

Operator dialog

2

Harmony *Optimise the creation of your dialogue solutions!*

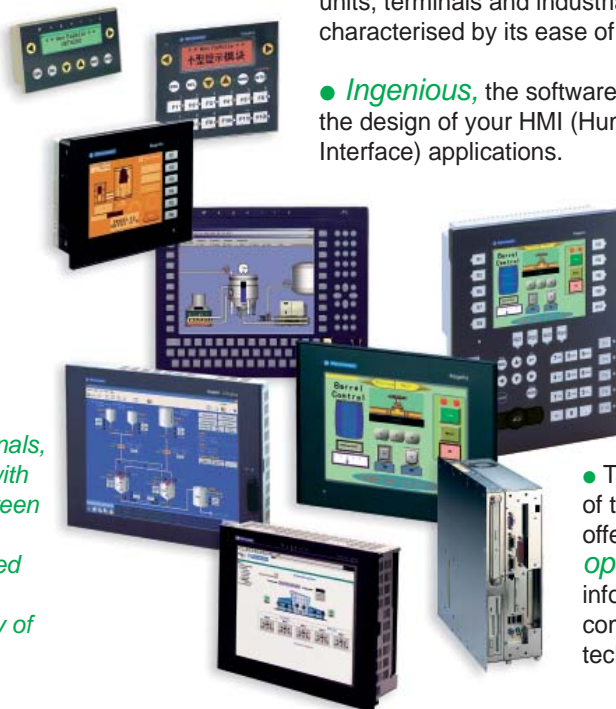
Unequalled and of high quality, it is the largest offer on the market.



- **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.

Contents

Control and signalling units



- Pushbuttons, switches and pilot lights Ø 16 with plastic bezel, **Harmony XB6**2/2 to 2/4
- LED pilot lights Ø 8 and 12
- Harmony XVL**2/5
- Pushbuttons, switches and pilot lights Ø 22 with metal bezel, **Harmony XB4**2/6 to 2/9
- Pushbuttons, switches and pilot lights Ø 22 with plastic bezel, **Harmony XB5**2/10 to 2/12
- Control stations
- Harmony XAL**2/13
- Monolithic pushbuttons, switches and pilot lights Ø 22 with plastic bezel, **Harmony XB7**2/14 to 2/15
- Pushbuttons, switches and pilot lights Ø 30 with metal or plastic bezel, **Harmony 9001**2/16 to 2/19
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- Harmony Series K**2/20 to 2/21
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- Harmony XVB / XVP**2/22
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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

- Display units and terminals
- Magelis XBT N, R, RT, GT, GK, GTW**2/28 to 2/33
- Industrial PCs
- Magelis Smart, Magelis Compact and Modular iPC**
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- Vijeo DesignerLite / Vijeo Designer, Vijeo Citect Lite / Vijeo Citect, Vijeo Historian, OFS**2/38 to 2/42
- Embedded Web servers and gateways
- FactoryCast**2/43

(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



2

Illuminated pushbuttons

Type of head		Shape of head		Flush push		
				rectangular (2)		
Degree of protection				IP 65 / Nema 4, 4X, 13 / Class II		
Mounting (mm)		panel cut-out		Ø 16.2 ^{+0.2} ₀		
		mounting centres		24 x 18 with rectangular head, 18 x 18 with square or circular head		
Dimensions (mm)		W x H x D (below head)		24 x 18 x 50 with rectangular head, 18 x 18 x 50 with square or circular head		
Connection (3)				Tags for 2.8 x 0.5 Faston connectors or for soldering		
Type of push				Spring return		
				Complete products	Products for user assembly	
				12 ... 24 V AC/DC		
References	Color	Contact function	Product reference	Product reference	Product reference	
white		N/O	XB6 DW1B1B	ZB6 E●1B (1)	ZB6 Z1B	ZB6 DW1
		N/C + N/O	XB6 DW1B5B	ZB6 E●1B (1)	ZB6 Z5B	ZB6 DW1
green		N/O	XB6 DW3B1B	ZB6 E●3B (1)	ZB6 Z1B	ZB6 DW3
		N/C + N/O	XB6 DW3B5B	ZB6 E●3B (1)	ZB6 Z5B	ZB6 DW3
red		N/C	XB6 DW4B2B	ZB6 E●4B (1)	ZB6 Z2B	ZB6 DW4
		N/C + N/O	XB6 DW4B5B	ZB6 E●4B (1)	ZB6 Z5B	ZB6 DW4
yellow		N/O	–	ZB6 E●5B (1)	ZB6 Z1B	ZB6 DW5
		N/C + N/O	XB6 DW5B5B	ZB6 E●5B (1)	ZB6 Z5B	ZB6 DW5
Type of push				Latching		
References	Color	Contact function	Product reference	Product reference	Product reference	
white		N/O	–	ZB6 E●1B (1)	ZB6 Z1B	ZB6 DF1
		N/C + N/O	XB6 DF1B5B	ZB6 E●1B (1)	ZB6 Z5B	ZB6 DF1
green		N/O	XB6 DF3B1B	ZB6 E●3B (1)	ZB6 Z1B	ZB6 DF3
		N/C + N/O	XB6 DF3B5B	ZB6 E●3B (1)	ZB6 Z5B	ZB6 DF3
red		N/C	XB6 DF4B2B	ZB6 E●4B (1)	ZB6 Z2B	ZB6 DF4
		N/C + N/O	XB6 DF4B5B	ZB6 E●4B (1)	ZB6 Z5B	ZB6 DF4
yellow		N/O	–	ZB6 E●5B (1)	ZB6 Z1B	ZB6 DF5
		N/C + N/O	–	ZB6 E●5B (1)	ZB6 Z5B	ZB6 DF5



Pilot lights

Type of head		Shape of head		Smooth lens cap	
				rectangular (2)	
Degree of protection				IP 65 / Nema 4, 4X, 13 / Class II	
Mounting (mm)		panel cut-out		Ø 16.2 ^{+0.2} ₀	
		mounting centres		24 x 18 with rectangular head, 18 x 18 with square or circular head	
Dimensions (mm)		W x H x D (below head)		24 x 18 x 50 with rectangular head, 18 x 18 x 50 with square or circular head	
Connection (3)				Tags for 2.8 x 0.5 Faston connectors or for soldering	
Type of push				Complete products	Products for user assembly
				12 ... 24 V AC/DC	
References	Color	Contact function	Product reference	Product reference	Product reference
white		N/O	XB6 DV1BB	ZB6 E●1B (1)	ZB6 DV1
green		N/O	XB6 DV3BB	ZB6 E●3B (1)	ZB6 DV3
red		N/C	XB6 DV4BB	ZB6 E●4B (1)	ZB6 DV4
yellow		N/O	XB6 DV5BB	ZB6 E●5B (1)	ZB6 DV5
blue		N/O	–	ZB6 E●6B (1)	ZB6 DV6

(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

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




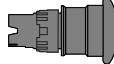


(1) For products with a square head, replace the letter **D** in the reference by the letter **C** (XB6 DA11B becomes XB6 CA11B).

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)

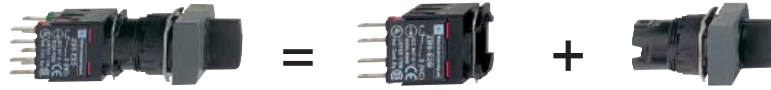
Type of head		Trigger action (EN 418)			
Shape of head		cylindrical			
Type of push		Turn to release			
		Complete products	Products for user assembly		
					
References	red 	2 N/C + 1 N/O	XB6 AS8349B	ZB6 E2B	ZB6 AS834
				ZB6 Z5B	
Type of push		Key release, Ronis 200			
References	red 	2 N/C + 1 N/O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

(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.

Pushbuttons, switches and pilot lights Ø 16 with plastic bezel

Contact functions and light functions with integral LED



2 Selector switches and key switches

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



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

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

- (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	
Degree of protection		IP 40, IP 65 with seal (2)			
Mounting (mm)	panel cut-out	Ø 8.2 mm		Ø 8.2 mm	
	mounting centres	12.5 x 12.5 mm		10.5 x 10.5 mm	
Dimensions (mm)	Ø x Depth (below head)	Ø 12 x 32		Ø 10 x 34	
Connection		Tags (3)		Threaded connectors	
References (1)	green ●	XVL A1●3		XVL A2●3	
	red ●	XVL A1●4		XVL A2●4	
	yellow ●	XVL A1●5		XVL A2●5	
Tightening key		For Ø 8 mm pilot lights		For Ø 12 mm pilot lights	
References		XVL X08		XVL X12	

2

(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●●.

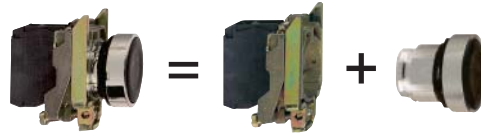
(3) Tags for 2.8 x 0.5 Faston connectors or for soldering.

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: Ue = 240 V and Ie = 1.5 A or Ue = 120 V and Ie = 3 A					Consumption			
Positive operation of contacts conforming to IEC/EN 60947-5-1: N/C contacts with positive opening operation, positive opening force 20 N					15 mA	12...24 V AC/DC		
					25 mA	48...120 V AC		
					25 mA	230...240 V AC		
References		Type of contact	Fixing collar + contacts	Contacts	Pilot light bodies	12 ... 24 V	48 ... 120 V	230 ... 240 V
		N/O	ZB6 Z1B	ZB6 E1B	White ●	ZB6 EB1B	ZB6 EG1B	ZB6 EM1B
		N/C	ZB6 Z2B	ZB6 E2B	Green ●	ZB6 EB3B	ZB6 EG3B	ZB6 EM3B
		2 N/O	ZB6 Z3B	–	Red ●	ZB6 EB4B	ZB6 EG4B	ZB6 EM4B
		2 N/C	ZB6 Z4B	–	Yellow ●	ZB6 EB5B	ZB6 EG5B	ZB6 EM5B
	N/O + N/C	ZB6 Z5B	–	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	
		ZB6 YD20	ZB6 YD21	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)			
Blank legend	Background colour	–	yellow or white	black or red	–	yellow or white	black or red	
		ZB6 Y1001	ZB6 Y2001	–	ZB6 Y4001	ZB6 Y3001		
Ø 45 mm yellow legend for mushroom head Emergency stop pushbutton								
References	Marking	Blank, for engraving		EMERGENCY STOP	ARRET D'URGENCE			
		ZB6 Y7001		ZB6 Y7330	ZB6 Y7130			
References	Body/fixing collar	Plate		Tightening tool		Dismantling tool		
		anti-rotation		and slackening, for fixing nut		for removal of contact blocks		
	ZB6 Y009 (10)*	ZB6 Y003 (10)*		ZB6 Y905 (2)*		ZB6 Y018 (5)*		
Protective shutter for pushbuttons and switches				Connector		Blanking plug		
	for rectangular heads	for circular and square heads		Faston, female		IP 65		
References	ZB6 YD001	ZB6 YA001		ZB6 Y004 (100)*		ZB6 Y005 (10)*		

* sold in lots of



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Pushbuttons, spring return

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 ^{+0.4} ₀ recommended)					
		mounting centres	30 (horizontal) x 40 (vertical)					
Depth (mm)		below head	43					
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	XB4 BA21	ZB4 BZ101	ZB4 BA2	XB4 BP21	ZB4 BZ101	ZB4 BP2
		green ● N/O	XB4 BA31	ZB4 BZ101	ZB4 BA3	XB4 BP31	ZB4 BZ101	ZB4 BP3
		red ● N/C	XB4 BA42	ZB4 BZ102	ZB4 BA4	XB4 BP42	ZB4 BZ102	ZB4 BP4
		yellow ● N/O	XB4 BA51	ZB4 BZ101	ZB4 BA5	XB4 BP51	ZB4 BZ101	ZB4 BP5
		blue ● N/O	XB4 BA61	ZB4 BZ101	ZB4 BA6	XB4 BP61	ZB4 BZ101	ZB4 BP6
Type of push		Flush						
With international marking		Products	Complete	For user assembly				
References		green ⓘ N/O	XB4 BA3311	ZB4 BZ101	ZB4 BA331	–	–	–
		red ⓘ N/C	XB4 BA4322	ZB4 BZ102	ZB4 BA432	–	–	–
		white ⓘ N/O	XB4 BA3341	ZB4 BZ101	ZB4 BA334	–	–	–
		black ⓘ N/O	XB4 BA3351	ZB4 BZ101	ZB4 BA335	–	–	–
Type of push		Projecting			Mushroom head, Ø 40 mm			
Unmarked		Products	Complete	For user assembly		Complete	For user assembly	
References		black ● N/O	–	–	–	XB4 BC21	ZB4 BZ101	ZB4 BC2
		red ● N/C	XB4 BL42	ZB4 BZ102	ZB4 BL4	–	–	–
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	XB4 BL845	ZB4 BZ105	ZB4 BL8434	XB4 BL945	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)

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

Other versions: please consult your Schneider Electric agency.

Contact functions



Selector switches and key switches

2

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 ^{+0.4} 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	XB4 BD21	ZB4 BZ101 ZB4 BD2	XB4 BD41	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	XB4 BD33	ZB4 BZ103 ZB4 BD3	XB4 BD53	ZB4 BZ103 ZB4 BD5



Type of operator		Key, n° 455			
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	XB4 BG21	ZB4 BZ101 ZB4 BG2	XB4 BG41	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	XB4 BG61	ZB4 BZ101 ZB4 BG6	–	–
	black ● N/O + N/O	–	–	XB4 BG33	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 ZBE 101 N/C ZBE 102

(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








Light functions






2

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



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



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

(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	N/C contacts with positive opening operation	14 mA	120 V AC		
conforming to IEC/EN 60947-5-1		14 mA	240 V AC		
		To combine with heads for integral LED			For BA 9s bulb (not included) 250 V max., 2.4 W max.
References (5)*	N/O ZBE 101	white ●	24 V AC/DC ZBV B1	48...120 V AC ZBV G1	ZBV M1
	N/C ZBE 102	green ●	ZBV B3	ZBV G3	ZBV M3
		red ●	ZBV B4	ZBV G4	ZBV M4
		yellow ●	ZBV B5	ZBV G5	ZBV M5
		blue ●	ZBV B6	ZBV G6	ZBV M6

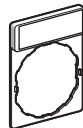
2



Diecast metal enclosures

(Zinc alloy, usable depth 49 mm)

		1 vertical row				2 vertical rows		
Number of cut-outs	Front face dimensions	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 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



2

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 ^{+0.4} ₀ recommended)					
Depth (mm)		30 (horizontal) x 40 (vertical)					
Connection (1)		Screw clamp terminals					
Type of push		Flush		Flush, booted			
Unmarked		Complete		Complete			
Products		For user assembly		For user assembly			
References		Complete		Complete			
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		Flush, booted			
With international marking		Complete		Complete			
Products		For user assembly		For user assembly			
References		Complete		Complete			
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		Complete		Complete			
Products		For user assembly		For user assembly			
References		Complete		Complete			
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		Complete		Complete			
Products		For user assembly		For user assembly			
References		Complete		Complete			
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		Complete			
References		For user assembly		For user assembly			
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		Complete		Complete			
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		Complete		Complete			
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

Type of head		Circular bezel			
Degree of protection		IP 66 / Nema 4X, 13 / Class II			
Mounting (mm)		panel cut-out	Ø 22.5 (22.4 ^{+0.4} ₀ 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 XB5 AD21	ZB5 AZ101 ZB5 AD2	XB5 AD41	ZB5 AZ101 ZB5 AD4
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 XB5 AD33	ZB5 AZ103 ZB5 AD3	XB5 AD53	ZB5 AZ103 ZB5 AD5
Type of operator		Key, n° 455			
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 XB5 AG21	ZB5 AZ101 ZB5 AG2	XB5 AG41	ZB5 AZ101 ZB5 AG4

(2) The symbol indicates key withdrawal position.

Separate components and accessories

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

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	
		Body/fixing collar			Fixing nut		Bezel tool		Plate
		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










2

Pilot lights




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



Illuminated pushbuttons and selector switches

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



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

(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 68 x 68 x 113 max. (with key release Ø 40 mushroom head pushbutton)				
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
		N/C	O	-	XAL D112	XAL D115

2

(1) Empty enclosures:

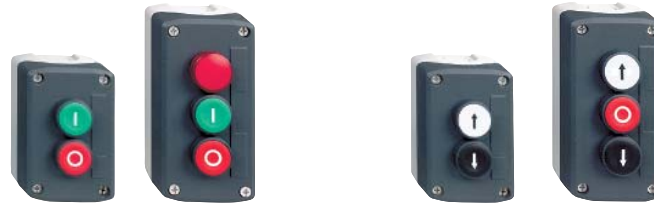
Basic reference: **XAL K0●**, replace the ● by the number of cut-outs required (see cut-out table above)



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 2-way control stations: 68 x 106 x 62; 3-way control stations: 68 x 136 x 87						
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 red pushbutton		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 red pilot light with integral LED (1)		1 flush black p/b	1 flush red p/b	1 flush black p/b	1 Ø 30 red mushroom head p/b
			24 V AC/DC	230 V AC				1 flush black p/b
References		N/O + N/C	I - O	XAL D213	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



2





Pushbuttons

Type of head			Flush or projecting push	circular
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 ² to 1 x 1.5 mm ²	
Type of push			Flush, spring return	Flush, push and push-to-release
References (10)*	black	 N/O	XB7 EA21P	XB7 EH21P
		C/O	XB7 EA25P	XB7 EH25P
	green	 N/O	XB7 EA31P	XB7 EH31P
		C/O	XB7 EA35P	XB7 EH35P
	red	 N/C	XB7 EA42P	–
		C/O	XB7 EA45P	–
yellow	 N/O	XB7 EA51P	–	
Type of push			Flush, spring return	Projecting, spring return
References	green	 N/O	XB7 EA3131P	–
	red	 N/C	–	XB7 EL4232P
	white	 N/O + C/O	XB7 EA11341P	–
	black	 N/O + C/O	XB7 EA21341	–

(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		2 positions 	3 positions 	2 positions 	3 positions 
References (10*)		N/O	–	–	–
		N/C + N/O	–	–	–
		2 N/O	–	–	–



Ø 40 mushroom head Emergency stop pushbuttons (2)

Type of push		Turn to release	Key release, Ronis 455
References (10)*	red  N/C	XB7 ES542P	XB7 ES142P
	red  N/C + N/O	XB7 ES545P	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 mounting centres		30 (horizontal) x 40 (vertical)	
Dimensions (mm)		Ø 29 x 41.5, (Ø 40 x 41.5 for Emergency stop)	
Connection (2)		Screw clamp terminals, 1 x 0.34 mm ² to 1 x 1.5 mm 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	XB7 EW33●1P (1)	XB7 EW3361P
	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	XB7 EH03●1P (1)	XB7 EH0361P
	red N/O	XB7 EH04●1P (1)	XB7 EH0461P
	N/C	XB7 EH04●2P (1)	–
	yellow N/O	XB7 EH05●1P (1)	XB7 EH0561P

2



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	XB7 EV01●P (1)	XB7 EV61P
	green	XB7 EV03●P (1)	XB7 EV63P
	red	XB7 EV04●P (1)	XB7 EV64P
	yellow	XB7 EV05●P (1)	XB7 EV65P
	blue	XB7 EV06●P (1)	XB7 EV66P
	orange	XB7 EV08●P (1)	XB7 EV68P

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



2

Pushbuttons, spring return

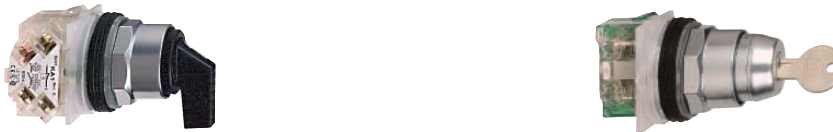
Type of push		Flush	Projecting	Projecting (high guard)
Colour of push		Multi-colour (set of 7 clip-in coloured caps)		
Degree of protection		IP 66 / Nema 1, 2, 3, 3R, 4, 6, 12 and 13 / Class II		
Mounting (mm)	panel cut-out	Ø 31		
	mounting centres	57.2 x 44.5 (with legend 9001KN2●●), 57.2 x 50.8 (with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



Mushroom head Emergency stop pushbuttons, latching (1)

Type of push		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	9001KR24RH13	9001KR25RH13	9001KR9R94H13	9001KR9R20H13
	N/C	9001KR24RH6	9001KR25RH6	9001KR9RH6	9001KR9R20H6

(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●●●● and XB4BS●●●●). See page 2/6.



Selector switches and key switches

Type of operator		Long black handle	Key, n° 455
	positions (2)	3 - spring return 2 - stay put	2 - stay put
Number and type of positions			
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	–	–
	C/O	9001KS53FBH1	9001KS11FBH5 9001KS34FBH5 9001KS43FBH1 9001KS11K1RH1

(2) The symbol indicates key withdrawal position.

Light functions



Pilot lights

Type of head		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)
		24 V AC/DC	48 V AC/DC	120 V AC/DC	230 V AC
References	green ●	9001KP35LGG9	9001KP36LGG9	9001KP38LGG9	9001KP7G9
	red ●	9001KP35LRR9	9001KP36LRR9	9001KP38LRR9	9001KP7R9
	yellow ●	9001KP35LYA9	9001KP36LYA9	9001KP38LYA9	9001KP7A9

2



Illuminated pushbuttons, spring return

Type of head		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)
		24 V AC/DC	48 V AC/DC	120 V AC/DC	230 V AC
References	green ●	C/O 9001K3L35LGGH13	9001K3L36LGGH13	9001K3L38LGGH13	9001K2L7RH13
	red ●	C/O 9001K3L35LRRH13	9001K3L36LRRH13	9001K3L38LRRH13	9001K2L7GH13
	yellow ●	C/O 9001K3L35LYAH13	9001K3L36LYAH13	9001K3L38LYAH13	9001K2L7AH13



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
Type of head		2 position, push-pull			
References	red ●	C/O 9001KR9P35RH13	9001KR9P36RH13	9001KR9P38RH13	9001KR9P7RH13
Type of head		3 position, push-pull (pull: spring return, centre: stay put, push: spring return)			
References	red ●	N/C + N/C late break 9001KR8P35RH25	9001KR8P36RH25	9001KR8P38RH25	9001KR8P7RH25



2

Pushbuttons, spring return

Type of push		Flush	Projecting	Projecting (high guard)	
Colour of push		Multi-colour (set of 7 clip-in coloured caps)			
Degree of protection		IP 66 / Nema 1, 2, 3, 3R, 4, 4X, 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	9001SKR1UH13	9001SKR3UH13	9001SKR2UH13
		N/O	9001SKR1UH5	9001SKR3UH5	9001SKR2UH5



Selector switches

Type of operator		Long black handle				
	positions	3 - spring return	2 - stay put	2 - spring return	3 - stay put	
Number and type of positions						
Degree of protection		IP 66 / Nema 1, 2, 3, 3R, 4, 4X, 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	–	9001SKS11FBH5	9001SKS34FBH5	–
		C/O	9001SKS53FBH1	–	–	9001SKS43FBH1



Pilot lights

Type of head		Smooth lens cap			
Degree of protection		IP 66 / Nema 1, 2, 3, 3R, 4, 4X, 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	9001SKP35LGG9	9001SKP36LGG9	9001SKP38LGG9	9001SKP7G9
	red	9001SKP35LRR9	9001SKP36LRR9	9001SKP38LRR9	9001SKP7R9
	yellow	9001SKP35LYA9	9001SKP36LYA9	9001SKP38LYA9	9001SKP7A9

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

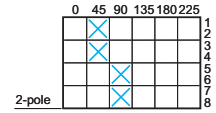
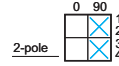
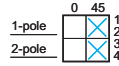


Legends

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 (°)



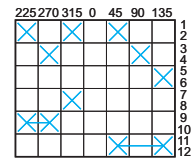
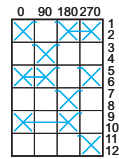
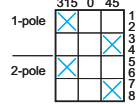
Cam switches, K1 / K2 series

2

Function	Switches	ON-OFF switches	Stepping switches
Degree of protection	front face	45° switching angle	90° switching angle
Conventional thermal current (Ith)	IP 65 (1)	IP 65 (1)	IP 65 (1)
Rated insulation voltage (Ui) conforming to IEC60947-1	12 A 20 A	12 A 20 A	12 A 20 A
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 Plastic mounting plate for Ø 22 mm hole	K1B 002ALH K2B 002ALH K1B 002ACH K2B 002ACH	K1B 1002HLH K2B 1002HLH K1B 1002HCH K2B 1002HCH
		K1D 012QLH K2D 012QLH K1D 012QCH K2D 012QCH	



positions (°)



Cam switches, K1 / K2 series

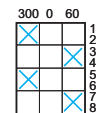
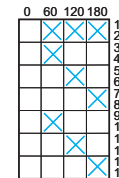
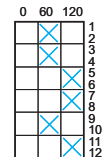
Function	Changeover switches	Ammeter switches	Voltmeter switches
Degree of protection	front face	IP 65 (1)	IP 65 (1)
Conventional thermal current (Ith)	12 A 20 A	12 A 20 A	12 A 20 A
Rated insulation voltage (Ui) conforming to IEC60947-1	690 V	690 V	690 V
Number of positions	2 + "0" position	3 + "0" position (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 Plastic mounting plate for Ø 22 mm hole	K1D 002ULH K2D 002ULH K1D 002UCH K2D 002UCH	K1F 003MLH to be compiled * K1F 003MCH to be compiled *
		K1F 027MLH to be compiled * K1F 027MCH 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 (°)



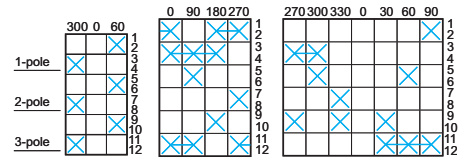
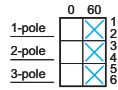
Cam switches with key operated lock, K1 series

Function	Stepping switches	Run switches	Changeover switches + "0" pos.
Degree of protection	front face	IP 65	IP 65
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	K1F 022QZ2 K1F 022QZ4	K1G 043RZ2 K1G 043RZ4
		K1D 002UZ2 K1D 002UZ4	

10 to 150 A ratings



positions (°)



Cam switches, K10 series

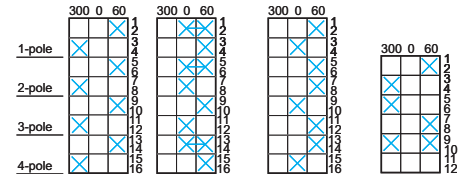
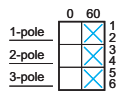
Function	Switches	Changeover switches	Ammeter switches	Voltmeter switches
Degree of protection front face	IP 65	IP 65	IP 65	IP 65
Conventional thermal current (Ith)	10 A	10 A	10 A	10 A
Rated insulation voltage (Ui) conforming to IEC60947-1	440 V	440 V	440 V	440 V
Number of positions	2	2 + "0" position	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 K10F003UCH	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 ON-OFF	Changeover with "0" position	Starting star-delta	Starting 2-speed	Reversing
Degree of protection front face	IP 40	IP 40	IP 40	IP 40	IP 40	IP 40
Conventional thermal current (Ith)	32 A	32 A	32 A	32 A	32 A	32 A
Rated insulation voltage (Ui) 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.	with 45 x 45 mm front plate multifixing
References (5)*	KZ 65	KZ 66	KZ 73

* sold in lots of

Universal range

High performance and wide choice of units



Ø 70 mm

2

Illuminated beacons XVB L		Steady light signaling		Flashing light signaling	
Light source		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)
Degree of protection		IP 66			
Beacon references (2)	12...250 V AC/DC	XVBL3●	–	–	–
	24 V AC/DC	–	XVBL0B●	XVBL1B●	XVBL6B●
	120 V AC	–	XVBL0G●	XVBL1G●	XVBL6G●
	230 V AC	–	XVBL0M●	XVBL1M●	XVBL6M●

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)
Light source		–	Incandescent BA 15d bulb, 10 W max. (not included)	Integral protected LED	Integral protected LED	"Flash" discharge tube 5 J (1)	–
Degree of protection		IP 66					–
Base unit references	with cover	XVBC21 (4)	–	–	–	–	–
	without cover	XVBC07 (5)	–	–	–	–	–
Lens unit references (2)	12... 230 V AC/DC	–	XVBC3●	–	–	–	–
	24 V AC/DC	–	–	XVBC2B●	XVBC5B●	XVBC6B●	–
	120 V AC	–	–	XVBC2G●	XVBC5G●	XVBC6G●	–
	230 V AC	–	–	XVBC2M●	XVBC5M●	XVBC6M●	–
Audible unit references unidirectional	12...48 V AC/DC	–	–	–	–	–	XVBC9B
	120...230 V AC	–	–	–	–	–	XVBC9M

(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)
Light source		–	Incandescent BA 15d bulb, 7 W max. (not included)	"Flash" discharge tube 0.3 J	"Flash" discharge tube 0.6 J	–
Degree of protection		IP 65				
Base unit	with cover	XVPC21	–	–	–	–
References (2)	250 V max.	–	XVPC3●	–	–	–
	24 V AC/DC (flash) - 24 V DC (buzzer)	–	–	XVPC6B●	–	XVPC09B
	120 V AC	–	–	–	XVPC6G●	XVPC09G
	230 V AC	–	–	–	XVPC6M●	XVPC09M

(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		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.

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

(3) Flash signaling 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

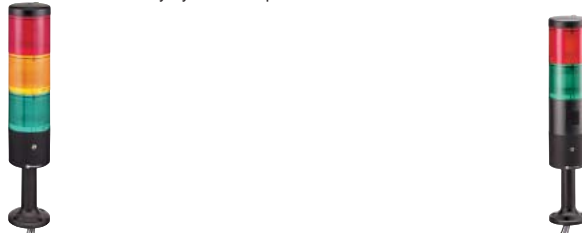


Ø 70 mm

2

Complete, pre-cabled beacons and indicator banks XVD (1)	1 signaling unit Flash light		2 signaling units 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.



Ø 70 mm

Complete, pre-cabled beacons and indicator banks XVD (1)	3 signaling units Steady light		Steady light + "flash"	Steady light + buzzer		
	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	XVDB2GAR6	XVDB2SGR
	230 V AC		XVDM1GAR	XVDM2GAR	-	XVDM2SGR

Complete, pre-cabled beacons and indicator banks XVD (2)	4 signaling units Steady light		Steady light + buzzer		
	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.

(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					
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	
Light source		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
References	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	–

2

(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			
Light source		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
References	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
Description		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	–
Diameter (mm)		Ø 25	Ø 25	Ø 20	Ø 20	Ø 20	Ø 20	–
Support tubes	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	–	–	–	–	–	–	
Fixing plates, black	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).

Pendant control stations for control circuits

Ready to use



2		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	I _{the}	10 A			
Connection		Screw clamp terminals, 1 x 2.5 mm ² or 2 x 1.5 mm ²			
For control of		single-speed motors 		2-speed motors 	
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 BS44)	
Number of operators	mechanically interlocked between pairs	2		4	
	Emergency stop	without	ZA2 BS44	without	ZA2 BS44
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	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.



2

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 Tesy Model U	
Supply voltages		5 VDC or PLC power supply	24 VDC		
References		XBTN200	XBTN400	XBTN410	XBTN401 XBTNU400

(1) Except XBTN200: alphanumeric screen.

Magelis XBT R with matrix screen



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		XBTR400	XBTR410 XBTR411

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		XBTR500	

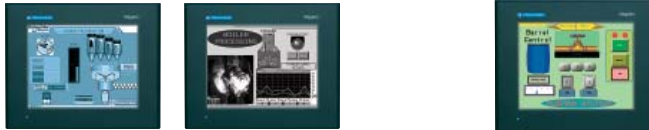
Graphic terminals Magelis XBT GT with 3.8" touchscreen



2

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	

2

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	
Compatibility with PLCs	Twido, Nano, TSX Micro, Premium, Quantum, Modicon M340			
USB port	1		2	
Video in	no		no	
Built-in Ethernet TCP/IP	no		yes	
Supply voltage	24 VDC			
References	XBTGK2120		XBTGK2330	
			XBTGK5330	



2

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	Vijeo 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.

Magelis Accessories

For display units and terminals



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

2

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

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



2

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 PCMCIA slot
			1 x type III/type I	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)	MPCST11NAJ00T	MPCST21NAJ10T	MPCST52NDJ20T
	HMI Edition (2)	MPCST11NAJ00H	MPCST21NAJ10R	MPCST52NDJ20H

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

(2) Vjeco 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

2

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	Vjeo Designer RT	MPCKT12NAX00H	MPCKT22NAX00R	MPCKT55NAX20H
	Vjeo 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



2

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



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

2

External screen

Magelis iDisplay



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

Accessories

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

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:

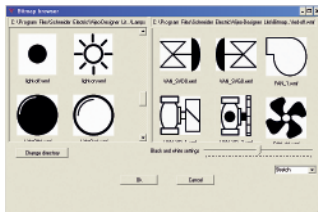
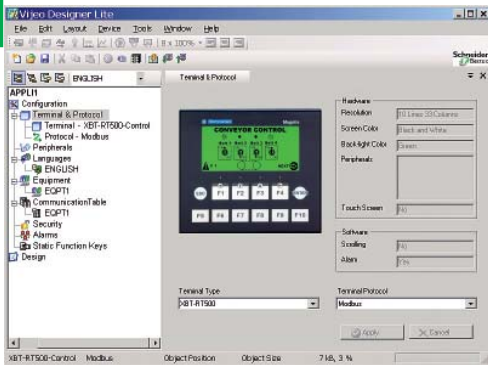
- Graphic objects developed for Magelis XBT RT (bar charts, trend curves...)
- Character fonts Byzantine, simplified Chinese, Cyrillic, Japanese
- Project reports
- Application simulation on PC
- Multilingual software : English, French, German, Italian, Spanish and Chinese.

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.

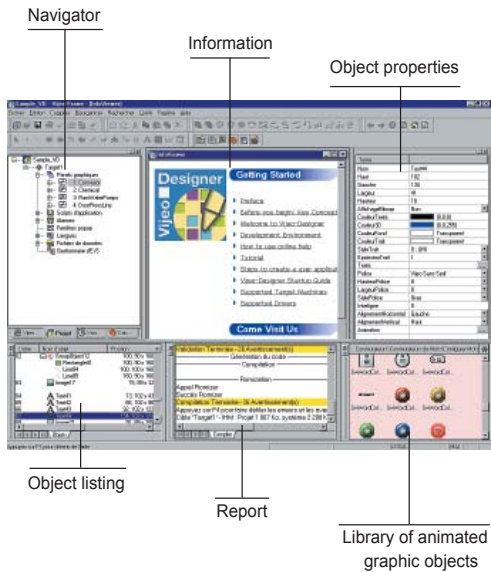
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Vijeo Designer configuration software enables creation of automated system control operator dialogue applications for XBT GT, GK, GTW terminals and Smart & Compact i PC. It also enables management of the multimedia functions of XBTGTs and Smart & Compact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

2



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

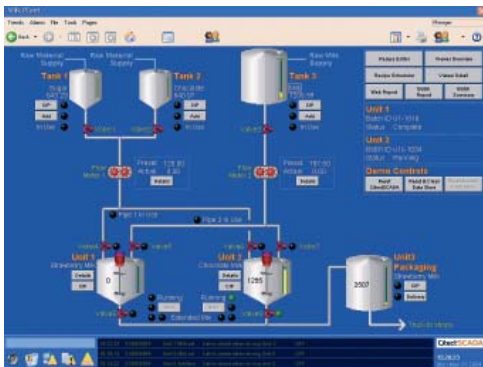
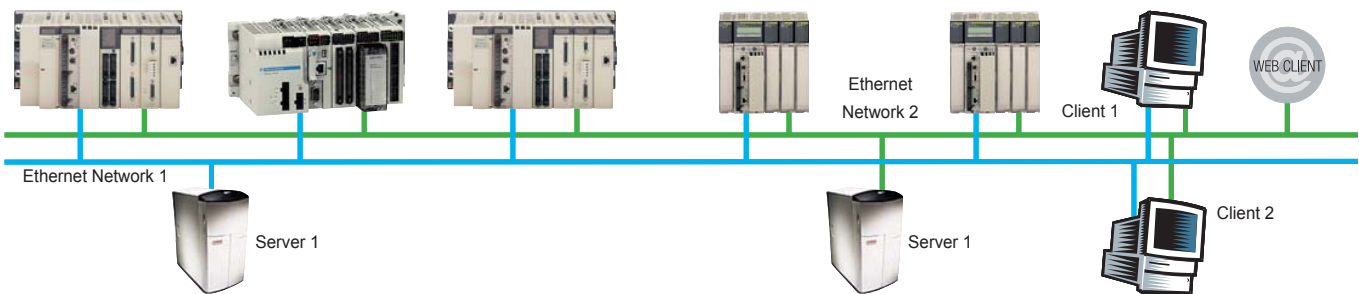
	Description	Composition	References
	Configuration software Vijeo Designer (1 license)	Without cable With USB cable	VJDSNDTGSV●●M VJDSUDTGAV●●M
	Configuration software Vijeo Designer (3 licenses)	Without cable	VJDGNDTGSV●●M
	Configuration software Vijeo Designer (10 licenses)	Without cable	VJDTNDTGSV●●M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



2

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, Viject Citect provides switches with no loss of functionality, or performance.

Advanced help

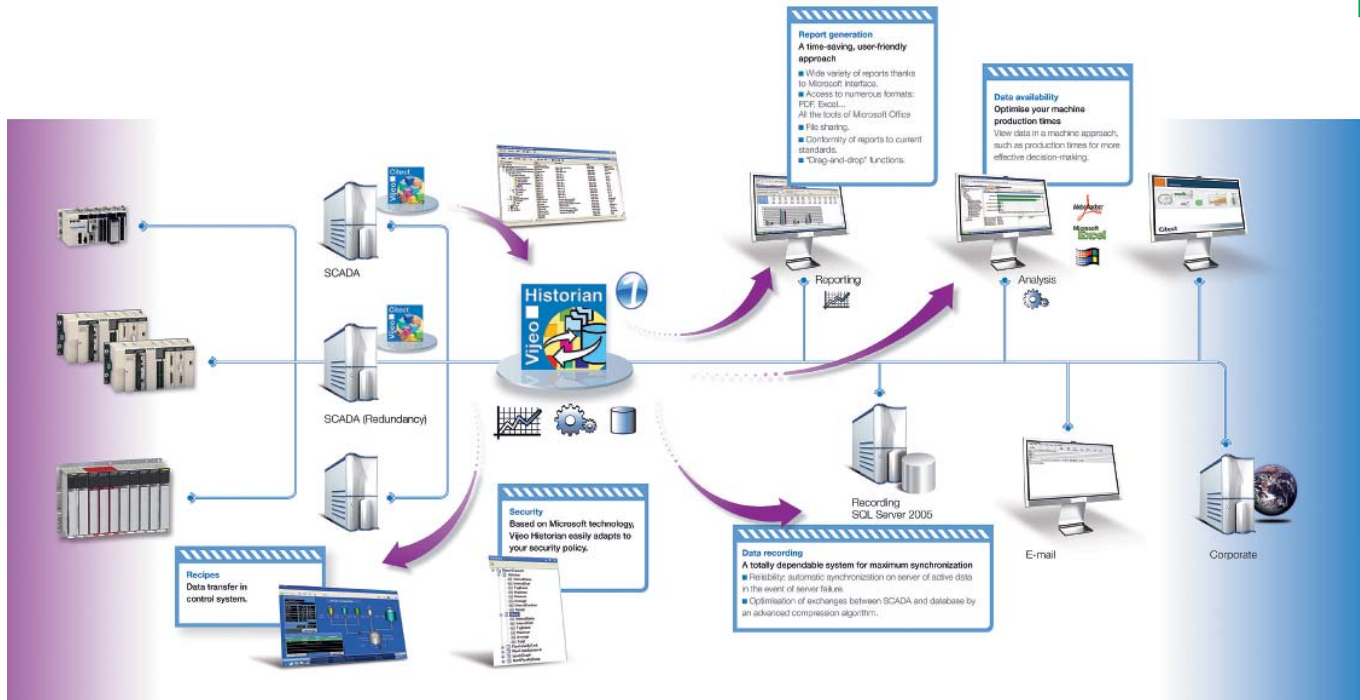
Vijeo Citect online help includes easy access to information and its use of "breadcrumb trails" simplifies navigation.

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

2



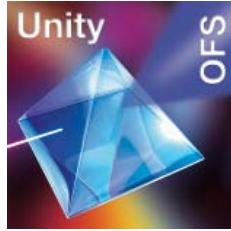
Vijeo Historian is a powerful factory-level reporting tool which collects, memorises and produces reports from different systems. Based on Microsoft SQL Server 2005, it is a true link between production and the information system.

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.

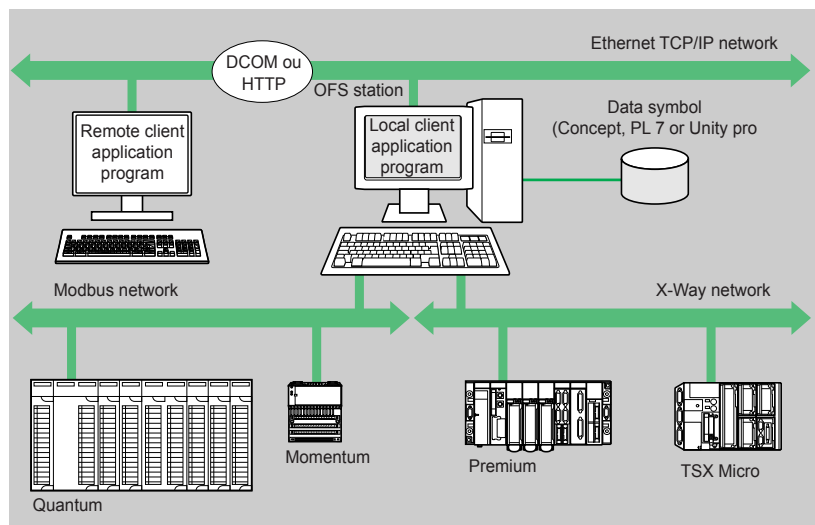
Vijeo Historian services

- 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



2

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	TLX CD SU OFS 33
	10 stations licence	TLX CD ST OFS 33
	200 stations licence	-
		TLX CD LF OFS 33



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.





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 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)

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



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.

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



2

Applications		Web Server modules for PLCs					
		FactoryCast				FactoryCast HMI	
Target devices	Type	TSX Micro PLCs	Modicon M340 PLCs	Modicon Premium PLCs	Modicon Quantum PLCs	Modicon Premium PLCs	Modicon Quantum PLCs
Network & Remote access services	Remote access	Intranet or via external RAS/modem					
	Gateway function	Remote programming, downloading via FTP, access to Web server via Internet browser					
	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					
Web server	Security	Protection by IP address filtering and passwords					
	Characteristics	HTTP and FTP server, 8 Mb memory available for user, hosting of user Web pages and documents (Doc, Pdf, Excel)					
Predefined services	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					
Customizable services	Graphic views	Graphic monitoring via animated pages (integrated graphic editor)					
	Unity Pro operator screen	-				Display in the form of Web pages	
Advanced services and HMI	User Web pages	Graphic monitoring via animated Web pages created by the user					
	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	140NOE7711	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)	
-			

2

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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