FM APPROVED

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

And therefore

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

Models	Type	SIL	HFT	SFF	PFD	λ_{SD}	λ_{SU}	λ_{DD}	λ_{DU}
Type 6100/6200	Type A Pneumatic Component	3, 2, 1	0	94%	4.78×10^{-6}	8.06×10^{-9}	9.13×10^{-9}	9.06×10^{-9}	1.07×10^{-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) 1oo1 Low Demand Configuration.

This certificate is subject to conditions of use presented in FM Approval Report Project ID PR456578 dated 28th September 2020.

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24 June 2024
Date

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