



DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION
FACILITIES DEVELOPMENT DIVISION

APPLICATION FOR HCAI SPECIAL SEISMIC
CERTIFICATION PREAPPROVAL (OSP)

OFFICE USE ONLY

APPLICATION #: OSP-0508

HCAI Special Seismic Certification Preapproval (OSP)

Type: ☐ New ☒ Renewal

Manufacturer Information

Manufacturer: Bryan Steam, LLC

Manufacturer's Technical Representative: Gregory Minard

Mailing Address: 783 North Chili Ave., Peru, IN 46970

Telephone: (765) 473-6651

Email: gminard@bryansteam.com

Product Information

Product Name: Industrial Control Panels

Product Type: Pump Control Panels

Product Model Number: Alarm and Pump Panels, 173-0304 and 173-0315

General Description: Galvanized carbon steel enclosures with internal components as listed in the attachments.

Mounting Description: Rigid, Wall Mounted

Tested Seismic Enhancements: None

Applicant Information

Applicant Company Name: The VMC Group

Contact Person: John Giuliano

Mailing Address: 113 Main Street, Bloomingdale, NJ 07403

Telephone: (973) 838-1780

Email: john.giuliano@thvmcgroup.com

Title: President



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California Licensed Structural Engineer Responsible for the Engineering and Test Report(s)

Company Name: THE VMC GROUP

Name: Kenneth Tarlow

California License Number: S2851

Mailing Address: 980 9th Street, 16th Floor, Sacramento, CA 95814

Telephone: (832) 627-2214

Email: ken.tarlow@thevmcgroup.com

Certification Method

☐ GR-63-Core

☒ ICC-ES AC156

☐ IEEE 344

☐ IEEE 693

☐ NEBS 3

☐ Other (Please Specify): _____

Testing Laboratory

Company Name: DYNAMIC CERTIFICATION LABORATORY (DCL)

Contact Person: Kelly Laplace

Mailing Address: 1315 Greg St., Ste 109, Sparks NV 89431

Telephone: (775) 358-5085

Email: kelly@shaketest.com



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Seismic Parameters

Design Basis of Equipment or Components (F_p/W_p) = 1.50 (SDS = 2.0, z/h = 1); 1.13 (SDS = 2.5, z/h = 0)

SDs (Design spectral response acceleration at short period, g) = 2.00 (z/h = 1) & 2.50 (z/h = 0)

a_p (Amplification factor) = 2.5

R_p (Response modification factor) = 6.0

Ω_0 (System overstrength factor) = 2.0

I_p (Importance factor) = 1.5

z/h (Height ratio factor) = 1 and 0

Natural frequencies (Hz) = See Attachment

Overall dimensions and weight = See Attachment

HCAI Approval (For Office Use Only) - Approval Expires on 03/01/2028

Date: 3/1/2022

Name: Mohammad Karim

Title: Supervisor, Health Facilities

Special Seismic Certification Valid Up to: SDS (g) = See Above

z/h = See Above

Condition of Approval (if applicable):

Table 1: Certified Control Panels

Model Number	Description	Phase	Input Voltage [VAC]	FLA [A]	NEMA Rating	Unit Dimensions [in]			Maximum Weight [lbs]	Manufacturer	Enclosure Construction	Installation Method	UUT
						Height	Width	Depth					
173-0304	Alarm Panel	1	120	0.3	12	15	13	8	26	Bryan Steam	14 gauge Carbon Steel	Wall Mounted	UUT 1
173-0315	Pump Panel	3	460	9	12	30	24	11	105				UUT 2

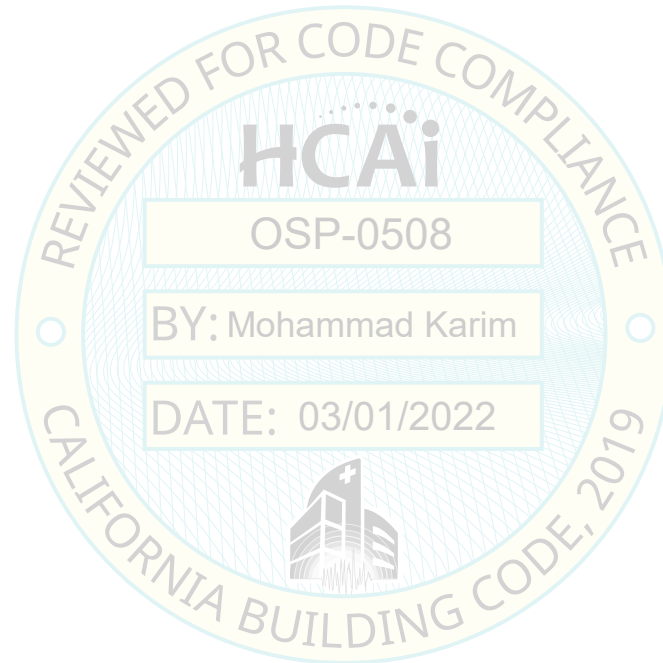


Table 2: Certified Alarm Control Panel Subcomponents

Component	Part #	Weight [lb]	Manufacturer	Material	UUT
Terminal Stop End Anchor	1492-EAJ35	< 0.50	Allen Bradley	Plastic	UUT-1
Terminal	1492-J3	< 0.50			
Ground Terminal	1492-JG4	< 0.50			
Terminal Center Jumpers	1492-CJLJ5-50	< 0.50			
Red Pilot Lamp	800FP-P4PN5R	< 0.50			
Selector Switch	800FP-SM22PX10	< 0.50			
Alarm Silencing Switch	800FP-F2PX10	< 0.50			
Markers	1492-MS10X17	< 0.50			
Terminal Block Markers	1492-MS5X12	< 0.50			
DPDT Relay	700-HLT12U1	< 0.50			
Jumpers	700-TBJ20R	< 0.50			
Terminal Strip Fuse Holder	1492-H6	< 0.50			
Alarm Sounder	855P-B10LE22	0.14			
Terminal Strip End Barrier	1492-N37	< 0.50			
Din Rail	199-DR1	< 0.50	Allen Bradley	Carbon Steel	
Stepdown Transformer	1497B-A1-M13-3-N	3.00			
5 Amp 250 V Fuse	MDL-5-R	< 0.50	Bussmann	Copper	
3-2/10 Amp 250 V Amp Fuse	FNM-3-2/10	< 0.50			
2½ Amp Fuse	LP-CC-2½	< 0.50			
Panel Insert	A14P12	3.14	Hoffman	Carbon Steel	
1" Wide Wiring Duct	F1X2LG6	< 0.50	Panduit	Plastic	
1" Wide Wiring Duct Cover	C1LG6	< 0.50			
Grounding Bar Kit	ECGB20	< 0.50	Siemens	Copper	
Controller	RWF55.5	0.73		Plastic	

DATE: 03/01/2022

Table 3: Certified Pump Control Panel Subcomponents

Component	Part #	Weight [lb]	Manufacturer	Material	UUT
Terminal Stop End Anchor	1492-EAJ35	< 0.50	Allen Bradley	Plastic	UUT-2
Terminal	1492-J3	< 0.50			
Ground Terminal	1492-JG4	< 0.50			
Terminal Center Jumpers	1492-CJLJ5-50	< 0.50			
Contactor	100-C09D10	0.505			
Overload	193-EECB E1	< 0.50			
Selector Switch	800FP-SM32PX20	< 0.50			
Selector Switch	800FP-SM22PX10	< 0.50			
Power Distribution Block	1492-PDM3141	< 0.50			
Power Distribution Block Cover	1492-PBC9	< 0.50			
Disconnect Switch	194R-J30-1753	< 0.50			
Disconnect Switch Handle	194R-PB	< 0.50			
Disconnect Switch Internal Operating Handle	194R-N1	< 0.50			
Green Pilot Lamp	800FP-P3PN5G	< 0.50			
SPDT Slim Line Relay	700-HK32A1	< 0.50			
8 Blade Based Minature Relay Socket	700-HN122	< 0.50			
On Delay Timing Relay	700-FEA1TU22	0.13			
Red Pilot Lamp	800FP-P4PN5R	< 0.50			
Terminal Block Markers	1492-MS5X12	< 0.50			
Din Rail	199-DR1	< 0.50			
Control Circuit Transformer	1497-G-BASX-3-N	19.95		Carbon Steel	
5 Amp Fuse	LP-CC-5	< 0.50	Bussmann	Copper	
5 Amp Fuse	FNM-5	< 0.50			
5 Amp Fuse	LPJ-5SP	< 0.50			
Panel Insert	A30P24G	19.00	Hoffman	Carbon Steel	
2¼" Wide Wiring Duct	F2X2LG6	< 0.50	Panduit	Plastic	
2¼" Wide Wiring Duct Cover	C2LG6	< 0.50			
Grounding Bar Kit	ECGB20	< 0.50	Siemens	Copper	



UNIT UNDER TEST (UUT) Summary Sheet

UUT-1

Test Report: VMA-50812-01E

Model Line	Model Number	Manufacturer
Control Panel	173-0304	Bryan Steam

Product Construction Summary

14 Gauge Carbon Steel Enclosure

Options / Subcomponent Summary

Red Pilot Lamp, Selector Switch, Alarm Silencing Switch, DPDT Relay, Stepdown Transformer, Alarm Sounder, Grounding Bar Kit, Controller

UUT Properties

Weight [lbs]	Dimensions [in]			Lowest Nat. Freq. [Hz]		
	Length	Width	Height	F-B	S-S	V
26	8.0	13.0	15.0	N/A	N/A	N/A

UUT Highest Passed Seismic Run Information

Building Code	Test Criteria	S_{DS}	z/h	I_p	A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
CBC 2019	ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	-	-
		2.50	0.0	1.5	-	-	1.68	0.68

Test Mounting Details

UUT-1 was mounted directly to the wall fixture using (4) 1/4" diameter Grade 5 bolts. The wall fixture was rigidly attached to the shake table.



All units were filled with contents and maintained structural integrity and functionality after AC-156 test.



UNIT UNDER TEST (UUT) Summary Sheet

UUT-2

Test Report: VMA-50812-01E

Model Line	Model Number	Manufacturer
Control Panel	173-0315	Bryan Steam

Product Construction Summary

14 Gauge Carbon Steel Enclosure

Options / Subcomponent Summary

Red Pilot Lamp, Selector Switch, Alarm Silencing Switch, DPDT Relay, Stepdown Transformer, Alarm Sounder, Grounding Bar Kit, Controller

UUT Properties

Weight [lbs]	Dimensions [in]			Lowest Nat. Freq. [Hz]		
	Length	Width	Height	F-B	S-S	V
105	11.0	24.0	30.0	N/A	N/A	N/A

UUT Highest Passed Seismic Run Information

Building Code	Test Criteria	S_{DS}	z/h	I_p	A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
CBC 2019	ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	-	-
		2.50	0.0	1.5	-	-	1.68	0.68

Test Mounting Details

UUT-2 was mounted directly to the wall fixture using (4) 3/8" diameter Grade 5 bolts. The wall fixture was rigidly attached to the shake table.



All units were filled with contents and maintained structural integrity and functionality after AC-156 test.