



Harmony[®] XB4 metal, Explosive atmosphere offer

Control and signaling units Ø 22



Harmony

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Advanced operator interface and industrial relays

Harmony operator interface and industrial relays enhance operational efficiency and equipment availability across industrial and building applications. Harmony includes intelligent connected products and edge terminals that visualize, gather and process data, enabling informed operator decisions

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- [Harmony Push Buttons and Switches](#)
- [Harmony HMI Operator Terminals, IPC and EdgeBox](#)
- [Harmony Signaling Devices](#)
- [Harmony Electrical Relays](#)
- [Harmony Safety](#)

Life Is On

Schneider
Electric

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Control and signaling units Ø 22

Harmony XB4 metal for explosive atmospheres

Pushbuttons, switches, and pilot lights

Presentation

The Harmony® XB4 Explosive atmosphere range of modular control and signaling units are designed for industries where explosive atmospheres can be present. This range is ideal for use in environments where the generation of possible ignition sources can be prevented and controlled.

This range includes 2 offers that meet the different standards:

- ATEX dust offer: compliant with European Directive 2014/34/EU , Zone 21/22
- Explosive atmosphere dust + gas offer: IECEx Zone 1/2/21/22; UL 60079 Zone 1/ 2/21/22; NEC 500 Class 1 Div 2, Class 2 Div 2 & Class 3

This range offers products for the following functions

- ATEX dust offer: illuminated and non-illuminated pushbuttons, selector and key switches, Emergency stop functions, and pilot lights.
- Explosive atmosphere dust + gas offer: illuminated and non-illuminated pushbuttons, selector and key switches, Emergency stop functions, pilot lights, push-to-test pilot lights, contact and LED light blocks.

Explosive atmosphere and ignition sources

According to the directives, a potentially explosive atmosphere is the mixture of air with flammable substances in the form of gas, vapor, and/or dust, that when exposed to an ignition source under normal atmospheric conditions can completely or partially catch fire and explode.

The types of ignition sources that can create an explosive atmosphere are:

- Hot surfaces
- Flames and hot gases
- Mechanically produced sparks
- Electrical equipment
- Transient currents
- Static electricity
- Lightning strikes
- Electromagnetic waves
- Optical radiation
- Ultrasound
- Chemical reactions
- People (indirectly)

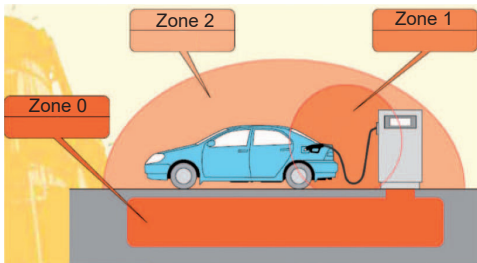
Explosive atmospheres are found in areas like:

- Metal surface grinding, especially aluminum dust and particles
- Oil refineries, rigs and processing plants
- Gas pipelines and distribution centers
- Printing industries, paper and textiles
- Aircraft refueling and hangars
- Chemical processing plants
- Grain handling and storage
- Sewage treatment plants
- Surface coating industries
- Underground coal mines
- Wood working areas
- Sugar refineries
- Vessels/ships
- Power plants

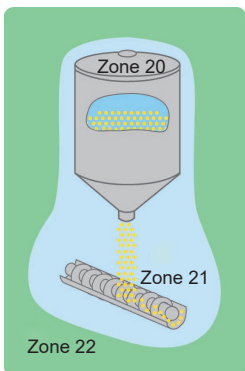
Explosive atmosphere IECEx zones and NEC 500 class and divisions

Explosive atmospheres are classified into the following categories and zones:

Category	Level of risk	IECEx/UL	NEC 500
Gas	High	Zone 0	Class 1 div 1
	Medium	Zone 1	
	Low	Zone 2	Class 1 div 2
Dust	High	Zone 20	Class 2 div 1
	Medium	Zone 21	
	Low	Zone 22	Class 2 div 2 Class 3 (fibers)



Example of hazardous gas and vapor zone



Example of hazardous dust zone

Control and signaling units Ø 22

Harmony XB4 metal for explosive atmospheres

Pushbuttons, switches, and pilot lights

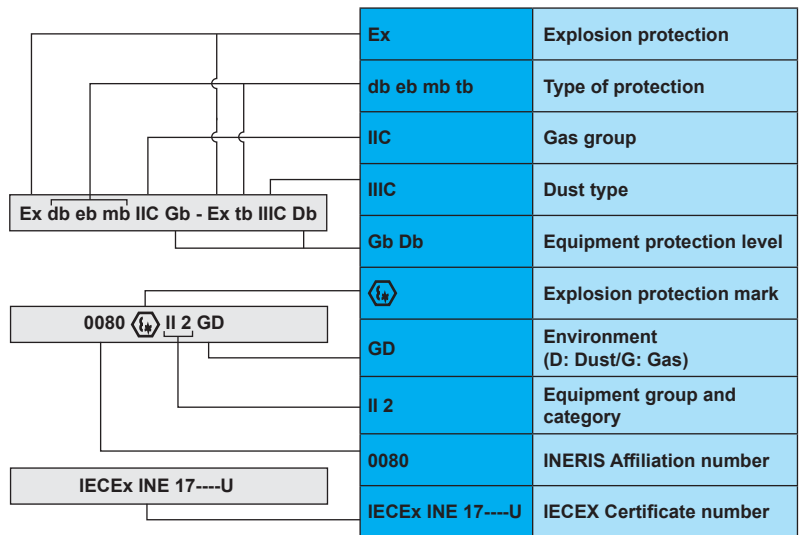
Presentation (continued)

Explosive atmosphere certification

Equipment made for use in potentially hazardous areas is obliged to follow a dedicated procedure for testing & inspection. Following the results of this procedure, the XB4 explosive atmosphere range obtained the following certificates:

- ATEX dust offer
 - ATEX certificate: 04ATEX9004U
- Explosive atmosphere dust + gas offer
 - ATEX certificate: 04ATEX9004U
 - IECEx certificate: IECEx INE 18.0003U
 - cULus Industrial control equipment for use in Hazardous Locations: E497361
 - cULus Emergency stop devices for use in Hazardous Locations: E497838

Marking example for XB4●●●GEX



Applications

- Industrial applications
 - Food & Beverage
 - Oil & Gas, including petrochemical extraction & transformation, car gas stations and gas bottling plants
 - Chemicals
 - Printing
 - Paint manufacturing lines



Food & Beverage



Oil & Gas



Printing



Paint manufacturing

For more technical information, please refer to the Harmony XB4 Explosive atmosphere products page on the Schneider Electric website.


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Harmony XB4 metal, explosive atmosphere

ATEX dust offer

Spring return pushbuttons, unmarked

Pushbuttons with silicon booted head for severe environments ⁽¹⁾ Screw clamp terminal connections (Schneider Electric anti-loosening system)


Shape of head	Type of push	Zone		Type of contact		Color of push	Reference	Weight kg/lb
		Dust	Gas	NO	NC			
	Booted, clear silicon For insertion of legends (color of push unobscured)	21-22	-	1	-	White	XB4BP181EX	0.082/0.181
				1	-	Green	XB4BP381EX	0.082/0.181
				-	1	Red	XB4BP482EX	0.082/0.181
				1	-	Yellow	XB4BP581EX	0.082/0.181
				1	-	Blue	XB4BP681EX	0.082/0.181
	Booted, clear silicon (color of push unobscured)	21-22	-	1	-	Black	XB4BP21EX	0.082/0.181
				1	-	Green	XB4BP31EX	0.082/0.181
				-	1	Red	XB4BP42EX	0.082/0.181
				1	-	Yellow	XB4BP51EX	0.082/0.181
				1	-	Blue	XB4BP61EX	0.082/0.181
	Booted, colored silicon	21-22	-	1	-	White	XB4BPS11EX	0.082/0.181
				1	-	Black	XB4BPS21EX	0.082/0.181
				1	-	Green	XB4BPS31EX	0.082/0.181
				-	1	Red	XB4BPS42EX	0.082/0.181
				1	-	Yellow	XB4BPS51EX	0.082/0.181
1	-	Blue	XB4BPS61EX	0.082/0.181				

PF1520/07B



XB4BP482EX

Illuminated pushbuttons with silicon booted head for severe environments ⁽¹⁾ Screw clamp terminal connections (Schneider Electric anti-loosening system)

Shape of head	Type of push	Zone		Type of contact		Supply voltage V	Color of push	Reference	Weight kg/lb
		Dust	Gas	NO	NC				
	Booted, clear silicon (color of push unobscured)	21-22	-	1	-	24 ~ 50/60 Hz	White	XB4BP183B5EX	0.102/0.225
				1	-		Green	XB4BP383B5EX	0.102/0.225
				-	1		Red	XB4BP483B5EX	0.102/0.225
				1	-		Yellow	XB4BP583B5EX	0.102/0.225
				1	-		Blue	XB4BP683B5EX	0.102/0.225
				1	-		230 ~ 50/60 Hz	White	XB4BP183M5EX
				1	-	Green		XB4BP383M5EX	0.102/0.225
				-	1	Red		XB4BP483M5EX	0.102/0.225
				1	-	Yellow		XB4BP583M5EX	0.102/0.225
				1	-	Blue		XB4BP683M5EX	0.102/0.225
				1	-	24...120 ~ 50/60 Hz		White	XB4BP183BG5EX
				1	-		Green	XB4BP383BG5EX	0.102/0.225
	-	1	Red	XB4BP483BG5EX	0.102/0.225				
	1	-	Yellow	XB4BP583BG5EX	0.102/0.225				
	1	-	Blue	XB4BP683BG5EX	0.102/0.225				
	1	-	110...120 ~ 50/60 Hz	White	XB4BP183G5EX		0.102/0.225		
	1	-		Green	XB4BP383G5EX	0.102/0.225			
	-	1		Red	XB4BP483G5EX	0.102/0.225			
	1	-		Yellow	XB4BP583G5EX	0.102/0.225			
	1	-		Blue	XB4BP683G5EX	0.102/0.225			

XB4EX_1039_CP0DA2076003



XB4BP383B5EX

(1) For additional contacts, please use standard Harmony XB4 range contact blocks ZBE101(1 NO) and ZBE102 (1 NC)

Control and signaling units Ø 22

Harmony XB4 metal, explosive atmosphere


ATEX dust offer

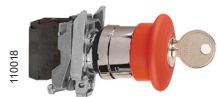
Mushroom head pushbuttons, spring return

Emergency stop and Emergency switching off functions






XB4BC21EX

Mushroom head pushbuttons (1)										
Screw clamp terminal connections (Schneider Electric anti-loosening system)										
Shape of head	Type of reset	Zone		Type of contact		Push Ø (mm)/in.	Color	Reference	Weight kg/lb	
		Dust	Gas	NO	NC					
	Mushroom head	21-22	-	1	-	40/1.575	Black	XB4BC21EX	0.122/0.269	
				1	-			Green		XB4BC31EX
				-	1			Red		XB4BC42EX
				1	-			Yellow		XB4BC51EX
				1	-			Blue		XB4BC61EX



XB4BS9445EX

Emergency stop and switching off pushbuttons with trigger action and mechanical latching (1)										
Screw clamp terminal connections (Schneider Electric anti-loosening system)										
Shape of head	Type of reset	Zone		Type of contact		Push Ø (mm)/in.	Color	Reference	Weight kg/lb	
		Dust	Gas	NO	NC					
	Push-pull	21-22	-	1	1	40/1.575	Red	XB4BT845EX	0.125/0.276	
	Turn to release	21-22	-	1	1			XB4BS8445EX		0.118/0.260
	Key release (key no. 455)	21-22	-	1	1			XB4BS9445EX		0.133/0.293

(1) For additional contacts, please use standard Harmony XB4 range contact blocks ZBE101(1 NO) and ZBE102 (1 NC)

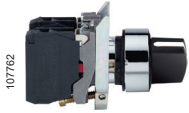
Control and signaling units Ø 22

Harmony XB4 metal, explosive atmosphere

ATEX dust offer

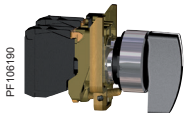
Selector switches with standard and long handle

Key switches



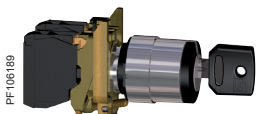
XB4BD33EX

Selector switches with standard handle (1)										
Screw clamp terminal connections (Schneider Electric anti-loosening system)										
Shape of head	Type of operator	Zone		Type of contact		Positions		Reference	Weight kg/lb	
		Dust	Gas	NO	NC	Number	Type			
	Standard handle, Black	21-22	-	1	1	2-position 90°	Stay put		XB4BD25EX	0.102/0.225
				2	-	3-position ± 45°	Stay put		XB4BD33EX	0.102/0.225
				-	-	Spring return to center			XB4BD53EX	0.102/0.225



XB4BJ33EX

Selector switches with long handle (1)										
Screw clamp terminal connections (Schneider Electric anti-loosening system)										
Shape of head	Type of operator	Zone		Type of contact		Positions		Reference	Weight kg/lb	
		Dust	Gas	NO	NC	Number	Type			
	Long handle, Black	21-22	-	1	-	2-position 90°	Stay put		XB4BJ21EX	0.096/0.212
				2	-	3-position ± 45°	Stay put		XB4BJ33EX	0.107/0.236
				-	-	Spring return to center			XB4BJ53EX	0.107/0.236



XB4BG33EX

Key switches (1)											
Screw clamp terminal connections (Schneider Electric anti-loosening system)											
Shape of head	Type of operator	Zone		Type of contact		Positions		Reference	Weight kg/lb		
		Dust	Gas	NO	NC	Number	Type				
	Key switch with key no. 455	21-22	-	1	-	2-position 90°	Stay put		XB4BG21EX	0.153/0.337	
									XB4BG41EX	0.153/0.337	
								Spring return to left		XB4BG61EX	0.153/0.337
								3-position ± 45°	Stay put		XB4BG03EX
	XB4BG33EX	0.164/0.362									

(1) For additional contacts, please use standard Harmony XB4 range contact blocks ZBE101(1 NO) and ZBE102 (1 NC)

Control and signaling units Ø 22





Harmony XB4 metal, explosive atmosphere

ATEX dust offer

Pilot lights with integral LED

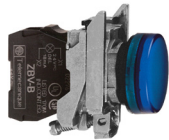
Pilot lights with integral LED (with plain lens) (1)

Screw clamp terminal connections (Schneider Electric anti-loosening system)

Shape of head	Supply voltage V	Zone		Color	Reference	Weight kg/lb
		Dust	Gas			
 Protected LED	24 ~ (50/60 Hz)	21-22	–	White	XB4BVB1EX	0.080/0.176
				Green	XB4BVB3EX	0.080/0.176
				Red	XB4BVB4EX	0.080/0.176
				Orange	XB4BVB5EX	0.080/0.176
				Blue	XB4BVB6EX	0.080/0.176
	24...120 ~ (50/60 Hz)	21-22	–	White	XB4BVBG1EX	0.080/0.176
				Green	XB4BVBG3EX	0.080/0.176
				Red	XB4BVBG4EX	0.080/0.176
				Orange	XB4BVBG5EX	0.080/0.176
				Blue	XB4BVBG6EX	0.080/0.176
	110...120 ~ (50/60 Hz)	21-22	–	White	XB4BVG1EX	0.080/0.176
				Green	XB4BVG3EX	0.080/0.176
				Red	XB4BVG4EX	0.080/0.176
				Orange	XB4BVG5EX	0.080/0.176
				Blue	XB4BVG6EX	0.080/0.176
	230...240 ~ (50/60 Hz)	21-22	–	White	XB4BVM1EX	0.080/0.176
				Green	XB4BVM3EX	0.080/0.176
				Red	XB4BVM4EX	0.080/0.176
				Orange	XB4BVM5EX	0.080/0.176
				Blue	XB4BVM6EX	0.080/0.176

(1) For additional contacts, please use standard Harmony XB4 range contact blocks ZBE101 (1 NO) and ZBE102 (1 NC)

110022



XB4BVB6EX

Control and signaling units Ø 22

Harmony XB4 metal, explosive atmosphere

Explosive atmosphere dust + gas offer

Spring return pushbuttons, unmarked



XB4BP482GEX

Pushbuttons with silicon booted head for severe environments (1)								
Screw clamp terminal connections (Schneider Electric anti-loosening system)								
Shape of head	Type of push	Zone		Type of contact		Color of push	Reference	Weight kg/lb
		Dust	Gas	NO	NC			
	Booted, clear silicon For insertion of legends (color of push unobscured)	21-22	1-2	1	–	White	XB4BP181GEX	0.089/0.196
				1	–	Green	XB4BP381GEX	0.089/0.196
				–	1	Red	XB4BP482GEX	0.109/0.240
				1	–	Yellow	XB4BP581GEX	0.109/0.240
				1	–	Blue	XB4BP681GEX	0.109/0.240
	Booted, clear silicon (color of push unobscured)	21-22	1-2	1	–	Black	XB4BP21GEX	0.089/0.196
				1	–	Green	XB4BP31GEX	0.089/0.196
				–	1	Red	XB4BP42GEX	0.109/0.240
				1	–	Yellow	XB4BP51GEX	0.109/0.240
				1	–	Blue	XB4BP61GEX	0.109/0.240
Booted, colored silicon	21-22	1-2	1	–	White	XB4BPS11GEX	0.080/0.176	
			1	–	Black	XB4BPS21GEX	0.080/0.176	
			1	–	Green	XB4BPS31GEX	0.080/0.176	
			–	1	Red	XB4BPS42GEX	0.081/0.179	
			1	–	Yellow	XB4BPS51GEX	0.080/0.176	
			1	–	Blue	XB4BPS61GEX	0.080/0.176	

Illuminated pushbuttons with silicon booted head for severe environments (1)									
Screw clamp terminal connections (Schneider Electric anti-loosening system)									
Shape of head	Type of push	Zone D		Type of contact		Supply voltage V	Color of push	Reference	Weight kg/lb
		Dust	Gas	NO	NC				
	Booted, clear silicon For insertion of legends (color of push unobscured)	21-22	1-2	1	–	24...254 ~ 50/60 Hz	White	XB4BP183BM5GEX	0.108/0.238
				1	–		Green	XB4BP383BM5GEX	0.108/0.238
				–	1		Red	XB4BP483BM5GEX	0.107/0.236
				1	–		Yellow	XB4BP583BM5GEX	0.108/0.238
				1	–		Blue	XB4BP683BM5GEX	0.108/0.238

(1) For additional contacts, please use specific Harmony XB4 range contact block [ZBE101GEX](#) (1 NO) and [ZBE102GEX](#) (1 NC)



XB4BP583BM5GEX


Control and signaling units Ø 22

Harmony XB4 metal, explosive atmosphere

Explosive atmosphere dust + gas offer




Mushroom head pushbuttons, spring return

Emergency stop and Emergency switching off functions

Mushroom head pushbuttons (1)									
Screw clamp terminal connections (Schneider Electric anti-loosening system)									
Shape of head	Type of reset	Zone D		Type of contact		Push		Reference	Weight kg/lb
		Dust	Gas	NO	NC	Ø (mm)/in.	Color		
	Mushroom head	21-22	1-2	1	–	40/1.575	Black	XB4BC21GEX	0.126/0.278
				1	–		Green	XB4BC31GEX	0.126/0.278
				–	1		Red	XB4BC42GEX	0.127/0.280
				1	–		Yellow	XB4BC51GEX	0.126/0.278
				1	–		Blue	XB4BC61GEX	0.126/0.278

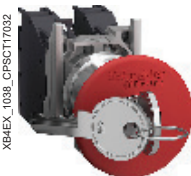


XB4BC21GEX

Emergency stop and switching off pushbuttons with trigger action and mechanical latching (1)									
Screw clamp terminal connections (Schneider Electric anti-loosening system)									
Shape of head	Type of reset	Zone D		Type of contact		Push		Reference	Weight kg/lb
		Dust	Gas	NO	NC	Ø (mm)/in.	Color		
	Push-pull	21-22	1-2	1	1	40/1.575	Red	XB4BT845GEX	0.142/0.313
	Turn to release	21-22	1-2	1	1			XB4BS8445GEX	0.141/0.311
				–	2			XB4BS8444GEX	0.140/0.309
	Key release (key no. 455) (3)	21-22	1-2	1	1			XB4BS9445GEX	0.168/0.370



XB4BS8445GEX
XB4BS8444GEX



XB4BS9445GEX

(1) For additional contacts, please use specific Harmony XB4 range contact block [ZBE101GEX](#) (1 NO) and [ZBE102GEX](#) (1 NC)

Control and signaling units Ø 22

Harmony XB4 metal, explosive atmosphere

Explosive atmosphere dust + gas offer

Selector switches with standard and long handle

Key switches

XB4EX_1038_CFSCT17008



XB4BD33GEX

Selector switches with standard handle (1)											
Screw clamp terminal connections (Schneider Electric anti-loosening system)											
Shape of head	Type of operator	Zone		Type of contact		Positions		Reference	Weight kg/lb		
		Dust	Gas	NO	NC	Number	Type				
	Standard handle, Black	21-22	1-2	1	1	2-position	Stay put 90°		XB4BD25GEX	0.115/0.254	
				2	–	3-position ± 45°	Stay put			XB4BD33GEX	0.114/0.251
						Spring return to center					XB4BD53GEX

XB4EX_1038_CFSCT17013



XB4BJ33GEX

Selector switches with long handle (1)											
Screw clamp terminal connections (Schneider Electric anti-loosening system)											
Shape of head	Type of operator	Zone		Type of contact		Positions		Reference	Weight kg/lb		
		Dust	Gas	NO	NC	Number	Type				
	Long handle, Black	21-22	1-2	1	–	2-position	Stay put 90°		XB4BJ21GEX	0.101/0.223	
				2	–	3-position ± 45°	Stay put			XB4BJ33GEX	0.114/0.251
						Spring return to center					XB4BJ53GEX

XB4EX_1038_CFSCT17011



XB4BG33GEX

Key switches (1)																
Screw clamp terminal connections (Schneider Electric anti-loosening system)																
Shape of head	Type of operator	Zone		Type of contact		Positions		Reference	Weight kg/lb							
		Dust	Gas	NO	NC	Number	Type									
	Key switch with key no. 455	21-22	1-2	1	–	2-position	Stay put 90°		XB4BG21GEX	0.159/0.351						
									XB4BG41GEX	0.158/0.348						
											Spring return to left				XB4BG61GEX	0.160/0.353
									2	–	3-position ± 45°	Stay put		XB4BG03GEX	0.176/0.388	
XB4BG33GEX	0.177/0.390															

(1) For additional contacts, please use specific Harmony XB4 range contact block [ZBE101GEX](#) (1 NO) and [ZBE102GEX](#) (1 NC)

Control and signaling units Ø 22

Harmony XB4 metal, explosive atmosphere


Explosive atmosphere dust + gas offer

Pilot lights with integral LED, Push-to-test pilot light

Contact and Light blocks

Pilot lights with integral LED (with plain lens)

Screw clamp terminal connections (Schneider Electric anti-loosening system)


Shape of head	Supply voltage V	Zone		Color	Reference	Weight kg/lb
		Dust	Gas			
 Protected LED	24...254 ~ (50/60 Hz)	21-22	1-2	White	XB4BVM1GEX	0.083/0.183
				Green	XB4BVM3GEX	0.083/0.183
				Red	XB4BVM4GEX	0.083/0.183
				Orange	XB4BVM5GEX	0.083/0.183
				Blue	XB4BVM6GEX	0.083/0.183

XB4EX_1038_CPSC17038



XB4BVM6GEX

Push-to-test pilot light (with plain lens)

Shape of head	Supply voltage V	Zone		Color	Reference	Weight kg/lb
		Dust	Gas			
 Protected LED	24...254 ~ (50/60 Hz)	21-22	1-2	White	XB4BW21BM5GEX	0.117/0.258
				Green	XB4BW23BM5GEX	0.117/0.258
				Red	XB4BW24BM5GEX	0.117/0.258
				Orange	XB4BW25BM5GEX	0.117/0.258
				Blue	XB4BW26BM5GEX	0.117/0.258



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XB4BW25BM5GEX

Contact blocks (1)

Screw clamp terminal connections (Schneider Electric anti-loosening system)

Description	Type of contact	Zone		Type of contact		Sold in lots of	Reference	Weight kg/lb
		Dust	Gas					
Contact blocks Single	Single	21-22	1-2	1	–	1	ZBE101GEX	0.018/0.040
				–	1	1	ZBE102GEX	0.019/0.042

XB4EX_1038_CPSC17039



ZBE101GEX

Light blocks (1)

Screw clamp terminal connections (Schneider Electric anti-loosening system)

Light source	Supply voltage V	Zone		Color of light source	Sold in lots of	Reference	Weight kg/lb
		Dust	Gas				
Integral LED	24...254 ~ (50/60 Hz)	21-22	1-2	White	1	ZBVM1GEX	0.020/0.044
				Green	1	ZBVM3GEX	0.020/0.044

XB4EX_1038_CPSC17041



ZBVM3GEX

(1) To be used only with explosive atmosphere dust + gas offer products



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