

DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION FACILITIES DEVELOPMENT DIVISION

APPI ICATION F	OR HCAI SPECIAL SEISMIC	OFFICE USE ONLY
		APPLICATION #: OSP-0130
HCAI Special Seismi	c Certification Preapproval (OSP)	
Type: New X	Renewal	
Manufacturer Inform	ation	
Manufacturer: Young	Touchstone, a Wabtec Company	
Manufacturer's Technica	al Representative: Vicki Piazza	
Mailing Address: 200 S	mith Lane, Jackson, TN 38301	
Telephone: (414) 768-7	Email: vpiazza@wabtec.co	m
Product Information	ED FOR	0,
Product Name: Emerger	ncy and Standby Power Systems	14
Product Type: Remote	Radiators	Z
Product Model Number:	Remote Charge Air Coolers 1.5 Square Feet thru 8 So	quare Feet
General Description:	Units are remote mounted charge air coolers (also cal diesel powered gensets.	led intercoolers or aftercoolers) for turbocharged
Mounting Description:	Vertical and Horizontal Core, base mounted- rigid, -	
Tested Seismic Enhance	ements: None DATE. 12/01/2022	510
HCAI Special Seismic Certification Preapproval (OSP) Type: New Renewal Manufacturer Information Manufacturer Information Manufacturer's Technical Representative: Vicki Piazza Mailing Address: 200 Smith Lane, Jackson, TN 38301 Telephone: (414) 768-7420 Email: vpiazza@wabtec.com Product Information Product Information Product Name: Emergency and Standby Power Systems Product Type: Remote Radiators Product Model Number: Remote Charge Air Coolers 1.5 Square Feet thru 8 Square Feet General Description: Units are remote mounted charge air coolers (also called intercoolers) for turbocharged diesel powered gensets. Mounting Description: Vertical and Horizontal Core, base mounted-rigid, -		
Applicant Company Nan	ne: TRU Compliance, by Structural Integrity Associates	s, Inc.
Contact Person: Katie I	Braman	
Mailing Address: 5215 H	Hellyer Ave. Suite 210, San Jose, CA 95138	
Telephone: (541) 639-2	Email: kbraman@structint.	com

Title: Program Manager, TRU Compliance





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California Licensed Structural Engineer Responsible for the Engineering and Test Report(s)
Company Name: STRUCTURAL INTEGRITY ASSOCIATES, INC.
Name: Andrew Coughlin California License Number: S6082
Mailing Address: 5215 Hellyer Ave, Suite 101, San Jose, CA 95138-1025
Telephone: (415) 635-8461 Email: acoughlin@structint.com
Certification Method
GR-63-Core X ICC-ES AC156 IEEE 344 IEEE 693 NEBS 3
Other (Please Specify):
EOR CODE CO.
Testing Laboratory
Company Name: Pacific Earthquake Engineering Research Center (PEER)
Contact Person: Amarnath Kasalanati
Mailing Address: 1301 South 46th St., Bldg. 420, Richmond CA 94720-1729
Telephone: (510) 642-3437 Email: Amarnath1@berkeley.edu
O DATE: 12/01/2022
DATE: 12/01/2022
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BUILDING

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0010				
Desig	n Basis of Equipment or Components	(Fp/Wp) = 1.44		
	SDS (Design spectral response accele	eration at short period, g) = 2.00		
	ap (Amplification factor) =	1.0		
	Rp (Response modification factor) =	2.5		
	Ω_0 (System overstrength factor) =	2.0		
	Ip (Importance factor) =	1.5		
	z/h (Height ratio factor) =	1		
	Natural frequencies (Hz) =	See Attachment		
	Overall dimensions and weight =	See Attachment		
		NED MA	4	
	Approval (For Office Use Only)	Approval Expires on 12/01/2028	12	
Date:	12/1/2022	05P-0130	m	
Name	e: Mohammad Karim	BV: Mohammad Karim	Title:	Supervisor, Health Facilities
Speci	al Seismic Certification Valid <mark>Up to</mark> : Si	ps(g) = 2.00	z/h =	1
Cond	ition of Approval (if applicable):	DATE: 12/01/2022	0	
		PRIVIA BUILDING COD	102	

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SPECIAL SEISMIC CERTIFICATION CERTIFIED COMPONENT MATRIX

1800975-CR-001-R4

TRU
COMPLIANCE

Manufacturer: Model Line:	Young Touchstone, a V Remote CAC	Vabtec Company			TAI	BLE 1
	nstruction Summary:					
	Copper fin charge air core	(ABT), Mechanical bo	ond core header			
Certified Options Sur	nmarv:					
Vertical Core 1.5 ft ² to						
	C C					
Mounting Configurat	tion	200				
<i>Mounting Configurat</i> Base mounted - rigid	uon:	FORCUL	ECON			
-	configuration must be of simila	r configuration and equiva	lent strength and sti	ffness to those	tested.	
Building Code: CBC 2	S.	Seismic Certificatio	n Limite:	_{DS} = 2.0 g 2	z/h=1.0	<i>I</i> _P = 1.5
			S S	_{DS} = 2.0 g 2	z/h=0.0	
Model Line	Modet	Unit Size (ft ²)	Weight (lb)	-	Notes	UUT
	15A17084	BY: M&famma	d Kari ³⁷⁰			1a
	20A <mark>17084</mark>	2.0	440			Interp
DCAC	25A17084	$A = E^{2.5} + 2/04$	480			Interp
RCAC	30A17084	DATE _{3.0} 12/01	510	12		Interp
(Vertical Water Connections)	40A17084	4.0	650	2		Interp
connections)	50A17084	5.0	900			Interp
	50A17168	5.0	1,200			Interp
	80A17168	8.0	1,700			2a
		BUILDI	NO			

SPECIAL SEISMIC CERTIFICATION CERTIFIED COMPONENT MATRIX

1800975-CR-001-R4

	TRU
C	COMPLIANCE

Manufacturer: Model Line:	Young Touchstone, a V Remote CAC	Vabtec Company			ТА	BLE 2
Certified Product Con						
	opper fin charge air core	(ABT), Mechanical bo	ond core heade	r		
Certified Options Sum	nmary:					
Horizontal Core 1.5 ft ²						
<i>Mounting Configurati</i> Base mounted - rigid Note: Installed mounting co	on: onfiguration must be of similar	FOR COD	E Contraction of the strength and strength a	tiffness to those	e tested.	
Building Code: CBC 20	022	Seismic Certificatio	on Limits:	$S_{DS} = 2.0 g$ $S_{DS} = 2.0 g$		l _P = 1.5
Model Line	Model	Unit Size (ft ²)	130 Weight (lb		Notes	UUT
	15A <mark>17084</mark>	BY: M&famma	d Kari ³⁷⁰			1b
	20A <mark>17084</mark>	2.0	440			Interp
DCAC	25A <mark>17084</mark>	$\Lambda = -2.5$	480			Interp
RCAC (Horizontal Water	30A17084	DATE _{3.0} 12/01	510			Interp
Connections)	40A17084	4.0	650	10		Interp
connections	50A17084	5.0	900			Interp
	50A17168	5.0	1,200			Interp
	80A17168	8.0	1,700 I,700			2b
			.1 4			



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	Line: Remote CAC	Damant Marine I.		Varia	100 17005			
υυτ	Unit Description (Mounting)	Report Number (UUT #)	Testing Lab	Year Tested	ISO 17025 Accredited?	S _{DS}	z/h	Ι _Ρ
1a	1.5 ft ² CAC, vertical core, (leg mount non-isolated)	PEER -STI 2010-12	Pacific Earthquake Engineering Research Center (PEER)	2010	No ¹	2.0	1.0	1.5
1b	1.5 ft ² CAC, horizontal core, (leg mount non-isolated)	PEER -STI 2010-12	Pacific Earthquake Engineering Research Center (PEER)	2010	No ¹	2.0	1.0	1.5
2a	8 ft ² CAC, vertical core, (base mount non-isolated)	PEER -STI 2010-12	Pacific Earthquake Engineering Research Center (PEER)	2010	No ¹	2.0	1.0	1.5
2b	8 ft ² CAC, horizontal core, (base mount non-isolated)	PEER -STI 2010-12	Pacific Earthquake Engineering Research P_ Center (PEER)	2010	No ¹	2.0	1.0	1.5
		BY: Moha	mmad Karim	0				
		DATE: 1	2/01/2022	2079				
		ORNIA RID	COD					
		BUI	LDING					

1. PEER was not ISO 17025 accredited at the time of testing but has been reviewed by TRU Compliance and found to meet the requirements for ICC-ES AC156 testing. Review form is on file with TRU Compliance.

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Model Line:	Young To	ouchstone, a Wabtec C	ompany						-
nouel Line.	Remote (CAC					U	UT 1	a
Model Number:	RCAC15A	17084		Serial Nu	ımber:	2979113			
Product Constructi Carbon steel frame	-	: rrangement, copper fir	n core						
Options/Subcompo		-							
_eg mounted to fra	me, 1.5 π Size	e, vertical core, non-is	R CODE C	On					
		AFP		Ma					
Weight		Dimension (in)	UUT Properties		Towes	t Natural	Frequen	cv (Hz)	
(lb)	Depth	Width	OS Height 30	Front	-Back	1	-Side		
370	26.3	33.5	22.2		/A		3.0		/A
		UUT Highest	Passed Seismic Run						
Building	Code	Test Criter	ia S _{DS} (g)	z/h	I _P	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g
CBC 20)22		56 12/01/2002	2 1.0	1.5	3.20	2.40	1.33	0.53
Test Mounting Deta	ails:				120				

1/2" A307 bolts and the GENSET rail was mounted to the shake table with eight (8) 1/2" A307 bolts.

Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test. Contents were included in testing per operating conditions.

¹See drawing with mounting details below for bolt reference. It is assumed that A307 bolts are used to mount the unit to the shake table since this bolt is called out in the drawing.

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Manufacturer:	Young To	uchstone, a Wabtee	c Company	,						h
Model Line:	Remote C	CAC						U	UT 1	.D
Model Number:	RCAC15A	17084			Serial Nu	mber:	2979113			
Product Construct	tion Summary:	·								
Carbon steel fram	e, horizontal ar	rangement, copper	r fin core							
Options/Subcomp	onent Summa	ry:								
Base mounted, 1.5	o ft ² size, horizo	ontal core, non-isola	ated mount	t						
			an ((
		F	OKC		\sim					
				A X X V V V						
		IED.			Ms,					
		ENED	UUTP	roperties	Mp.					
Weight		Dimension (in		properties	MA	Y.	st Natural	Frequen	cy (Hz)	
Weight (lb)	Depth	Dimension (in Width	ı)	properties eight 30		Y.	1	Frequen -Side		tical
-	Depth 26.3		n) OSR			Lowe: -Back	Side		Ver	tical /A
(lb)	-	Width 33.5	n) OSH	eight 30	Front 9	Lowes -Back	Side	-Side	Ver	
(lb)	26.3	Width 33.5	DSH	eight 30 22.2	Front 9	Lowes -Back	Side N	- Side /A	Ver	/A
(lb) 370 Building	26.3 g Code	Width 33.5 UUT Highe Test Crit	n) OSH est Passed : teria	eight 30 22.2 Seismic Run S _{DS} (g)	Front 9 Informa z/h	Lowes -Back 0 tion I _P	Side N A _{FLX-H} (g)	-Side /A A _{RIG-H} (g)	Ver N A _{FLX-V} (g)	/A A _{rig-v} (g)
(lb) 370	26.3 g Code	Width 33.5 UUT Highe	n) OSH est Passed : teria	eight 30 22.2 Seismic Run	Front 9 Informa	Lowes -Back 0 tion	Side N	- Side /A	Ver	/A



UUT1b was mounted to I-beams with six (6) 1/2" A307 bolts¹. The GENSET rail was mounted to the shake table with eight (8)1/2" A307 bolts.

Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test. Contents were included in testing per operating conditions.

¹See drawing with mounting details below for bolt reference. It is assumed that A307 bolts are used to mount the unit to the shake table since this bolt is called out in the drawing.

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1800975-CR-001-R4



Manufacturer:	Young Tou	chstone, a Wabtec Co	ompany			.		-
Model Line:	Remote CA	NC .				U	UT 2	2a
Model Number:	RCAC80A1	7168		Serial Numbe	r: 2979067			
Product Construe	ction Summary:							
Carbon steel fran	ne, horizontal arra	angement, copper fir	i core					
Options/Subcom	ponent Summary	/:						
Leg mounted to f	rame, 8 ft ² size, ve	ertical core, non-isola	ated mount					
			RCODEC					
		SFU		OND,				
		NEV		, AN				
		<u> </u>	UUT Properties					
Weight		Dimension (in)			west Natural	-	1	
(lb)	Depth	Width	OS Height 30	Front-Bac		-Side		
1,700	44.2	55.9	40.3	29.0	1	9.0	10	0.0
			Passed Seismic Run			1		
Buildir	ng Code	Test Criter	ia S _{DS} (g)	z/h l	P A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (§
CBC	2022	ICC-ESAC1	6 12/01/2.002	2 1.0 / I .	.5 3.20	2.40	1.33	0.53
Test Mounting De	etails:							
		E Contraction	BUILDING					
			L LANNIN .					
		1.912		1.#				
		52						
		24	R.E					
				0				
UUT2a was mour	nted to I-beams w	rith twelve (12) 1/2" A	307 bolts ¹ . The I-be	ams were mou	unted to the G	GENSET ra	ail with eig	ght (8)
		il was mounted to th		-				
	-	y and remained func		turer requirem	ient after sha	ke table t	est.	
Contents were in	cluded in testing	per operating conditi	ions.					

¹See drawing with mounting details below for bolt reference. It is assumed that A307 bolts are used to mount the unit to the shake table since this bolt is called out in the drawing.

1800975-CR-001-R4





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Model Number: Product Construction S Carbon steel frame, hor Options/Subcomponen Base mounted, 8 ft ² size Weight								Young Touchstone, a Wabtec Company							
Product Construction S Carbon steel frame, hor Options/Subcomponen Base mounted, 8 ft ² size Weight (lb) 1,700	RCAC80A17	100	Remote CAC						U	UT 2	.D				
Carbon steel frame, hor Options/Subcomponen Base mounted, 8 ft ² size Weight (lb) 1,700 Building Cod	RCAC80A17168					Serial Number:		2979067							
Base mounted, 8 ft ² size Weight (lb) 1,700 Building Cod	-	ngement,	copper fir	i core											
Weight (lb) [1,700 Building Cod	-		-isolated	mount											
(lb) [1,700 Building Cod	., 110112011001		DFO	R CO	DE Ca	ONA									
(lb) [1,700 Building Cod		E.		UUT Pro	perties		T								
1,700 Building Cod		.2 55.9) OS Height 30 40.3 st Passed Seismic Run		Front-Back 9.0		t Natural Frequen							
Building Cod	Depth							Side-Side		Vertical					
-	44.2							20.6		31.0					
-									a (a)	a (-)					
CBC 2022	le	Test Criteri		la	S _{DS} (g)	z/h	I _P	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g				
			C-ESAC1	56 12/0)1/220)2	2 1.0	1.5	3.20	2.40	1.33	0.53				
Test Mounting Details:															
UUT2b was mounted to (8)1/2" A307 bolts. Unit maintained structu Contents were included	ural integrity	y and rema	ained func	tional per						-	ţht				

¹See drawing with mounting details below for bolt reference. It is assumed that A307 bolts are used to mount the unit to the shake table since this bolt is called out in the drawing.

OSP-0130

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