



CSA INTERNATIONAL

Letter of Attestation

207284-2735122

Class No. 7861-37

CSA-International has completed testing for
Special purpose enclosure, CSA Type 4X, IP66 model G6MD0200-001 for use with
industrial control equipment.

manufactured by: Senstar Corporation

*and hereby attests that the Special purpose enclosure CSA Type 4X, IP66 model G6MD0200-001 is in
compliance to the following standards, to the extent applicable:*

CAN/CSA – C22.2 No. 94-91 - Special Purpose Enclosures
IEC 60529 (edition 2.2)) - Degrees of Protection Provided by Enclosures (IP Code)

Issued By: **Thomas Munteanu, P.Eng**
Motors, Controls and Switchgear Group

Signature: Munteanu
October 3, 2014

This Letter of Attestation is not an authorization to use any of CSA's registered Marks

TECHNICAL DOCUMENT PACKAGE

PREPARED BY CSA-INTERNATIONAL FOR

SENSTAR CORPORATION

**119 John Cavanaugh Rd, Ottawa, ON K0A 1L0
Canada**

CSA PROJECT 207284-2735122

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MASTER CONTRACT: 207284
PROJECT: 2735122

Edition 1: October 3, 2014; Project 2735122 - Toronto
Issued by Thomas Munteanu, P. Eng.

Contents: Description and Tests – Pages 1 to 4
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PRODUCTS

Special purpose enclosure, CSA Type 4X, model G6MD0200-001 for use with industrial control equipment.

APPLICABLE REQUIREMENTS

CAN/CSA-C22.2 No. 14-13 - Industrial Control Equipment
CAN/CSA-C22.2 No. 94-M91 - Special Purpose Enclosures

DESCRIPTION

General: This report covers 1 door painted aluminum alloy type enclosure for use with industrial control equipment.

The dimensions of the enclosure are as follows:

Model G6MD0200-001

- Height: 260 mm.
- Width: 160 mm.
- Depth: 86.73 mm.

Construction:

Model G6MD0200-001 (See Ill. 1)

1. Enclosure Body: Painted aluminum alloy. Thickness is 14 GA (1.62 mm or 0.064 in) or 12 GA (2.1 mm or 0.08 in). Refer to Ill. 1 for dimensional drawings. Paint is Polyester Powder coat, PROTECH POWDER COATINGS #PT411A282 or VT411A1
2. Door: Same as item 1 except for dimensions. Refer to Ill. 1.
3. Gasket: UL Recognized in UL50 applications, type, Cat. No. HT-800 by Rogers Corp., ¼ thick in by 1 in wide (6.35 x 25.4mm).

4. Door Locking Means: Southco 1/2 turn padlockable latch, stainless steel, by Southco # K3-2403-52 (1 point locking) or approved equivalent and latch keeper, Southco # K3-0334-52.
5. Hinge: Piano type hinge, extends the entire length of the door, welded to the door and body. The pin of the hinge is 1/4 in (6.25mm) dia.
6. Grounding: Grounding means are provided in the form of a threaded welded stud 10/32 in by 2 in large, welded on the body of the enclosure and provided with a grounding lug cat. no. Panduit LAMA2-14-QY, Thomas & Betts ADR2, Marathon Special Products GL02 or approved equivalent, suitable for size AWG 2-14 wire.
7. Strain relief: Cable fittings for strain relief made by Heyco, qty 4 of # 3228 and qty 1 of # 3231 plus the corresponding nuts #8461 and # 8463 or approved equivalents.

TEST REPORT

The following test has been performed at CSA Laboratories in Toronto, on samples provided by the submittor:

Hosedown Test: Cl. 6.8.2 of Std. 94-91

Sample Tested: Enclosure Model G6MD0200-001.

A stream of water from a hose having 25mm dia. nozzle that delivers at least 240 L of water per minute was directed at the joints of the enclosure from a distance of 3m to 3.5m and moved along the joints or surface at a min rated of 6mm/s. Duration of the was 5minutes.

Results: The above results were considered acceptable since there was no indication of water inside the enclosure at the conclusion of the test.

Corrosion Resistance: Clause 6.12.2 of Std. 94-91

Sample tested: Same as above.

Result: Acceptable, since no sign of corrosion on underlying surfaces of test sample.

Tests for IP 66 rating

Dust test for first characteristic numeral 6: IEC 60529, Edition 2.2, Cl. 13.4, 13.6

Category 1

The sample under test is placed in a chamber in which talcum powder is maintained in suspension. The talcum powder used shall be able to pass through a square-meshed sieve, which has a nominal wire diameter of 50 micrometers and a nominal distance between wires of 75 micrometers.

By means of depression (maximum 20 mbar, 8 inches of H₂O), a volume of air 80 times the volume of the sample enclosure being tested shall be drawn into the enclosure without exceeding an extraction rate of 60 volumes per hour.

If an extraction rate of 40 to 60 volumes per hour is obtained the duration of the test will be 2 hours.

If, with a maximum depression of 20 mbar (8 inches of H₂O), the extraction rate is less than 40 volumes per hour, the test is continued until 80 volumes of air have been drawn through or 8 hours have elapsed.

Enclosure Volume:

Location of Suction Connection: Via cable gland

Result: Dust did not enter the enclosure.

Water test for second characteristic numeral 6: IEC 60529, Edition 2.2, Cl. 14.2.6 and 14.3.

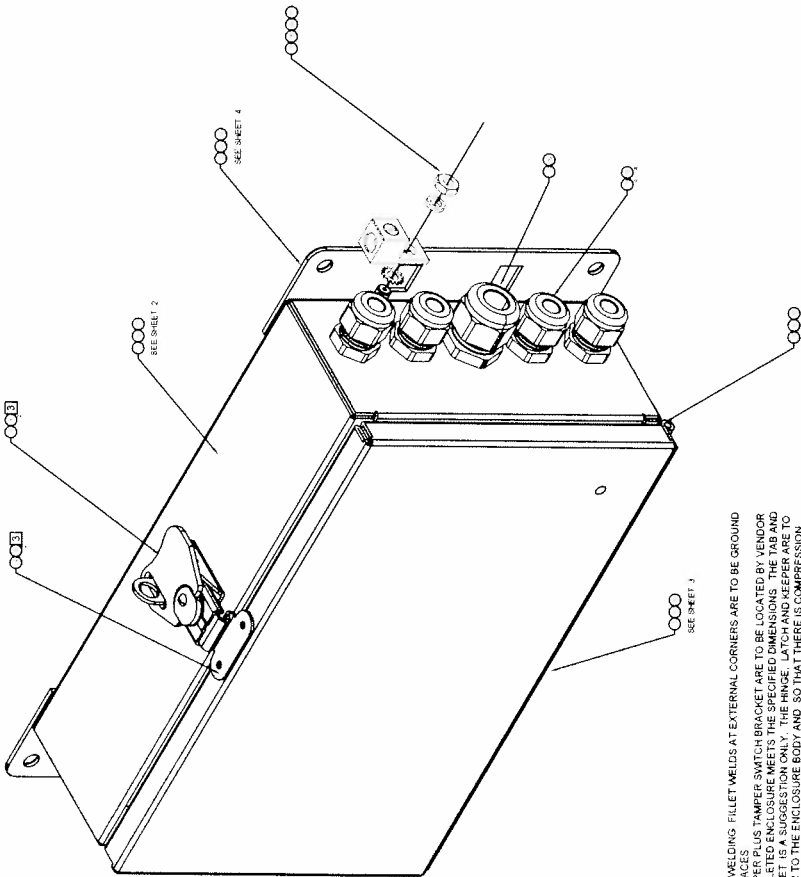
This test has been waived since the Type 4 Hosedown Test performed as per Cl. 6.8.2 of Std. 94-91 is considered more severe.

ZONE	REV.	DESCRIPTION	APP'D
1		ROUGH DESIGN FOR QUOTATION/SAMPLE	
2		MODEL SCALED 1:1 IN ON CHANGED TO 1:1mm	
3		UPDATES FROM FIRST SAMPLE	
4		FINAL PRE-PRODUCTION DRAFT FOR PRESS TEST	
		CONFIGURATION BASELINE	
		PRODUCTION RELEASE	

COMPUTER GENERATED
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8 7 6 5 4 3 2 1



- NOTES:**
- REMOVE ALL BURRS AND SHARP EDGES
 - OUTER SURFACE TO BE FREE OF DISTORTION CAUSED BY WELDING. FILLET WELDS AT EXTERNAL CORNERS ARE TO BE GROUND
 - INTERIOR SURFACE TO BE GROUND WITH A BLENDED RADIUS BETWEEN THE TWO SURFACES
 - CHERRY FINISH IS PREFERRED. TAMPER SWITCH BRACKET ARE TO BE LOCATED BY VENDOR
 - USE WELDING TECHNIQUES AS PREFERRED PROVIDED THE CAPTURED WELDING PROCESS AND WELDING MATERIALS AND METHODS FOR WELDING THE TAMPER SWITCH BRACKET IS A SUGGESTION ONLY. THE HINGE LATCH AND BRACKET ARE TO BE PLACED SO THAT COVER IS SQUARE & PERPENDICULAR TO THE ENCLOSURE BODY AND SO THAT THERE IS COMPRESSION
 - PROTECT ENTIRE PERIMETER OF THE GASKET
 - Prior to painting install studs and standoffs (ITEMS 5 & 7). AS INDICATED, IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS
 - MASK ALL EXTERNAL INTERNAL THREADS PRIOR TO PAINTING. EXTERNAL THREADS MUST BE MASKED COMPLETELY TO SHEET SURFACE. IF NECESSARY FOR VISIBILITY, DATE OF MANUFACTURE SHOULD ALSO BE MASKED FREE OF PAINT (SEE NOTE 6).
 - FINISH PLATE APPLY BRIGHT FINISH PER MIL-S-2836E, TRIVALENT CHROME PROCESS
 - MARK ON PART No. G6MD0200-001 WITH CURRENT REVISION (REFERENCE TITLE BLOCK IN TOP RIGHT HAND CORNER OF DRAWING AND DATE OF MANUFACTURE (YYMMDD)) IN APPROX. LOCATION SHOWN ON SHEET 2. VENDOR MAY AT THEIR DISCRETION USE ANY OTHER METHOD OF PERMANENTLY MARKING THE ABOVE CHOICES INCLUDE LASER ETCH, STAMPING, ENGRAVING OR PAD PRINTING. DATE OF MANUFACTURE SHALL BE NOT LESS THAN 3.2 [0.12] METHOD SELECTED MUST BE VISIBLE THROUGH PAINTED SURFACE
 - APPLY GASKET (ITEM 11) TO THE INSIDE SURFACE OF THE LID. BE SURE TO BUTT EDGE AGAINST NON HINGE SIDE. TEARS IN GASKET WILL NOT BE ACCEPTED
 - ALL INTERNAL SURFACES TO BE FULLY WELDED AND GROUND SMOOTH ON EXTERNAL SURFACES AND ON INTERNAL SURFACES WHERE IDENTIFIED. VENDOR SHALL PROVIDE MATERIAL USAGE AND FABRICATION PROCESSES
 - ANY REGISTRATION HOLES ADDED AS AID TO MANUFACTURE MUST BE IDENTIFIED AND ASSEMBLY MUST MEET SEAS (AS) CORPORATION'S ENVIRONMENTAL REQUIREMENTS FOR COMPLIANCE WITH CERTAIN BANNED SUBSTANCES. SEE SPECIFICATION DOCUMENT # MSP250001

LEAD FREE

ROHS COMPLIANT

THE SYMBOLS DENOTE THIS PART/ASSEMBLY MUST BE MANUFACTURED OR ASSEMBLED USING TERMINAL LEAD FREE SUBSTANCES (SEE NOTE 3)

CONTRACT	DATE
M. NOWELL	14/03/10
CHECKED	Bill Hodgins
APPROVED	Jeremy Weese
APPROVED	

THIRD ANGLE PROJECTION	
DIMENSIONS AND TOLERANCES BASED ON UNS T15	
ALL UNLESS OTHERWISE SPECIFIED	
METRIC DIMENSIONS AND TOLERANCES APPLY	
IMPERIAL DIMENSIONS AND TOLERANCES FOR REF. ONLY	
MIN. X IN. ± 0.01	MIN. X MM ± 0.05
MIN. Y IN. ± 0.01	MIN. Y MM ± 0.05
MIN. Z IN. ± 0.01	MIN. Z MM ± 0.05
FINISH	X

ENCLOSURE, FLEX ZONE PROCESSOR	DWG/PART No.
G 16 M 10 12 010	0101
FORM No.	68327
SCALE	1:1
SHEET	1 OF 4

ITEM	DESCRIPTION	QTY	REF. DESIG.
21	CORD GRP. LIQUID TIGHT, NYLON, BLACK, 1/2 HPT, NYCO # 3331 OR EQUIVALENT	1	010849
20	LOOKNUT NYLON, BLACK, 1/2 HPT, NYCO # 8403	1	010227
19	CORD GRP. LIQUID TIGHT, NYLON, BLACK, 3/8 HPT, NYCO # 3228 OR EQUIVALENT	4	010863
18	LOOKNUT NYLON, BLACK, 3/8 HPT, NYCO # 8481	4	010400
17	NOIR WASHLOCKETT, SS, P/A	1	010534
16	MACHINE KEY, M.T. STAINLESS STEEL, 1/4-20	1	010039
15	WIPER, WIPER, LOCK, SPLIT, STAINLESS STEEL, 1/4-20	1	010032
14	PROTECTIVE LUG, #14-UNC, ALUMINUM	1	010032
13	PAINT, POLYESTER POWDER COAT, GREY PER OSP0700-001	A/R	
12	INDICATE PER MIL-C-55410 COLOUR. CLEAR PROCESS MUST BE TR-VALENT CHROME (ROHS COMPATIBLE)	A/R	
11	GASKET, DIECUT FOAM, C/W ADHESIVE BACKING, EPDM/SBR FOAM RUBBER, 4/8 [0.1875] THK (3/8) (RHS) PER SENSTAR DRAWING 04000-001	A/R	
10	HANGE CONTINUOUS ALUMINUM 3/16 [0.1875] THK WITH, 12.7 [0.50] MAXIMUM 1.52 [0.060] LEAF THICKNESS, MASTER CARR # 150435 OR EQUIVALENT	A/R	
9	POP RIVET, STAINLESS STEEL, 0.79-3.17 [0.031-125]	2	
8	POP RIVET, CLOSED END, STAINLESS STEEL, 0.79-4.57 [0.031-107] DRIP FLANGE, P/A # SDC5585R17 OR APPROVED EQUIV.	2	
7	STUD, SELF-DRILLING, 250-20, SS x 15.08 [0.625]	1	
6	STUD, SELF-DRILLING, 250-20, SS x 15.08 [0.625]	1	
5	STANDOFF, SELF-DRILLING, 112-40, SS, 1.627 [0.063]	2	
4	LATCH KEEPER USED WITH ITEM 3	5	
3	SOUTHCO P/A # K3-0334-02 OR APPROVED EQUIV.	1	
2	SOUTHCO P/A # K3-2403-02 OR APPROVED EQUIV.	1	
1	SHEET ALUM. ALLOY, 5005 H-34, 2.03 [0.080] THK (12 GA)	A/R	
	SHEET ALUM. ALLOY, 5005 H-34, 1.627 [0.063] THK (14 GA)	A/R	



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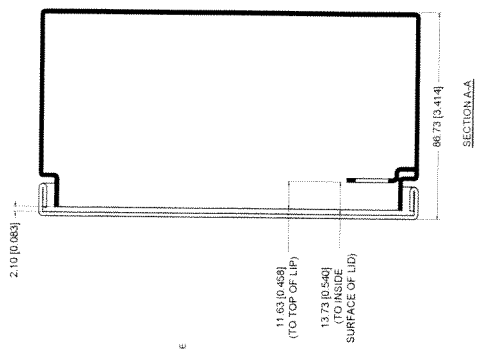
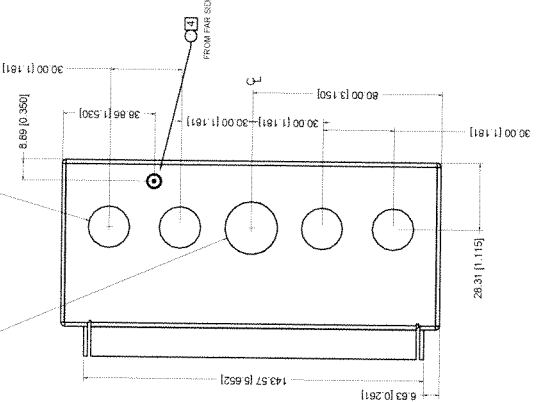
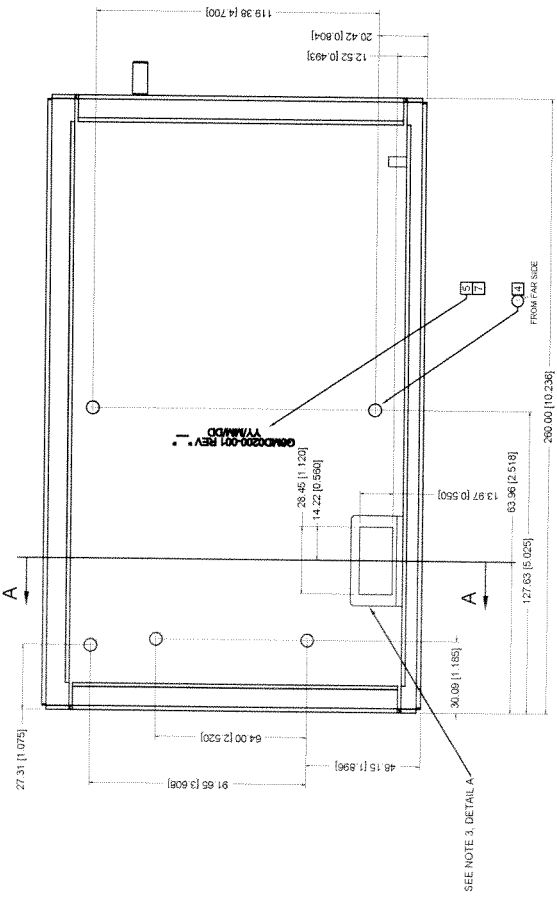
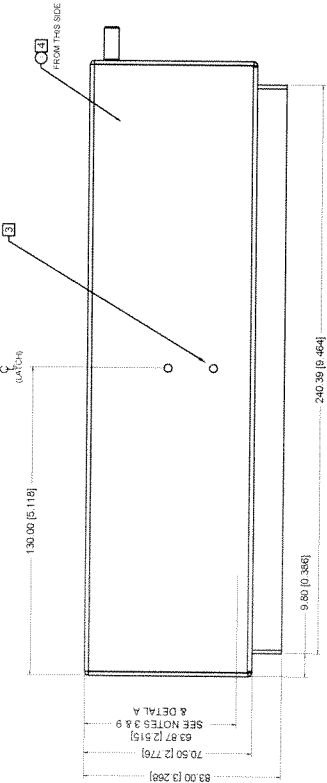
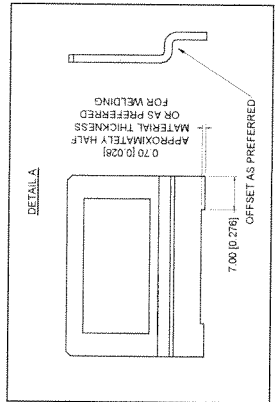
110, JOM CAVANAUGH DR
CAMPO, ONTARIO
CANADA T0A 1A0

1 2 3 4 5 6 7 8

DWG/PART No. G6MD0200-001 SH. 2 REV. A

ZONE	REV.	DESCRIPTION
1		ROUGH DESIGN FOR QUOTATION/SAMPLE
2		MODEL SCALED 1:1 IN CM CHANGED TO 1:1MM
3		UPDATES FROM FIRST SAMPLE
4		FINAL PRE-PRODUCTION DRAFT FOR INGRESS TEST
		CONFIGURATION BASELINE
A		PRODUCTION RELEASE

COMPUTER GENERATED
DRAWING. PLEASE MANUALLY
DO NOT SCALE DRAWING



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119 JOHN CAVANAGH DR
CANANDAIGUA, NY 14831

DWG/PART No.	G6MD0200-001
ESDM No.	G6MD0200-001
PROJECT	68327
SCALE	1:1
SHEET	2
OF	4

NOTES

DWG/PART No. G6MD0200-001 SHIT 3 REV. A

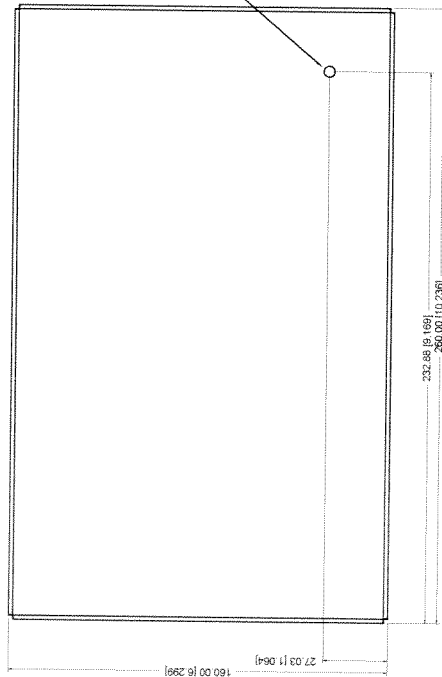
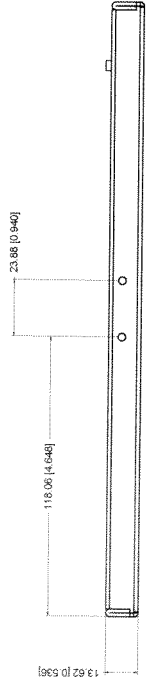
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	1	ROUGH DESIGN FOR QUOTATION/SAMPLE
	2	MODEL SCALED 1:1 IN ctm CHANGED TO 1:1mm
	3	UPDATES FROM FIRST SAMPLE
	4	FINAL PRE-PRODUCTION DRAFT FOR INGRESS TEST
	-	CONFIGURATION BASELINE
	A	PRODUCTION RELEASE

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DO NOT SCALE DRAWING

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3 4 5 6 7 8

D C A



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CAMP, ONTARIO
CANADA K0A 1L0

DWG SIZE	D	DWG/PART No.	G6MD0200
FROM No.	68327	PROJECT	G16MID012
SCALE	1:1	DWG TYPE	SEQUENCE
		DOC. TYPE	
		SHEET	3 OF 4
		EDITION	3 OF 4

NOTES

8 7 6 5 4 3 2 1

A B C D

DWG/PART No: G6MD0200-001 SHT 4 REV. A

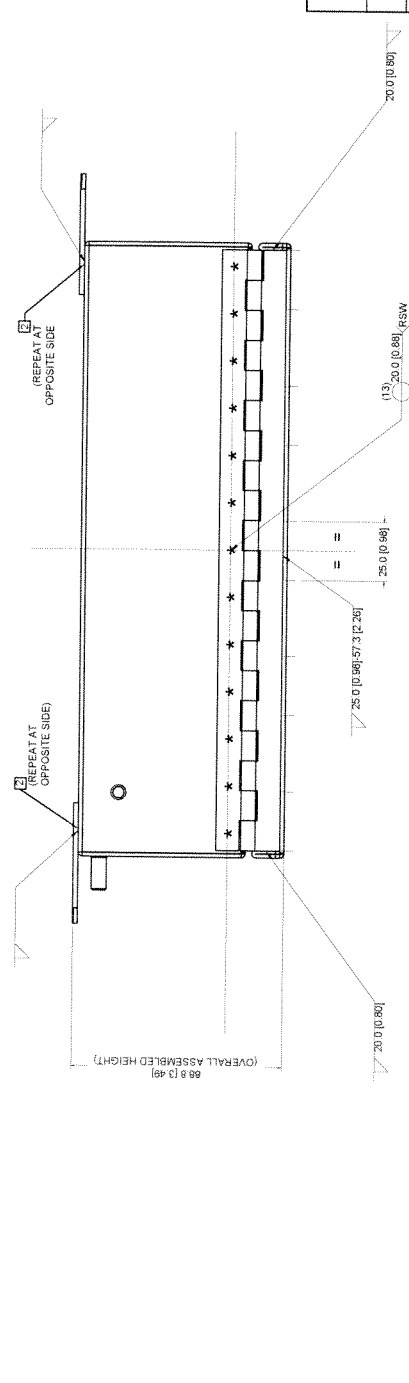
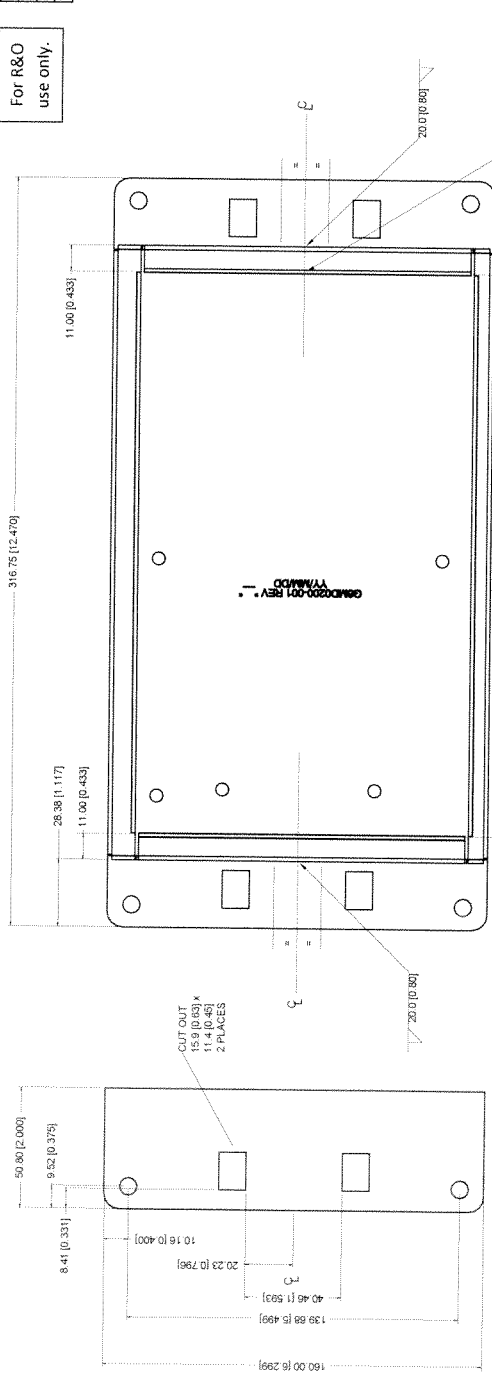
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REV.	DESCRIPTION
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3 4 5 6 7 8



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CAMP, ONTARIO
CANADA M2A 1L0

DWG/PART No.	G6MD0200-001		
FORM No.	0101	DATE	0101
PROJECT	0101	DWG TYPE	0101
SEQUENCE	0101	DWG. TYPE	0101
SCALE	1 : 1	SHEET	4 OF 4

NOTES