

Translation

Type Examination Certificate

Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014

Type Examination Certificate Number: **BVS 18 ATEX E 045** Issue: **01**

Equipment: **Positioner with HART® communication TROVIS 3730-3-850...**

Manufacturer: **SAMSON AG**

Address: **Weismüllerstraße 3, 60314 Frankfurt am Main, Germany**

This product and any acceptable variations thereto are specified in the appendix to this certificate and the documents referred to therein.

DEKRA Testing and Certification GmbH certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.
The examination and test results are recorded in the confidential Report No. BVS PP 18.2083 EU / N1.
This issue of the Type Examination Certificate replaces the previous issue of the Type Examination Certificate BVS 18 ATEX E 045.

The Essential Health and Safety Requirements are assured in consideration of:

EN IEC 60079-0:2018 **General requirements**
EN IEC 60079-7:2015+A1:2018 **Increased Safety "e"**

If the sign "X" is placed after the certificate number, it indicates that the product is subject to the "Specific Conditions of Use" listed under item 17 of this certificate.

This Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

The marking of the product shall include the following:

 **II 3G Ex ec IIC T4/T6 Gc**

DEKRA Testing and Certification GmbH
Bochum, 2023-05-11

Signed: Dr. Rolf Krökel

Managing Director

13 **Appendix**
 14 **Type Examination Certificate**
BVS 18 ATEX E 045 Issue 01

15 **Product description**

15.1 **Subject and type**

Stellungsregler mit HART®-Kommunikation TROVIS 3730-3-850*****

TROVIS 3730-3- a b c d e f g H i j k l m n o p q r s t

a	b	c	Explosion protection
8	5	0	II 3G Ex ec IIC T4/T6 Gc
	d		Function
	-		Not relevant
	e		Slot A Option
	0		Without
	1		Position transmitter 4 to 20 mA
	2		Binary input 24 V DC
	f		Slot B Option
	0		Without
	1		Position transmitter 4 to 20 mA
	2		Binary input 24 V DC
	3		Forced venting
	g		Slot C Option
	0		Without
	2		Software limit switches + Binary output (NAMUR)
	3		1 x Inductive limit switches + Binary output (NAMUR)
	4		2 x Inductive limit switches + Binary output (NAMUR)
	5		1 x Software limit switches + 1 x Inductive limit switches + Binary output (NAMUR)
	h		Slot D Option
	0		Without
	i		Reserved
	-		Not relevant
	j		Pressure Sensor
	0		Without
	1		With pressure sensor
	k		Emergency shutdown
	-		Not relevant
	l		Electrical connection
	0		Without
	1		Two M20x1.5, one plastic cable gland
	2		Two M20x1.5, two metal cable glands
	m		Reserved
	-		Not relevant
	n		Housing material
	0		Aluminium EN AC-44300DF
	1		Stainless steel 1.4408
	o		Cover
	1		With round window
	2		Closed (without window)
	p q		Housing version
	- -		Not relevant
	r		Additional approval
	-		Not relevant
	s		Ship approval
	-		Not relevant
	t		Permissible ambient temperature
	-		Not relevant



15.2 Description

The Positioner with HART® communication TROVIS 3730-3-850... is a single acting positioner for attachment to pneumatic control valves. The Positioner mainly consists of the electronics part and one pneumatic module. The parts are assembled in an enclosure made of aluminium die cast or stainless steel die cast. The enclosure has a cover with a polymeric inspection window. As an alternative to the polymeric material the lid can be made completely solid from aluminium or stainless steel. The rating of the enclosure construction is IP66. The device is built in type of protection "ec".

Reason for this issue

- Introduction of a new Pressure sensor PCB
- Extension of the type code
- Modification of Multifunction and Modem PCBs
- Changeover of protection type "nA" to "ec"
- Updating of the applied standard EN IEC 60079-0:2018

15.3 Parameters

15.3.1 Electrical parameters

15.3.1.1 Signal Circuit Terminal +11 / -12

Nominal input current	I_N	4 ... 20	mA
Nominal input voltage	U_N	9.8	V
Nominal input power	P_N	212	mW

15.3.1.2 Software Limit Switches (NAMUR) Terminals +45 / -46 and +55 / -56

Nominal input voltage	U_N	8.2	V
Nominal input power	P_N	17	mW

15.3.1.3 Binary Output (NAMUR) Terminal +83 / -84

Nominal input voltage	U_N	8.2	V
Nominal input power	P_N	17	mW

15.3.1.4 Binary Input (24 V DC) Terminal +87 / -88

Nominal input voltage	U_N	24	V
Nominal input power	P_N	12	mW

15.3.1.5 Position Transmitter Terminal +31 / -32

Nominal input voltage	U_N	24	V
Nominal input power	P_N	518	mW

15.3.1.6 Forced Venting Terminal +81 / -82

Nominal input voltage	U_N	24	V
Nominal input power	P_N	173	mW

15.3.1.7 Inductive Limit Switches Terminals +41 / -42 and +51 / -52

Nominal input voltage	U_N	8.2	V
Nominal input power	P_N	17	mW

15.3.2 Thermal Parameters

Temperature Class	T4	$-40\text{ °C} \leq T_{\text{amb}} \leq +80\text{ °C}$
Temperature Class	T6	$-40\text{ °C} \leq T_{\text{amb}} \leq +55\text{ °C}$

16 **Report Number**

BVS PP 18.2083 EU, as of 2023-05-11

17 **Specific Conditions of Use**

None

18 **Essential Health and Safety Requirements**

Met by compliance with the requirements mentioned in item 9.

19 **Remarks and additional information**

Drawings and documents are listed in the confidential report.

We confirm the correctness of the translation from the German original.
In the case of arbitration only the German wording shall be valid and binding.

DEKRA Testing and Certification GmbH
Bochum, 2023-05-11
BVS-Fro/Mu A 20210708 / 342369100



Managing Director