

Controlair, LLC 8 Columbia Dr Amherst NH 03031 United States

Certificate of Compliance to IEC 61508

FM Approvals Certifies herewith that the

Type 6100/6200 Volume Booster (Safety Manual [441-622-208])

Complies with the relevant requirements of standards listed below:

Standards	Description	Compliance
IEC 61508-1: 2010	Functional Safety of Electronic/Electrical/Programmable	Part 1
	Electronic Safety-Related Systems- General Requirements	
IEC 61508-2: 2010	Functional Safety of Electronic/Electrical/Programmable	Part 2
	Electronic Safety-Related Systems	

And therefore

IS DECLARED "FIT FOR USE" IN A SIL 3, 2 or 1 Low Demand SAFETY APPLICATION

Models	SIL	HFT	SFF	PFD	λs	λ_{DD}	λ _{DU}
Type 6100/6200	3, 2, 1	0	94%	4.78X10 ⁻⁶	9.13X10 ⁻⁹	9.06X10 ⁻⁹	1.07X10 ⁻⁹

Note: PFD Average Calculation is based on a proof test interval of 1-year, a Hardware Fault Tolerance (HFT) of 0, a Mean Time of Repair (MTR) of 8 hours, and Mean Time To Restoration (MTTR) of 8-Hours.

Specific Condition of Use:

1) The analysis shows the design of the Type 6100/6200 Volume Booster can meet the hardware requirements of IEC61508 SIL 3 depending on the complete final element design.

2) 1001 Low Demand Configuration

This certificate is subject to conditions of use presented in FM Approval Report

Project ID PR456578 Dated 28th September 2020

13 July 2021

Date

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Manager - Electrical Systems

FM Approvals

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