



**OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
FACILITIES DEVELOPMENT DIVISION**

**APPLICATION FOR OSHPD SPECIAL SEISMIC
CERTIFICATION PREAPPROVAL (OSP)**

OFFICE USE ONLY	
APPLICATION #:	OSP – 0626

OSHPD Special Seismic Certification Preapproval (OSP)

Type: New Renewal

Manufacturer Information

Manufacturer: Intelligent Power Solutions

Manufacturer's Technical Representative: Rob Inman

Mailing Address: 741 N. Main Street, Orange, CA 92868

Telephone: (714) 769-8522 Email: rob@intelligentpowersolutions.com

Product Information

Product Name: Intelligent Power Solutions Maintenance Bypass Cabinet

Product Type: Maintenance Bypass Cabinet OSP-0626

Product Model Number: See attached
(List all unique product identification numbers and/or part numbers)

General Description: The Maintenance Bypass Cabinet is composed of the following: Breaker / Contactor, Breaking Resistors, Fans, Control Transformer, Electrical Components, Kirk Locks, and the Enclosure.

Mounting Description: Rigid Base Mount

Applicant Information


Applicant Company Name: The VMC Group

Contact Person: John Giuliano

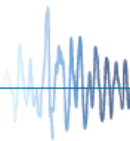
Mailing Address: 113 Main Street, Bloomingdale, NJ 07403

Telephone: (973) 838-1780 Email: john.giuliano@thevmcgroup.com

I hereby agree to reimburse the Office of Statewide Health Planning and Development review fees in accordance with the California Administrative Code, 2016.

Signature of Applicant:  Date: 10/29/19
Title: President Company Name: The VMC Group

"Access to Safe, Quality Healthcare Environments that Meet California's Diverse and Dynamic Needs"





**OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
FACILITIES DEVELOPMENT DIVISION**

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

Company Name: The VMC Group

Name: Kenneth Tarlow California License Number: S-2851

Mailing Address: 113 Main Street, Bloomingdale, NJ 07403

Telephone: (973) 838-1780 Email: ken.tarlow@thevmcgroup.com

Supports and Attachments Preapproval

- Supports and attachments are preapproved under OPM- _____
(Separate application for OSHPD Preapproval of Manufacturer's Certification (OPM) of Supports and attachments is required)
- Supports and attachments are not preapproved

Certification Method

- Testing in accordance with: ICC-ES AC156
- Other (Please Specify): _____

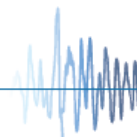
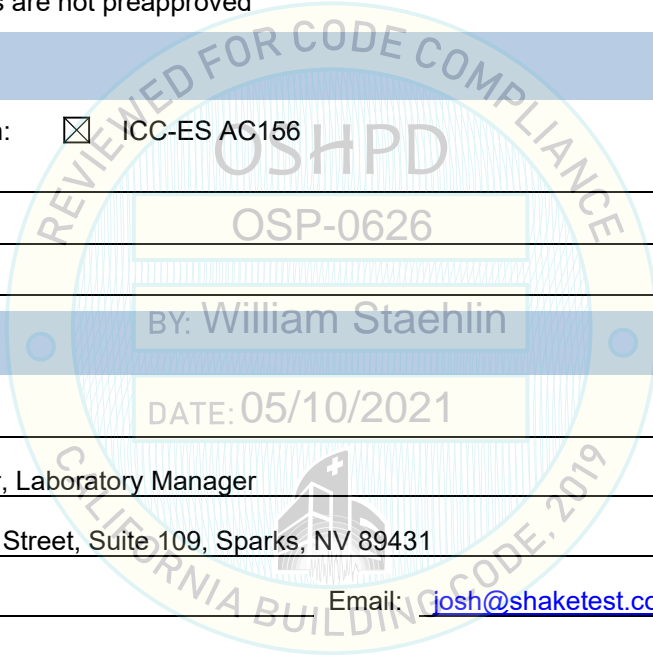
Testing Laboratory

Company Name: DCL Labs

Contact Name: Josh Sailer, Laboratory Manager

Mailing Address: 1315 Greg Street, Suite 109, Sparks, NV 89431

Telephone: (775) 358-5085 Email: josh@shaketest.com





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Seismic Parameters

Design in accordance with ASCE 7-10 Chapter 13: Yes No

Design Basis of Equipment or Components (F_p/W_p) = 1.44

S_{DS} (Design spectral response acceleration at short period, g) = 2.00

a_p (In-structure equipment or component amplification factor) = 1.0

R_p (Equipment or component response modification factor) = 2.5

Ω_0 (System overstrength factor) = 2.0

I_p (Importance factor) = 1.5

z/h (Height factor ratio) = 1

Equipment or Component Natural Frequencies (Hz) = See attachment

Overall dimensions and weight (or range thereof) = See attachment

Equipment or Components @ grade designed in accordance with ASCE 7-10 Chapter 15: Yes No

Design Basis of Equipment or Components (V/W) = _____

S_{DS} (Design spectral response acceleration at short period, g) = _____

S_{D1} (Design spectral response acceleration at 1 second period, g) = _____

R (Response modification coefficient) = _____

Ω_0 (System overstrength factor) = by William Staehlin

C_d (Deflection amplification factor) = _____

I_p (Importance factor) = 1.5

Height to Center of Gravity above base = _____

Equipment or Component Natural Frequencies (Hz) = _____

Overall dimensions and weight (or range thereof) = _____

Tank(s) designed in accordance with ASME BPVC, 2015: Yes No

List of Attachments Supporting Special Seismic Certification

Test Report(s) Drawings Calculations Manufacturer's Catalog

Other(s) (Please Specify): _____

OSHPD Approval (For Office Use Only) – Approval Expires on December 31, 2025

Signature: William Staehlin

Date: May 10, 2021

Print Name: William Staehlin

Title: Senior Structural Engineer

Special Seismic Certification Valid Up to: S_{DS} (g) = 2.00

z/h = 1

Condition of Approval (if applicable): _____

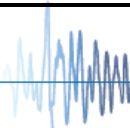


Table 1 - Certified Components

Mounting Configuration: Rigid Base Mount

Certification Level: $S_{DS} = 2.00g$, $z/h=1.0$

Manufacturer: Intelligent Power Solutions (by Systemes de Support Informatique)



Model Number	Description	Max. Dimensions (in)			Measured Weight (lb)	Unit
		Depth	Width	Height		
UP-2-125-3G6G-DE-MAN-R-O	4 Breaker MBS with Breaking Resistors	33.0	33.0	79.0	600.0	UUT 1

Note: Unit manufacturing process is ISO 9001 certified.



Table 2 - Certified Subcomponents

Mounting Configuration: Rigid Base Mount

Certification Level: S_{DS} = 2.00g, z/h=1.0

Manufacturer: Intelligent Power Solutions (by Systemes de Support Informatique)



Subcomponent	Manufacturer Name	Model Number	Description	Material	Measured Weight (lb)	Unit
Breaker / Contactor	ABB	XT3	Molded case circuit breakers 200A Circuit Breaker	Molded insulating cases made of synthetic resins reinforced with glass fibers; anti-corrosion treatment of the main metallic parts	13.9	UUT 1
	ABB	XT1	Molded case circuit breakers 15A Circuit Breaker	Molded insulating cases made of synthetic resins reinforced with glass fibers; anti-corrosion treatment of the main metallic parts	1.4	UUT 1
	ABB	AF09-30-10-13	Breaking Resistor Contactor	Molded insulating cases made of synthetic resins reinforced with glass fibers; anti-corrosion treatment of the main metallic parts	1.0	UUT 1
Breaking Resistor Assembly	Transfab	10.5kW, 480VAC 3 phase	Resistor structure	16 gage galvanized steel painted ANSI 61 gray	73.0	UUT 1
		54105	Resistor body	Cordierite		UUT 1
Fans	ebm-papst	W2E200-HH86-01	120VAC, (2) 603 CFM axial fans	Die cast aluminium structure, copper motor windings, bearings, propeller	12.0	UUT 1
Control Transformer	Transfab	EXA025036	250VA control transformer 480V to 120V	Magnetic steel, copper conductors, steel base	7.1	UUT 1
Electrical Components	ABB	E91/30sCC / E92/30sCC	Fuse holders 1P / 2P	Plastic insulation, copper, etc	0.5	UUT 1
	ABB	NF22E-14	Power control relay	Plastic insulation, copper, etc	0.7	UUT 1
	ABB	CR-M120AC2L	Buzzer control relay	Plastic insulation, copper, etc	0.1	UUT 1
	ABB	CT-AHD,12	OFF-DELAY control relay	Plastic insulation, copper, etc	0.1	UUT 1
	ABB	CP3-12R-10	Push buttons	Plastic insulation, copper, etc	0.0	UUT 1
	ABB	CB1-621B	Buzzer	Plastic insulation, copper, etc	0.0	UUT 1
	Mersen	MPDB67251 / MPDBC6667	Terminal blocks	Plastic insulation, copper, etc	0.6	UUT 1
	WAGO	2002-1201	Terminals	Plastic insulation, copper, etc	0.7	UUT 1
	ITC	111.013	Din rail	Carbon steel	0.1	UUT 1
	Edison	HCTR1 / HCTR2	Fuses	Conductor, insulation	0.1	UUT 1
Anixter	1284-2/0/1330-0	Insulated copper conductors TEW 105°C	Plastic insulation, copper, etc	1.0	UUT 1	
Kirk Locks	Kirk Key Interlock Company	KFL015010S-A2	Locking device for a sequence	Brass and steel	0.5	UUT 1
Enclosure	SSI	SSI-00133-1901	Maintenance bypass cabinet for 125kVA UPS with breaking resistors	Carbon steel	467.0	UUT 1

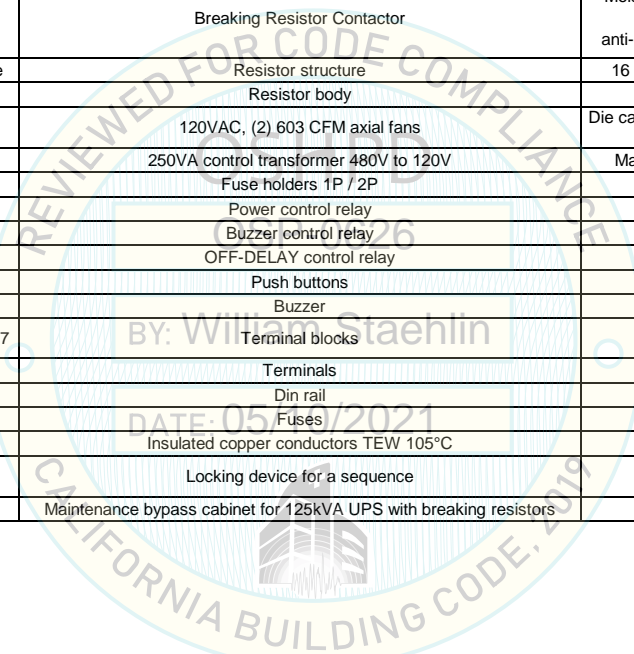


Table 3 - Tested Units

Mounting Configuration: Rigid Base Mount

Certification Level: $S_{DS} = 2.00g$, $z/h=1.0$

Manufacturer: Intelligent Power Solutions (by Systemes de Support Informatique)



Model Number	Description	Max. Dimensions (in)			Measured Weight (lb)	Unit
		Depth	Width	Height		
UP-2-125-3G6G-DE-MAN-R-O	4 Breaker MBS with Breaking Resistors	33.0	33.0	79.0	600.0	UUT 1



UUT 1	
Unit Under Test (UUT) Summary Sheet	

Manufacturer:	Intelligent Power Solutions (by Systemes de Support Informatique)
Product Line:	Maintenance Bypass Cabinet
Model Number:	UP-2-125-3G6G-DE-MAN-R-O
Mounting:	Rigid Base Mount

Product Construction Summary:
Powder Coated Carbon Steel

Options / Component Summary:
Breaker/Contactor, Breaking Resistor, Fans, Control Transformer, Electrical Components, Kirk Locks, and Enclosure.

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.

UUT Properties

Operating Weight (lb)	Dimensions (inches)			Lowest Natural Frequency (Hz)		
	Length	Width	Height	Front-Back	Side-Side	Vertical
600.0	33.0	33.0	79.0	15.0	26.5	>33.3

Seismic Test Parameters

Building Code	Test Criteria	Sds (g)	z/h	Ip	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2016	ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	1.33	0.53

Unit Mounting Description:



UUT 1 was rigid base mounted to the DCL table interface plate with (4) ½" grade 8 bolts, lock washers, and flat washers. The bolts were spaced 30" widthwise on center and 27.5" lengthwise on center. The DCL table interface plate was bolted directly to the shake table.