



EU Type Examination Certificate CML 22ATEX1135U Issue 0

- 1 Components intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU
- 2 Component Switch Module Type 07-332*-***0/**** and Type 07-3382-****/****, Control Switch Module Type 07-3332-1***/****, Illuminated Indicator Module Type 07-335*-***0/****, Illuminated Push Button Module Type 07-336*-***0/****, Potentiometer Module Type 07-337*-*D*0/****
- 3 Manufacturer Bartec GmbH

4 Address Max-Eyth-Straße 16, 97980 Bad Mergentheim, Germany

- 5 The component is specified in the description of this certificate and the documents to which it refers.
- 6 CML B.V., Chamber of Commerce No 67386717, Koopvaardijweg 32, 4906CV Oosterhout, The Netherlands, Notified Body Number 2776, 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 component has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 12.

- 7 The 'U' suffix after the certificate number indicates that the component is subject to conditions of safe use (affecting correct installation or safe use). These are specified in Section 14.
- 8 This EU Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 2014/34/EU Article 13 apply to the manufacture of the equipment or component and are separately certified.
- 9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

EN IEC 60079-0:2018 EN IEC 60079-7:2015/A1:2018 EN 60079-1:2014 EN 60079-11:2012

push button module types:- 07-335*-*4*0/****.

07-336*-*5*0/**** and 07-336*-*6*0/****

10 The component shall be marked with the following:

⟨£x⟩ _{M2} 2G	Ex db eb I Mb Ex db eb IIC Gb	Only applicable to switch, Illuminated indicator, illuminated push button and potentiometer module types:- 07-332*-***0/***, 07-3332-1***/****, 07-3382-****/****, 07-335*-*1*0/****, 07-336*-*1*0/****, 07-336*-*2*0/****, 07-336*-*7*0/****, 07-336*-*8*0/**** and 07-337*-*D*0/****
ξx I M2	Ex db ia l Mb	Only applicable to Illuminated indicator and illuminated

Ts= -55 °C to +85 °C (See Schedule of Limitations)

Ex db ia IIC Gb



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II 2G

S. Roumbedakis Technical Manager





11 Description

Switch module type 07-332*-***0/****

The switch module is used in hazardous areas where machine functions are to be activated by pressing a button or actuating a switch.

The switch module is designed for mounting onto a mounting rail or for mounting without tools onto an actuating element. The connection is established by means of terminals.

Type no.	0 7 -	3 3 2	* -	* *	* 0 /	* * * *
Code no.	A B	C D E	F	G H	I J	K L M N

<u>Code</u> A, B	<u>Code for</u> Basic program	<u>Variations</u> 07	<i>Description</i> ExCo							
C , D	Product sector	33	Control and indicator device							
E	Device	2	Switch module							
F	Mounting	2	Rail							
		4	Panel							
G	Connection	1	Terminals (only for type 07-3322-****/****)							
		4	Terminals 15° (only for type 07-3324-****/****)							
н	Design	1	2 × NCC							
		2	2 × NOC							
		4	1 × NCC & 1 × NOC							
I	Contact	0	Silver alloy							
		1	Gold plated							
J	Cable length	0	N/A							
K-N	Number or letter for characteristics without influence on the explosion protection									

Ratings

The switch modules can be used to switch non-intrinsically safe electrical circuits:

Rated voltage	400/690 V
Rated insulation voltage	400/690 V
Rated current	up to 16 A
Maximum ambient temperature only for protection by flameproof enclosure "d"	+85 °C
Rated connecting capacity of terminals	0.75 - 2.5 mm ²
Rated torque	0.4 - 0.7 Nm





Switch module type 07-3382-****/****

The switch module is used in hazardous areas where machine functions are to be activated by pressing a button or actuating a switch.

The switch module is designed for mounting onto a mounting rail. The connection is established by means of terminals.

Type no.	0	7	-	3	3	8	2	-	*	*	*	*	1	*	*	*	*
Code no.	Α	В		С	D	Ε	F		G	Н	I	J		Κ	L	Μ	Ν

<u>Code</u>	Code for	Variations	<u>Description</u>
А, В	Basic program	07	ExCo
C, D	Product sector	33	Control and indicator device
E	Device	8	Switch module 4-pole
F	Mounting	2	Rail
G	Design	1	4 × NCC
		2	3 × NCC & 1 × NOC
		3	2 × NCC & 2 × NOC
		4	4 × NOC
		5	1 × NCC & 3 × NOC
H-N	Number or letter	for character	istics without influence on the explosion protection

H-N Number or letter for characteristics without influence on the explosion protection

<u>Ratings</u>

The switch modules can be used to switch non-intrinsically safe electrical circuits:

Rated voltage	400/690 V
Rated insulation voltage	400/690 V
Rated current	up to 25 A
Maximum ambient temperature only for protection by flameproof enclosure "d"	+85 °C
Rated connecting capacity of terminals	0.75 - 4 mm ²
Rated torque	0.4 - 0.7 Nm





Control switch module type 07-3332-1***/****

The control switch module is used in hazardous areas where machine functions are to be activated by actuating a switch.

The control switch module is designed for mounting onto a mounting rail. The connection is established by means of terminals.

Type no.	0	7	-	3	3	3	2	-	1	*	*	*	1	*	* *	*
Code no.	Α	В		С	D	Е	F		G	Н	I	J		K	LM	Ν

<u>Code</u>	Code for	Variations	<u>Description</u>						
Α, Β	Basic program	07	ExCo						
C, D	Product sector	33	Control and indicator device						
Е	Device	3	Control switch module						
F	Mounting	2	Rail						
G	Connection	1	Terminals						
H-N	Number or letter for characteristics without influence on the explosion protection								

<u>Ratings</u>

The switch modules can be used to switch non-intrinsically safe electrical circuits:

Rated voltage	400/690 V
Rated insulation voltage	400/690 V
Rated current	up to 25 A
Maximum ambient temperature only for protection by flameproof enclosure "d"	+85 °C
Rated connecting capacity of terminals	0.75 - 4 mm²
Rated torque	0.4 - 0.7 Nm





Illuminated indicator module type 07-335*-***0/****

The illuminated indicator module is used in hazardous areas where the functional status of the respective machine is to be visually displayed.

The illuminated indicator module is designed for mounting onto a mounting rail or for mounting without tools onto an actuating element. The connection is established by means of terminals.

Type no.	0	7	-	3	3	5	*	-	*	*	*	0	1	*	*	*	*
Code no.	Α	В		С	D	Ε	F		G	Н	I	J		Κ	L	Μ	Ν

<u>Code</u>	Code for	Variations	<u>Description</u>
Α, Β	Basic program	07	ExCo
C, D	Product sector	33	Control and indicator device
Е	Device	5	Illuminated indicator module
F	Mounting	2	Rail
		4	Panel
G	Connection	1	Terminals (only for type 07-3352-****/****)
		4	Terminals 15° (only for type 07-3354-****/****)
н	Design	1	Increased safety "e"
		4	Intrinsic safety "i"
I	Color	1	Red
		2	Green
		3	Yellow
		4	White
		5	Blue
J	Cable length	0	N/A
K-N	Number or letter	for character	istics without influence on the explosion protection





<u>Ratings</u>

Type 07-335*-*1*0/****

The illuminated indicator modules can be used to indicate and switch non-intrinsically safe electrical circuits

Rated voltage	230 V
Working voltage	250 V
Rated operating voltage	AC/DC 12 V to 230 V
Power consumption	up to 1 W
Rated current	up to 1 A
Maximum ambient temperature only for protection by flameproof enclosure "d"	+85 °C
Rated connecting capacity of terminals	0.75 - 2.5 mm ²
Rated torque	0.4 - 0.7 Nm

Type 07-335*-*4*0/****

The illuminated indicator modules can be used to indicate and switch a circuit in type of protection Intrinsic Safety Ex ia IIC:

Rated voltage, U	30 V
Rated operating voltage, Ue	DC 12 V to 30 V
Maximum ambient temperature only for protection by flameproof enclosure "d"	+85 °C
Rated connecting capacity of terminals	0.75 - 2.5 mm ²
Rated torque	0.4 - 0.7 Nm
Maximum values:	$\begin{array}{l} U_i = 30 \ V \\ I_i = 150 \ mA \\ P_i = 1 \ W \\ C_i = 37 \ nF \\ L_i - negligibly \ low \end{array}$





Illuminated push button module type 07-336*-***0/****

The illuminated push button module is used in hazardous areas where machine functions are to be activated by pressing a button and the corresponding functional status of the respective machine is to be visually displayed.

The illuminated push button module is designed for mounting onto a mounting rail or for mounting without tools onto an actuating element. The connection is established by means of terminals.

Type no.	0	7	-	3	3	6	*	-	*	*	*	0	1	*	*	*	*
Code no.	Α	В		С	D	Е	F		G	Н	I	J		κ	L	Μ	Ν

<u>Code</u>	Code for	Variations	Description
А, В	Basic program	07	ExCo
C, D	Product sector	33	Control and indicator device
E	Device	6	Illuminated push button module
F	Mounting	2	Rail
		4	Panel
G	Connection	1	Terminals (only for type 07-3362-****/****)
		4	Terminals 15° (only for type 07-3364-****/****)
н	Design	1	Increased safety "e", 1 × NCC, low voltage
		2	Increased safety "e", 1 × NOC, low voltage
		5	Intrinsic safety "i", 1 × NCC
		6	Intrinsic safety "i", 1 × NOC
		7	Increased safety "e", 1 × NCC
		8	Increased safety "e", 1 × NOC
I	Color	1	Red
		2	Green
		3	Yellow
		4	White
		5	Blue
J	Cable length	0	N/A
K-N	Number or letter	for character	ristics without influence on the explosion protection





Ratings

Types; 07-336*-*7*0/****, and 07-336*-*8*0/****

The illuminated push button modules can be used to indicate and switch non-intrinsically safe electrical circuits:

Rated voltage	230 V
Working voltage	250 V
Rated insulation voltage	300 V
Rated operating voltage, (indicator)	AC/DC 12 V to 230 V
Power consumption (indicator)	up to 1 W
Rated current	up to 1 A
Maximum ambient temperature only for protection by flameproof enclosure "d"	+85 °C
Rated connecting capacity of terminals	0.75 - 2.5 mm ²
Rated torque	0.4 - 0.7 Nm

Types; 07-336*-*5*0/****, and 07-336*-*6*0/****

The illuminated push button modules can be used to indicate and switch a circuit in type of protection Intrinsic Safety Ex ia IIC:

Rated voltage, U	30 V
Rated insulation voltage, Ui	30 V
Rated operating voltage, U_e (indicator)	DC 12 V to 30 V
Maximum ambient temperature only for protection by flameproof enclosure "d"	+85 °C
Rated connecting capacity of terminals	0.75 - 2.5 mm ²
Rated torque	0.4 - 0.7 Nm
Maximum values per circuit:	$\begin{array}{l} U_i = 30 \ V \\ I_i = 150 \ mA \\ P_i = 1 \ W \\ C_i \ (indicator) = 37 \ nF \\ C_i \ (switch) - negligibly \ low \\ L_i - negligibly \ low \end{array}$





Types; 07-336*-*1*0/****, and 07-336*-*2*0/****

The illuminated push button modules can be used to indicate and switch a non-intrinsically safe electrical circuits:

Rated voltage	30 V
Rated insulation voltage	30 V
Rated operating voltage (indicator)	DC 12 V to 30 V
Power consumption (indicator)	up to 1 W
Rated current	up to 0.25 A
Maximum ambient temperature only for protection by flameproof enclosure "d"	+85 °C
Rated connecting capacity of terminals	0.75 - 2.5 mm ²
Rated torque	0.4 - 0.7 Nm





Potentiometer module type 07-337*-*D*0/****

The potentiometer module is used in hazardous areas where machine functions are to be controlled by adjustable voltage dividers.

The potentiometer module is designed for mounting onto a mounting rail or for mounting without tools onto an actuating element. The connection is established by means of terminals.

Type no.	0	7	- 3	3	7	*	-	*	D	*	0	1	*	*	*	*
Code no.	Α	В	С	D	Е	F		G	Н	I	J		Κ	L	Μ	Ν

<u>Code</u>	Code for	Variations	<u>Description</u>			
Α, Β	Basic program	07	ExCo			
C, D	Product sector	33	Control and indicator device			
E	Device	7	Potentiometer module			
F	Mounting	2	Rail			
		4	Panel			
G	Connection	1	Terminals (only for type 07-3372-****/****)			
		4	Terminals 15° (only for type 07-3374-****/****)			
н	Design	D	Potentiometer			
I	Number or letter for characteristics without influence on the explosion protection					
J	Cable length	0	N/A			
K-N	Number or letter	for character	ristics without influence on the explosion protection			

Ratings

The potentiometer modules can be used to switch non-intrinsically safe electrical circuits:

Rated voltage	250 V
Rated insulation voltage	250 V
Rated power dissipation	up to 1 W
Maximum ambient temperature only for protection by flameproof enclosure "d"	+85 °C
Rated connecting capacity of terminals	0.75 - 2.5 mm²
Rated torque	0.4 - 0.7 Nm





12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	26 May 2023	R15124A/00	Issue of Prime Certification

Note: Drawings that describe the equipment or component are listed in the Annex.

13 Conditions of Manufacture

The following conditions are required of the manufacturing process for compliance with the certification.

i. Where the product incorporates certified parts or safety critical components, the manufacturer of the product defined on this certificate shall continually monitor these parts/components for any modifications introduced by the manufacturer(s) of these constituent parts. If the manufacturer of any constituent part introduces any changes which affect the compliance of the certified product that is the subject of this certificate, the manufacturer is required to have this certificate updated.

14 Schedule of Limitations

The following conditions relate to safe installation and/or use of the equipment.

- i. The modules that complies with EN IEC 60079-7, shall be installed in an enclosure which meets the requirements of a recognised type of protection as specified in Section 1 of EN IEC 60079-0. When the modules are installed in an increased safety enclosure that complies with EN IEC 60079-7, the creepage and clearance distances shall comply with the standard requirements. The actual maximum rated current resp. power dissipation of the modules shall be determined in the type test of the electrical equipment concerned. When the module is used in a mine susceptible to firedamp (Group I), the maximum rated current shall not exceed 16 A.
- ii. The modules that complies with EN IEC 60079-11, shall be installed in such a way that it is protected by an enclosure that complies at least with the requirements of EN IEC 60079-0 clause 26.4.2 and excludes the risk of mechanical damage. The separation distances to the module terminals shall be comply with the standard requirements.
- iii. The service temperature of the modules shall be within -55 °C to +85 °C. The service temperature of the locking device for the modules type 07-33*4-4***/**** shall not exceed +70 °C.
- iv. Each terminal of the module is limited to one conductor per clamping unit.
- v. The modules shall be installed in accordance with manufacturers documentation.

Certificate Annex

Certificate Number Equipment	CML 22ATEX1135U Switch Module Type 07-332*-***0/**** and Type 07-3382-****/****,	
	Control Switch Module Type 07-3332-1***/****,	
	Illuminated Indicator Module Type 07-335*-***0/****,	
	Illuminated Push Button Module Type 07-336*-***0/****,	
	Potentiometer Module Type 07-337*-*D*0/****	
Manufacturer	Bartec GmbH	

The following documents describe the equipment or component defined in this certificate:

Issue 0

Document No	Sheets	Rev	Approved date	Title
01-3322-650001	1 of 1	А	26 May 2023	Switch module type 07-3322-1**0/****
01-3322-650001-BOM	1 of 1	А	26 May 2023	Switch module type 07-3322-1**0/****
01-3322-650002	1 of 1	_	26 May 2023	Clamp, rail, and contact type 07-33**-****/****
01-3322-650002-BOM	1 of 1	_	26 May 2023	Clamp, rail, and contact type 07-33**-****/****
01-3322-650003	1 of 1	А	26 May 2023	Switch module type 07-332*-***0/***
01-3322-650005-HLP	1 to 11	_	26 May 2023	Separation distances type 07-33**-****/****
01-3322-6A0002	1 of 1	A	26 May 2023	Minimum content of Marking Switch module type 07-332*-***0/****
01-3324-650001	1 of 1	А	26 May 2023	Switch module type 07-3324-4**0/****
01-3324-650001-BOM	1 of 1	А	26 May 2023	Switch module type 07-3324-4**0/****
01-3332-650001	1 of 1	_	26 May 2023	Control switch module type 07-3332-1***/****
01-3332-650001-BOM	1 of 1	_	26 May 2023	Control switch module type 07-3332-1***/****
01-3352-650001	1 of 1	А	26 May 2023	Illuminated indicator module type 07-3352-1**0/****
01-3352-650001-BOM	1 of 1	А	26 May 2023	Illuminated indicator module type 07-3352-1**0/****
01-3352-650002-ASY	1 to 2	_	26 May 2023	Printed-board assembly Ex e type 07-33**-***/****
01-3352-650002-BOM	1 of 1	А	26 May 2023	Printed-board assembly Ex e type 07-33**-****/****

Certificate Annex

Certificate Anne	ex	
Certificate Number	CML 22ATEX1135U	
Equipment	Switch Module Type 07-332*-***0/**** and	
	Type 07-3382-****/****,	
	Control Switch Module Type 07-3332-1***/****,	
	Illuminated Indicator Module Type 07-335*-***0/****,	
	Illuminated Push Button Module Type 07-336*-***0/****,	
	Potentiometer Module Type 07-337*-*D*0/****	
Manufacturer	Bartec GmbH	

Document No	Sheets	Rev	Approved date	Title
01-3352-650002-PCB	1 to 3	_	26 May 2023	Printed-board assembly Ex e type 07-33**-****/****
01-3352-650002-SCH	1 of 1	_	26 May 2023	Printed-board assembly Ex e type 07-33**-****/****
01-3352-650003-ASY	1 to 2	А	26 May 2023	Printed-board assembly Ex i type 07-33**-****/****
01-3352-650003-BOM	1 of 1	А	26 May 2023	Printed-board assembly Ex i type 07-33**-****/****
01-3352-650003-PCB	1 to 3	А	26 May 2023	Printed-board assembly Ex i type 07-33**-****/****
01-3352-650003-SCH	1 of 1	-	26 May 2023	Printed-board assembly Ex i type 07-33**-****/****
01-3352-650005	1 of 1	А	26 May 2023	Illuminated indicator module type 07-33**-***0/****
01-3352-6A0003	1 of 1	A	26 May 2023	Minimum content of Marking Illuminated indicator module type 07-335*-*1*0/****
01-3352-6A0004	1 of 1	A	26 May 2023	Minimum content of Marking Illuminated indicator module type 07-335*-*4*0/****
01-3354-650001	1 of 1	А	26 May 2023	Illuminated indicator module type 07-3354-4**0/****
01-3354-650001-BOM	1 of 1	А	26 May 2023	Illuminated indicator module type 07-3354-4**0/****
01-3362-650001	1 of 1	А	26 May 2023	Illuminated push button module type 07-3362-1**0/****
01-3362-650001-BOM	1 of 1	А	26 May 2023	Illuminated push button module type 07-3362-1**0/****
01-3362-650002	1 of 1		26 May 2023	Circuits assembly Ex i type 07-336*- *5*0/****, 07-336*-*6*0/****
01-3362-650002-BOM	1 of 1	_	26 May 2023	Circuits assembly Ex i type 07-336*- *5*0/****, 07-336*-*6*0/****
01-3362-6A0004	1 of 1	A	26 May 2023	Minimum content of Marking Illuminated push button module type 07-336*-*7*0/****, 07-336*-*8*0/****

Certificate Annex

Certificate Anne		
Certificate Number	CML 22ATEX1135U	
Equipment	Switch Module Type 07-332*-***0/**** and	
	Type 07-3382-****/****,	
	Control Switch Module Type 07-3332-1***/****,	
	Illuminated Indicator Module Type 07-335*-***0/****,	
	Illuminated Push Button Module Type 07-336*-***0/****,	
	Potentiometer Module Type 07-337*-*D*0/****	
Manufacturer	Bartec GmbH	

Document No	Sheets	Rev	Approved date	Title
01-3362-6A0005	1 of 1	A	26 May 2023	Minimum content of Marking Illuminated push button module type 07-336*-*5*0/****, 07-336*-*6*0/****
01-3362-6A0006	1 of 1	A	26 May 2023	Minimum content of Marking Illuminated push button module type 07-336*-*1*0/****, 07-336*-*2*0/****
01-3364-650001	1 of 1	А	26 May 2023	Illuminated push button module type 07-3364-4**0/****
01-3364-650001-BOM	1 of 1	А	26 May 2023	Illuminated push button module type 07-3364-4**0/****
01-3372-650001	1 of 1	_	26 May 2023	Potentiometer module type 07-3372-1D*0/****
01-3372-650001-BOM	1 of 1	_	26 May 2023	Potentiometer module type 07-3372-1D*0/****
01-3372-6A0002	1 of 1	-	26 May 2023	Minimum content of Marking Potentiometer module type 07-337*-*D*0/****
01-3374-650001	1 of 1	_	26 May 2023	Potentiometer module type 07-3374-4D*0/****
01-3374-650001-BOM	1 of 1	_	26 May 2023	Potentiometer module type 07-3374-4D*0/****
01-3382-650001	1 of 1	А	26 May 2023	Switch module 4-pole type 07-3382-****/****
01-3382-650001-BOM	1 of 1	_	26 May 2023	Switch module 4-pole type 07-3382-****/****
01-3382-6A0001	1 of 1	A	26 May 2023	Minimum content of Marking Switch module type 07-3332-1***/****, 07-3382-****/****