

Pursuant to the authority vested in the Air Resources Board by Health and Safety Code Sections 43013, 43018, 43101, 43102 and 43104; and

Pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-19-095;

IT IS ORDERED AND RESOLVED: That the following new spark-ignition marine engine and emission control systems (ECS) produced by the manufacturer are certified as described below. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	FUEL TYPE	DISPLACEMENT (cc)	LEVEL OF CLEANLINESS
2023	PM9XM04.62RS	Gasoline	4576	Ultra Low Emission ("Three Stars")
EQUIPMENT APPLICATION		ECS & SPECIAL FEATURES		ENGINE TYPE
Outboard		Sequential Multiport Fuel Injection Heated Oxygen Sensor Supercharged with Water to Air Cooler		4-Stroke
ENGINE MODELS (rated power in kilowatts, kW)	See Attachment			

BE IT ORDERED AND RESOLVED: That the listed engines are certified to a hydrocarbon plus oxides of nitrogen (HC+NOx) family emission limit (FEL) and a carbon monoxide (CO) direct standard in accordance with a plan submitted by the manufacturer to, and approved by, the Executive Officer for compliance with the exhaust emission standards on a corporate average basis pursuant to Title 13, California Code of Regulations, (13 CCR) Section 2442(a). The HC+NOx FEL and the CO standard shall be the applicable emission standards for this engine family for determining compliance of any engine within this engine family pursuant to 13 CCR Sections 2444.1 (in-use compliance) and 2446 (audit testing). The standards and certification emission levels in grams per kilowatt-hour (g/kW-hr) for this engine family are as follows. Engines in this engine family shall have closed crankcases in conformance with Part I, Section 18(h) of the "California Exhaust Emission Standards and Test Procedures for 2001 Model-Year and Later Spark-Ignition Marine Engines."

*=not applicable	HC+NOx (g/kW-hr)	CO (g/kW-hr)
STANDARD	*	300.0
FAMILY EMISSION LEVEL	15.90	*
CERTIFICATION LEVEL	13.88	192.6

Compliance with the emission standards on a corporate average basis shall be determined pursuant to 13 CCR Section 2442(a) based on the sales-weighted average power of all engines produced for sale in California that are included in the approved corporate average compliance plan for the model-year.

BE IT FURTHER RESOLVED: That for the listed engines, the manufacturer has submitted, and the Executive Officer hereby approves, the information and materials to demonstrate certification compliance with 13 CCR Sections 2443.1, 2443.2 and 2443.3 (emission control, consumer, and environmental labels), and Sections 2445.1 and 2445.2 (emission control system warranty).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

Quarterly reports of engines produced in this engine family for sale in California shall be submitted to the Executive Officer no later than 45 days after the end of each calendar quarter pursuant to 13 CCR Sections 2442(a)(2)(B) and 2446.

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

Executed on this 20th day of June 2022.



Allen Lyons, Chief
 Emissions Certification and Compliance Division

Date: 12/14/2023

Engine Family: PM9XM04.62RS

RC02_12-14-2023

Model Summary

S12. Engine Model	S13. Engine Code	S14. Sales Codes (Check all appropriate)			S15. Engine Displacement (cc)	S16. Rated Power (kW)	S17. Rated Speed (RPM)	S18. Peak Torque (N-m)	S19. Peak Torque Speed (RPM)
		CA Only	49-State	50-State					
450R L SM1.6 BL	14500007A			X	4576	336	6400	577	4000
450R CL SM1.6 BL	*14500008A			X	4576	336	6400	577	4000
450R XL SM1.6 BL	14500009A			X	4576	336	6400	577	4000
450R CXL SM1.6 BL	14500010A			X	4576	336	6400	577	4000
450R XXL SM1.6 BL	14500011A			X	4576	336	6400	577	4000
450R CXXL SM1.6BL	14500012A			X	4576	336	6400	577	4000
450R L SM1.6 RCBL	14500013A			X	4576	336	6400	577	4000
450R L SM1.6 RTB	14500021A			X	4576	336	6400	577	4000
450R CL SM1.6 RTB	14500022A			X	4576	336	6400	577	4000
450R L SM1.6 CF	14500034A			X	4576	336	6400	577	4000
450R CL SM1.6 CF	14500035A			X	4576	336	6400	577	4000
450R XL SM1.6 CF	14500036A			X	4576	336	6400	577	4000
450R CXL SM1.6 CF	14500037A			X	4576	336	6400	577	4000
450R XXL SM1.6 CF	14500038A			X	4576	336	6400	577	4000
450R CXXL SM1.6CF	14500039A			X	4576	336	6400	577	4000
450R L SM1.6 RCCF	14500040A			X	4576	336	6400	577	4000
450R L SM1.6 RTW	14500048A			X	4576	336	6400	577	4000
450R CL SM1.6 RTW	14500049A			X	4576	336	6400	577	4000
450R LHDJ1.6BL	14500055A			X	4576	336	6400	577	4000
450R CLHDJ1.6BL	14500056A			X	4576	336	6400	577	4000
450R XLHDJ1.6BL	14500057A			X	4576	336	6400	577	4000
450R CXLHDJ1.6BL	14500058A			X	4576	336	6400	577	4000
450R XXLHDJ1.6BL	14500059A			X	4576	336	6400	577	4000
450R CXXLHDJ1.6BL	14500060A			X	4576	336	6400	577	4000
450R LHDJ1.6CF	14500061A			X	4576	336	6400	577	4000
450R CLHDJ1.6CF	14500062A			X	4576	336	6400	577	4000
450R XLHDJ1.6CF	14500063A			X	4576	336	6400	577	4000
450R CXLHDJ1.6CF	14500064A			X	4576	336	6400	577	4000
450R XXLHDJ1.6CF	14500065A			X	4576	336	6400	577	4000
450R CXXLHDJ1.6CF	14500066A			X	4576	336	6400	577	4000
450R L HD RC RT BL	14500067A			X	4576	336	6400	577	4000
450RCL HD LC RT B	14500068A			X	4576	336	6400	577	4000
450R L HD RC RTCF	14500069A			X	4576	336	6400	577	4000
450RCL HD LC RTCF	14500070A			X	4576	336	6400	577	4000
450R LHC1.6BL	14500071A			X	4576	336	6400	577	4000
450R CLHC1.6BL	14500072A			X	4576	336	6400	577	4000
450R XLHC1.6BL	14500073A			X	4576	336	6400	577	4000
450R CXLHC1.6BL	14500074A			X	4576	336	6400	577	4000

Date: 12/14/2023

Engine Family: PM9XM04.62RS

RC02_12-14-2023

Model Summary

S12. Engine Model	S13. Engine Code	S14. Sales Codes (Check all appropriate)			S15. Engine Displacement (cc)	S16. Rated Power (kW)	S17. Rated Speed (RPM)	S18. Peak Torque (N-m)	S19. Peak Torque Speed (RPM)
		CA Only	49-State	50-State					
450R XXLHC1.6BL	14500075A			X	4576	336	6400	577	4000
450R CXLHC1.6BL	14500076A			X	4576	336	6400	577	4000
450R LHC1.6CF	14500077A			X	4576	336	6400	577	4000
450R CLHC1.6CF	14500078A			X	4576	336	6400	577	4000
450R XLHC1.6CF	14500079A			X	4576	336	6400	577	4000
450R CXLHC1.6CF	14500080A			X	4576	336	6400	577	4000
450R XXLHC1.6CF	14500081A			X	4576	336	6400	577	4000
450R CXLHC1.6CF	14500082A			X	4576	336	6400	577	4000
450R XLHD1.6CRTBL	14500083A			X	4576	336	6400	577	4000
45R CXLHD1.6CRTBL	14500084A			X	4576	336	6400	577	4000
450R XLHD1.6CRTCF	14500085A			X	4576	336	6400	577	4000
450R CXLHD1.6CRTCF	14500086A			X	4576	336	6400	577	4000
450R XXLSM1.6RTBL	14500087A			X	4576	336	6400	577	4000
450R CXLSM1.6RTBL	14500088A			X	4576	336	6400	577	4000
450R XXLSM1.6RTCF	14500089A			X	4576	336	6400	577	4000
450R CXLSM1.6RTCF	14500090A			X	4576	336	6400	577	4000
500R L RD B	15000105A			X	4576	373	6600	620	4000
500R CL RD B	15000106A			X	4576	373	6600	620	4000
500R XL RD B	15000107A			X	4576	373	6600	620	4000
500R CXL RD B	15000108A			X	4576	373	6600	620	4000
500R XXL RD B	15000109A			X	4576	373	6600	620	4000
500R CXXL RD B	15000110A			X	4576	373	6600	620	4000
500R XXXL RD B	15000111A			X	4576	373	6600	620	4000
500R CXXXL RD B	15000112A			X	4576	373	6600	620	4000
500R L RD BTB	15000113A			X	4576	373	6600	620	4000
500R CL RD BTB	15000114A			X	4576	373	6600	620	4000
500R XL RD BTB	15000115A			X	4576	373	6600	620	4000
500R CXL RD BTB	15000116A			X	4576	373	6600	620	4000
500R L 145RDSB	15000117A			X	4576	373	6600	620	4000
500R CL 145RDSB	15000118A			X	4576	373	6600	620	4000
500R XL 145RDSB	*15000119A			X	4576	373	6600	620	4000
500R CXL 145RDSB	15000120A			X	4576	373	6600	620	4000
500R XXL 145RDSB	15000121A			X	4576	373	6600	620	4000
500R CXXL 145RDSB	15000122A			X	4576	373	6600	620	4000
500R L 145 RDSCB	15000123A			X	4576	373	6600	620	4000
500R L 145RDSBTB	15000124A			X	4576	373	6600	620	4000
500R CL 145RDSBTB	15000125A			X	4576	373	6600	620	4000
500R L RD W	15000126A			X	4576	373	6600	620	4000

Date: 12/14/2023

Engine Family: PM9XM04.62RS

RC02_12-14-2023

Model Summary

S12. Engine Model	S13. Engine Code	S14. Sales Codes (Check all appropriate)			S15. Engine Displacement (cc)	S16. Rated Power (kW)	S17. Rated Speed (RPM)	S18. Peak Torque (N-m)	S19. Peak Torque Speed (RPM)
		CA Only	49-State	50-State					
500R CL RD W	15000127A			X	4576	373	6600	620	4000
500R XL RD W	15000128A			X	4576	373	6600	620	4000
500R CXL RD W	15000129A			X	4576	373	6600	620	4000
500R XXL RD W	15000130A			X	4576	373	6600	620	4000
500R CXXL RD W	15000131A			X	4576	373	6600	620	4000
500R XXXL RD W	15000132A			X	4576	373	6600	620	4000
500R CXXXL RD W	15000133A			X	4576	373	6600	620	4000
500R L RD WTB	15000134A			X	4576	373	6600	620	4000
500R CL RD WTB	15000135A			X	4576	373	6600	620	4000
500R XL RD WTB	15000136A			X	4576	373	6600	620	4000
500R CXL RD WTB	15000137A			X	4576	373	6600	620	4000
500R L 145RDSW	15000138A			X	4576	373	6600	620	4000
500R CL 145RDSW	15000139A			X	4576	373	6600	620	4000
500R XL 145RDSW	15000140A			X	4576	373	6600	620	4000
500R CXL 145RDSW	15000141A			X	4576	373	6600	620	4000
500R XXL 145RDSW	15000142A			X	4576	373	6600	620	4000
500R CXXL 145RDSW	15000143A			X	4576	373	6600	620	4000
500R L 145 RDSCW	15000144A			X	4576	373	6600	620	4000
500R L 145RDSWTB	15000145A			X	4576	373	6600	620	4000
500R CL 145RDSWTB	15000146A			X	4576	373	6600	620	4000
500R L RD P	15000147A			X	4576	373	6600	620	4000
500R CL RD P	15000148A			X	4576	373	6600	620	4000
500R XL RD P	15000149A			X	4576	373	6600	620	4000
500R CXL RD P	15000150A			X	4576	373	6600	620	4000
500R XXL RD P	15000151A			X	4576	373	6600	620	4000
500R CXXL RD P	15000152A			X	4576	373	6600	620	4000
500R XXXL RD P	15000153A			X	4576	373	6600	620	4000
500R CXXXL RD P	15000154A			X	4576	373	6600	620	4000
500R L RD PTB	15000155A			X	4576	373	6600	620	4000
500R CL RD PTB	15000156A			X	4576	373	6600	620	4000
500R XL RD PTB	15000157A			X	4576	373	6600	620	4000
500R CXL RD PTB	15000158A			X	4576	373	6600	620	4000
500R L 145RDSP	15000159A			X	4576	373	6600	620	4000
500R CL 145RDSP	15000160A			X	4576	373	6600	620	4000
500R XL 145RDSP	15000161A			X	4576	373	6600	620	4000
500R CXL 145RDSP	15000162A			X	4576	373	6600	620	4000
500R XXL 145RDSP	15000163A			X	4576	373	6600	620	4000
500R CXXL 145RDSP	15000164A			X	4576	373	6600	620	4000

Date: 12/14/2023

Engine Family: PM9XM04.62RS

RC02_12-14-2023

Model Summary

S12. Engine Model	S13. Engine Code	S14. Sales Codes (Check all appropriate)			S15. Engine Displacement (cc)	S16. Rated Power (kW)	S17. Rated Speed (RPM)	S18. Peak Torque (N-m)	S19. Peak Torque Speed (RPM)
		CA Only	49-State	50-State					
500R L 145 RDSCP	15000165A			X	4576	373	6600	620	4000
500R L 145RDSPTB	15000166A			X	4576	373	6600	620	4000
500R CL 145RDSPTB	15000167A			X	4576	373	6600	620	4000
500R XXXL 145RDSB	15000168A			X	4576	373	6600	620	4000
500R CXXXL145RDSB	15000169A			X	4576	373	6600	620	4000
500R XXXL 145RDSW	15000170A			X	4576	373	6600	620	4000
500R CXXXL145RDSW	15000171A			X	4576	373	6600	620	4000
500R XXXL 145RDSP	15000172A			X	4576	373	6600	620	4000
500R CXXXL145RDSP	15000173A			X	4576	373	6600	620	4000
500RXXL145RDSBTB	15000174A			X	4576	373	6600	620	4000
500RCXXL145RDSBTB	15000175A			X	4576	373	6600	620	4000
500RXXL145RDSWTB	15000176A			X	4576	373	6600	620	4000
500RCXXL145RDSWTB	15000177A			X	4576	373	6600	620	4000
500RXXL145RDSPTB	15000178A			X	4576	373	6600	620	4000
500RCXXL145RDSPTB	15000179A			X	4576	373	6600	620	4000
500R XXL RD BTB	15000180A			X	4576	373	6600	620	4000
500R CXXL RD BTB	15000181A			X	4576	373	6600	620	4000
500R XXXL RD BTB	15000182A			X	4576	373	6600	620	4000
500R CXXXL RD BTB	15000183A			X	4576	373	6600	620	4000
500R XXL RD WTB	15000184A			X	4576	373	6600	620	4000
500R CXXL RD WTB	15000185A			X	4576	373	6600	620	4000
500R XXXL RD WTB	15000186A			X	4576	373	6600	620	4000
500R CXXXL RD WTB	15000187A			X	4576	373	6600	620	4000
500R XXL RD PTB	15000188A			X	4576	373	6600	620	4000
500R CXXL RD PTB	15000189A			X	4576	373	6600	620	4000
500R XXXL RD PTB	15000190A			X	4576	373	6600	620	4000
500R CXXXL RD PTB	15000191A			X	4576	373	6600	620	4000
500R L RDJ B	15000192A			X	4576	373	6600	620	4000
500R CL RDJ B	15000193A			X	4576	373	6600	620	4000
500R XL RDJ B	15000194A			X	4576	373	6600	620	4000
500R CXL RDJ B	15000195A			X	4576	373	6600	620	4000
500R XXL RDJ B	15000196A			X	4576	373	6600	620	4000
500R CXXL RDJ B	15000197A			X	4576	373	6600	620	4000
500R XXXL RDJ B	15000198A			X	4576	373	6600	620	4000
500R CXXXL RDJ B	15000199A			X	4576	373	6600	620	4000
500R L RDJ W	15000200A			X	4576	373	6600	620	4000
500R CL RDJ W	15000201A			X	4576	373	6600	620	4000
500R XL RDJ W	15000202A			X	4576	373	6600	620	4000

Date: 12/14/2023

Engine Family: PM9XM04.62RS

RC02_12-14-2023

Model Summary

S12. Engine Model	S13. Engine Code	S14. Sales Codes (Check all appropriate)			S15. Engine Displacement (cc)	S16. Rated Power (kW)	S17. Rated Speed (RPM)	S18. Peak Torque (N-m)	S19. Peak Torque Speed (RPM)
		CA Only	49-State	50-State					
500R CXL RDJ W	15000203A			X	4576	373	6600	620	4000
500R XXL RDJ W	15000204A			X	4576	373	6600	620	4000
500R CXXL RDJ W	15000205A			X	4576	373	6600	620	4000
500R XXXL RDJ W	15000206A			X	4576	373	6600	620	4000
500R CXXXL RDJ W	15000207A			X	4576	373	6600	620	4000
500R L RDJ P	15000208A			X	4576	373	6600	620	4000
500R CL RDJ P	15000209A			X	4576	373	6600	620	4000
500R XL RDJ P	15000210A			X	4576	373	6600	620	4000
500R CXL RDJ P	15000211A			X	4576	373	6600	620	4000
500R XXL RDJ P	15000212A			X	4576	373	6600	620	4000
500R CXXL RDJ P	15000213A			X	4576	373	6600	620	4000
500R XXXL RDJ P	15000214A			X	4576	373	6600	620	4000
500R CXXXL RDJ P	15000215A			X	4576	373	6600	620	4000
500R L 160RDSB	15000216A			X	4576	373	6600	620	4000
500R CL 160RDSB	15000217A			X	4576	373	6600	620	4000
500R XL 160RDSB	15000218A			X	4576	373	6600	620	4000
500R CXL 160RDSB	15000219A			X	4576	373	6600	620	4000
500R XXL 160RDSB	15000220A			X	4576	373	6600	620	4000
500R CXXL 160RDSB	15000221A			X	4576	373	6600	620	4000
500R XXXL 160RDSB	15000222A			X	4576	373	6600	620	4000
500R CXXXL160RDSB	15000223A			X	4576	373	6600	620	4000
500R L 160 RDSCB	15000224A			X	4576	373	6600	620	4000
500R L 160RDSBTB	15000225A			X	4576	373	6600	620	4000
500R CL 160RDSBTB	15000226A			X	4576	373	6600	620	4000
500RXXL160RDSBTB	15000227A			X	4576	373	6600	620	4000
500RCXXL160RDSBTB	15000228A			X	4576	373	6600	620	4000
500R L 160RDSW	15000229A			X	4576	373	6600	620	4000
500R CL 160RDSW	15000230A			X	4576	373	6600	620	4000
500R XL 160RDSW	15000231A			X	4576	373	6600	620	4000
500R CXL 160RDSW	15000232A			X	4576	373	6600	620	4000
500R XXL 160RDSW	15000233A			X	4576	373	6600	620	4000
500R CXXL 160RDSW	15000234A			X	4576	373	6600	620	4000
500R XXXL 160RDSW	15000235A			X	4576	373	6600	620	4000
500R CXXXL160RDSW	15000236A			X	4576	373	6600	620	4000
500R L 160 RDSCW	15000237A			X	4576	373	6600	620	4000
500R L 160RDSWTB	15000238A			X	4576	373	6600	620	4000
500R CL 160RDSWTB	15000239A			X	4576	373	6600	620	4000
500RXXL160RDSWTB	15000240A			X	4576	373	6600	620	4000

Date: 12/14/2023

Engine Family: PM9XM04.62RS

RC02_12-14-2023

Model Summary

S12. Engine Model	S13. Engine Code	S14. Sales Codes (Check all appropriate)			S15. Engine Displacement (cc)	S16. Rated Power (kW)	S17. Rated Speed (RPM)	S18. Peak Torque (N-m)	S19. Peak Torque Speed (RPM)
		CA Only	49-State	50-State					
500RCXXL160RDSWTB	15000241A			X	4576	373	6600	620	4000
500R L 160RDSP	15000242A			X	4576	373	6600	620	4000
500R CL 160RDSP	15000243A			X	4576	373	6600	620	4000
500R XL 160RDSP	15000244A			X	4576	373	6600	620	4000
500R CXL 160RDSP	15000245A			X	4576	373	6600	620	4000
500R XXL 160RDSP	15000246A			X	4576	373	6600	620	4000
500R CXXL 160RDSP	15000247A			X	4576	373	6600	620	4000
500R XXXL 160RDSP	15000248A			X	4576	373	6600	620	4000
500R CXXXL160RDSP	15000249A			X	4576	373	6600	620	4000
500R L 160 RDSCP	15000250A			X	4576	373	6600	620	4000
500R L 160RDSPTB	15000251A			X	4576	373	6600	620	4000
500R CL 160RDSPTB	15000252A			X	4576	373	6600	620	4000
500RXXL160RDSPTB	15000253A			X	4576	373	6600	620	4000
500RCXXL160RDSPTB	15000254A			X	4576	373	6600	620	4000
500R XL160RDSBTD	15000255A			X	4576	373	6600	620	4000
500R CXL160RDSBTD	15000256A			X	4576	373	6600	620	4000
500R XL160RDSWTB	15000257A			X	4576	373	6600	620	4000
500R CXL160RDSWTB	15000258A			X	4576	373	6600	620	4000
500R XL160RDSPTB	15000259A			X	4576	373	6600	620	4000
500R CXL160RDSPTB	15000260A			X	4576	373	6600	620	4000