

# Operator dialog

## Harmony *Optimise the creation of your dialogue solutions!*

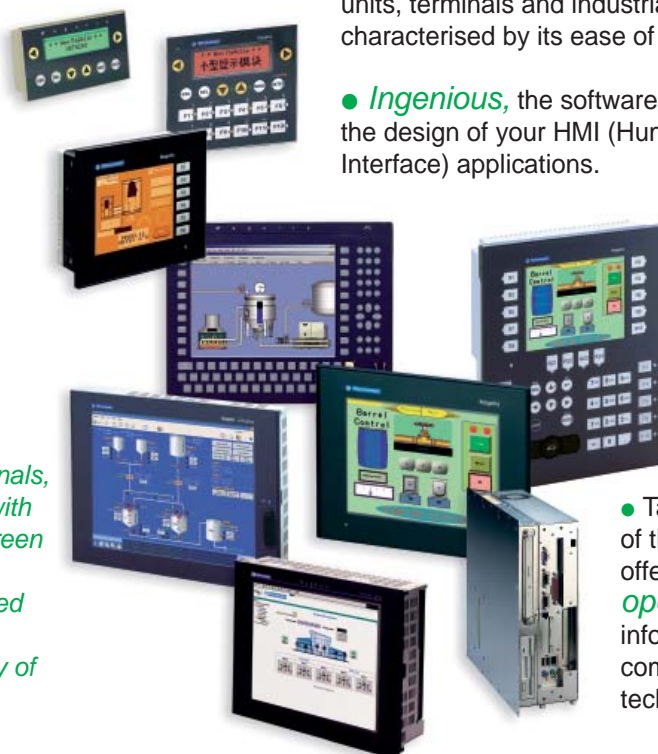
2

*Unequalled and of high quality, it is the largest offer on the market.*



- **Simplicity:** the clip together components ensure simple and secure assembly.
- **Ingenuity:** LED technology for all signalling functions.
- **Flexibility:** of modular construction, the products evolve with the automation system.
- **Robustness:** mechanical performance much higher than standard requirements.
- **Compactness:** the overall dimensions are the smallest on the market.

## Magelis *HMI at the touch of a finger and the blink of an eye.*



*The new Magelis range, comprising display units, terminals, graphic terminals with keypad or touchscreen and i PC industrial PCs, offers improved robustness for ensuring availability of your installation.*

- **Compact,** the range of Magelis display units, terminals and industrial PCs is characterised by its ease of implementation.
- **Ingenious,** the software range simplifies the design of your HMI (Human/Machine Interface) applications.

- Take advantage of these new offers that are **open** to the new information and communication technologies.

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● Control and signalling units for explosive atmospheres (see Chapter 10 “Explosive Atmospheres”)

Perfect software interoperability (configuration, supervision, reporting...).



## Human/Machine Interfaces

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(1):

Voltage	Letter (●)
12...24 V AC/DC (15 mA)	B
48...120 V AC (25 mA)	G
230...240 V AC (25 mA)	M



### Illuminated pushbuttons

<b>Type of head</b> <b>Shape of head</b>		<b>Flush push</b> rectangular (2)				
Degree of protection		IP 65 / Nema 4, 4X, 13 / Class II				
Mounting (mm)		panel cut-out mounting centres $\varnothing 16.2^{+0.2}_0$				
Dimensions (mm)		24 x 18 with rectangular head, 18 x 18 with square or circular head				
Connection (3)		24 x 18 x 50 with rectangular head, 18 x 18 x 50 with square or circular head				
<b>Type of push</b>		<b>Spring return</b>				
		<b>Complete products</b> 12 ... 24 V AC/DC	<b>Products for user assembly</b> 			
References	white	● N/O	<b>XB6 DW1B1B</b>	<b>ZB6 E●1B (1)</b>	<b>ZB6 Z1B</b>	<b>ZB6 DW1</b>
		● N/C + N/O	<b>XB6 DW1B5B</b>	<b>ZB6 E●1B (1)</b>	<b>ZB6 Z5B</b>	<b>ZB6 DW1</b>
	green	● N/O	<b>XB6 DW3B1B</b>	<b>ZB6 E●3B (1)</b>	<b>ZB6 Z1B</b>	<b>ZB6 DW3</b>
		● N/C + N/O	<b>XB6 DW3B5B</b>	<b>ZB6 E●3B (1)</b>	<b>ZB6 Z5B</b>	<b>ZB6 DW3</b>
	red	● N/C	<b>XB6 DW4B2B</b>	<b>ZB6 E●4B (1)</b>	<b>ZB6 Z2B</b>	<b>ZB6 DW4</b>
		● N/C + N/O	<b>XB6 DW4B5B</b>	<b>ZB6 E●4B (1)</b>	<b>ZB6 Z5B</b>	<b>ZB6 DW4</b>
	yellow	● N/O	–	<b>ZB6 E●5B (1)</b>	<b>ZB6 Z1B</b>	<b>ZB6 DW5</b>
		● N/C + N/O	<b>XB6 DW5B5B</b>	<b>ZB6 E●5B (1)</b>	<b>ZB6 Z5B</b>	<b>ZB6 DW5</b>
<b>Type of push</b>		<b>Latching</b>				
References	white	● N/O	–	<b>ZB6 E●1B (1)</b>	<b>ZB6 Z1B</b>	<b>ZB6 DF1</b>
		● N/C + N/O	<b>XB6 DF1B5B</b>	<b>ZB6 E●1B (1)</b>	<b>ZB6 Z5B</b>	<b>ZB6 DF1</b>
	green	● N/O	<b>XB6 DF3B1B</b>	<b>ZB6 E●3B (1)</b>	<b>ZB6 Z1B</b>	<b>ZB6 DF3</b>
		● N/C + N/O	<b>XB6 DF3B5B</b>	<b>ZB6 E●3B (1)</b>	<b>ZB6 Z5B</b>	<b>ZB6 DF3</b>
	red	● N/C	<b>XB6 DF4B2B</b>	<b>ZB6 E●4B (1)</b>	<b>ZB6 Z2B</b>	<b>ZB6 DF4</b>
		● N/C + N/O	<b>XB6 DF4B5B</b>	<b>ZB6 E●4B (1)</b>	<b>ZB6 Z5B</b>	<b>ZB6 DF4</b>
	yellow	● N/O	–	<b>ZB6 E●5B (1)</b>	<b>ZB6 Z1B</b>	<b>ZB6 DF5</b>
		● N/C + N/O	–	<b>ZB6 E●5B (1)</b>	<b>ZB6 Z5B</b>	<b>ZB6 DF5</b>



### Pilot lights

<b>Type of head</b> <b>Shape of head</b>		<b>Smooth lens cap</b> rectangular (2)			
		<b>Complete products</b> 12 ... 24 V AC/DC	<b>Products for user assembly</b> 		
References	white	●	<b>XB6 DV1BB</b>	<b>ZB6 E●1B (1)</b>	<b>ZB6 DV1</b>
	green	●	<b>XB6 DV3BB</b>	<b>ZB6 E●3B (1)</b>	<b>ZB6 DV3</b>
	red	●	<b>XB6 DV4BB</b>	<b>ZB6 E●4B (1)</b>	<b>ZB6 DV4</b>
	yellow	●	<b>XB6 DV5BB</b>	<b>ZB6 E●5B (1)</b>	<b>ZB6 DV5</b>
	blue	●	–	<b>ZB6 E●6B (1)</b>	<b>ZB6 DV6</b>

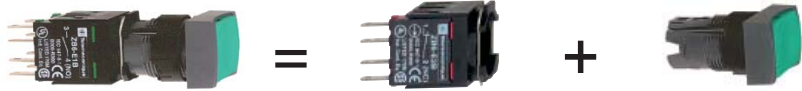
(1) Basic reference, to be completed by the letter B, G or M indicating the required voltage. See voltage table above.

(2) For products with a square head, replace the letter **D** in the reference by the letter **C** (XB6 DW1B1B becomes XB6 CW1B1B).











For products with a circular head, replace the letter **D** in the reference by the letter **A** (XB6 DW1B1B becomes XB6 AW1B1B).

(3) Alternative connection: 1 x 0.5 pins for printed circuit boards.

## Contact functions



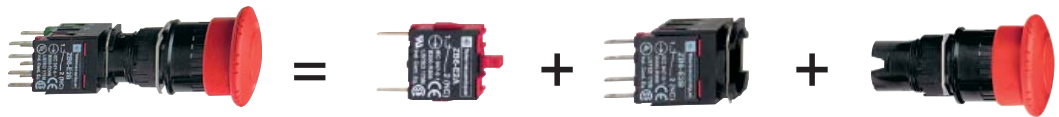
### Pushbuttons

<b>Type of head</b>	  	<b>Flush push</b>			
<b>Shape of head</b>		rectangular (1)			
<b>Degree of protection</b>		IP 65 / Nema 4, 4X, 13 / Class II			
<b>Mounting (mm)</b>	panel cut-out mounting centres	$\varnothing 16.2^{+0.2}_0$			
<b>Dimensions (mm)</b>	W x H x D (below head)	24 x 18 with rectangular head, 18 x 18 with square or circular head			
<b>Connection (2)</b>		24 x 18 x 50 with rectangular head, 18 x 18 x 50 with square or circular head			
<b>Connection (2)</b>		Tags for 2.8 x 0.5 Faston connectors or for soldering			
<b>Type of push</b>		<b>Spring return</b>			
		<b>Complete products</b>	<b>Products for user assembly</b>		
					
<b>References</b>	white 	N/O	<b>XB6 DA11B</b>	<b>ZB6 Z1B</b>	<b>ZB6 DA1</b>
		N/C + N/O	<b>XB6 DA15B</b>	<b>ZB6 Z5B</b>	<b>ZB6 DA1</b>
	black 	N/O	–	<b>ZB6 Z1B</b>	<b>ZB6 DA2</b>
		N/C + N/O	<b>XB6 DA25B</b>	<b>ZB6 Z5B</b>	<b>ZB6 DA2</b>
	green 	N/O	<b>XB6 DA31B</b>	<b>ZB6 Z2B</b>	<b>ZB6 DA3</b>
		N/C + N/O	<b>XB6 DA35B</b>	<b>ZB6 Z5B</b>	<b>ZB6 DA3</b>
	red 	N/O	–	<b>ZB6 Z1B</b>	<b>ZB6 DA4</b>
		N/C + N/O	<b>XB6 DA45B</b>	<b>ZB6 Z5B</b>	<b>ZB6 DA4</b>




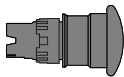


(1) For products with a square head, replace the letter **D** in the reference by the letter **C** (XB6 DA11B becomes XB6 CA11B).

For products with a circular head, replace the letter **D** in the reference by the letter **A** (XB6 DA11B becomes XB6 AA11B).

(2) Alternative connection: 1 x 0.5 pins for printed circuit boards.

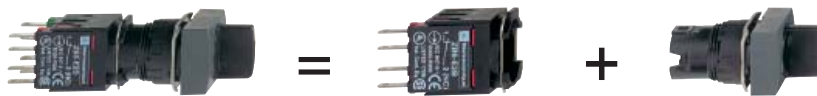


### Ø 30 mushroom head Emergency stop pushbuttons (3)

<b>Type of head</b>		<b>Trigger action (EN 418)</b>			
<b>Shape of head</b>		cylindrical			
<b>Type of push</b>		<b>Turn to release</b>			
		<b>Complete products</b>	<b>Products for user assembly</b>		
					
<b>References</b>	red 	2 N/C + 1 N/O	<b>XB6 AS8349B</b>	<b>ZB6 E2B</b>	<b>ZB6 Z5B</b>
					<b>ZB6 AS834</b>
<b>Type of push</b>		<b>Key release, Ronis 200</b>			
<b>References</b>	red 	2 N/C + 1 N/O	<b>XB6 AS9349B</b>	<b>ZB6 E2B</b>	<b>ZB6 Z5B</b>
					<b>ZB6 AS934</b>

(3) The trigger action mushroom head Emergency stop pushbuttons conform to standard IEC/EN 60947-5-5, Machinery Directive 98/37/EC and standard EN 418.

Please consult your Regional Sales Office for full details of these standards and directives.



### Selector switches and key switches

<b>Type of head</b>		<b>Black handle</b>	rectangular (2)
<b>Shape of head</b>			
<b>Degree of protection</b>			IP 66 / Nema 4, 4X, 13 / Class II
<b>Mounting (mm)</b>	panel cut-out mounting centres		Ø 16.2 <sup>+0.2</sup> <sub>0</sub>
<b>Dimensions (mm)</b>	W x H x D (below head)		24 x 18 with rectangular head, 18 x 18 with square or circular head
<b>Connection (3)</b>			24 x 18 x 50 with rectangular head, 18 x 18 x 50 with square or circular head
<b>Connection (3)</b>			Tags for 2.8 x 0.5 Faston connectors or for soldering
<b>Type of operator</b>		<b>Black handle</b>	
		<b>Complete products</b>	<b>Products for user assembly</b>
<b>Number and type of positions</b>		<b>2 positions</b> stay put	<b>2 positions</b> stay put <b>2 positions</b> spring return to centre
<b>References</b>	N/O	<b>XB6 DD221B</b>	ZB6 Z1B   ZB6 DD22   ZB6 Z1B   ZB6 DD24
	N/C + N/O	XB6 DD225B	ZB6 Z5B   ZB6 DD22   ZB6 Z5B   ZB6 DD24
<b>Number and type of positions</b>		<b>3 positions</b> stay put	<b>3 positions</b> stay put <b>3 positions</b> spring return to centre
<b>References</b>	N/O	<b>XB6 DD235B</b>	ZB6 Z5B   ZB6 DD23   ZB6 Z5B   ZB6 DD25



<b>Type of operator</b>		<b>Ronis key, n° 200</b>	
		<b>Complete products</b>	<b>Products for user assembly</b>
<b>Number and type of positions</b>		<b>2 positions</b> stay put	<b>2 positions</b> stay put <b>2 positions</b> spring return to centre
<b>References</b>	N/C + N/O	<b>XB6 DGC5B</b>	ZB6 Z5B   ZB6 DGC   ZB6 Z5B   ZB6 DGB
<b>Number and type of positions</b>		<b>3 positions</b> stay put	<b>3 positions</b> stay put <b>3 positions</b> spring return to centre
<b>References</b>	N/C + N/O	XB6 DGH5B	ZB6 Z5B   ZB6 DGH   ZB6 Z5B   ZB6 DGS

(1):

Voltage	Letter (●)
12...24 V AC/DC (15 mA)	B
48...120 V AC (25 mA)	G
230...240 V AC (25 mA)	M



### Illuminated selector switches

<b>Type of operator</b>		<b>Coloured handle</b>	
	<b>Products for user assembly</b>		
<b>Number and type of positions</b>		<b>2 positions</b> stay put	<b>3 positions</b> stay put
<b>References</b>	white ● N/C + N/O	<b>ZB6 E●1B (1)   ZB6 Z5B</b>	<b>ZB6 DD02</b>   <b>ZB6 DD03</b>   <b>ZB6 YK1</b>
	green ● N/C + N/O	<b>ZB6 E●3B (1)   ZB6 Z5B</b>	<b>ZB6 DD02</b>   <b>ZB6 DD03</b>   <b>ZB6 YK3</b>
	red ● N/C + N/O	<b>ZB6 E●4B (1)   ZB6 Z5B</b>	<b>ZB6 DD02</b>   <b>ZB6 DD03</b>   <b>ZB6 YK4</b>

(1) Basic reference, to be completed by the letter B, G or M indicating the required voltage. See voltage table above.

(2) For products with a square head, replace the letter **D** in the reference by the letter **C** (XB6 DD221B becomes XB6 CD221B).

For products with a circular head, replace the letter **D** in the reference by the letter **A** (XB6 DD221B becomes XB6 AD221B).

(3) Alternative connection: 1 x 0.5 pins for printed circuit boards.

# LED pilot lights Ø 8 and 12

(1):

Voltage	Number (●)
5 V (25 mA)	1
12 V (18 mA)	2
24 V (18 mA)	3
48 V (10 mA)	4



LED pilot lights		With black bezel	With integral lens cap	
Type of head		Protruding LED, Ø 8 mm	Covered LED, Ø 8 mm	Covered LED, Ø 12 mm
Degree of protection		IP 40, IP 65 with seal (2)		
Mounting (mm)	panel cut-out	Ø 8.2 mm	Ø 8.2 mm	Ø 12.2 mm
	mounting centres	12.5 x 12.5 mm	10.5 x 10.5 mm	16.5 x 16.5 mm
Dimensions (mm)	Ø x Depth (below head)	Ø 12 x 32	Ø 10 x 34	Ø 16 x 45
Connection		Tags (3)	Tags (3)	Threaded connectors
References (1)	green ●	<b>XVL A1●3</b>	<b>XVL A2●3</b>	<b>XVL A3●3</b>
	red ●	<b>XVL A1●4</b>	<b>XVL A2●4</b>	<b>XVL A3●4</b>
	yellow ●	<b>XVL A1●5</b>	<b>XVL A2●5</b>	<b>XVL A3●5</b>
Tightening key		For Ø 8 mm pilot lights		For Ø 12 mm pilot lights
References		XVL X08		XVL X12

(1) Basic reference, to be completed by the number 1, 2, 3 or 4 indicating the required voltage. See voltage table above.

(2) For an IP 65 degree of protection, include the seals: XVL Z911 for pilot lights XVL A1●● and XVL A2●●; XVL Z912 for pilot lights XVL A3●●.

(3) Tags for 2.8 x 0.5 Faston connectors or for soldering.

## Sub-assemblies & accessories for Ø 16 plastic bezel control and signaling units



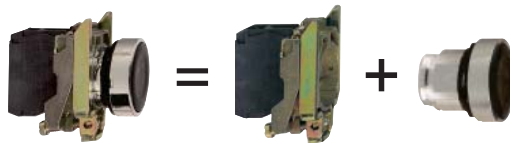
Sub-assemblies	Bodies for pushbuttons and selector switches			Bodies for pilot lights			
Rated operational characteristics, AC-15: U <sub>e</sub> = 240 V and I <sub>e</sub> = 1.5 A or U <sub>e</sub> = 120 V and I <sub>e</sub> = 3 A Positive operation of contacts conforming to IEC/EN 60947-5-1: N/C contacts with positive opening operation, positive opening force 20 N				Consumption			
				15 mA	12...24 V AC/DC		
				25 mA	48...120 V AC		
				25 mA	230...240 V AC		
	Type of contact	Fixing collar + contacts	Contacts	Pilot light bodies	12 ... 24 V	48 ... 120 V	230 ... 240 V
References	N/O	ZB6 Z1B	<b>ZB6 E1B</b>	White ●	<b>ZB6 EB1B</b>	ZB6 EG1B	<b>ZB6 EM1B</b>
	N/C	ZB6 Z2B	<b>ZB6 E2B</b>	Green ●	<b>ZB6 EB3B</b>	ZB6 EG3B	<b>ZB6 EM3B</b>
	2 N/O	<b>ZB6 Z3B</b>	–	Red ●	<b>ZB6 EB4B</b>	ZB6 EG4B	<b>ZB6 EM4B</b>
	2 N/C	ZB6 Z4B	–	Yellow ●	ZB6 EB5B	ZB6 EG5B	ZB6 EM5B
	N/O + N/C	<b>ZB6 Z5B</b>	–	Blue ●	ZB6 EB6B	ZB6 EG6B	ZB6 EM6B

### Accessories
















Legend holders	24 x 28 mm (8 x 21 mm legend)			24 x 36 mm (16 x 21 mm legend)			
Blank legend	Background colour	without legend	yellow or white	black or red	without legend	yellow or white	black or red
References (10)*		<b>ZB6 YD20</b>	<b>ZB6 YD21</b>	ZB6 YD22	ZB6 YD30	ZB6 YD31	ZB6 YD32
Blank legends for legend holders		8 x 21 mm (24 x 28 mm legend holder)			16 x 21 mm (24 x 36 mm legend holder)		
	Background colour	–	yellow or white	black or red	–	yellow or white	black or red
References (20)*		–	<b>ZB6 Y1001</b>	ZB6 Y2001	–	ZB6 Y4001	ZB6 Y3001
<b>Ø 45 mm yellow legend for mushroom head Emergency stop pushbutton</b>							
	Marking	Blank, for engraving		EMERGENCY STOP	ARRET D'URGENCE		
References		<b>ZB6 Y7001</b>		<b>ZB6 Y7330</b>	ZB6 Y7130		
	Body/fixing collar	Plate		Tightening tool	Dismantling tool		
		anti-rotation		and slackening, for fixing nut	for removal of contact blocks		
References	ZB6 Y009 (10)*	ZB6 Y003 (10)*		ZB6 Y905 (2)*	ZB6 Y018 (5)*		
	<b>Protective shutter for pushbuttons and switches</b>			<b>Connector</b>		<b>Blanking plug</b>	
	for rectangular heads	for circular and square heads		Faston, female	IP 65		
References	ZB6 YD001	<b>ZB6 YA001</b>		ZB6 Y004 (100)*	ZB6 Y005 (10)*		

\* sold in lots of









### Pushbuttons, spring return

<b>Type of head</b>			<b>Chromium plated circular bezel</b>					
<b>Degree of protection</b>			IP 66 / Nema 4X, 13 / Class I					
<b>Mounting (mm)</b>		panel cut-out mounting centres	Ø 22.5 (22.4 <sup>+0.4</sup> <sub>0</sub> recommended) 30 (horizontal) x 40 (vertical)					
<b>Depth (mm)</b>		below head	43					
<b>Connection (1)</b>			Screw clamp terminals					
<b>Type of push</b>			<b>Flush</b>			<b>Flush, booted</b>		
Unmarked		<b>Products</b>	<b>Complete</b>	<b>For user assembly</b>		<b>Complete</b>	<b>For user assembly</b>	
								
<b>References</b>		black ● N/O	<b>XB4 BA21</b>	ZB4 BZ101	ZB4 BA2	<b>XB4 BP21</b>	ZB4 BZ101	ZB4 BP2
		green ● N/O	<b>XB4 BA31</b>	ZB4 BZ101	ZB4 BA3	<b>XB4 BP31</b>	ZB4 BZ101	ZB4 BP3
		red ● N/C	<b>XB4 BA42</b>	ZB4 BZ102	ZB4 BA4	<b>XB4 BP42</b>	ZB4 BZ102	ZB4 BP4
		yellow ● N/O	<b>XB4 BA51</b>	ZB4 BZ101	ZB4 BA5	<b>XB4 BP51</b>	ZB4 BZ101	ZB4 BP5
		blue ● N/O	<b>XB4 BA61</b>	ZB4 BZ101	ZB4 BA6	<b>XB4 BP61</b>	ZB4 BZ101	ZB4 BP6
<b>Type of push</b>			<b>Flush</b>			<b>Mushroom head, Ø 40 mm</b>		
With international marking		<b>Products</b>	<b>Complete</b>	<b>For user assembly</b>				
								
<b>References</b>		green ⓘ N/O	<b>XB4 BA3311</b>	ZB4 BZ101	ZB4 BA331	–	–	–
		red ⓘ N/C	<b>XB4 BA4322</b>	ZB4 BZ102	ZB4 BA432	–	–	–
		white ⓘ N/O	<b>XB4 BA3341</b>	ZB4 BZ101	ZB4 BA334	–	–	–
		black ⓘ N/O	<b>XB4 BA3351</b>	ZB4 BZ101	ZB4 BA335	–	–	–
<b>Type of push</b>			<b>Projecting</b>			<b>Double-headed pushbuttons, booted</b>		
Unmarked		<b>Products</b>	<b>Complete</b>	<b>For user assembly</b>		<b>Complete</b>	<b>For user assembly</b>	
								
<b>References</b>		black ● N/O	–	–	–	<b>XB4 BC21</b>	ZB4 BZ101	ZB4 BC2
		red ● N/C	<b>XB4 BL42</b>	ZB4 BZ102	ZB4 BL4	–	–	–
<b>Type of push</b>			<b>Double-headed pushbuttons</b>			<b>Double-headed pushbuttons, booted</b>		
<b>Degree of protection</b>			IP 40			IP 66		
With international marking		<b>Products</b>	<b>Complete</b>	<b>For user assembly</b>		<b>Complete</b>	<b>For user assembly</b>	
								
<b>References</b>		green / red ⓘ N/C + N/O	<b>XB4 BL845</b>	ZB4 BZ105	ZB4 BL8434	<b>XB4 BL945</b>	ZB4 BZ105	ZB4 BL9434

(1) Alternative connections: plug-in connector, Faston connectors (6.35 and 2 x 2.8).



### Ø 40 mm mushroom head Emergency stop pushbuttons (2)

<b>Type of push</b>			<b>Latching</b>			<b>Trigger action (EN 418)</b>		
Unmarked		<b>Products</b>	<b>Complete</b>	<b>For user assembly</b>		<b>Complete</b>	<b>For user assembly</b>	
								
<b>References</b>		red ● N/C or N/C + N/O	<b>XB4 BT42</b>	ZB4 BZ102	ZB4 BT4	<b>XB4 BT845</b>	ZB4 BZ105	ZB4 BT84
<b>Type of push</b>			<b>Turn to release (N/C)</b>			<b>Turn to release (N/C + N/O)</b>		
<b>References</b>		red ● N/C or N/C + N/O	<b>XB4 BS542</b>	ZB4 BZ102	ZB4 BS54	<b>XB4 BS8445</b>	ZB4 BZ105	ZB4 BS844
<b>Type of push</b>			<b>Key release (N/C)</b>			<b>Key release (N/C + N/O)</b>		
<b>References</b>		red ● N/C or N/C + N/O	<b>XB4 BS142</b>	ZB4 BZ102	ZB4 BS14	<b>XB4 BS9445</b>	ZB4 BZ105	ZB4 BS944

(2) The mushroom head Emergency stop pushbuttons conform to standard IEC/EN 60947-5-5 and Machinery Directive 98/37/EC.

Trigger action mushroom head Emergency stop pushbuttons conform to standard EN 418.

## Contact functions



### Selector switches and key switches

Type of head	Chromium plated circular bezel	
Degree of protection	IP 66 / Nema 4X, 13 / Class I	
Mounting (mm)	panel cut-out	Ø 22.5 (22.4 <sup>+0.4</sup> <sub>0</sub> recommended)
	mounting centres	30 (horizontal) x 40 (vertical)
Depth (mm)	below head	43
Connection (1)	Screw clamp terminals	
Type of operator	Handle	

Products		Complete	For user assembly	Complete	For user assembly
Number and type of positions		2 positions stay put	2 positions stay put	2 positions spring return to left	2 positions spring return to left
References	black ● N/O	<b>XB4 BD21</b>	ZB4 BZ101   ZB4 BD2	<b>XB4 BD41</b>	ZB4 BZ101   ZB4 BD4
Number and type of positions		3 positions stay put	3 positions stay put	3 positions spring return to centre	3 positions spring return to centre
References	black ● N/O + N/O	<b>XB4 BD33</b>	ZB4 BZ103   ZB4 BD3	<b>XB4 BD53</b>	ZB4 BZ103   ZB4 BD5



Products		Complete	For user assembly	Complete	For user assembly
Number and type of positions (2)		2 positions stay put	2 positions stay put	2 positions stay put	2 positions stay put
References	black ● N/O	<b>XB4 BG21</b>	ZB4 BZ101   ZB4 BG2	<b>XB4 BG41</b>	ZB4 BZ101   ZB4 BG4
Number and type of positions		2 positions spring return to left	2 positions spring return to left	3 positions stay put	3 positions stay put
References	black ● N/O	<b>XB4 BG61</b>	ZB4 BZ101   ZB4 BG6	–	–
	black ● N/O + N/O	–	–	<b>XB4 BG33</b>	ZB4 BZ103   ZB4 BG3

## Separate components




### Electrical blocks

#### Single contact blocks

Rated operational characteristics	AC-15, 240 V - 3 A
Positive operation of contacts conforming to IEC/EN 60947-5-1	All functions incorporating a N/C contact are positive opening operation
References (5)*	N/O
	<b>ZBE 101</b>
	N/C
	<b>ZBE 102</b>

(1) Alternative connections: plug-in connector, Faston connectors (6.35 and 2 x 2.8).

(2) The symbol  indicates key withdrawal position.

\* sold in lots of











# Pushbuttons, switches and pilot lights Ø 22 with metal bezel

## Light functions










### Pilot lights




<b>Type of head</b>		<b>Circular bezel</b>					
<b>Degree of protection</b>		<b>Smooth lens cap</b>					
<b>Mounting (mm)</b>	panel cut-out	IP 66 / Nema 4X, 13 / Class I					
	mounting centres	Ø 22.5 (22.4 <sup>+0.4</sup> <sub>0</sub> recommended)					
<b>Depth</b>	below head	30 (horizontal) x 40 (vertical)					
<b>Connection (1)</b>		43					
<b>Light source</b>		Screw clamp terminals			Integral LED		
	<b>Products</b>	<b>Complete</b>			Direct supply for BA 9s bulb (not included)		
					<b>Complete</b>	<b>For user assembly</b>	
							
<b>Supply voltage</b>		24 V AC/DC	48...120 V AC	230...240 V AC	250 V max., 2.4 W max.		
<b>References</b>	white 	<b>XB4 BVB1</b>	<b>XB4 BVG1</b>	<b>XB4 BVM1</b>	<b>XB4 BV61</b>	ZB4 BV6	ZB4 BV01
	green 	<b>XB4 BVB3</b>	<b>XB4 BVG3</b>	<b>XB4 BVM3</b>	<b>XB4 BV63</b>	ZB4 BV6	ZB4 BV03
	red 	<b>XB4 BVB4</b>	<b>XB4 BVG4</b>	<b>XB4 BVM4</b>	<b>XB4 BV64</b>	ZB4 BV6	ZB4 BV04
	yellow 	<b>XB4 BVB5</b>	<b>XB4 BVG5</b>	<b>XB4 BVM5</b>	<b>XB4 BV65</b>	ZB4 BV6	ZB4 BV05
	blue 	<b>XB4 BVB6</b>	<b>XB4 BVG6</b>	<b>XB4 BVM6</b>	–	–	–



### Illuminated pushbuttons and selector switches

<b>Type</b>	Flush push, spring return, illuminated pushbuttons						
<b>Light source</b>		Integral LED			Direct supply for BA 9s bulb (not included)		
	<b>Products</b>	<b>Complete</b>			<b>Complete</b>	<b>For user assembly</b>	
							
<b>Supply voltage</b>		24 V AC/DC	48...120 V AC	230...240 V AC	250 V max., 2.4 W max.		
<b>References</b>	white  N/C + N/O	<b>XB4 BW31B5</b>	<b>XB4 BW31G5</b>	<b>XB4 BW31M5</b>	<b>XB4 BW3165</b>	ZB4 BW065	ZB4 BW31
	green  N/C + N/O	<b>XB4 BW33B5</b>	<b>XB4 BW33G5</b>	<b>XB4 BW33M5</b>	<b>XB4 BW3365</b>	ZB4 BW065	ZB4 BW33
	red  N/C + N/O	<b>XB4 BW34B5</b>	<b>XB4 BW34G5</b>	<b>XB4 BW34M5</b>	<b>XB4 BW3465</b>	ZB4 BW065	ZB4 BW34
	yellow  N/C + N/O	<b>XB4 BW35B5</b>	<b>XB4 BW35G5</b>	<b>XB4 BW35M5</b>	<b>XB4 BW3565</b>	ZB4 BW065	ZB4 BW35
	blue  N/C + N/O	<b>XB4 BW36B5</b>	<b>XB4 BW36G5</b>	<b>XB4 BW36M5</b>	–	–	–



<b>Type</b>	<b>Double-headed pushbuttons with LED pilot light</b> (1 flush green push, 1 projecting red push)			<b>Illuminated selector switches</b> (2 position stay put)			
<b>Degree of protection</b>	IP 40			IP 65			
<b>Light source</b>	Integral LED			Integral LED			
	<b>Products</b>	<b>Complete</b>			<b>Complete</b>		
<b>Supply voltage</b>		24 V AC/DC	48...120 V AC	230...240 V AC	24 V AC/DC	48...120 V AC	230...240 V AC
<b>References</b>	green  N/C + N/O	–	–	–	<b>XB4 BK123B5</b>	<b>XB4 BK123G5</b>	<b>XB4 BK123M5</b>
	red  N/C + N/O	–	–	–	<b>XB4 BK124B5</b>	<b>XB4 BK124G5</b>	<b>XB4 BK124M5</b>
	yellow  N/C + N/O	<b>XB4 BW84B5</b>	<b>XB4 BW84G5</b>	<b>XB4 BW84M5</b>	<b>XB4 BK125B5</b>	<b>XB4 BK125G5</b>	<b>XB4 BK125M5</b>

(1) Alternative connections: plug-in connector, Faston connectors (6.35 and 2 x 2.8).

## Separate components and accessories



### Electrical blocks

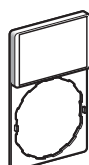
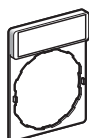
	Single contact blocks	Light blocks with integral LED				Light block, direct supply
Rated operational characteristics	AC-15, 240 V - 3 A	Consumption				
		18 mA	24 V AC/DC			
Positive operation of contacts conforming to IEC/EN 60947-5-1	N/C contacts with positive opening operation	14 mA	120 V AC			
		14 mA	240 V AC			
		To combine with heads for integral LED				For BA 9s bulb (not included)
		24 V AC/DC	48...120 V AC	230...240 V AC		250 V max., 2.4 W max.
References (5)*	N/O <b>ZBE 101</b>	white	ZBV B1	ZBV G1	ZBV M1	ZBV 6
	N/C <b>ZBE 102</b>	green	ZBV B3	ZBV G3	ZBV M3	Colour provided by lens
		red	ZBV B4	ZBV G4	ZBV M4	
		yellow	ZBV B5	ZBV G5	ZBV M5	
		blue	ZBV B6	ZBV G6	ZBV M6	



### Diecast metal enclosures

(Zinc alloy, usable depth 49 mm)

Number of cut-outs	Front face dimensions	1 vertical row				2 vertical rows		
		1	2	3	4	2	4	6
References	80 x 80 mm	XAP M1201	–	–	–	XAP M1202	–	–
	80 x 130 mm	–	XAP M2202	XAP M2203	–	–	XAP M2204	–
	80 x 175 mm	–	–	XAP M3203	XAP M3204	–	–	XAP M3206



### Accessories

#### Legend holders, 30 x 40 mm, for 8 x 27 mm legends

Marking	Background colour: black or red					white or yellow			
References (10)*	Blank	ZBY 2101					ZBY 4101		
International	0 (red background)	ZBY 2931	I	ZBY 2147	AUTO	ZBY 2115	STOP	ZBY 2304	–
English	OFF	ZBY 2312	ON	ZBY 2311	START	ZBY 2303	–	–	–
French	ARRET (red b/grnd)	ZBY 2104	ARRET-MARCHE	ZBY 2166	MARCHE	ZBY 2103	–	–	–
German	AUS	ZBY 2204	AUS-EIN	ZBY 2266	EIN	ZBY 2203	–	–	–
Spanish	PARADA (red b/grnd)	ZBY 2404	PARADA-MARCHA	ZBY 2466	MARCHA	ZBY 2403	–	–	–

#### Legend holders, 30 x 50 mm, for 18 x 27 mm legends

Background colour	black or red					white or yellow	
References (10)*	Blank	ZBY 6101					ZBY 6102

#### Ø 60 mm legend for mushroom head Emergency stop pushbutton

Background colour	yellow				
Marking	Blank	EMERGENCY STOP	ARRET D'URGENCE	NOT-AUS	PARADA DE EMERGENCIA
References	ZBY 9101	ZBY 9330	ZBY 9130	ZBY 9230	ZBY 9430

(1) Alternative connections: plug-in connector, Faston connectors (6.35 and 2 x 2.8).

\* sold in lots of

# Pushbuttons, switches and pilot lights Ø 22 with plastic bezel

## Contact functions



### Pushbuttons, spring return

Type of head		Circular bezel			
Degree of protection		IP 66 / Nema 4X, 13 / Class II			
Mounting (mm)		Ø 22.5 (22.4 <sup>+0.4</sup> <sub>0</sub> recommended)			
Depth (mm)		30 (horizontal) x 40 (vertical)			
Connection (1)		Screw clamp terminals			
Type of push		Flush		Flush, booted	
Unmarked	Products	Complete	For user assembly	Complete	For user assembly
References	black ● N/O	XB5 AA21	ZB5 AZ101 ZB5 AA2	XB5 AP21	ZB5 AZ101 ZB5 AP2
	green ● N/O	XB5 AA31	ZB5 AZ101 ZB5 AA3	XB5 AP31	ZB5 AZ101 ZB5 AP3
	red ● N/C	XB5 AA42	ZB5 AZ102 ZB5 AA4	XB5 AP42	ZB5 AZ102 ZB5 AP4
	yellow ● N/O	XB5 AA51	ZB5 AZ101 ZB5 AA5	XB5 AP51	ZB5 AZ101 ZB5 AP5
	blue ● N/O	XB5 AA61	ZB5 AZ101 ZB5 AA6	XB5 AP61	ZB5 AZ101 ZB5 AP6
Type of push		Flush		Mushroom head, Ø 40 mm	
With international marking	Products	Complete	For user assembly	Complete	For user assembly
References	green ⓘ N/O	XB5 AA3311	ZB5 AZ101 ZB5 AA3311	–	–
	red ⓘ N/C	XB5 AA4322	ZB5 AZ102 ZB5 AA4322	–	–
	white ⓘ N/O	XB5 AA3341	ZB5 AZ101 ZB5 AA334	–	–
	black ⓘ N/O	XB5 AA3351	ZB5 AZ101 ZB5 AA335	–	–
Type of push		Projecting		Mushroom head, Ø 40 mm	
Unmarked	Products	Complete	For user assembly	Complete	For user assembly
References	black ● N/O	–	–	XB5 AC21	ZB5 AZ101 ZB5 AC2
	red ● N/C	XB5 AL42	ZB5 AZ102 ZB5 AL4	–	–
Type of push		Double-headed pushbuttons		Double-headed pushbuttons, booted	
Degree of protection		IP 40		IP 66	
With international marking	Products	Complete	For user assembly	Complete	For user assembly
References	green / red ⓘ N/C + N/O	XB5 AL845	ZB5 AZ105 ZB5 AL8434	XB5 AL945	ZB5 AZ105 ZB5 AL9434

(1) Alternative connections: plug-in connector, Faston connectors (6.35 and 2 x 2.8).



### Ø 40 mm mushroom head Emergency stop pushbuttons (2)

Type of push		Latching		Trigger action (EN 418)	
Unmarked		Push-pull (N/C)		Push-pull (N/C + N/O)	
Products		Complete	For user assembly	Complete	For user assembly
References	red ● N/C or N/C + N/O	XB5 AT42	ZB5 AZ102 ZB5 AT4	XB5 AT845	ZB5 AZ105 ZB5 AT84
Type of push		Turn to release (N/C)		Turn to release (N/C + N/O)	
References	red ● N/C or N/C + N/O	XB5 AS542	ZB5 AZ102 ZB5 AS54	ZB5 AZ105	ZB5 AZ105 ZB5 AS844
Type of push		Key release (N/C)		Key release (N/C + N/O)	
References	red ● N/C or N/C + N/O	XB5 AS142	ZB5 AZ102 ZB5 AS14	ZB5 AZ105	ZB5 AZ105 ZB5 AS944

(2) The mushroom head Emergency stop pushbuttons conform to standard IEC/EN 60947-5-5 and Machinery Directive 98/37/EC. Trigger action mushroom head Emergency stop pushbuttons conform to standard EN 418.

## Contact functions



### Selector switches and key switches

<b>Type of head</b>		<b>Circular bezel</b>			
Degree of protection		IP 66 / Nema 4X, 13 / Class II			
Mounting (mm)	panel cut-out mounting centres	Ø 22.5 (22.4 <sup>+0.4</sup> <sub>0</sub> recommended)			
Depth (mm)	below head	30 (horizontal) x 40 (vertical)			
Connection (1)		Screw clamp terminals			
<b>Type of operator</b>		<b>Handle</b>			
	<b>Products</b>	<b>Complete</b>	<b>For user assembly</b>	<b>Complete</b>	<b>For user assembly</b>
Number and type of positions		<b>2 positions</b> stay put	<b>2 positions</b> stay put	<b>2 positions</b> spring return to left	<b>2 positions</b> spring return to left
References	black ● N/O	<b>XB5 AD21</b>	ZB5 AZ101   ZB5 AD2	<b>XB5 AD41</b>	ZB5 AZ101   ZB5 AD4
Number and type of positions		<b>3 positions</b> stay put	<b>3 positions</b> stay put	<b>3 positions</b> spring return to centre	<b>3 positions</b> spring return to centre
References	black ● N/O + N/O	<b>XB5 AD33</b>	ZB5 AZ103   ZB5 AD3	<b>XB5 AD53</b>	ZB5 AZ103   ZB5 AD5
<b>Type of operator</b>		<b>Key, n° 455</b>			
Number and type of positions (2)		<b>2 positions</b> stay put	<b>2 positions</b> stay put	<b>2 positions</b> stay put	<b>2 positions</b> stay put
References	black ● N/O	<b>XB5 AG21</b>	ZB5 AZ101   ZB5 AG2	<b>XB5 AG41</b>	ZB5 AZ101   ZB5 AG4

(2) The symbol indicates key withdrawal position.

## Separate components and accessories

### Electrical blocks

Single contact blocks		Light blocks with integral LED			Light block, direct supply	
		To combine with heads for integral LED			For BA 9s bulb (not included)	
References (5)*	N/O ZBE 101 N/C ZBE 102	white ● green ● red ● yellow ● blue ●	24 V AC/DC ZBV B1 ZBV B3 ZBV B4 ZBV B5 ZBV B6	48...120 V AC ZBV G1 ZBV G3 ZBV G4 ZBV G5 ZBV G6	230...240 V AC ZBV M1 ZBV M3 ZBV M4 ZBV M5 ZBV M6	250 V max., 2.4 W max. ZBV6 Colour provided by lens

### Accessories

#### Legend holders, 30 x 40 mm, for 8 x 27 mm legends

Marking	Background colour: black or red								white or yellow	
References (10)*	Blank	ZBY 2101								ZBY 4101
References	International	0 (red background)	ZBY 2931	I	ZBY 2147	AUTO	ZBY 2115	STOP	ZBY 2304	–
	English	OFF	ZBY 2312	ON	ZBY 2311	START	ZBY 2303	–	–	–
	French	ARRET (red b/grnd)	ZBY 2104	ARRET-MARCHE	ZBY 2166	MARCHE	ZBY 2103	–	–	–
	German	AUS	ZBY 2204	AUS-EIN	ZBY 2266	EIN	ZBY 2203	–	–	–
	Spanish	PARADA (red b/grnd)	ZBY 2404	PARADA-MARCHA	ZBY 2466	MARCHA	ZBY 2403	–	–	–

#### Legend holders, 30 x 50 mm, for 18 x 27 mm legends

Background colour	black or red								white or yellow	
References (10)*	Blank	ZBY 6101								ZBY 6102

#### Ø 60 mm legend for mushroom head Emergency stop pushbutton

Background colour	yellow								
Marking	Blank	EMERGENCY STOP	ARRET D'URGENCE	NOT-AUS	PARADA DE EMERGENCIA				
References	ZBY 9101	ZBY 9330	ZBY 9130	ZBY 9230	ZBY 9430				
	<b>Body/fixing collar</b>			<b>Fixing nut</b>	<b>Bezel tool</b>	<b>Plate</b>			
	for electrical block (contact or light)			for head	for tightening fixing nut ZB5 AZ901		anti-rotation		
References	ZB5 AZ009 (10)*			ZB5 AZ901 (10)*	ZB5 AZ905		ZB5 AZ902		

(1) Alternative connections: plug-in connector, Faston connectors (6.35 and 2 x 2.8).

\* sold in lots of



#### Pilot lights

<b>Type of head</b>		<b>Circular bezel</b>					
<b>Degree of protection</b>		<b>Smooth lens cap</b>					
<b>Mounting (mm)</b>	panel cut-out	IP 66 / Nema 4X, 13 / Class II					
	mounting centres	Ø 22.5 (22.4 <sup>+0.4</sup> <sub>0</sub> recommended)					
<b>Depth</b>	below head	30 (horizontal) x 40 (vertical)					
<b>Connection (1)</b>		43					
<b>Light source</b>		Screw clamp terminals			Integral LED		
		Direct supply for BA 9s bulb (not included)					
	<b>Products</b>	<b>Complete</b>			<b>Complete</b>	<b>For user assembly</b>	
<b>Supply voltage</b>		24 V AC/DC	48...120 V AC	230...240 V AC	250 V max., 2.4 W max.		
<b>References</b>	white	<b>XB5 AVB1</b>	<b>XB5 AVG1</b>	<b>XB5 AVM1</b>	<b>XB5 AV61</b>	ZB5 AV6	ZB5 AV01
	green	<b>XB5 AVB3</b>	<b>XB5 AVG3</b>	<b>XB5 AVM3</b>	<b>XB5 AV63</b>	ZB5 AV6	ZB5 AV03
	red	<b>XB5 AVB4</b>	<b>XB5 AVG4</b>	<b>XB5 AVM4</b>	<b>XB5 AV64</b>	ZB5 AV6	ZB5 AV04
	yellow	<b>XB5 AVB5</b>	<b>XB5 AVG5</b>	<b>XB5 AVM5</b>	<b>XB5 AV65</b>	ZB5 AV6	ZB5 AV05
	blue	<b>XB5 AVB6</b>	<b>XB5 AVG6</b>	<b>XB5 AVM6</b>	–	–	–



#### Illuminated pushbuttons and selector switches

<b>Type</b>	Flush push, spring return, illuminated pushbuttons							
<b>Light source</b>	Integral LED			Direct supply for BA 9s bulb (not included)				
	<b>Products</b>			<b>Complete</b>	<b>Complete</b>	<b>For user assembly</b>		
<b>Supply voltage</b>			24 V AC/DC	48...120 V AC	230...240 V AC	250 V max., 2.4 W max.		
<b>References</b>	white	N/C + N/O	<b>XB5 AW31B5</b>	<b>XB5 AW31G5</b>	<b>XB5 AW31M5</b>	<b>XB5 AW3165</b>	ZB5 AW065	ZB5 AW31
	green	N/C + N/O	<b>XB5 AW33B5</b>	<b>XB5 AW33G5</b>	<b>XB5 AW33M5</b>	<b>XB5 AW3365</b>	ZB5 AW065	ZB5 AW33
	red	N/C + N/O	<b>XB5 AW34B5</b>	<b>XB5 AW34G5</b>	<b>XB5 AW34M5</b>	<b>XB5 AW3465</b>	ZB5 AW065	ZB5 AW34
	yellow	N/C + N/O	<b>XB5 AW35B5</b>	<b>XB5 AW35G5</b>	<b>XB5 AW35M5</b>	<b>XB5 AW3565</b>	ZB5 AW065	ZB5 AW35
	blue	N/C + N/O	<b>XB5 AW36B5</b>	<b>XB5 AW36G5</b>	<b>XB5 AW36M5</b>	–	–	–



<b>Type</b>	Double-headed pushbuttons with LED pilot light (1 flush green push, 1 projecting red push)			Illuminated selector switches (2 position stay put)				
<b>Degree of protection</b>	IP 40			IP 66				
<b>Light source</b>	Integral LED			Integral LED				
	<b>Products</b>			<b>Complete</b>				
<b>Supply voltage</b>			24 V AC/DC	48...120 V AC	230...240 V AC	24 V AC/DC	48...120 V AC	230...240 V AC
<b>References</b>	green	N/C + N/O	–	–	–	<b>XB5 AK123B5</b>	<b>XB5 AK123G5</b>	<b>XB5 AK123M5</b>
	red	N/C + N/O	–	–	–	<b>XB5 AK124B5</b>	<b>XB5 AK124G5</b>	<b>XB5 AK124M5</b>
	yellow	N/C + N/O	<b>XB5 AW84B5</b>	<b>XB5 AW84G5</b>	<b>XB5 AW84M5</b>	<b>XB5 AK125B5</b>	<b>XB5 AK125G5</b>	<b>XB5 AK125M5</b>

(1) Alternative connections: plug-in connector, Faston connectors (6.35 and 2 x 2.8).

Separate components and accessories: see previous page.

(1):

Number of cut-outs	Number (●)
1	1
2	2
3	3
4	4
5	5



### Complete stations with 1 pushbutton, selector switch or key switch

(light grey RAL 7035 base with dark grey RAL 7016 lid)

Degree of protection			IP 65 / Nema 4X and 13 / Class II				
Dimensions (mm)			W x H x D				
Fixing (mm)			2 x Ø 4.3 on 54 mm centres				
Function			1 Start or Stop function			1 Start-Stop function	
Marking			On spring return push			On legend holder and legend below head	
Number and type of pushbutton/selector switch/key switch			1 flush green p/b	1 flush red p/b	1 projecting red p/b	1 2 position stay put selector switch or key switch	
References			N/O	I	XAL D102	–	–
			Start	XAL D103	–	–	–
			O - I	–	–	XAL D134	XAL D144
			N/C	O	–	XAL D112	XAL D115

2

(1) Empty enclosures:

Basic reference: XAL K0●, replace the ● by the number of cut-outs required (see cut-out table above)



Function			Emergency stop (2) (light grey RAL 7035 base with yellow RAL 1012 lid)			
Number and type of mushroom head pushbutton			1 red Ø 40 head, turn to release		1 red Ø 40 head, key release	
Latching mechanism			Trigger action (EN 418)		Latching	
References			N/C	–	XAL K174	XAL K184
			N/C + N/C	XAL K178F	XAL K174F	XAL K184F
			N/C + N/O	XAL K178E	XAL K174E	XAL K184E
			N/C + N/C + N/O	XAL K178G	XAL K174G	XAL K184G

(2) The mushroom head Emergency stop pushbuttons conform to standard IEC/EN 60947-5-5 and Machinery Directive 98/37/EC.

Trigger action mushroom head pushbuttons conform to standard EN 418.



(1) Empty enclosures:

Basic reference: XAL K0●, replace the ● by the number of cut-outs required (see cut-out table above)

### Complete stations with 2 and 3 pushbuttons or 2 pushbuttons + 1 pilot light

(light grey RAL 7035 base with dark grey RAL 7016 lid)

Dimensions (mm)			W x H x D						
Fixing (mm)			2-way control stations: 2 x Ø 4.3 on 54 x 68 centres; 3-way control stations: 2 x Ø 4.3 on 54 x 98 centres						
Function			Start-Stop functions			2 functions		3 functions	
Marking			On spring return push						
Number and type of pushbutton/pilot light			1 flush green p/b	1 flush green pushbutton	1 flush white p/b	1 flush white p/b	1 flush white p/b	1 flush white p/b	1 flush white p/b
			1 flush red p/b	1 flush red pushbutton	1 flush black p/b	1 flush red p/b	1 flush red p/b	1 Ø 30 red mushroom head p/b	1 flush black p/b
				1 red pilot light with integral LED (1)				1 flush black p/b	1 flush black p/b
References			N/O + N/C	I - O	XAL D213	24 V AC/DC	230 V AC	XAL D363B	XAL D363M
			Start - Stop	XAL D215	–	–	–	–	–
			N/O + N/O	↕	–	–	–	XAL D222	–
			N/O + N/C + N/O	↕	–	–	–	–	XAL D324
				↕	–	–	–	–	XAL D328

Accessories		Standard contact blocks			(1) Light blocks with integral LED, colour red	
Description		N/O contact	N/C contact		24 V AC/DC	230 V AC
References		ZEN L1111	ZEN L1121		ZAL VB4	ZAL VM4





**Pushbuttons**

<b>Type of head</b>		<b>Flush or projecting push</b>	
Degree of protection		IP 54, class II	
Mounting (mm)	panel cut-out	Ø 22.4 (0 +0.1)	
	mounting centres	30 (horizontal) x 40 (vertical)	
Dimensions (mm)	Ø x Depth (below head)	Ø 29 x 41.5 (Ø 40 x 41.5 for Emergency stop)	
Connection (1)		Screw clamp terminals, 1 x 0.34 mm <sup>2</sup> to 1 x 1.5 mm <sup>2</sup>	
<b>Type of push</b>		<b>Flush, spring return</b>	<b>Flush, push and push-to-release</b>
References (10)*	black	N/O	XB7 EA21P
		C/O	XB7 EA25P
	green	N/O	<b>XB7 EA31P</b>
		C/O	XB7 EA35P
	red	N/C	<b>XB7 EA42P</b>
		C/O	XB7 EA45P
	yellow	N/O	XB7 EA51P
<b>Type of push</b>		<b>Flush, spring return</b>	<b>Projecting, spring return</b>
References	green	N/O	<b>XB7 EA3131P</b>
	red	N/C	–
	white	N/O + C/O	<b>XB7 EA11341P</b>
	black	N/O + C/O	<b>XB7 EA21341</b>

(1) Alternative connection: 1 x 6.35 and 2 x 2.8 mm Faston connectors.



**Selector switches and key switches**

Type of operator		Black handle		Ronis key, n° 455
Number and type of positions		<b>2 positions</b> stay put		<b>2 positions</b> stay put
		<b>3 positions</b> stay put		<b>3 positions</b> stay put
References (10)*	N/O	<b>XB7 ED21P</b>	–	<b>XB7 EG21P</b>
	N/C + N/O	XB7 ED25P	–	–
	2 N/O	–	<b>XB7 ED33P</b>	–
				XB7 EG33P



**Ø 40 mushroom head Emergency stop pushbuttons (2)**

Type of push		Turn to release	Key release, Ronis 455
References (10)*	red	N/C	<b>XB7 ES542P</b>
	red	N/C + N/O	XB7 ES545P
			<b>XB7 ES142P</b>
			XB7 ES145P

(2) The mushroom head Emergency stop pushbuttons conform to standard IEC/EN 60947-5-5 and Machinery Directive 98/37/EC.

For conformity to standard EN 418, use a trigger action Emergency stop from the Harmony XB5 range (XB5A●8●●● and XB5AS9●●●). See page 2/10.

\* sold in lots of 10








## Contact functions and light functions

(1):

Voltage	Letter (●)
24 V AC/DC	B
120 V AC	G
230 V AC	M









### Illuminated pushbuttons

Type of head		Projecting push	
		circular	
Degree of protection		IP 54, class II	
Mounting (mm)		Ø 22.4 (0 +0.1)	
panel cut-out		30 (horizontal) x 40 (vertical)	
mounting centres		Ø 29 x 41.5, (Ø 40 x 41.5 for Emergency stop)	
Dimensions (mm)		Ø 29 x 41.5, (Ø 40 x 41.5 for Emergency stop)	
Ø x Depth (below head)		Screw clamp terminals, 1 x 0.34 mm <sup>2</sup> to 1 x 1.5 mm <sup>2</sup>	
Connection (2)			
Type of push		Spring return	
Light source		Integral LED	Incandescent bulb direct supply (bulb not included)
Supply voltage		24 V DC or 230 V AC	6 or 24 V DC, or 130 V AC
References (10)*	green  N/O	<b>XB7 EW33●1P</b> (1)	<b>XB7 EW3361P</b>
	red  N/O	XB7 EW34●1P (1)	XB7 EW3461P
	N/C	XB7 EW34●2P (1)	–
yellow  N/O	XB7 EW35●1P (1)	XB7 EW3561P	
Type of push		Push and push-to-release	
Light source		Integral LED	Incandescent bulb direct supply (bulb not included)
Supply voltage		24 V DC or 230 V AC	6 or 24 V DC, or 130 V AC
References (10)*	green  N/O	<b>XB7 EH03●1P</b> (1)	<b>XB7 EH0361P</b>
	red  N/O	XB7 EH04●1P (1)	XB7 EH0461P
	N/C	XB7 EH04●2P (1)	–
yellow  N/O	XB7 EH05●1P (1)	XB7 EH0561P	



### Pilot lights

Light source		Integral LED	Incandescent bulb direct supply (bulb not included)	Incandescent bulb direct through resistor (bulb included)
Supply voltage		24VAC/DC or 120VAC or 230...240VAC	6 or 24 V DC, or 130 V AC	230 V AC
References (10)*	white 	<b>XB7 EV01●P</b> (1)	XB7 EV61P	XB7 EV71P
	green 	<b>XB7 EV03●P</b> (1)	<b>XB7 EV63P</b>	<b>XB7 EV73P</b>
	red 	<b>XB7 EV04●P</b> (1)	<b>XB7 EV64P</b>	<b>XB7 EV74P</b>
	yellow 	XB7 EV05●P (1)	XB7 EV65P	XB7 EV75P
	blue 	<b>XB7 EV06●P</b> (1)	XB7 EV66P	XB7 EV76P
	orange 	<b>XB7 EV08●P</b> (1)	XB7 EV68P	XB7 EV78P

### Incandescent bulbs, long life

BA 9s base fitting, Ø 11 mm max., length 28 mm max.

References	6 V (1.2 W)	24 V (2 W)	130 V (2.4 W)
	DL1 CB006	DL1 CE024	DL1 CE130

(1) Basic reference, to be completed by the letter B, G or M indicating the required voltage. See voltage table above.

(2) Alternative connection: 1 x 6.35 and 2 x 2.8 mm Faston connectors.

\* sold in lots of 10



#### Pushbuttons, spring return

<b>Type of push</b>		Flush	Projecting	Projecting (high guard)
<b>Colour of push</b>		Multi-colour (set of 7 clip-in coloured caps)		
Degree of protection		IP 66 / Nema 1, 2, 3, 3R, 4, 6, 12 and 13 / Class II		
Mounting (mm)	panel cut-out	Ø 31		
	mounting centres	57.2 x 44.5 (with legend 9001KN2●●), 57.2 x 50.8 (with legend 9001KN3●●)		
Depth below head (mm)		42		
Connection		Screw clamp terminals		
References	C/O	<b>9001KR1UH13</b>	<b>9001KR3UH13</b>	<b>9001KR2UH13</b>
	N/O	<b>9001KR1UH5</b>	<b>9001KR3UH5</b>	<b>9001KR2UH5</b>



#### Mushroom head Emergency stop pushbuttons, latching (1)

<b>Type of push</b>		Spring return	Push-pull		
		Ø 35 mushroom head	Ø 57 mushroom head	Ø 41 mushroom head	Ø 35 mushroom head
Degree of protection		IP 66 / Nema 1, 2, 3, 3R, 4, 6, 12 and 13 / Class II			
Mounting (mm)	panel cut-out	Ø 31			
	mounting centres	57.2 x 44.5 (with legend 9001KN2●●), 57.2 x 50.8 (with legend 9001KN3●●)			
	mounting centres (Ø 57 head)	57.2 x 57.2 (with legend 9001KN2●● or 9001KN3●●)			
Depth below head (mm)		42			
Connection		Screw clamp terminals			
References	C/O	<b>9001KR24RH13</b>	<b>9001KR25RH13</b>	<b>9001KR9R94H13</b>	<b>9001KR9R20H13</b>
	N/C	<b>9001KR24RH6</b>	<b>9001KR25RH6</b>	<b>9001KR9RH6</b>	<b>9001KR9R20H6</b>

(1) The mushroom head Emergency stop pushbuttons conform to standard IEC/EN 60947-5-5 and Machinery Directive 98/37/EC.

For conformity to standard EN 418, use a trigger action Emergency stop from the Harmony XB4 range (XB4B●8●●● and XB4BS9●●●). See page 2/6.



#### Selector switches and key switches

<b>Type of operator</b>		Long black handle	Key, n° 455			
Number and type of positions	positions (2)	3 - spring return	2 - stay put	2 - spring return	3 - stay put	2 - stay put
Degree of protection		IP 66 / Nema 1, 2, 3, 3R, 4, 6, 12 and 13 / Class II				
Mounting (mm)	panel cut-out	Ø 31				
	mounting centres	57.2 x 44.5 (with legend 9001KN2●●), 57.2 x 50.8 (with legend 9001KN3●●)				
Depth below head (mm)		42				
Connection		Screw clamp terminals				
References	N/O	–	<b>9001KS11FBH5</b>	<b>9001KS34FBH5</b>	–	–
	C/O	<b>9001KS53FBH1</b>	–	–	<b>9001KS43FBH1</b>	<b>9001KS11K1RH1</b>

(2) The symbol indicates key withdrawal position.

## Light functions



### Pilot lights

<b>Type of head</b>	Smooth lens cap				
Degree of protection	IP 66 / Nema 1, 2, 3, 3R, 4, 6, 12 and 13 / Class II				
Mounting (mm)	panel cut-out	Ø 31			
	mounting centres	57.2 x 44.5 (with legend 9001KN2●●), 57.2 x 50.8 (with legend 9001KN3●●)			
Depth below head (mm)	42				
Connection	Screw clamp terminals				
Type of light block	With high luminosity LED (included)			Incandescent BA 9s bulb (included)	
References		24 V AC/DC	48 V AC/DC	120 V AC/DC	230 V AC
	green ●	<b>9001KP35LGG9</b>	<b>9001KP36LGG9</b>	<b>9001KP38LGG9</b>	<b>9001KP7G9</b>
	red ●	<b>9001KP35LRR9</b>	<b>9001KP36LRR9</b>	<b>9001KP38LRR9</b>	<b>9001KP7R9</b>
	yellow ●	<b>9001KP35LYA9</b>	<b>9001KP36LYA9</b>	<b>9001KP38LYA9</b>	<b>9001KP7A9</b>

2



### Illuminated pushbuttons, spring return

<b>Type of head</b>	Spring return flush push				
Degree of protection	IP 66 / Nema 1, 2, 3, 3R, 4, 6, 12 and 13 / Class II				
Mounting (mm)	panel cut-out	Ø 31			
	mounting centres	57.2 x 44.5 (with legend 9001KN2●●), 57.2 x 50.8 (with legend 9001KN3●●)			
Depth below head (mm)	42				
Connection	Screw clamp terminals				
Type of light block	With high luminosity LED (included)			Incandescent BA 9s bulb (included)	
References		24 V AC/DC	48 V AC/DC	120 V AC/DC	230 V AC
	green ● C/O	<b>9001K3L35LGGH13</b>	<b>9001K3L36LGGH13</b>	<b>9001K3L38LGGH13</b>	<b>9001K2L7RH13</b>
	red ● C/O	<b>9001K3L35LRRH13</b>	<b>9001K3L36LRRH13</b>	<b>9001K3L38LRRH13</b>	<b>9001K2L7GH13</b>
	yellow ● C/O	<b>9001K3L35LYAH13</b>	<b>9001K3L36LYAH13</b>	<b>9001K3L38LYAH13</b>	<b>9001K2L7AH13</b>



### Illuminated Ø 41 mushroom head pushbuttons, latching, high luminosity LED

Degree of protection	IP 66 / Nema 1, 2, 3, 3R, 4, 6, 12 and 13 / Class II				
Mounting (mm)	panel cut-out	Ø 31			
	mounting centres	57.2 x 44.5 (with legend 9001KN2●●), 57.2 x 50.8 (with legend 9001KN3●●)			
Depth below head (mm)	42				
Connection	Screw clamp terminals				
Type of light block	With high luminosity LED (included)			Incandescent BA 9s bulb (included)	
		24 V AC/DC	48 V AC/DC	120 V AC/DC	230 V AC/DC
<b>Type of head</b>	2 position, push-pull				
References	red ● C/O	<b>9001KR9P35RH13</b>	<b>9001KR9P36RH13</b>	<b>9001KR9P38RH13</b>	<b>9001KR9P7RH13</b>
<b>Type of head</b>	3 position, push-pull (pull: spring return, centre: stay put, push: spring return)				
References	red ● N/C + N/C late break	<b>9001KR8P35RH25</b>	<b>9001KR8P36RH25</b>	<b>9001KR8P38RH25</b>	<b>9001KR8P7RH25</b>



#### Pushbuttons, spring return

<b>Type of push</b>		Flush	Projecting	Projecting (high guard)
<b>Colour of push</b>		Multi-colour (set of 7 clip-in coloured caps)		
<b>Degree of protection</b>		IP 66 / Nema 1, 2, 3, 3R, 4, 4X, 12 and 13 / Class II		
<b>Mounting (mm)</b>	panel cut-out	Ø 31		
	mounting centres	57.2 x 44.5 (with legend 9001KN2●●), 57.2 x 50.8 (with legend 9001KN3●●)		
<b>Depth below head (mm)</b>		42		
<b>Connection</b>		Screw clamp terminals		
<b>References</b>	C/O	<b>9001SKR1UH13</b>	<b>9001SKR3UH13</b>	<b>9001SKR2UH13</b>
	N/O	<b>9001SKR1UH5</b>	<b>9001SKR3UH5</b>	<b>9001SKR2UH5</b>



#### Selector switches

<b>Type of operator</b>		Long black handle			
	positions	3 - spring return	2 - stay put	2 - spring return	3 - stay put
<b>Number and type of positions</b>					
<b>Degree of protection</b>		IP 66 / Nema 1, 2, 3, 3R, 4, 4X, 12 and 13 / Class II			
<b>Mounting (mm)</b>	panel cut-out	Ø 31			
	mounting centres	57.2 x 44.5 (with legend 9001KN2●●), 57.2 x 50.8 (with legend 9001KN3●●)			
<b>Depth below head (mm)</b>		42			
<b>Connection</b>		Screw clamp terminals			
<b>References</b>	N/O	–	<b>9001SKS11FBH5</b>	<b>9001SKS34FBH5</b>	–
	C/O	<b>9001SKS53FBH1</b>	–	–	<b>9001SKS43FBH1</b>



#### Pilot lights

<b>Type of head</b>		Smooth lens cap			
<b>Degree of protection</b>		IP 66 / Nema 1, 2, 3, 3R, 4, 4X, 12 and 13 / Class II			
<b>Mounting (mm)</b>	panel cut-out	Ø 31			
	mounting centres	57.2 x 44.5 (with legend 9001KN2●●), 57.2 x 50.8 (with legend 9001KN3●●)			
<b>Depth below head (mm)</b>		42			
<b>Connection</b>		Screw clamp terminals			
<b>Type of light block</b>		With high luminosity LED (included)			Incandescent BA 9s bulb (included)
<b>References</b>	green	24 V AC/DC <b>9001SKP35LGG9</b>	48 V AC/DC <b>9001SKP36LGG9</b>	120 V AC/DC <b>9001SKP38LGG9</b>	230 V AC <b>9001SKP7G9</b>
	red	<b>9001SKP35LRR9</b>	<b>9001SKP36LRR9</b>	<b>9001SKP38LRR9</b>	<b>9001SKP7R9</b>
	yellow	<b>9001SKP35LYA9</b>	<b>9001SKP36LYA9</b>	<b>9001SKP38LYA9</b>	<b>9001SKP7A9</b>

## Accessories



### Contact blocks with protected terminals

Type of contact	Single contact blocks	
Connection	Screw clamp terminals	
References	C/O	9001KA1
	N/O	9001KA2
	N/C	9001KA3
	C/O, late break	9001KA4
	N/C, late break	9001KA5
	N/O, early make	9001KA6

2



### Enclosures

Type	Number of Ø 30 mm cut-outs	NEMA ratings	Reference
Aluminium	1	1, 3, 4, 6, 12, 13	9001KY1
	2	1, 3, 4, 6, 12, 13	9001KY2
	3	1, 3, 4, 6, 12, 13	9001KY3
	4	1, 3, 4, 6, 12, 13	9001KY4
Stainless steel	1	1, 3, 4, 4X, 13	9001KYSS1
	2	1, 3, 4, 4X, 13	9001KYSS2
	3	1, 3, 4, 4X, 13	9001KYSS3



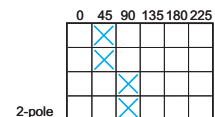
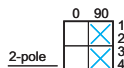
### Legends

Type	Colour of legend	Aluminium, size 44 x 43 mm black background	Plastic, size 57 x 57 mm white background
Marking	Blank	9001KN200	9001KN100WP
	START	9001KN201	9001KN101WP
	STOP (red background)	9001KN202	9001KN102RP
	FORWARD	9001KN206	9001KN106WP
	REVERSE	9001KN207	9001KN107WP
	CLOSE	9001KN208	9001KN108WP
	OPEN	9001KN209	9001KN109WP
	DOWN	9001KN210	9001KN110WP
	UP	9001KN211	9001KN111WP
	HIGH	9001KN214	9001KN114WP
	LOW	9001KN215	9001KN115WP
	RESET	9001KN223	9001KN123WP
	PULL TO START/ PUSH TO STOP	9001KN379	9001KN179WP





positions (°)

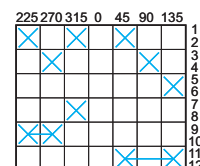
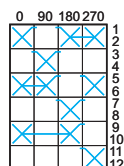
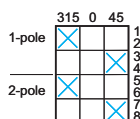


### Cam switches, K1 / K2 series

Function	Switches	ON-OFF switches	Stepping switches
Degree of protection front face	45° switching angle IP 65 (1)	90° switching angle IP 65 (1)	with "0" position IP 65 (1)
Conventional thermal current (Ith)	12 A   20 A	12 A   20 A	12 A   20 A
Rated insulation voltage (Ui) conforming to IEC60947-1	690 V	690 V	690 V
Number of positions	2	2	2 + "0" position
Number of poles	2	2	2
Dimensions of front plate (mm)	45 x 45	45 x 45	45 x 45
Front mounting method	Multifixing plate, 45 x 45 mm	<b>K1B 002ALH</b>   <b>K2B 002ALH</b>	<b>K1B 1002HLH</b>   <b>K2B 1002HLH</b>
	Plastic mounting plate for Ø 22 mm hole	<b>K1B 002ACH</b>   <b>K2B 002ACH</b>	<b>K1B 1002HCH</b>   <b>K2B 1002HCH</b>
		<b>K1D 012QLH</b>   <b>K2D 012QLH</b>	<b>K1D 012QCH</b>   <b>K2D 012QCH</b>



positions (°)



### Cam switches, K1 / K2 series

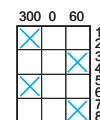
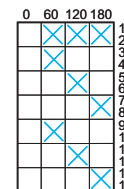
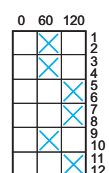
Function	Changeover switches	Ammeter switches	Voltmeter switches
Degree of protection front face	IP 65 (1)	IP 65 (1)	IP 65 (1)
Conventional thermal current (Ith)	12 A   20 A	12 A   20 A	12 A   20 A
Rated insulation voltage (Ui) conforming to IEC60947-1	690 V	690 V	690 V
Number of positions	2 + "0" position	3 + "0" position (3 circuits + "0" position)	6 + "0" position (measurements between 3 phases & N + "0" pos.)
Number of poles	2	4	7
Dimensions of front plate (mm)	45 x 45	45 x 45	45 x 45
Front mounting method	Multifixing plate, 45 x 45 mm	<b>K1D 002ULH</b>   <b>K2D 002ULH</b>	<b>K1F 003MLH</b>   to be compiled *
	Plastic mounting plate for Ø 22 mm hole	<b>K1D 002UCH</b>   <b>K2D 002UCH</b>	<b>K1F 003MCH</b>   to be compiled *
		<b>K1F 027MLH</b>   to be compiled *	<b>K1F 027MCH</b>   to be compiled *

(1) With seal KZ73 for switch with Multifixing plate, with seal KZ65 for Ø 22 mm hole mounting switches. Seal to be ordered separately.

(\*) Please consult your Schneider Electric agency.



positions (°)



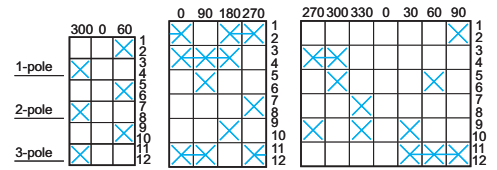
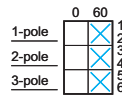
### Cam switches with key operated lock, K1 series

Function	Stepping switches	Run switches	Changeover switches + "0" pos.
Degree of protection front face	IP 65	IP 65	IP 65
Conventional thermal current (Ith)	12 A	12 A	12 A
Rated insulation voltage (Ui) conforming to IEC60947-1	690 V	690 V	690 V
Number of positions	2 + "0" position	3 + "0" position	2 + "0" position
Number of poles	3	2	2
Dimensions of front plate (mm)	55 x 100	55 x 100	55 x 100
Colour of handle	red   black	red   black	red   black
Front mounting method	Ø 22 mm hole + Ø 43.5 mm hole	<b>K1F 022QZ2</b>   <b>K1F 022QZ4</b>	<b>K1G 043RZ2</b>   <b>K1G 043RZ4</b>
		<b>K1D 002UZ2</b>   <b>K1D 002UZ4</b>	

## 10 to 150 A ratings



positions (°)



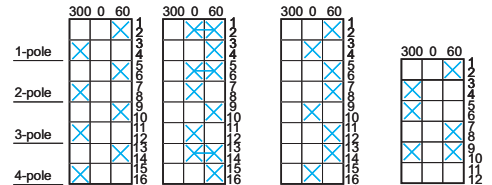
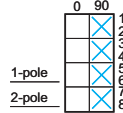
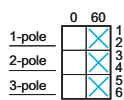
Cam switches, K10 series										
Function	Switches			Changeover switches		Ammeter switches	Voltmeter switches			
Degree of protection	front face	IP 65			with "0" position IP 65		IP 65	IP 65		
Conventional thermal current (I <sub>th</sub> )	10 A			10 A		10 A	10 A			
Rated insulation voltage (U <sub>i</sub> ) conforming to IEC60947-1	440 V			440 V		440 V	440 V			
Number of positions	2			2 + "0" position		3 + "0" pos. (1)	6 + "0" pos. (2)			
Number of poles	1	2	3	2	3	3	3			
Dimensions of front plate (mm)	30 x 30			30 x 30		30 x 30	30 x 30			
Front mounting method	By Ø 16 mm or 22 mm hole			K10 A001ACH	K10 B002ACH	K10 C003ACH	K10 D002UCH	K10 F003UCH	K10 F003MCH	K10 F027MCH

(1) (3 circuits + "0" position).

(2) (Measurements between 3 phases and N + "0" position).



positions (°)



Cam switches, K30 series							
Function	Switches	Switches	Changeover	Starting	Starting	Reversing	
Degree of protection	front face	IP 40		with "0" position IP 40	star-delta IP 40	2-speed IP 40	IP 40
Conventional thermal current (I <sub>th</sub> )	32 A		32 A	32 A	32 A	32 A	32 A
Rated insulation voltage (U <sub>i</sub> ) conforming to IEC60947-1	690 V		690 V	690 V	690 V	690 V	690 V
Number of positions	2		2	3	3	3	3
Number of poles	3	3	4	4	3	3	3
Dimensions of front plate (mm)	64 x 64		64 x 64	64 x 64	64 x 64	64 x 64	64 x 64
Front mounting method	Multifixing						
	K30 C003AP (3)	K30 C003HP (3)	K30 D004HP (3)	K30 H004UP (3)	K30 H001YP (3)	K30 H004PP (3)	K30 E003WP (3)

(3) To order switches with other thermal current ratings (50, 63, 115, 150 A): replace the number 30 in the reference by 50, 63, 115 or 150 respectively.

Example: a switch with a 32 A current rating, for example K30 C003AP, becomes K50 C003AP for a current rating of 50 A.

## Accessories for cam switches K1/K2

Rubber seals			
for IP 65 degree of protection	For use with heads	with 45 x 45 mm front plate Ø 22 mm hole or 4 hole front mtg.	with 60 x 60 mm front plate Ø 22 mm hole or 4 hole front mtg.
References (5)*		KZ 65	KZ 66
			with 45 x 45 mm front plate multifixing KZ 73

\* sold in lots of

### Universal range

High performance and wide choice of units



Ø 70 mm

Illuminated beacons XVB L		Steady light signaling		Flashing light signaling	
<b>Light source</b>		Incandescent BA 15d bulb, 10 W max. (not included)	Protected BA 15d LED (included)	Protected BA 15d LED (included)	"Flash" discharge tube 5 J (1)
<b>Degree of protection</b>		IP 66			
<b>Beacon references (2)</b>	12...250 V AC/DC	<b>XVBL3●</b>	–	–	–
	24 V AC/DC	–	<b>XVBL0B●</b>	<b>XVBL1B●</b>	<b>XVBL6B●</b>
	120 V AC	–	<b>XVBL0G●</b>	<b>XVBL1G●</b>	<b>XVBL6G●</b>
	230 V AC	–	<b>XVBL0M●</b>	<b>XVBL1M●</b>	<b>XVBL6M●</b>

Ø 70 mm



Indicator banks XVB C comprising 2 to 5 signaling units (3)		Base units	Steady light signaling		Flashing light signaling	"Flash" light signaling	Audible units (90 db at 1 m)
<b>Light source</b>		–	Incandescent BA 15d bulb, 10 W max. (not included)	Integral protected LED	Integral protected LED	"Flash" discharge tube 5 J (1)	–
<b>Degree of protection</b>		IP 66					
<b>Base unit references</b>	with cover	<b>XVBC21 (4)</b>	–	–	–	–	–
	without cover	<b>XVBC07 (5)</b>	–	–	–	–	–
<b>Lens unit references (2)</b>	12... 230 V AC/DC	–	<b>XVBC3●</b>	–	–	–	–
	24 V AC/DC	–	–	<b>XVBC2B●</b>	<b>XVBC5B●</b>	<b>XVBC6B●</b>	–
	120 V AC	–	–	<b>XVBC2G●</b>	<b>XVBC5G●</b>	<b>XVBC6G●</b>	–
	230 V AC	–	–	<b>XVBC2M●</b>	<b>XVBC5M●</b>	<b>XVBC6M●</b>	–
<b>Audible unit references</b>	12...48 V AC/DC	–	–	–	–	–	<b>XVBC9B</b>
	unidirectional 120...230 V AC	–	–	–	–	–	<b>XVBC9M</b>

(4) For connection on AS-Interface, order base unit XVBC21A (side cable entry) or XVBC21B (bottom cable entry with M12 connector on flying lead).

(5) For indicator banks with "flash" discharge tube unit.



Ø 50 mm

Indicator banks XVP C comprising 2 to 5 signaling units (3), black clamping ring (6)		Base unit	Steady or flashing light signaling	"Flash" light signaling		Audible units (55...85 dB at 1 m)
<b>Light source</b>		–	Incandescent BA 15d bulb, 7 W max. (not included)	"Flash" discharge tube 0.3 J	"Flash" discharge tube 0.6 J	–
<b>Degree of protection</b>		IP 65				
<b>Base unit</b>	with cover	<b>XVPC21</b>	–	–	–	–
<b>References (2)</b>	250 V max.	–	<b>XVPC3●</b>	–	–	–
	24 V AC/DC (flash) - 24 V DC (buzzer)	–	–	<b>XVPC6B●</b>	–	<b>XVPC09B</b>
	120 V AC	–	–	–	<b>XVPC6G●</b>	<b>XVPC09G</b>
	230 V AC	–	–	–	<b>XVPC6M●</b>	<b>XVPC09M</b>

(1) To order a lens unit with a 10 J discharge tube, replace the number 6 by 8 in the reference (example: XVBL6B● becomes XVBL8B●).

(2) To obtain the complete reference, replace the ● by the number designating the colour as follows: 3 = green, 4 = red, 5 = orange, 6 = blue, 7 = clear, 8 = yellow.

(3) An indicator bank comprises: 1 base unit + 1 to 5 signaling units maximum.

(6) To order products with a **cream clamping ring**, add the letter **W** to the end of the reference (example: base unit + green lens unit: XVPC21W + XVPC33W etc.).

#### Optimum range

Excellent price/performance ratio



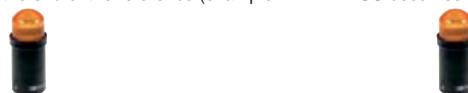
Ø 45 mm

Complete, pre-cabled indicator banks XVM (1)		2 sig. units + integral buzzer (2)		3 signaling units + integral buzzer (2)			
		Steady light signaling		Steady light signaling + "flash" (3)			
Light source		Incandescent BA 15d bulb, 5 W max. (included)	BA 15d LED (included)	Incandescent BA 15d bulb, 5 W max. (included)	BA 15d LED (included)	Incandescent BA 15d bulb, 5 W max. (included)	BA 15d LED (included)
Degree of protection		IP 42					
Signalling colours		Red - Green		Red - Orange - Green			
Indicator bank references	24 V AC/DC	XVMB1RGS	XVMB2RGS	XVMB1RAGS	XVMB2RAGS	XVMB1R6AGS	XVMB2R6AGS
	120 V AC/DC (bulb) - 120 V AC (LED)	XVMG1RGS	XVMG2RGS	XVMG1RAGS	XVMG2RAGS	XVMG1R6AGS	XVMG2R6AGS
	230 V AC/DC (bulb) - 230 V AC (LED)	XVMM1RGS	XVMM2RGS	XVMM1RAGS	XVMM2RAGS	XVMM1R6AGS	XVMM2R6AGS

(1) Indicator banks XVM are also available as separate components for customised assembly by the user: please refer to [www.schneider-electric.com](http://www.schneider-electric.com).

(2) To order products without an integral buzzer, delete the letter **S** from the end of the reference (example: XVMB2RGS becomes XVMB2RG).

(3) Flash signalling colour: red - 0.8 J.



Ø 45 mm

Miniature illuminated beacons XVDLS		Steady light signaling	"Flash" light signaling
Light source		Incandescent BA 15d bulb, 5 W max. (not included)	"Flash" discharge tube, 0.5 J
Degree of protection		IP 40	
Beacon references (4)	24...230 V AC/DC	XVDLS3●	-
	24 V AC/DC	-	XVDLS6B●
	120 V AC	-	XVDLS6G●
	230 V AC	-	XVDLS6M●

(4) To obtain the complete reference, replace the ● by the number designating the colour as follows: 3 = green, 4 = red, 5 = orange, 6 = blue, 7 = clear, 8 = yellow.



Ø 70 mm

Illuminated beacons XVE L		Steady light signaling	"Flash" light signaling	
Light source		Incandescent BA 15d bulb, 5 W max. (not included)	Integral LED	"Flash" discharge tube, 1 J
Degree of protection		IP 42/IP 54 (with sealing kit)		
Beacon references (5)	24... 240 V AC/DC	XVEL3●	-	
	24 V AC/DC	-	XVEL2B●	XVEL6B●
	120 V AC	-	XVEL2G●	XVEL6G●
	230 V AC	-	XVEL2M●	XVEL6M●

(5) To obtain the complete reference, replace the ● by the number designating the colour as follows: 3 = green, 4 = red, 5 = orange, 6 = blue, 7 = clear.



Ø 70 mm

Indicator banks XVE C comprising 2 to 5 signaling units (5)		Base units	Steady light signaling	Flashing light signaling	"Flash" light signaling	Audible units (85 db at 1 m)	
Light source		-	Incandescent BA 15d bulb, 5 W max. (not included)	Integral LED	Integral LED	"Flash" discharge tube 1 J	
Degree of protection		IP 42/IP 54 (with sealing kit)					
Base unit references	IP 42	XVEC21	-	-	-	-	
	IP 54	XVEC21P	-	-	-	-	
Lens unit references (6)	24...230 V AC/DC	-	XVEC3●	-	-	-	
	24 V AC/DC	-	-	XVEC2B●	XVEC5B●	XVEC6B●	XVEC9B
	120 V AC	-	-	XVEC2G●	XVEC5G●	XVEC6G●	XVEC9G
	230 V AC	-	-	XVEC2M●	XVEC5M●	XVEC6M●	XVEC9M

(6) An indicator bank comprises: 1 base unit + 1 to 5 signaling units.

### Application specific range

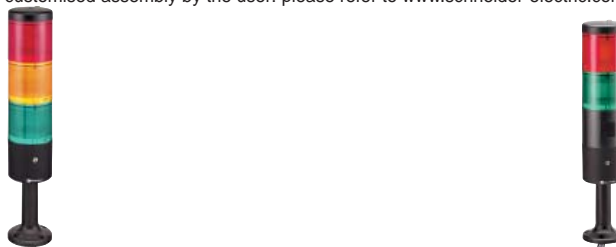
Ready to use for specific requirements



Ø 70 mm

Complete, pre-cabled beacons and indicator banks XVD (1)	1 signaling unit		2 signaling units				
	Flash light		Steady light	Steady light + "flash"	"Flash" light + buzzer		
Light source	"Flash" discharge tube 5 J		BA 15d LED (included)	BA 15d LED (included) + "Flash" discharge tube, 5 J	"Flash" discharge tube, 5 J + buzzer, 90 db		
Degree of protection	IP 40						
Signalling colours	Orange	Red	Green - Red	Orange - Red	Green - Red	Orange	
Beacon/Indicator bank references	24 V AC/DC	XVDBA6	XVDBR6	XVDB2GR	XVDB2AR	XVDB2GR6	XVDBSA6
	230 V AC	XVDMA6	XVDMR6	-	-	-	-

(1) Indicator banks XVD are also available as separate components for customised assembly by the user: please refer to [www.schneider-electric.com](http://www.schneider-electric.com).



Ø 70 mm

Complete, pre-cabled beacons and indicator banks XVD (1)	3 signaling units		Steady light + "flash"	Steady light + buzzer
	Steady light			
Light source	Incandescent BA 15d bulb, 10 W max. (included)	BA 15d LED (included)	BA 15d LED (included) + "Flash" discharge tube, 5 J	BA 15d LED (included) + buzzer, 90 db
Degree of protection	IP 40			
Signalling colours	Green - Orange - Red		Green - Orange - Red	Green - Red (2)
Indicator bank references	24 V AC/DC	XVDB1GAR	XVDB2GAR	XVDB2SGR
	230 V AC	XVDM1GAR	XVDM2GAR	-

Complete, pre-cabled beacons and indicator banks XVD (2)	4 signaling units		Steady light + buzzer		
	Steady light				
Light source	BA 15d LED (included)		Incandescent BA 15d bulb, 10 W max. (included)	BA 15d LED (included)	
Degree of protection	IP 40				
Signalling colours	Clear - Green - Orange - Red		Green - Orange - Red		
Indicator bank references	24 V AC/DC	XVDB2CGAR		XVDB1SGAR	XVDB2SGAR
	230 V AC	-		-	XVDM2SGAR

(1) Beacons and indicator banks XVD are also available as separate components for customised assembly by the user: please refer to [www.schneider-electric.com](http://www.schneider-electric.com).

(2) Also available in 24 V AC/DC with colours Orange - Red: **XVDB2SAR**.



Rotating mirror beacon XVR and Sirens XVS	Rotating mirror beacon		Sirens, 106 db		
Description	Halogen bulb 70 W H1 (included)	Incandescent bulb 25 W BA 15d (included)	1 tone	2 tone	
Diameter	Ø 165 mm		Ø 92 mm		
Degree of protection	IP 65		IP 40		
References (3)	24 V AC/DC	XVR1B9●	XVR1B0●	XVSB1	XVSB2
	120 V AC	-	XVR1G0●	XVSG1	XVSG2
	230 V AC	-	XVR1M0●	XVSM1	XVSM2

(3) To obtain the complete reference, replace the ● by the number designating the colour as follows: 3 = green , 4 = red , 5 = orange, 6 = blue, 8 = yellow.



Bulbs and LEDs		Beacons and indicator banks XVB / XVP (1) / XVD				Rotating mirror beacon XVR	
<b>Light source</b>		Incandescent BA 15d base 7 W	Incandescent BA 15d base 10 W (not XVP)	LED (2) BA 15d base	Flashing LED (2) BA 15d base	Incandescent BA 15d base 25 W	Halogen H1 base 70 W
<b>References</b>	12 V	DL1BEJ	DL1BLJ	–	–	–	–
	24 V	DL1BEB	DL1BLB	DL1BDB●	DL1BKB●	DL1 BRB	DL1 BRBH
	48 V	DL1BEE	DL1BLE	–	–	–	–
	120 V	DL1BEG	DL1BLG	DL1BDG●	DL1BKG●	DL1 BRG	–
	230 V	DL1BEM	DL1BLM	DL1BDM●	DL1BKM●	DL1 BRM	–

(1) Indicator banks XVP can be fitted with 5 W incandescent bulbs: see beacons XVDLS / XVE.

(2) To obtain the complete reference, replace the ● by the number designating the colour as follows: 1 = white, 3 = green, 4 = red, 5 = orange, 6 = blue, 8 = yellow.



Bulbs and LEDs		Beacons XVDLS / XVE	Indicator banks XVM / XVE			
<b>Light source</b>		Incandescent BA 15d base 5 W	Incandescent BA 15d base 5 W	LED (3) BA 15d base	Flashing LED (3) BA 15d base	"Flash" discharge tube, 0.8 Joule BA 15d base
<b>References</b>	24 V	DL1EDBS	DL1EDBS	DL2EDB●	DL1EKB●	DL6BB
	120 V	DL1EDGS	DL1EDGS	DL2EDG●	DL1EKG●	DL6BG
	230 V	DL1EDMS	DL1EDMS	DL2EDM●	DL1EKM●	DL6BM

(3) To obtain the complete reference, replace the ● by the number designating the colour as follows: 1 = white, 3 = green, 4 = red, 6 = blue, 8 = orange.



Mounting accessories		Beacons and indicator banks XVB / XVD / XVE		Indicator banks XVP	Indicator banks XVM	Rotating mirror beacon XVR		
<b>Description</b>		Aluminium tube with integral black plastic fixing base	Plastic tube with integral black plastic fixing base	Aluminium tube with integral black plastic fixing base	Aluminium tube with steel fixing bracket	Aluminium tube with integral cream plastic fixing base	Aluminium tube with steel fixing bracket	–
<b>Diameter (mm)</b>		Ø 25	Ø 25	Ø 20	Ø 20	Ø 20	Ø 20	–
<b>Support tubes</b>	60 mm	XVEZ13	–	–	–	–	–	–
	100 mm	–	–	–	XVPC02T	XVMZ02	XVMZ02T	–
	112 mm	–	–	XVPC02 (4)	–	–	–	–
	120 mm	XVBZ02	–	–	–	–	–	–
	140 mm	–	XVDC02	–	–	–	–	–
	250 mm	–	–	–	XVPC03T	XVMZ03	XVMZ03T	–
	260 mm	–	–	XVPC03 (4)	–	–	–	–
	400 mm	–	–	–	XVPC04T	XVMZ04	XVMZ04T	–
	410 mm	–	–	XVPC04 (4)	–	–	–	–
	420 mm	XVBZ03	–	–	–	–	–	–
820 mm	XVBZ04	–	–	–	–	–	–	
<b>Fixing plates, black</b>	for vertical support	XVBC12	–	XVPC12 (4)	–	–	–	XVR012
	for horizontal support	XVBZ01	–	–	–	–	–	XVR013

(4) To order an aluminium support tube with integral cream fixing base, add the letter W to the end of the reference (example: XVPC02W).





#### Type XAC A "Pistol grip"

Degree of protection		IP 65 / Nema 4, 4X / Class II			
Rated operational characteristics		AC 15 (240 V 3 A), DC 13			
Conventional thermal current		10 A			
Connection		Screw clamp terminals, 1 x 2.5 mm <sup>2</sup> or 2 x 1.5 mm <sup>2</sup>			
For control of		<b>single-speed motors</b> 		<b>2-speed motors</b> 	
Dimensions (mm)	W x H x D	52 x 295 x 71 (x 85 with ZA2 BS44)		52 x 295 x 71 (x 85 with ZA2 BS44)	
Number of operators	mechanically interlocked	2		2	
	Emergency stop	without	ZA2 BS44	without	ZA2 BS44
References		XAC A201	XAC A2013	XAC A207	XAC A2073



#### Type XAC A

For control of single-speed motors					
Dimensions (mm)	W x H x D	80 x 314 x 70 (x 90 with ZA2 BS44)		80 x 440 x 70 (x 90 with ZA2 BS54)	
Number of operators	mechanically interlocked between pairs	2		4	
	Emergency stop	without	ZA2 BS44	without	ZA2 BS54
References		XAC A271	XAC A2713	XAC A471	XAC A4713



For control of single-speed motors					
Dimensions (mm)	W x H x D	80 x 500 x 70 (x 90 with ZA2 BS54)		80 x 560 x 70	
Number of operators	mechanically interlocked between pairs	6		8	
	Emergency stop	without	ZA2 BS54	without	
References		XAC A671	XAC A6713	XAC A871	

# Stations for user assembly

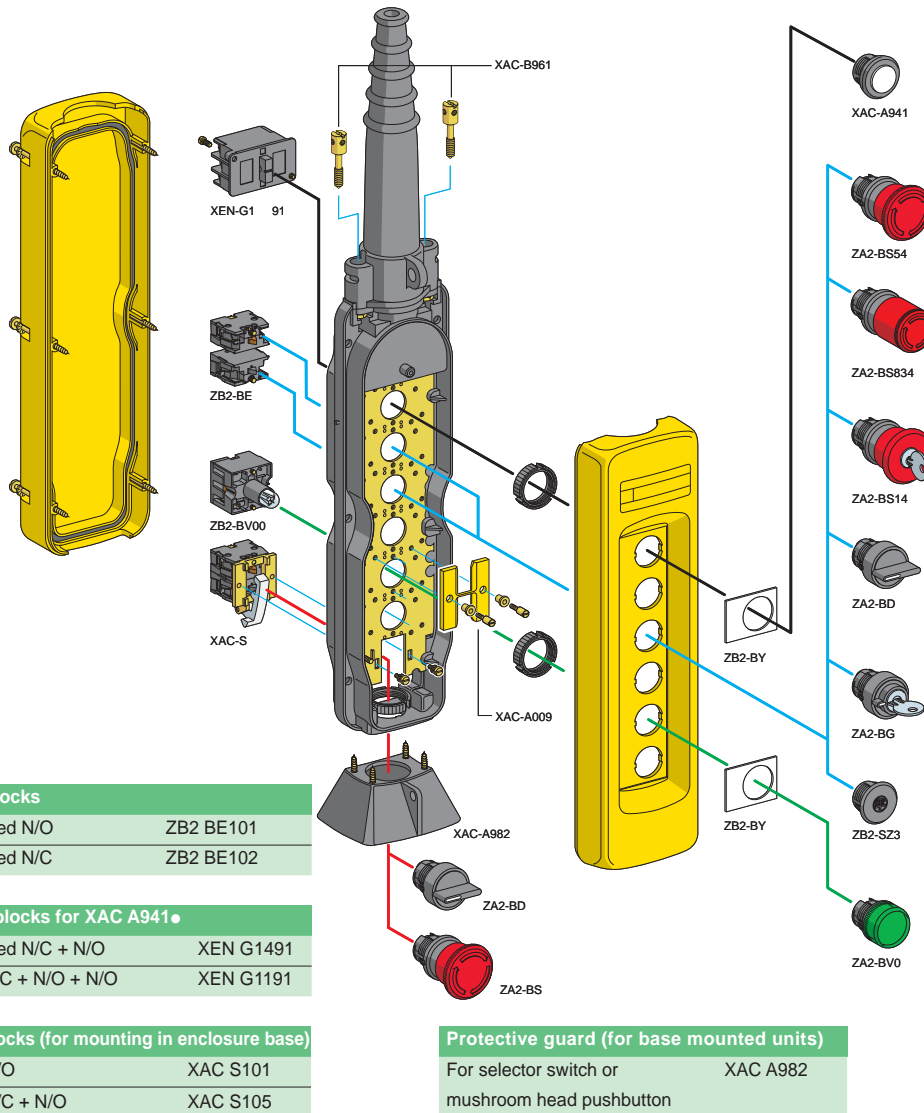


## Empty enclosures type XAC A

Number of ways	2	3	4	5	6	8	12
References	XAC A02	XAC A03	XAC A04	XAC A05	XAC A06	XAC A08	XAC A12

2

## Separate components (for mounting in enclosures XAC A)



Contact blocks	
Single-speed N/O	ZB2 BE101
Single-speed N/C	ZB2 BE102

Contacts blocks for XAC A941	
Single-speed N/C + N/O	XEN G1491
2-speed N/C + N/O + N/O	XEN G1191

Contact blocks (for mounting in enclosure base)	
N/O	XAC S101
N/C + N/O	XAC S105

**Protective guard (for base mounted units)**  
For selector switch or mushroom head pushbutton XAC A982

Booted operators	
white	XAC A9411
black	XAC A9412

Mushroom head, latching (1)	
turn to release Ø 30	ZA2 BS44
Ø 40	ZA2 BS54

Mushroom head, latching, trigger action (1)	
turn to release Ø 30	ZA2 BS834
Ø 40	ZA2 BS844

Mushroom head, latching (1)	
key release Ø 30	ZA2 BS74
Ø 40	ZA2 BS14

Selector switch	
2 pos. stay put	ZA2 BD2
3 pos. stay put	ZA2 BD3

Key switch	
key n° 455 2 pos. stay put	ZA2 BG4
3 pos. stay put	ZA2 BG5

Blanking plug	
with seal and fixing nut	ZB2SZ3

Pilot light heads	
white	ZA2 BV01
green	ZA2 BV03
red	ZA2 BV04
yellow	ZA2 BV05

Pilot light bodies	
direct supply	ZB2 BV006
direct supply, through resistor	ZB2 BV007

### Legends, 30 x 40 mm

Legends, 30 x 40 mm	With symbols conforming to NF E 52-124						With text			
References	ZB2 BY4901	ZB2 BY4903	ZB2 BY4907	ZB2 BY4909	ZB2 BY4913	ZB2 BY4915	ZB2 BY4930	ZB2 BY2303	ZB2 BY2304	
								blank		
References	ZB2 BY2904	ZB2 BY2906	ZB2 BY2910	ZB2 BY2912	ZB2 BY2916	ZB2 BY2918	ZB2 BY2931	white or yellow background	ZB2 BY4101	

(1) The mushroom head Emergency stop pushbuttons conform to standard IEC/EN 60947-5-5 and Machinery Directive 98/37/EC. Trigger action mushroom head Emergency stop pushbuttons conform to standard EN 418.



Type		Characteristics			
Display	Capacity	2 lines, 20 characters	1 to 4 lines, 5 to 20 characters		
	Type	Back-lit LCD green	Back-lit LCD 3 colours green, orange, red	Back-lit LCD green	
Data entry		Via keypad with 8 keys (4 with changeable legends)			
Function	Representation of variables	Alphanumeric			
Communication	Downloadable protocols	Uni-TE, Modbus Master	Uni-TE, Modbus, Siemens, Rockwell, Omron, Mitsubishi	Modbus	
Development software		Vijeo Designer Lite (on Windows 2000 and XP)			
Dimensions W x D x H		132 x 37 x 74 mm			
Compatibility with PLCs		Twido, Modicon TSX Micro, Modicon Premium, Modicon M340	Twido, Modicon TSX Micro, Modicon Premium, Modicon Quantum, Modicon Momentum, Modicon M340	Motor starter Tesys Model U	
Supply voltages		5 VDC or PLC power supply	24 VDC		
References		<b>XBTN200</b>	<b>XBTN400</b>	<b>XBTN410</b>	<b>XBTN401</b> <b>XBTNU400</b>

(1) Except XBTN200: alphanumeric screen.

## Simple terminals Magelis XBT R with matrix keypad



Type		Characteristics		
Display	Capacity	4 lines, 20 characters		
	Type	Back-lit LCD green	Back-lit LCD, 3 colours green, orange, red	
Data entry		Via keypad with 20 keys (12 with changeable legends)		
Function	Representation of variables	Alphanumeric		
Communication	Downloadable protocols	Uni-TE, Modbus Master	Uni-TE, Modbus, Siemens, Rockwell, Omron, Mitsubishi	
Development software		Vijeo Designer Lite (on Windows 2000 and XP)		
Dimensions W x D x H		137 x 37 x 118 mm		
Compatibility with PLCs		Twido, Modicon TSX Micro, Modicon Premium, Modicon M340	Twido, Modicon TSX Micro, Modicon Premium, Modicon Quantum, Modicon Momentum, Modicon M340	
Supply voltages		5 VDC or PLC power supply	24 VDC	
References		<b>XBTR400</b>	<b>XBTR410</b>	<b>XBTR411</b>

2

## Magelis XBT RT with semi-graphic touch screen



Type		Characteristics		
Display	Capacity	10 lines, 33 characters		
	Type	Back-lit LCD green		
Data entry		Via keypad with 12 keys (10 with changeable legends)		
Functions	Representation of variables	Alphanumeric, bargraph, curves, button and light		
Communication	Downloadable protocols	Uni-TE, Modbus Master		
Development software		Vijeo Designer Lite (on Windows 2000 and XP)		
Dimensions W x D x H		137 x 37 x 118 mm		
Compatibility with PLCs		Twido, Modicon TSX Micro, Modicon Premium, Modicon M340		
Supply voltages		5 VDC or PLC power supply		
References		<b>XBTRT500</b>		

### Magelis XBT GT with 3.8" touchscreen



Type		Characteristics				
Display	LCD screen size	3.8"				
	Type	STN monochrome, amber or red			TFT colour	
Functions	Representation of variables	Alphanumeric, bitmap, bargraph, gauge, button, light, clock, flashing light, keypad				
	Curves	yes, with log				
	Alarm logs	yes, incorporated				
Communication	Downloadable protocols	Uni-TE, Modbus		Uni-TE, Modbus, Modbus TCP/IP		
	Bus and networks	-		Ethernet, IEEE 802.3 10 BASE-T, RJ45	Ethernet, IEEE 802.3 10/100 BASE-T, RJ45	
Third party protocols	Mitsubishi (Melsec), Omron (Sysmac), Rockwell Automation (Allen Bradley), Siemens (Simatic)					
Development software	Vijeo Designer VJD●●●TG●V●●M (on Windows Vista, XP and 2000)					
Dimensions W x D x H	130x41x104mm					
Compatibility with PLCs	Twido, Nano, TSX Micro, Premium, Quantum, Modicon M340					
«Compact Flash» card slot	no					
USB port	-		1	-	1	1
Built-in Ethernet TCP/IP	no		yes			
Supply voltage	24 VDC					
References	XBTGT1100		XBTGT1105	XBTGT1130	XBTGT1135	XBTGT1335

### Magelis XBT GT with 5,7" touchscreen



Type		Characteristics				
Display	LCD screen size	5.7"				
	Type	Back-lit STN, monochrome blue      black and white			STN, colour 4096 colours	TFT, colour 65536 colours
Functions	Representation of variables	Alphanumeric, bitmap, bargraph, gauge, button, light, clock, flashing light, keypad				
	Curves	yes, with log				
	Alarm logs	yes, incorporated				
Communication	Downloadable protocols	Uni-TE, Modbus		Uni-TE, Modbus, Modbus TCP/IP	Uni-TE, Modbus	Uni-TE, Modbus, Modbus TCP/IP
	Bus and networks	-		Ethernet, IEEE 802.3 10/100 BASE-T, RJ45	-	Ethernet, IEEE 802.3 10/100 BASE-T, RJ45
Third party protocols	Mitsubishi (Melsec), Omron (Sysmac), Rockwell Automation (Allen Bradley), Siemens (Simatic)					
Development software	Vijeo Designer VJD●●●TG●V●●M (on Windows Vista, XP and 2000)					
Dimensions W x D x H	167.5x60x135mm					
Compatibility with PLCs	Twido, Nano, TSX Micro, Premium, Quantum, Modicon M340					
«Compact Flash» card slot	no		yes			
USB port	1					
Video in	no					
Built-in Ethernet TCP/IP	no		no	yes	no	yes
Supply voltage	24 VDC					
References	XBTGT2110		XBTGT2120	XBTGT2130	XBTGT2220	XBTGT2330

### Magelis XBT GT with 7,5", 10,4", 12,1",15" touchscreen



Type		Characteristics								
Display	LCD screen size	7.5"			10.4"			12.1"		15"
	Type (colour)	STN	TFT	TFT	STN	TFT	TFT	TFT	TFT	TFT
	Number of colours	4096	65536	65536	4096	65536	65536	65536	65536	65536
Functions	Representation of variables	Alphanumeric, bitmap, bargraph, gauge, button, light, clock, flashing light, keypad								
	Curves	yes, with log								
	Alarm logs	yes, incorporated								
Communication	Downloadable protocols	Uni-TE, Modbus, Modbus TCP/IP								
	Bus and networks	Ethernet, IEEE 802.3 10/100 BASE-T, RJ 45								
Third party protocols	Mitsubishi (Melsec), Omron (Sysmac), Rockwell Automation (Allen Bradley), Siemens (Simatic)									
Development software	Vijeo Designer VJD●●●TG●V●●M (on Windows Vista, XP and 2000)									
Dimensions W x D x H (mm)	215x60x170			313x56x239		271x57x213		313x56x239		395x60x294
Compatibility with PLCs	Twido, Nano, TSX Micro, Premium, Quantum, Modicon M340									
«Compact Flash» card slot	yes									
USB port	1	1	1	2	2	2	2	2	2	
Video in	no	no	yes	no	no	yes	no	yes	yes	
Built-in Ethernet TCP/IP	yes									
Supply voltage	24 VDC									
References	XBTGT4230	XBTGT4330	XBTGT4340	XBTGT5230	XBTGT5330	XBTGT5340	XBTGT6330	XBTGT6340	XBTGT7340	

### Magelis XBT GK with touchscreen / keypad



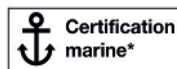
Type		Characteristics			
Display	Screen size	5,7"		10,4"	
	Type	STN monochrome black and white		TFT Colour 65536 colours	
Data entry	Soft function keys with LED	14		18	
	Static function keys with LED	10 + legends		12 + legends	
	Service keys	8			
	Alphanumeric keys	12			
Functions	Touchscreen and industrial pointer	yes			
	Representation of variables	Alphanumeric, bitmap, bargraph, gauge, button, light, clock, flashing light, keypad			
	Curves	Yes, with log			
Communication	Alarm logs	Yes			
	Downloadable protocols	Uni-TE, Modbus		Uni-TE, Modbus, Modbus TCP/IP	
	Bus and networks	-		Ethernet, IEEE 802.3 10/100 BASE-T, RJ 45	
Third party protocols	Mitsubishi (Melsec), Omron (Sysmac), Rockwell Automation (Allen Bradley), Siemens (Simatic)				
Development software	Vijeo Designer VJD●●●TG●V●●M (on Windows Vista, XP and 2000)				
«Compact Flash» card slot	yes				
Dimensions W x D x H	220,3x88x265mm		296x91x332mm	197x92,6x147mm	
Compatibility with PLCs	Twido, Nano, TSX Micro, Premium, Quantum, Modicon M340				
USB port	1		1	2	
Video in	no		no	no	
Built-in Ethernet TCP/IP	no		yes		
Supply voltage	24 VDC				
References	XBTGK2120		XBTGK2330	XBTGK5330	





Type		Characteristics	
Display	LCD screen size	8,4”	15”
	Type (colour)	TFT	TFT
	Number of colours	262 144	16 777 216
Functions	Representation of variables	Alphanumeric, bitmap, bargraph, gauge, button, light, clock, flashing light, keypad	
	Curves	yes, with log	
	Alarm historic	yes, incorporated	
Communication	Downloadable protocols	Uni-TE, Modbus, Modbus TCP/IP	
	Bus and networks	Dual Ethernet, IEEE 802.3 10/100/1Gb BASE-T, RJ 45	
Third party protocols	Mitsubishi (Melsec), Omron (Sysmac), Rockwell Automation (Allen Bradley), Siemens (Simatic)		
Development software	Vije Designer VJD●●●TG●V●●M (on Windows Vista, XP and 2000)		
Dimensions W x D x H (mm)	230 x 177 x 65		395 x 294 x 65
Compatibility with PLCs	Twido, Nano, TSX Micro, Premium, Quantum, Modicon M340		
«Compact Flash» card slot	2		1
USB port	4		4 + 1 on front panel
Video in	no		
Built-in Ethernet TCP/IP	2		
Supply voltage	24 VDC		
References	XBTGTW450		XBTGTW750

### Certifications Magelis XBT range:



C-Tick



Catégorie 3



For more informations, consult your HMI catalogue.



Connection cables	PC to Magelis transfer cables	
	2.5 m	2 m
Application	PC to XBTN / R / RT	PC to XBTGT / GK / GTW
Type of connector	RJ45/RJ45	USB/USB
Physical link	RS 485	–
References	XBTZ925 (1)	XBTZG935

(1) Adaptor TSXCUSB485 for linking USB port of PC, to be used with connecting cables XBTZ925

2

Cards and gateways for fieldbus	Modbus Plus	Fipio	Profibus DP	Device Net
References	XBTZGUMP	TSXCUSBFIP	XBTZGPDP	XBTZGDVN

Connection cables	PLC connection cables (2.5 m)					
Application	XBTGT, GK, N200, N400, R400 RT500 to: Modicon M340	Twido, Nano, TSX Micro, Premium	XBTGT,GK,GTW to: Quantum	All XBT, XBT N410, N401, R410, R411 to: Twido, Nano, TSX Micro, Premium	Quantum	Momentum (port 1)
Type of connector	RJ45/RJ45	RJ45 / MiniDin	SUB D 9 / SUB D 9	MiniDin / SUB D 25	SUB D 9 / SUB D 25	RJ45 / SUB D 25
Physical link	RS 485	RS 485	RS 232	RS 485	RS 232	RS 232
References	XBTZ9980	XBTZ9780	990NAA26320	XBTZ968	XBTZ9710	XBTZ9711

«Compact Flash» card				
Memory	128 Mb	256 Mb	512 Mb	1 Gb
References	XBTZGM128	XBTZGM256	MPCYN00CFE00N	MPCYN00CF100N

Connection cables	off-set USB
Application	XBTGT (except XBTGT1100/1130) / GT / GTW
Type of connector	USB / USB
Reference	XBTZGUSB



Type		Characteristics		
Display	Size	8,4" SVGA (800 x 600)	12" SVGA (800 x 600)	15" XGA (1024 x 768)
	Type	TFT colour		
Data entry		Via touchscreen		
Processor	Type	Intel Celerom M		
	Frequency	600 MHz		
Internal hard disk		1Go Compact flash		
RAM memory		256 MB expandable up to 1024 MB		
CD-ROM drive		-		
Expansion slots		-	1 x PCMCIA slot 1 x type III/type I	1 x PCMCIA slot 1 x type III or 2 x type I
Ethernet TCP/IP network		2 x 10BASE-T/100BASE-TX (RJ45)		
Operating system		Windows Embedded XPe SP2		
Input/Output ports		4 x USB, 1 x RS232		2 x USB, 1 x COM1, 1 x COM2, 1 x parallel, 1 x PS2 keyboard, 1 x PS2 pointing device
	on front panel	-	1 x USB	
Fixing		Fixings included with each product for mounting on panel or enclosure door		
Dimensions W x D x H		230 x 177 x 65	313 x 239 x 60	395 x 294 x 65
Supply voltage		100...240 VAC and 24 VDC	100...240 VAC	24 VDC
References	Client Edition (1)	<b>MPCST11NAJ00T</b>	<b>MPCST21NAJ10T</b>	<b>MPCST52NDJ20T</b>
	HMI Edition (2)	<b>MPCST11NAJ00H</b>	<b>MPCST21NAJ10R</b>	<b>MPCST52NDJ20H</b>

(1) Visualization with Internet Explorer or any client application (ex FactoryCast P2143).

(2) Vijeo Designer RT application and above client application.

## Accessories

Protection film	8,4"	12"	15"
References	MPCYK10SPSKIT	MPCYK20SPSKIT	MPCYK50SPSKIT



Type		Characteristics		
Display	Size	8,4" SVGA (800 x 600)	12" XGA (1024 x 768)	15" XGA (1024 x 768)
	Type	TFT colour		
Data entry		Via touchscreen		
Processor	Type	Celeron M	Intel Celeron M	Pentium M
	Frequency	1,0 GHz	1,3 GHz	1,6 GHz
Internal hard disk		≥ 40 GB		
RAM memory		512 MB expandable up to 1024 MB		512 MB
CD-ROM drive		-		yes
Expansion slots		1 PCI	1 x PCI bus slot	1 x PCI bus slot
		-	1 x PCMCIA slot	1 x PCMCIA slot
		-	1 x type III/type I	1 x type III or 2 x type II
Ethernet TCP/IP network		2 x 10BASE-T/100 BASE-TX (RJ45)		
Operating system		Windows XP Pro		
Input/Output ports		4 x USB, 1 x RS232		2 x USB, 1 COM1, 1 x COM2, 1 x parallel, 2 x PS2
	on front panel	1 x USB		
Fixing		Fixings included with each product for mounting on panel or enclosure door		
Dimensions W x D x H		230 x 177 x 105	313 x 239 x 100	395 x 294 x 100
Supply voltage		100...240 VAC		
References	XP Pro	MPCKT12NAX00N	MPCKT22NAX00N	MPCKT52NAX20N

## Combined offers (bundle pack)

Magelis iPC Compact industrial PCs can be supplied with software packages.  
Characteristics identical to standard industrial PCs shown above.

Type		8,4"	12"	15"
Applications	Vijeo Designer RT	MPCKT12NAX00H	MPCKT22NAX00R	MPCKT55NAX20H
	Vijeo Citect RT	-	-	MPCKT55NAX20V

## Accessories

RAM memory expansion			
Capacity	SO DIMM 512 Mo	SO DIMM 512 Mo	SO DIMM 1024 Mo
Compatibility	MPCST52●●●	MPCKT55●●●	MPCST21●●●
	MPCKT52●●●	MPCKT22●●●	MPCKT22●●●
	-	MPCST21●●●	MPCKT55N●●2●●
References	MPCYK02RAM512	MPCYK05RAM512	MPCYK22RA1024



Central unit Control box type		102		402	
Processor	Type	Intel Celeron M	Intel Pentium M	Intel Celeron M	Intel Pentium M
	Frequency	1,3 GHz	1,6 GHz	1,3 GHz	1,6 GHz
Internal hard disk	≥ 40 Gb IDE, 2"1/2				
RAM memory	512 Mb SDRAM expandable up to 2 Gb (2 memory slots max.)				
CD-ROM drive	Yes, removable 24 x and Combo CD-RW option				
Expansion slots	3 slots (1 PCI bus and 2 PCMCIA bus)			6 slots (4 PCI bus and 2 PCM CIA bus)	
	Ethernet TCP/IP network 1 x 10 BASE-T/100 BASE-TX (RJ45)				
Bus and networks		With additional card on ISA or PCI bus: Modbus/Uni-TE/Fipio bus, Modbus Plus/Fipway networks, INTERBus-S/Profibus DP/CANopen Third party bus			
Video card	built-in	Controller built-in Intel chipset			
Operating system		Windows 2000 or Windows XP Pro pre-installed			
Input/Output ports		2 x USB, 1 x COM1, 1 x COM4 and 1 x LTP1 (parallel) 1 x external VGA video screen, 1 x PS/2 keyboard (1) and 1 x PS/2 pointing device (1)			
Associated product		1 front panel screen or as a stand-alone (2)			
Fixing		Fixings included with each screen for mounting on panel or enclosure door			
Dimensions W x D x H		310 x 310 x 110 mm		310 x 310 x 200 mm	
115...230 VAC supply voltage	Windows 2000	MPCEN02NAA00N	MPCEN05NAA00N	MPCDN02NAA00N	MPCDN05NAA00N
	Windows XP Pro	MPCEN02NAX00N	MPCEN05NAX00N	MPCDN02NAX00N	MPCDN05NAX00N
24 VDC supply voltage	Windows 2000	MPCEN02NDA00N	MPCEN05NDA00N	MPCDN02NDA00N	MPCDN05NDA00N
	Windows XP Pro	MPCEN02NDX00N	MPCEN05NDX00N	MPCDN02NDX00N	MPCDN05NDX00N

(1) Port not operational when the central unit Control box is used with the front panel screen.

(2) To use the Control box without a front panel screen, mounting panel **MPCNP00NNN00N** is required.

# Modular Industrial PCs (PC Based Control/SCADA)

## Magelis Modular iPC



<b>Front panel screen type</b>		<b>15"</b>		
<b>Display</b>	<b>Size</b>	<b>15" active matrix XGA (1024 x 768)</b>		
	<b>Type</b>	Back-lit active matrix TFT colour LCD (262,144 colours)		
<b>Data entry</b>		<b>Via keyboard</b>	<b>Via keyboard and touchscreen</b>	<b>Via touchscreen</b>
	Keyboard	70 standard IBM keys + 2 x 10 user function keys		–
<b>Dimensions W x D x H</b>		480 x 52.7 x 370 mm	480 x 52.7 x 370 mm	460 x 52.7 x 340 mm
<b>Input/Output ports on front panel</b>		1 x IrDA infrared and 1 x PS/2 keyboard/mouse		
<b>Associated product</b>		1 central unit Control box or 1 central unit Control box pack (combined offer)		
<b>Fixing</b>		Fixings included with each screen for mounting on panel or enclosure door		
<b>Supply voltage</b>		From Control box unit		
<b>References</b>		<b>MPCNA50NNN20N</b>	<b>MPCNB50NNN20N</b>	<b>MPCNT50NNN20N</b>

2

## External screen

### Magelis iDisplay



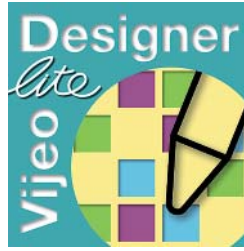
<b>Separate components</b>				
<b>External LCD flat screen with touch screen</b>		15" XGA (1024 x 768)		19" SXGA (1280 x 1024)
<b>References</b>	115...230 VAC supply voltage	<b>MPCYT50NAN00N</b>		<b>MPCYT90NAN00N</b>

## Accessories

<b>Separate components for Control box</b>				
<b>Qwerty PS/2 keyboard, 101 keys</b>		<b>MPCYN00KBD00N</b>		
<b>SDRAM memory expansion</b>		512 Mb		1024 Mb
<b>References</b>		<b>MPCYDERAM0512</b>		<b>MPCYDERAM1024</b>
<b>Option Combo, DVD drive, CD-RW recorder</b>		<b>MPCYN00CDWROM</b>		



# Vijeo Designer Lite \_\_\_\_\_ Configuration software for Magelis XBT N, R, RT simple graphic terminals



Vijeo Designer Lite configuration software enables creation of simple operator dialogue applications on Magelis XBT N, R and RT simple terminal ranges (with touch screen). It also enables transparent recovery of all applications for Magelis XBT N and R platforms produced using its predecessor: XBT L1000.

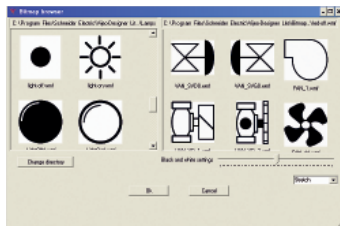
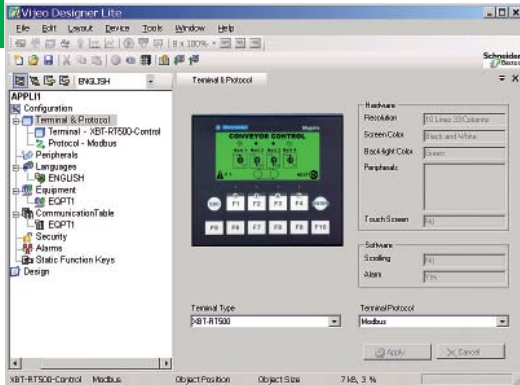
For simplified installation and improved consistency, Vijeo Designer Lite retains the main characteristics of Vijeo Designer software (ergonomics, interface ...) which has become the reference in the HMI field.

## Configuration

Vijeo Designer Lite software enables fast and easy creation of different page types (application page, alarm pages, help pages...) and the installation of navigation between pages.

It offers:

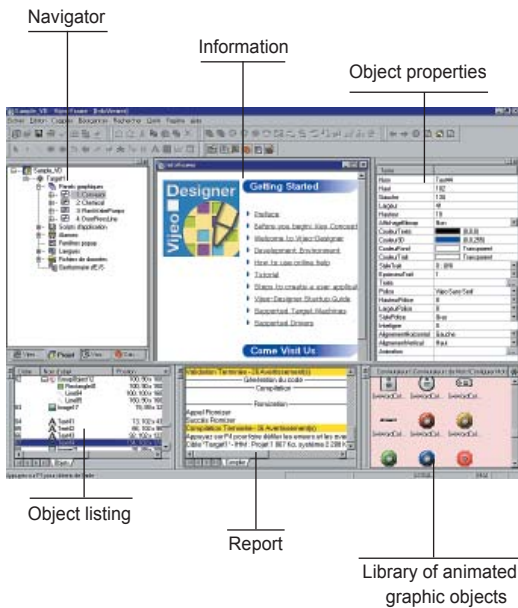
- Graphic objects developed for Magelis XBT RT (bar charts, trend curves...)
- Character fonts Byzantine, simplified Chinese, Cyrillic, Japanese
- Project reports
- Application simulation on PC
- Multilingual software : English, French, German, Italian, Spanish and Chinese.



## Selection guide

	Description	Composition	References
	Configuration software Vijeo Designer Lite (1 license)	Without cable With USB cable	VJDSNDTMSV●●M VJDSUDTMSV●●M
	Configuration software Vijeo Designer Lite (3 licenses)	Without cable	VJDGNDTMSV●●M
	Configuration software Vijeo designer Lite (10 licenses)	Without cable	VJDTNDTMSV●●M
	Configuration software Vijeo Designer Lite (site license)	Without cable	VJDFNDTMSV●●M
	Transfer cable for USB port	Adapter Link USB/serial link	XBTZ925 TSXCUSB485

Software is delivered on CD-ROM and can be executed under Windows Vista, XP and 2000.  
●● represents version number.



Vijeo Designer configuration software enables creation of automated system control operator dialogue applications for XBT GT, GK, GTW terminals and Smart & Compact *iPC*. It also enables management of the multimedia functions of XBTGTs and Smart & Compact *iPC* (video and audio) and offers users of Ethernet terminals and *iPC* remote access via a Web browser (WEB Gate function).

### Configuration

Vijeo Designer configuration software enables fast, simple processing of operator dialogue projects thanks to its ergonomics, developed around 6 configurable windows.

It also offers comprehensive application management tools:

- Project creation; projects comprising one or several applications.
- Recipe editor (32 groups of 64 recipes of max. 1024 ingredients).
- User action list (eg. script) for application adaptability.
- Application variable cross-referencing.
- Vectorial graphic library for more attractive graphic screens.
- Application block diagram documentation.
- Simulation mode for simple design office application testing.
- High-performance graphic editor for simple block diagram creation (over 30 animated preconfigured objects).
- Support of layers and masks for faster development.
- Data sharing (up to 300 variables on 8 terminals).
- Management of 40 languages (including simplified Chinese, Korean, Arabic and Hebrew).
- Programmable controller database sharing (Unity, PL7, Concept, TwidoSoft, ProWORX, ModSoft).
- Advanced traceability function (periodic, at event or on request).
- Project backup on terminal for simple maintenance.
- User-friendly data recovery tool.
- Support of standard USB peripherals (USB key up to 2 GB).
- Support of external USB keyboards and mice.
- Integration with Schneider Electric equipment (buffer diag., variables access ...)
- Over 35 third party protocols
- Multilingual software : English, french, german, italian, spanish and chinese.

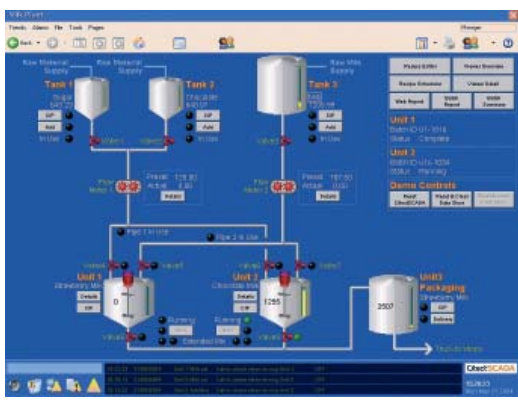
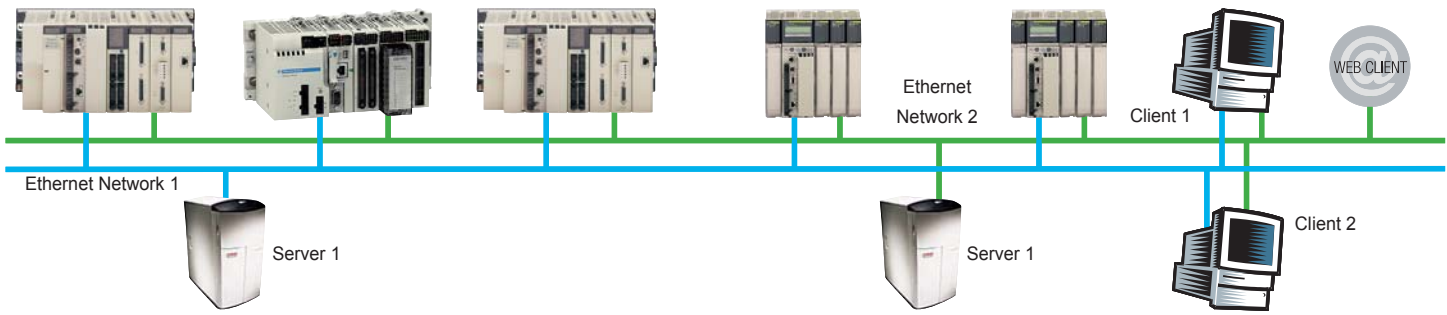
## Selection guide

	Description	Composition	References
	Configuration software Vijeo Designer (1 license)	Without cable With USB cable	VJDSNDTGSV●●M VJDSUDTGAV●●M
	Configuration software Vijeo Designer (3 licenses)	Without cable	VJDGNDTGSV●●M
	Configuration software Vijeo Designer (10 licenses)	Without cable	VJDTNDTGSV●●M
	Configuration software Vijeo Designer (site license)	Without cable	VJDFNDTGSV●●M

Software is delivered on CD-ROM and can be executed under Windows Vista, XP and 2000.  
●● represents version number.



Type	Supervision software (SCADA)
Compatibility	All Schneider-Electric automation platforms and third parties PLCs
Operating system	Windows XP Service Pack 2 and Windows Server 2003 with Service Pack 1
Versions	The development version without network connectivity offers 10 mn operation in communication mode with the PLC. Vijeo Citect includes 6 servers sizes: 75 points, 150 points, 500 points, 1500 points, 5000 points, 15000 Points and more Vijeo Citect Lite without network connectivity is available in 300, 600, 1200 points
References	Please contact your local sales agency



Vijeo Citect is designed for control engineers, product managers and industrial automated system integrators seeking simple configuration and high performance. It provides multi-CPU support, a multi-project Find/Replace tool and integrated XML Web service. Vijeo Citect uses the power of multi-CPU machines to offer outstanding performance.

The possibility of grouping servers from version Vijeo Citect 7.0 enables easy adaptation of SCADA architecture to that of the application for optimum performance.

Highly-developed "Find/Replace" functions enable searches in project graphic pages. The "Find" function can browse the entire project structure, offering the user a unique search engine simplifying configuration.

Industry accepts use of XML Web services as interface between different applications, and Vijeo Citect integrates a read-only Web interface. This enables access to all data, alarms and trends, and simplifies integration of Vijeo Citect in information systems.

### Single data entry

Application development time is significantly reduced thanks to SpeedLink software, which enables automatic creation of variables, alarms and histories from Unity Pro applications.

In addition, Citect is compatible with Unity v2.3 Application Generator.

### Added security

Configuration security of Vijeo Citect enables application of read-only parameters to all or certain projects within a system. The read-only parameters are based on Windows user or user group privileges to centralise access rights management. Integrators or system producers can therefore lock all or certain of their projects.

### Redundancy

Vijeo Citect supports full hot standby configuration. By nominating primary and standby PLCs, Vijeo Citect automatically connects to the active device in case failure. Due to its built-in redundancy, Vijeo Citect provides switches with no loss of functionality, or performance.

### Advanced help

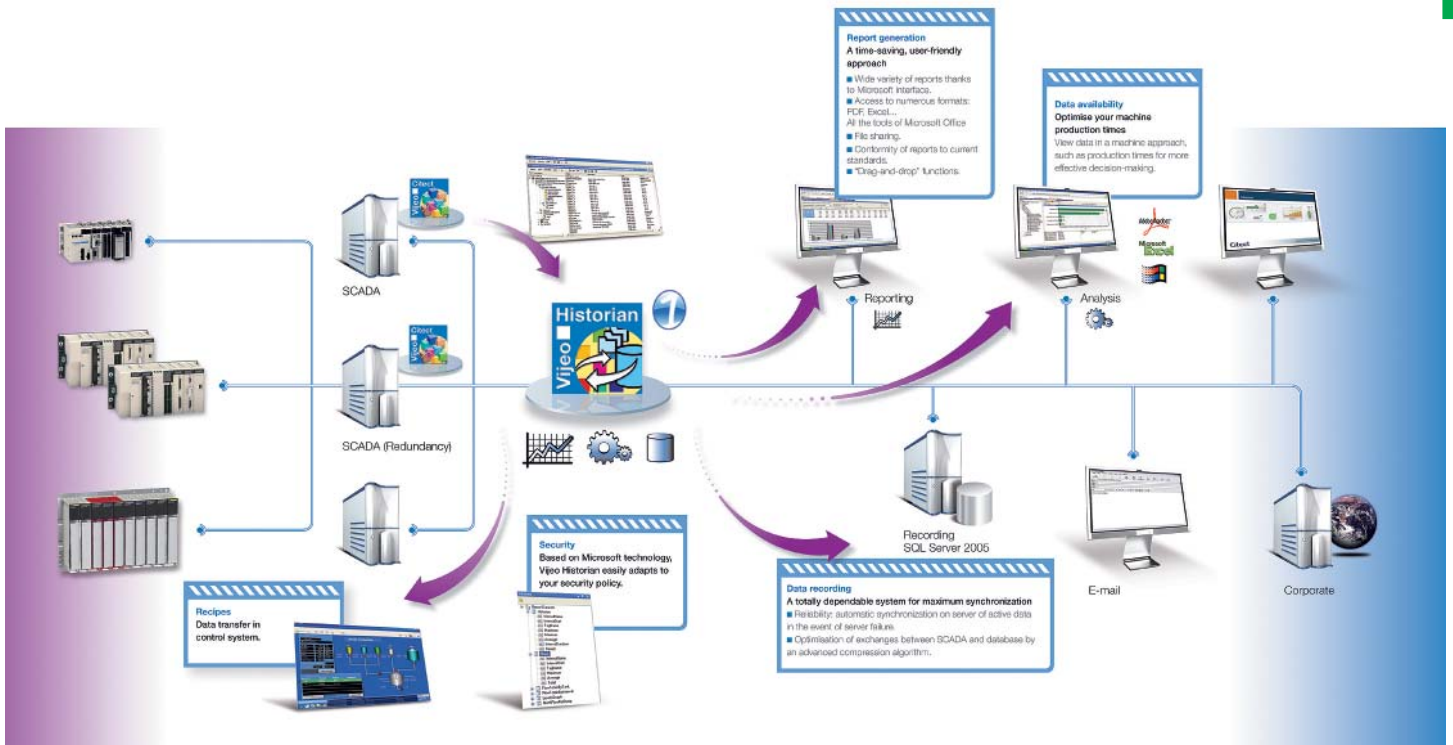
Vijeo Citect online help includes easy access to information and its use of "breadcrumb trails" simplifies navigation.

# Vijeo Historian Reporting software



Type	Reporting software
Compatibility	Vijeo Citect 6.1
Operating system	Windows XP and Windows Server 2003 - recommended
References	CD-ROM PC Contact your local sales office

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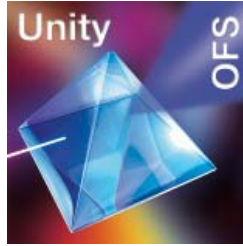
Vijeo Historian is a powerful factory-level reporting tool which collects, memorises and produces reports from different systems. Based on Microsoft SQL Server 2005, it is a true link between production and the information system.

Vijeo Historian offers production managers and operators clear and relevant reports to assist decision-making.

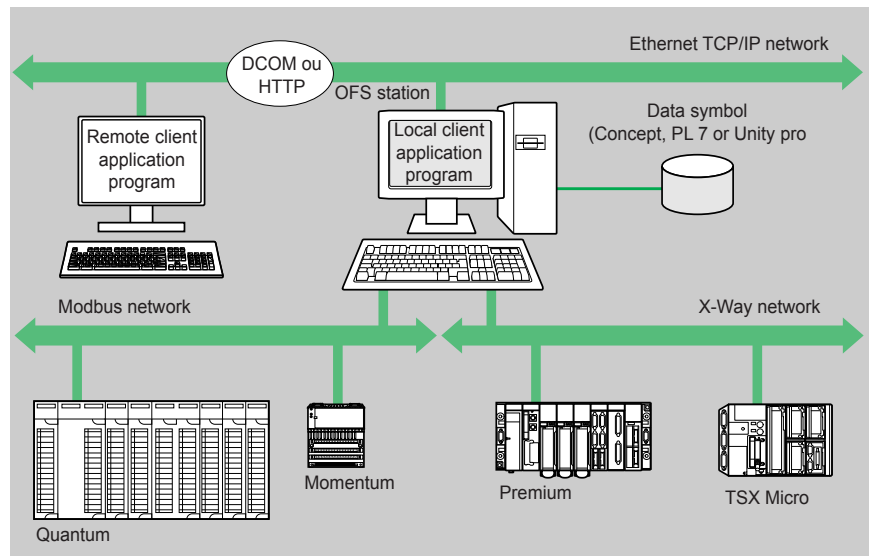
Data is directly accessible via optimisation and management software such as Microsoft Excel or Microsoft Reporting Services. Based on recognised standards, Vijeo Historian is easy to maintain.

#### Vijeo Historian services

- Display of data from several SCADAs
- Data analysis with Microsoft Excel
- SCADA data transfer to SQL Server 2005 database
- Report creation from standard industry tools



Type	OPC data server	
	OFS Small	OFS Large
Items number	1000 items	Unlimited
OPC protocols	OPC DA, OPC .NET	OPC DA, OPC .NET, OPC XML DA,
References	Single station licence 10 stations licence 200 stations licence	<b>TLX CD SU OFS 33</b> <b>TLX CD ST OFS 33</b> -
		<b>TLX CD LU OFS</b> <b>TLX CD LT OFS 33</b> <b>TLX CD LF OFS 33</b>



**Description:**

Based on the OPC protocols, Schneider-Electric's OFS software (**OPC Factory Server**) enables local or remote OPC client applications such as SCADA, supervisors or custom interfaces, to access Schneider devices and PLCs data in real time.

OFS software is a multi-device data server which provides simultaneous use of various communication protocols, and allows client applications to access control data via physical addresses or via symbols

**Supported devices :**

- Modicon Quantum, Premium, Micro, Compact and Momentum PLCs
- TSX Series 7 and April Series 1000 Schneider-Electric PLCs
- Serial Modbus or Uni-Telway devices connected via Schneider-Electric and Merlin Gerin gateways TSX ETG 10xx, EGX xxx ranges etc.

**Supported networks and protocols :**

- Modbus: Serial Modbus, Modbus Plus, Modbus TCP/IP.
- XWAY/UNI-TE: Uni-Telway, FIPWAY, ETHWAY, ISAWAY, PCIWAY.

**Openess:**

OFS V3.3, integrates the most recent specifications of the OPC Foundation:

- **OPC-DA** (OPC Data Access)
- **.NET API interface**
- **OPC XML-DA V1.0** (OPC XML Data Access)

The development of specialized interfaces is even more easy and open.

Developers and System integrators can develop custom applications (in Visual Basic, VBA for Excel, C++, etc) requiring access to Schneider Electric control devices. The OPC XML-DA V1.0 interface is designed to provide an interface for Windows and non-Windows client applications and remote access via the Internet through firewalls.







## FactoryCast modules for PLC

“Ready to use” diagnostic and monitoring functions embedded in a PLC module accessible remotely via a simple Internet browser:

- Real-time communication based on Ethernet TCP/IP (Modbus and Uni-TE)
- Secure access to the PLC system and application diagnostics
- Numerical or graphical data monitoring and control
- E-mail notifications
- Web server open to user customization and creation of Web pages for diagnostics suited to your needs
- Library of animated graphic objects
- Open communications using SOAP/XML protocol as a server interface (Web services)

## FactoryCast HMI modules for PLC

Diagnostic functions identical as FactoryCast modules + Built-in HMI / SCADA functions embedded in a PLC module:

- Visualization of Unity Pro PLC program and Operator screens via Web pages
- PLC data acquisition
- Calculations scripts for data-processing Real-time database (1000 variables)
- Alarm and report notifications via E-mail
- Archiving of data directly into database servers (SQL, Oracle, MySQL)
- Data logging in CSV files in the module.
- Recipe management with read Database
- Dynamic HTML Reporting function
- Web server open to user Web pages customization
- Built-in Supervision via graphic screens and custom Web pages
- Data monitoring and Graphic monitoring (read/write)
- Library of animated graphic objects
- Open communication using SOAP/XML protocol as a server interface (Web services)

Embedded in the TCP/IP communication modules for Modicon M340, Premium and Quantum PLCs, FactoryCast Web servers provide secured access to the diagnostics, monitoring and maintenance functions of your automation installations via a simple web browser.

## FactoryCast Gateways - ETG 1000 / 10.. modules

Cost-effective web gateways offer integrating in a stand-alone module:

- All Communications network interfaces: Ethernet TCP/IP, Modbus and Uni-Telway
- Remote access functions, RAS server,
- Transparent gateway / Router functions
- Notification of alarms via E-mail
- Data monitoring and Graphic monitoring (read/write)
- A user customizable Web server for creating an interface fully adapted to your needs
- Library of animated graphic objects



## FactoryCast HMI Gateways - ETG 3000 / 30.. modules

“All in one” Web gateway module integrating in a stand-alone device:

- a built-in modem (PSTN or GSM/GPRS) depending on the reference
- A Remote Access server function (RAS)
- 2 Ethernet ports and a Modbus serial port
- Transparent gateway / Router functions to Ethernet or Modbus serial devices
- I/O card : 6 discrete inputs/ 2 discrete outputs
- Operating temperature : -25°C to +75°C
- User customizable Web server
- Built-in Supervision via graphic screens and custom Web pages
- Data monitoring and Graphic monitoring (read/write)
- Data Acquisition, Data Processing and Data logging in the module (CSV files)
- Archiving of data directly into database servers (SQL, Oracle, MySQL)
- Alarms and reports via E-mail / SMS
- Open communication using SOAP/XML protocol as a server interface

In the areas of distributed infrastructures, transport, RTU installations, industry and machines, ETG 1000 / 3000 modules more than satisfy your requirements for remote diagnostics and maintenance, remote monitoring and control, and remote programming.





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Applications		Web Server modules for PLCs					
		FactoryCast				FactoryCast HMI	
<b>Target devices</b>	Type	TSX Micro PLCs	Modicon M340 PLCs	Modicon Premium PLCs	Modicon Quantum PLCs	Modicon Premium PLCs	Modicon Quantum PLCs
<b>Network &amp; Remote access services</b>	Remote access	Intranet or via external RAS/modem					
		Remote programming, downloading via FTP, access to Web server via Internet browser					
	Gateway function	-					
	Serial protocols	-					
	Ethernet protocols	Modbus TCP, Uni-TE	Modbus TCP	Modbus TCP, Uni-TE	Modbus TCP	Modbus TCP, Uni-TE	Modbus TCP
	TCP/IP protocols	BootP/DHCP, DNS, SNMP agent, SMTP client, NTP client, FTP					
<b>Web server</b>	Characteristics	HTTP and FTP server, 8 Mb memory available for user, hosting of user Web pages and documents (Doc, Pdf, Excel)					
<b>Predefined services</b>	Configuration	Via Web Designer software or predefined Web pages					
	Diagnostics	System, rack and PLC I/O diagnostics via predefined Web pages					
	Monitoring of variables	Monitoring of devices and application via animated data (read/write variables)					
	Alarm management	PLCs and applications alarms monitoring via predefined Web pages					
<b>Customizable services</b>	Graphic views	Graphic monitoring via animated pages (integrated graphic editor)					
	Unity Pro operator screen	-				Display in the form of Web pages	
	User Web pages	Graphic monitoring via animated Web pages created by the user					
<b>Advanced services and HMI</b>	Calculation scripts	-				Arithmetic and logical scripts	
	E-mail service	Alarm notification by E-mail					
	Data logging	-				Data logging in the module with time stamping (CSV files)	
	Database connection	-				Direct logging in an SQL, Oracle, MySQL database servers	
	Report service	-				Dynamic HTML report management	
	Recipe service	-				Management of "Recipe" data (storage and read locally or on remote database)	

**Application development software** | **Web Designer**

Supplied with each module



References	TSXETZ510	BMXNOE0110	TSXETY5103	140NOE77111	TSXWMY100	140NWM10000

# FactoryCast Gateway

## Web Gateways for Remote control



### Standalone Gateway, Web Server for Remote Access FactoryCast Gateway ETG 10●0

### FactoryCast HMI Gateway ETG30●●

All equipment supporting Modbus	All equipment supporting Uni-Telway	All Modicon PLCs and third-party equipment supporting Modbus	
Intranet or via external Modem, integrated RAS function		Intranet or Modem External modem, integrated RAS	Intranet or Modem Integrated PSTN/RTC/GSM modem and RAS modem
Remote programming, downloading via FTP, access to Web server via Internet browser			
Ethernet to Modbus serial Modem to Modbus serial and Ethernet	Ethernet to Uni-Telway serial Modem to Uni-Telway and Ethernet	Ethernet to Modbus serial Modem to Modbus serial and Ethernet (Modbus, UNITE)	
Modbus (Master)	Uni-Telway (Slave)	Modbus (Master)	
Modbus TCP	Modbus TCP, Uni-TE (Modicon Premium, Modicon TSX Micro)	Modbus TCP Uni-TE TCP	
BootP/DHCP, SNMP agent, SMTP client, NTP client, FTP		DHCP, DNS, SNMP agent, SMTP client, NTP client, FTP	
Protection by IP address filtering and password			
HTTP and FTP server, 8 Mb memory available for user, hosting of user Web pages and documents (Doc, Pdf, Excel)		HTTP and FTP server, 32 Mb memory available for user Web pages, memory extension using Compact Flash cards 1 Gb max., hosting of user Web pages and documents (Doc, Pdf, Excel)	
Via Web Designer software or predefined Web pages			
Diagnostics of serial devices via predefined Web pages		Network diagnostics, diagnostics of serial devices and Ethernet via predefined Web pages	
Monitoring of devices and application via data tables (read/write variables)			
Via E-mail		Via E-mail/SMS	
Graphic monitoring via animated views (integrated graphic editor)			
-			
Graphic monitoring via animated Web pages created by the user			
-		Arithmetic and logical scripts	
Alarm notification by E-mail		Alarm notification by E-mail/SMS	
-		Data logging in the module with time stamping (CSV files)	
-		Direct recording in SQL, Oracle, MySQL database servers	
-		Dynamic HTML report management	
-		Management of "Recipe" data (storage and revad locally or on remote database)	
-			

### Web Designer

Supplied with each module



TSXETG1000	TSXETG1010	TSXETG3000	TSXETG3010 (Modem RTC)	TSXETG3021 (GSM band 900/1800) TSXETG3022 (GSM band 850/1900)
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