



**DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION
OFFICE OF STATEWIDE HOSPITAL PLANNING AND DEVELOPMENT**

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

OFFICE USE ONLY

APPLICATION #: OSP-0235

HCAI Special Seismic Certification Preapproval (OSP)

Type: New Renewal

Manufacturer Information

Manufacturer: Schneider Electric Pvt Ltd.

Manufacturer's Technical Representative: Allen Amanna

Mailing Address: Argon North Tower, Bagamane Solarium City, Kundalahalli Road, Doddanekundi Village, K R Puram Hobli, Bengaluru, 560037 Karnataka, India

Telephone: +91 97 4135 5576

Email: allen.amanna@se.com

Product Information

Product Name: InfraStructure (ISX) PDU

Product Model Number(s): See Certified Product Table Attached

Product Category: Panelboards

Product Sub-Category: Power Distribution Units

General Description: Infrastructure (ISX) power distribution units ranging from 20kVA to 175kVA.

Mounting Description: Base Mounted Rigid -

Tested Seismic Enhancements: Seismic enhancements made to the test units and/or modifications required to address anomalies during the tests shall be incorporated into the production units.

Applicant Information

Applicant Company Name: TRU Compliance, by Structural Integrity Associates, Inc.

Contact Person: Victoria Ahrens

Mailing Address: 233 SW Wilson Ave, Suite 101, Bend, OR 97702

Telephone: (541) 292-5820

Email: vahrens@structint.com

Title: Certification Engineer





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

Company Name: STRUCTURAL INTEGRITY ASSOCIATES, INC.
Name: LACHEZAR HANDZHIYSKI California License Number: S6515
Mailing Address: 5215 Hellyer Avenue, Suite 210, San Jose, CA 95138
Telephone: (669) 437-0200 Email: Lhandzhiyski@StructInt.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

Company Name: NATIONAL TECHNICAL SYSTEMS (NTS)
Contact Person: Greg Mason
Mailing Address: 7800 Highway 20 West, Huntsville AL 35806
Telephone: (256) 837-4411 Email: greg.mason@nts.com





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Seismic Parameters

Design Basis of Equipment or Components (F_p/W_p) = 1.043 (SDS=1.39 @ z/h=1); 0.675 (SDS=1.5 @ z/h=0)

SDS (Design spectral response acceleration at short period, g) = 1.39 (z/h = 1); 1.5 (z/h = 0)

a_p (Amplification factor) = 2.5

R_p (Response modification factor) = 6

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

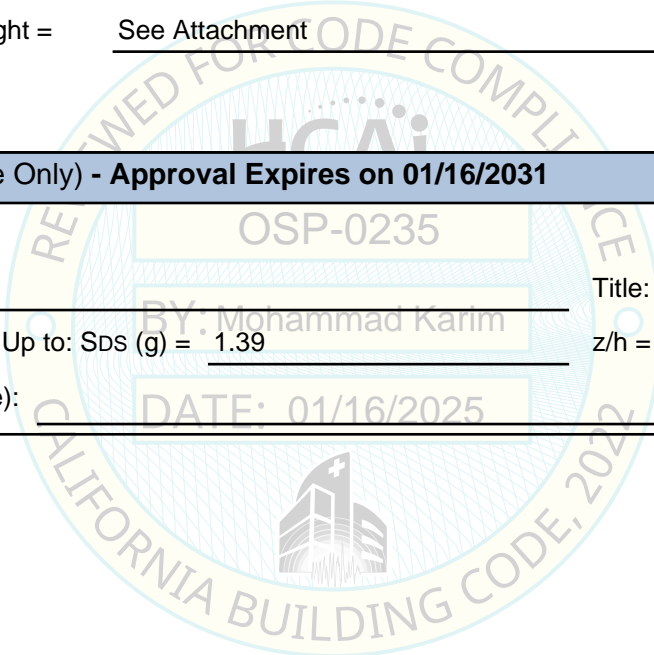
HCAI Approval (For Office Use Only) - Approval Expires on 01/16/2031

Date: 1/16/2025

Name: Mohammad Karim Title: Supervisor, Health Facilities

Special Seismic Certification Valid Up to: SDS (g) = 1.39 z/h = 1

Condition of Approval (if applicable): DATE: 01/16/2025



SPECIAL SEISMIC CERTIFICATION CERTIFIED COMPONENT MATRIX

2400810-CR-001-R1



Manufacturer: Schneider Electric Private Limited	TABLE 1
Model Line: InfraStructure (ISX) PDU	

Certified Product Construction Summary:
16 - 14 GA Cold Formed Carbon Steel, NEMA 1

Certified Options Summary:
See Subcomponent Tables

Mounting Configuration:
Base mounted - rigid
Note: Installed mounting must be of similar configuration and equivalent strength and stiffness to those tested.

Building Code: CBC 2022 **Seismic Certification Limits:** $S_{DS} = 1.39 g$ $z/h = 1.0$ $I_p = 1.5$
 $S_{DS} = 1.50 g$ $z/h = 0.0$

Model Line	SKU #	Dimensions (in)			Weight (lbs.)	Notes	UUT
		Depth	Width	Height			
InfraStructure (ISX) PDU	ISX20K20F	36.0	24.0	82.0	1,188	PX 20kVA	1
	PDRDPF10U-R	34.5	23.5	81.5	600	10U RDP, 28.8kVA, 208 V	Interp.
	PD40F6FK1-M	36.0	24.0	82.0	1,188	40kVA, 208:208V, MBP	3
	PDRPPNX10-M	34.5	23.5	81.5	1,150	40kVA, 208:208V, MBP, No Xfmr	Interp.
	PD40G6FK1-M	34.5	23.5	81.5	1,580	40kVA, 480:208V, MBP	Interp.
	PD40L6FK1-M	34.5	23.5	81.5	1,580	40kVA, 600:208V, MBP	Interp.
	PD60F6FK1	36.0	24.0	81.0	1,070	60kVA, 208:208V	5
	PDRPPNX10	34.5	23.5	81.5	775	60kVA, 208:208V, No Xfmr	Interp.
	PD60G6FK1	34.5	23.5	81.5	1,225	60kVA, 480:208V	Interp.
	PD60L6FK1	34.5	23.5	81.5	1,225	60kVA, 600:208V	Interp.
	PDPM72F-R	43.0	24.0	78.0	420	72kVA, 208V, 5U Modular RDP	6
	PDPM72F-5U	42.0	24.0	78.0	327	72kVA, 208V, 5U Modular RDP	Interp.
	SYMBP100F	42.0	12.0	78.0	380	100kVA, 208V, PX MBP	Interp.
	PDPM150G6F	42.0	24.0	78.0	2,150	144kVA, 480:208V, Modular	Interp.
	PDPM150L6F	42.0	24.0	78.0	2,150	144kVA, 600:208V, Modular	Interp.
	PDPB150G6F	42.0	24.0	78.0	2,150	150kVA, 84 pole	Interp.
	PDPM175G6H	42.0	24.0	79.0	2,000	175kVA, 480:415V, Modular	4
	PD150G6F	35.0	29.5	82.0	2,150	150kVA, 480:208V	2

SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

2400810-CR-001-R1



Manufacturer: Schneider Electric Private Limited Model Line: InfraStructure (ISX) PDU		Table Description: Enclosures		TABLE 2	
Building Code: CBC 2022		Seismic Certification Limits:		$S_{DS} = 1.39 g \quad z/h = 1.0$ $S_{DS} = 1.50 g \quad z/h = 0.0$	
				$I_p = 1.5$	
Component Type	Manufacturer	Model	Description	Notes	UUT
Enclosures	Schneider Electric	0M-815185A	12"Wx42"Dx78"H		Interp.
		0G-AR3100	24"Wx42"Dx78"H		6
		0M-814974	24"Wx42"Dx78"H		4
		0M-11465	24"Wx42"Dx78"H		Interp.
		0M-10702	24"Wx42"Dx78"H		Interp.
		0M-11082A	24"Wx42"Dx78"H		Interp.
		0M-1326B	23.5"Wx34.5"Dx81.5"H		1, 3, 5
		0M-3106D	23.5"Wx34.5"Dx81.5"H		Interp.
		AR2381BLKX311	29.5"Wx34.5"Dx81"H		2

SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

2400810-CR-001-R1



Manufacturer: Schneider Electric Private Limited Model Line: InfraStructure (ISX) PDU		Table Description: Electrical Components		TABLE 3	
Building Code: CBC 2022		Seismic Certification Limits:		$S_{DS} = 1.39 g \quad z/h = 1.0$ $S_{DS} = 1.50 g \quad z/h = 0.0$	
				$I_p = 1.5$	
Component Type	Manufacturer	Model	Description	Notes	UUT
Panel Boards	Square D	530-0355	225A, 42-poles		1
		530-2023	225A, 42-poles		3
		530-2189	225A, 42-poles		5
		530-4000	225A, 42-poles		3
		530-0364	400A, 42-poles		2
Transformers	Philippine Electric Corporation (PhEC)	430-4106B	60kVA, 208:208, LVT		3
		430-4105B	60kVA, 480:208, LVT		Interp.
		430-4107B	60kVA 600:208, LVT		Interp.
		430-0664	150kVA, 208:208, LVT		Interp.
		430-0663	150kVA, 480:208, LVT		Interp.
		430-0361A	150kVA, 480:208, LVT		2
		430-0662	150kVA 600:208, LVT		Interp.
	430-0796	175kVA, 480:415, LVT		Interp.	
	Schneider Electric	430-10064	60kVA, 208:208, LVT		5
		430-10066	60kVA, 480:208, LVT		Interp.
		430-10065	60kVA 600:208, LVT		Interp.
		430-10067	150kVA, 208:208, LVT		Interp.
		430-10063	150kVA, 480:208, LVT		Interp.
		430-92022	150kVA 600:208, LVT		Interp.
		430-10068	175kVA, 480:415, LVT		4
Busbar	Schneider Electric	0M-9684	200A (5U)		6
		0M-9744	400A (RPP)		Interp.
		0M-8747	400A (RPP)		4

SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

2400810-CR-001-R1



Manufacturer: Schneider Electric Private Limited		Table Description: Electrical Components		TABLE 3	
Model Line: InfraStructure (ISX) PDU					
Building Code: CBC 2022		Seismic Certification Limits:			
		$S_{DS} = 1.39 g$ $z/h = 1.0$		$I_P = 1.5$	
		$S_{DS} = 1.50 g$ $z/h = 0.0$			
Component Type	Manufacturer	Model	Description	Notes	UUT
Static Bypass Switch	Schneider Electric	0G-SYSW40KF			1
Assembly for Static Bypass Switch	Schneider Electric	0M-4069			1
Battery	Schneider Electric	0G-SYBTU1			1
		0G-SYBTU2			Extrap. ¹
Power Module	Schneider Electric	0G-SYPM10KF	10kVA		1
		0G-SYPM10KF2	10kVA		Extrap. ¹
Intelligence Module	Schneider Electric	0G-SYMIM4			1
Display Assembly	Schneider Electric	0G-9215RM-A	20char X 4lines		1, 2, 3, 5
		0G-9233	122 X 32 dot		4, 6
Printed Circuit Board (PCB)	Schneider Electric	0M-5103	XPDU MR1 + PS		2, 3, 5
		0G-9354-01	XRDP MR1		6
		0G-9357	XRDP MR2		4
		0G-9357-01	X84P MR2		Interp.
		0G-SY2CSPS	Metering + PS		1
		0G-SYCDCI	ISX		1
Fans	NMB	490-1020	24VDC (3200rpm)		1
	EBM	490-0180	120VAC, 50/60Hz (2800-3300rpm)		Interp.
		490-0181	240VAC, 50/60Hz (2800-3300rpm)		4
		490-1050B	240VAC, 50/60Hz (2650-3100rpm)		2
Power Distribution Module (PDM)	Schneider Electric	PDM1320			4
		PDM3520			4

Notes:

1. Structurally identical to tested unit except for branding .

SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

2400810-CR-001-R1



Manufacturer: Schneider Electric Private Limited	Table Description: Protection and Disconnections	TABLE 4
Model Line: InfraStructure (ISX) PDU		

Building Code: CBC 2022	Seismic Certification Limits:	$S_{DS} = 1.39 g$ $z/h = 1.0$	$I_p = 1.5$
		$S_{DS} = 1.50 g$ $z/h = 0.0$	

Component Type	Manufacturer	Model	Description	Notes	UUT	
Disconnect Switch	ABB	560-0205	100A, 3-pole		1	
		540-0159	150A, 3-pole		Interp.	
		530-4018A	225A, 3-pole		Interp.	
		540-0083A	225A, 3-pole		3, 5	
Circuit Breaker	ABB	530-0306	175A, 3-pole		5	
		530-0632A	200A, 3-pole		2	
		530-4013A	200A, 3-pole		3	
		530-0439	225A, 3-pole		2	
		530-0679A	400A, 3-pole		2	
		530-4014A	150A, 4-pole		3	
	Square D	Square D	530-2454	250A, 3-pole		Interp.
			530-2235	250A, 3-pole		Interp.
			530-2237	250A, 3-pole		Interp.
			530-2386	250A, 3-pole		1
			530-2452	400A, 3-pole		4
			530-2552	400A, 3-pole		Interp.
			530-1913	400A, 3-pole		Interp.
			530-2236	400A, 3-pole		Interp.
			530-2549	600A, 3-pole		4
530-2551	400A, 4-pole		Interp.			
530-2550	600A, 4-pole		4			

SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

2400810-CR-001-R1



Manufacturer: Schneider Electric Private Limited	Table Description: Protection and Disconnections	TABLE 4
Model Line: InfraStructure (ISX) PDU		

Building Code: CBC 2022 **Seismic Certification Limits:** $S_{DS} = 1.39 g$ $z/h = 1.0$ $I_p = 1.5$
 $S_{DS} = 1.50 g$ $z/h = 0.0$

Component Type	Manufacturer	Model	Description	Notes	UUT
Branch Breaker	Square D	PD1P20ABBSD	20A, 1-pole		1, 2
		PD2P20ABBSD	20A, 2-pole		2
		PD2P30ABBSD	30A, 2-pole		2
		PD3P20ABBSD	20A, 3-pole		2, 3
		PD3P50ABBSD	50A, 3-pole		2
		PD3P80ABBSD	80A, 3-pole		1
		530-2215	150A, 3-pole		Interp.
Control Breaker	Airpax	530-0039-001	15A, 1-pole		2, 3, 5
	Schneider Electric	530-1497	5A, 1-pole		4
		530-1136	5A, 3-pole		6

UNIT UNDER TEST (UUT) SUMMARY SHEET

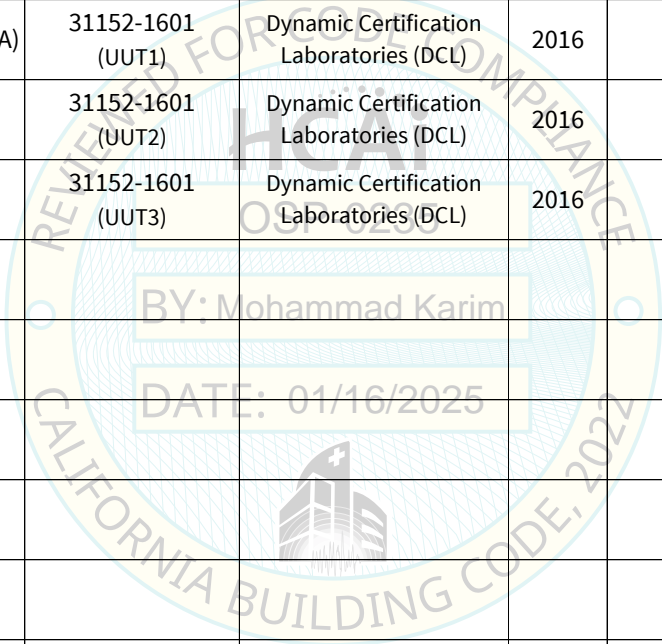
2400810-CR-001-R1



Manufacturer: Schneider Electric Private Limited

Model Line: InfraStructure (ISX) PDU

UUT	Unit Description	Report Number	Testing Lab	Year Tested	ISO 17025 Accredited?	S _{DS}	z/h	I _p
1	ISX PDU PX 20kVA	58640R11-5 (UUT-1)	NTS-Huntsville (formerly Wyle)	2011	Yes	1.94 3.10	1.0 0.0	1.5
2	ISX PDU 150kVA	58640R11-4 (UUT-1)	NTS-Huntsville (formerly Wyle)	2011	Yes	2.13 3.41	1.0 0.0	1.5
3	ISX PDU 40kVA	58640R11-3 (UUT-1)	NTS-Huntsville (formerly Wyle)	2011	Yes	2.13 3.41	1.0 0.0	1.5
4	PDPM175G6H (175kVA)	31152-1601 (UUT1)	Dynamic Certification Laboratories (DCL)	2016	Yes	1.39 1.50	1.0 0.0	1.5
5	PD60F6FK1 (60kVA)	31152-1601 (UUT2)	Dynamic Certification Laboratories (DCL)	2016	Yes	1.97 1.97	1.0 0.0	1.5
6	PDPM72F-R (72kVA)	31152-1601 (UUT3)	Dynamic Certification Laboratories (DCL)	2016	Yes	1.96 1.96	1.0 0.0	1.5



Notes:

UNIT UNDER TEST (UUT) SUMMARY SHEET

2400810-CR-001-R1



Manufacturer: Schneider Electric Private Limited	UUT 1
Model Line: InfraStructure (ISX) PDU	
Model Number: ISX PDU PX 20kVA	
Serial Number: OF11241L0042	
Test Report: 58640R11-5 (UUT-1)	

UUT Properties						
Weight (lbs.)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
1,188	36.0	24.0	82.0	5.1	3.9	21.5

UUT Highest Passed Seismic Run Information									
Building Code	Test Criteria	S _{DS} (g)	z/h	I _P	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)	
CBC 2022	ICC-ES AC156	1.94	1.0	1.5	3.10	2.33	2.07	0.83	
		3.10	0.0						

Product Construction Summary: 16 - 14 ga Cold Formed Steel, NEMA 1	Test Mounting Details:
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Options/Subcomponent Summary:		
Description	Mfr.	Part Number
Enclosure	Schneider Electric	0M-1326B
Panel Boards	Square D	530-0355
Static Bypass Switch	Schneider Electric	0G-SYSW40KF
Assembly for Static Bypass Switch	Schneider Electric	0M-4069
Battery	Schneider Electric	0G-SYBTU1
Power Module	Schneider Electric	0G-SYPM10KF
Intelligence Module	Schneider Electric	0G-SYMIM4
Display Assembly	Schneider Electric	0G-9215RM-A
Printed Circuit Board (PCB)	Schneider Electric	0G-SY2CSPS, 0G-SYCDCI
Fan	NMB	490-1020
Disconnect Switch	ABB	560-0205
Circuit Breaker	Square D	530-2386
Branch Breaker	Square D	PD1P20ABBSD, PD3P80ABBSD



UUT1 was base mounted - rigid to the fixture using four (4) 1/2" - 13 Grade 5 bolts and washers, torqued to 70ft.-lbs. Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test. Contents were included in testing per operating conditions.

UNIT UNDER TEST (UUT) SUMMARY SHEET

2400810-CR-001-R1



Manufacturer: Schneider Electric Private Limited					UUT 2				
Model Line: InfraStructure (ISX) PDU									
Model Number: ISX PDU 150kVA									
Serial Number: OF10471L0028									
Test Report: 58640R11-4 (UUT-1)									
UUT Properties									
Weight (lbs.)	Dimension (in)			Lowest Natural Frequency (Hz)					
	Depth	Width	Height	Front-Back	Side-Side	Vertical			
2,150	35.0	29.5	82.0	4.7	4.0	18.0			
UUT Highest Passed Seismic Run Information									
Building Code	Test Criteria	S _{DS} (g)	z/h	I _P	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)	
CBC 2022	ICC-ES AC156	2.13	1.0	1.5	3.41	2.55	2.27	0.91	
		3.41	0.0						
Product Construction Summary:					Test Mounting Details:				
16 - 14 ga Cold Formed Steel, NEMA 1					<p>UUT2 was base mounted - rigid to the fixture using four (4) 1/2" - 13 Grade 5 bolts and washers, torqued to 70ft.-lbs. Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test. Contents were included in testing per operating conditions.</p>				
Options/Subcomponent Summary:									
Description	Mfr.	Part Number							
Enclosure	Schneider Electric	AR2381BLKX311							
Panel Boards	Square D	530-0364							
Transformers	PhEC	430-0361A							
Display Assembly	Schneider Electric	0G-9215RM-A							
Printed Circuit Board (PCB)	Schneider Electric	0M-5103							
Fan	EBM	490-1050B							
Circuit Breakers	ABB	530-0632A, 530-0439, 530-0679A							
Branch Breakers	Square D	PD1P20ABBSD, PD2P20ABBSD, PD3P20ABBSD, PD2P30ABBSD, PD3P50ABBSD							
Control Breaker	Airpax	530-0039-001							

UNIT UNDER TEST (UUT) SUMMARY SHEET

2400810-CR-001-R1



Manufacturer:	Schneider Electric Private Limited	UUT 3
Model Line:	InfraStructure (ISX) PDU	
Model Number:	ISX PDU 40kVA	
Serial Number:	OF11111L0004	
Test Report:		58640R11-3 (UUT-1)

UUT Properties						
Weight (lbs.)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
1,188	36.0	24.0	82.0	3.9	3.9	24.0

UUT Highest Passed Seismic Run Information								
Building Code	Test Criteria	S _{DS} (g)	z/h	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
CBC 2022	ICC-ES AC156	2.13	1.0	1.5	3.41	2.55	2.27	0.91
		3.41	0.0					

Product Construction Summary:
16 - 14 ga Cold Formed Steel, NEMA 1

Test Mounting Details:

Options/Subcomponent Summary:

Description	Mfr.	Part Number
Enclosure	Schneider Electric	0M-1326B
Panel Boards	Square D	530-2023, 530-4000
Transformers	PhEC	430-4106B
Display Assembly	Schneider Electric	0G-9215RM-A
Printed Circuit Board (PCB)	Schneider Electric	0M-5103
Disconnect Switch	ABB	540-0083A
Circuit Breaker	ABB	530-4013A, 530-4014A
Branch Breaker	Square D	PD3P20ABBSD
Control Breaker	Airpax	530-0039-001



UUT3 was base mounted - rigid to the fixture using four (4) 1/2" - 13 Grade 5 bolts and washers, torqued to 70ft.-lbs. Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test. Contents were included in testing per operating conditions.

UNIT UNDER TEST (UUT) SUMMARY SHEET


2400810-CR-001-R1



Manufacturer: Schneider Electric Private Limited	UUT 4
Model Line: InfraStructure (ISX) PDU	
Model Number: PDPM175G6H (175kVA)	
Serial Number: N/A	
Test Report: 31152-1601 (UUT1)	

UUT Properties						
Weight (lbs.)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
2,000	42.0	24.0	79.0	11.5	5.5	27.0

UUT Highest Passed Seismic Run Information								
Building Code	Test Criteria	S _{DS} (g)	z/h	I _P	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
CBC 2022	ICC-ES AC156	1.39	1.0	1.5	2.22	1.67	1.00	0.40
		1.50	0.0					

Product Construction Summary: 16 - 14 ga Cold Formed Steel, NEMA 1	Test Mounting Details: 
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Options/Subcomponent Summary:		
Description	Mfr.	Part Number
Enclosure	Schneider Electric	0M-814974
Transformers	Schneider Electric	430-10068
Display Assembly	Schneider Electric	0G-9233
Printed Circuit Board (PCB)	Schneider Electric	0G-9357
Fan	EBM	490-0181
Circuit Breaker	Square D	530-2452,
		530-2549,
		530-2550
Control Breaker	Schneider Electric	530-1497
Busbar	Schneider Electric	0M-8747
Power Distribution Module (PDM)	Schneider Electric	PDM1320, PDM3520
Seismic Kit	Schneider Electric	SYOPT600

UUT4 was base mounted - rigid to the table using eight (8) 1/2" Grade 5 bolts and washers, torqued to 75ft.-lbs.
Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test. Contents were included in testing per operating conditions.

