



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-0093

HCAI Special Seismic Certification Preapproval (OSP)

Type: ☐ New ☒ 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@us.abb.com

Product Information

Product Name: ReliaGear LV MCC

Product Model Number(s): ReliaGear LV MCC

Product Category: Motor Control Centers

Product Sub-Category: Motor Control Centers - Low Voltage

General Description: Low voltage motor control centers consisting of up to 3200A bus, starters with motor circuit protectors, variable frequency drives, and softstarters.

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: 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



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

Company Name: W.E. GUNDY & ASSOCIATES 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

☒ ICC-ES AC156

☐ IEEE 344

☐ IEEE 693

☐ NEBS 3

☐ Other (Please Specify): _____

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 Basis of Equipment or Components (F_p/W_p) =	1.50 for SDS = 2.0 at $z/h = 1$ and 1.13 for SDS = 2.5 at $z/h = 0$
SDS (Design spectral response acceleration at short period, g) =	2.00 ($z/h = 1.0$) and 2.50 ($z/h = 0.0$)
a_p (Amplification factor) =	2.5
R_p (Response modification factor) =	6.0
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 05/15/2031

Date:	5/15/2025		
Name:	Mohammad Karim	Title:	Supervisor, Health Facilities
Special Seismic Certification Valid Up to: SDS (g) =	2.0	z/h =	1
Condition of Approval (if applicable):			



TABLE 1	ABB RELIAGEAR LOW VOLTAGE MCC CERTIFIED PRODUCT LINE MATRIX							 W.E. GUNDY & ASSOCIATES, INC. 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	3R	40	44	102.3	1503	50	UUT _w -1A
MCC-2000	2000A	3R	20 - 30	27 - 42.5	102.5	550-1350	36	interpolated
MCC-2000	2000A	3R	30 - 36	27 - 42.5	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	36	44	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. ² Subscript indicates the test 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 seismically tested to seismically certify the variety of sub-components of the MCC product line. The heavier, more seismically 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							 W.E. GUNDY & ASSOCIATES, INC. 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	20	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	1	20	20	91.6	470	38	UUT _v -5B
MCC-600	600A	1	20	20	112	478	NA	UUT _z -4B
MCC-1200	1200A	1	36	20	90	510	46	UUT _u -10
MCC-600	600A	1	20	20	90	550	NA	UUT _x -A
MCC-800	800A	1	30	20	91.6	568	64	UUT _v -3B
MCC-800	800A	1	30	20	92	568	NA	UUT _z -3B
MCC-600	600A	1	20	20	90	572	NA	UUT _x -B
MCC-1200	1200A	1	20	20	91.6	648	35	UUT _v -5A
MCC-3200	3200A	1	24	30	96	748	51	UUT _w -4C
MCC-600	600A	1	20	20	92	749	26	UUT _w -8B
MCC-3200	3200A	12	30	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.


TABLE 2		ABB RELIAGEAR LOW VOLTAGE MCC CERTIFIED SUBCOMPONENT MATRICES		 W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUAKE ENGINEERING	
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*	GE	30-400A S* Type	7 - 16	interpolated	
SGLA36AI0400	GE	400A S* Type	16	UUT _x -1 / UUT _x -2	
S*	GE	400-600A S* Type	14 - 16	interpolated	
SGLA36AI0600	GE	600A S* Type	16	UUT _y -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	E _{max} E1.2 250-1200A	31 - 35	extrapolated	
Z1****A	ABB	E _{max} 1.2 250A-1200A (Draw-out)	90 - 103	extrapolated	
Z2HCUFBE000A000000XA	ABB	E _{max} 2 E2.2 800A	115	UUT _w -4C	
Z2HEUJAE000A000000XA	ABB	E _{max} 2 E2.2 1600A (Draw-out)	128	UUT _w -4B	
Z2****A	ABB	E _{max} 2 E2.2 800A-2000A	115 - 148	interpolated	
Z2****B	ABB	E _{max} 2 E2.2 800A-1600A (Draw-out)	128 - 150	interpolated	
Z2****B	ABB	E _{max} 2 E2.2 2000A (Draw-out)	135 - 239	interpolated	
Z4****A	ABB	E _{max} 2 E4.2 800A-3200A	161 - 203	interpolated	
Z4VHUNBE000A000000XA	ABB	E _{max} 2 E4.2 3200A	201	UUT _w -4A	
Z4****B	ABB	E _{max} 2 E4.2 800A-2500A (Draw-out)	261	interpolated	
Z4VHUNAE000A000000XB	ABB	E _{max} 2 E4.2 3200A (Draw-out)	300	UUT _v -2A	


TABLE 2		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
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
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 1 - 6	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: CR309* starter consists of (2) CR305* starters with interlock mechanism				


TABLE 2		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
Transformers (CPT, Potential, and Distribution)				
M9T22B4311	AFP	5kVA	80	UUT _v -5B
M9T22B43** / 87021*****	AFP	5kVA - 25 kVA	80 - 160	interpolated
M9T22B43** / 87021*****	AFP	25kVA	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	CPT	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				
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	MTE	52A Matrix Filter	140	UUT _t -2A
MAPP*	MTE	6-850 A Matrix Filter	20 - 983	interpolated
MAPP0850D	MTE	850A Matrix Filter	983	UUT _t -1A
Surge 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
Automatic 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	ReliaGear 125A-600A	15 - 80	interpolated
REK-SLT-INT-N	GE	ReliaGear XT5 RE 600A	80	UUT _u -9B

TABLE 3	ABB RELIAGEAR LOW VOLTAGE MCC UNIT UNDER TEST INDEX					
	UUT	Identification	Test Dates	Report #	Lab	Tested S _{DS} (g)
						z / h = 1.0
	UUT _f -1A	MCC-3200	March 2025	17580A	ETL	2.00
	UUT _f -1B	MCC-3200	March 2025	17580A	ETL	2.00
	UUT _f -1C	MCC-3200	March 2025	17580A	ETL	2.00
	UUT _f -2A	MCC-1200	March 2025	17580A	ETL	2.00
	UUT _f -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	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	October 2023	17179	ETL	2.00
	UUT _v -5A	MCC-1200	October 2023	17179	ETL	2.00
	UUT _v -5B	MCC-1200	October 2023	17179	ETL	2.00
	UUT _v -6A	MCC-600	October 2023	17179	ETL	2.00
	UUT _v -6B	MCC-600	October 2023	17179	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



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



Manufacturer: ABB, Inc.				Test Location: ETL (Dallas, TX)				
Component: 3200A Reliagear LV MCC				Test Date: March 2025				
Model Number: MCC-3200				Report Number: 17580A				
UUT Function: Electrical operation and control of motors for industrial applications								
UUT Description: NEMA 12 carbon steel enclosure with 3200A main bus and MAPP00850D Matrix Filter								
UUT PROPERTIES								
Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)				
	Width	Depth	Height	FB	SS	V		
1550	36.0	30.0	90.0	6.7	10.1	13.4		
SEISMIC TEST PARAMETERS								
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		2.00	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-1B

UNIT UNDER TEST (UUT) SUMMARY SHEET



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



Manufacturer: ABB, Inc.	Test Location: ETL (Dallas, TX)
Component: 3200A Reliagear LV MCC	Test Date: March 2025
Model Number: MCC-3200	Report Number: 17580A
UUT Function: Electrical operation and control of motors for industrial applications	
UUT Description: NEMA 12 carbon steel enclosure with 3200A main bus and V1K480A00, V1K600A00 Load Filters	

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
790	30.0	30.0	90.0	6.7	10.1	13.4

SEISMIC TEST PARAMETERS

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	2.00	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-1C

UNIT UNDER TEST (UUT) SUMMARY SHEET



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



Manufacturer: ABB, Inc.	Test Location: ETL (Dallas, TX)
Component: 3200A Reliagear LV MCC	Test Date: March 2025
Model Number: MCC-3200	Report Number: 17580A
UUT Function: Electrical operation and control of motors for industrial applications	
UUT Description: NEMA 12 carbon steel enclosure with 3200A main bus and ACH580-31-180A-4 Variable Frequency Drive	

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
820	24.0	30.0	90.0	6.7	10.1	13.4

SEISMIC TEST PARAMETERS

Building Code / Test Criteria	S _{DS} (g)	z / h	I _p	A _{FLX-H} (g)	A _{RIX-H} (g)	A _{FLX-V} (g)	A _{RIX-V} (g)
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_t-2A

UNIT UNDER TEST (UUT) SUMMARY SHEET



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



Manufacturer: ABB, Inc.

Test Location: ETL (Dallas, TX)

Component: 1200A Reliagear LV MCC

Test Date: March 2025

Model Number: MCC-1200

Report Number: 17580A

UUT Function: Electrical operation and control of motors for industrial applications

UUT Description: NEMA 12 carbon steel enclosure with 1200A main bus and MAPP0052E Matrix Filter

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
405	20.0	20.0	90.0	6.7	5.7	28.9

SEISMIC TEST PARAMETERS

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	2.00	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_t-2B

UNIT UNDER TEST (UUT) SUMMARY SHEET



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



Manufacturer: ABB, Inc.

Test Location: ETL (Dallas, TX)

Component: 1200A ReliGear LV MCC

Test Date: March 2025

Model Number: MCC-1200

Report Number: 17580A

UUT Function: Electrical operation and control of motors for industrial applications

UUT Description: NEMA 12 carbon steel enclosure with 1200A main bus and ACQ580-31-077A-4 Variable Frequency Drive

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
393	20.0	20.0	90.0	6.7	5.7	28.9

SEISMIC TEST PARAMETERS

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	2.00	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-9A

UNIT UNDER TEST (UUT) SUMMARY SHEET



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

UUT_u-9A



Manufacturer: ABB, Inc.				Test Location: ETL (Dallas, TX)			
Component: 1200A Reliagear LV MCC				Test Date: December 2023			
Model Number: MCC-1200				Report Number: 17244			
UUT Function: Electrical operation and control of motors for industrial applications							
UUT Description: NEMA 1 carbon steel enclosure with 1200A main bus and ABB TruONE 3 pole 30A ATS							
UUT PROPERTIES							
Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)			
	Width	Depth	Height	FB	SS	V	
311	30.0	20.0	90.0	5.3	6.5	30.0	
SEISMIC TEST PARAMETERS							
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	2.00	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-9B

UNIT UNDER TEST (UUT) SUMMARY SHEET



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



UUT_u-9B

Manufacturer: ABB, Inc.				Test Location: ETL (Dallas, TX)			
Component: 1200A Reliagear LV MCC				Test Date: December 2023			
Model Number: MCC-1200				Report Number: 17244			
UUT Function: Electrical operation and control of motors for industrial applications							
UUT Description: NEMA 1 carbon steel enclosure with 1200A main bus and ReliaGear XT5 RE 600A lighting panel							
UUT PROPERTIES							
Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)			
	Width	Depth	Height	FB	SS	V	
430	30.0	20.0	90	5.3	6.5	30.0	
SEISMIC TEST PARAMETERS							
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	2.00	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-10

UNIT UNDER TEST (UUT) SUMMARY SHEET



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



Manufacturer: ABB, Inc.

Test Location: ETL (Dallas, TX)

Component: 1200A ReliGear LV MCC

Test Date: December 2023

Model Number: MCC-1200

Report Number: 17244

UUT Function: Electrical operation and control of motors for industrial applications

UUT Description: NEMA 1 carbon steel enclosure with 1200A main bus and ABB TruONE 4 Pole 1200A ATS

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
510	36	20	90	7.4	7.1	26.4

SEISMIC TEST PARAMETERS

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	2.00	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-11A

UNIT UNDER TEST (UUT) SUMMARY SHEET



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

UUT_u-11A



Manufacturer: ABB, Inc.

Test Location: ETL (Dallas, TX)

Component: 600A Reliagear LV MCC

Test Date: December 2023

Model Number: MCC-600

Report Number: 17244

UUT Function: Electrical operation and control of motors for industrial applications

UUT Description: NEMA 1 carbon steel enclosure with 600A main bus (MLO)

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	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} (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	2.00	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



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



UUT_u-11B

Manufacturer: ABB, Inc.				Test Location: ETL (Dallas, TX)			
Component: 600A Reliagear LV MCC				Test Date: December 2023			
Model Number: MCC-600				Report Number: 17244			
UUT Function: Electrical operation and control of motors for industrial applications							
UUT Description: NEMA 1 carbon steel enclosure with 600A main bus and ReliaGear XT4 RQ 125A lighting panel							
UUT PROPERTIES							
Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)			
	Width	Depth	Height	FB	SS	V	
400	20.0	20.0	90.0	8.4	7.9	29.8	
SEISMIC TEST PARAMETERS							
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	2.00	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_v-2A

UNIT UNDER TEST (UUT) SUMMARY SHEET



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

UUT_v-2A



Manufacturer: ABB, Inc.

Test Location: ETL (Dallas, TX)

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

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	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	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	2.00	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_v-2B

UNIT UNDER TEST (UUT) SUMMARY SHEET



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



UUT_v-2B

Manufacturer: ABB, Inc.

Test Location: ETL (Dallas, TX)

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 and ABB ACS580 R11 drive

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
1,600	36.0	45.3	105.3	4.6	6.5	23.5

SEISMIC TEST PARAMETERS

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	2.00	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_v-3A

UNIT UNDER TEST (UUT) SUMMARY SHEET



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

UUT_v-3A



Manufacturer: ABB, Inc.

Test Location: ETL (Dallas, TX)

Component: 800A Reliagear LV MCC

Test Date: October 2023

Model Number: MCC-800

Report Number: 17179

UUT Function: Electrical operation and control of motors for industrial applications

UUT Description: NEMA 1 carbon steel enclosure with 800A main bus, ABB 1200A Tmax XT7 circuit breaker, ABB Size 7 starter, and ABB PSTX 570A solid state starter

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
650	30.0	20.0	91.6	7.2	8.3	24.0

SEISMIC TEST PARAMETERS

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	2.00	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_v-3B

UNIT UNDER TEST (UUT) SUMMARY SHEET



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



UUT_v-3B

Manufacturer: ABB, Inc.

Test Location: ETL (Dallas, TX)

Component: 800A Reliagear LV MCC

Test Date: October 2023

Model Number: MCC-800

Report Number: 17179

UUT Function: Electrical operation and control of motors for industrial applications

UUT Description: NEMA 1 carbon steel enclosure with 800A main bus, ABB 400A Tmax XT5 circuit breaker, ABB FVR Size 5 starter, ABB 0.50kVA transformer, and GE ITI NEMA 5 & 6 CT

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
568	30.0	20.0	91.6	7.2	8.3	24.0

SEISMIC TEST PARAMETERS

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	2.00	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_v-5A

UNIT UNDER TEST (UUT) SUMMARY SHEET



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

UUT_v-5A



Manufacturer: ABB, Inc.

Test Location: ETL (Dallas, TX)

Component: 1200A Reliagear LV MCC

Test Date: October 2023

Model Number: MCC-1200

Report Number: 17179

UUT Function: Electrical operation and control of motors for industrial applications

UUT Description: NEMA 1 carbon steel enclosure with 1200A main bus, ABB Tmax XT7 circuit breaker, and TCI 450-500 HP line reactor

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
648	20.0	20.0	91.6	8.4	7.2	19.6

SEISMIC TEST PARAMETERS

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	2.00	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_v-5B

UNIT UNDER TEST (UUT) SUMMARY SHEET



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



UUT_v-5B

Manufacturer: ABB, Inc.				Test Location: ETL (Dallas, TX)			
Component: 1200A Reliagear LV MCC				Test Date: October 2023			
Model Number: MCC-1200				Report Number: 17179			
UUT Function: Electrical operation and control of motors for industrial applications							
UUT Description: NEMA 1 carbon steel enclosure with 1200A main bus, ABB Tmax XT4 circuit breaker, ABB Size 1 starter, ABB PSTX 45A solid state starter, AFP 5kVA transformer, and TCI 250A load filter							
UUT PROPERTIES							
Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)			
	Width	Depth	Height	FB	SS	V	
470	20.0	20.0	91.6	8.4	7.2	19.6	
SEISMIC TEST PARAMETERS							
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	2.00	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_v-6A

UNIT UNDER TEST (UUT) SUMMARY SHEET



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

UUT_v-6A



Manufacturer: ABB, Inc.

Test Location: ETL (Dallas, TX)

Component: 600A Reliagear LV MCC

Test Date: October 2023

Model Number: MCC-600

Report Number: 17179

UUT Function: Electrical operation and control of motors for industrial applications

UUT Description: NEMA 1 carbon steel enclosure with 600A main bus (MLO)

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
368	20.0	20.0	91.6	10.4	9.3	17.6

SEISMIC TEST PARAMETERS

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	2.00	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_v-6B

UNIT UNDER TEST (UUT) SUMMARY SHEET



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



UUT_v-6B

Manufacturer: ABB, Inc.

Test Location: ETL (Dallas, TX)

Component: 600A Reliagear LV MCC

Test Date: October 2023

Model Number: MCC-600

Report Number: 17179

UUT Function: Electrical operation and control of motors for industrial applications

UUT Description: NEMA 1 carbon steel enclosure with 600A main bus and ABB ACS580 R1 drive

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
400	20.0	20.0	91.6	10.4	9.3	17.6

SEISMIC TEST PARAMETERS

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	2.00	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_v-7A

UNIT UNDER TEST (UUT) SUMMARY SHEET



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



Manufacturer: ABB, Inc.				Test Location: ETL (Dallas, TX)			
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 and ABB 25kVA transformer							
UUT PROPERTIES							
Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)			
	Width	Depth	Height	FB	SS	V	
1,600	24.0	45.3	104.7	5.4	3.9	5.3	
SEISMIC TEST PARAMETERS							
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	2.00	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_v-7B

UNIT UNDER TEST (UUT) SUMMARY SHEET



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



UUT_v-7B

Manufacturer: ABB, Inc.				Test Location: ETL (Dallas, TX)			
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 and AFP 37.5kVA transformer							
UUT PROPERTIES							
Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)			
	Width	Depth	Height	FB	SS	V	
1,328	36.0	45.3	104.7	5.4	3.9	5.3	
SEISMIC TEST PARAMETERS							
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	2.00	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_w-1A

UNIT UNDER TEST (UUT) SUMMARY SHEET



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

UUT_w-1A



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 3200A main bus (MLO)

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
1,503	40.0	44.0	102.3	3.2	3.8	19.4

SEISMIC TEST PARAMETERS

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	2.00	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_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							
Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)			
	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	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	2.00	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_w-4A

UNIT UNDER TEST (UUT) SUMMARY SHEET



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

UUT_w-4A



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 1 carbon steel enclosure with 3200A bus and ABB Emax E4.2 circuit breaker (3200A Fixed)

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
1,402	36.0	30.0	96.0	6.0	7.3	15.8

SEISMIC TEST PARAMETERS

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	2.00	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_w-4B

UNIT UNDER TEST (UUT) SUMMARY SHEET



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

UUT_w-4B



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 1 carbon steel enclosure with 3200A bus and ABB Emax E2.2 circuit breaker (1600A Draw-out)

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
847	24.0	30.0	96.0	6.0	7.3	15.8

SEISMIC TEST PARAMETERS

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	2.00	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_w-4C

UNIT UNDER TEST (UUT) SUMMARY SHEET



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



UUT_w-4C

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 1 carbon steel enclosure with 3200A bus and ABB Emax E2.2 circuit breaker (800A Fixed)

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
748	24.0	30.0	96.0	6.0	7.3	15.8

SEISMIC TEST PARAMETERS

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	2.00	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.

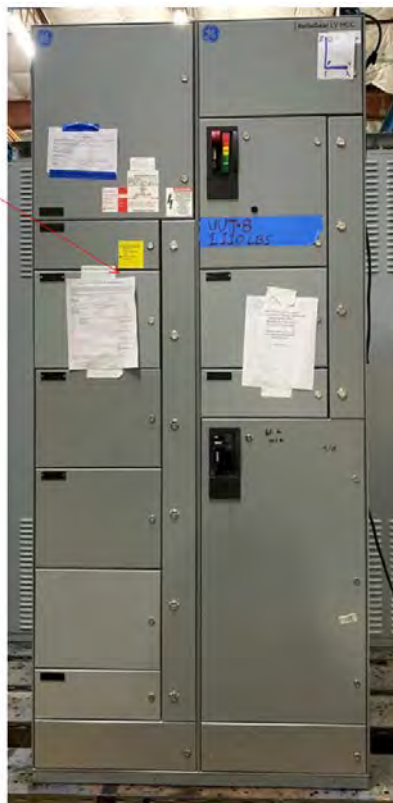
UUT_w-8A

UNIT UNDER TEST (UUT) SUMMARY SHEET



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

UUT_w-8A



Manufacturer: ABB, Inc.

Test Location: ETL (Dallas, TX)

Component: 600A Reliagear LV MCC

Test Date: May 2023

Model Number: MCC-600

Report Number: 16991

UUT Function: Electrical operation and control of motors for industrial applications

UUT Description: NEMA 1 carbon steel enclosure with 600A main bus (MLO)

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
361	20.0	20.0	92.0	7.5	6.0	20.7

SEISMIC TEST PARAMETERS

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	2.00	1.0	1.5	3.20	2.40	--	--
	2.50	0.0	1.5	--	--	1.67	0.67

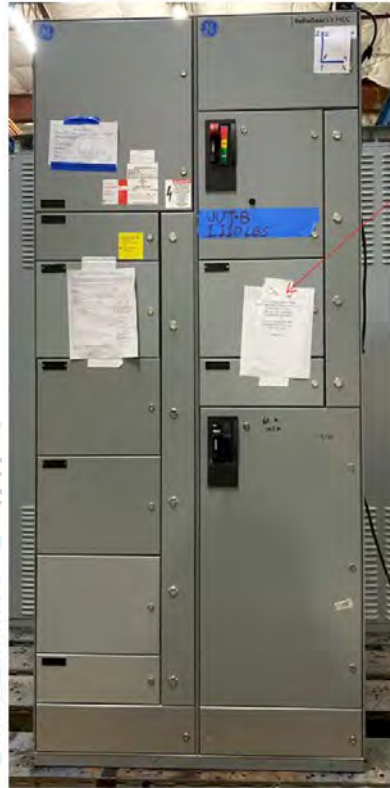
Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 test.

UUT_w-8B

UNIT UNDER TEST (UUT) SUMMARY SHEET



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



UUT_w-8B

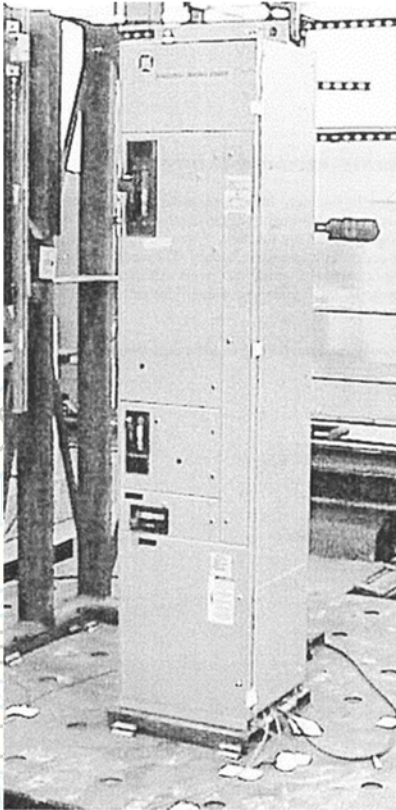
Manufacturer: ABB, Inc.				Test Location: ETL (Dallas, TX)			
Component: 600A Reliagear LV MCC				Test Date: May 2023			
Model Number: MCC-600				Report Number: 16991			
UUT Function: Electrical operation and control of motors for industrial applications							
UUT Description: NEMA 1 carbon steel enclosure with 600A main bus, ABB 3kVA transformer and AFP 25kVA transformer							
UUT PROPERTIES							
Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)			
	Width	Depth	Height	FB	SS	V	
749	20.0	20.0	92.0	7.5	6.0	20.7	
SEISMIC TEST PARAMETERS							
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	2.00	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_x-A

UNIT UNDER TEST (UUT) SUMMARY SHEET



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



Manufacturer: ABB, Inc.

Test Location: Wyle Laboratories (AL)

Component: 600A Evolution E9000

Test Date: December 2005

Model Number: MCC-600

Report Number: 52870-1

UUT Function: Electrical operation and control of motors for industrial applications

UUT Description: NEMA 1 carbon steel enclosure with 30A & 400A circuit breakers, 150VA CPT, and FVNR size 5 starter

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
550	20.0	20.0	90.0	8.7	5.1	9.7

SEISMIC TEST PARAMETERS

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	2.00	1.0	1.5	3.20	2.40	--	--
	2.50	0.0	1.5	--	--	1.67	0.67

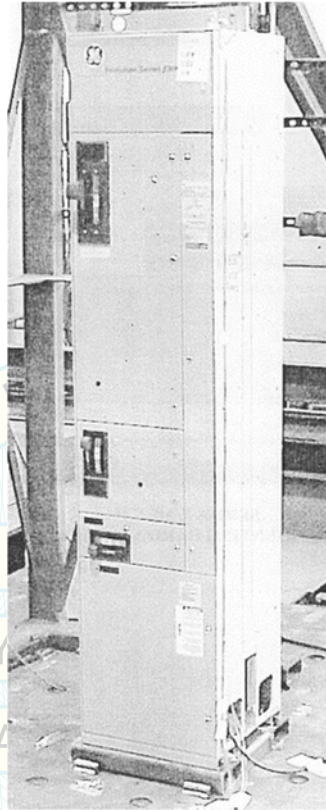
Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 test.

UUT_x-B

UNIT UNDER TEST (UUT) SUMMARY SHEET



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



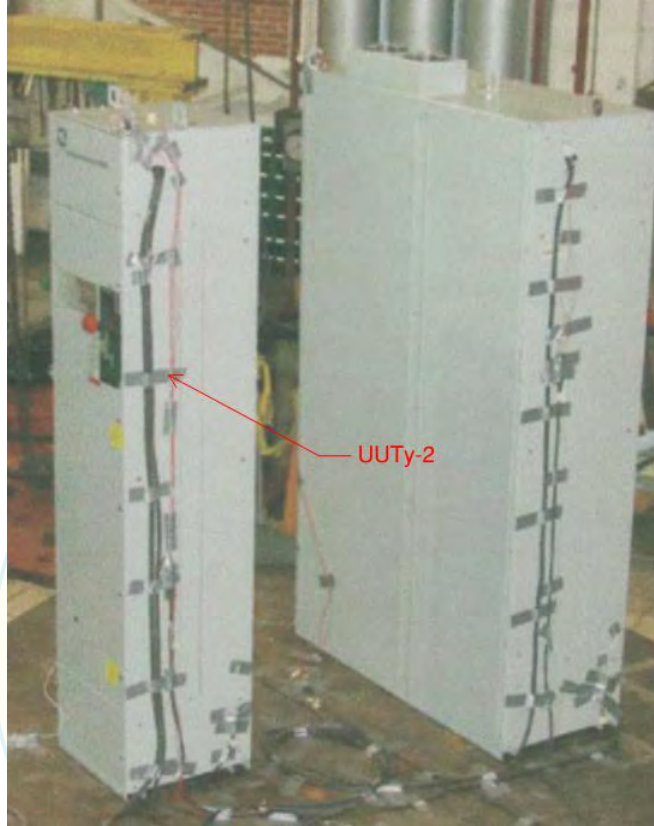
Manufacturer: ABB, Inc.				Test Location: Wyle Laboratories (AL)			
Component: 600A Evolution E9000				Test Date: December 2005			
Model Number: MCC-600				Report Number: 52870-1			
UUT Function: Electrical operation and control of motors for industrial applications							
UUT Description: NEMA 1 carbon steel enclosure with 30A & 400A circuit breakers, 150VA CPT, potential transformer, and size 5 starter.							
UUT PROPERTIES							
Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)			
	Width	Depth	Height	FB	SS	V	
572	20.0	20.0	90.0	6.0	5.8	8.9	
SEISMIC TEST PARAMETERS							
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	2.00	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_y-2

UNIT UNDER TEST (UUT) SUMMARY SHEET



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



Manufacturer: ABB, Inc.

Test Location: Clark Testing (PA)

Component: 600A Evolution E9000 MCC

Test Date: November 2008

Model Number: MCC-600

Report Number: 8639

UUT Function: Electrical operation and control of motors for industrial applications

UUT Description: NEMA 1 carbon steel enclosure with 600A circuit breaker and 300VA CPT

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
451	20.0	20.0	91.5	8.6	5.4	> 33.0

SEISMIC TEST PARAMETERS

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	2.00	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_z-1A

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Floor mounted with (4) 1/2" diameter grade 8 bolts.



Manufacturer: ABB, Inc.

Test Location: Clark Testing (PA)

Component: 600A Evolution E9000 MCC

Test Date: December 2013 – January 2014

Model Number: MCC-600

Report Number: 3380-R

UUT Function: Electrical operation and control of motors for industrial applications

UUT Description: NEMA 3R carbon steel enclosure with 20A circuit breaker, 200kA SPD, voltage transformer, VFD size 1, FVNR size 1 starter, GE Filter, and size 1 solid state starters

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
823	20.0	20.0	102.5	17.9	8.4	> 33.0

SEISMIC TEST PARAMETERS

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	2.25	1.0	1.5	3.60	2.70	--	--
	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_Z-1B

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Floor mounted with (4) 1/2" diameter grade 8 bolts.



Manufacturer: ABB, Inc.				Test Location: Clark Testing (PA)			
Component: 600A Evolution E9000 MCC				Test Date: December 2013 – January 2014			
Model Number: MCC-600				Report Number: 3380-R			
UUT Function: Electrical operation and control of motors for industrial applications							
UUT Description: NEMA 3R carbon steel enclosure with 20A circuit breaker, 200kA SPD, voltage transformer, VFD size 1, FVNR size 1 starter, GE Filter, and size 1 solid state starters							
UUT PROPERTIES							
Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)			
	Width	Depth	Height	FB	SS	V	
823	20.0	20.0	102.5	17.9	8.4	> 33.0	
SEISMIC TEST PARAMETERS							
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	2.25	1.0	1.5	3.60	2.70	--	--
	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_z-3A

UNIT UNDER TEST (UUT) SUMMARY SHEET



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



Manufacturer: ABB, Inc.

Test Location: Clark Testing (PA)

Component: 800A Evolution E9000 MCC

Test Date: December 2013 – January 2014

Model Number: MCC-800

Report Number: 3380-R

UUT Function: Electrical operation and control of motors for industrial applications

UUT Description: NEMA 1 carbon steel enclosure with 600A & 1200A circuit breakers, 300VA & 500VA CPTs, (2) size 6 solid state starters, and FVNRV size 6 vacuum starter

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
378	20.0	20.0	91.5	7.9	5.8	> 33.0

SEISMIC TEST PARAMETERS

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	2.00	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_z-3B

UNIT UNDER TEST (UUT) SUMMARY SHEET



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



Manufacturer: ABB, Inc.

Test Location: Clark Testing (PA)

Component: 800A Evolution E9000 MCC

Test Date: December 2013 – January 2014

Model Number: MCC-800

Report Number: 3380-R

UUT Function: Electrical operation and control of motors for industrial applications

UUT Description: NEMA 1 carbon steel enclosure with 600A & 1200A circuit breakers, 300VA & 500VA CPTs, (2) size 6 solid state starters, and FVNRV size 6 vacuum starter

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
568	30.0	20.0	91.5	7.9	5.8	> 33.0

SEISMIC TEST PARAMETERS

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	2.00	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_z-4A

UNIT UNDER TEST (UUT) SUMMARY SHEET



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



Manufacturer: ABB, Inc.

Test Location: Clark Testing (PA)

Component: 600A Evolution E9000 MCC

Test Date: December 2013 – January 2014

Model Number: MCC-600

Report Number: 3380-R

UUT Function: Electrical operation and control of motors for industrial applications

UUT Description: NEMA 1 carbon steel enclosure with 250A circuit breaker, 300VA CPT, 25kA SPD, and FVNRV size 4 vacuum starter

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
383	20.0	20.0	92.0	11.2	10.4	12.2

SEISMIC TEST PARAMETERS

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	2.50	1.0	1.5	4.00	3.00	--	--
	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_z-4B

UNIT UNDER TEST (UUT) SUMMARY SHEET



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



Manufacturer: ABB, Inc.

Test Location: Clark Testing (PA)

Component: 600A Evolution E9000 MCC

Test Date: December 2013 – January 2014

Model Number: MCC-600

Report Number: 3380-R

UUT Function: Electrical operation and control of motors for industrial applications

UUT Description: NEMA 1 carbon steel enclosure with 250A circuit breaker, 300VA CPT, 25kA SPD, and FVNRV size 4 vacuum starter

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
478	20.0	20.0	112.0	11.2	10.4	12.2

SEISMIC TEST PARAMETERS

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	2.50	1.0	1.5	4.00	3.00	--	--
	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_z-4C

UNIT UNDER TEST (UUT) SUMMARY SHEET



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



Manufacturer: ABB, Inc.

Test Location: Clark Testing (PA)

Component: 600A Evolution E9000 MCC

Test Date: December 2013 – January 2014

Model Number: MCC-600

Report Number: 3380-R

UUT Function: Electrical operation and control of motors for industrial applications

UUT Description: NEMA 1 carbon steel enclosure with 250A circuit breaker, 300VA CPT, 25kA SPD, and FVNRV size 4 vacuum starter

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
383	20.0	20.0	92.0	11.2	10.4	12.2

SEISMIC TEST PARAMETERS

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	2.50	1.0	1.5	4.00	3.00	--	--
	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.