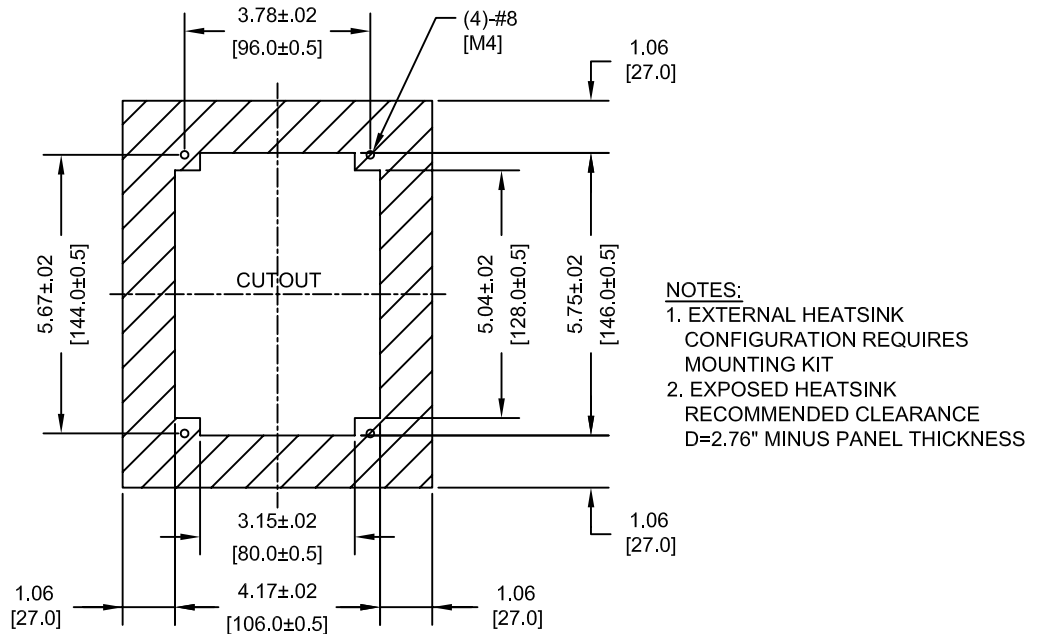
FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:		<p>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.</p>	DRAWN: J. MATTAS CHECKED: J. PIOTROWSKI TECH: J. CAIRO APPROVED: T. SASADA ORIGINAL DESIGN: -	DATE 1-22-09 DATE 8-21-09 DATE 8-24-09 DATE 8-28-09 DATE -	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 7 OPEN ENCLOSURE (IP20 RATING) 2A0010B
UNITS: IN [mm]	SCALE: BY VIEW		SIZE A	REVISION R00	PAGE 2 of 3
			DRAWING #: DD.V1K.FR7.IP20		

MINIMUM INSTALLATION CLEARANCES (SCALE 1:4)

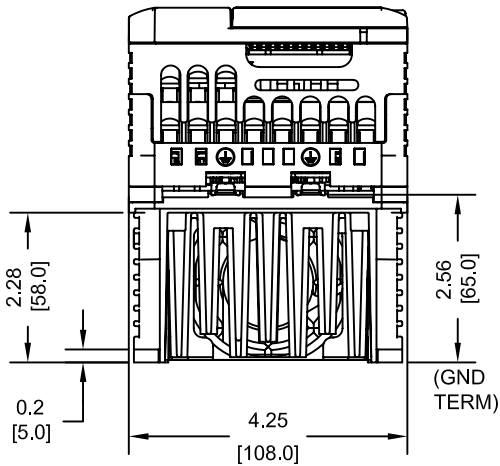
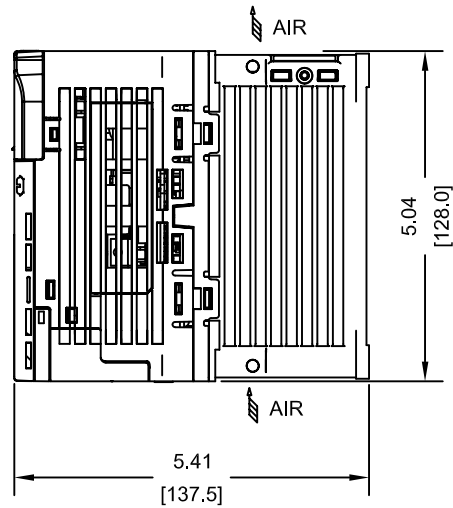
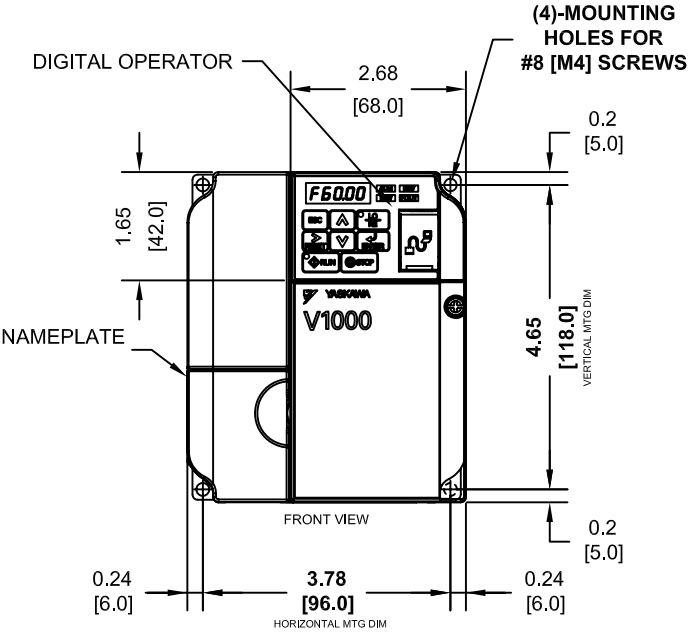
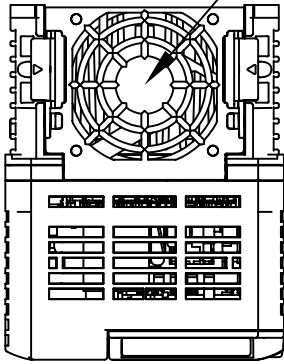


PANEL CUTOUT FOR EXTERNAL HEATSINK MOUNTING CONFIGURATION (SCALE 1:4)



TOLERANCES / REFERENCES:		<p>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.</p>	DRAWN: J. MATTAS CHECKED: J. PIOTROWSKI TECH: J. CAIRO APPROVED: T. SASADA ORIGINAL DESIGN: -	DATE 1-22-09 DATE 8-21-09 DATE 8-24-09 DATE 8-28-09 DATE -	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 7 OPEN ENCLOSURE (IP20 RATING) 2A0010B
UNITS: IN [mm]	SCALE: BY VIEW		SIZE A	REVISION R00	PAGE 3 of 3
			DRAWING #: DD.V1K.FR7.IP20		

2A0012B: COOLING FAN
 BA0006B: NATURAL CONVECTION
 4A0004B: NATURAL CONVECTION



MODEL # CIMR-VU	VOLTAGE (VAC)	OUTPUT CURRENT (A)		WEIGHT LBS (Kg)	HEAT LOSS (W)					
		ND	HD		ND (Fc=2kHz)			HD (Fc=8kHz)		
					INT	EXT	TOT	INT	EXT	TOT
BA0006BXX	208/240 SINGLE PHASE	6.0	5.0	3.7 (1.7)	19.4	30.1	49.5	16.8	33.7	50.5
2A0012BXX	208/240 THREE PHASE	12.0	11.0	3.7 (1.7)	30.4	61.3	91.7	29.9	70.7	100.6
4A0004BXX	380/480 THREE PHASE	4.1	3.4	3.7 (1.7)	16.8	30.5	47.3	17.9	42.3	60.2

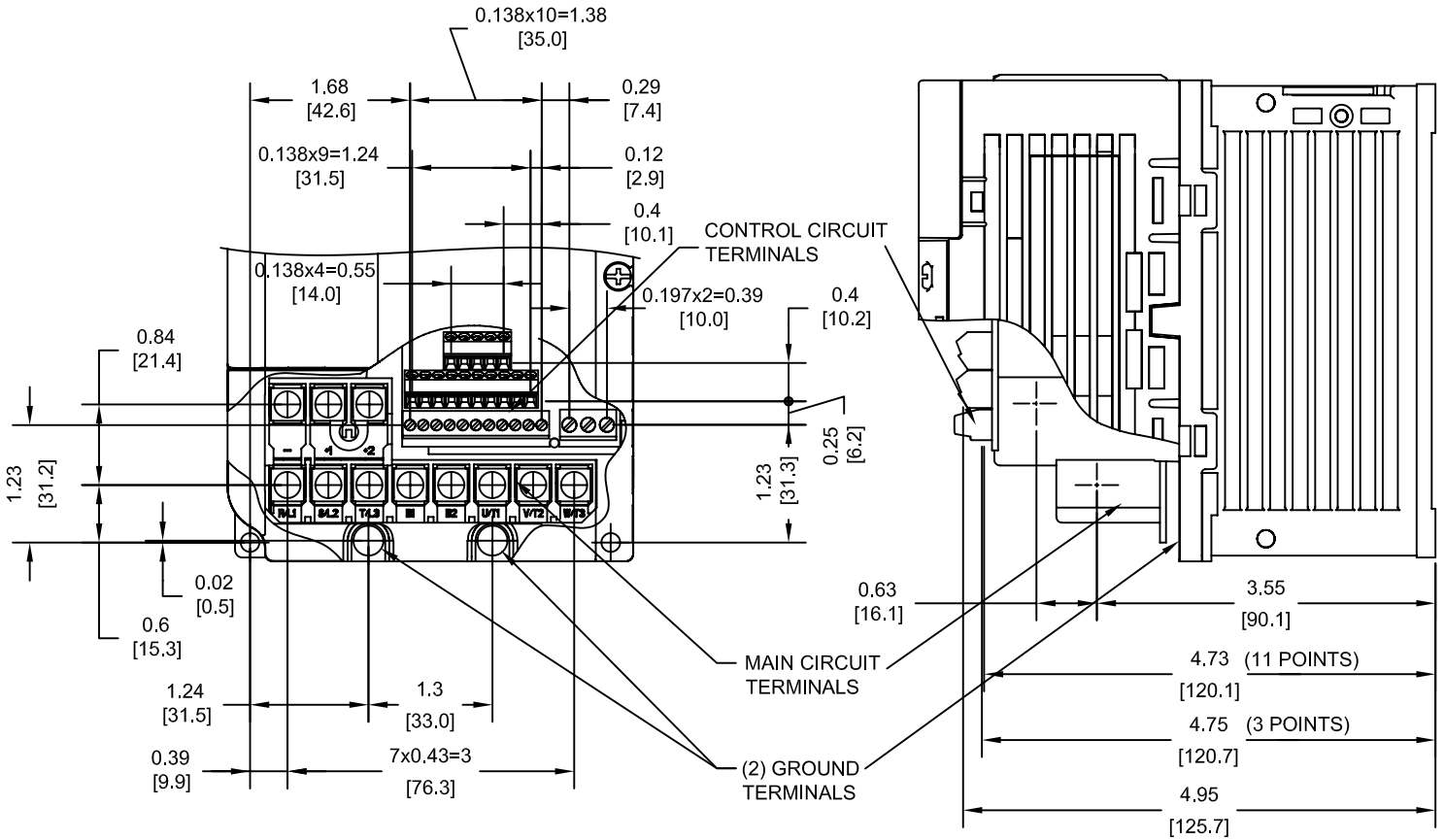
NOTE:
 XX DENOTES AA-ZZ

INT=INTERNAL COMPONENTS
 EXT=EXTERNAL HEATSINK
 TOT=TOTAL

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:		<p>YASKAWA The Drive for Quality™</p> <p>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.</p>	DRAWN: J. MATTAS CHECKED: J. PIOTROWSKI TECH: J. CAIRO APPROVED: T. SASADA ORIGINAL DESIGN: -	DATE 1-22-09 DATE 8-21-09 DATE 8-24-09 DATE 8-28-09 DATE -	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 8 OPEN ENCLOSURE (IP20 RATING) BA0006B, 2A0012B & 4A0004B
UNITS: IN [mm]	SCALE: 1:3		SIZE A REVISION R00 PAGE 1 of 3	DRAWING #: DD.V1K.FR8.IP20	

TERMINAL AND WIRING DETAILS (SCALE 1:2)



TERMINAL AND WIRE SPECIFICATIONS FOR
 MAIN CIRCUIT AND GROUND

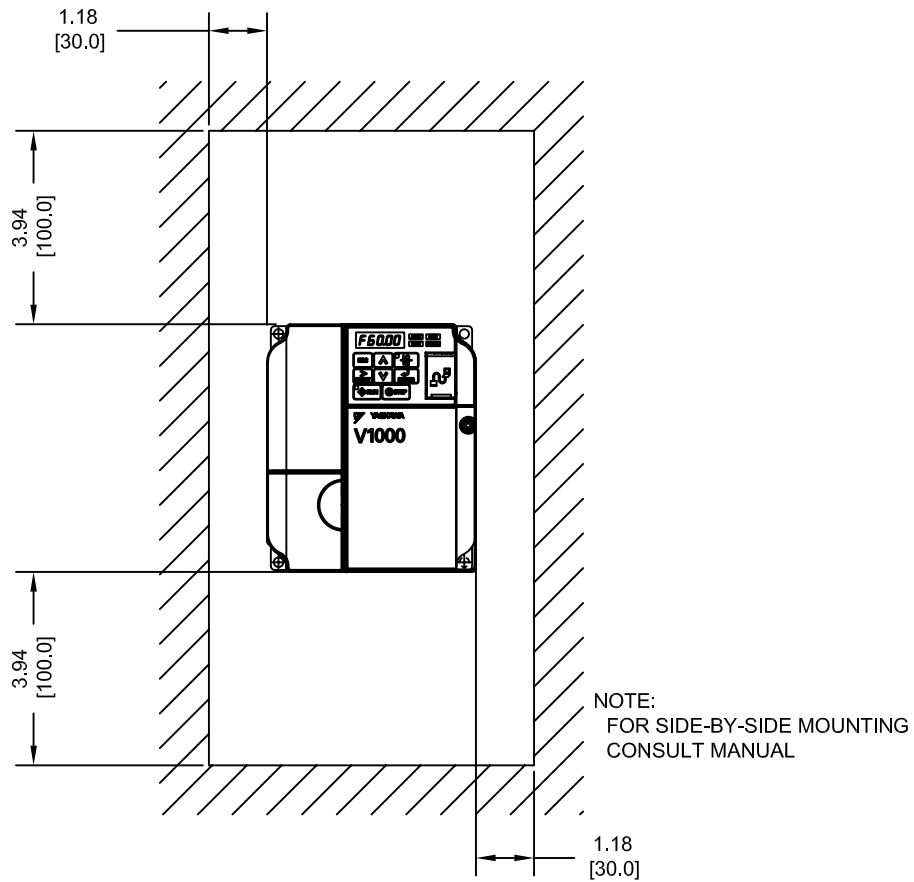
MODEL # CIMR-VU	TERMINAL SCREW	CLAMPING TORQUE lb.in.(N.m.)	WIRE RANGE AWG(mm ²)
BA0006B	M4	10.6 TO 13.3 (1.2 TO 1.5)	22-10 (0.33-5.5)
2A0012B	M4	10.6 TO 13.3 (1.2 TO 1.5)	22-10 (0.33-5.5)
4A0004B	M4	10.6 TO 13.3 (1.2 TO 1.5)	22-10 (0.33-5.5)

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

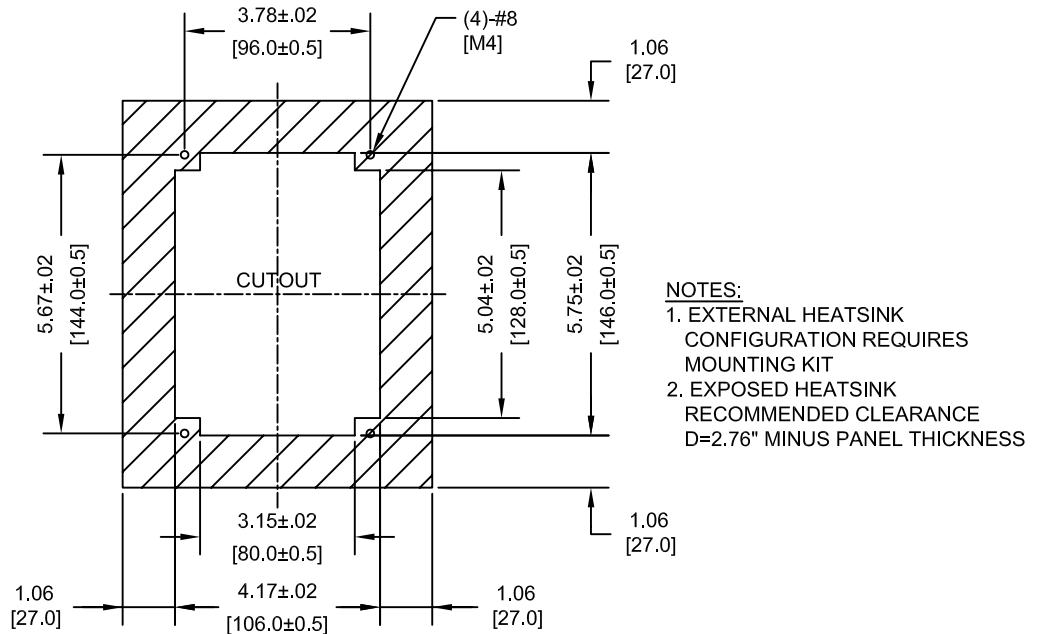
FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:		DRAWN:	J. MATTAS	DATE:	1-22-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 8 OPEN ENCLOSURE (IP20 RATING) BA0006B, 2A0012B & 4A0004B
		CHECKED:	J. PIOTROWSKI	DATE:	8-21-09	
		TECH:	J. CAIRO	DATE:	8-24-09	
		APPROVED:	T. SASADA	DATE:	8-28-09	
UNITS: IN [mm]	SCALE: BY VIEW	ORIGINAL DESIGN:	-	DATE:	-	SIZE: A REVISION: R00 PAGE: 2 of 3
				DRAWING #:		DD.V1K.FR8.IP20

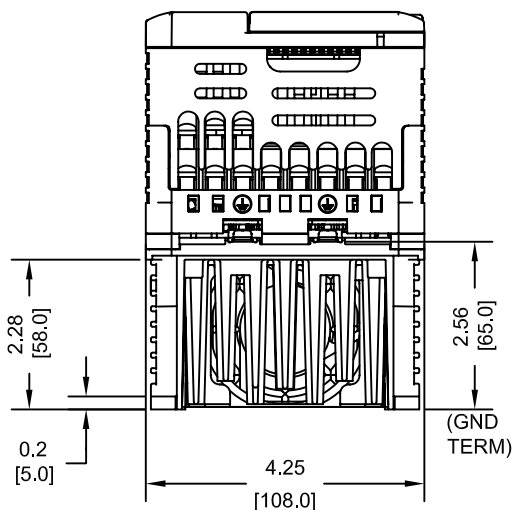
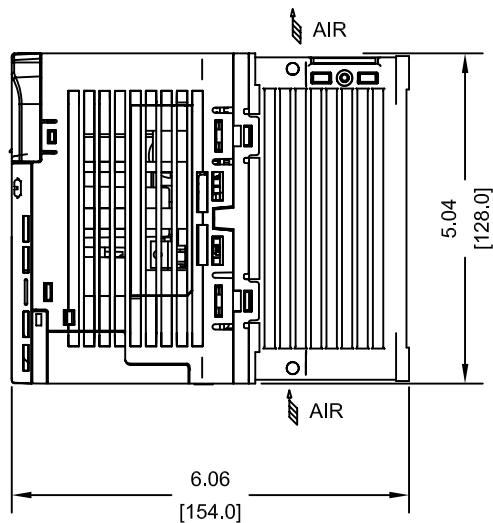
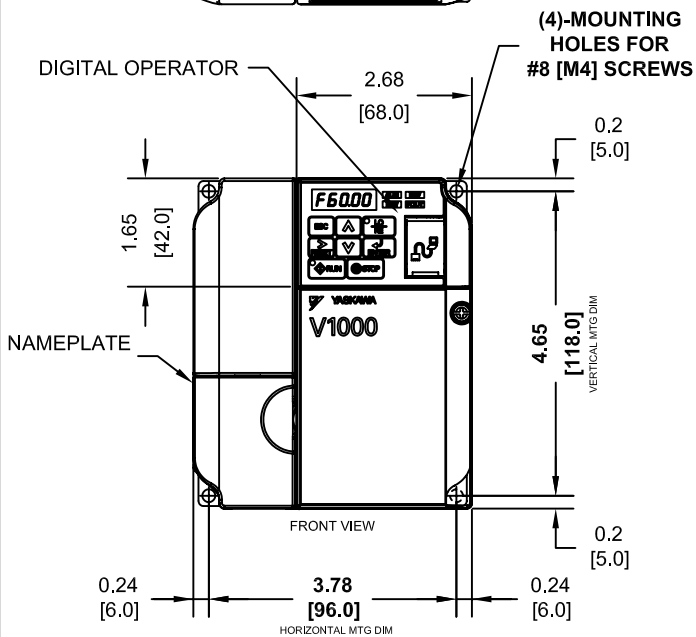
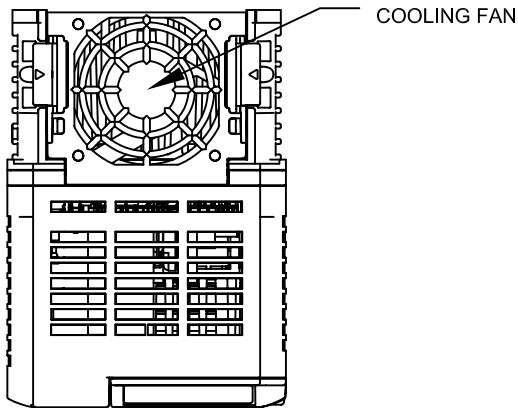
MINIMUM INSTALLATION CLEARANCES (SCALE 1:4)



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



TOLERANCES / REFERENCES:		<p>YASKAWA The Drive for Quality™</p> <p>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.</p>	DRAWN: J. MATTAS DATE 1-22-09	DATE 1-22-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 8 OPEN ENCLOSURE (IP20 RATING) BA0006B, 2A0012B & 4A0004B	
			CHECKED: J. PIOTROWSKI DATE 8-21-09	DATE 8-21-09		
			TECH: J. CAIRO DATE 8-24-09	DATE 8-24-09		
			APPROVED: T. SASADA DATE 8-28-09	DATE 8-28-09		
UNITS: IN [mm]	SCALE: BY VIEW	ORIGINAL DESIGN: -	DATE -	SIZE A	REVISION R00	PAGE 3 of 3
			DRAWING #: DD.V1K.FR8.IP20			



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	TOT	INT	EXT	TOT
4A0005BXX	380/480	5.4	4.8	3.7 (1.7)	21.8	44.5	66.3	26.2	70.7	96.9
4A0007BXX		6.9	5.5	3.7 (1.7)	28.4	58.5	86.9	30.7	81.0	111.7
4A0009BXX		8.8	7.2	3.7 (1.7)	31.4	63.7	95.1	32.9	84.6	117.5

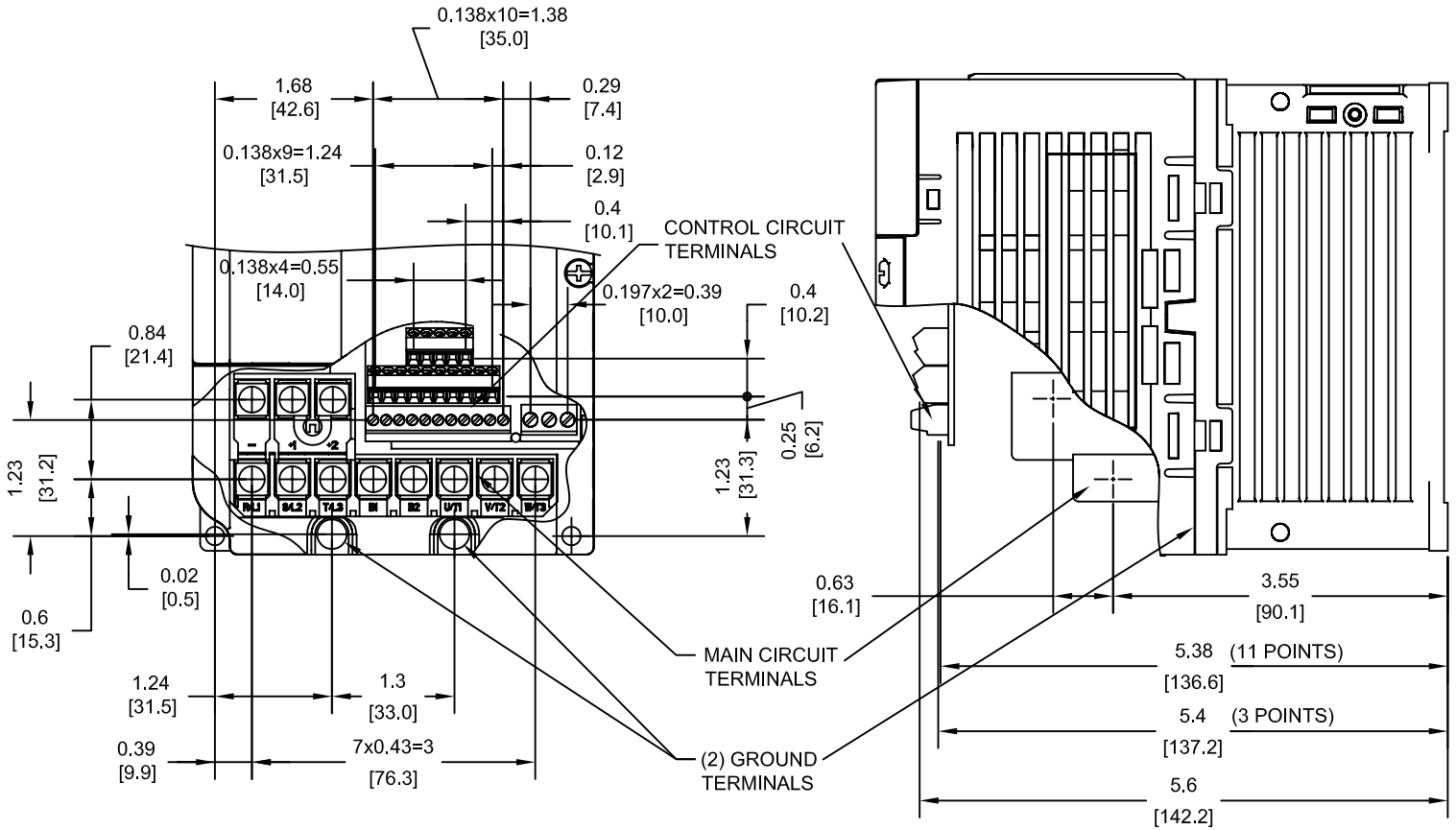
NOTE:
XX DENOTES AA-ZZ

INT=INTERNAL COMPONENTS
EXT=EXTERNAL HEATSINK
TOT=TOTAL

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:		<p>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.</p>	DRAWN: J. MATTAS DATE 1-26-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 9 OPEN ENCLOSURE (IP20 RATING) 4A0005B, 4A0007B & 4A0009B		
UNITS: IN [mm]			CHECKED: J. PIOTROWSKI DATE 8-21-09	SIZE A	REVISION R00	PAGE 1 of 3
SCALE: 1:3			TECH: J. CAIRO DATE 8-24-09	DATE 8-28-09	DRAWING #: DD.V1K.FR9.IP20	
			APPROVED: T. SASADA DATE 8-28-09	ORIGINAL DESIGN: -		

TERMINAL AND WIRING DETAILS (SCALE 1:2)



TERMINAL AND WIRE SPECIFICATIONS FOR
MAIN CIRCUIT AND GROUND

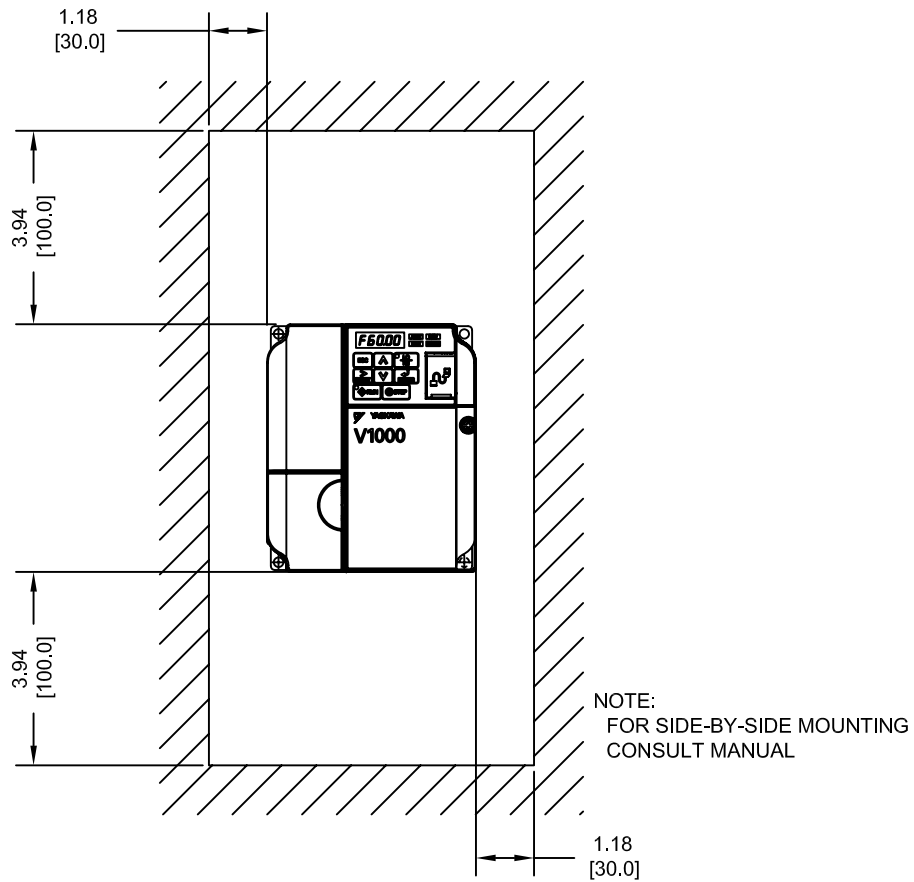
MODEL # CIMR-VU	TERMINAL SCREW	CLAMPING TORQUE lb.in.(N.m.)	WIRE RANGE AWG(mm ²)
4A0005B	M4	10.6 TO 13.3 (1.2 TO 1.5)	22-10 (0.33-5.5)
4A0007B	M4	10.6 TO 13.3 (1.2 TO 1.5)	22-10 (0.33-5.5)
4A0009B	M4	10.6 TO 13.3 (1.2 TO 1.5)	22-10 (0.33-5.5)

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

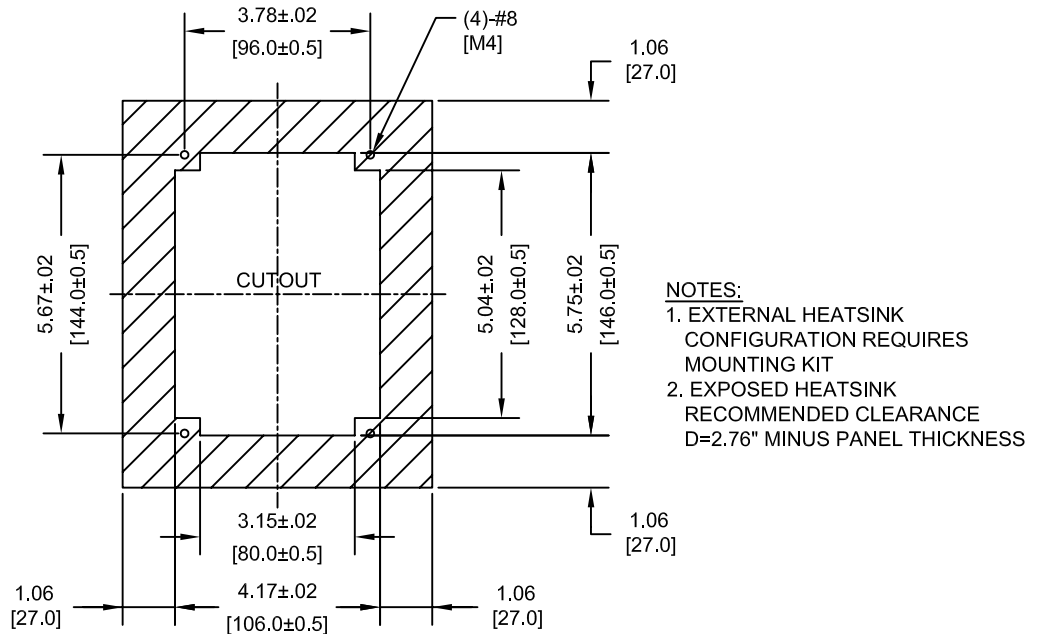
FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:		<p>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.</p>	DRAWN: J. MATTAS DATE 1-26-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 9 OPEN ENCLOSURE (IP20 RATING) 4A0005B, 4A0007B & 4A0009B		
			CHECKED: J. PIOTROWSKI DATE 8-21-09	TECH: J. CAIRO DATE 8-24-09	SIZE A	REVISION R00
			APPROVED: T. SASADA DATE 8-28-09	ORIGINAL DESIGN: -	DATE -	PAGE 2 of 3
UNITS: IN [mm]	SCALE: BY VIEW		DRAWING #: DD.V1K.FR9.IP20			

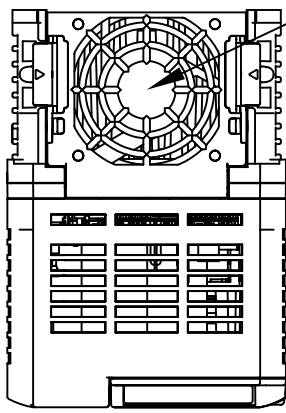
MINIMUM INSTALLATION CLEARANCES (SCALE 1:4)



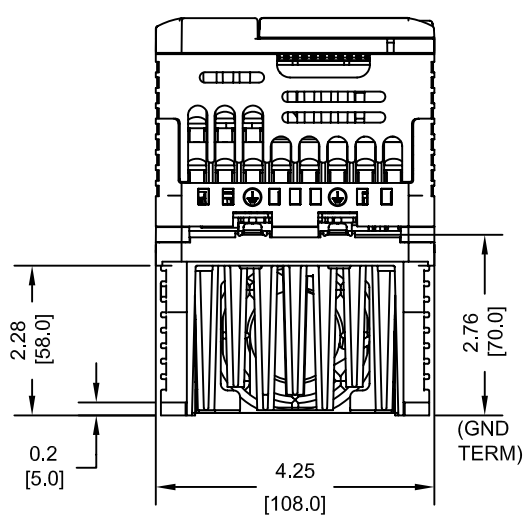
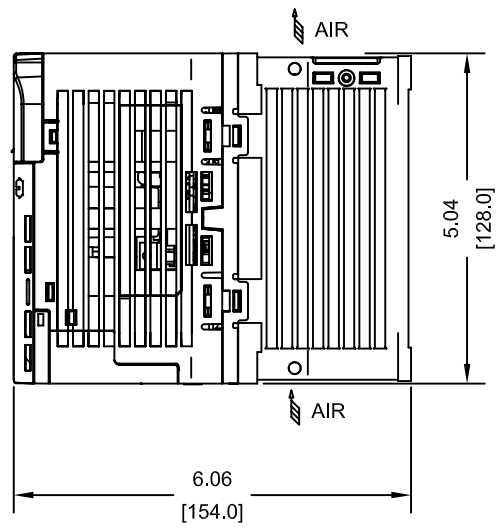
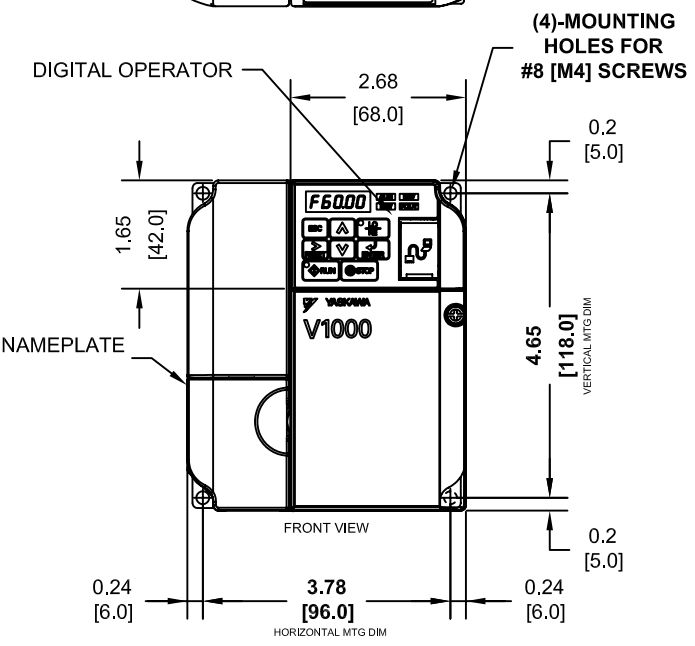
PANEL CUTOUT FOR EXTERNAL HEATSINK MOUNTING CONFIGURATION (SCALE 1:4)



TOLERANCES / REFERENCES:		<p>YASKAWA The Drive for Quality™</p> <p>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.</p>	DRAWN: J. MATTAS DATE 1-26-09	DATE 1-26-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 9 OPEN ENCLOSURE (IP20 RATING) 4A0005B, 4A0007B & 4A0009B	
			CHECKED: J. PIOTROWSKI DATE 8-21-09	DATE 8-21-09		
			TECH: J. CAIRO DATE 8-24-09	DATE 8-24-09		
			APPROVED: T. SASADA DATE 8-28-09	DATE 8-28-09		
UNITS: IN [mm]	SCALE: BY VIEW	ORIGINAL DESIGN: -	DATE -	SIZE A	REVISION R00	PAGE 3 of 3
			DRAWING #: DD.V1K.FR9.IP20			



COOLING FAN



MODEL # CIMR-VU	VOLTAGE SINGLE PHASE (VAC)	OUTPUT CURRENT (A)		WEIGHT LBS (Kg)	HEAT LOSS (W)					
		ND	HD		ND (Fc=2kHz)			HD (Fc=8kHz)		
					INT	EXT	TOT	INT	EXT	TOT
BA0010BXX	208/240	9.6	8.0	4.0 (1.8)	29.8	51.7	81.5	25.9	54.8	80.7

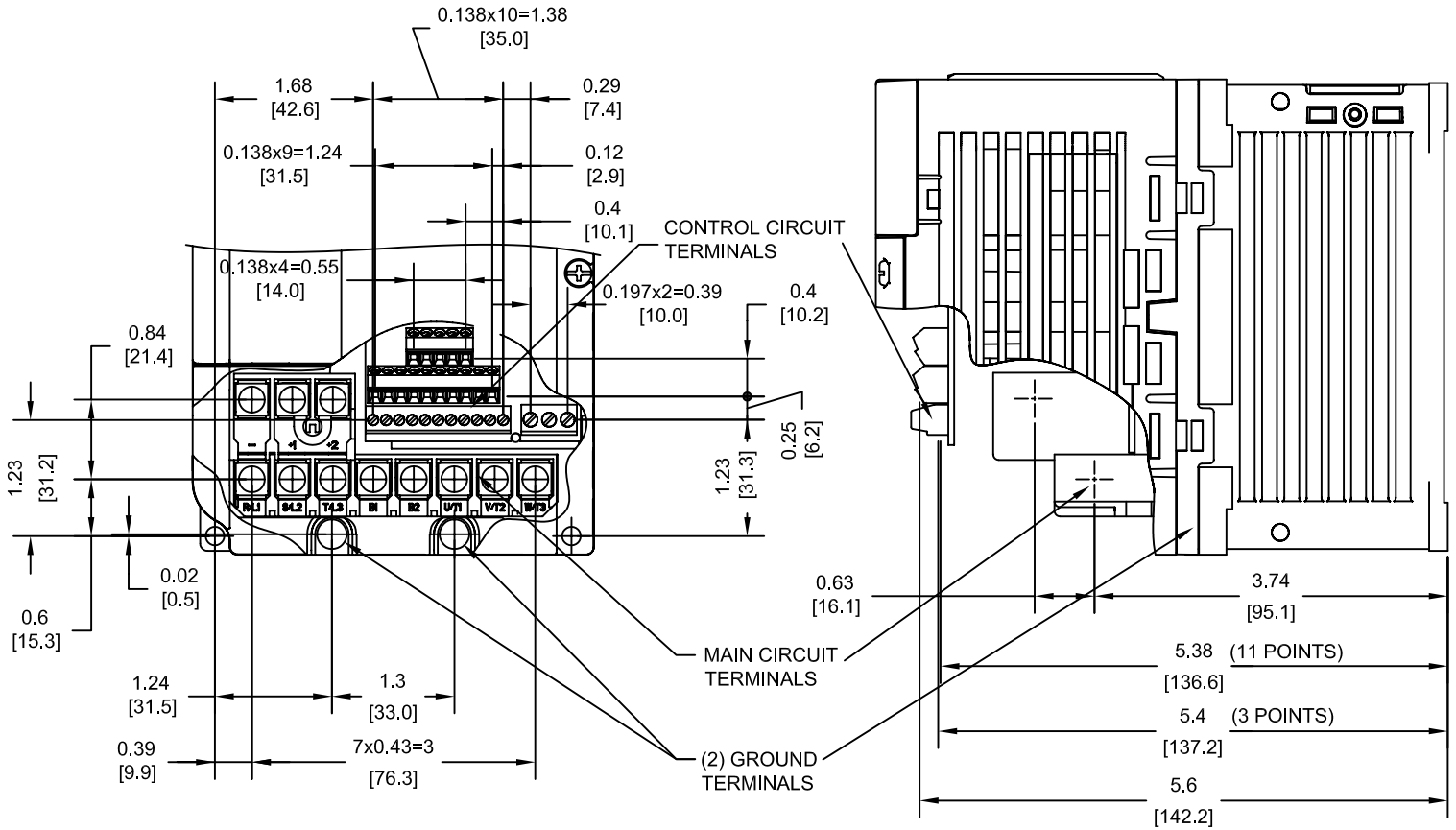
NOTE:
XX DENOTES AA-ZZ

INT=INTERNAL COMPONENTS
EXT=EXTERNAL HEATSINK
TOT=TOTAL

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:		<p>YASKAWA The Drive for Quality™</p> <p><i>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.</i></p>	DRAWN: J. MATTAS DATE 1-26-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 10 OPEN ENCLOSURE (IP20 RATING) BA0010B		
UNITS: IN [mm]	SCALE: 1:3		CHECKED: J. PIOTROWSKI DATE 8-21-09	SIZE A	REVISION R00	PAGE 1 of 3
			TECH: J. CAIRO DATE 8-24-09	APPROVED: T. SASADA DATE 8-28-09	DRAWING #: DD.V1K.FR10.IP20	
			ORIGINAL DESIGN: -	DATE -		

TERMINAL AND WIRING DETAILS (SCALE 1:2)



TERMINAL AND WIRE SPECIFICATIONS FOR
MAIN CIRCUIT AND GROUND

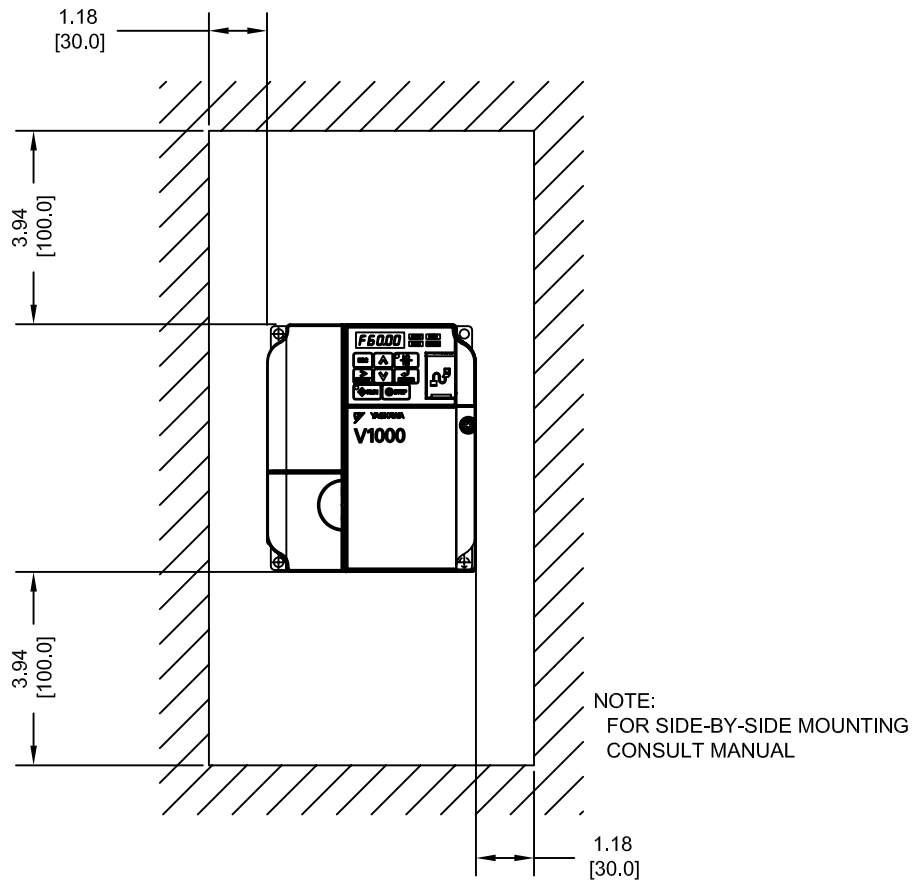
MODEL #	TERMINAL SCREW	CLAMPING TORQUE lb.in.(N.m.)	WIRE RANGE AWG(mm ²)
BA0010B	M4	10.6 TO 13.3 (1.2 TO 1.5)	22-10 (0.33-5.5)

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

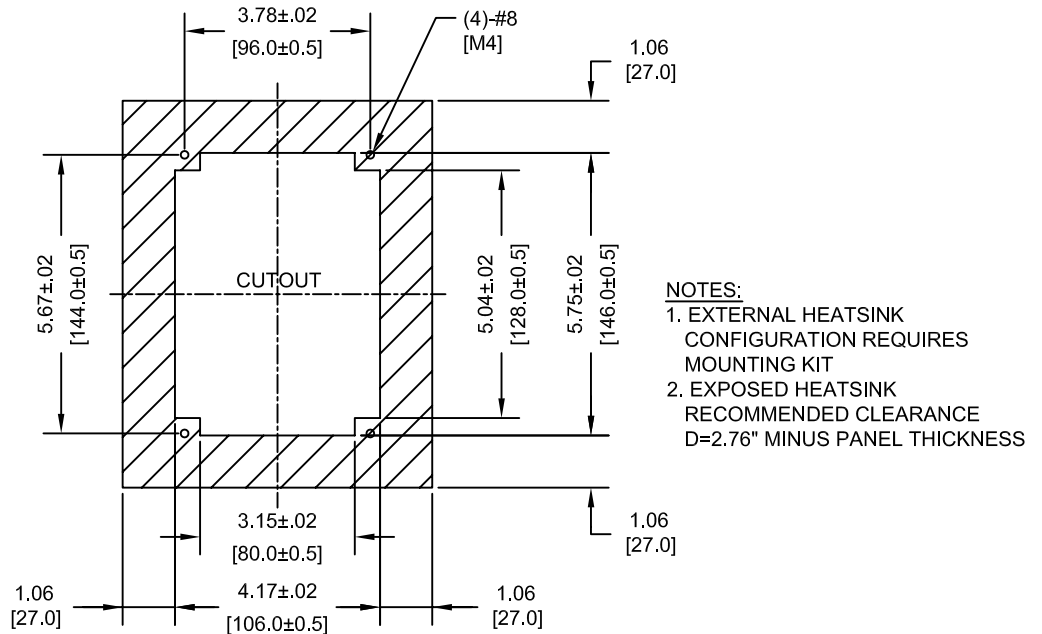
FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:		<p>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.</p>	DRAWN: J. MATTAS DATE 1-26-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 10 OPEN ENCLOSURE (IP20 RATING) BA0010B		
			CHECKED: J. PIOTROWSKI DATE 8-21-09	TECH: J. CAIRO DATE 8-24-09	SIZE A	REVISION R00
			APPROVED: T. SASADA DATE 8-28-09	ORIGINAL DESIGN: -	DATE -	PAGE 2 of 3
UNITS: IN [mm]	SCALE: BY VIEW		DRAWING #: DD.V1K.FR10.IP20			

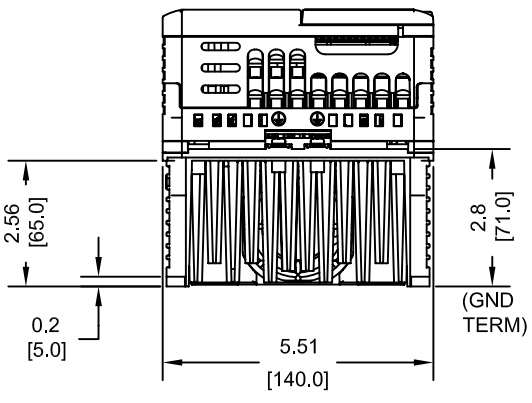
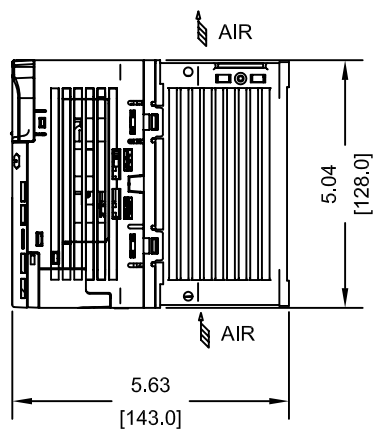
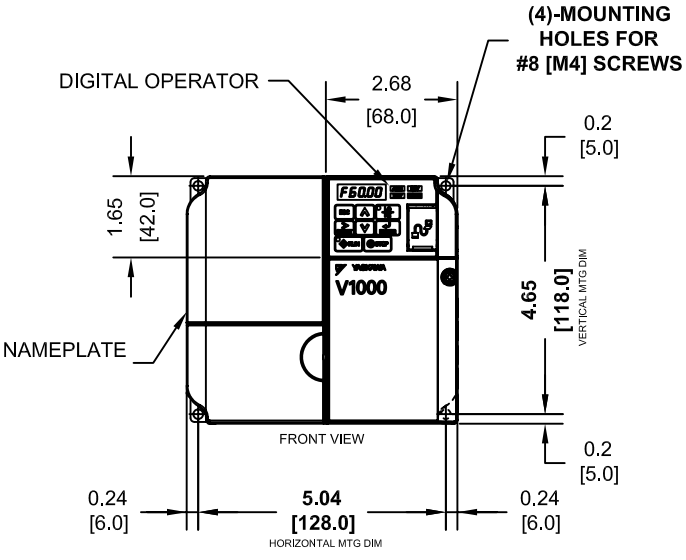
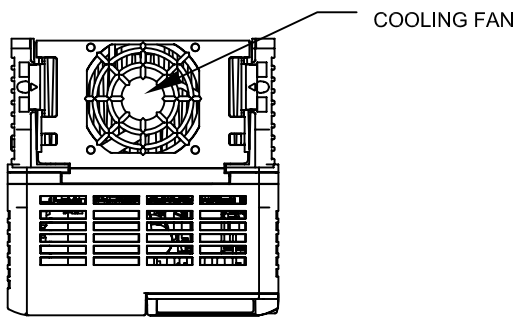
MINIMUM INSTALLATION CLEARANCES (SCALE 1:4)



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



TOLERANCES / REFERENCES:		<p>YASKAWA The Drive for Quality™</p> <p>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.</p>	DRAWN: J. MATTAS DATE: 1-26-09	DATE: 1-26-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 10 OPEN ENCLOSURE (IP20 RATING) BA0010B	
			CHECKED: J. PIOTROWSKI DATE: 8-21-09	DATE: 8-21-09		
			TECH: J. CAIRO DATE: 8-24-09	DATE: 8-24-09		
			APPROVED: T. SASADA DATE: 8-28-09	DATE: 8-28-09		
UNITS: IN [mm]	SCALE: BY VIEW	ORIGINAL DESIGN: -	DATE: -	SIZE: A	REVISION: R00	PAGE: 3 of 3
			DRAWING #: DD.V1K.FR10.IP20			



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	TOT	INT	EXT	TOT
2A0020BXX	208/240	19.6	17.5	5.3 (2.4)	46.3	98.7	145.0	43.3	110.5	153.8
4A0011BXX	380/480	11.1	9.2	5.3 (2.4)	46.0	81.7	127.7	41.5	107.2	148.7

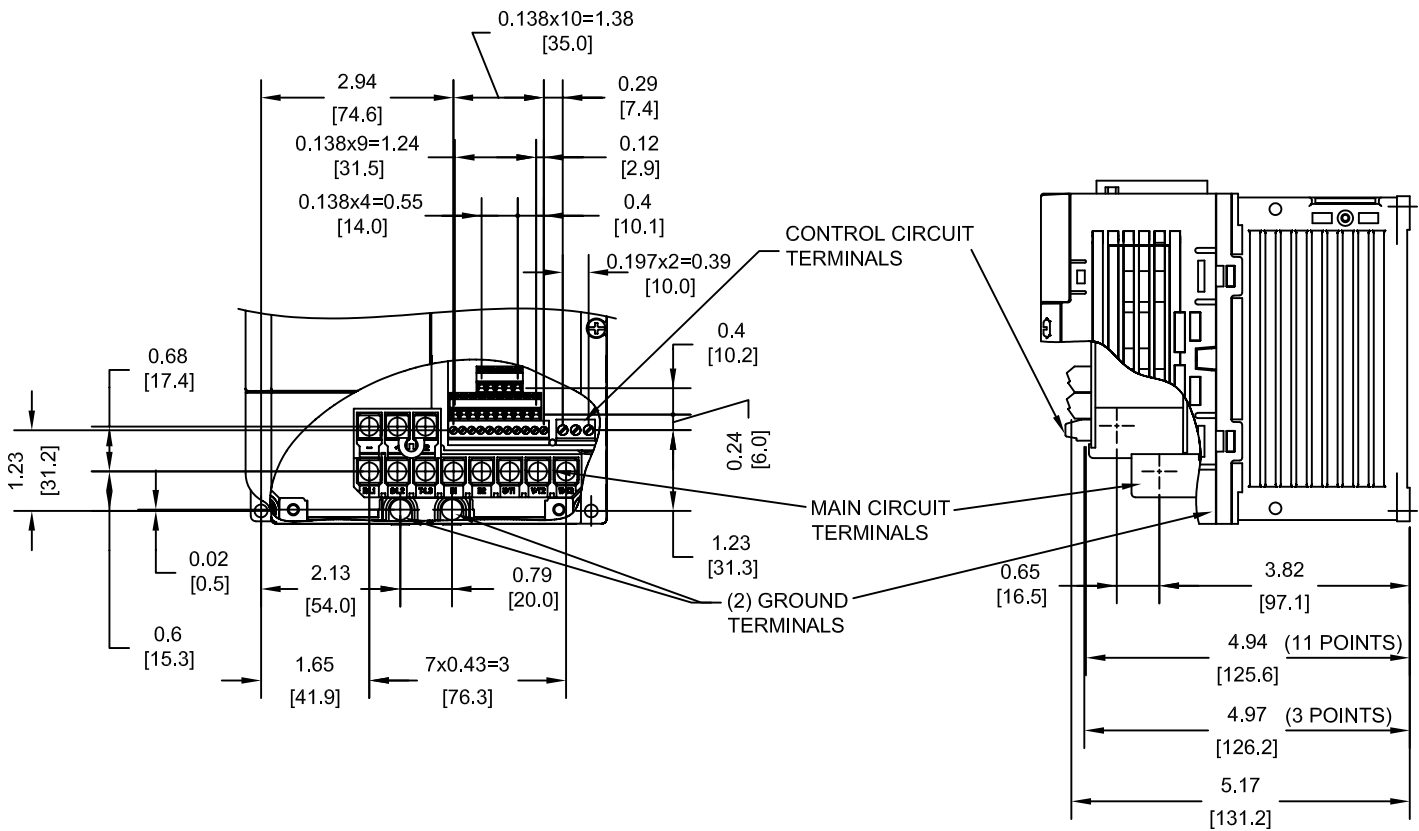
NOTE:
XX DENOTES AA-ZZ

INT=INTERNAL COMPONENTS
EXT=EXTERNAL HEATSINK
TOT=TOTAL

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:		<p>YASKAWA The Drive for Quality™</p> <p><i>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.</i></p>	DRAWN: J. MATTAS DATE 1-26-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 11 OPEN ENCLOSURE (IP20 RATING) 2A0020B & 4A0011B		
UNITS: IN [mm]	SCALE: 1: 4		CHECKED: J. PIOTROWSKI DATE 8-21-09	SIZE A	REVISION R00	PAGE 1 of 3
			TECH: J. CAIRO DATE 8-24-09	DRAWING #: DD.V1K.FR11.IP20		
			APPROVED: T. SASADA DATE 8-28-09	ORIGINAL DESIGN: - DATE -		

TERMINAL AND WIRING DETAILS (SCALE 1:3)



TERMINAL AND WIRE SPECIFICATIONS FOR
MAIN CIRCUIT AND GROUND

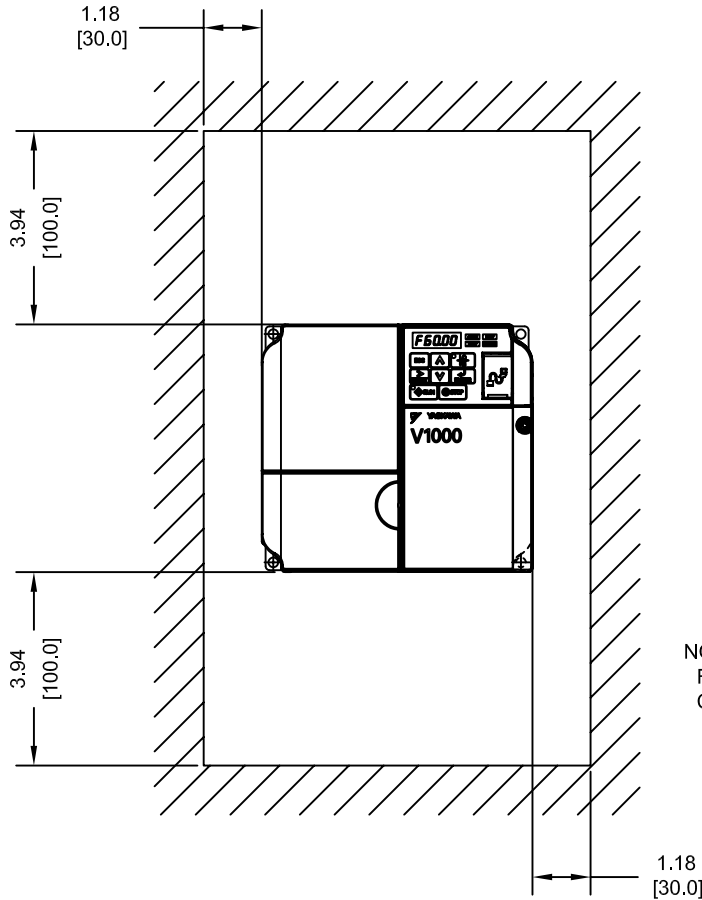
MODEL #	TERMINAL SCREW	CLAMPING TORQUE lb.in.(N.m.)	WIRE RANGE AWG(mm ²)
2A0020B	M4	10.6 TO 13.3 (1.2 TO 1.5)	22-10 (0.33-5.5)
4A0011B	M4	10.6 TO 13.3 (1.2 TO 1.5)	22-10 (0.33-5.5)

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

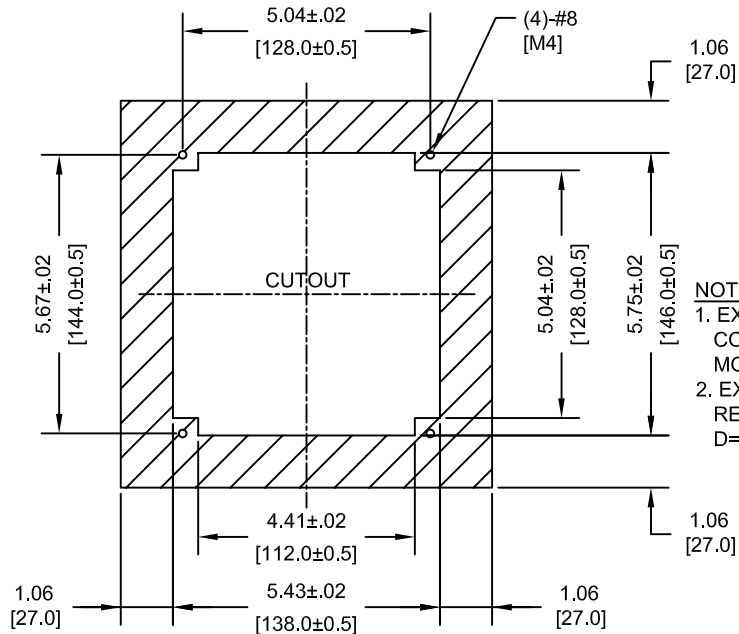
FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:		<p>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.</p>	DRAWN: J. MATTAS DATE 1-26-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 11 OPEN ENCLOSURE (IP20 RATING) 2A0020B & 4A0011B		
UNITS: IN [mm]			CHECKED: J. PIOTROWSKI DATE 8-21-09	SIZE A	REVISION R00	PAGE 2 of 3
SCALE: BY VIEW			TECH: J. CAIRO DATE 8-24-09	APPROVED: T. SASADA DATE 8-28-09	DRAWING #: DD.V1K.FR11.IP20	
			ORIGINAL DESIGN: -	DATE -		

MINIMUM INSTALLATION CLEARANCES (SCALE 1:4)



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



TOLERANCES / REFERENCES:



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OF YASKAWA ELECTRIC AMERICA INC.

DRAWN:
J. MATTAS

CHECKED:
J. PIOTROWSKI

TECH:
J. CAIRO

APPROVED:
T. SASADA

ORIGINAL DESIGN:
-

DATE
1-26-09

DATE
8-21-09

DATE
8-24-09

DATE
8-28-09

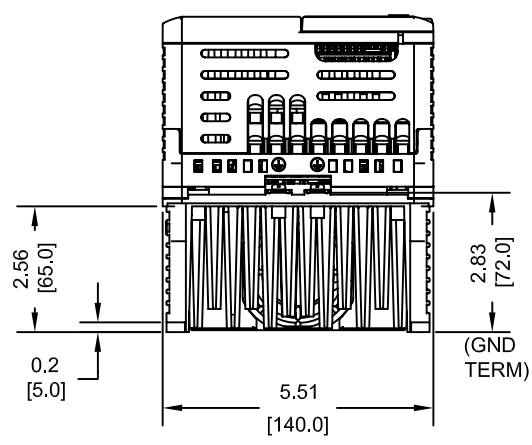
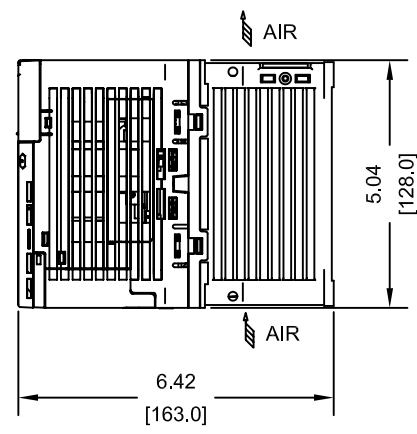
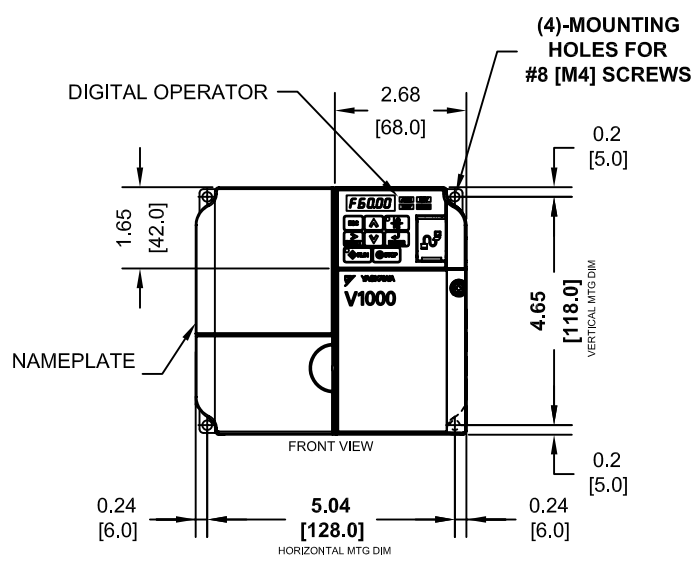
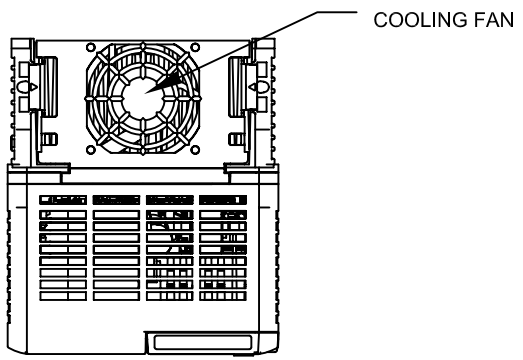
DATE
-

TITLE:
V1000 DIMENSION DRAWING
FRAME SIZE 11
OPEN ENCLOSURE (IP20 RATING)
2A0020B & 4A0011B

SIZE A	REVISION R00	PAGE 3 of 3
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DRAWING #:
DD.V1K.FR11.IP20

UNITS: IN [mm] SCALE: BY VIEW



MODEL # CIMR-VU	VOLTAGE SINGLE PHASE (VAC)	OUTPUT CURRENT (A)		WEIGHT LBS (Kg)	HEAT LOSS (W)					
		ND	HD		ND (Fc=2kHz)			HD (Fc=8kHz)		
					INT	EXT	TOT	INT	EXT	TOT
BA0012BXX	208/240	12.0	11.0	5.3 (2.4)	37.1	61.3	98.4	34.1	70.7	104.8

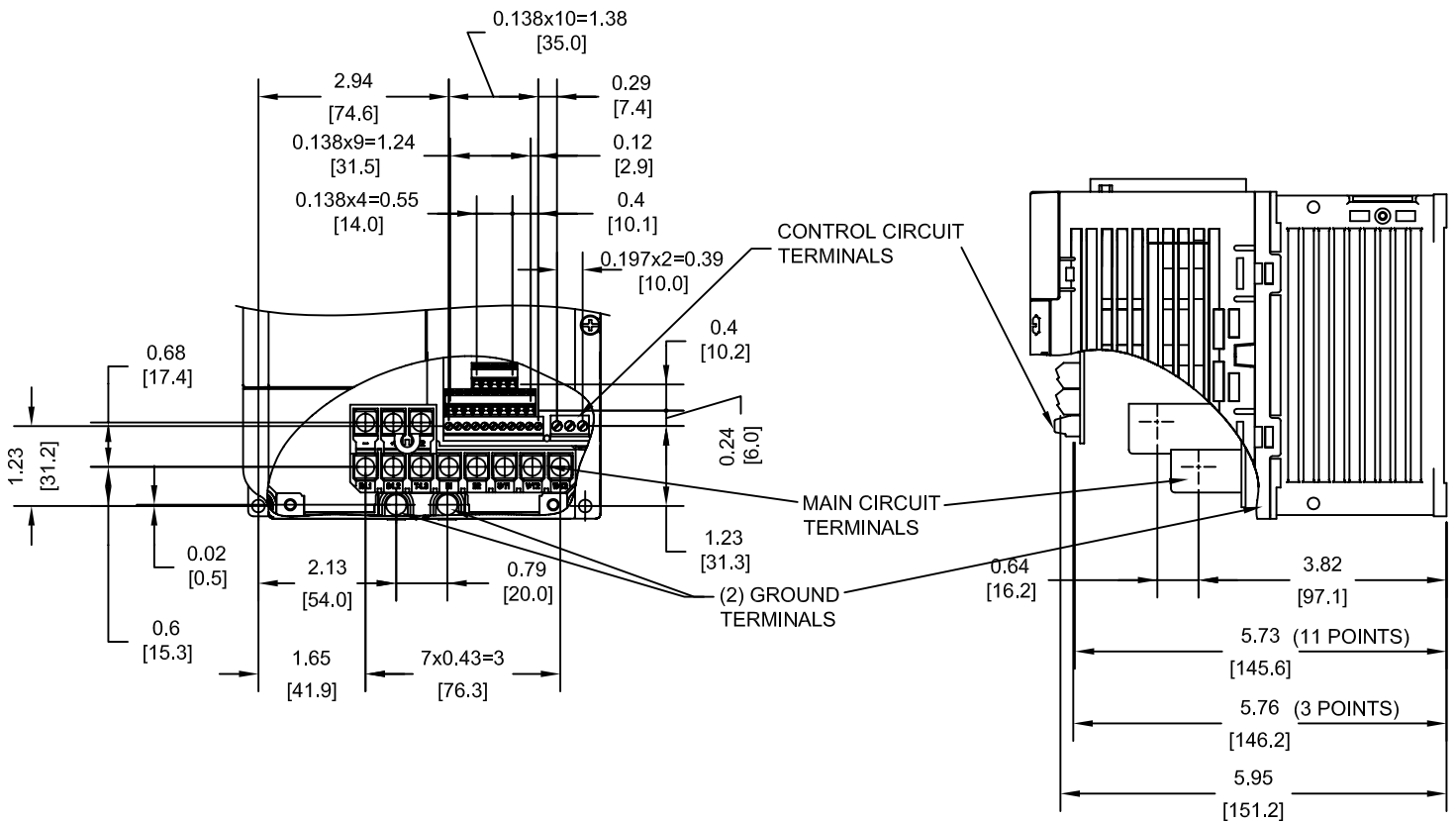
NOTE:
XX DENOTES AA-ZZ

INT=INTERNAL COMPONENTS
EXT=EXTERNAL HEATSINK
TOT=TOTAL

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:		<p>YASKAWA The Drive for Quality™</p> <p><i>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.</i></p>	DRAWN: J. MATTAS CHECKED: J. PIOTROWSKI TECH: J. CAIRO APPROVED: T. SASADA ORIGINAL DESIGN: -	DATE 1-27-09 DATE 8-21-09 DATE 8-24-09 DATE 8-28-09 DATE -	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 12 OPEN ENCLOSURE (IP20 RATING) BA0012B
UNITS: IN [mm]	SCALE: 1:4		SIZE A	REVISION R00	PAGE 1 of 3
			DRAWING #: DD.V1K.FR12.IP20		

TERMINAL AND WIRING DETAILS (SCALE 1:3)



TERMINAL AND WIRE SPECIFICATIONS FOR
MAIN CIRCUIT AND GROUND

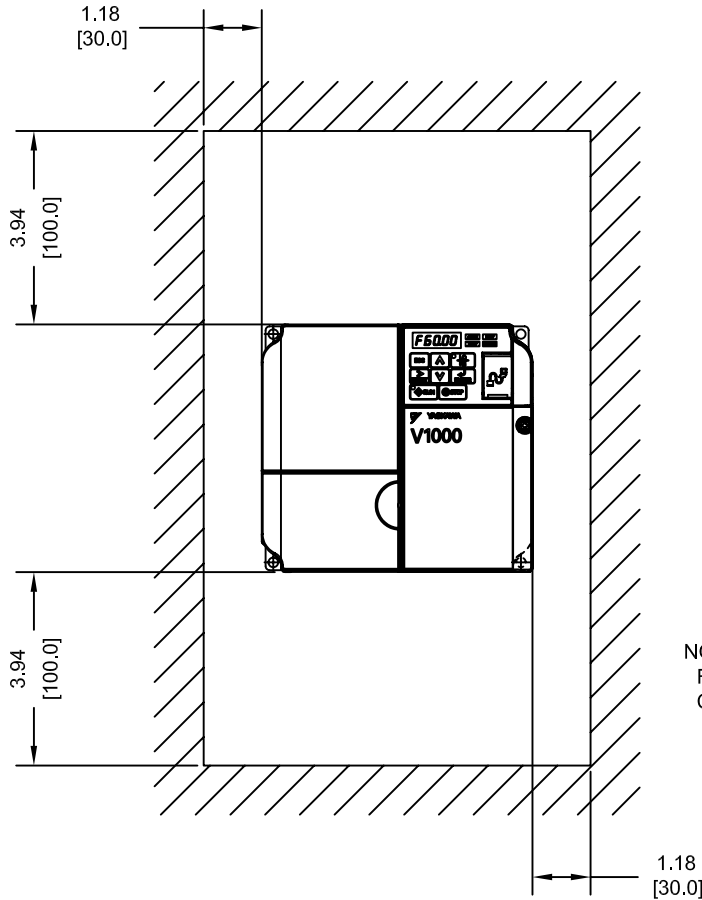
MODEL #	TERMINAL SCREW	CLAMPING TORQUE lb.in.(N.m.)	WIRE RANGE AWG(mm ²)
CIMR-VU	M4	10.6 TO 13.3 (1.2 TO 1.5)	22-10 (0.33-5.5)
BA0012B	M4	10.6 TO 13.3 (1.2 TO 1.5)	22-10 (0.33-5.5)

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

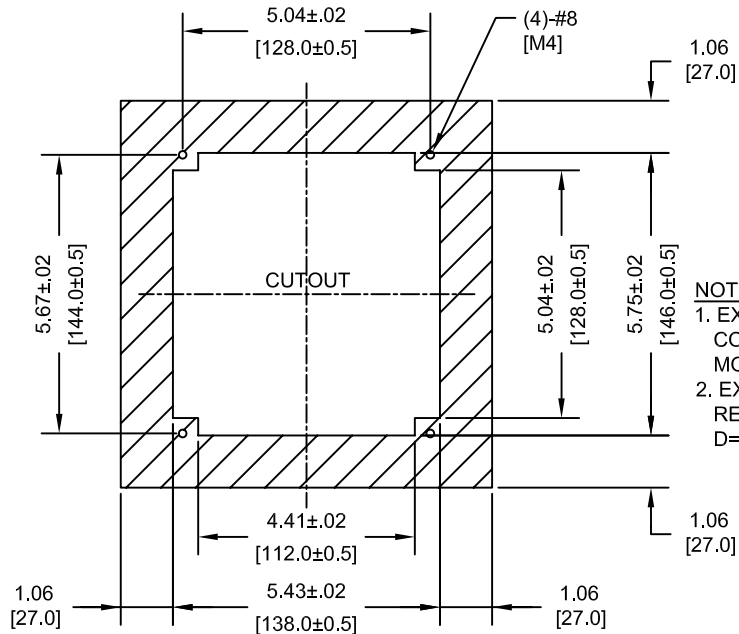
FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:		<p>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.</p>	DRAWN: J. MATTAS DATE 1-27-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 12 OPEN ENCLOSURE (IP20 RATING) BA0012B		
			CHECKED: J. PIOTROWSKI DATE 8-21-09	TECH: J. CAIRO DATE 8-24-09	SIZE A	REVISION R00
			APPROVED: T. SASADA DATE 8-28-09	ORIGINAL DESIGN: -	DATE -	PAGE 2 of 3
UNITS: IN [mm]	SCALE: BY VIEW		DRAWING #: DD.V1K.FR12.IP20			

MINIMUM INSTALLATION CLEARANCES (SCALE 1:4)

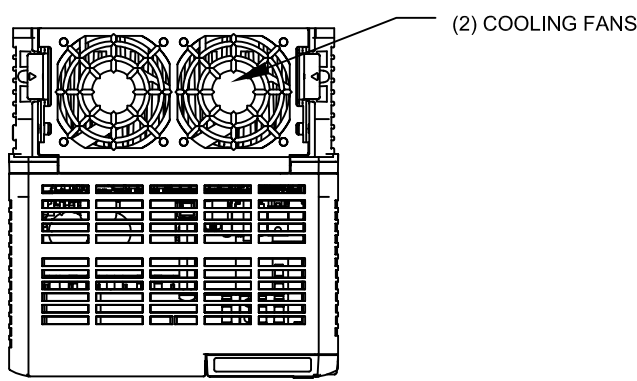


PANEL CUTOUT FOR EXTERNAL HEATSINK MOUNTING CONFIGURATION (SCALE 1:4)

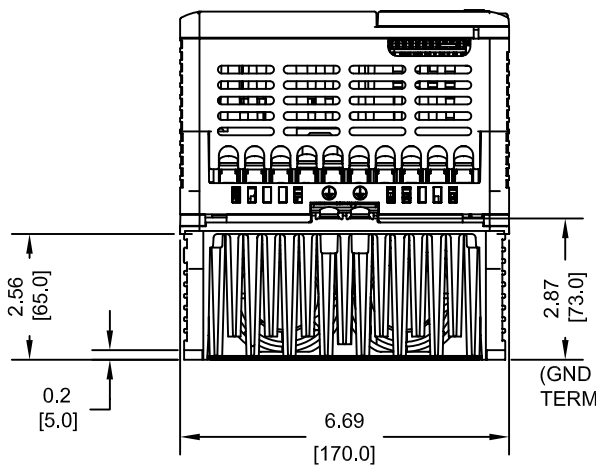
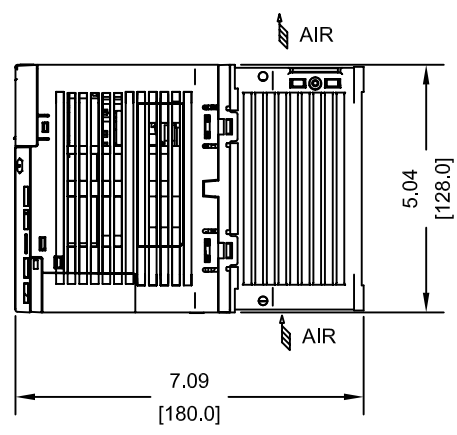
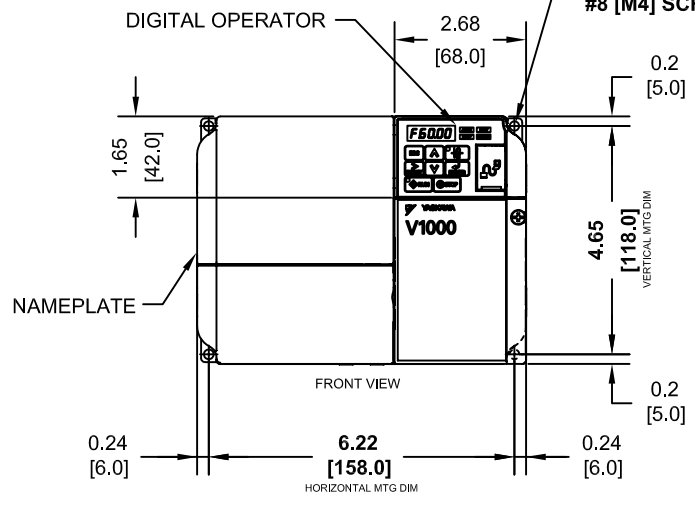


- NOTES:
- EXTERNAL HEATSINK CONFIGURATION REQUIRES MOUNTING KIT
 - EXPOSED HEATSINK RECOMMENDED CLEARANCE $D=2.76''$ MINUS PANEL THICKNESS

TOLERANCES / REFERENCES:		<p>YASKAWA The Drive for Quality™</p> <p>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.</p>	DRAWN: J. MATTAS DATE 1-27-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 12 OPEN ENCLOSURE (IP20 RATING) BA0012B		
UNITS: IN [mm]			CHECKED: J. PIOTROWSKI DATE 8-21-09	SIZE A	REVISION R00	PAGE 3 of 3
SCALE: BY VIEW			TECH: J. CAIRO DATE 8-24-09	DATE 8-28-09	DRAWING #: DD.V1K.FR12.IP20	
			APPROVED: T. SASADA DATE 8-28-09	ORIGINAL DESIGN: -		



(4)-MOUNTING HOLES FOR #8 [M4] SCREWS



MODEL # CIMR-VU	VOLTAGE SINGLE 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
BA0018BXX	208/240	-	17.5	6.6 (3.0)	-	-	-	51.4	110.5	161.9

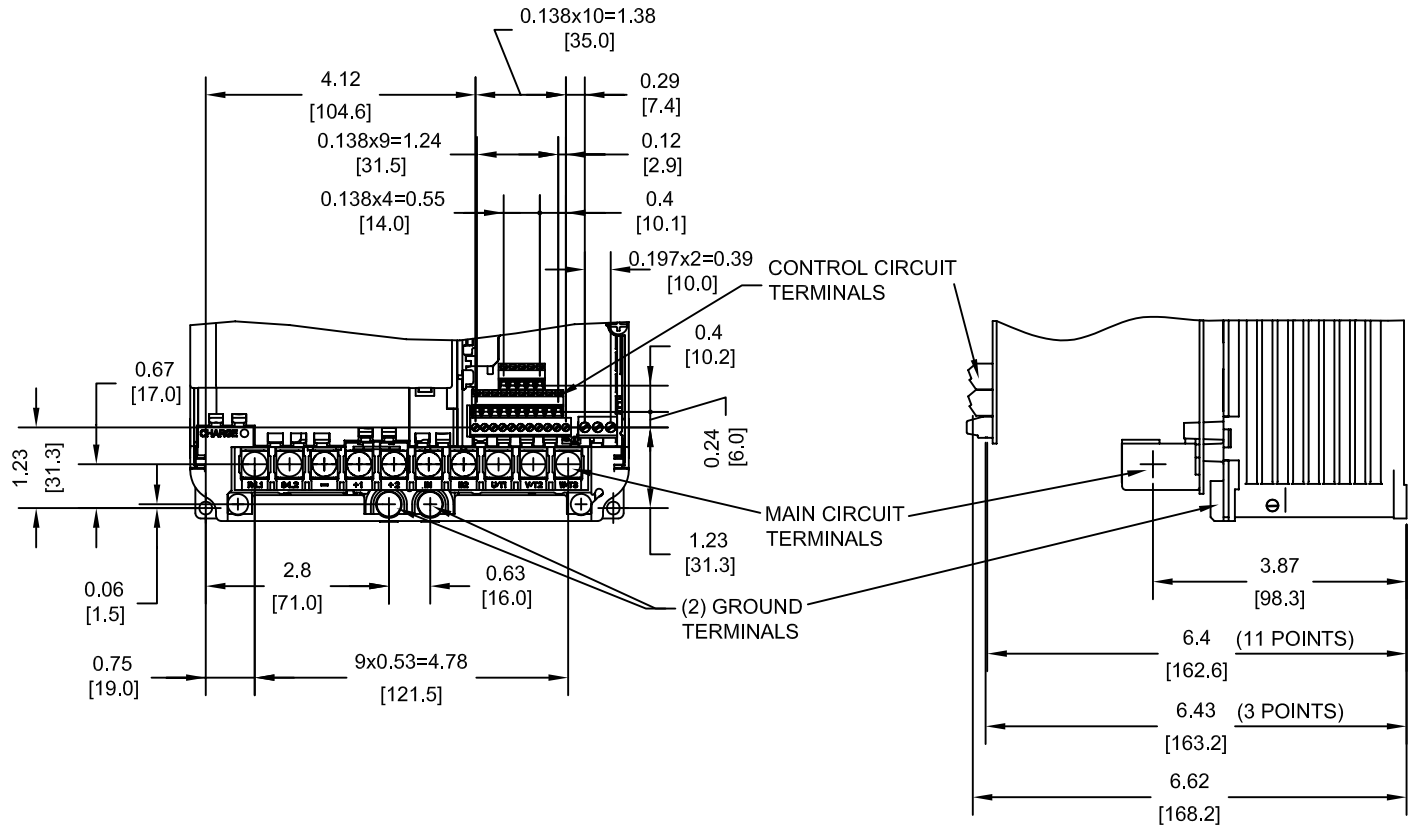
NOTE:
XX DENOTES AA-ZZ

INT=INTERNAL COMPONENTS
EXT=EXTERNAL HEATSINK
TOT=TOTAL

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:		<p>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.</p>	DRAWN: J. MATTAS DATE: 1-27-09	DATE: 1-27-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 13 OPEN ENCLOSURE (IP20 RATING) BA0018B
			CHECKED: J. PIOTROWSKI DATE: 8-21-09	DATE: 8-21-09	
			TECH: J. CAIRO DATE: 8-24-09	DATE: 8-24-09	
			APPROVED: T. SASADA DATE: 8-28-09	DATE: 8-28-09	
UNITS: IN [mm]	SCALE: 1: 4	ORIGINAL DESIGN: -	DATE: -	SIZE: A REVISION: R00 PAGE: 1 of 3	DRAWING #: DD.V1K.FR13.IP20

TERMINAL AND WIRING DETAILS (SCALE 1:3)



TERMINAL AND WIRE SPECIFICATIONS FOR
MAIN CIRCUIT AND GROUND

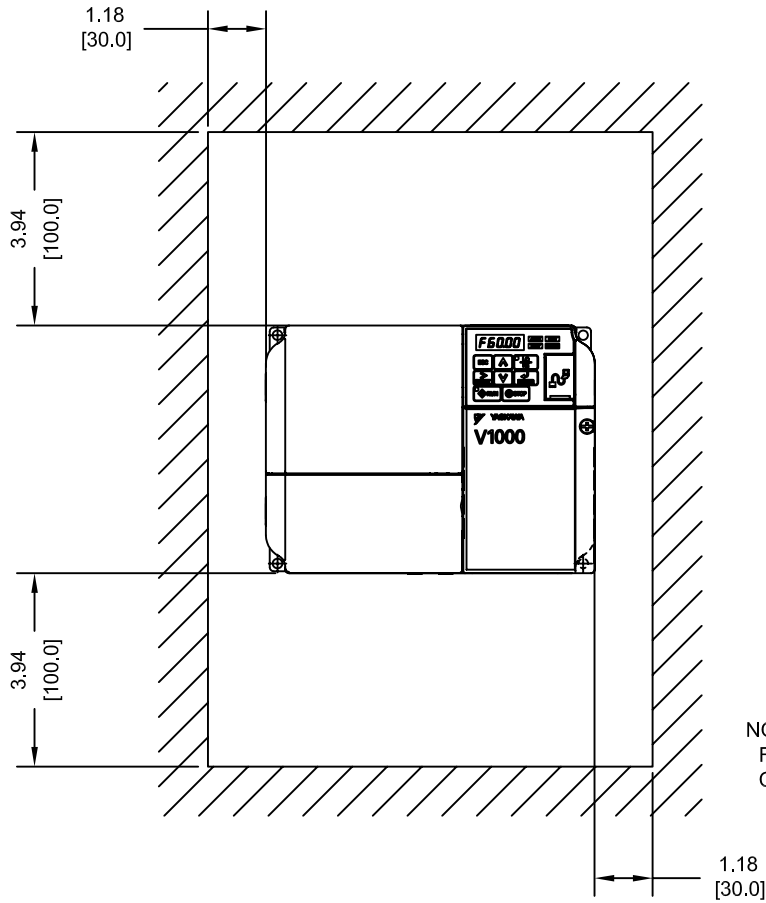
MODEL #	TERMINAL SCREW	CLAMPING TORQUE lb.in.(N.m.)	WIRE RANGE AWG(mm ²)
BA0018B	M5	22.1 (2.5)	12-8 (3.5-8)

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

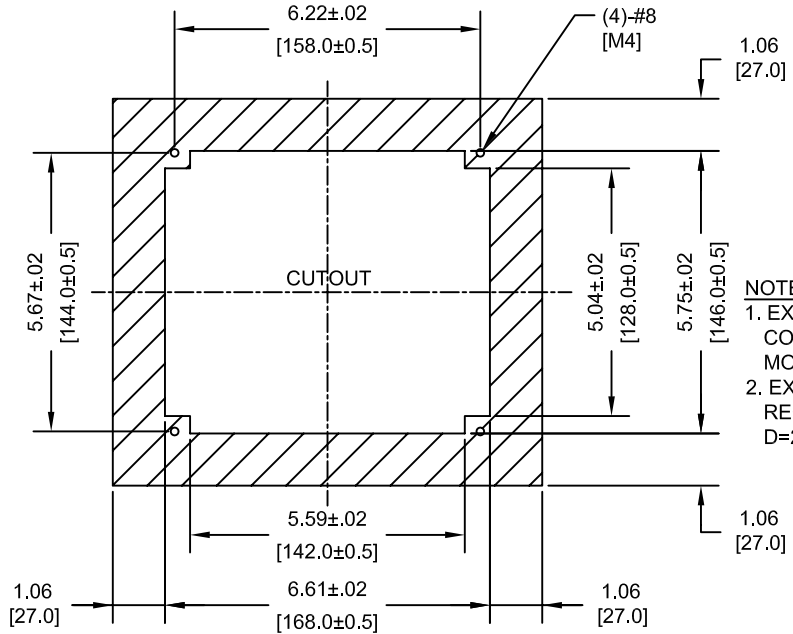
FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:		<p>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.</p>	DRAWN: J. MATTAS CHECKED: J. PIOTROWSKI TECH: J. CAIRO APPROVED: T. SASADA ORIGINAL DESIGN: -	DATE 1-27-09 DATE 8-21-09 DATE 8-24-09 DATE 8-28-09 DATE -	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 13 OPEN ENCLOSURE (IP20 RATING) BA0018B
UNITS: IN[mm]	SCALE: BY VIEW		SIZE A	REVISION R00	PAGE 2 of 3
			DRAWING #: DD.V1K.FR13.IP20		

MINIMUM INSTALLATION CLEARANCES (SCALE 1:4)



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



- NOTES:
- EXTERNAL HEATSINK CONFIGURATION REQUIRES MOUNTING KIT
 - 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.

DRAWN: J. MATTAS

CHECKED: J. PIOTROWSKI

TECH: J. CAIRO

APPROVED: T. SASADA

ORIGINAL DESIGN: -

DATE: 1-27-09

DATE: 8-21-09

DATE: 8-24-09

DATE: 8-28-09

DATE: -

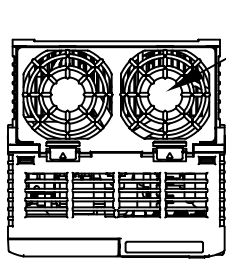
TITLE:

V1000 DIMENSION DRAWING
FRAME SIZE 13
OPEN ENCLOSURE (IP20 RATING)
BA0018B

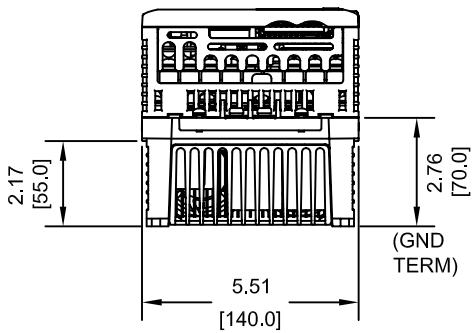
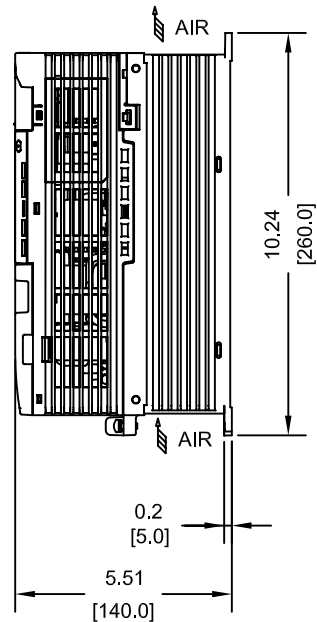
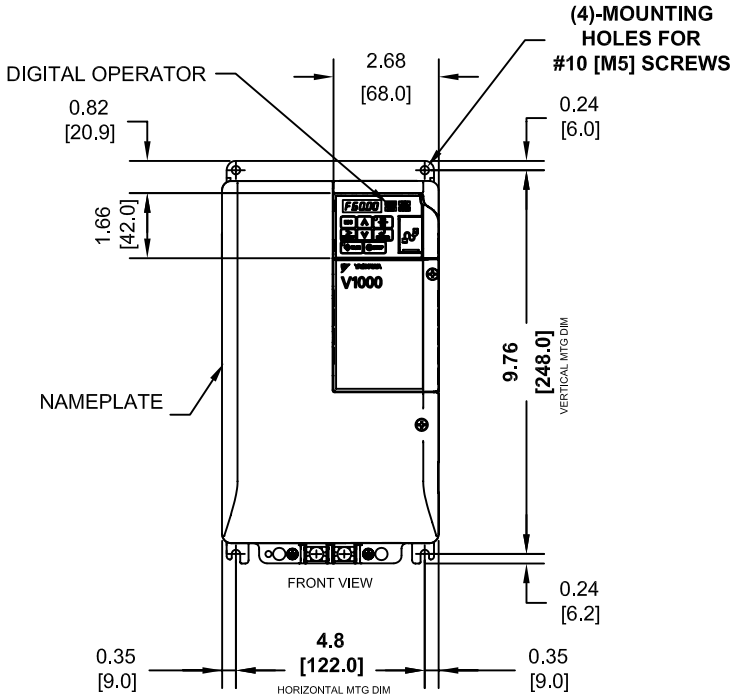
SIZE A	REVISION R00	PAGE 3 of 3
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DRAWING #: DD.V1K.FR13.IP20

UNITS: IN[mm] SCALE: BY VIEW



(2) COOLING FANS



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	TOT	INT	EXT	TOT
2A0030AXX	208/240	30.0	25.0	7.9 (3.6)	88.9	246.4	335.3	72.2	231.5	303.7
2A0040AXX		40.0	33.0	7.9 (3.6)	112.8	266.7	379.5	82.8	248.5	321.3
4A0018AXX	380/480	17.5	14.8	7.9 (3.6)	80.1	181.2	261.3	62.7	166.0	228.7
4A0023AXX		23.0	18.0	7.9 (3.6)	107.7	213.4	321.1	78.1	207.1	285.2

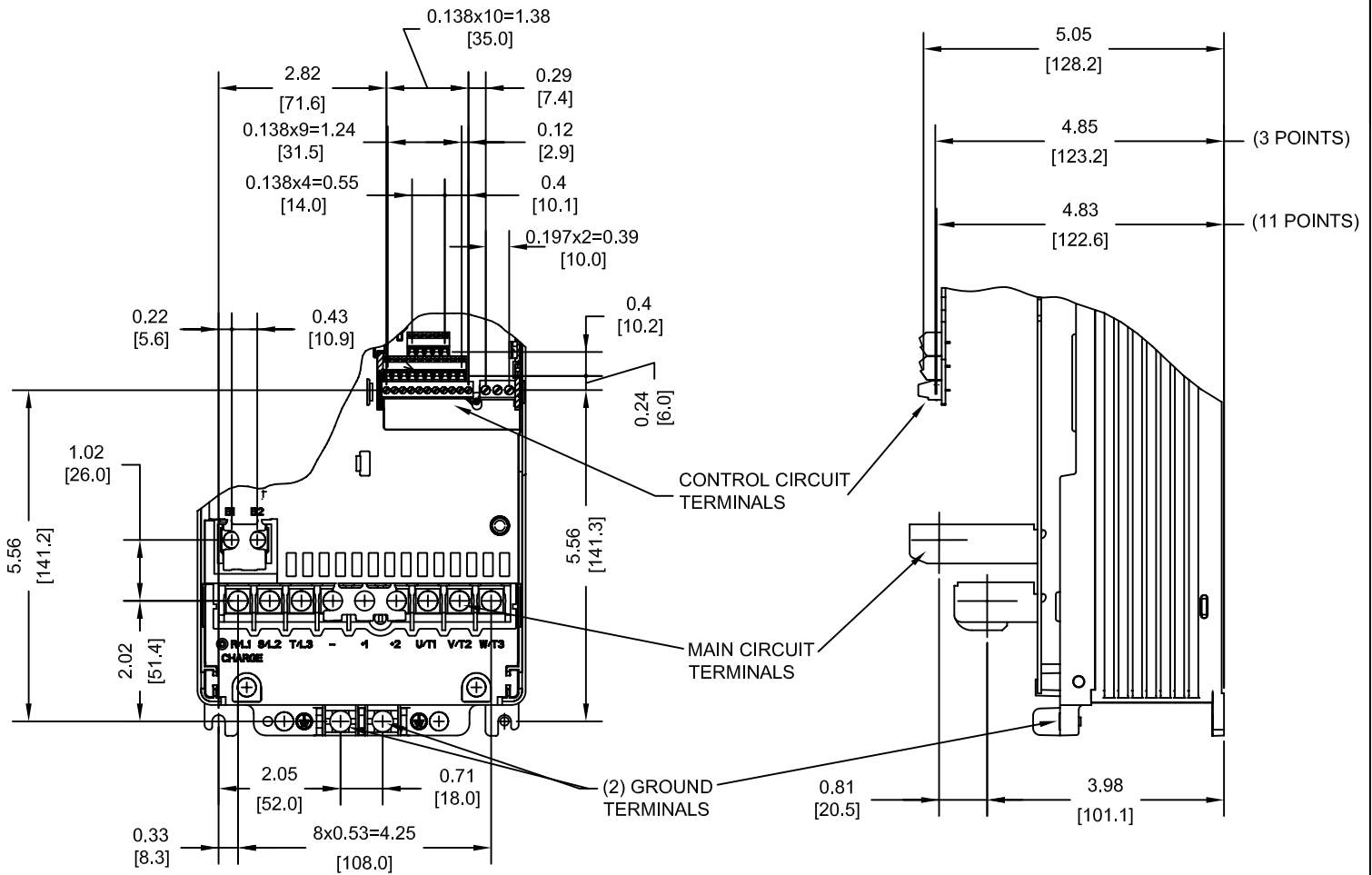
NOTE:
XX DENOTES AA-ZZ

INT=INTERNAL COMPONENTS
EXT=EXTERNAL HEATSINK
TOT=TOTAL

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:		<p>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.</p>	DRAWN: J. MATTAS DATE 1-27-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 14 OPEN ENCLOSURE (IP00 RATING) 2A0030A, 2A0040A, 4A0018A, 4A0023A
			CHECKED: J. PIOTROWSKI DATE 8-21-09	DATE 8-21-09
			TECH: J. CAIRO DATE 8-24-09	DATE 8-24-09
			APPROVED: T. SASADA DATE 8-28-09	DATE 8-28-09
UNITS: IN [mm]	SCALE: 1:5	ORIGINAL DESIGN: -	DATE -	SIZE A REVISION R00 PAGE 1 of 3 DRAWING #: DD.V1K.FR14.IP00

TERMINAL AND WIRING DETAILS (SCALE 1:3)



TERMINAL AND WIRE SPECIFICATIONS FOR MAIN CIRCUIT AND GROUND

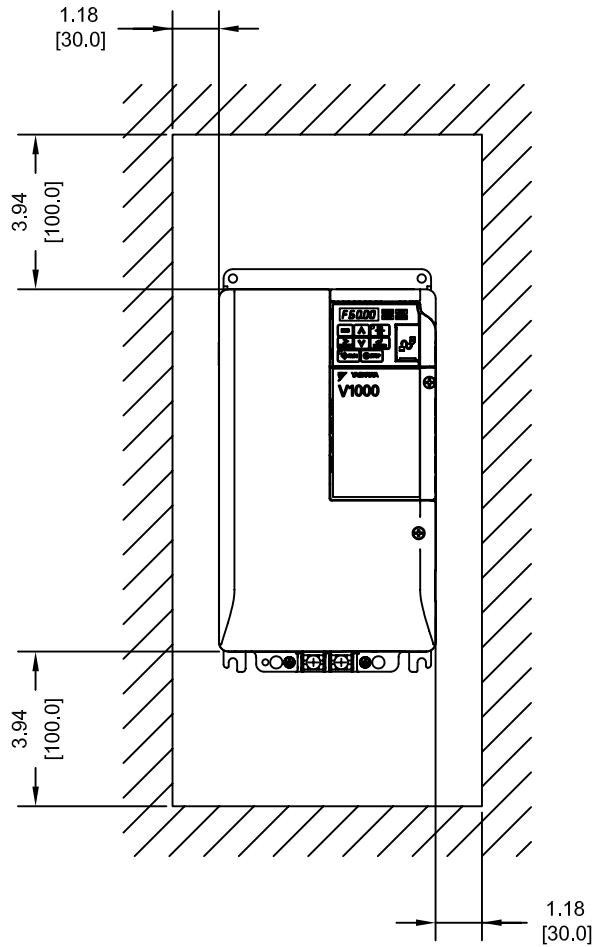
MODEL # CIMR-VU	TERMINAL SYMBOL	TERMINAL SCREW	CLAMPING TORQUE lb.in.(N.m.)	WIRE RANGE AWG(mm)
2A0030A	R/L1, S/L2, T/L3, ⊖, ⊕1, ⊕2, U/T1, V/T2, W/T3	M4	20.4 (2.3)	12-6 (3.5-14)
	B1, B2	M4	20.4 (2.3)	12-10 (3.5-5.5)
	⊕	M5	17.7-22.1 (2.0-2.5)	10-6 (5.5-14)
2A0040A	R/L1, S/L2, T/L3, ⊖, ⊕1, ⊕2, U/T1, V/T2, 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)
4A0018A	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)
4A0023A	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

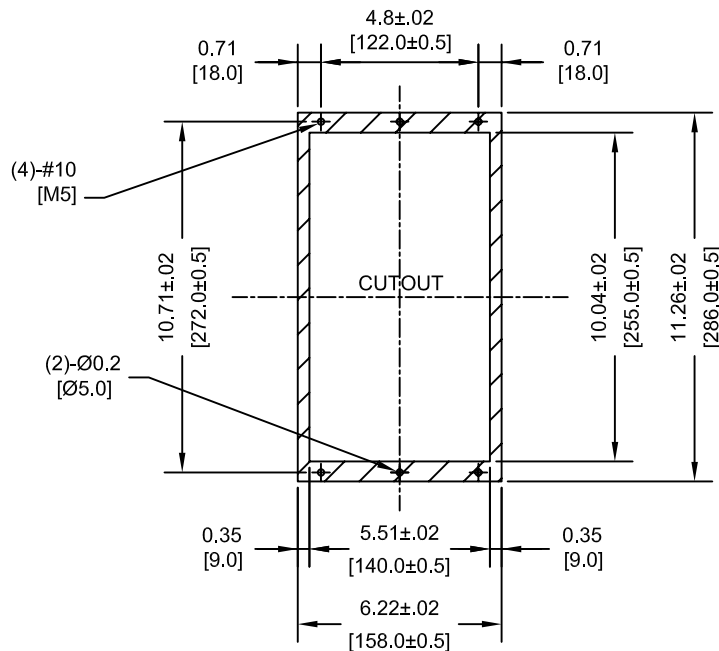
TOLERANCES / REFERENCES:	<p>THIS DOCUMENT AND INFORMATION CONTAINED IN IT ARE CONFIDENTIAL, AND CANNOT BE COPIED OR DISCLOSED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN CONSENT OF YASKAWA ELECTRIC AMERICA INC.</p>	DRAWN: J. MATTAS	DATE 1-27-09	TITLE: V1000 DIMENSION DRAWING	
		CHECKED: J. PIOTROWSKI	DATE 8-21-09	FRAME SIZE 14	
		TECH: J. CAIRO	DATE 8-24-09	OPEN ENCLOSURE (IP00 RATING)	
		APPROVED: T. SASADA	DATE 8-28-09	2A0030A, 2A0040A, 4A0018A, 4A0023A	
UNITS: IN [mm]	SCALE: BY VIEW	ORIGINAL DESIGN: -	DATE -	SIZE A	REVISION R00
			DRAWING #: DD.V1K.FR14.IP00		PAGE 2 of 3

MINIMUM INSTALLATION CLEARANCES (SCALE 1:5)



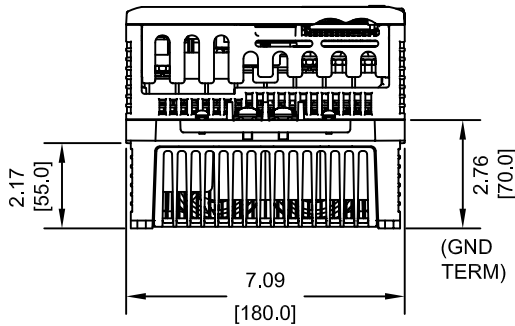
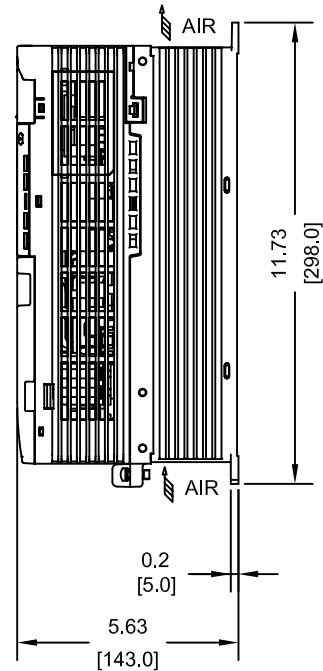
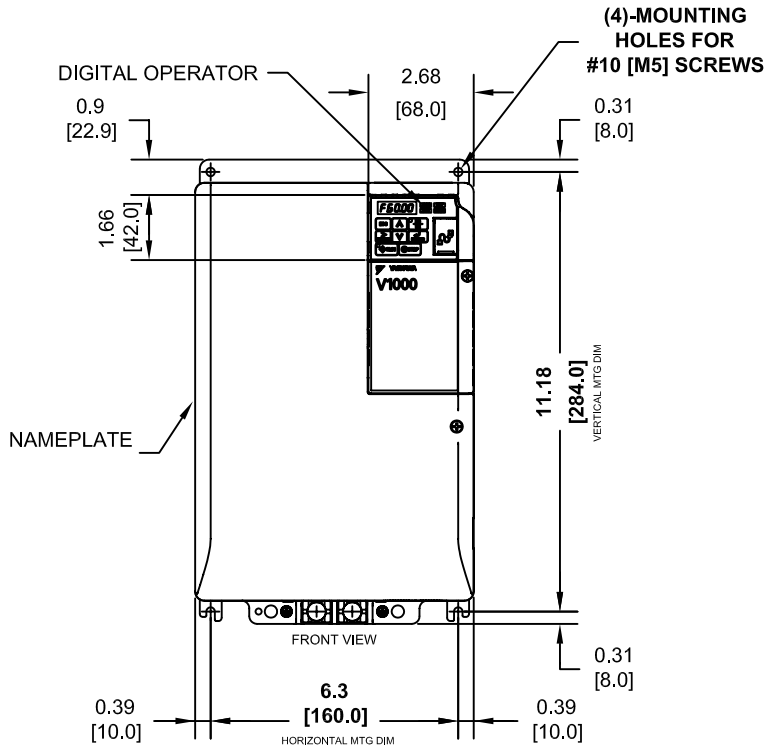
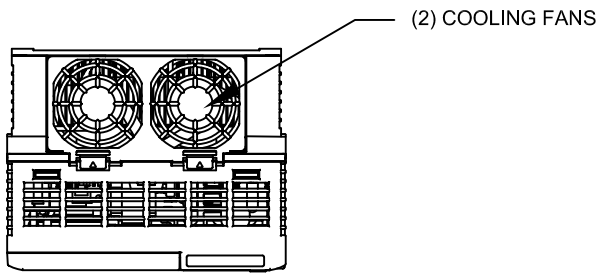
NOTE:
FOR SIDE-BY-SIDE MOUNTING
CONSULT MANUAL

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:		<p>YASKAWA The Drive for Quality™</p> <p>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.</p>	DRAWN: J. MATTAS	DATE: 1-27-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 14 OPEN ENCLOSURE (IP00 RATING) 2A0030A, 2A0040A, 4A0018A, 4A0023A
			CHECKED: J. PIOTROWSKI	DATE: 8-21-09	
			TECH: J. CAIRO	DATE: 8-24-09	
			APPROVED: T. SASADA	DATE: 8-28-09	
UNITS: IN [mm]	SCALE: BY VIEW	ORIGINAL DESIGN:	-	DATE:	-
					DRAWING #: DD.V1K.FR14.IP00
			SIZE: A	REVISION: R00	PAGE: 3 of 3



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
4A0031AXX	380/480	31.0	24.0	11.0 (5.0)	146.1	287.5	433.6	105.9	266.9	372.8

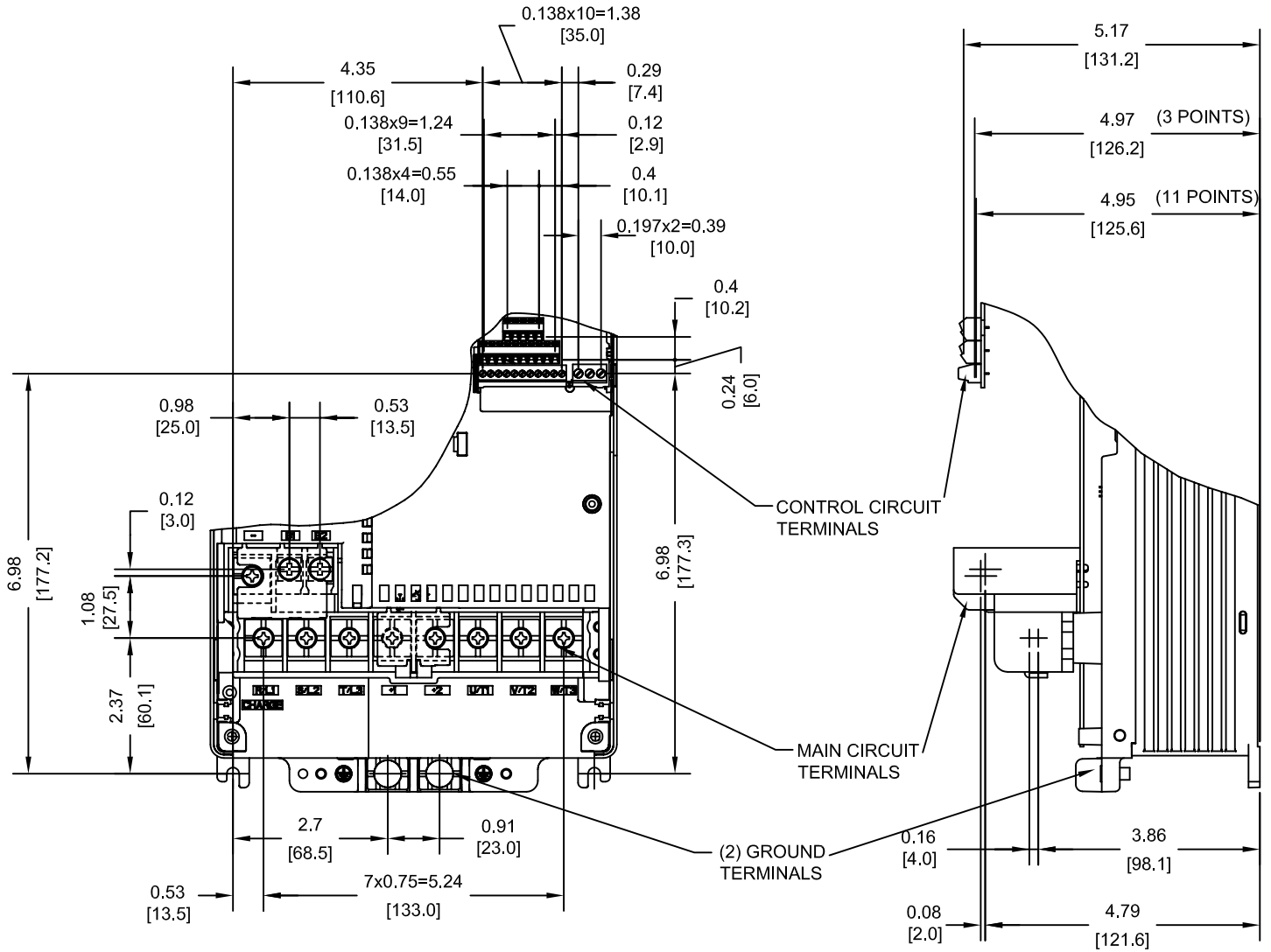
NOTE:
XX DENOTES AA-ZZ

INT=INTERNAL COMPONENTS
EXT=EXTERNAL HEATSINK
TOT=TOTAL

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:		<p>YASKAWA The Drive for Quality™</p> <p>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.</p>	DRAWN: J. MATTAS DATE: 1-28-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 15 OPEN ENCLOSURE (IP00 RATING) 4A0031A
UNITS: IN [mm]	SCALE: 1:5		CHECKED: J. PIOTROWSKI DATE: 8-21-09	SIZE: A REVISION: R00 PAGE: 1 of 3
			TECH: J. CAIRO DATE: 8-24-09	DRAWING #: DD.V1K.FR15.IP00
			APPROVED: T. SASADA DATE: 8-28-09	
		ORIGINAL DESIGN:	DATE:	

TERMINAL AND WIRING DETAILS (SCALE 1:3)



TERMINAL AND WIRE SPECIFICATIONS FOR
MAIN CIRCUIT AND GROUND

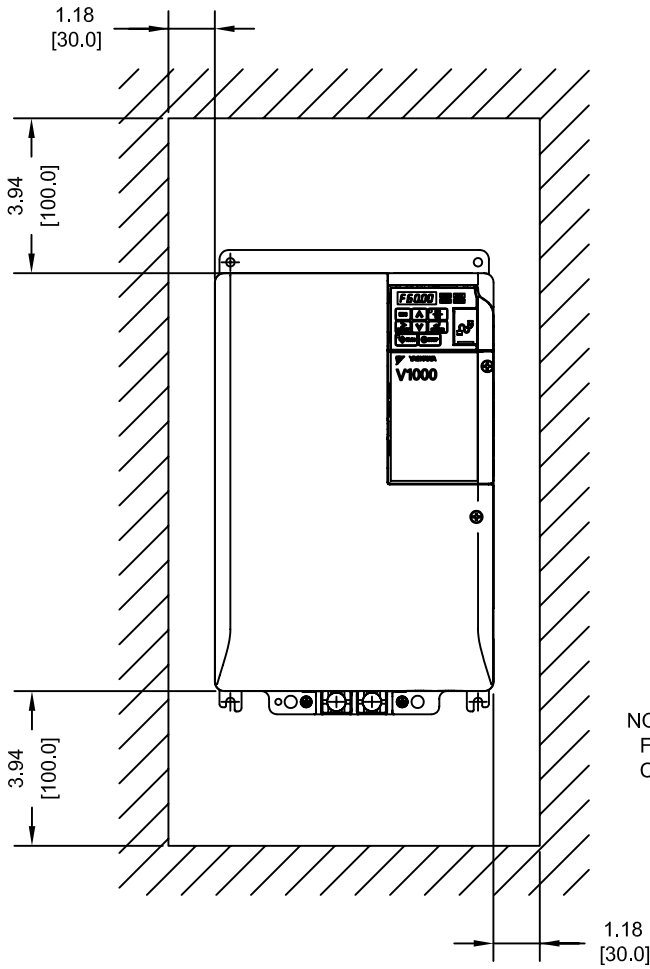
MODEL # CIMR-VU	TERMINAL SYMBOL	TERMINAL SCREW	CLAMPING TORQUE lb.in.(N.m.)	WIRE RANGE AWG(mm ²)
4A0031A	R/L1, S/L2, T/L3, Ⓞ, ⊕1, ⊕2, U/T1, V/T2, W/T3, B1, B2	M5	17.7 TO 22.1 (2.0 TO 2.5)	10-6 (5.5-14)
	Ⓞ	M6	35.4 TO 53.1 (4 TO 6)	10-6 (5.5-14)

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

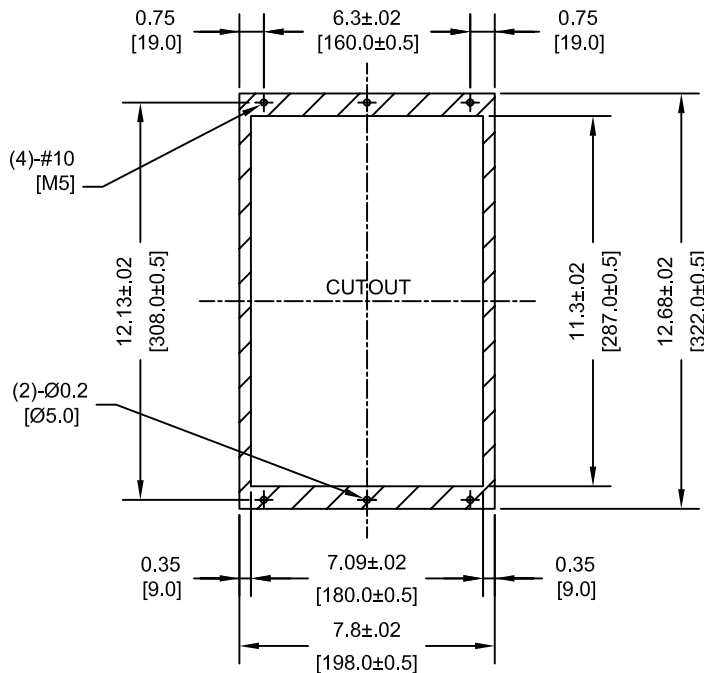
TOLERANCES / REFERENCES:		<p>THIS DOCUMENT AND INFORMATION CONTAINED IN IT ARE CONFIDENTIAL, AND CANNOT BE COPIED OR DISCLOSED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN CONSENT OF YASKAWA ELECTRIC AMERICA INC.</p>	DRAWN: J. MATTAS DATE 1-28-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 15 OPEN ENCLOSURE (IP00 RATING) 4A0031A		
UNITS: IN[mm]			CHECKED: J. PIOTROWSKI DATE 8-21-09	SIZE A	REVISION R00	PAGE 2 of 3
SCALE: BY VIEW			TECH: J. CAIRO DATE 8-24-09	APPROVED: T. SASADA DATE 8-28-09	DRAWING #: DD.V1K.FR15.IP00	
			ORIGINAL DESIGN: -	DATE -		

MINIMUM INSTALLATION CLEARANCES (SCALE 1:5)



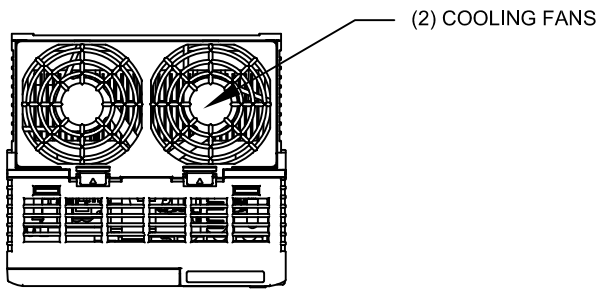
NOTE:
FOR SIDE-BY-SIDE MOUNTING
CONSULT MANUAL

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

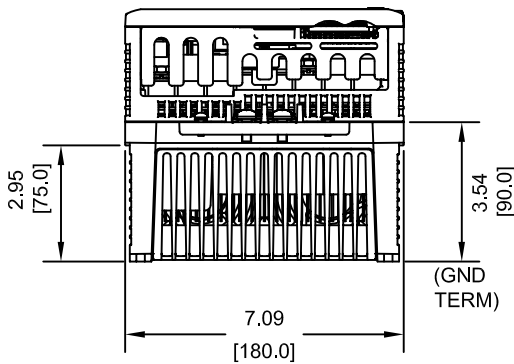
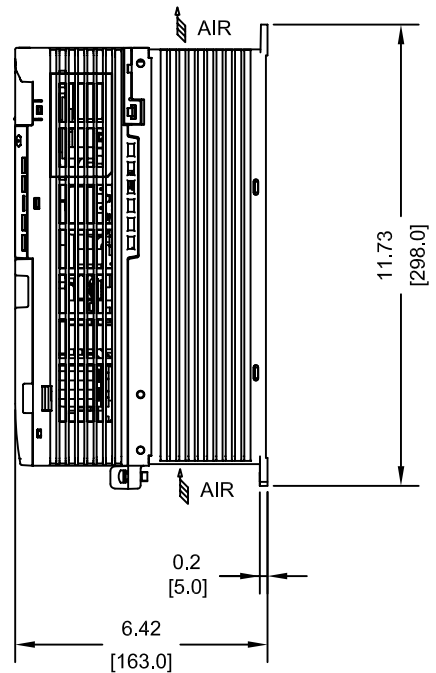
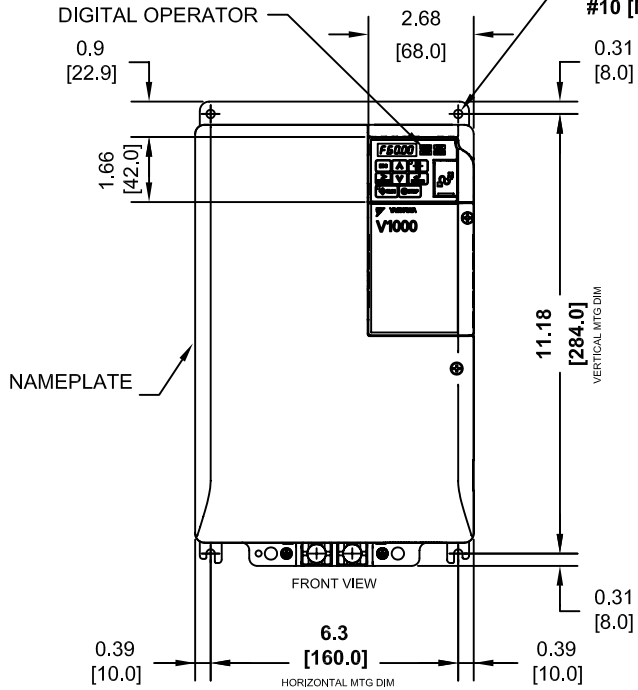


NOTES:
1. EXTERNAL HEATSINK
CONFIGURATION REQUIRES
MOUNTING KIT
2. EXPOSED HEATSINK
RECOMMENDED CLEARANCE
D=2.36" MINUS PANEL THICKNESS

TOLERANCES / REFERENCES:		<p>YASKAWA The Drive for Quality™</p> <p>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.</p>	DRAWN: J. MATTAS DATE 1-28-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 15 OPEN ENCLOSURE (IP00 RATING) 4A0031A
			CHECKED: J. PIOTROWSKI DATE 8-21-09	REVISION R00
			TECH: J. CAIRO DATE 8-24-09	PAGE 3 of 3
			APPROVED: T. SASADA DATE 8-28-09	DRAWING #: DD.V1K.FR15.IP00
UNITS: IN [mm]	SCALE: BY VIEW	ORIGINAL DESIGN:	DATE	



(4)-MOUNTING HOLES FOR #10 [M5] SCREWS



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
2A0056AXX	208/240	56.0	47.0	11.7 (5.3)	151.8	357.9	509.7	117.6	347.6	465.2
4A0038AXX	380/480	38.0	31.0	11.7 (5.3)	155.8	319.2	475.0	126.6	319.1	445.7

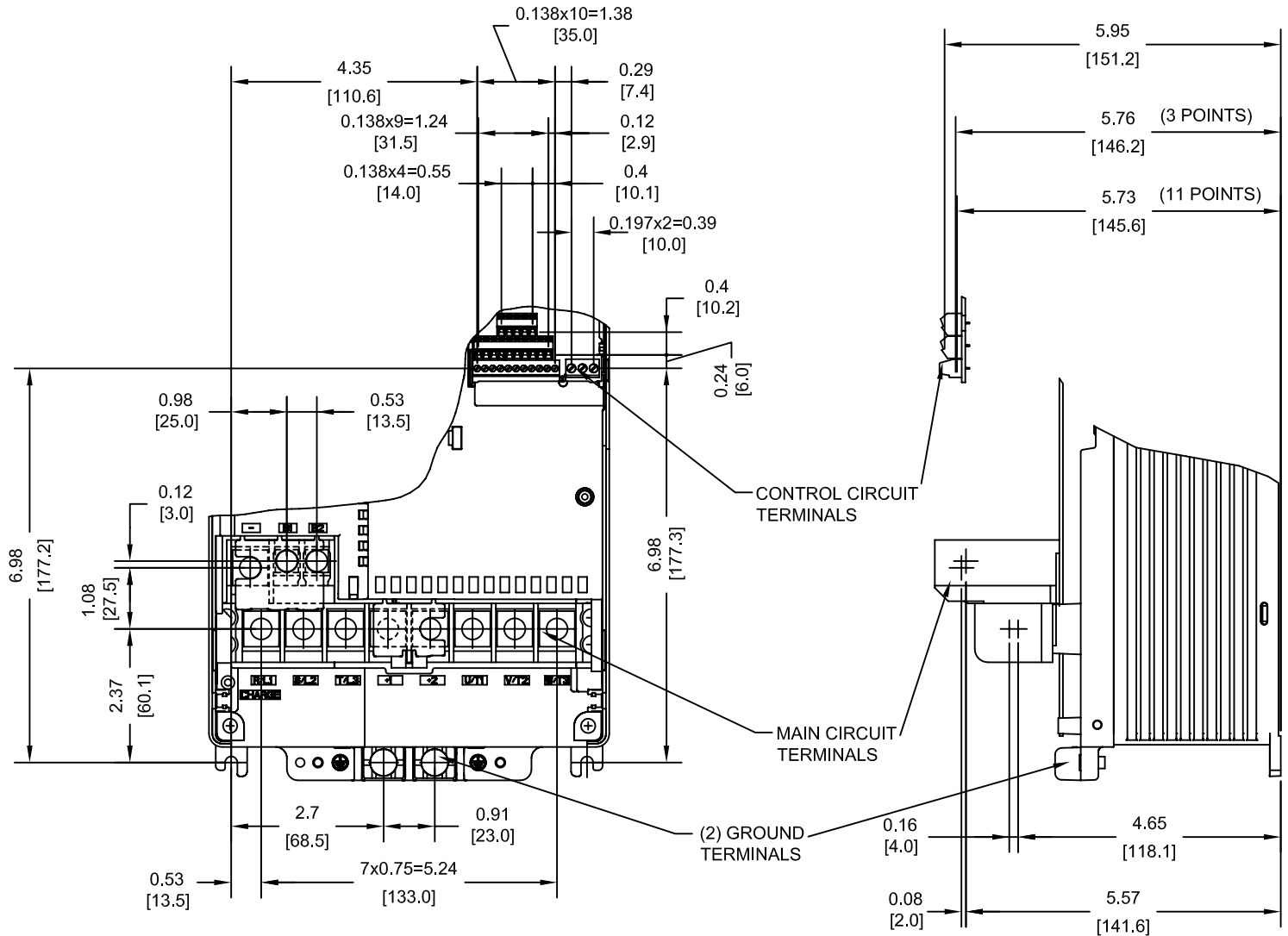
NOTE:
XX DENOTES AA-ZZ

INT=INTERNAL COMPONENTS
EXT=EXTERNAL HEATSINK
TOT=TOTAL

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:		<p>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.</p>	DRAWN: J. MATTAS DATE: 1-29-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 16 OPEN ENCLOSURE (IP00 RATING) 2A0056A AND 4A0038A
			CHECKED: J. PIOTROWSKI DATE: 8-21-09	SIZE: A REVISION: R00 PAGE: 1 of 3
			TECH: J. CAIRO DATE: 8-24-09	DRAWING #: DD.V1K.FR16.IP00
UNITS: IN [mm]	SCALE: 1:5		APPROVED: T. SASADA DATE: 8-28-09	ORIGINAL DESIGN: - DATE: -

TERMINAL AND WIRING DETAILS (SCALE 1:3)



TERMINAL AND WIRE SPECIFICATIONS FOR
MAIN CIRCUIT AND GROUND

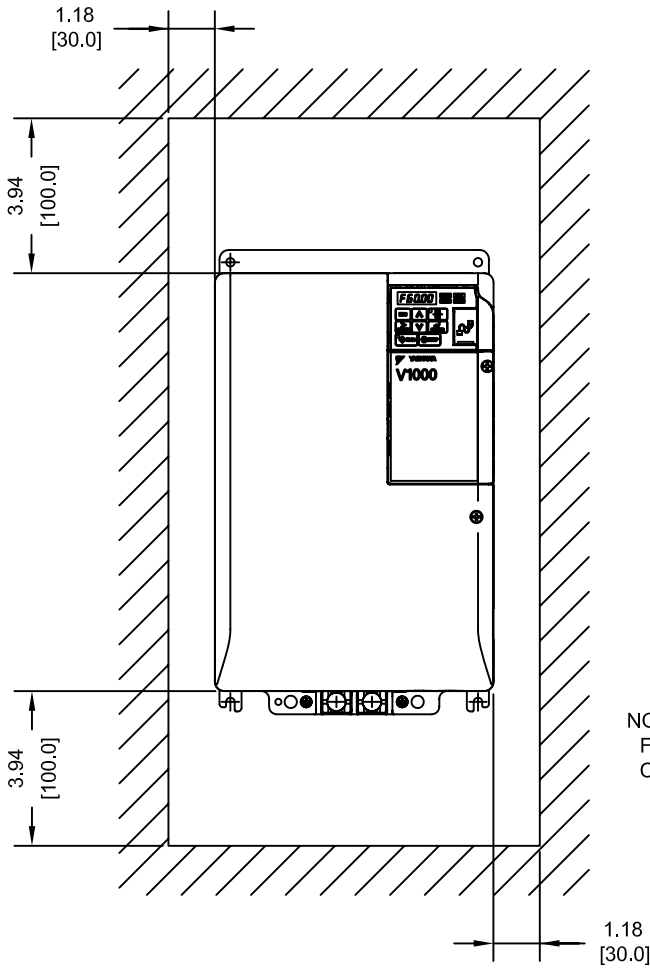
MODEL # CIMR-VU	TERMINAL SYMBOL	TERMINAL SCREW	CLAMPING TORQUE lb.in.(N.m.)	WIRE RANGE AWG(mm ²)
2A0056A	R/L1, S/L2, T/L3, ⊖, ⊕1, ⊕2, U/T1, V/T2, W/T3	M6	35.4 TO 53.1 (4 TO 6)	6-4 (14-22)
	B1, B2	M5	17.7 TO 22.1 (2 TO 2.5)	10-6 (5.5-14)
4A0038A	R/L1, S/L2, T/L3, ⊖, ⊕1, ⊕2, U/T1, V/T2, W/T3, B1, B2	M5	17.7 TO 22.1 (2 TO 2.5)	10-6 (5.5-14)
	⊕	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

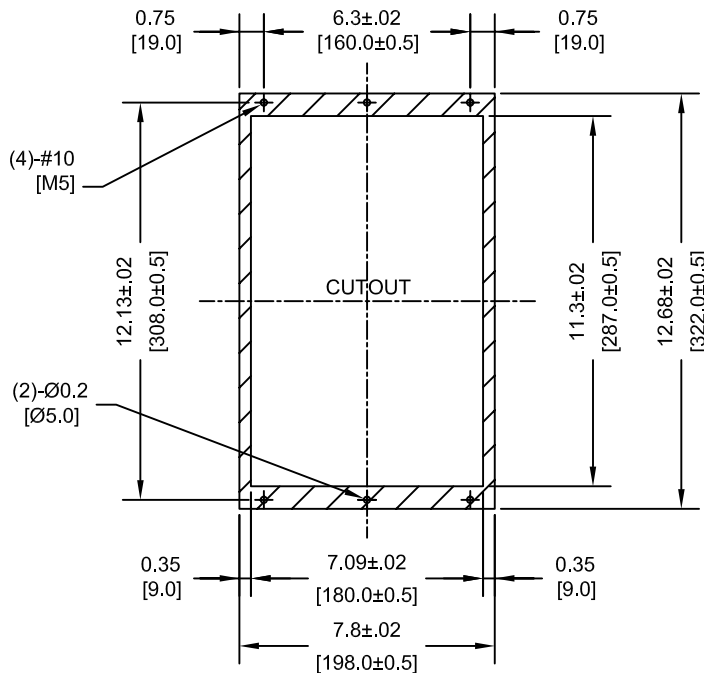
TOLERANCES / REFERENCES:		<p>THIS DOCUMENT AND INFORMATION CONTAINED IN IT ARE CONFIDENTIAL, AND CANNOT BE COPIED OR DISCLOSED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN CONSENT OF YASKAWA ELECTRIC AMERICA INC.</p>	DRAWN: J. MATTAS DATE 1-29-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 16 OPEN ENCLOSURE (IP00 RATING) 2A0056A AND 4A0038A		
UNITS: IN [mm]			CHECKED: J. PIOTROWSKI DATE 8-21-09	TECH: J. CAIRO DATE 8-24-09	SIZE A	REVISION R00
SCALE: BY VIEW			APPROVED: T. SASADA DATE 8-28-09	ORIGINAL DESIGN: -	DATE -	PAGE 2 of 3
			DRAWING #: DD.V1K.FR16.IP00			

MINIMUM INSTALLATION CLEARANCES (SCALE 1:5)



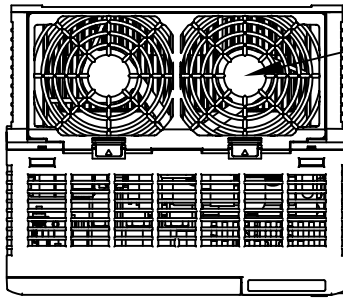
NOTE:
FOR SIDE-BY-SIDE MOUNTING
CONSULT MANUAL

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

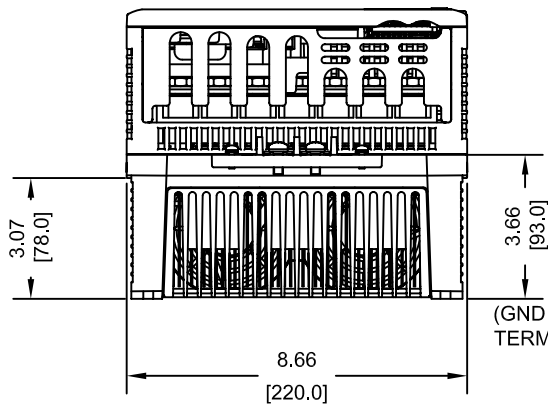
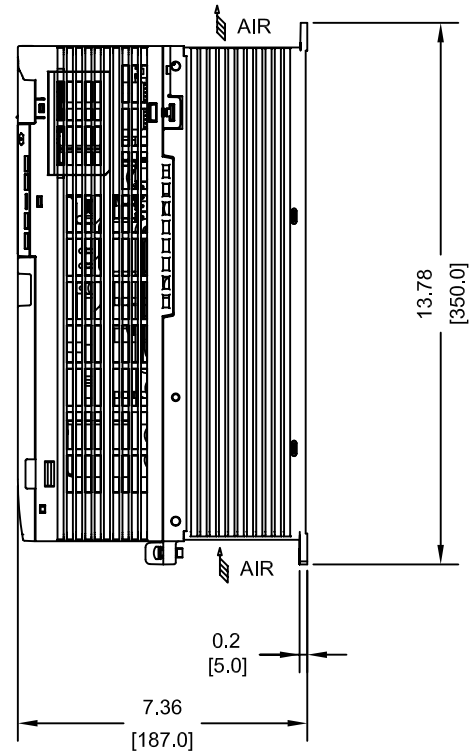
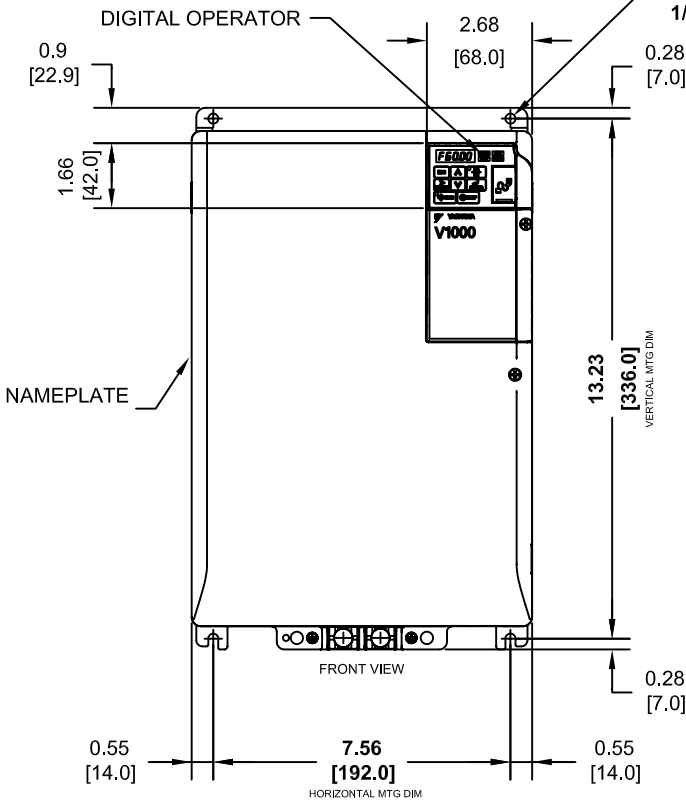


NOTES:
1. EXTERNAL HEATSINK
CONFIGURATION REQUIRES
MOUNTING KIT
2. EXPOSED HEATSINK
RECOMMENDED CLEARANCE
D=3.15" MINUS PANEL THICKNESS

TOLERANCES / REFERENCES:		<p>YASKAWA The Drive for Quality™</p> <p>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.</p>	DRAWN: J. MATTAS DATE 1-29-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 16 OPEN ENCLOSURE (IP00 RATING) 2A0056A AND 4A0038A		
			CHECKED: J. PIOTROWSKI DATE 8-21-09	DATE 8-24-09	REVISION R00	PAGE 3 of 3
			TECH: J. CAIRO DATE 8-24-09	DATE 8-28-09	SIZE A	
			APPROVED: T. SASADA DATE 8-28-09	DATE -	DRAWING #: DD.V1K.FR16.IP00	
UNITS: IN [mm]	SCALE: BY VIEW					



(2) COOLING FANS



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	TOT	INT	EXT	TOT	INT	EXT	TOT
2A0069AXX	208/240	69.0	60.0	19.1 (8.7)	184.5	461.7	646.2	151.4	437.7	589.1

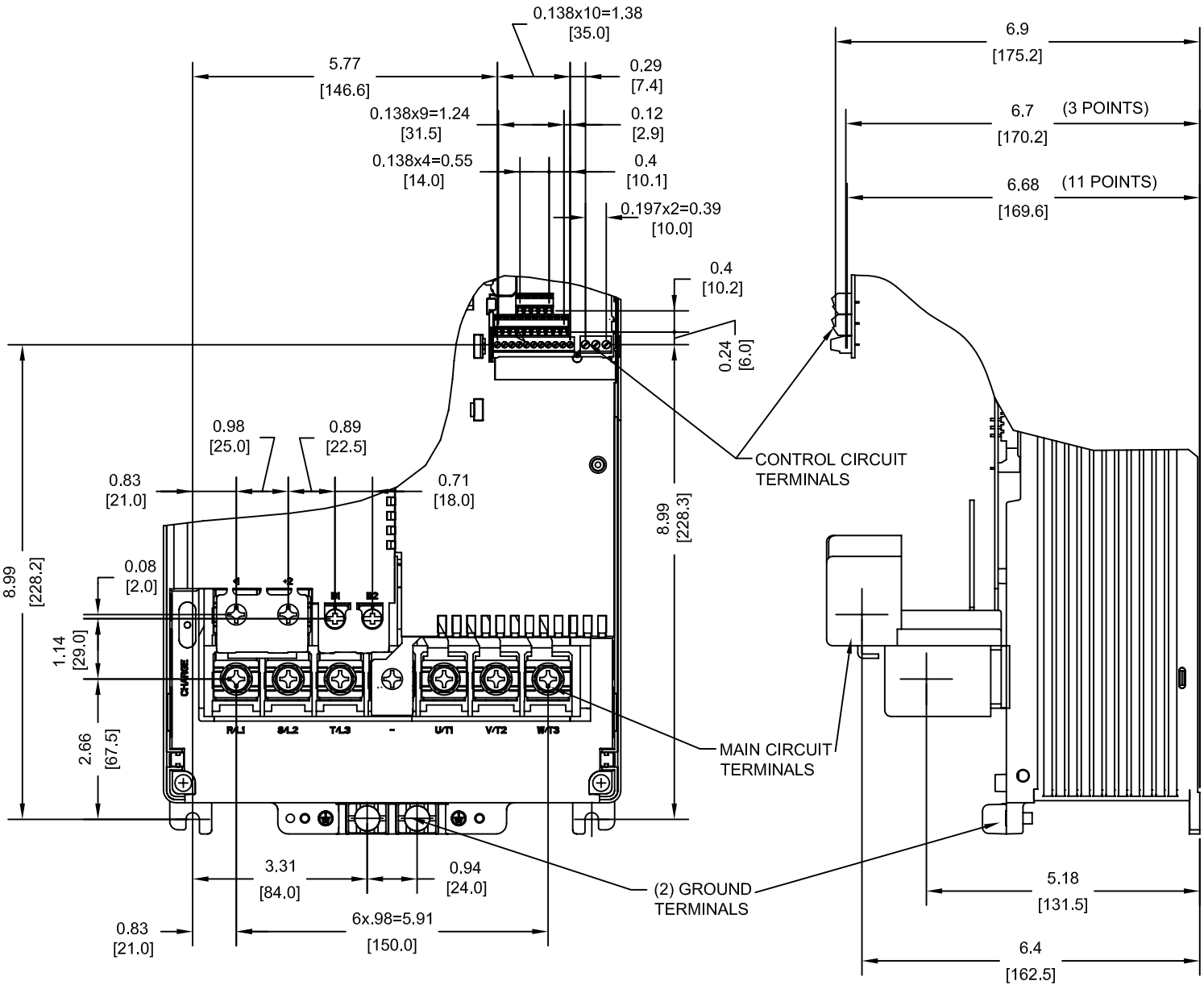
NOTE:
XX DENOTES AA-ZZ

INT=INTERNAL COMPONENTS
EXT=EXTERNAL HEATSINK
TOT=TOTAL

FOR ADDITIONAL DETAILS AND SPECIFICATIONS, CONSULT MANUAL

TOLERANCES / REFERENCES:		<p>YASKAWA The Drive for Quality™</p> <p>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.</p>	DRAWN: J. MATTAS DATE 1-29-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 17 OPEN ENCLOSURE (IP00 RATING) 2A0069A		
			CHECKED: J. PIOTROWSKI DATE 8-21-09	SIZE A	REVISION R00	PAGE 1 of 3
			TECH: J. CAIRO DATE 8-24-09	DRAWING #: DD.V1K.FR17.IP00		
			APPROVED: T. SASADA DATE 8-28-09			
UNITS: IN [mm]	SCALE: 1:5	ORIGINAL DESIGN: -				

TERMINAL AND WIRING DETAILS (SCALE 1:3)



TERMINAL AND WIRE SPECIFICATIONS FOR
MAIN CIRCUIT AND GROUND

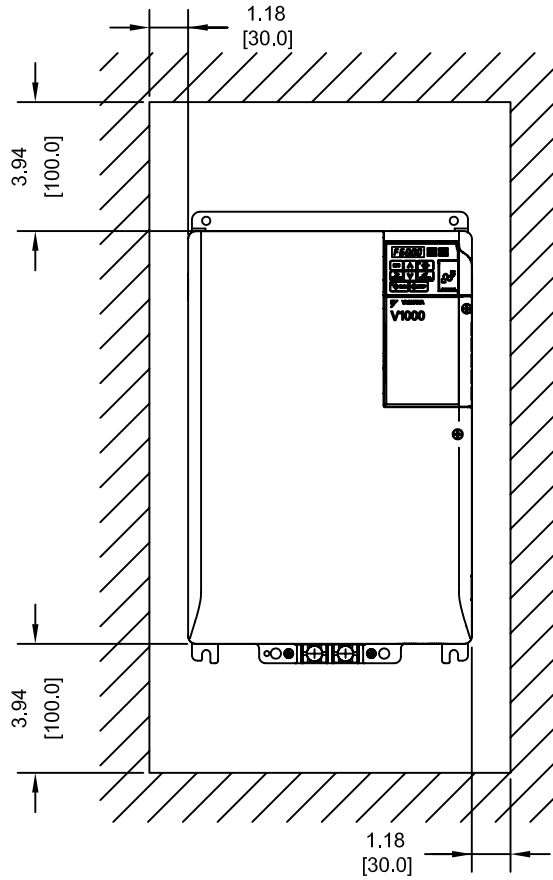
MODEL # CIMR-VU	TERMINAL SYMBOL	TERMINAL SCREW	CLAMPING TORQUE lb.in.(N.m.)	WIRE RANGE AWG(mm ²)
2A0069A	R/L1, S/L2, T/L3, ⊙, ⊕1, ⊕2, U/T1, V/T2, W/T3	M8	79.7 TO 97.4 (9 TO 11)	10-2 (5.5-38)
	B1, B2	M5	17.7 TO 22.1 (2 TO 2.5)	8-6 (8-14)
	⊕	M6	35.4 TO 53.1 (4 TO 6)	8-4 (8-22)

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

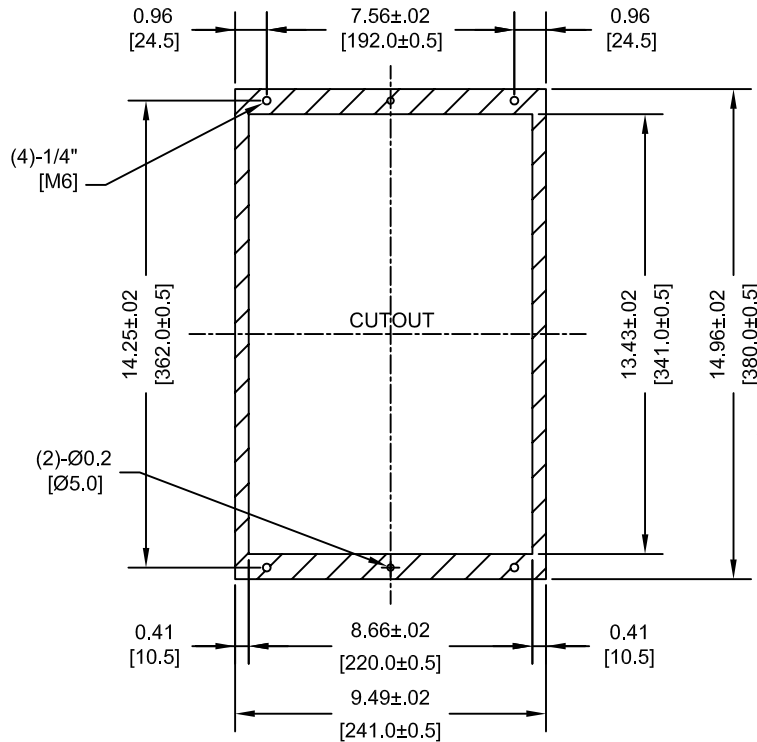
TOLERANCES / REFERENCES:		<p>YASKAWA The Drive for Quality™</p> <p><i>THIS DOCUMENT AND INFORMATION CONTAINED IN IT ARE CONFIDENTIAL, AND CANNOT BE COPIED OR DISCLOSED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN CONSENT OF YASKAWA ELECTRIC AMERICA INC.</i></p>	DRAWN: J. MATTAS DATE 1-29-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 17 OPEN ENCLOSURE (IP00 RATING) 2A0069A
UNITS: IN[mm]	SCALE: BY VIEW		CHECKED: J. PIOTROWSKI DATE 8-21-09	DATE 8-24-09
		TECH: J. CAIRO DATE 8-24-09	DATE 8-28-09	REVISION R00
		APPROVED: T. SASADA DATE 8-28-09	ORIGINAL DESIGN: -	PAGE 2 of 3
		DRAWING #: DD.V1K.FR17.IP00		

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:		<p>YASKAWA The Drive for Quality™</p> <p>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.</p>	DRAWN: J. MATTAS DATE: 1-29-09	TITLE: V1000 DIMENSION DRAWING FRAME SIZE 17 OPEN ENCLOSURE (IP00 RATING) 2A0069A
			CHECKED: J. PIOTROWSKI DATE: 8-21-09	SIZE: A REVISION: R00 PAGE: 3 of 3
			TECH: J. CAIRO DATE: 8-24-09	DRAWING #: DD.V1K.FR17.IP00
UNITS: IN [mm]	SCALE: BY VIEW		APPROVED: T. SASADA DATE: 8-28-09	