



Certificate no. TAI-FS-C-26-0019

WE HEREBY CERTIFY THAT

Product description Pneumatic scotch-yoke spring return and double acting actuator

Models Bettis™ series CBB, CBA300
Biffi™ series FCB (models FCBB, FCBA300)

Manufacturer Biffi Italia S.r.l.
Strada Biffi 165
I-29017 Fiorenzuola d'Arda (PC)

IS IN COMPLIANCE WITH THE REQUIREMENTS OF THE STANDARDS

IEC 61508 Parts 1–7:2010

AS RESULT OF THE ASSESSMENT ACCORDING TO THE PROVISION SET OUT IN THE ABOVE-MENTIONED STANDARDS THE PRODUCT MEETS ALSO THE REQUIREMENTS OF STANDARD EN 17955:2024

Assessment report no. TAI-FS-R-26-0023

Expiry date 28.04.2029

Issue date 05.05.2026

TUV AUSTRIA ITALIA
05.05.2026, Monte Roberto (AN)

Ing. Crescenzo Di Fratta

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TUV AUSTRIA HOLDING AG Deutschstrasse 10, A-1230, Vienna, Austria
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Annex to certificate no. TAI-FS-C-26-0019

Type	A
HFT	0
Safety functions	<u>Spring return actuators:</u> 1. Delivery of a full stroke ($90^\circ \pm$ tolerance) driven by the spring, with power fluid exhausted from the cylinder through the control system <u>Double acting actuators:</u> 1. Delivery of a full stroke ($90^\circ \pm$ tolerance) driven by the piston of cylinder, powered by the specified medium working pressure
Mode of operation	Low Demand Mode

Random failure rates				
Model / Configuration	Safety function	λ_{DU} [1/h]	λ_{DD} [1/h]	λ_S [1/h]
Bettis™ CBB spring return, Biffi™ FCBB spring return - No PST	1	9,37E-09	0,00E+00	0,00E+00
Bettis™ CBB spring return, Biffi™ FCBB spring return - With PST	1	8,43E-10	8,53E-09	0,00E+00
Bettis™ CBB double acting, Biffi™ FCBB double acting - No PST	1	1,81E-08	0,00E+00	0,00E+00
Bettis™ CBB double acting, Biffi™ FCBB double acting - With PST	1	1,63E-09	1,65E-08	0,00E+00
Bettis™ CBA300 spring return, Biffi™ FCBA300 spring return - No PST	1	9,79E-09	0,00E+00	0,00E+00
Bettis™ CBA300 spring return, Biffi™ FCBA300 spring return - With PST	1	8,81E-10	8,91E-09	0,00E+00
Bettis™ CBA300 double acting, Biffi™ FCBA300 double acting - No PST	1	1,98E-08	0,00E+00	0,00E+00
Bettis™ CBA300 double acting, Biffi™ FCBA300 double acting - With PST	1	1,78E-09	1,80E-08	0,00E+00

Systematic capability	3 (Route 1s applied)			
Architectural constraints	Route 1_H:	Applied	Route 2_H:	Applied
	The product can be used in: <ul style="list-style-type: none"> • single channel configuration: <ul style="list-style-type: none"> ○ up to SIL 2 without external diagnostic tests ○ up to SIL 3 considering external diagnostic tests • double channel configuration: up to SIL 3 			

- Remarks:**
- For further details, including environmental conditions, limitations of use, lifetime, failure rates traceability, mean repair times, common cause factors and systematic capability constraints, make reference to Safety Manual ES 47_CBB, ES 47_CBAX30, SM 033

END OF CERTIFICATE

TUV AUSTRIA ITALIA
05.05.2026, Monte Roberto (AN)


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