

CERTUSS

STEAM GENERATOR

E110-320MX

[FACTSHEET]

www.certuss-america.com

CERTUSS

EMX



THE STEAM REVOLUTION STARTS NOW!

ZERO EMISSIONS. MAXIMUM POWER. PURE INNOVATION.

Get ready to witness the future of steam generation! The CERTUSS EMX is turning heads and transforming industries with its groundbreaking fully electric technology. Imagine: 100% emission-free operation when powered by renewable energy – that's not just clean, that's REVOLUTIONARY!

This powerhouse delivers everything you need in a package that's 25% smaller than traditional boiler plants, freeing up valuable floor space while maximizing performance. With intelligent stepless power control, you'll slash operational costs and boost efficiency like never before. The modular architecture means you can scale and adapt in real-time to meet your exact demands – no compromise, just pure flexibility! And it's all backed by cutting-edge Industry 4.0 connectivity: smart automation, intuitive multilingual HMI, remote diagnostics, and condition monitoring that keeps you in control 24/7. This isn't just another steam generator – it's the FUTURE, and it's compact, powerful, and brilliantly connected! Don't just meet the future – be part of it!

CAPACITIES

Size/Model		E110MX	E160MX	E220MX	E320MX
Steam Capacity*	**lbs/h**	**243**	**353**	**485**	**705**
	kg/h	110	160	220	320
Steam Capacity**	**lbs/h**	**290**	**422**	**580**	**844**
	kg/h	132	191	263	383
Steam Capacity***	**lbs/h**	**277**	**403**	**553**	**805**
	kg/h	126	183	251	365
Rated Output US**	**MBtu/h**	**281.5**	**409.5**	**563.0**	**818.9**
	BHP	8.4	12.2	16.8	24.5
	kW	82.5	120	165	240

*43,5 psi, 32 °F **0 psi, 212°F ***135 psi, 212°F



EMX WILL FEATURE AND INCLUDE:

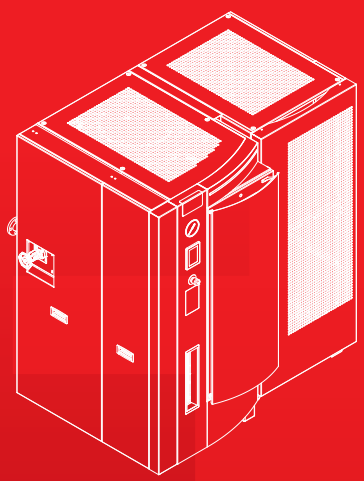
_Fastest start-up < 5 minutes
_Steam quality – industrial or culinary
_Compact design – 25% smaller than traditional boiler plants
_Decentralized on-demand solution
_Modular design
_Easy control via HMI
_One-View control
_Maintenance advantages due to easy accessibility

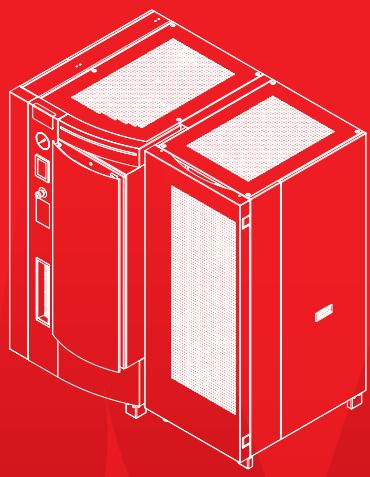
STEAM PRESSURE RATING

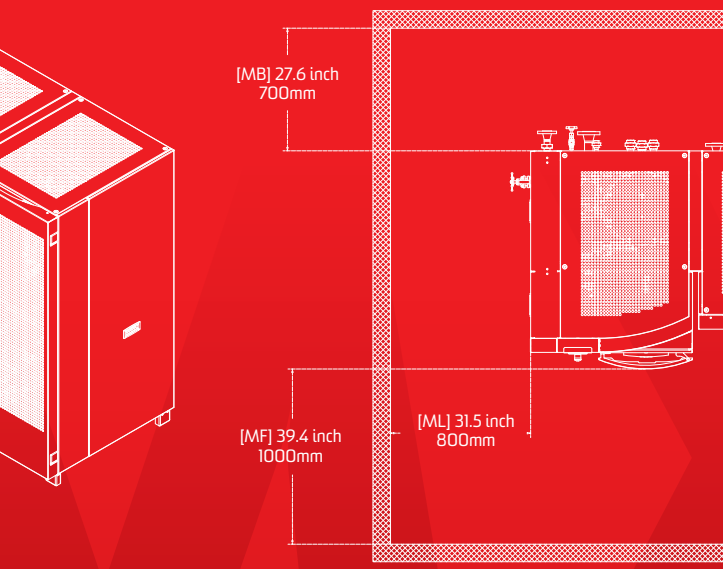
Size/Model		E110MX-E320MX
Max allowable working pressure (MAWP)	**psig**	**60 / 90 / 120 / 150**
	MPa	0.41 / 0.62 / 0.83 / 1.03
Max. operating pressure	**psig**	**52 / 82 / 112 / 135**
	MPa	0.36 / 0.57 / 0.77 / 0.93
Min. operating pressure	**psig**	**44 / 51**
	MPa	0.30 / 0.35

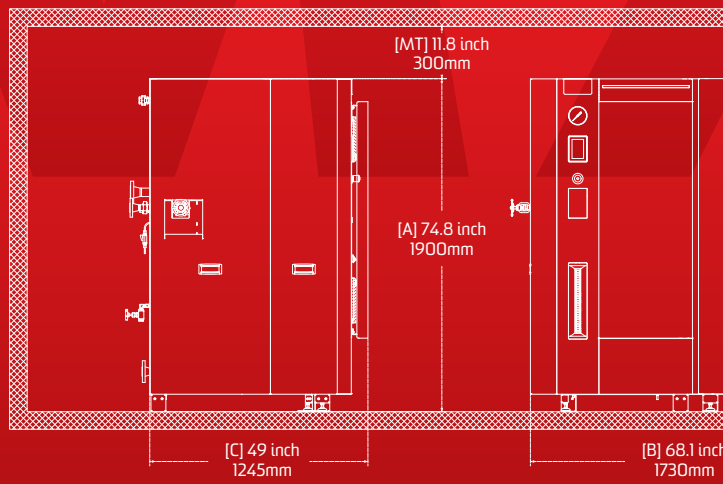
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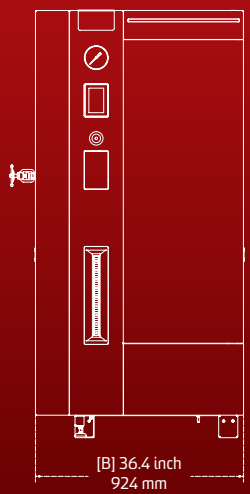




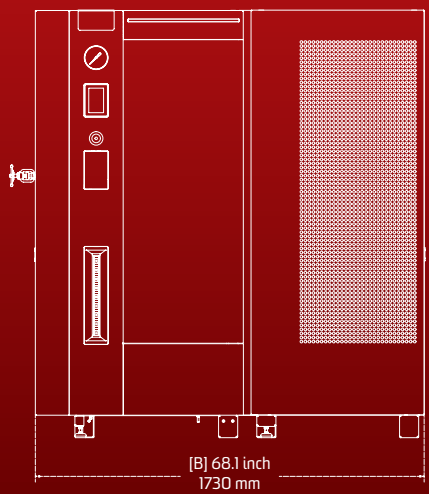


A Height
B Width
C Depth
MR Maintenance Right
MF Maintenance Front
MT Maintenance Top

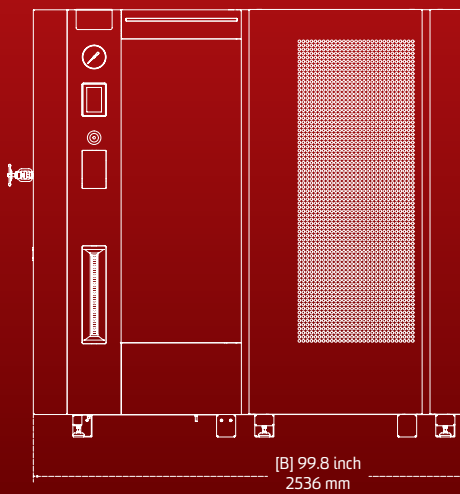
E110MX / E160MX

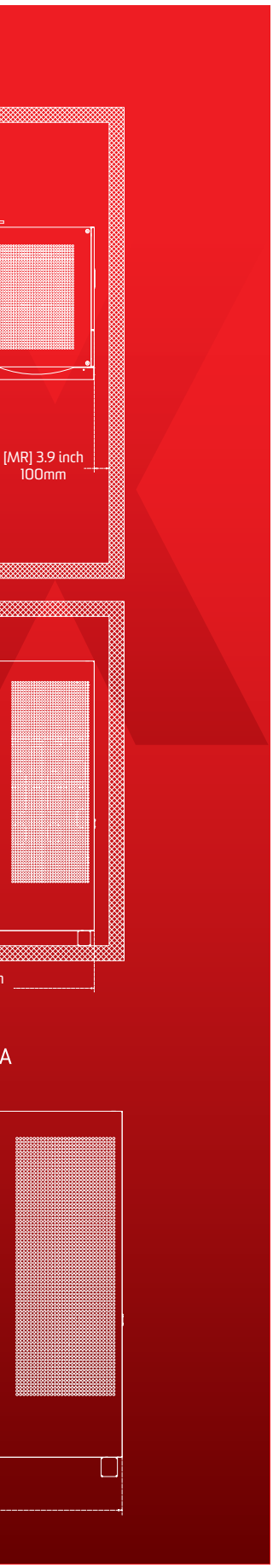


E110MX / E160MX+MX-CPA
E220MX/E320MX



E220MX / E320MX + MX-CP





DIMENSIONS

Size/Model		E110MX/E160MX	E110MX/E160MX+MX-CPA	E220MX/E320MX	E220MX/E320MX+MX-CPA
Height (A)	**mm**		**1900**		
	in		74.8		
Width (B)	**mm**	**924**	**1730**		**2536**
	in	36.4	68.1		99.8
Depth (C)	**mm**		**1245**		
	in		49		
Footprint	**m^2**	**1.1**	**2.0**		**2.9**
	sq ft	11	21		31
Dry weight	**kg**	**570**	**920**	**870**	**1220**
	lbs	1257	2028	1918	2690
Operating weight	**kg**	**630**	**1050**	**960**	**1380**
	lbs	1389	2315	2116	3042

CONNECTIONS

Size/Model		E110MX	E160MX	E220MX	E320MX
Steam	**in**	1/2			1
Water*	**in**	1/2			1/2
Safety valve**	**in**	1			1 - 1 1/2
Drain	**in**			1	

*feedwater or raw water with MX-CPA **depending on MAWP

MAINTENANCE AREA

Front (MF)	**in**	**39.4**
	mm	1000
Back (MB)	**in**	**27.6**
	mm	700
Right (MR)	**in**	**3.9**
	mm	100
Left (ML)	**in**	**31.5**
	mm	800
Top (MT)	**in**	**11.8**
	mm	300

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PRESSURE VESSEL

Size/Model		E110MX	E160MX	E220MX	E320MX
Material					
Carbon Steel			ASME SA-234 Grade WPB et. al.		
Stainless Steel*			ASME SA-182/240/403 et.al. Grade 316		
Volume	**gal**		**10.3**		**20.7**
	l		47		94
Heating Surface	**ft²**	**7.7**	**11.2**	**15.4**	**22.4**
	m²	0.7	1.1	1.4	2.1

*max. feed water conductivity 1µS/cm according to ASME BPVC I PEB-5.3

ELECTRICAL REQUIREMENTS

Size/Model		E110MX	E160MX	E220MX	E320MX
Electrical Supply	**V**			**440/460/480**	
	Hz			50/60	
Total Load*	**hp**	**112**	**162**	**222****	**323****
	kW	83.25	120.75	165.75	240.75
Optional Loads					
Cabinet Cooling	**hp**		**1.2**		**1.9**
	kW		0.90		1.45
Feedwater Heating	**hp**		**12/24**		**12/24/36/48**
	kW		9/18		9/18/27/36

*without optional loads listed below **two power modules, each with a separate power supply







FEATURES
_Full modulating
_Compact design
_Integrated HMI
_One-View control
_Integrated cooling
_Flexible access points for maintenance
_Steam quality: industrial or culinary

OPTIONS
_Integrated water module MX-CPA
_Thermotimat PLUS control (fully automated)
_Stainless steel
_Available as containerized solution

APPROVALS*
_ASME Boiler & Vessel Code S-Stamp
_ASME CSD-1
_UL 834
_Electrical cabinet wired according to UL 508
_Heating Elements according to UL 1030

*in preparation

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