

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

APPLICATION FOR HCAI SPECIAL SEISMIC	OFFICE USE ONLY
CERTIFICATION PREAPPROVAL (OSP)	APPLICATION #: OSP-0093
HCAI Special Seismic Certification Preapproval (OSP)	
Type: New X Renewal	
Manufacturer Information	
Manufacturer: ABB Inc.	
Manufacturer's Technical Representative: Babu Valiyattil	
Mailing Address: 6801 Industrial Drive, Mebane, NC 27302	
Telephone: (407) 314-0691 Email: babu.sankar@u	us.abb.com
Product Information	
Product Name: ReliaGear LV MCC	PLA
Product Model Number(s): ReliaGear LV MCC	The second secon
Product Category: Motor Control Centers OSP-0093	1 CF
Product Sub-Category: Motor Control Centers - Low Voltage	
General Description: Low voltage motor control centers consisting of up variable frequency drives, and softstarters.	o to 3200A bus, starters with motor circuit protectors,
Mounting Description: Base Mounted Rigid DATE: 05/15/2025	
Tested Seismic Enhancements: Seismic enhancements made to the test anomalies during the tests shall be income	st units and/or modifications required to address or porated into the production units.
Applicant Information	
Applicant Company Name: WE Gundy & Associates, Inc	
Contact Person: Travis Soppe	
Mailing Address: PO Box 9121, Boise, ID 83707	
Telephone: (208) 342-5989 Email: tsoppe@wegai.	.com
Title: President	



STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY

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OSP-0093



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

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
Mailing Address: 11034 Indian Trail, Dallas TX 75229-3513
Telephone: (972) 247-9657 Email: jeremy@etldallas.com
Company Name: NATIONAL TECHNICAL SYSTEMS (NTS)
Contact Person: Tom Boonarkat
Mailing Address: 7800 Highway 20 West, Huntsville AL 35806
Telephone: (256) 837-4411 Email: tom.boonarkat@nts.com



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Seismic Parameters

Design Ba	asis of Equipment or Components	(Fp/Wp) =	1.50 for SDS = 2.0 at z/h	= 1 and 1	.13 for SDS = 2.5 at z/h = 0			
SDS	6 (Design spectral response accele	ration at sho	ort period, g) = $2.00 (z/h)$	= 1.0) and	2.50 (z/h = 0.0)			
ap (A	Amplification factor) =	2.5						
Rp ((Response modification factor) =	6.0						
Ω0 ((System overstrength factor) =	2.0						
lp (Ir	mportance factor) =	1.5						
z/h ((Height ratio factor) =	1 and 0						
Natu	ural frequencies (Hz) =	See Attach	ment					
	erall dimensions and weight =	See Attach	MA	-				
HCAI Ap	proval (For Office Use Only) -	Approval E	Expires on 05/15/2031					
Date: 5	5/15/2025		DSP-0093	Fil				
Name: N	Mohammad Karim				Supervisor, Health Facilities			
Special Se	eismic Certification Valid Up to: SD	s (g) = 2.0		_ <mark>z/h =</mark>	1			
Condition of	of Approval (if applicable):	DATE	• 05/15/2025					
	T	PRNIA B	PUILDING COD	202				



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OSP-0093

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ABB RELIAGEAR LOW VOLTAGE MCC CERTIFIED PRODUCT LINE MATRIX



								STRUCTURAL & EARTHQUAKE ENGINEERING
Identification	Main Bus Amperage	NEMA ¹	Width (in)	Depth (in)	Height (in)	Weight (lbs)	Max CG (in)	Representative UUT ²
MCC-1200	1200A	1	36	20	90	510	46	UUT _u -10
MCC-800	800A	1	30	20	91.6	650	22	UUT _v -3A
MCC-600/800	600A/800A	1, 2, 12	20 - 30	20 - 30	90 - 112	350-750	40	interpolated
MCC-600/800	600A/800A	1, 2, 12	30 - 36	20 - 30	90 - 112	350-750	45	interpolated
MCC-3200	3200A	1	24	30	96	847	51	UUT _w -4B
MCC-600/800	600A/800A	3R	20 - 30	27 - 42.5	102.5	350-850	43	interpolated
MCC-600/800	600A/800A	3R	30 - 36	27 - 42.5	102.5	350-850	54	interpolated
MCC-1200/1600	1200A/1600A	1, 2, 12	20 - 30	20 - 30	90 - 112	550-950	38	interpolated
MCC-1200	1200A	3R	20 - 36	27 - 42.5	102.5	550-1150	38	interpolated
MCC-1200/1600	1200A/1600A	1, 2, 12	30 - 36	20-30	90 - 112	550-1250	38	interpolated
MCC-3200	3200A	3R	36	45.3	104.7	1328	38	UUT _v -7B
MCC-1600	1600A	3R	20 - 30	27 - 42.5	102.5	550-1150	38	interpolated
MCC-1600	1600A	3R	30 - 36	27 - 42.5	102.5	550-1350	45	interpolated
MCC-3200	3200A	1	36	30	96	1402	51	UUT _w -4A
MCC-2000	2000A	1, 2, 12	20 - 30	20 = 30	90 - 112	550-1250	35	interpolated
MCC-2000	2000A	1, 2, 12	30 - 36	20 - 30	90 - 112	550-1450	36	interpolated
MCC-3200	3200A	<mark>∂</mark> R	BY40/101	nan44nac	102.31	1503	50	UUT _w -1A
MCC-2000	2000A	3R	20 - 30	27 - 42.5	102.5	550-1 <mark>350</mark>	36	interpolated
MCC-2000	2000A	3R	30 - 36	275/42.5/	2 102.5	550-1550	44	interpolated
MCC-3200	3200A	3R	24	45.3	104.7	1600	35	UUT _v -7A
MCC-3200	3200A	3R	36	45.3	105.3	1600	39	UUT _v -2B
MCC-2500	2500A	1, 2, 12	20 - 30	20 - 30	90 - 112	750-1250	33	interpolated
MCC-2500	2500A	1, 2, 12	30 - 36	20 - 30	90 - 112	750-1650	34	interpolated
MCC-3200	3200A	3R	368	JT (44) T (102.3	1701	41	UUT _w -1B
MCC-3200	3200A	1, 2, 12	20 - 30	20 - 30	90 - 112	750-1350	32	interpolated
MCC-3200	3200A	1, 2, 12	30 - 36	20 - 30	90 - 112	750-1750	33	interpolated
MCC-2500/3200	2500A/3200A	3R	20 - 30	27 - 42.5	102.5	750-1350	35	interpolated
MCC-2500/3200	2500A/3200A	3R	30 - 36	27 - 42.5	102.5	750-1800	40	interpolated
MCC-3200	3200A	3R	36	27 - 42.5	102.5	750-2200	39	interpolated
MCC-3200	3200A	3R	40	45.3	105.3	2186	55	UUT _v -2A

General Notes:

¹ NEMA 1,2, 12 & 3R enclosures are constructed of carbon steel. The enclosure design is identical for the 1, 2, and 12 designs therefore the rating is listed as 1, 2, 12.

²Subscript indicates the stest report in which the units were qualified:

t - 17580A / u - 17244 / v - 17179 / w - 16991 / x - 52870-1 / y - 8639 / z - 3380-R

³ Multiple UUT's were seismcally tested to seismically certify the variety of sub-components of the MCC product line. The heavier, more seismcally vulnerable tested sections are listed in the product matrix on the first page for interpolation of the product line. The remainder of the tested UUT's (< 850lb) are presented on the second page. The UUT's tested prior to 2023 do not have listed center of gravities.

TABLE 1

ABB RELIAGEAR LOW VOLTAGE MCC CERTIFIED PRODUCT LINE MATRIX



								STRUCTURAL & EARTHQUAKE ENGINEERING	
Identification	Main Bus Amperage	NEMA ¹	Width (in)	Depth (in)	Height (in)	Weight (lbs)	Max CG (in)	Representative UUT ²	
MCC-1200	1200A	1	30	20	90	311	48	UUT _u -9A	
MCC-600	600A	1	20	20	90	339	45	UUT _u -11A	
MCC-600	600A	1	20	20	90	361	49	UUT _w -8A	
MCC-600	600A	1	20	20	91.6	368	50	UUT _v -6A	
MCC-800	800A	1	20	20	92	378	NA	UUT _z -3A	
MCC-600	600A	1	20	20	90	383	NA	UUT _z -4A	
MCC-600	600A	1	20	20	90	383	NA	UUT _z -4C	
MCC-1200	1200A	12	20	20	90	393	39	UUT _t -2B	
MCC-600	600A	1	20	20	90	400	48	UUT _u -11B	
MCC-600	600A	1	20	C20D	91.6	400	50	UUT _v -6B	
MCC-1200	1200A	12	20	20	90	405	30	UUT _t -2A	
MCC-1200	1200A	1	30	20	90	430	54	UUT _u -9B	
MCC-600	600A	1	20	20	90	451	NA	UUT _y -2	
MCC-1200	1200A		20	20	91.6	470	38	UUT _v -5B	
MCC-600	600A		20 0	$SP_{20}00$	93112	478	NA	UUT _z -4B	
MCC-1200	1200A	1	36	20	90	510	46	UUT _u -10	
MCC-600	600A	01	BY20/101	han20hao	Køoim	550	NA	UUT _x -A	
MCC-800	800A	1	30	20	91.6	568	64	UUT _v -3B	
MCC-800	800A			052015/	20 9 25	568	NA	UUT _z -3B	
MCC-600	600A	ZI	20	20	90	572	NA	UUT _x -B	
MCC-1200	1200A	1	20	20	91.6	648	35	UUT _v -5A	
MCC-3200	3200A	100	24	30	96	748	51	UUT _w -4C	
MCC-600	600A	1	20	20	92	749	26	UUT _w -8B	
MCC-3200	3200A	12	<u>30</u> B	J[30][90	790	38	UUT _t -1B	
MCC-3200	3200A	12	24	30	90	820	41	UUT _t -1C	
MCC-600	600A	3R	20	20	102.5	823	NA	UUT _z -1B	
MCC-600	600A	3R	20	20	102.5	823	NA	UUT _z -1A	
MCC-3200	3200A	12	36	30	90	1550	29	UUT _t -1A	

General Notes:

¹ NEMA 1,2, 12 & 3R enclosures are constructed of carbon steel. The enclosure design is identical for the 1, 2, and 12 designs therefore the rating is listed as 1, 2, 12.

² Subscript indicates the stest report in which the units were qualified:

t - 17580A / u - 17244 / v - 17179 / w - 16991 / x - 52870-1 / y - 8639 / z - 3380-R

³ Multiple UUT's were seismcally tested to seismically certify the variety of sub-components of the MCC product line. The heavier sections are listed in the product matrix on the first page for interpolation and the remainder of the tested UUT's are presented on the second page.

ABB RELIAGEAR LOW VOLTAGE MCC CERTIFIED SUBCOMPONENT MATRICES



ID/Catalog Number	Manufacturer	Description	Weight (lbs)	Representative UUT ¹
	Molded	Case Circuit Breakers / Switches		
1SDA*R1	ABB	3.2-125 A Tmax XT1 / XT1-D	1 - 3	extrapolated
1SDA*R1	ABB	15-125 A Tmax XT2 / XT2-D	2 - 4	extrapolated
1SDA074830R1	ABB	125A Tmax XT2	4	UUT _w -1B
1SDA*R1	ABB	80-225 A Tmax XT3 / XT3-D	3 - 5	interpolated
1SDA*R1	ABB	25-250 A Tmax XT4 / XT4-D	5 - 8	interpolated
1SDA075459R1	ABB	250A Tmax XT4	5	UUT _v -5B
1SDA*R1	ABB	300-600 A Tmax XT5 / XT5-D	7 - 10	interpolated
1SDA102522R1	ABB	400 A Tmax XT5	9	UUT _v -3B
1SDA*R1	ABB	600-800 A Tmax XT6 / XT6-D	21 - 27	interpolated
1SDA*R1	ABB	600-1200 A Tmax XT7 / XT7-D	21 - 28	interpolated
1SDA103000R1	ABB	600-1200 A Tmax XT7	28	UUT_v -3A / UUT_v -5A
S*	GE	15-30 A S* Type	5 - 6	extrapolated
SELA36AI0030	GE	30A S* Type	6	UUT_x -1 / UUT_x -2
S*	O GE B	30-400A S* Type	7 - 16	interpolated
SGLA36AI0400	GE	400A S* Type	16	UUT_x-1 / UUT_x-2
S*	GE D	400-600A S* Type	14 - 16	interpolated
SGLA36AI0600	GE	600A S* Type	16	UUT _v -2
S*	GE	600-1200A S* Type	42 - 48	interpolated
SKPA36AT1200	GE	1200A S* Type	48	UUT _z -3
		Air Circuit Breakers		
Z1****A	ABB	Emax E1.2 250-1200A	31 - 35	extrapolated
Z1****A	ABB	Emax1.2 250A-1200A (Draw-out)	90 - 103	extrapolated
Z2HCUFBE000A000000XA	ABB	Emax2 E2.2 800A	115	UUT _w -4C
Z2HEUJAE000A000000XA	ABB	Emax2 E2.2 1600A (Draw-out)	128	UUT _w -4B
Z2****A	ABB	Emax2 E2.2 800A-2000A	115 - 148	interpolated
Z2****B	ABB	Emax2 E2.2 800A-1600A (Draw-out)	128 - 150	interpolated
Z2****B	ABB	Emax2 E2.2 2000A (Draw-out)	135 - 239	interpolated
Z4****A	ABB	Emax2 E4.2 800A-3200A	161 - 203	interpolated
Z4VHUNBE000A000000XA	ABB	Emax2 E4.2 3200A	201	UUT _w -4A
Z4****B	ABB	Emax2 E4.2 800A-2500A (Draw-out)	261	interpolated
Z4VHUNAE000A00000XB	ABB	Emax2 E4.2 3200A (Draw-out)	300	UUT _v -2A

ABB RELIAGEAR LOW VOLTAGE MCC CERTIFIED SUBCOMPONENT MATRICES



ID/Catalog Number	Manufacturer	Description	Weight (lbs)	Representative UUT ¹
		Drives		
ACS580-01-017A-2	ABB	ACS580 R1	10	UUT _v -6B
AC*580-01-*-*	ABB	AC*580 R1 to R9	10 - 214	interpolated
AC*580-04-*-*	ABB	AC*580 R10	357	interpolated
ACS580-04-820A-4	ABB	ACS580 R11	441	UUT _v -2B
ACQ / ACH 580-31-*-*	ABB	ACH / ACQ 580 R3	47	extrapolated
ACQ / ACH 580-31-077A-4	ABB	ACH / ACQ 580 R6	135	UUT _t -2B
ACQ / ACH 580-31-180A-4	ABB	ACH / ACQ 580 R8	260	UUT _t -1C
		FOR Starters		
AF26-30-00-13 (1SBL237001)	ABB	Size 1	1	UUT _v -5B
AF*	ABB	Size 1 - 7	1 - 33	interpolated
AF750-30-11 (1SFL637001)	ABB	Size 7	33	UUT _v -3A
	2	OSP-0093		
CR306C104	GE / ABB	Size 1	4	UUT _z -1
CR360L*	GE / ABB	Open Lighting Contactor 30A - 200A	3 - 48	interpolated
CR309*	GE / ABB	FVR Size 00 - 4	7 - 49	interpolated
CR305*	GE / ABB	FVNR Size 11-6/2025	1 - 50	interpolated
CR306*	GE / ABB	Size 00 - 5	4 - 55	interpolated
CR306HH104	GE / ABB	Size 5	55	UUT_x -1 / UUT_x -2
CR309S002BHD	GE / ABB	FVR Size 5	115	UUT _v -3B
169C6383CEG1	GE / ABB	Vacuum FVNR Size 4	27	UUT _z -4
169C6*	GE / ABB	Vacuum FVNR Size 4 - 6	27	interpolated
169C6383BXG3	GE / ABB	Vacuum FVNR Size 6	27	UUT _z -3
V201K4CU	EATON	Vacuum Contactor FVNR Size 4	1	UUT _z -4
V201K*	EATON	Vacuum Contactor FVNR Size 4 - 6	1 - 32	interpolated
V201K6CJZ1	EATON	Vacuum Contactor FVNR Size 6	32	UUT _z -3
	:	Solid State Starters		
PSTX45-600-70	ABB	PSTX 45 A	10	UUT _v -5B
PSTX*-600-70	ABB	PSTX 30 - 570 A	10 - 60	interpolated
PSTX570-600-70	ABB	PSTX 570 A	60	UUT _v -3A
General Notes:	•	•		

General Notes:

CR309* starter consists of (2) CR305* starters with interlock mechanism

ABB RELIAGEAR LOW VOLTAGE MCC CERTIFIED SUBCOMPONENT MATRICES



ID/Catalog Number	Manufacturer	Description	Weight (lbs)	Representative UUT ¹
		Solid State Starters		
QT10008U11DS	GE	RV XT (SSS) Size 1	4	UUT _z -1
QC2GDP	GE	RV BP(SSS) Size 1	7	UUT _z -1
QT20580U11DS	GE	RV XT (SSS) Size 6	70	UUT _z -3
QC2TDP	GE	RV BP(SSS) Size 6	84	UUT _z -3
	Transforme	rs (CPT, Potential, and Distribution	<u> </u>	
M9T22B4311	AFP	5kVA	80	UUT _v -5B
M9T22B43** / 87021*****	AFP	5kVA - 25 kVA	80 - 160	interpolated
M9T22B43** / 87021*****	AFP	25kVA CODE	160	UUT _w -8B
830014200	AFP	37.5kVA	350	UUT _v -7B
9T58K*	GE/ABB	0.05kVA - 0.15kVA 208V - 600V	3	extrapolated
9T58K0504G37	GE / ABB	0.15kVA	6	UUT_x-1 / UUT_x-2
9T58K*	GE / ABB	0.15kVA - 0.30kVA 208V - 600V	6 - 8	interpolated
9T58R0507G76	GE / ABB	0.30kVA	8	UUT_z -3 / UUT_z -4
9T58K*	GE / ABB	0.30kVA - 0.50kVA 208V - 600V	8 - 12	interpolated
9T58R0000G09	GE / ABB	0.50kVA	12	UUT _z -3
9T58K1810	GE / ABB	0.50kVA	12	UUT _v -3B
9T58K2983	GE / ABB	3kVA	47	UUT _w -1B
9T58K*	GE / ABB	0.50kVA - 3kVA 240V - 600V	12 - 52	interpolated
9T58K2815	GE / ABB	3kVA	52	UUT _w -8B
9T*	GE / ABB	3kVA - 25kVA	47 - 388	interpolated
9T21B9110	GE / ABB	25kVA	388	UUT _v -7A
9T*	GE / ABB	15kVA - 45kVA	230 - 480	interpolated
9T10V1003	GE / ABB	45kVA	480	UUT _w -1B
2VT469-480	GE-ITI	VT	5	UUT _z -1
3P528-301	GE-ITI	CT for NEMA 5 & 6	12	UUT _v -3B
B100-2989-5	MIC	СРТ	4	UUT_x-1 / UUT_x-2
B100-2989-5	Micron	0.10kVA	5	UUT _x -1

TABLE 2

ABB RELIAGEAR LOW VOLTAGE MCC CERTIFIED SUBCOMPONENT MATRICES



ID/Catalog Number	Manufacturer	Description	Weight (lbs)	Representative UUT ¹	
		Harmonic Filters	1		
273A7844CWP4	GE	Filter	1	UUT _z -1	
KDR*	TCI	1/2-200 HP Line Reactor	8 - 50	interpolated	
V1K*A00	TCI	2-600 A Load Filter	8 - 130	interpolated	
V1K250A00	TCI	250 A Load Filter	65	UUT _v -5B	
V1K480A00	TCI	480 A Load Filter	95	UUT _t -1B	
V1K600A00	TCI	600 A Load Filter	130	UUT _t -1B	
KDR*	TCI	125-500 HP Line Reactor	65 - 150	interpolated	
KDRS47H	TCI	450-500 HP Line Reactor	150	UUT _v -5A	
MAPP0052E	52E MTE 52A Matrix Filter				
MAPP*	MTE	6-850 A Matrix Filter	20 - 983	interpolated	
MAPP0850D	MTE	850A Matrix Filter	983	UUT _t -1A	
	Su	rge Protective Device (SPD)			
TPME480D06ME	GE / ABB	25kA per mode, 50kA per phase	24	UUT _z -4	
TPHE*/TPME*/TME*/ATME*	GE / ABB	23kA-300kA/mode, 50kA-600kA/phase	24 - 31	interpolated	
TPHE*, THE*	GE / ABB	300kA per mode, 600kA per phase	31	interpolated	
TPHE480D20ME	GE / ABB	200kA per mode, 400kA per phase	31	UUT _z -1	
	A	itomatic Transfer Switches	-		
OXA30U3X4QT	GE / ABB	TruONE 3 Pole 30A	27	UUT _u -9A	
OX*	GE / ABB	TruONE 30A - 1200A	27 - 97	interpolated	
OXA1200U3S4QT	GE / ABB	TruONE 4 Pole 1200A	97	UUT _u -10	
		Lighting Panels			
RQF-ML-INTERIOR-N	GE	ReliaGear XT4 RQ 125A	30	UUT _u -11B	
RQ*, RL*, RE*, RS* GE Re		ReliaGear 125A-600A	15 - 80	interpolated	
REK-SLT-INT-N	GE	ReliaGear XT5 RE 600A	80	UUT _u -9B	

TABLE 3		IAGEAR LOW		1CC	WEGAI W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUAKE ENGINEERING
UUT	Identification	Test Dates	Report #	Lab	Tested S _{DS} (g)
001	Identification	Test Dates	Report #	Lau	z / h = 1.0
UUT _t -1A	MCC-3200	March 2025	17580A	ETL	2.00
UUT _t -1B	MCC-3200	March 2025	17580A	ETL	2.00
UUT _t -1C	MCC-3200	March 2025	17580A	ETL	2.00
UUT _t -2A	MCC-1200	March 2025	17580A	ETL	2.00
UUT _t -2B	MCC-1200	March 2025	17580A	ETL	2.00
UUT _u -9A	MCC-1200	December 2023	17244	ETL	2.00
UUT _u -9B	MCC-1200	December 2023	17244	ETL	2.00
UUT _u -10	MCC-1200	December 2023	17244	ETL	2.00
UUT _u -11A	MCC-600	December 2023	17244	ETL	2.00
UUT _u -11B	MCC-600	December 2023	DE 17244	ETL	2.00
UUT _v -2A	MCC-3200	October 2023	17179	ETL	2.00
UUT _v -2B	MCC-3200	October 2023	17179	ETL	2.00
UUT _v -3A	MCC-800	October 2023	17179	ETL	2.00
UUT _v -3B	MCC-800 4	October 2023	09317179	ETL	2.00
UUT _v -5A	MCC-1200	October 2023	17179	ETL	2.00
UUT _v -5B	MCC-1200	October 2023	ad K17179	ETL	2.00
UUT _v -6A	MCC-600	October 2023	17179	ETL	2.00
UUT _v -6B	MCC-600	October 2023	5/2017179	ETL	2.00
UUT _v -7A	MCC-3200	October 2023	17179	ETL	2.00
UUT _v -7B	MCC-3200	October 2023	17179	ETL	2.00
UUT _w -1A	MCC-3200	May 2023	16991	ETL	2.00
UUT _w -1B	MCC-3200	May 2023	16991	ETL	2.00
UUT _w -4A	MCC-3200	May 2023	16991	ETL	2.00
UUT _w -4B	MCC-3200	May 2023	16991	ETL	2.00
UUT _w -4C	MCC-3200	May 2023	16991	ETL	2.00
UUT _w -8A	MCC-600	May 2023	16991	ETL	2.00
UUT _w -8B	MCC-600	May 2023	16991	ETL	2.00
UUT _x -A	MCC-600	December 2005	52870-1	Wyle	2.00
UUT _x -B	MCC-600	December 2005	52870-1	Wyle	2.00
UUT _y -2	MCC-600	November 2008	8639	Clark	2.00
UUT _z -1A	MCC-600	December 2013	3380-R	Clark	2.25
UUT _z -1B	MCC-600	December 2013	3380-R	Clark	2.25
UUT _z -3A	MCC-800	December 2013	3380-R	Clark	2.00
UUT _z -3B	MCC-800	December 2013	3380-R	Clark	2.00
UUT _z -4A	MCC-600	December 2013	3380-R	Clark	2.50
UUT _z -4B	MCC-600	December 2013	3380-R	Clark	2.50
UUT _z -4C	MCC-600	December 2013	3380-R	Clark	2.50

UUT_t-1A

UNIT UNDER TEST (UUT) SUMMARY SHEET





UUT_t-1B

UNIT UNDER TEST (UUT) SUMMARY SHEET





UUT_t-1C

UNIT UNDER TEST (UUT) SUMMARY SHEET





UUT_t-2A

UNIT UNDER TEST (UUT) SUMMARY SHEET



			-1						
	128 Criteria		s A	UUT-2 SECTION 001 ReliaGear UV HCC 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		002 Gear			
Manufacturer						cation: ET		TX)	
	1200A Reliagear	LV MCC	B		TRICT	ite: March 2			
Model Numbe						Number: 1			
	1: Electrical oper								Laterian Dilta
UUI Descript	ion: NEMA 12						is and MAF	220032E N	latrix Filter
	<u>.</u>			T PRO	PERTL		. 15	/**	
Weight (lb)	Unr Width	nensions (in Depth	che	/	aht	N FB	atural Freq) V
405	20.0	20.0		Heig 90	-	<u>FB</u> 6.7	5.		28.9
100	20.0					METERS	5.	,	20.9
Building Code	e / Test Criteria			z/h	IANAI		$\Lambda_{\rm DIG} = (\alpha)$		
		$\frac{S_{DS}(g)}{2.00}$		2 / II 1.0	1.5	А _{FLX-H} (g) 3.20	А _{RIG-H} (g) 2.40	$A_{FLX-V}(g)$	
CBC 2022 / I	CC-ES AC156	2.00		0.0	1.5				0.67
	as full of contents du tural integrity during	iring testing a		emained f	functiona	before and aft	er the ICC-ES		

UUT_t-2B

UNIT UNDER TEST (UUT) SUMMARY SHEET



	120 0		SECT	UT-2 101A041 MCC 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	UUT-t-	002 Genr 077.6.* 0 0			
Manufacturer						cation: ET		TX)	
Component:	1200A Reliageau	· LV MCC	M	12.1.241101.141	N N N N	te: March 2			
Model Numbe	er: MCC-1200	- A	BL		Report	Number:	17580A		
UUT Function	: Electrical ope	ration and co	ontro	ol of m	otors fo	r industrial a	pplications	1	
UUT Descript	ion: NEMA 12 Variable Fi	carbon steel requency Dr		losure	with 12	00A main bı	is and ACQ	580-31-0	77A-4
		1	UUT	PRO	PERTI	ES			
XX7 * 1 . /11 \	Din	nensions (in	ches)		N	latural Freq	uency (Hz	z)
Weight (lb)	Width	Depth	T	Heig	ght	FB	SS		V
393	20.0	20.0		90.	.0	6.7	5.	7	28.9
		SEISM		TEST	PARA	METERS			
Building Code	e / Test Criteria	S _{DS} (g)	Z	/ h	Ip	A _{FLX-H} (g)	Arig-H (g)	A _{FLX-V} (g	g) Arig-v (g)
		2.00	1	.0	1.5	3.20	2.40		
СВС 2022 / І	CC-ES AC156	2.50	0	0.0	1.5			1.67	0.67
	as full of contents du ural integrity during					l before and aft	er the ICC-ES	S AC156 tes	st. The unit

UUT_u-9A

UNIT UNDER TEST (UUT) SUMMARY SHEET



	UUT _u -9	A	UU19 ABS Reliadea LV MCC					
Manufacturer	: ABB, Inc. 1200A Reliagear	IVMCC			cation: ET.		(X)	
Model Numbe		LVINCC	BIITIE	- 16	Number:			
	: Electrical oper	notion and a		-				
	ion: NEMA 1 ca ATS							pole 30A
		1	UUT PRO	PERTI	ES			
	Din	nensions (in	ches)		N	latural Freq	uency (Hz)	
Weight (lb)	Width	Depth	Hei	ght	FB	SS	S	V
311	30.0	20.0	90	.0	5.3	6.:	5	30.0
		SEISM	IIC TEST	PARAN	METERS			
Building Code	e / Test Criteria	S _{DS} (g)	z / h	IP	$A_{FLX-H}(g)$	$A_{RIG-H}(g)$	$A_{FLX-V}(g)$	$A_{RIG-V}(g)$
		2.00	1.0	1.5	3.20	2.40		
СВС 2022 / 1	CC-ES AC156	2.50	0.0	1.5			1.67	0.67
	as full of contents du ural integrity during				before and aft	er the ICC-ES	S AC156 test.	The unit

UUT_u-9B

UNIT UNDER TEST (UUT) SUMMARY SHEET



Manufacturer:	ABB, Inc.				Test Lo	pcation: ETI	JUT _u -9B L (Dallas, T		
Component: 12		LV MCC	D		-116	te: Decemb			
Model Number:		_	ЪU		-	Number: 1			
UUT Function: UUT Descriptio		arbon steel e							RE 600A
		1	UUT	PRO	PERTI	ES			
	Din	nensions (in	ches)			N	atural Freq	uency (Hz	z)
Weight (lb)	Width	Depth		Heig	ght	FB	SS		V
430	30.0	20.0		90)	5.3	6.:	5	30.0
		SEISM	IIC T	EST	PARAN	METERS			
Building Code	Test Criteria	S _{DS} (g)	z /	′ h	Ip	$A_{FLX-H}(g)$	$A_{RIG-H}(g)$	A _{FLX-V} (g) $A_{RIG-V}(g)$
		2.00	1.	.0	1.5	3.20	2.40		
	C-ES AC156	2.50	0.	0	1.5			1.67	0.67



	Chr			Luri B Ali neucler I Mai						
Manufacturer	1200A Reliagear	IVMCC	<u>VVV</u>			cation: ET	-	Δ)		
	er: MCC-1200	LVINCE	B	1 1	-116	Number: 1				
	: Electrical oper	ration and co	ontr		-					
	ion: NEMA 1 ca 1200A ATS	arbon steel e							4 I	Pole
		I	UU.	T PRO	PERTI	ES				
Waight (11)	Din	nensions (in	che	s)		N	atural Freq	uency (H	Hz)	
Weight (lb)	Width	Depth		Hei	ght	FB	SS		•	V
510	36	20		9()	7.4	7.	1		26.4
		SEISM	IIC	TEST	PARA	METERS				
Building Cod	e / Test Criteria	$S_{DS}(g)$	2	z / h	I _P	$A_{FLX-H}(g)$	$A_{RIG-H}(g)$	A _{FLX-V} ((g)	$A_{RIG-V}(g)$
		2.00		1.0	1.5	3.20	2.40			
СВС 2022 / І	CC-ES AC156	2.50		0.0	1.5			1.67		0.67
	as full of contents du ural integrity during					l before and aft	er the ICC-ES	S AC156 t	est.	The unit

UUT_u-11A

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Floor mounted with (4) 1/2" diameter grade 5 bolts.

	C											
Manufacturer	Manufacturer: ABB, Inc. Test Location: ETL (Dallas, TX)											
Component:	600A Reliagear	· LV MCC	Test D	ate: December	2023							
Model Numbe	Model Number: MCC-600 BUIL Report Number: 17244											
UUT Function	n: Electrical op	eration and con	trol of motors fo	or industrial app	olications							
UUT Descript	ion: NEMA 1	carbon steel end	closure with 600	A main bus (M	LO)							
		UI	T PROPERTI	ES								
Waight (lb)	Di	mensions (inch	es)	Nat	ural Frequency	(Hz)						
Weight (lb)	Width	Depth	Height	FB	SS	V						
339	20.0	20.0	90.0	8.4	7.9	29.8						

SEISMIC TEST PARAMETERS

Building Code / Test Criteria	$S_{DS}\left(g ight)$	z / h	IP	$A_{FLX-H}\left(g ight)$	$A_{RIG-H}\left(g ight)$	$A_{FLX-V}(g)$	$A_{RIG-V}\left(g ight)$
CBC 2022 / ICC-ES AC156	2.00	1.0	1.5	3.20	2.40		
	2.50	0.0	1.5			1.67	0.67

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 test.

UUT_u-11B

UNIT UNDER TEST (UUT) SUMMARY SHEET



Manufacturer						UUTu-1			
	600A Reliagear	LV MCC	<u>M</u>			te: Decemb	•	(A)	
Model Numbe		A	B	1.1	-116	Number:			
UUT Functior	1: Electrical oper	ration and co	onti		-				
	ion: NEMA 1 c lighting par	arbon steel e							Q 125A
		τ	UU	T PRO	PERTI	ES			
Weight (lb)	Din	nensions (ind	che	s)		N	atural Freq	uency (Hz)
0 ()	Width	Depth		Hei	-	FB	SS		V
400	20.0	20.0		90		8.4	7.	9	29.8
		SEISM	IC	TEST	PARAN	AETERS			-
Building Cod	e / Test Criteria	$S_{DS}(g)$	2	z / h	I _P	$A_{FLX-H}\left(g ight)$	$A_{RIG\text{-}H}\left(g\right)$	A _{FLX-V} (g)	$A_{RIG-V}(g)$
		2.00		1.0	1.5	3.20	2.40		
СВС 2022 / 1	CC-ES AC156	2.50		0.0	1.5			1.67	0.67
	as full of contents du tural integrity during					before and aft	er the ICC-ES	S AC156 test	. The unit

UUT_v-2A

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Floor mounted with (4) 1/2" diameter grade 5 bolts. UUT_v-2A Test Location: ETL (Dallas, TX) Manufacturer: ABB, Inc. Component: 3200A Reliagear LV MCC Test Date: October 2023 Model Number: MCC-3200 Report Number: 17179 UUT Function: Electrical operation and control of motors for industrial applications UUT Description: NEMA 3R carbon steel enclosure with 3200A main bus, ABB Emax2 E4.2 3200A draw-out circuit breaker **UUT PROPERTIES Dimensions (inches)** Natural Frequency (Hz) Weight (lb) Width Depth Height FB SS V 2,186 40.0 45.3 105.3 4.6 6.5 23.5 SEISMIC TEST PARAMETERS Building Code / Test Criteria $A_{FLX-H}(g) | A_{RIG-H}(g) | A_{FLX-V}(g) | A_{RIG-V}(g)$ z / h Ip $S_{DS}(g)$ 2.00 1.5 3.20 1.0 2.40----CBC 2022 / ICC-ES AC156 2.50 0.0 1.5 1.67 0.67 Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 test.

UUT_v-2B

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Floor mounted with (4) 1/2" diameter grade 5 bolts. - UUT_v-2B Test Location: ETL (Dallas, TX) Manufacturer: ABB, Inc. Component: 3200A Reliagear LV MCC Test Date: October 2023 Report Number: 17179 Model Number: MCC-3200 UUT Function: Electrical operation and control of motors for industrial applications UUT Description: NEMA 3R carbon steel enclosure with 3200A main bus and ABB ACS580 R11 drive **UUT PROPERTIES Dimensions** (inches) Natural Frequency (Hz) Weight (lb) V Width Depth Height FB SS 1.600 36.0 45.3 105.3 4.6 6.5 23.5 SEISMIC TEST PARAMETERS Building Code / Test Criteria z/hIp $A_{RIG-H}(g) | A_{FLX-V}(g) \rangle$ $S_{DS}(g)$ $A_{FLX-H}(g)$ $A_{RIG-V}(g)$ 1.5 3.20 2.00 1.0 2.40CBC 2022 / ICC-ES AC156 2.50 0.0 1.5 1.67 0.67 ___ Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 test.

UUT_v-3A

UNIT UNDER TEST (UUT) SUMMARY SHEET



	UUT _v -3	A								
Manufacturer Component:	800A Reliagear I	LV MCC	<u>M</u>			cation: ET		(A)		
Model Numbe		14	B	1.1.		Number:				
UUT Function	: Electrical oper	ration and co	ont					5		
UUT Descript	ion: NEMA 1 ca breaker, AF	BB Size 7 st	arte	er, and A	ABB PS	TX 570A so			x X7	7 circuit
	Γ			T PRO	PERTI					
Weight (lb)		nensions (in	che	/	1.4		atural Freq		(Hz)	
650	Width 30.0	Depth 20.0		Heig 91		FB 7.2	<u> </u>			V 24.0
030	30.0					/.2 METERS	0	J		∠ 1 .0
\mathbf{D}							A (.)		(-)	A (-)
Building Code / Test Criteria $S_{DS}(g)$ z / h I_P $A_{FLX-H}(g)$ $A_{RIG-H}(g)$ $A_{FLX-V}(g)$ $A_{RIG-V}(g)$ 2.001.01.52.202.40										
CBC 2022 / I	CC-ES AC156	2.00 2.50		1.0 0.0	1.5 1.5	3.20	2.40		7	0.67
	as full of contents du tural integrity during					before and aft	er the ICC-ES	S AC156	test.	The unit

UUT_v-3B

UNIT UNDER TEST (UUT) SUMMARY SHEET



	CHANGE CHANGE					IT _v -3B		
Manufacturer		VINCO			ocation: ET	·	(X)	
-	800A Reliagear I				ate: October			
Model Numbe	r: Electrical oper	ration and a	RHTIE	<u> 7 N-7 N-7 N</u>	Number: 1		,	
	ion: NEMA 1 ca	arbon steel 3B FVR Siz	enclosure w	vith 800 ABB 0	A main bus, .50kVA trans	ABB 400A	Tmax X	
	Dim	nensions (in				atural Freq	uency (Hz	2
Weight (lb)	Width	Depth	Hei	ght	FB	SS		V
568	30.0	20.0	91		7.2	8.		24.0
		SEISN	IIC TEST	PARA	METERS			
Building Cod	e / Test Criteria	$S_{DS}(g)$	z / h	IP	$A_{FLX-H}(g)$	$A_{RIG-H}(g)$	A _{FLX-V} (g) $A_{RIG-V}(g)$
		2.00	1.0	1.5	3.20	2.40		
СВС 2022 / І	CC-ES AC156	2.50	0.0	1.5			1.67	0.67
	as full of contents du tural integrity during	ring testing a	nd remained	functiona	l before and aft	er the ICC-ES		

UUT_v-5A

UNIT UNDER TEST (UUT) SUMMARY SHEET



Manufacturer	Chr.	UT-5A			Sechara Sechara	Decation: ET				
	1200A Reliagear	· LV MCC	ALL AND			ate: October		(11)		
Model Numbe	er: MCC-1200		B	UILD	Report	Number: 1	7179			
UUT Functior	1: Electrical oper	ration and c	ont	rol of m	otors fo	or industrial a	pplications	5		
UUT Descript	ion: NEMA 1 ca breaker, an	arbon steel o d TCI 450-5					, ABB Tma	ax XT7	circ	uit
	1			T PRO	PERTI					
Weight (lb)		nensions (in	iche	/	1.		atural Freq		Hz)	.
	Width	Depth	-+	Hei	-	FB	SS			V 10.6
648	20.0	20.0		91 TEST		8.4	7.2	2		19.6
			1			METERS				
Building Cod	e / Test Criteria	$S_{DS}(g)$		z / h	IP	$A_{FLX-H}(g)$	$A_{RIG-H}(g)$	A _{FLX-V}	(g)	$A_{RIG-V}(g)$
CBC 2022 / I	CC-ES AC156	2.00		1.0	1.5	3.20	2.40		7	
	as full of contents du tural integrity during					 l before and aft	 er the ICC-ES	1.67 S AC156		0.67 The unit

UUT_v-5B

UNIT UNDER TEST (UUT) SUMMARY SHEET



			LV MCC D SEC		UUT _v -5			
Manufacturer	: ABB, Inc. 1200A Reliagear	IVMCC			ocation: ET		(X)	
Model Numbe	U	LVIVICC						
	: Electrical oper	ration and c	RHTIE	<u> 1177 - 1177</u>	Number: 1			
	ion: NEMA 1 ca	arbon steel o BB Size 1 st , and TCI 2	enclosure w tarter, ABB 250A load f	vith 120 PSTX 4 ilter	0A main bus 45A solid sta	, ABB Tma	ax XT4 cir	
			UUT PRO	PERTL			/	<u></u>
Weight (lb)	Dim Width	ensions (in Depth	iches) Hei	aht	N FB	atural Freq) V
470	20.0	20.0	91	č	8.4	7.2		v 19.6
			IIC TEST				I	
Building Code	e / Test Criteria	$S_{DS}(g)$	z / h	Ip	A _{FLX-H} (g)	$A_{RIG-H}(g)$	A _{FLX-V} (g)	$A_{RIG-V}(g)$
		2.00	1.0	1.5	3.20	2.40		
CBC 2022 / I	CC-ES AC156	2.50	0.0	1.5			1.67	0.67
	as full of contents du ural integrity during	ring testing a	nd remained	functiona	l before and aft	er the ICC-ES		

UUT_v-6A

UNIT UNDER TEST (UUT) SUMMARY SHEET



	CHEN CHEN	UTv-6A							
Manufacturer		VINCO			ocation: ET	-	(X)		
Component: Model Numbe	600A Reliagear I		BLITIE	- 16	ate: October				
		notion and a		-	Number: 1				
	i: Electrical oper ion: NEMA 1 ca						•		
c c i Descript									
	D'		UUT PRO	F EK I L		atau - 1 P		·)	
Weight (lb)	Width	nensions (in Depth	iches) Hei	aht	FB	latural Freq		z) V	
368	20.0	20.0	91	-	10.4	9.3		17.6	
~ ~	- * *		IIC TEST				I		
Building Cod	e / Test Criteria	$S_{DS}(g)$	z / h	Ip	A _{FLX-H} (g)	$A_{RIG-H}(g)$	A _{FLX-V} (g) A _{RIG-V}	/ (g)
00u		2.00	1.0	1.5	3.20	2.40			
CBC 2022 / I	CC-ES AC156	2.50	0.0	1.5			1.67	0.6	7
	as full of contents du tural integrity during				l before and aft	er the ICC-ES	S AC156 te	st. The uni	it

UUT_v-6B

UNIT UNDER TEST (UUT) SUMMARY SHEET



	Christian Christian				UUT-				
Manufacturer	600A Reliagear I	VMCC			cation: ET. te: October		.Λ)		
Model Numbe			BUTIE		Number:				
	: Electrical oper	ration and c					1		
	ion: NEMA 1 ca							R1 di	rive
			UUT PRO						
TTT 1 (41)	Din	nensions (in				latural Freq	uency (H	Iz)	
Weight (lb)	Width	Depth	Hei	ght	FB	SS			V
400	20.0	20.0	91	.6	10.4	9.1	3		17.6
		SEISM	IIC TEST	PARAN	IETERS				
Building Code	e / Test Criteria	$S_{DS}(g)$	z / h	IP	$A_{FLX-H}(g)$	$A_{RIG-H}(g)$	A _{FLX-V} ((g) A	$A_{RIG-V}(g)$
		2.00	1.0	1.5	3.20	2.40			
СВС 2022 / І	CC-ES AC156	2.50	0.0	1.5			1.67		0.67
	as full of contents du ural integrity during				before and aft	er the ICC-ES	S AC156 to	est. T	he unit

UUT_v-7A

UNIT UNDER TEST (UUT) SUMMARY SHEET





UUT_v-7B

UNIT UNDER TEST (UUT) SUMMARY SHEET



					UUT				
Manufacturer	3200A Reliagear	LVMCC			cation: ETI ate: October		Δ)		
	er: MCC-3200		BUTI	- 16	Number: 1				
	1: Electrical oper	ration and c		-					
	ion: NEMA 3R transformer	carbon stee						/A	
		1	UUT PRO	PERTI	ES				
Weight (11)	Dim	nensions (in	ches)		N	atural Freq	uency (Hz)	
Weight (lb)	Width	Depth	Hei	ght	FB	SS	5		V
1,328	36.0	45.3	104	1.7	5.4	3.9	9		5.3
		SEISM	IIC TEST	PARA	METERS				
Building Cod	e / Test Criteria	$S_{DS}(g)$	z / h	IP	$A_{FLX-H}(g)$	$A_{RIG-H}\left(g ight)$	A _{FLX-V}	(g)	$A_{RIG-V}(g)$
		2.00	1.0	1.5	3.20	2.40			
СВС 2022 / І	CC-ES AC156	2.50	0.0	1.5			1.67	7	0.67
	as full of contents du tural integrity during				l before and aft	er the ICC-ES	S AC156	test.	The unit

UUT_w-1A

UNIT UNDER TEST (UUT) SUMMARY SHEET





UUT_w-1B

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Floor mounted with (4) 1/2" diameter grade 5 bolts. UUT_w-1B Manufacturer: ABB, Inc. Test Location: ETL (Dallas, TX) Component: 3200A Reliagear LV MCC Test Date: May 2023 Model Number: MCC-3200 Report Number: 16991 UUT Function: Electrical operation and control of motors for industrial applications UUT Description: NEMA 3R carbon steel enclosure with 125A ABB Tmax XT2 Circuit Breaker, 45kVA ABB distribution transformer and 3kVA ABB CPT **UUT PROPERTIES Dimensions (inches)** Natural Frequency (Hz) Weight (lb) Width Depth Height FB SS V 1,701 36.0 44.0 102.3 3.2 3.8 19.4 SEISMIC TEST PARAMETERS Building Code / Test Criteria $A_{FLX-H}(g) | A_{RIG-H}(g) | A_{FLX-V}(g) | A_{RIG-V}(g)$ z / h Ip $S_{DS}(g)$ 2.00 1.0 1.5 3.20 2.40 ___ --CBC 2022 / ICC-ES AC156 2.50 0.0 1.5 1.67 0.67 Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 test.

UUT_w-4A

UNIT UNDER TEST (UUT) SUMMARY SHEET





UUT_w-4B

UNIT UNDER TEST (UUT) SUMMARY SHEET





UUT_w-4C





UUT_w-8A

UNIT UNDER TEST (UUT) SUMMARY SHEET



		JTw-8A						
Manufacturer		VMCC			cation: ET	· ·	TX)	
Model Numbe	600A Reliagear I		Du		ite: May 202 Number: ¹	16991		
	1: Electrical oper	ration and c		-				
	ion: NEMA 1 ca							
1			UUT PRO					
	Dim	nensions (in				atural Freq	uency (H	7)
Weight (lb)	Width	Depth	Hei	ght	FB	SS		V V
361	20.0	20.0	92	0	7.5	6.		20.7
		SEISN	IIC TEST	PARAN	AETERS			
Building Cod	e / Test Criteria	$S_{DS}(g)$	z / h	IP	$A_{FLX-H}(g)$	$A_{RIG-H}(g)$	A _{FLX-V} (§	g) $A_{RIG-V}(g)$
		2.00	1.0	1.5	3.20	2.40		
СВС 2022 / І	CC-ES AC156	2.50	0.0	1.5			1.67	0.67
	as full of contents du tural integrity during				before and aft	er the ICC-ES	S AC156 te	st. The unit

UUT_w-8B

UNIT UNDER TEST (UUT) SUMMARY SHEET



Manufacturer					UUTw-			
	600A Reliagear I	LV MCC			ate: May 202	,	(11)	
Model Numbe		14	DI			16991		
UUT Function	: Electrical oper	ration and c		-		pplications	;	
UUT Descript	ion: NEMA 1 ca AFP 25kVA			vith 600	A main bus,	ABB 3kVA	A transforr	ner and
]	UUT PRO	PERTI	ES			
Weight (lb)		nensions (in	ches)		N	latural Freq	uency (Hz	
	Width	Depth	Hei	<u> </u>	FB	SS		V
749	20.0	20.0	92	.0	7.5	6.	0	20.7
		SEISM	IIC TEST	PARA	METERS			
Building Code	e / Test Criteria	$S_{DS}(g)$	z / h	IP	$A_{FLX-H}(g)$	$A_{RIG-H}\left(g ight)$	A _{FLX-V} (g) $A_{RIG-V}(g)$
CDC 2022 / I		2.00	1.0	1.5	3.20	2.40		
СВС 2022 / 1	CC-ES AC156	2.50	0.0	1.5			1.67	0.67
	as full of contents du tural integrity during				l before and aft	er the ICC-ES	S AC156 tes	t. The unit

UUT_x-A

UNIT UNDER TEST (UUT) SUMMARY SHEET



	CHUN CHUN							
Manufacturer Component:	600A Evolution 1	E9000			cation: Wy ite: Decemb		files (AL)	
Model Numbe			DL	-116	Number: 5			
UUT Functior	: Electrical oper	ration and c		-			5	
UUT Descript	ion: NEMA 1 ca FVNR size		enclosure v	vith 30A	& 400A cir	cuit breake	rs, 150VA	CPT, and
			UUT PRO	PERTI	ES			
Weight (lb)	Dim	nensions (in	ches)		N	atural Freq	uency (Hz)
	Width	Depth	Hei	-	FB	SS		V
550	20.0	20.0	90	.0	8.7	5.	1	9.7
		SEISN	IIC TEST	PARA	METERS			
Building Cod	e / Test Criteria	$S_{DS}(g)$	z / h	IP	$A_{FLX-H}(g)$	$A_{RIG-H}\left(g ight)$	A _{FLX-V} (g)	$A_{RIG-V}(g)$
CDC 2022 / J		2.00	1.0	1.5	3.20	2.40		
СВС 2022 / 1	CC-ES AC156	2.50	0.0	1.5			1.67	0.67
	as full of contents du tural integrity during				before and aft	er the ICC-ES	S AC156 test	. The unit

UUT_x-B

UNIT UNDER TEST (UUT) SUMMARY SHEET



Manufacturer	CAL	ENED BY DA			Deation: Wy			
	600A Evolution 1	E9000			ate: Decemb		(112)	
Model Numbe	r: MCC-600	14	BUILD	Report	Number: 5	52870-1		
UUT Function	: Electrical oper	ation and c	ontrol of n	notors fo	or industrial a	pplications	5	
UUT Descript	ion: NEMA 1 ca potential tra				A & 400A cir	cuit breake	rs, 150VA	CPT,
			UUT PRO	PERTI				
Weight (lb)		nensions (in		1.		latural Freq		/
572	Width 20.0	Depth 20.0		ght 0.0	FB 6.0	<u> </u>		V 8.9
572	20.0		IIC TEST				υ	0.7
Building Code	e / Test Criteria		z/h	IANA		$\Delta \mathbf{p}_{\mathbf{G}} \mathbf{y}(\mathbf{g})$	A _{FLX-V} (g	$\Delta \mathbf{p}_{\mathbf{G}} \mathbf{v}_{\mathbf{G}}$
Dunuing Cour		$\frac{S_{DS}(g)}{2.00}$	1.0	1.5	А _{FLX-H} (g) 3.20	А _{RIG-H} (g) 2.40	rafla-v (g	$A_{\text{RIG-V}}(g)$
CBC 2022 / I	CC-ES AC156	2.00	0.0	1.5			1.67	0.67
	as full of contents du ural integrity during				l before and aft	er the ICC-ES	S AC156 tes	t. The unit

UUT_y-2

UNIT UNDER TEST (UUT) SUMMARY SHEET



Manufacturer		PAIR			ocation: Cla		(PA)	
-	600A Evolution	E9000 MCC	BUT	AINU	ate: Novemb			
Model Numbe				_	Number: 8			
	: Electrical open							
UUT Descript	ion: NEMA 1 ca					aker and 30	00VA CPT	
			UUT PR	OPERTI	ES			
Weight (lb)		nensions (in				latural Freq		
	Width	Depth		eight	FB	SS		V
451	20.0	20.0		01.5	8.6	5.4	4	> 33.0
		SEISM	HC TES	I PARA	METERS	1	1	1
Building Code	e / Test Criteria	S _{DS} (g)	z / h	IP	$A_{FLX-H}(g)$	$A_{RIG-H}\left(g ight)$	$A_{FLX-V}(g)$	$A_{RIG-V}(g)$
CBC 2022 / I	CC-ES AC156	2.00	1.0	1.5	3.20	2.40		
CDC 2022 / I	CC-LS AC130	2.50	0.0	1.5			1.67	0.67
	as full of contents du ural integrity during				Il before and aft	er the ICC-ES	S AC156 test.	The unit

UUTz-1A

UNIT UNDER TEST (UUT) SUMMARY SHEET



Manufacturer		-1A				ccation: Cla	the Taging			
	600A Evolution	E9000 MC0				te: Decemb			2014	4
Model Numbe			5		HNU	Number: 3		5		
UUT Function	n: Electrical ope	ration and c	on	trol of m	otors fo	r industrial a	pplications			
	ion: NEMA 3R	carbon stee	l ei	nclosure	with 20		aker, 200k	A SPD,		-
		I	UU	T PRO	PERTI	ES				
Weight (lb)		nensions (in	che	es)			atural Freq		Hz)	
	Width	Depth		Hei	0	FB	SS			V
823	20.0	20.0		102	2.5	17.9	8.4	4		> 33.0
		SEISM		TEST	PARA	METERS				
Building Cod	e / Test Criteria	$S_{DS}(g)$		z / h	I_P	$A_{FLX-H}\left(g ight)$	$A_{RIG\text{-}H}\left(g\right)$	A _{FLX-V}	(g)	$A_{RIG-V}(g)$
CDC 2022 / J		2.25		1.0	1.5	3.60	2.70			
СВС 2022 / 1	CC-ES AC156	2.50		0.0	1.5			1.67		0.67
	as full of contents du tural integrity during					l before and aft	er the ICC-ES	S AC156 t	est.	The unit

UUTz-1B

UNIT UNDER TEST (UUT) SUMMARY SHEET







	THE OCH					UUTz-3A				
Manufacturer Component:	800A Evolution	E9000 MCC				ocation: Cla ate: Decemb			201	4
Model Numbe	er: MCC-800		0	UILU	Report	Number: 3	3380-R			
UUT Function	1: Electrical ope	ration and co	ont	rol of m	otors fo	or industrial a	pplications			
UUT Descript	ion: NEMA 1 c 500VA CP					A & 1200A s, and FVNF				
		τ	JU	T PRO	PERTI	ES				
Weight (lb)		nensions (inc	che	es)		N	atural Freq	- È	Hz)	
	Width	Depth		Hei	-	FB	SS			V
378	20.0	20.0		91		7.9	5.	8		> 33.0
		SEISM	IC	TEST	PARA	METERS				
Building Code	e / Test Criteria	$S_{DS}(g)$		z / h	I_P	$A_{FLX-H}\left(g ight)$	$A_{RIG-H}\left(g ight)$	A _{FLX-V}	(g)	$A_{RIG-V}(g)$
CDC 2022 / I		2.00		1.0	1.5	3.20	2.40			
UBC 2022 / I	CC-ES AC156	2.50		0.0	1.5			1.67		0.67
	as full of contents du tural integrity during					l before and aft	er the ICC-ES	S AC156	test.	The unit



	CHE				UUTz-					
Manufacturer	800A Evolution	F9000 MCC				ocation: Cla ate: Decemb			201	4
Model Numbe			B	UILD	HNO	Number: 3		unuary 2	201	•
	1: Electrical ope	ration and co	onti					5		
	tion: NEMA 1 c	arbon steel e	encl	losure v	vith 600		circuit brea	kers, 30		
		I	UU	T PRO	PERTI	ES				
Weight (lb)		nensions (in	che	/			atural Freq		Hz)	
0 ()	Width	Depth		Hei	0	FB	SS			V
568	30.0	20.0		91		7.9	5.	8		> 33.0
		SEISM	IC	TEST	PARA	METERS				
Building Cod	e / Test Criteria	$S_{DS}(g)$		z / h	IP	$A_{FLX-H}\left(g ight)$	$A_{RIG-H}\left(g\right)$	A _{FLX-V}	(g)	$A_{RIG-V}\left(g\right)$
CBC 2022 / I	CRC 2022 / ICC ES AC156 2.00 1.0 1.5 3.20 2.40									
CBC 2022 / ICC-ES AC156 2.50 0.0 1.5 1.67							0.67			
Note: The unit w maintained struct	as full of contents du tural integrity during	uring testing and after the l	nd re ICC	emained -ES AC1	functiona 56 test.	l before and aft	er the ICC-ES	S AC156 t	est.	The unit

UUTz-4A



	CAL							
Manufacturer Component:	600A Evolution	E9000 MC0			cation: Cla te: Decemb			14
Model Numbe				$HN \Theta$	Number: 3		<u> </u>	
UUT Function	: Electrical oper	ration and c		-				
UUT Descript	ion: NEMA 1 ca and FVNR				A circuit bre	aker, 300V	A CPT, 25	5kA SPD,
	Γ		UUT PRO	PERTI				
Weight (lb)		nensions (in				atural Freq		1
e . ,	Width	Depth	Hei	-	FB			V 12.2
383	20.0	20.0	92		11.2	10.	.4	12.2
			IIC TEST					
Building Cod	e / Test Criteria	$S_{DS}(g)$	z / h	I _P 1.5	A _{FLX-H} (g) 4.00		A _{FLX-V} (g	$A_{RIG-V}(g)$
CBC 2022 / I	CBC 2022 / ICC-ES AC156 2.50 1.0 2.50 0.0 0.0 0.0					3.00	 1.67	0.67
	as full of contents du ural integrity during	ring testing a	nd remained		 l before and aft			

UUTz-4B

UNIT UNDER TEST (UUT) SUMMARY SHEET



	CALL			UUTz-				
Manufacturer	: ABB, Inc. 600A Evolution l	E0000 MCC			cation: Cla te: Decemb	-		Λ
Model Numbe				$HN \sim$	Number: 3		anuary 201	7
	: Electrical oper	ration and c		_				
	ion: NEMA 1 ca and FVNR	arbon steel o	enclosure v	vith 250				kA SPD,
			UUT PRO	PERTI	ES			
Weight (lb)		ensions (in				atural Freq		V
	Width 20.0	Depth 20.0	Hei	-	FB			
478	20.0	20.0			11.2 AETEDS	10.	.4	12.2
					I			
Building Code	e / Test Criteria	$S_{DS}(g)$	z / h	Ip	$A_{FLX-H}(g)$		$A_{FLX-V}(g)$	$A_{RIG-V}(g)$
CBC 2022 / I	CC-ES AC156	2.50 2.50	1.0	1.5 1.5	4.00	3.00	1.67	0.67
	as full of contents du ural integrity during	ring testing a	nd remained	functiona	before and aft	er the ICC-ES		

UUTz-4C

UNIT UNDER TEST (UUT) SUMMARY SHEET



	CHLA BELA	H	UTz-4C						
Manufacturer	: ABB, Inc. 600A Evolution I	F9000 MCC			ocation: Cla	_		14	
Model Numbe				Test Date: December 2013 – January 2014 Report Number: 3380-R					
	: Electrical oper	ation and c							
	ion: NEMA 1 ca and FVNRV	arbon steel o V size 4 vac	enclosure v cuum starte	vith 250 r	A circuit bre			5kA SPD,	
			UUT PRO	PERTI					
Weight (lb)		nensions (in		- 1- 4		atural Freq		,	
383	Width 20.0	Depth 20.0	Hei 92	0	FB 11.2	FB SS 11.2 10.4		V 12.2	
	2010		IIC TEST			10	··	12.2	
Building Code	e / Test Criteria	$S_{DS}(g)$	z/h	IP	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g	$A_{RIG-V}(g)$	
		2.50	1.0	1.5	4.00	3.00			
CBC 2022 / ICC-ES AC156 2.50 1.0 2.50 0.0				1.5			1.67	0.67	
	as full of contents du ural integrity during				l before and aft	er the ICC-ES	S AC156 tes	t. The unit	