

# DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION FACILITIES DEVELOPMENT DIVISION

APPLICATION FOR HCAI SPECIAL SEISMIC	OFFICE USE ONLY
CERTIFICATION PREAPPROVAL (OSP)	APPLICATION #: OSP-0778
HCAI Special Seismic Certification Preapproval (OSP)	
Type: X New Renewal	
Manufacturer Information	
Manufacturer: ABB	
Manufacturer's Technical Representative: Dhirendra Tiwari	
Mailing Address: 41 Woodford Ave, Plainville, CT 06062	
Telephone: (860) 747-7935 Email: dhirendra.tiwari@	⊉us.abb.com
Product Information	Mp.
Product Name: Emergency and Standby Power Systems	
Product Type: Automatic Transfer Switches	2
Product Model Number: Service Entrance ATS	
General Description: Transfer switches that provide manual / automatic power source.	power switching from a primary source to a backup
Mounting Description: Rigid, Floor/Wall Mounted	
Tested Seismic Enhancements: None	
Applicant Information	
Applicant Company Name: WE Gundy & Associates, Inc	01
Contact Person: Travis Soppe	
Mailing Address: PO Box 9121, Boise, ID 83707	
Telephone:       (208) 342-5989       Email: tsoppe@wegai.c	com
Title: President	



STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY

"A healthier California where all receive equitable, affordable, and quality health care"

OSP-0778

ALIm



# DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION FACILITIES DEVELOPMENT DIVISION

California Licensed Structural Engineer Responsible for the Engineering and Test Report(s)
Company Name: W.E. GUNDY & ASOCIATES INC.
Name: Travis Soppe     California License Number: S6115
Mailing Address: P.O. Box 9121, Boise, ID 83707
Telephone: (208) 342-5989 Email: tsoppe@wegai.com
Certification Method
GR-63-Core X ICC-ES AC156 IEEE 344 IEEE 693 NEBS 3
Other (Please Specify):
FOR CODE CO
Testing Laboratory
Company Name: CLARK TESTING LABORATORY, INC.
Contact Person: Suzanne Mazon
Mailing Address: 1801 Route 51, Jefferson Hills PA 15025
Telephone: (412) 387-1001 Email: smazon@clarktesting.com
Company Name: ENVIRONMENTAL TESTING LABORATORIES, INC. (ETL)
Contact Person: Jeremy Lange DATE: 10/16/2023
Mailing Address: 11034 Indian Trail, Dallas TX 75229-3513
Telephone: (972) 247-9657 Email: Jeremy@etIdallas.com
BUILDING



"A healthier California where all receive equitable, affordable, and quality health care" STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY

OSP-0778



# DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION FACILITIES DEVELOPMENT DIVISION

#### Seismic Parameters

Design Basis of Equipment or Components	$(F_p/W_p) = 1.5 (SDS = 2.0g, z/h=1)$	); 1.13 (SDS	=2.50g, z/h=0)
SDS (Design spectral response accele	eration at short period, g) = $2.00 (z/l)$	n = 1.0) and	2.50 (z/h = 0.0)
ap (Amplification factor) =	2.5		
Rp (Response modification factor) =	6.0		
$\Omega_0$ (System overstrength factor) =	2.0		
lp (Importance factor) =	1.5		
z/h (Height ratio factor) =	1 and 0		
Natural frequencies (Hz) =	See Attachment		
Overall dimensions and weight = HCAI Approval (For Office Use Only) -	See Attachment	9	
Date: 10/16/2023	OSP-0778	G	
Name: Mohammad Karim		Title:	Supervisor, Health Facilities
Special Seismic Certification Valid Up to: St	os (g) = See Above	z/h =	See Above
Condition of Approval (if applicable):	DATE: 10/16/2023		
	PRIVIA BUILDING CO	20	



"A healthier California where all receive equitable, affordable, and quality health care" STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY All Ju

Table 1		2	C. SERVIO D PRODU				WEGAI W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUAKE ENGINEERING
ID/Catalag Number	Ampere	NEMA	Equip	ment Dimensio	ns (in)	Waight (lbg)	Representative
ID/Catalog Number	rating	Rating <sup>2</sup>	Width	Depth	Height	Weight (lbs)	UUT <sup>3</sup>
	Service E	Intrance A	<b>TS Product I</b>	Line - Floor N	Iounted		
Seismic Cer	tification Limits:	$S_{DS} = 2.0 a$	$t^{z}/_{h} = 1.0 : F_{p} =$	= 1.50g and S <sub>D</sub>	$_{\rm S} = 2.5 ~{\rm at} ~{\rm z}/{\rm h}$	$= 0 : F_p = 1.13g$	
Z3SSO0403M12Bxxxxxx	260 - 400	1	28	20	58	291	UUT <sub>y</sub> -6
ZTX, ZTG(D)(C), ZTS(D)(C) Series	30 - 200	3R/4/12	28	20	58	394 - 403	extrapolated
ZTX, ZTG(D)(C), ZTS(D)(C) Series	260 - 400	ŁO	$RC_{28}DE$	20	58	287 - 296	interpolated
ZTX, ZTG(D)(C), ZTS(D)(C) Series	260 - 400	3R/4/12	28	20	58	399 - 407	interpolated
ZTX, ZTG(D)(C), ZTS(D)(C) Series	600	1	40	20	74	463 - 479	interpolated
ZTX, ZTG(D)(C), ZTS(D)(C) Series	600	3R/4/12	40	20	74	585 - 621	interpolated
ZTX, ZTG(D)(C), ZTS(D)(C) Series	800 - 1200	1	DSP30778	37	92	1112 - 1142	interpolated
Z4SGO1204M45Bxxxxxx	800 <mark>- 1200</mark>	3R/4/12	40	41	94	1262	UUT <sub>y</sub> -7
ZTX, ZTG(D)(C), ZTS(D)(C) Series	800 <mark>- 120</mark> 0	3R/4/12	bam <sup>40</sup> ad k	arim <sup>43</sup>	94	1232 - 1262	interpolated
Z5SGO1603M16Bxxxxxx	160 <mark>0 - 200</mark> 0		36	48	90	1650	UUT <sub>y</sub> -8
ZTX, ZTG(D)(C), ZTS(D)(C) Series	1600 - 2000	БІТС	1036 6/20	48	90	1650 - 1755	interpolated
ZTX, ZTG(D)(C), ZTS(D)(C) Series	1600 - 2000	3R/4/12	. 10/10/20	48	90	1770 - 1875	interpolated
ZTX, ZTG(D)(C), ZTS(D)(C) Series	2500 - 3000		36	48	90	1842 - 1947	interpolated
ZTX, ZTG(D)(C), ZTS(D)(C) Series	2500 - 3000	3R/4/12	-36	48	90	1928 - 2033	interpolated
Z5SGO2504M36Bxxxxxx	2500 - 3000	3R/4/12	36	48	90	2033	UUT <sub>y</sub> -9

Notes:

RITIDING <sup>1</sup> All components are manufactured by ABB. The part numbers listed uniquely identify the type of component, manufacturer, and material of construction for each subcomponent within the tested units.

<sup>2</sup> Enclosures are constructed of welded carbon steel. The enclosure design is identical for the 3R, 4, and 12 designs therefore the rating is listed as 3R/4/12.

Subscript indicates the test report in which the units were qualified: y - 16827, z - 19-00274

The ZTX/ZTG/ZTS(D) service entrance series products are represented with the following ID numbers:

ZTX - ZxSXxxxxxxxxxxxx

ZTG(D)(C) - ZxSGxxxxxxxxxxxx

ZTS(D)(C) - ZxSSxxxxxxxxxxxx

The ZTX/ZTG(D)/ZTS(D) service entrance automatic transfer switches (ATS) are of nearly identical construction with minor differences listed below:

ZxSXO(D)(C) - ZTX open, delayed, or closed transition with L2 / L3 / L4 controller

ZxSGO(D)(C) - ZTG open, delayed, or closed transition with L2 / L3 / L4 controller

ZxSSO(D)(C) - ZTS open, delayed, or closed transition with L2 / L3 / L4 controller

Table 1		-		CE ENTR JCT LINH			WEGAI W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUARE ENGINEERING
ID/Catalog Number	Ampere rating	NEMA Rating <sup>2</sup>	Equip Width	ment Dimensic Depth	ns (in) Height	Weight (lbs)	Representative UUT <sup>3</sup>
	Service ]	Entrance A	TS Product	Line - Wall N	lounted		
Seismic Certifi	cation Limits:	$S_{DS} = 2.0$ at	$t^{z}/_{h} = 1.0 : F_{p}$	= 1.50g and S <sub>I</sub>	$p_{\rm S} = 2.5 ~{\rm at} ~{\rm z}/{\rm h} =$	$= 0 : F_p = 1.13g$	
ZGOK3SX12	400	1	24	12	46	142	UUT <sub>z</sub> -2
ZTX, ZTG(D)(C), ZTS(D)(C) Series	30 - 200	1	24	12 - 14	46	142 - 156	interpolated
Z2SSO0203M11Bxxxxxx	200	10	$R C_{24} DE$	14	46	151	UUT <sub>y</sub> -5
<ul> <li><sup>3</sup> Subscript indicates the test report in which t</li> <li><sup>4</sup> The ZTX/ZTG/ZTS(D) service entrance series ZTX - ZxSXxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx</li></ul>	automatic transformed transition w	fer switches (A vith L2 / L3 / L vith L2 / L3 / L	ith the following hammad h TS) are of near A controller A controller	g ID numbers:	ruction with min	nor differences lis	sted below:

Table 2	-	IC. SERVICE ENTRANCE		WEGAI W.E. GUNDY & ASSOCIATES, INC STRUCTURAL & LARTHQUAKE ENGINEERING
Identification Number	Manufacturer	Description	Weight (lbs)	Representative UU7
	Service Entran	ce ATS Product Line - Wall Mounted Sub	component	s
		Switch / Power Panels		
OXA200U3X3QB-ZE		200A 3P TruONE	32	UUT <sub>y</sub> -5
OXx260Uxxxxx-ZE		260A 2/3/4P TruONE	31 - 40	interpolated
OXA400U3X3QB-ZE	ABB	400A 3P TruONE	43	interpolated
OXA400U3S3QB-ZE		400A 4P TruONE	45	UUT <sub>z</sub> -2
		Circuit Breaker		
1SDA074764R1	ABB	XT2	2	UUT <sub>y</sub> -5
		Controller		
OXCO1 <sup>1</sup>	ABB	Controller	2	UUT <sub>z</sub> -2
	Service Entranc	e ATS Product Line - Floor Mounted Sul	ocomponent	ts
	4	Switch / Power Panels		
OXA200U3X3QB-ZE	S	200A 3P TruONE	32	extrapolated
OXx260Uxxxxx-ZE	RFI	260A 2/3/4P TruONE	31 - 40	extrapolated
OXA400U3X3QB-ZE		400A 3P TruONE	43	UUT <sub>y</sub> -6
OXA400U3S3QB-ZE	0	400A 4P TruONE	45	interpolated
OXx600Uxxxxx-ZE	ABB	600A 2/3/4P TruONE	38 - 48	interpolated
OXx800-1200Uxxxxx-ZE	(C)	800A - 1200A 2/3/4P TruONE	96 - 125	interpolated
OXA1200U3S3QB-ZE		1200A 4P TruONE	125	UUT <sub>y</sub> -7
70010426990A		1600A - 3000A R5 3P	189	UUT <sub>y</sub> -8
70010426262A		1600A - 3000A R5 4P	223	UUT <sub>y</sub> -9
		Circuit Breaker		
1SDA074764R1		XT2	2	extrapolated
1SDA075200R1		XT4	4	extrapolated
1SDA102487R1	ABB	XT5	5	UUT <sub>y</sub> -6
1SDA102947R1	ADD	XT7	28	UUT <sub>y</sub> -7
1SDA077263R1		Emax 2.2	115	UUT <sub>y</sub> -8
1SDA077913R1		Emax 4.2	123	UUT <sub>y</sub> -9

#### Notes:

<sup>1</sup> OXCO1 is the primary controller identification number representative of the OXAMI1-L2, OXBMI1-L2, OXAMI1-L3, OXBMI1-L3, OXAMI1-L4, OXBMI1-L4 controller configuations with varied software.

<sup>2</sup> Subscript indicates the test report in which the units were qualified: y - 16827, z - 19-00274

Table 2	,	IC. SERVICE ENTRANCE D SUBCOMPONENT MAT		WEGAI W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUAKE ENGINEERING
Identification Number	Manufacturer	Description	Weight (lbs)	Representative UUT
	Service Entranc	e ATS Product Line - Floor Mounted Su	bcomponent	S
		Bus Structure		
59P-2062		800 - 1200A, 3 Pole	127	extrapolated
59P-2063		800 - 1200A, 4 Pole	147	UUT <sub>y</sub> -7
59P-2064	ABB	1600 - 2000A, 3 Pole	422	UUT <sub>y</sub> -8
59P-2065	АВВ	1600 - 2000A, 4 Pole	467	interpolated
59P-2066	Ĭ	2500A, 3 Pole	459	interpolated
59P-2067	Ĭ	2500A, 4 Pole	507	UUT <sub>y</sub> -9
		Controller	•	
OXCO1 <sup>1</sup>	ABB	Controller	2	UUT <sub>y</sub> -8 / UUT <sub>y</sub> -9
Notes:			-	

<sup>1</sup> OXCO1 is the primary controller identification number representative of the OXAMI1-L2, OXBMI1-L2, OXAMI1-L3, OXBMI1-L3, OXAMI1-L4, OXBMI1-L4 controller configurations with varied software.

 $^2$  Subscript indicates the test report in which the units were qualified: y - 16827, z - 19-00274

2 BY: Mohammad Karim L, HRORNIA BUI' DATE: 10/16/2023 ING CODE:

# UNIT UNDER TEST (UUT) SUMMARY SHEET



		Succession of the second secon			DE 0778 mad k /16/20	)23					
Manufacturer						Test Locati	/			)	
-	Service Entrance					Test Date:			22		
	r: Z3SSO0403N : Automatic Tra		$\Box \downarrow$	M		Report Nur	nber:	10827			
-	ion: NEMA 1 c						30B	7E 400		NE	switch /
	power pane	and 1SDA	1024	87R	1 XT5	circuit breal	ter.	ZL 700.	A Huoi	NL.	Switch /
		U	UT	PR	OPER	TIES					
<b>XX7 ' 1</b> / 711 \	Din	nensions (inc	hes)				Natu	Iral Freq	uency (]	Hz)	
Weight (lb)	Width	Depth		He	eight	FB		S			V
291	28	20			58	25.4		12	.9		32.4
		SEISM	IC T	EST	<b>F PAR</b>	AMETERS					
Building Code	e / Test Criteria	$S_{DS}(g)$	<b>z</b> / 1	h	IP	$A_{FLX-H}\left(g ight)$	A <sub>RI</sub>	G-н (g)	A <sub>FLX-V</sub>	(g)	$A_{RIG-V}(g)$
		2.00	1.0	)	1.5	3.20	2	.40	-		-
СВС 2022 / 10	CC-ES AC156	2.50	0.0	)	1.5	-		-	1.67		0.67
	as full of contents du ural integrity during						after t	he ICC-E	S AC156	test.	The unit

# UNIT UNDER TEST (UUT) SUMMARY SHEET



	O CPAC		Apto Apto Action Ac	DE ( Ai -0778 mad K	)23-	NCE O Z		
Manufacturer						on: ETL (Da		
-	Service Entrance				$\langle 0 \rangle$	December 20	)22	
	er: Z4SGO1204					nber: 16827		
	<b>n:</b> Automatic Tra							
UUI Descript	ion: NEMA 3R 1200A Tru					200A bus, OX 2947R1 XT7		
			UUT PR	OPERT	TIES			
Weight (lb)	Din	nensions (in	iches)			Natural Free	quency (H	[z]
	Width	Depth		eight	FB	S		V
1,262	40	41		94	27.8	7.	.9	32.6
		SEISM	IIC TEST	<b>F PAR</b> A	AMETERS		-	
Building Cod	e / Test Criteria	$S_{DS}(g)$	z / h	IP	$A_{FLX-H}(g)$	$A_{RIG-H}\left(g ight)$	A <sub>FLX-V</sub> (	g) $A_{RIG-V}(g)$
CDC 2022 / I		2.00	1.0	1.5	3.20	2.40	-	-
СВС 2022 / I	CC-ES AC156	2.50	0.0	1.5	-	-	1.67	0.67
	as full of contents du tural integrity during					after the ICC-E	S AC156 te	est. The unit

# UNIT UNDER TEST (UUT) SUMMARY SHEET



	· UUT-S Vert c.ex Hob Luc L			R CC DSP- Dham : 10/	DE 0778 mad k	MIW #				
Manufacturer	: ABB, Inc.					Test Locati		,	· · · · ·	
-	Service Entrance					Test Date:			22	
	er: Z5SGO1603			$\left( \right) $		Report Nur	nber:	16827		
	: Automatic Tra									
UUT Descript	ion: NEMA 1 ca 3000A R5 OXCO1 co	3P switch / ntroller.	роч	wer pa	nel and	1SDA0779	0A bi 13R1	ıs, 7001 Emax 2	0426990 <i>A</i> .2 circuit l	A 1600A- oreaker, an
	D'				OPER			1		_)
Weight (lb)	Width	nensions (in Depth	iche	/	eight	FB	Inatu	ral Free S	quency (Hz	z) V
1,650	36	<u> </u>			90	12.7		5.		13.5
1,000			110			AMETERS			-	
Building Code	e / Test Criteria	SLISH S <sub>DS</sub> (g)	1	z / h	IP	A <sub>FLX-H</sub> (g)	Али	-н (g)	A <sub>FLX-V</sub> (§	$A_{RIG-V}$
		2.00		1.0	1.5	3.20		.40	-	-
CBC 2022 / I	CC-ES AC156	2.50		0.0	1.5	-		-	1.67	0.67
	as full of contents du ural integrity during	uring testing a	ind r	emaine	1 functio		after th	ne ICC-E		

# UNIT UNDER TEST (UUT) SUMMARY SHEET



Manufacturer			OR CO DSP Moham	/16/20	Fest Locati	on; ETL (Da	· · · · ·	
-	Service Entrance					December 20		
	r: Z5SGO2504			the transfer of the		<b>nber:</b> 16827		
	: Automatic Tra		PHIT	TAL	1			
UUI Descript	ion: NEMA 3R 3000A R5 4 OXCO1 co	4P switch /				500A bus, 70 13R1 Emax 4		
		١	UUT PR	OPERT	TIES			
Weight (lb)	Din	nensions (in	ches)			Natural Free	quency (Hz)	)
weight (10)	Width	Depth	Н	eight	FB	S	S	V
2,033	36	48		90	8.3	5.	.3	10.8
		SEISM	IIC TES	T PARA	AMETERS		-	
Building Code	e / Test Criteria	$S_{DS}(g)$	z / h	IP	$A_{FLX-H}\left(g ight)$	$A_{RIG-H}\left(g ight)$	$A_{FLX-V}(g)$	$A_{RIG-V}\left(g\right)$
CBC 2022 / I	CC-ES AC156	2.00 2.50	1.0 0.0	1.5 1.5	3.20	2.40	-	- 0.67
Note: The unit wa maintained struct	as full of contents du ural integrity during	ring testing a	nd remaine	d function	nal before and	after the ICC-E		

UUTz-2

## UNIT UNDER TEST (UUT) SUMMARY SHEET



10/16/20 <mark>23</mark>
Manufacturer: ABB, Inc.Test Location: Clark Testing (Pittsburgh, FComponent: Automatic Transfer SwitchTest Date: May 2019
Model Number: ZGOK3SX12 Report Number: 19-00274 Rev 0
UUT Function: Automatic Transfer Switch and Main Disconnect
UUT Description: NEMA 1 carbon steel enclosure with OXA400U3S3QB-ZE TruONE switch / powe panel and OXCO1 controller. UUT PROPERTIES
Dimensions (inches)     Natural Frequency (Hz)
Weight (lb)Dimensions (inclus)Natural Frequency (H2)WidthDepthHeightFBSSV
$\begin{array}{c c c c c c c c c c c c c c c c c c c $
SEISMIC TEST PARAMETERS
SEISMIC TEST PARAMETERS

# UNIT UNDER TEST (UUT) SUMMARY SHEET



WITE SAS High Lucel ICAN OSP-0778 BY: Mohammad Karim DATE: 10/18/2022												
Manufacturer: ABB, Inc.						Test Location: ETL (Dallas, TX)						
Component: Service Entrance ATS Model Number: Z2SSO0203M11Bxxxxxx						Test Date: December 2022 Report Number: 16827						
	: Automatic Tra	· V/ A		nd Ma	الحاديدين التراجي		nber:	1002/				
	ion: NEMA 1 c	arbon steel	encl	osure	with O		3QB-2 ker.	ZE 2004	A TruO	NE	switch /	
		1	UUI	Г PR(	OPERT	TIES						
Weight (lb)	Din	Dimensions (inches)					Natural Frequency (Hz)					
	Width	Depth		Height		FB		SS			V	
151	24	14		4	46	n/a	n		a n/		n/a	
		SEISM	IIC	TEST	Γ <b>PAR</b> A	AMETERS						
Building Code	S <sub>DS</sub> (g)	Z	/ h	Ip	$A_{FLX-H}(g)$	Arig	-н (g)	A <sub>FLX-V</sub>	(g)	$A_{RIG-V}(g)$		
CBC 2022 / I	2.00 2.50		.0 ).0	1.5 1.5	3.20	2.	40 -	-	7	- 0.67		
Note: The unit wa maintained struct	as full of contents du ural integrity during	uring testing a	nd re	mained	1 functio	nal before and	after th	e ICC-ES				