



## CZM Marine Sanitation Device

34-11,250 Gallons Per Day (0.128-45.5 m<sup>3</sup>/Day)



### FEATURES

- Reliable proven process
- Dual Certified USCG and IMO 159.55
- Unitary construction with lifting eyes
- Ultra low maintenance
- Low odor
- Minimal Sludge Production

### CONTROLS

- Relay logic controls
- Single button operation
- Chlorine tablet low indicator
- Odor control and bacteria auto-feed system
- Motor starters included
- Common alarm output

### INSTRUMENTS

- High level alarm with beacon
- Chlorine tablet low alarm
- Odor control low level alarm
- Blower run light
- Power on light
- Overboard pump run light
- Lamp test function
- Blower HOA switch

### MATERIALS OF CONSTRUCTION

- Tank A36 steel (C Option)
- Internal Piping: Schedule 80, CPVC
- Blower piping 316SS

- Overboard pump: Bronze
- Electrical Enclosure: Polycarbonate

### DOCUMENTATION

- Operation and Maintenance Manual
- General Arrangement Drawing
- Plumbing and Instrumentation Diagram
- Wiring Diagram
- Weight and Center of Gravity

### AVAILABLE OPTIONS

- 316 Stainless Steel unit (S)
- Conventional open top unit (CO)
- Redundant pumps and blowers
- Explosion proof C1D2 or Zone 2
- IMO de-chlorination (DC)
- Grey water bypass kit (GW)
- Vacuum collection system
- Lift station

### ELECTRICAL OPTIONS (50/60HZ)

- 115V 1 phase
- 230V 1 phase
- 230V 3 phase
- 460V 3 phase
- Others on request

### PAINT OPTIONS

- Exterior (2-Part 2C, 3-Part 3C epoxy)
- Interior (Coal Tar CT, Phenoline F)
- Paint: 3-Part Carboline marine system



MODEL	CZM-00034	CZM-00076	CZM-00112	CZM-00182	CZM-00240
Hydraulic Loading GPD	34	76	112	182	240
M3/Day	0.13	0.29	0.42	0.69	0.91
Organic Loading LBS/Day	0.59	1.19	2.38	3.57	4.76
Kg/Day	0.27	0.54	1.08	1.62	2.16
USCG Black/Black & Gray	3/1	7/2	11/3	18/6	24/8
IMO Black/Black & Gray	2/0	5/1	7/2	12/4	16/5
USCG/IMO Certificate Number	159.015/10040/0	159.015/10041/0	159.015/10042/0	159.015/10043/0	159.015/10044/0
<b>Pumps and Motors</b>					
Blower Model	CZ-BLWRS025-1	CZ-BLWRS05-1	CZ-BLWRS05-1	CZ-BLWRS15-1	CZ-BLWRS15-1
Blower Type	Regenerative	Regenerative	Regenerative	Regenerative	Regenerative
Quantity	1	1	1	1	1
Motor Power	.25	.50	.50	1.50	1.50
Design Flow Rate (CFM)	40	60	60	107	107
Design Pressure (TDH)	40	44	44	51	51
Discharge Pump Model	CZ-DISCHARGE1	CZ-DISCHARGE1	CZ-DISCHARGE1	CZ-DISCHARGE1	CZ-DISCHARGE1
Quantity	1	1	1	1	1
Material	Bronze	Bronze	Bronze	Bronze	Bronze
Motor Power	.50	.50	.50	.50	.50
Pressure Rating	22	22	22	22	22
<b>Installation and Utility Requirements</b>					
Inlet	3"	3"	3"	3"	3"
Outlet	1.50"	1.50"	1.50"	1.50"	1.50"
Vent	2"	3"	3"	3"	3"
Power	115/208-230 1PH 50/60 Hz	115/208-230 1PH 50/60 Hz	115/208-230 1PH 50/60 Hz	115/208-230 1PH 50/60 Hz	115/208-230 1PH 50/60 Hz
<b>Size and Weight</b>					
Dimensions (L x W x H)	58"x 30"x 48"	73"x 29"x 53"	79"x 31"x 53"	95"x 37"x 58"	95"x 41"x 68"
Weight (DRY)	600	700	900	1100	1300
Weight (OPERATING)	1017	1659	2342	3451	4352



MODEL	CZM-00360	CZM-00575	CZM-00750	CZM-01125	CZM-01546
Hydraulic Loading GPD	360	575	750	1125	1546
M3/Day	1.36	2.18	2.84	4.25	5.85
Organic Loading LBS/Day	7.14	11.30	14.88	22.22	30.64
Kg/Day	3.24	5.13	6.75	10.08	13.90
USCG Black/Black & Gray	36/12	57/19	75/25	112/37	154/51
IMO Black/Black & Gray	24/8	38/12	50/16	75/25	103/34
USCG/ IMO Certificate Number	159.015/10045/0	159.015/10046/0	159.015/10047/0	159.015/10048/0	159.015/10049/0
<b>Pumps and Motors</b>					
Blower Model	CZ-BLWRS15-1	CZ-BLWRS25-3	CZ-BLWRS25-3	CZ-BLWRS25-3	CZ-BLWRS40-3
Blower Type	Regenerative	Regenerative	Regenerative	Regenerative	Regenerative
Quantity	1	1	1	1	1
Motor Power	1.50	2.50	2.50	2.50	4.00
Design Flow Rate (CFM)	107	160	160	160	210
Design Pressure (TDH)	51	76	76	76	94
Discharge Pump Model	CZ-DISCHARGE1	CZ-DISCHARGE2	CZ-DISCHARGE2	CZ-DISCHARGE2	CZ-DISCHARGE2
Quantity	1	1	1	1	1
Material	Bronze	Bronze	Bronze	Bronze	Bronze
Motor Power	.50	.75	.75	.75	.75
Pressure Rating	22	30	30	30	30
<b>Installation and Utility Requirements</b>					
Inlet	3"	3"	3"	3"	3"
Outlet	1.50"	1.50", 3"	1.50", 3"	1.50", 3"	1.50", 3"
Vent	2"	3"	3"	3"	3"
Power	115/208-230 1PH 50/60 Hz	230/460 3PH 50/60 Hz	230/460 3PH 50/60 Hz	230/460 3PH 50/60 Hz	230/460 3PH 50/60 Hz
<b>Size and Weight</b>					
Dimensions (L x W x H)	101"x 44"x 72"	93"x 57"x 85"	112"x 56"x 84"	142"x 56"x 84"	154"x 69"x 84"
Weight (DRY)	1550	2848	3269	3833	4638
Weight (OPERATING)	5928	10484	12481	16103	21839



MODEL	CZM-02026	CZM-02500	CZM-03000	CZM-03500	CZM-04000
Hydraulic Loading GPD	2026	2500	3000	3500	4000
M3/Day	7.67	9.46	11.36	13.24	15.14
Organic Loading LBS/Day	40.12	49.60	59.52	69.44	79.36
Kg/Day	18.20	22.50	27.00	31.50	36.00
USCG Black/Black & Gray	202/67	250/83	300/100	350/116	400/133
IMO Black/Black & Gray	135/45	166/55	200/66	233/77	266/88
USCG/MO Certificate Number	159.015/10050/0	159.015/10051/0	159.015/10052/0	159.015/10053/0	159.015/10139/0
<b>Pumps and Motors</b>					
Blower Model	CZ-BLWRS40-3	CZ-BLWRS40-3	CZ-BLWRS40-3	CZ-BLWRS50-3	CZ-BLWRS50-3
Blower Type	Regenerative	Regenerative	Regenerative	Regenerative	Regenerative
Quantity	1	1	1	1	1
Motor Power	4.0	4.0	4.0	5.0	5.0
Design Flow Rate (CFM)	210	210	210	262	262
Design Pressure (TDH)	94	94	94	88	88
Discharge Pump Model	CZ-DISCHARGE2	CZ-DISCHARGE2	CZ-DISCHARGE2	CZ-DISCHARGE2	CZ-DISCHARGE2
Quantity	1	1	1	1	1
Material	Bronze	Bronze	Bronze	Bronze	Bronze
Motor Power	.75	.75	.75	.75	.75
Pressure Rating	30	30	30	30	30
<b>Installation and Utility Requirements</b>					
Inlet	3"	3"	3"	3"	3"
Outlet	1.50", 3"	1.50", 3"	1.50", 3"	1.50", 3"	1.50", 3"
Vent	3"	3"	3"	3"	3"
Power	230/460 3PH 50/60 Hz	230/460 3PH 50/60 Hz	230/460 3PH 50/60 Hz	230/460 3PH 50/60 Hz	230/460 3PH 50/60 Hz
<b>Size and Weight</b>					
Dimensions (L x W x H)	166"x 92"x 84"	190"x 93"x 82"	158"x 105"x 105"	174"x 97"x 107"	VARIABLES
Weight (DRY)	5472	6004	7254	7720	VARIABLES
Weight (OPERATING)	28545	31512	44915	50361	VARIABLES



MODEL	CZM-04500	CZM-05000	CZM-05500	CZM-06000	CZM-07500
Hydraulic Loading GPD	4500	5000	5500	6000	7500
M3/Day	17.03	18.93	20.82	22.71	28.39
Organic Loading LBS/Day	88.89	98.76	108.64	118.52	148.81
Kg/Day	40.32	44.80	49.28	53.76	67.50
USCG Black/Black & Gray	450/150	500/166	550/183	600/200	750/250
IMO Black/ Black & Gray	300/100	333/111	366/122	400/133	500/166
USCG/IMO Certificate Number	159.015/10143/0	159.015/10144/0	159.015/10145/0	159.015/10146/0	159.015/10140/0
<b>Pumps and Motors</b>					
Blower Model	CZ-BLWRS50-3	CZ-BLWRS	CZ-BLWRS	CZ-BLWRS	CZ-BLWRS
Blower Type	Regenerative	Regenerative	Regenerative	Regenerative	Regenerative
Quantity	1	1	1	1	1
Motor Power	5.0				
Design Flow Rate (CFM)	262				
Design Pressure (TDH)	88				
Discharge Pump Model	CZ-DISCHARGE2	CZ-DISCHARGE2	CZ-DISCHARGE2	CZ-DISCHARGE2	CZ-DISCHARGE2
Quantity	1	1	1	1	1
Material	Bronze	Bronze	Bronze	Bronze	Bronze
Motor Power	.75	.75	.75	.75	.75
Pressure Rating	30	30	30	30	30
<b>Installation and Utility Requirements</b>					
Inlet	4"	4"	4"	4"	4"
Outlet	1.50", 3"	1.50", 3"	1.50", 3"	1.50", 3"	1.50", 3"
Vent	4"	4"	4"	4"	4"
Power	230/460 3PH 50/60 Hz	230/460 3PH 50/60 Hz	230/460 3PH 50/60 Hz	230/460 3PH 50/60 Hz	230/460 3PH 50/60 Hz
<b>Size and Weight</b>					
Dimensions (L x W x H)	VARIABLES	VARIABLES	VARIABLES	VARIABLES	VARIABLES
Weight (DRY)	VARIABLES	VARIABLES	VARIABLES	VARIABLES	VARIABLES
Weight (OPERATING)	VARIABLES	VARIABLES	VARIABLES	VARIABLES	VARIABLES



MODEL	CZM-09000	CZM-11250			
Hydraulic Loading GPD	9000	11250			
M3/Day	34.07	42.58			
Organic Loading LBS/Day	178.57	222.22			
Kg/Day	81.00	100.80			
USCG Black/Black & Gray	900/300	1125/375			
IMO Black/Black & Gray	600/200	750/250			
IMO Certificate Number	159.015/10141/0	159.015/10142/0			
USCG Certificate Number	159.015/10141/0	159.015/10142/0			
<b>Pumps and Motors</b>					
Blower Model					
Blower Type	Regenerative	Regenerative			
Quantity	1	1			
Motor Power					
Design Flow Rate (CFM)					
Design Pressure (TDH)					
Discharge Pump Model	CZ-DISCHARGE2	CZ-DISCHARGE2			
Quantity	1	1			
Material	Bronze	Bronze			
Motor Power	.75	.75			
Pressure Rating	30	30			
<b>Installation and Utility Requirements</b>					
Inlet	4"	4"			
Outlet	1.50", 3"	1.50", 3"			
Vent	4"	4"			
Power					
<b>Size and Weight</b>					
Dimensions (L x W x H)	VARIES	VARIES	VARIES	VARIES	VARIES
Weight (DRY)	VARIES	VARIES	VARIES	VARIES	VARIES
Weight (OPERATING)	VARIES	VARIES	VARIES	VARIES	VARIES