Base Load Power Hub (BLPH)

ATEX REGISTER

Document Number:1724000791-IN-LIS-00012

Document Class: 2

04	15/1/2025	ACCEPTED FOR CONSTRUCTION (AFC)	Gábor Simon	Mária Poór	Zsanett Molnár
03	1/8/2024	ACCEPTED FOR CONSTRUCTION (AFC)	Gábor Simon	Mária Poór	Zsanett Molnár
02	9/7/2024	ACCEPTED FOR CONSTRUCTION (AFC)	Gábor Simon	Mária Poór	Zsanett Molnár
01	13/6/2024	ACCEPTED FOR CONSTRUCTION (AFC)	Gábor Simon	Mária Poór	Zsanett Molnár
00	16/5/2024	Issue for Review (IFR)	Gábor Simon	Mária Poór	Zsanett Molnár
Rev.	Date	Description	Prepared	Reviewed	Approved

BROOKS INSTRUMENT Beyond Measure

This document undergoes an issuance cycle within EDMS "Fusionlive".
Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy

Table of Contents

SH.	DESCRIPTION	REVISIONS							
		00	01	02	03	04			
1	Cover	X	X	X	X	X			
2	Table of Contents	X	X	X	X	X			
3	Revision / Change Log	X	X	X	X	X			
4	ATEX REGISTER	X	X	X	X	X			
5	Atex certificate	X	X	X	X	X			
8	EC declaration of conformity	X	X	X	X	X			

This document undergoes an issuance cycle within EDMS "Fusionlive".
Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy

Revision / Change Log

Rev.	Description
00	ISSUE FOR REVIEW (IFR)
01	ACCEPTED FOR CONSTRUCTION (AFC)
02	ACCEPTED FOR CONSTRUCTION (AFC)
03	ACCEPTED FOR CONSTRUCTION (AFC)
04	ACCEPTED FOR CONSTRUCTION (AFC)

HOLDS LIST

No.	Description
1.	
2.	
3.	
4.	

This document undergoes an issuance cycle within EDMS "Fusionlive".
Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy

No.	Revision	Tag Number	Description	Location	Manufacturer	Model Type Catalogue Number	Serial Number	ATEX Certification Marking	Reference Document	ATEX Certificate Number	Installation Zone	Notes / Comments	P.O.	Vendor	Skid / Package	Barrier Calculation Ref.	Non-Electrical Equipment	Special Conditions of safe use Applicable
1		25-FT-031	VA flowmeter	123A90-DDL-PR-PID-80015	Brooks Instrument	3809GCA10AGBC3D2C0AC	06C43100310	II 2 G Ex db IIC T6…T1 Gb	3809g-atex-xp f	DEKRA 13ATEX0086 X	ATEX Zone2 - IIC (IIB+H2) T1	--	1724000791	Brooks Instrument	N.A.	N.A.	NO	YES
2		25-FT-032	VA flowmeter	123A90-DDL-PR-PID-80016	Brooks Instrument	3809GCA10AGBC3D2C0AC	06C43100311	II 2 G Ex db IIC T6…T1 Gb	3809g-atex-xp f	DEKRA 13ATEX0086 X	ATEX Zone2 - IIC (IIB+H2) T1	--	1724000791	Brooks Instrument	N.A.	N.A.	NO	YES
3		25-FT-033	VA flowmeter	123A90-DDL-PR-PID-80017	Brooks Instrument	3809GCA10AGBC3D2C0AC	06C43100312	II 2 G Ex db IIC T6…T1 Gb	3809g-atex-xp f	DEKRA 13ATEX0086 X	ATEX Zone2 - IIC (IIB+H2) T1	--	1724000791	Brooks Instrument	N.A.	N.A.	NO	YES
4		25-FT-034	VA flowmeter	123A90-DDL-PR-PID-80019	Brooks Instrument	3809GCA10AGBC3D2C0AC	06C43100313	II 2 G Ex db IIC T6…T1 Gb	3809g-atex-xp f	DEKRA 13ATEX0086 X	ATEX Zone2 - IIC (IIB+H2) T1	--	1724000791	Brooks Instrument	N.A.	N.A.	NO	YES
5		25-FT-036	VA flowmeter	123A90-DDL-PR-PID-80018	Brooks Instrument	3809GCA10AGBC3D2C0AC	06C43100314	II 2 G Ex db IIC T6…T1 Gb	3809g-atex-xp f	DEKRA 13ATEX0086 X	ATEX Zone2 - IIC (IIB+H2) T1	--	1724000791	Brooks Instrument	N.A.	N.A.	NO	YES
6		25-FT-038	VA flowmeter	123A90-DDL-PR-PID-80020	Brooks Instrument	3809GCA10AGBC3D2C0AC	06C43100315	II 2 G Ex db IIC T6…T1 Gb	3809g-atex-xp f	DEKRA 13ATEX0086 X	ATEX Zone2 - IIC (IIB+H2) T1	--	1724000791	Brooks Instrument	N.A.	N.A.	NO	YES
7		64-FG-001	VA flowmeter	123A90-DDL-PR-PID-80028	Brooks Instrument	3809GCC08BFBC9A0V0AC	06C43100316	II 2 G Ex h IIC T6…T3 Gb	MBID 022 Rev. A	MBID 022 Rev. A	ATEX -ZONE 1/ZONE 2 - NO ELEC	--	1724000791	Brooks Instrument	N.A.	N.A.	YES	YES

CERTIFICATE

(1) EU-Type Examination

(2) **Equipment or protective systems intended for use in potentially explosive atmospheres - Directive 2014/34/EU**

(3) EU-Type Examination Certificate Number: **DEKRA 13ATEX0086 X** Issue Number: **6**

(4) Product: **Variable Area Flowmeter MT3809G Series**

(5) Manufacturer: **Brooks Instrument, LLC.**

(6) Address: **407 West Vine Street, Hatfield, PA 19440, USA**

(7) This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) DEKRA Certification B.V., Notified Body number 0344 in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, 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 confidential test report number NL/DEK/ExTR13.0026/05.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0 : 2018 **EN 60079-1 : 2014** **EN 60079-11 : 2012**
EN 60079-31 : 2014

except in respect of those requirements listed at item 18 of the Schedule.

(10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

(11) This EU-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.

(12) The marking of the product shall include the following:

II 1 G Ex ia IIC T6...T2 Ga
II 2 G Ex ia IIC T6...T2 Gb
II 2 G Ex db IIC T6...T1 Gb
II 2 D Ex ia IIIC T85 °C...T300 °C Db
II 2 D Ex tb IIIC T85 °C...T450 °C Db

Date of certification: 25 May 2023

DEKRA Certification B.V.

R. Schuller
Certification Manager

PRODUCTS RvAC 001

© Integral publication of this certificate and adjoining reports is allowed. This Certificate may only be reproduced in its entirety and without any change.

DEKRA Certification B.V. Meander 1051, 6825 MJ Arnhem P.O. Box 5185, 6802 ED Arnhem The Netherlands
T +31 88 96 83000 F +31 88 96 83100 www.dekra-product-safety.com Registered Arnhem 09085396

(13) # SCHEDULE

(14) **to EU-Type Examination Certificate DEKRA 13ATEX0086 X** Issue No. **6**

(15) **Description**

Variable Area Flowmeters of the MT3809G Series measure flow, based on the variable area principle. The flow meter consists of a stainless enclosure with windowed cover in type of protection Ex db, Ex ia, or Ex tb or alternatively of an aluminium enclosure with windowed cover in type of protection Ex ia.

The flow raises a float in a tapered tube increasing the area for the passage of flow. The float assumes distinct positions for every constant rate flow. Flow rate indication is provided by means of magnetic coupling. A magnet encapsulated in the float is coupled to a rotatable magnet located in the rear of the indicator, turning the dial indicator mounted on the meter.

A flow transmitter with communication interfaces and/or optional limit switches in may be mounted with the flow meter in the same enclosure.

For nomenclature, thermal data, product ratings and electrical data see Annex 1 to report NL/DEK/ExTR13.0026/05.

Installation instructions

The instructions provided with the product shall be followed in detail to assure safe operation.

(16) **Report Number**

No. NL/DEK/ExTR13.0026/05.

(17) **Specific conditions of use**

<u>For approval type A and B (Ex ia):</u>
For applications requiring EPL Gb (Category 2 G), the transparent cover must be installed such, that ignition sources due to electrostatic discharge sparks are prevented.

For application in environments requiring EPL Ga and the enclosure is made of aluminum, it shall be installed in such a way that sparking as a result of impact or friction is excluded.

For applications requiring EPL Db (Category 2 D), the transparent cover and the painted parts must be installed such, that danger of ignition due to propagating brush discharges is prevented.

For models marked with material code M, Titanium Grade II, the installation instructions contain the specification of the alloy, allowing the user determine the suitability of the equipment for the particular application.

From the safety point of view the circuits shall be assumed to be connected to earth.

On units with a digital display, the programming function shall only be performed in a non-hazardous area.

(13) # SCHEDULE

(14) **to EU-Type Examination Certificate DEKRA 13ATEX0086 X** Issue No. **6**

(17) For approval type C (Ex db and Ex tb):
For applications requiring EPL Gb (Category 2 G), the threaded entries of the enclosure shall be sealed with plugs, cable entry devices such as glands or conduit entry devices which are Ex db IIC Gb approved.

For applications requiring EPL Db (Category 2 D), the threaded entries of the enclosure shall be sealed with plugs, cable entry devices such as glands or conduit entry devices which are Ex tb IIIC Db approved.

For information regarding the dimensions of the flameproof joints the manufacturer shall be contacted.

(18) **Essential Health and Safety Requirements**

Covered by the standards listed at item (9).

(19) **Test documentation**

As listed in Report No. NL/DEK/ExTR13.0026/05.

(20) **Certificate history**

Issue 1 -	215864200	Initial certificate;
Issue 2 -	218494200	Assessment to the latest editions of the standards, Addition of Type of Protection Ex ia and tc, Addition of a transmitter model
Issue 3 -	218494200	Add type of protection Ex ic, Specific Conditions of Use updated, Corrected terminal no's in Annex 1
Issue 4 -	328890200	Assessment to latest EN IEC 60079-0, Category 3 removed, Specific Conditions of Use updated and minor constructional changes
Issue 5 -	383146800	Update of barrier entity parameters for 4-20mA option only.
Issue 6 -	383404800	Minor changes to the construction

BROOKS INSTRUMENT
Beyond Measure

CE

Declaration of Conformity
No: MBID 022 Rev. D

Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 2014/34/EU

Equipment: Non-Electrical Variable Area Flow Meter MT3809G series, MT3750 Series

As per Directive 2014/34/EU, Annex VIII, Module A "Internal production control", the product and quality system assessment procedure can be carried out by the manufacturer. In this module there is no involvement of a notified body in the conformity assessment activities. As per Chapter 3, Article 13 (1) (b) (ii) of the directive for equipment – group II, equipment categories 2 and non-electrical equipment, communication/deposit of the technical documentation to a notified body, and retention of such documentation by the notified body, are required.

In accordance with the requirements the technical documentation is deposited at DEKRA Certification B.V under technical construction file number 203104000-1604.

We certify that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the directive.

Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN ISO 80079-36:2016 and **EN ISO 80079-37:2016**

The marking of the equipment shall include the following:

MT3809 Equipment:	**MT3750 Equipment:**
II2G Ex h IIC T6...T3 Gb	**II2G Ex h IIC T6...T3 Gb**
II2D Ex h IIIC T200°C Db	**II2D Ex h IIIC T200°C Db**
-20°C ≤ Ta ≤ 70°C	**-30°C ≤ Ta ≤ 70°C**

Special Conditions:
Enclosure contains glass & painted aluminum parts. If it is mounted in an area where the use of category 2G or 2D apparatus is required, it must be installed such that ignition source due to propagating brush discharge sparks are excluded.

The actual maximum surface temperature of the equipment depends not on the equipment itself, but on operating conditions of the process fluid/gas flowing through the equipment. The equipment by itself does not generate heat. Due to this reason the temperature class is marked as a range. The maximum permitted ambient and process temperature limits can be found in the operating instructions.

At start up especially for gas applications, ensure that the pressure is gradually increased through the piping system. A sudden pressure spike situation may result in a fast movement of the float within the VA flowmeter & the float may hit hard against the float stop.

Supply grounding connection by the process connections or earthing terminal.

June 10th, 2024
(Date of issue)

JP. Prego
VA Engineering Manager

Brooks Instrument | 407 West Vine Street | Hatfield, PA 19440 | USA | T : 1-215-362-3500 | F : 1-215-362-3745
www.BrooksInstrument.com

BROOKS INSTRUMENT
Beyond Measure

CE

Declaration of Conformity
No: MBID 022 Rev. D

Annex 1

Description
Variable Area Flowmeter Models MT3809G & MT3750 measure flow based on the variable area principle. The flow meter consists of an aluminium enclosure or stainless enclosure with windowed cover in type of protection constructional safety 'c'. The flow raises a float in a tapered tube increasing the area for the passage of flow. The float assumes distinct position for every constant rate flow. Flow rate indication is provided by means of magnetic coupling. A magnet encapsulated in the float is coupled to a rotatable magnet located in the rear of the indicator, turning the dial indicator mounted on the meter.

Nomenclature and Type Designation

Brooks Model 3809G series Variable Area Flow Meter

MT3809	G	M	...	6	...	V	...
I-IV	V	VI		XIV		XVII	XX

Mode Code Position	Explanation	Value	Explanation
I-IV	Model	MT3809	Variable Area Flowmeter (Metal Tube)
V	Model Revision	G	
VI	Material	A-Q	Material of construction of flow body
XIV	Indicator configuration	1,8 2,5,9	Aluminium housing * Stainless steel housing * (Both GP as well XP)
			NOTE * optionally painted in which case special conditions for safe use apply
XVII	Certs	V	ATEX – Zone 1/Zone 2, Non- Electrical

Brooks Model 3750 series Variable Area Flow Meter

MT3750	C	M	...	U	A	...
I-IV	V	VI		XV	XIII	XVIII

Mode Code Position	Explanation	Value	Explanation
I-IV	Model	MT3750	Variable Area Flowmeter (Metal Tube)
V	Model Revision	C	
VI	Material	1-H	Material of construction of flow body
XV	Approvals	U	ATEX – Zone 1/Zone 2, Non- Electrical
XIII	Electrical Output	A	Aluminum Indicator only (no Electronics)

Brooks Instrument | 407 West Vine Street | Hatfield, PA 19440 | USA | T : 1-215-362-3500 | F : 1-215-362-3745
www.BrooksInstrument.com