



C E R T I F I C A T E

Certificate no. 17-SIL-0010009-10-TIC

WE HEREBY CERTIFY THAT

Product description LIMIT SWITCH BOXES
Models Series ASB
Series SDCU-20 with limit switches kit SDCU-20-LS
Manufacturer DVG AUTOMATION S.p.A.
Via G. Rossetti 2 - 29016 Cortemaggiore 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

Summary Report no. RC-0518-SIL-TIC-PC-0010009-17-12

Expiry date 17.05.2021

Note

This certificate is issued upon the request of the manufacturer as voluntary certification; it does not include the production surveillance.
This certificate does not allow the manufacturer to use the safety mark of TÜV INTERCERT.



Reggio Emilia, 18.05.2018

Dipl. Ing. Feridoon Sergizzarea

TÜV INTERCERT Certification Body

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ANNEX to Certificate no. 17-SIL-0010009-10-TIC

Type	A
HFT	0
Safety functions	<ol style="list-style-type: none"> 1. De-energize-to-trip operation: when the actuator, on which the device is mounted, starts to drive the emergency valve to its safe position 2. De-energize-to-trip operation: when the actuator, on which the device is mounted, reaches the "safe position"
Mode of operation	Low Demand Mode

Random failure rates				
Configuration	Safety function	λ_{DU} [1/h]	λ_{DD} [1/h]	λ_S [1/h]
ASB; SDCU-20 with SDCU-20-LS - No PST - Single switch	1 / 2	1,00E-08	0,00E+00	1,80E-08
ASB; SDCU-20 with SDCU-20-LS - With PST - Single switch	1	1,00E-10	9,90E-09	1,80E-08
ASB; SDCU-20 with SDCU-20-LS - No PST - Redundant switch	1 / 2	1,00E-09	0,00E+00	3,60E-08
ASB; SDCU-20 with SDCU-20-LS - With PST - Redundant switch	1	1,00E-11	9,90E-10	3,60E-08

Systematic capability	3 (Route 1 _S applied)			
Architectural constraints	Route 1_H:	Applied	Route 2_H:	Applied
	The product can be used in: <ul style="list-style-type: none"> • single switch configuration: <ul style="list-style-type: none"> ○ Series ASB: <ul style="list-style-type: none"> ○ up to SIL 2 without external diagnostic tests ○ up to SIL 3 considering external diagnostic tests ○ Series SDCU-20 with SDCU-20-LS: up to SIL 3 • redundant switch configuration: up to SIL 3 			

Remarks:

- In case of series SDCU-20 with SDCU-20-LS, the diagnostic test can be performed by the electronic board of the SDCU-20 itself.
- 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 SM-Isb-safetyman.

END OF CERTIFICATE

Dipl. Ing. Feridoon Sergizzarea

Reggio Emilia, 18.05.2018

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