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Pendant control stations with intuitive operation

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Pendant control stations

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(1) XAC M and XAC F: products for maintenance purposes only.

Controllers

Selection guide *6/66*

■ Controllers for “light hoisting” applications, type **XKB**

□ Controllers **XKB A** with predefined, non modifiable schemes, factory assembled . . . . . *page 6/72*

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■ Controllers for “medium hoisting” applications, type **XKD F**

□ Controllers with variable composition schemes, factory assembled . . . . . *page 6/78*

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■ Controllers for “heavy hoisting” applications, type **XKM**

□ Controllers **XKM A** and **XKM B** with variable composition schemes, factory assembled . . . . . *page 6/86*

□ Controllers **XKM C** with variable composition schemes, factory assembled . . . . . *page 6/93*

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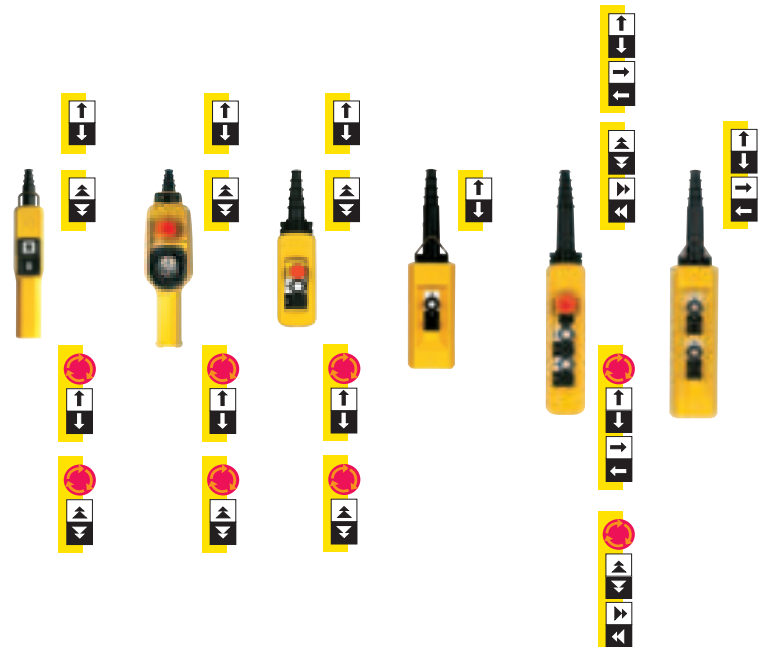
■ Potentiometers for controllers

□ For standard applications, type **XKZ A** . . . . . *page 6/100*

□ For applications requiring an extended “neutral zone”, types **XKB Z** and **XKD Z** . . . . . *page 6/101*

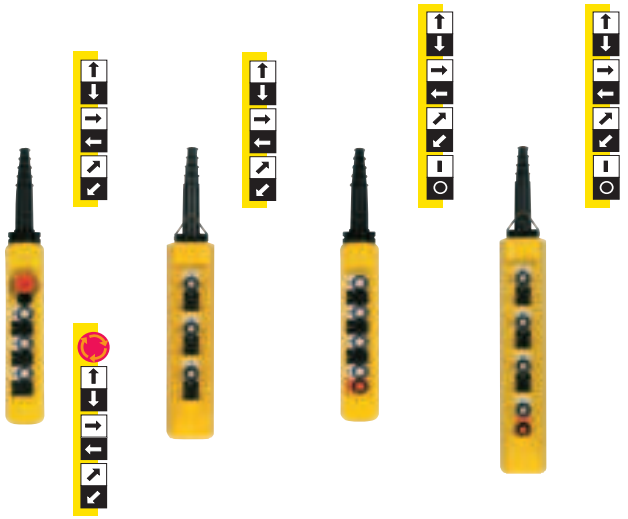
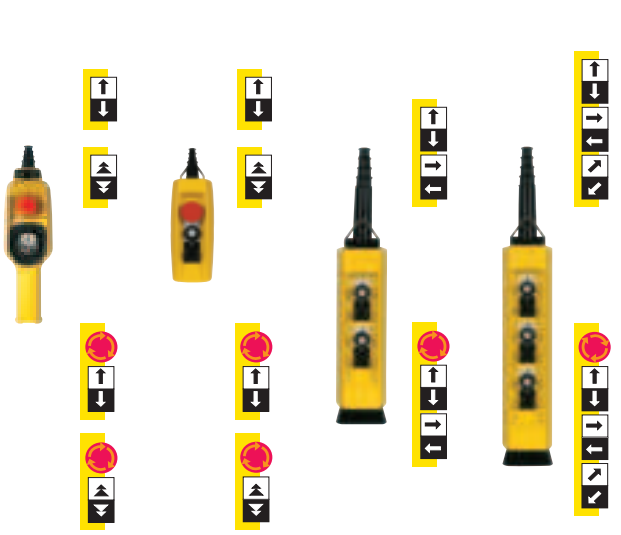
Pendant control stations
Complete stations “ready for use” and variable composition stations

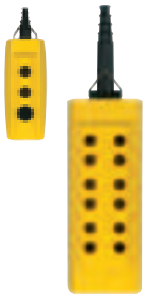
Complete stations “ready for use”

Applications	Control circuits					
	Simple hoisting: 1 movement				Handling-hoisting: 2 movements	
Motor control *Single-speed* *2-speed* *Emergency stop*						
Number of operators	2	1 (2-directional)	2	2	4	4
Enclosure material	Polypropylene	Polypropylene	Polypropylene	Polyester	Polypropylene	Polyester
Pendant station type reference	XAC A	XAC D	XAC A	XAC B	XAC A	XAC B
Page(s)	6/5	6/9	6/19	6/35	6/20	6/35

Variable composition stations

Applications	Control circuits		
Number of cut-outs	1 or 2	2, 3, 4, 5, 6, 8 or 12	2, 3, 4, 6, 8 or 12 in 1 row or 2 rows of 6
			
Equipment	■ Emergency stop (front mounted) ■ Contact blocks for 1 or 2 speeds	■ Pushbuttons ■ Selector/key switches ■ Pilot lights ■ Emergency stop (front or base mounted) ■ Wobblesticks ■ Contact blocks for 1 or 2 speeds	■ Pushbuttons ■ Selector/key switches ■ Pilot lights ■ Emergency stop (front or base mounted) ■ Wobblesticks ■ Contact blocks for 1 or 2 speeds
Enclosure material	Polypropylene	Polypropylene	Polyester
Pendant station type reference	XAC D	XAC A	XAC B
Page(s)	6/12 and 6/13	6/23 to 6/29	6/39 to 6/54

Handling-hoisting: 3 movements				Power circuits			
				Simple hoisting: 1 movement		Handling-hoisting:	
						2 movements	3 movements
							
6	6	8	8	1 (2-directional)	2	4	6
Polypropylene	Polyester	Polypropylene	Polyester	Polypropylene	Polyester	Polyester	Polyester
XAC A	**XAC B**	**XAC A**	**XAC B**	**XAC D**	**XAC B**	**XAC B**	**XAC B**
6/20	6/35	6/21	6/35	6/11	6/37	6/37	6/38

4 or 8	Up to 30	Power circuits	
		1 or 2	2, 3, 4, 6, 8 or 12 in 2 rows of 6
Products for maintenance purposes only	Products for maintenance purposes only		
			
■ Pushbuttons ■ Selector/key switches ■ Pilot lights ■ Emergency stop (front or base mounted) ■ Wobblesticks ■ Contact blocks for 1 or 2 speeds	■ Pushbuttons ■ Selector/key switches ■ Pilot lights ■ Emergency stop (front or base mounted) ■ Wobblesticks ■ Contact blocks for 1 or 2 speeds	■ Emergency stop (front mounted) ■ Contact blocks for 1 or 2 speeds	■ Pushbuttons ■ Selector/key switches ■ Pilot lights ■ Emergency stop (front or base mounted) ■ Wobblesticks ■ Contact blocks for 1 or 2 speeds
Aluminium	Polyester	Polypropylene	Polyester
XAC M	**XAC F**	**XAC D**	**XAC B**
6/41	6/61	6/12 and 6/13	6/37 to 6/54

Pendant control stations
Double insulated with intuitive operation, type XAC A “Pistol grip”
For control circuits

Environment

Conformity to standards			EN/IEC 60947-5-1 EN/IEC 60204-32, UL 508, CSA C22-2 n° 14 EN/IEC 60947-5-5 and EN/ISO 13850: 2006 for versions with trigger action Emergency stop
Product certifications			UL type 4X A600-Q600, CSA type 4 A600-Q600
Protective treatment	Standard version		“TH”
Ambient air temperature	For operation	**°C**	- 25…+ 70
	For storage	**°C**	- 40…+ 70
Vibration resistance			15 gn (10…500 Hz) conforming to IEC 60068-2-6
Shock resistance			100 gn conforming to IEC 60068-2-27
Electric shock protection			Class II conforming to IEC 61140
Degree of protection			IP 65 conforming to IEC 60529 IK 08 conforming to EN 50102
Mechanical durability (in millions of operating cycles)			1
Enclosure			Double insulated polypropylene, coloured yellow throughout
Cable entry			Rubber sleeve with stepped entry diameter for cable Ø 7…Ø 15 mm

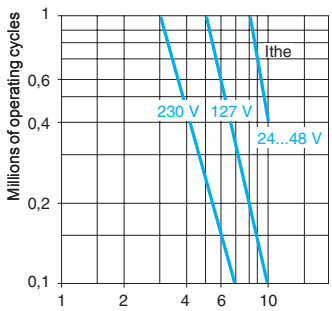
Contact block characteristics

Rated operational characteristics		∼ AC-15: A600 or Ue = 600 V, Ie = 1.2 A or Ue = 240 V, Ie = 3 A ⎓ DC-13: Q600 or Ue = 600 V, Ie = 0.1 A or Ue = 250 V, Ie = 0.27 A conforming to EN/IEC 60947-5-1 Appendix A
Thermal current (Ithe)	**A**	10
Rated insulation voltage (Ui)	**V**	600, degree of pollution 3, conforming to IEC 60947-1
Rated impulse withstand voltage (U imp)	**kV**	6, conforming to IEC 60947-1
Positive operation		Mushroom head pushbutton: N/C contact with positive opening operation conforming to EN/IEC 60947-5-1 Appendix K
Contact operation		Slow break
Resistance across terminals	**MΩ**	⩽ 25
Operating force	**N**	13 to 15
Terminal referencing		By numbers conforming to CENELEC EN 50013
Short-circuit protection		10 A cartridge fuse type gG (gI)
Connection	**mm²**	Screw and captive cable clamp terminals. Clamping capacity: 1 x 2.5 or 2 x 1.5 with or without cable end

Rated operational power

Conforming to EN/IEC 60947-5-1 Appendix C. Utilisation categories AC-15 and DC-13.
Operating rate: 3600 operating cycles/hour. Load factor: 0.5.

a.c. supply ∼ 50/60 Hz
Inductive circuit



d.c. supply ⎓
Power broken in W for 1 million operating cycles

Voltage	V	24	48	120
	W	65	48	40

References: pages 6/5 and 6/6
Dimensions: page 6/7
Application schemes: page 6/7

Pendant control stations

Double insulated with intuitive operation, type XAC A “Pistol grip”

For control circuits

Complete stations “ready for use”



XAC A201



XAC A211

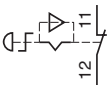
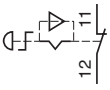
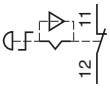
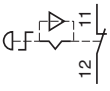


XAC A2014



XAC A2114

For control of single-speed hoist motors

Functions	Number of operators	Type of operators	Contact block(s) and scheme			Reference	Weight
			Per direction		For Emergency stop		kg
	**2** mechanically interlocked	Standard	1 N/O ZB2 BE101		–	**XAC A201**	0.270
			1 N/C + 1 N/O ZB2 BE102 + ZB2 BE101		–	**XAC A205**	0.300
		Booted	1 N/O ZB2 BE101		–	**XAC A211**	0.290
			1 N/C + 1 N/O ZB2 BE102 + ZB2 BE101		–	**XAC A215**	0.320
	2 mechanically interlocked + 1 trigger action latching Emergency stop Ø 30 mm operator ZA2 BS834 *(1)*	Standard	1 N/O ZB2 BE101		1 N/C ZB2 BE102 	**XAC A2014**	0.310
			1 N/C + 1 N/O ZB2 BE102 + ZB2 BE101		1 N/C ZB2 BE102 	**XAC A2054**	0.340
		Booted	1 N/O ZB2 BE101		1 N/C ZB2 BE102 	**XAC A2114**	0.310
			1 N/C + 1 N/O ZB2 BE102 + ZB2 BE101		1 N/C ZB2 BE102 	**XAC A2154**	0.340

(1) Trigger action mechanically latching Emergency stop pushbuttons conform to standards EN/IEC 60204-32, EN/ISO 13850: 2006, Machinery directive 98/37/EC and standard EN/IEC 60947-5-5.

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Characteristics: page 6/4
Dimensions: page 6/7
Application schemes: page 6/7

Pendant control stations

Double insulated with intuitive operation, type XAC A "Pistol grip"

For control circuits
Complete stations "ready for use"

For control of 2-speed hoist motors

Functions	Number of operators	Type of operators	Contact block(s) and scheme: Per direction	For Emergency stop	Reference	Weight kg
	2 mechanically interlocked	Standard	2 step 1 N/O + 1 N/O staggered ZB2 BE101 + ZB2 BE201	–	**XAC A207**	0.320
		Booted	2 step 1 N/O + 1 N/O staggered ZB2 BE101 + ZB2 BE201	–	**XAC A217**	0.320
	2 mechanically interlocked + 1 trigger action latching Emergency stop Ø 30 mm operator ZA2 BS834 *(1)*	Standard	2 step 1 N/O + 1 N/O staggered ZB2 BE101 + ZB2 BE201	1 N/C ZB2 BE102	**XAC A2074**	0.360
		Booted	2 step 1 N/O + 1 N/O staggered ZB2 BE101 + ZB2 BE201	1 N/C ZB2 BE102	**XAC A2174**	0.360

DF565520 DF565519



XAC A207



XAC A217

DF565521 DF565522



XAC A2074



XAC A2174

6

Separate components and spare parts

Description	For use with	Marking/ Function	Scheme	Reference	Weight kg
Booted pushbutton operators with fixing screws	XAC A211● XAC A215● (single-speed)	▲	–	**XAC A921**	0.010
		▼	–	**XAC A922**	0.010
	XAC A217● (2-speed)	▲	–	**XAC A923**	0.010
		▼	–	**XAC A924**	0.010
Contact blocks spring return, slow break	XAC A all models	N/O		**ZB2 BE101**	0.015
		N/C		**ZB2 BE102**	0.015
		N/O staggered		**ZB2 BE201**	0.015
Protective cable sleeve + suspension ring + cable clamp	Cable Ø 7 to Ø 13 mm	–	–	**XAC A913**	0.070

803998 803990

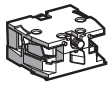


XAC A921



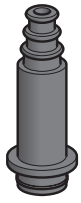
XAC A923

530667



ZB2 BE●●●

530668



XAC A913

(1) Trigger action mechanically latching Emergency stop pushbuttons conform to standards EN/IEC 60204-32, EN/ISO 13850: 2006, Machinery directive 98/37/EC and standard EN/IEC 60947-5-5.

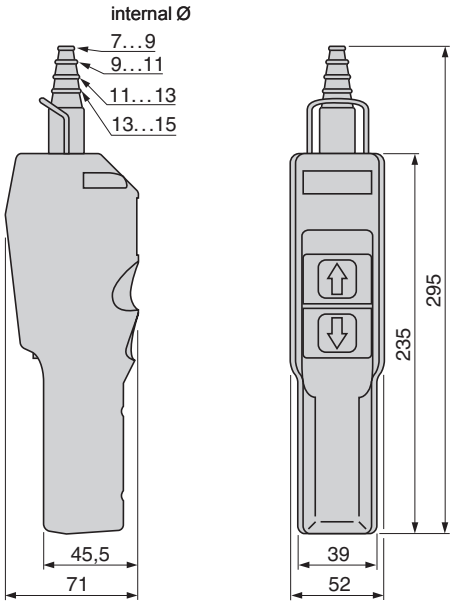
Characteristics: page 6/4 Dimensions: page 6/7 Application schemes: page 6/7

Pendant control stations

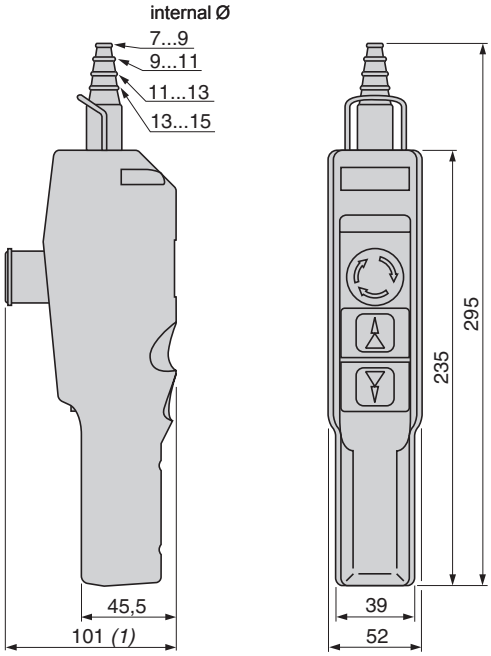
Double insulated with intuitive operation, type XAC A "Pistol grip"
For control circuits
Complete stations "ready for use"

Dimensions

XAC A2●●



XAC A2●●●

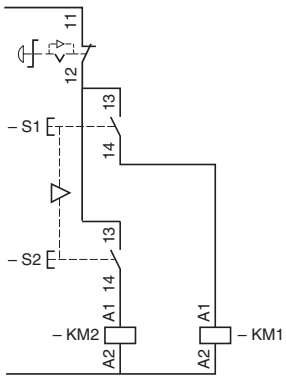


(1) With trigger action latching Ø 30 mm Emergency stop ZA2 BS834.

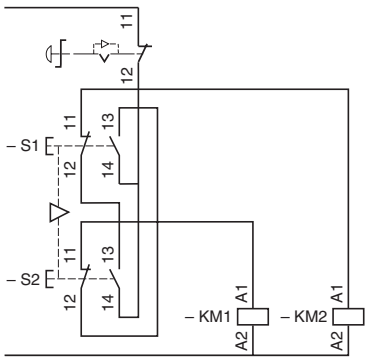
Application schemes (typical examples)

For control of single-speed reversing motor

XAC A2●1●

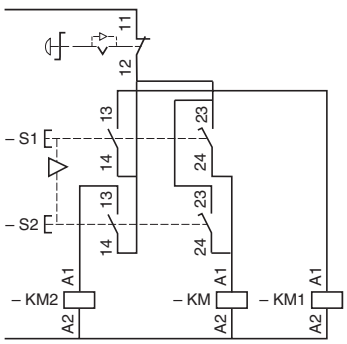


XAC A2●5●



For control of 2-speed reversing motor

XAC A2●7●



Characteristics: page 6/4
References: pages 6/5 and 6/6

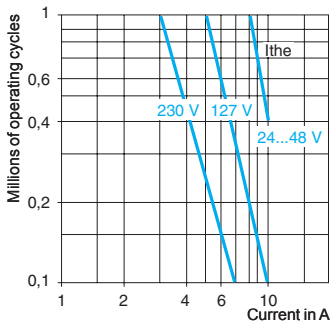
Pendant control stations
Double insulated with intuitive operation, type XAC D
For control circuits

Environment			
Conformity to standards			EN/IEC 60947-5-1 EN/IEC 60204-32, UL 508, CSA C22-2 n° 14 EN/IEC 60947-5-5 and EN/ISO 13850: 2006 for versions with trigger action Emergency stop
Protective treatment	Standard version		"TH"
Ambient air temperature	For operation	**°C**	- 25…+ 70
	For storage	**°C**	- 40…+ 70
Vibration resistance			15 gn (10…500 Hz) conforming to IEC 60068-2-6
Shock resistance			70 gn conforming to IEC 60068-2-27
Electric shock protection			Class II conforming to IEC 61140
Degree of protection			IP 65 conforming to IEC 60529 IK 08 conforming to EN 50102
Mechanical durability (in millions of operating cycles)			3
Enclosure			Double insulated polypropylene, coloured yellow throughout
Cable entry			Rubber sleeve with stepped entry diameter for cable Ø 7…Ø 18 mm
Contact block characteristics			
Rated operational characteristics			∼ AC-15: A600 or Ue = 600 V, Ie = 1.2 A or Ue = 240 V, Ie = 3 A ⎓ DC-13: Q600 or Ue = 600 V, Ie = 0.1 A or Ue = 250 V, Ie = 0.27 A conforming to EN/IEC 947-5-1 Appendix A
Thermal current (Ithe)	**XAC D2●A010●**	**A**	10
	XAC D2●A12●1	**A**	16
Rated insulation voltage (Ui)		**V**	600, degree of pollution 3, conforming to IEC 60947-1
Rated impulse withstand voltage (U imp)		**kV**	6, conforming to IEC 60947-1
Positive operation			Mushroom head pushbutton on **XAC D22A●●●●**: N/C contact with positive opening operation conforming to EN/IEC 60947-5-1 Appendix K
Contact operation			Single-speed contact blocks: slow break 2-speed contact blocks: snap action
Resistance across terminals		**MΩ**	⩽ 25
Operating force	**XAC D2●A010●, XAC D2●A12●1**	**N**	16
Terminal referencing			By numbers conforming to CENELEC EN 50013
Short-circuit protection			10 A cartridge fuse type gG (gI)
Connection		**mm²**	Captive screw clamp terminals Clamping capacity: 1 x 2.5 or 2 x 1.5 with or without cable end

Operational power

Conforming to IEC 60947-5-1 Appendix C. Utilisation categories AC-15 and DC-13.
Operating rate: 3600 operating cycles/hour. Load factor: 0.5.

a.c.supply ∼ 50/60 Hz
Inductive circuit



d.c. supply ⎓
Power broken in W for 1 million operating cycles

Voltage	**V**	**24**	**48**	**120**
Inductive circuit	W	65	48	40

References: page 6/9 | Dimensions: page 6/14 | Application schemes: page 6/15 | Presentation: page 6/16

Pendant control stations

Double insulated with intuitive operation, type XAC D

For control circuits

Complete stations “ready for use”

DF565503



XAC D21A0101

DF565501



XAC D24A0105

DF565504



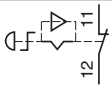
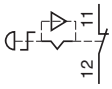
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DF565502

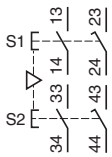
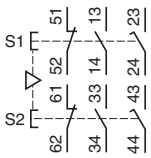
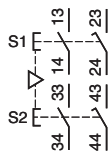
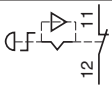
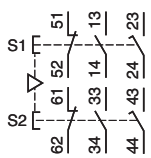
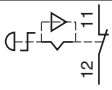


XAC D24A1241

For control of single-speed hoist motors

Functions	Number of operators	Contact block(s) and scheme		Reference	Weight kg
		Per direction	For Emergency stop		
 Reversing, mechanically interlocked	**1** 2-directional operator	1 N/O ZB2 BE101 	–	**XAC D21A0101**	0.340
		1 N/C + 1 N/O ZB2 BE102 + ZB2 BE101 	–	**XAC D21A0105**	0.365
	1 2-directional operator + 1 trigger action Emer. stop Ø 30 mm ZA2 BS834 operator *(2)*	1 N/O ZB2 BE101 	1 N/C ZB2 BE102 	**XAC D24A0101**	0.395
		1 N/C + 1 N/O ZB2 BE102 + ZB2 BE101 	1 N/C ZB2 BE102 	**XAC D24A0105**	0.425

For control of 2-speed hoist motors

Functions	Number of operators	Contact block(s) and scheme		Reference	Weight kg
		Per direction	For Emergency stop		
 Reversing, mechanically interlocked	**1** 2-directional operator	1 N/O + N/O staggered XED S1231 *(1)* 	–	**XAC D21A1231**	0.365
		1 N/C + N/O + N/O staggered XED S1241 *(1)* 	–	**XAC D21A1241**	0.405
	1 2-directional operator + 1 trigger action latching Emergency stop Ø 30 mm ZA2 BS834 operator *(2)*	1 N/O + N/O staggered XED S1231 *(1)* 	1 N/C ZB2 BE102 	**XAC D24A1231**	0.420
		1 N/C + N/O + N/O staggered XED S1241 *(1)* 	1 N/C ZB2 BE102 	**XAC D24A1241**	0.420

(1) Reference of double contact block for reversing operation.

(2) Trigger action mechanically latching Emergency stop pushbuttons conform to standards EN/IEC 60204-32, EN/ISO 13850: 2006, Machinery directive 98/37/EC and standard EN/IEC 60947-5-5.

6

Pendant control stations
Double insulated with intuitive operation, type XAC D
For power circuits (direct switching)

Environment			
Conformity to standards			EN/IEC 60947-5-1 EN/IEC 60204-32, UL 508, CSA C22-2 n° 14 EN/IEC 60947-5-5 and EN/ISO 13850: 2006 for versions with trigger action Emergency stop EN/IEC 60947-3
Protective treatment	Standard version		"TH"
Ambient air temperature	For operation	**°C**	- 25…+ 70
	For storage	**°C**	- 40…+ 70
Vibration resistance			15 gn (10…500 Hz) conforming to IEC 60068-2-6
Shock resistance			100 gn conforming to IEC 60068-2-27 except **XAC D** 2-speed: 70 gn
Electric shock protection			Class II conforming to IEC 61140
Degree of protection			IP 65 conforming to IEC 60529 IK 08 conforming to EN 50102
Mechanical durability (in millions of operating cycles)			3
Enclosure			Double insulated polypropylene, coloured yellow throughout
Cable entry			Rubber sleeve with stepped entry diameter for cable Ø 7…Ø 18 mm
Contact block characteristics			
Thermal current (Ithe)	**XEN T●●●●**	**A**	10
	XED S●●●●	**A**	16
Rated insulation voltage (Ui)		**V**	500, degree of pollution 3 conforming to IEC 60947-1 400, degree of pollution 3 for Emergency stop contact on stations **XAC D22P●●●●**
Rated impulse withstand voltage (U imp)		**kV**	6, conforming to IEC 60947-1 4 for Emergency stop contact on stations **XAC D22P●●●●**
Contact operation			Snap action
Operating force		**N**	Single-speed: 28; 2-speed: 31
Terminal referencing			By numbers conforming to CENELEC EN 50005
Short-circuit protection			6 A maximum cartridge fuse type aM
Connection		**mm²**	Screw clamp terminals Clamping capacity: 1 x 2.5 or 2 x 1.5 with or without cable end
Operational power			Utilisation categories AC-3 and AC-4 conforming to IEC 60947-3 Appendix A 3 phases, 2 poles **XED S2●●●**: 1.1 kW-400 V **XED S3●●●**: 2.2 kW-400 V Brake contact: 100 V d.c. supply, 0.7 A, L/R = 100 ms
			Utilisation category AC-23B, mushroom head Emergency stop 3 phases, 3 poles, isolating block: **XEN T●●●●**: 3 kW-400 V
Electrical durability (in millions of operating cycles)			Utilisation categories AC-3 and AC-4 conforming to IEC 60947-3 Appendix A Duty cycle comprising 75% AC-3, 25% AC-4 Operating rate: 600 per hour, load factor: 0.4 3 phases, 2 poles **XED S2●●●**: 1.1 kW-400 V = 1 million **XED S3●●●**: 2.2 kW-400 V = 1 million

6

References: page 6/11 | Dimensions: page 6/14 | Application schemes: page 6/15 | Presentation: page 6/16

Pendant control stations

Double insulated with intuitive operation, type XAC D

For power circuits (direct switching)
Complete stations “ready for use”


DF565500

XAC D21P2111


DF565501

XAC D24P2121


DF565504

XAC D21P2231


DF565502

XAC D24P3241

For control of single-speed hoist motors

Functions	Number of operators	Contact blocks: Per direction	Contact blocks: For Emergency stop	Maximum operational power/400 V	Reference	Weight kg
 Reversing, mechanically interlocked	**1** 2-directional operator	2-pole XED S2111 *(1)*	–	1.1 kW	**XAC D21P2111**	0.355
		2-pole XED S3111 *(1)*	–	2.2 kW	**XAC D21P3111**	0.355
		2-pole + 1 N/O (brake) XED S2121 *(1)*	–	1.1 kW	**XAC D21P2121**	0.355
		2-pole + 1 N/O (brake) XED S3121 *(1)*	–	2.2 kW	**XAC D21P3121**	0.355
	1 2-directional operator + 1 trigger action latching Emergency stop Ø 30 mm operator ZA2 BS834 *(2)*	2-pole XED S3111 *(1)*	1 N/C + N/C + N/C XEN T1991	2.2 kW	**XAC D24P3111** *(2)*	0.410
		2-pole + 1 N/O (brake) XED S2121 *(1)*	1 N/C + N/C + N/C XEN T1991	1.1 kW	**XAC D24P2121** *(2)*	0.410
		2-pole + 1 N/O (brake) XED S3121 *(1)*	1 N/C + N/C + N/C XEN T1991	2.2 kW	**XAC D24P3121** *(2)*	0.410

For control of 2-speed hoist motors

Functions	Number of operators	Contact blocks: Per direction	Contact blocks: For Emergency stop	Maximum operational power/400 V	Reference	Weight kg
 Reversing, mechanically interlocked	**1** 2-directional operator	2-pole XED S2231 *(1)*	–	1.1 kW	**XAC D21P2231**	0.355
		2-pole XED S3231 *(1)*	–	2.2 kW	**XAC D21P3231**	0.355
		2-pole + 1 N/O (brake) XED S2241 *(1)*	–	1.1 kW	**XAC D21P2241**	0.355
		2-pole + 1 N/O (brake) XED S3241 *(1)*	–	2.2 kW	**XAC D21P3241**	0.355
	1 2-directional operator + 1 trigger action latching Emergency stop Ø 30 mm operator ZA2 BS834 *(2)*	2-pole XED S2231 *(1)*	1 N/C + N/C + N/C XEN T1991	1.1 kW	**XAC D24P2231** *(2)*	0.420
		2-pole XED S3231 *(1)*	1 N/C + N/C + N/C XEN T1991	2.2 kW	**XAC D24P3231** *(2)*	0.420
		2-pole + 1 N/O (brake) XED S3241 *(1)*	1 N/C + N/C + N/C XEN T1991	2.2 kW	**XAC D24P3241** *(2)*	0.420

(1) Reference of double contact block for reversing operation.
(2) Trigger action mechanically latching Emergency stop pushbuttons conform to standards EN/IEC 60204-32, EN/ISO 13850: 2006, Machinery directive 98/37/EC and standard EN/IEC 60947-5-5.

Characteristics: page 6/10 | Dimensions: page 6/14 | Application schemes: page 6/15 | Presentation: page 6/16

Pendant control stations

Double insulated with intuitive operation, type XAC D

For control or power circuits

Empty enclosures, separate components and spare parts

DF565505



XAC D021

DF565506



XAC D022

DF565505



ZB2 BE10●

DF565506



XED S1231

DF565509



XED S2121

DF565510



XEN T1991

Empty enclosures

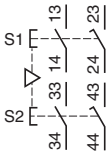
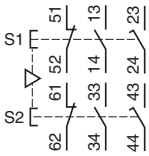
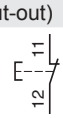
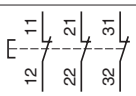
Description	Enclosure cut-outs	Reference	Weight kg
Empty enclosure comprising: - the enclosure, - protective cable sleeve for Ø 7 to 18 mm cable, - internal cable clamp, - cable tie (for tightening sleeve onto cable), - the directional operator, - legends.	For directional operator	**XAC D021**	0.345
	For directional operator + operating head (Ø 22.5 mm cut-out)	**XAC D022**	0.345

Variable composition stations, factory assembled

Use the order form on page 6/17 to define the required configuration.

Equipment: contact blocks and operating heads	See separate components, pages 6/13 and 6/14

Contact blocks

Description	Application	Function *(1)*	Scheme *(1)*	Max. power/ 400 V	Reference	Weight kg
For control circuits						
Single block spring return, slow break	Single-speed	N/O		–	**ZB2 BE101**	0.015
		N/C		–	**ZB2 BE102**	0.015
Double block spring return, snap action	2-speed	N/O + N/O staggered		–	**XED S1231**	0.015
		N/C + N/O + N/O staggered		–	**XED S1241**	0.015
For power circuits						
Double block spring return, snap action	Single-speed	2-pole	*(2)*	1.1 kW	**XED S2111**	0.080
				2.2 kW	**XED S3111**	0.090
		2-pole + 1 N/O (brake)	(2)	1.1 kW	**XED S2121**	0.090
				2.2 kW	**XED S3121**	0.090
	2-speed	2-pole	*(2)*	1.1 kW	**XED S2231**	0.110
				2.2 kW	**XED S3231**	0.110
		2-pole + 1 N/O (brake)	*(2)*	1.1 kW	**XED S2241**	0.120
				2.2 kW	**XED S3241**	0.120
For Emergency stop operating head (Ø 22.5 mm cut-out)						
Single block spring return, slow break		N/C		–	**ZB2 BE102**	0.015
		N/C + N/C + N/C		–	**XEN T1991**	0.040

(1) Function or scheme per direction for double contact blocks.
(2) See application schemes, page 6/15.

Characteristics: pages 6/8 and 6/10 | Dimensions: page 6/14 | Application schemes: page 6/15 | Presentation: page 6/16

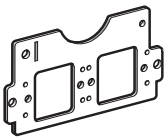
Pendant control stations

Double insulated with intuitive operation, type XAC D

For control or power circuits

Separate components and spare parts

817505

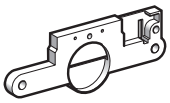


XAC D913

Contact block support plates

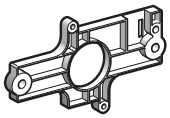
For use with	Reference	Weight kg
2 movement contact blocks ZB2 BE10● (control circuit stations)	**XAC D913**	0.010
1 contact block ZB2 BE102 for operating head	**XAC D911**	0.005
1 contact block XEN T1991 for operating head	**XAC D912**	0.010

817503



XAC D911

817504



XAC D912

Operating heads for Ø 22.5 mm cut-out

Description	Colour	Reference	Weight kg
1 trigger action latching Emergency stop Ø 30 mm operator *(1)* Turn to release	Red	**ZA2 BS834**	0.040
1 trigger action latching Emergency stop Ø 30 mm operator Key release, n° 455 *(2)* Key withdrawal in rest (unactuated) position	Red	**ZA2 BS934**	0.060
Selector switch, standard handle 2 position, stay put	Black	**ZA2 BD2**	0.018
Key switch (key n° 455) *(2)* 2 position, stay put Key withdrawal in left-hand position	–	**ZA2 BG2**	0.020
Key switch (key n° 455) *(2)* 2 position, spring return from right to left Key withdrawal in left-hand position	–	**ZA2 BG6**	0.020
Key switch (key n° 455) *(2)* 2 position, stay put Key withdrawal in left and right-hand position	–	**ZA2 BG4**	0.020
Key switch (key n° 455) *(2)* *(3)* 3 position, stay put Key withdrawal in left and right-hand position	–	**ZA2 BG5**	0.020
Key switch (key n° 455) *(2)* *(3)* 3 position, stay put Key withdrawal in centre position	–	**ZA2 BG3**	0.020

817495



ZA2 BS834

DF538494



ZA2 BS934

DF565513



ZA2 BD2

DF565514



ZA2 BG2

(1) Trigger action mechanically latching Emergency stop pushbuttons conform to standards EN/IEC 60204-32, EN/ISO 13850: 2006, Machinery directive 98/37/EC and standard EN/IEC 60947-5-5.

(2) Other key numbers available on request, please consult your Regional Sales Office.

(3) Only suitable for front mounting.

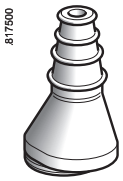
6

Characteristics: pages 6/8 and 6/10 | Dimensions: page 6/14 | Application schemes: page 6/15 | Presentation: page 6/16

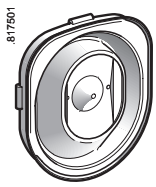
Pendant control stations

Double insulated with intuitive operation, type XAC D

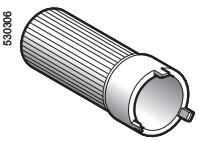
For control or power circuits
Complementary accessories



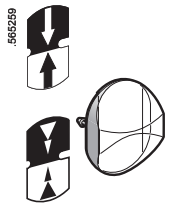
XAC D901



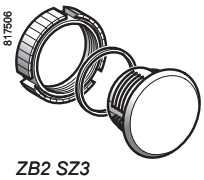
XAC D902



ZA2 BZ905



XAC D905



ZB2 SZ3

Complementary accessories

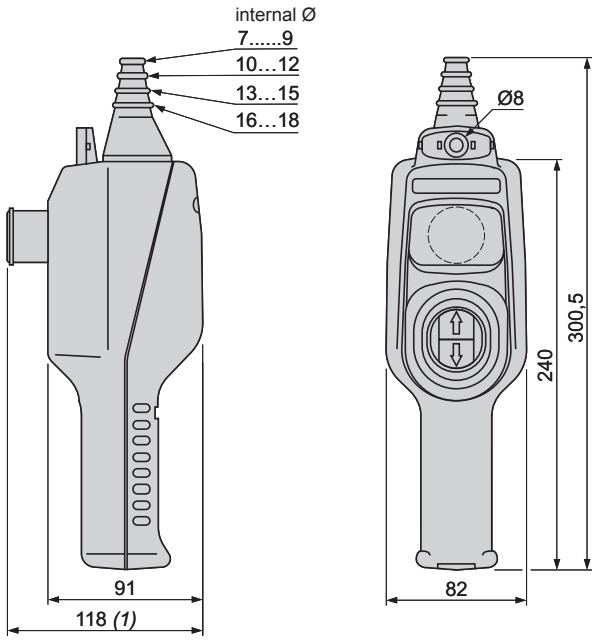
Protective cable sleeve for cable Ø 7 to 18 mm	–	**XAC D901**	0.030
Diaphragm for directional operator, polychloroprene	Black	**XAC D902**	0.015
Tightening tool for fixing nut	–	**ZA2 BZ905**	0.060
Directional operator with set of legends (single-speed and 2-speed)	–	**XAC D905**	0.005
Blanking plug for Ø 22.5 mm cut-out, with seal and fixing nut	Black	**ZB2 SZ3**	0.010

Printed labels, pendant station characteristics

Description	Pendant station circuit type	Sold in lots of	Unit reference	Weight kg
Self-adhesive labels product identification	Control	50	**XAC D950**	0.001
	Power, 1.1 kW	50	**XAC D951**	0.001
	Power, 2.2 kW	50	**XAC D952**	0.001

Dimensions

XAC D●●●

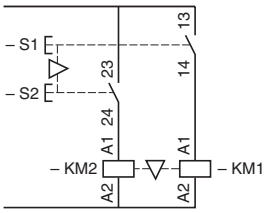


(1) With trigger action latching Ø 30 mm Emergency stop ZA2 BS834.

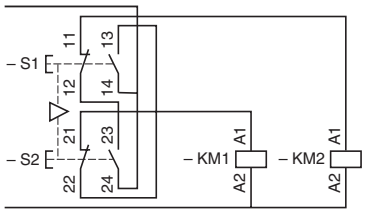
Pendant control stations
Double insulated with intuitive operation, type XAC D
For control or power circuits

Control circuits

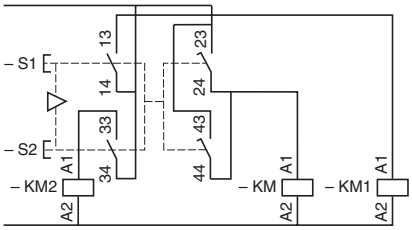
XAC D21A0101



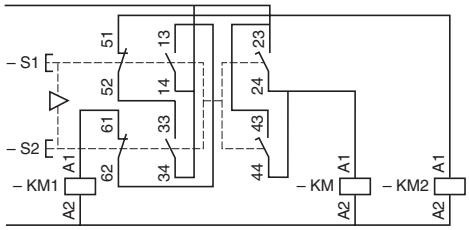
XAC D21A0105



XAC D21A1231



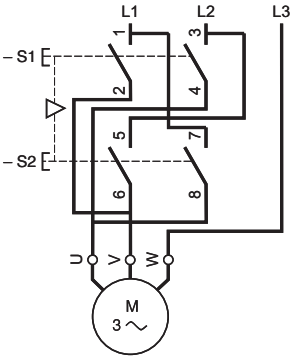
XAC D21A1241



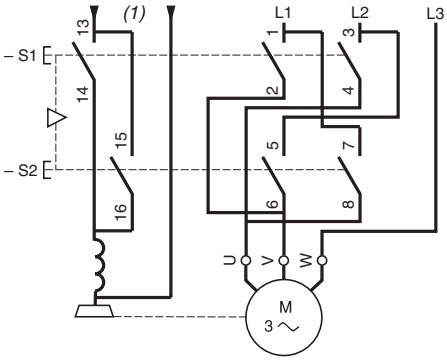
Power circuits

For control of single-speed reversing motor
2-phase switching

XAC D21P2111, XAC D21P3111



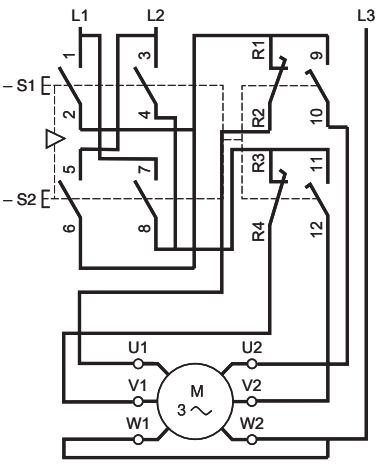
XAC D21P2121, XAC D21P3121



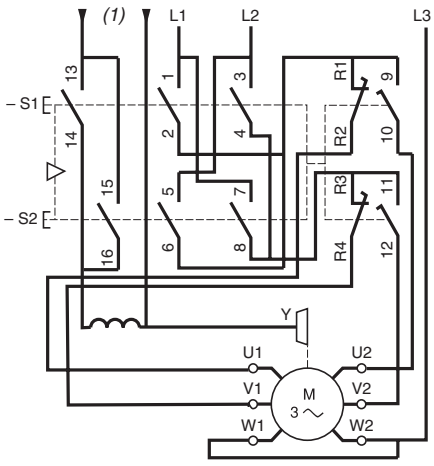
(1) Brake supply.

For control of 2-speed reversing motor (motors with separate windings only)
2-phase switching

XAC D21P2231, XAC D21P3231



XAC D21P2241, XAC D21P3241



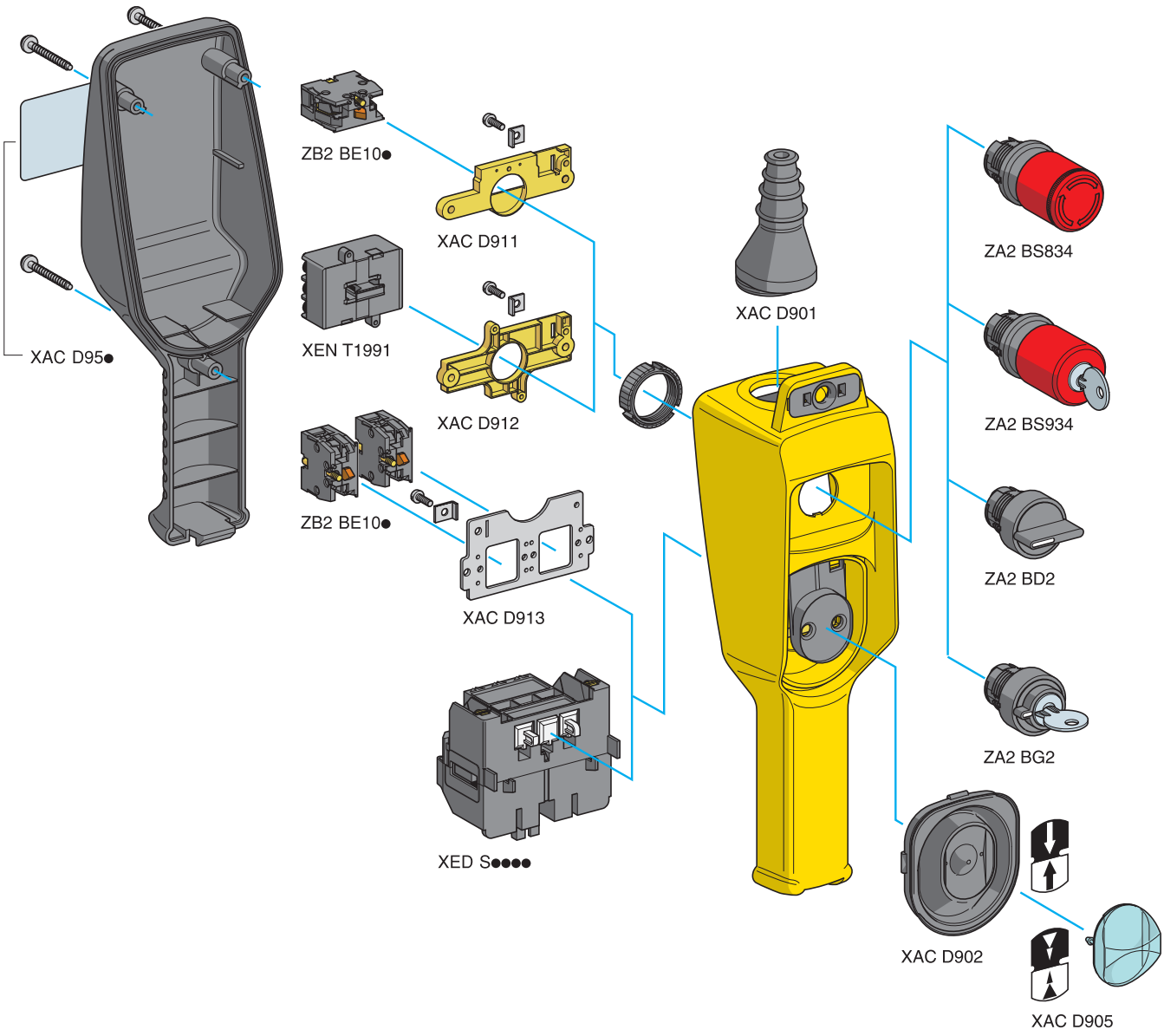
(1) Brake supply.

Characteristics: pages 6/8 and 6/10
References: pages 6/9 to 6/13
Dimensions: page 6/14
Presentation: page 6/16

Pendant control stations

Double insulated with intuitive operation, type XAC D

For control or power circuits
Variable composition stations, factory assembled



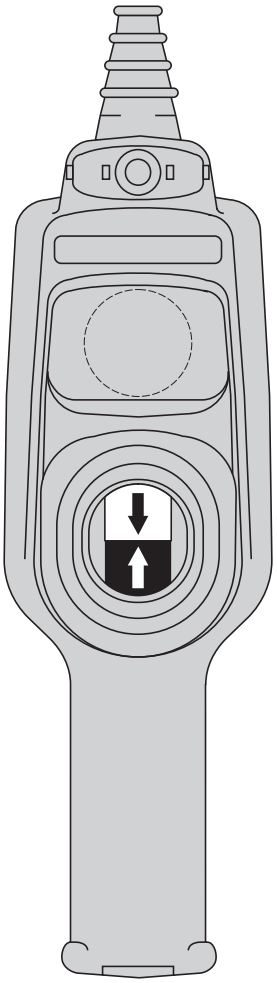
Order form (specimen suitable for photocopying)

Pendant control stations

Double insulated with intuitive operation, type XAC D

For control or power circuits

Variable composition stations, factory assembled



Customer			**Schneider Electric Industries**	
Company	Order N°	Delivery date	Sales office - Subsidiary Co.	Order N°

Enter the order with XAC D09 reference

Unit reference of empty enclosure, see page 6/12	**Number of identical stations**	**Enclosure price** *(1)*
XAC **D** **0** **2**		

The reference of the empty enclosure above comprises:
- the enclosure,
- internal cable clamp,
- cable tie (for tightening sleeve onto cable),
- the directional operator with set of legends, **XAC D905**,
- protective cable sleeve for Ø 7 to 18 mm cable, **XAC D901**,
- diaphragm for directional operator, **XAC D902**.

Operating head see page 6/13		**Contact blocks** see page 6/12		**Support plate** see page 6/13		
Reference	Unit price	Reference	Unit price	Reference	Unit price	**Total price**

Contact blocks see page 6/12			**Support plate** (for ZB2 BE●●● only) see page 6/13			
Reference	Qty.	Unit price	Reference	Qty.	Unit price	**Total price**

Factory assembly:
Add an additional cost for assembly **XAC 9VA**

Total price of assembled pendant station

(1) Obtain the empty enclosure price.

6

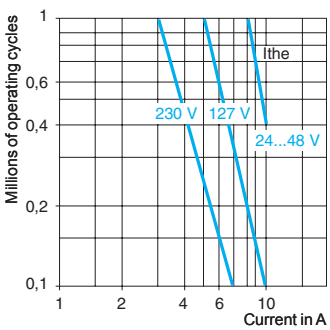
Pendant control stations
Double insulated, type XAC A
For control circuits

Environment			
Conformity to standards			EN/IEC 60947-5-1 EN/IEC 60204-32, UL 508, CSA C22-2 n° 14 EN/IEC 60947-5-5 and EN/ISO 13850: 2006 for versions with trigger action Emergency stop
Product certifications			Special version, with suffix “H7”: UL Listed A600-Q600, CSA A600-Q600, CCC, GOST
Protective treatment	Standard version		“TH”
Ambient air temperature	For operation	**°C**	- 25…+ 70
	For storage	**°C**	- 40…+ 70
Vibration resistance			15 gn (10…500 Hz) conforming to IEC 60068-2-6
Shock resistance			100 gn conforming to IEC 60068-2-27
Electric shock protection			Class II conforming to IEC 61140
Degree of protection			IP 65 conforming to IEC 60529 IK 08 conforming to EN 50102
Mechanical durability (in millions of operating cycles)			1
Enclosure			Double insulated polypropylene, coloured yellow throughout
Cable entry			Rubber sleeve with stepped entry diameter for cable Ø 8…Ø 26 mm
Contact block characteristics			
Rated operational characteristics	**ZB2 BE●●●, XEN G●●●●, XAC S●●●●**		∿ AC-15: A600 or Ue = 600 V, Ie = 1.2 A or Ue = 240 V, Ie = 3 A ⎓ DC-13: Q600 or Ue = 600 V, Ie = 0.1 A or Ue = 250 V, Ie = 0.27 A
	XEN T●●●●		∿ AC-15: A300 or Ue = 240 V, Ie = 3 A ⎓ DC-13: Q300 or Ue = 250 V, Ie = 0.27 A conforming to EN/IEC 60947-5-1 Appendix A
Thermal current (Ithe)		**A**	10
Rated insulation voltage (Ui)	**ZB2 BE●●●, XEN G●●●●, XAC S●●●●**	**V**	600, degree of pollution 3
	XEN T●●●●	**V**	400, degree of pollution 3, conforming to EN/IEC 60947-1
Rated impulse withstand voltage (U imp)		**kV**	6, conforming to EN/IEC 60947-1
Positive operation			Mushroom head pushbutton: N/C contact with positive opening operation conforming to EN/IEC 60947-5-1 Appendix K
Contact operation			N/C or N/O slow break
Resistance across terminals		**MΩ**	≤ 25
Operating force		**N**	Operators - with 1 N/O contact: 10 - with 1 N/C contact: 8 - with additional N/O contact: + 5 - with additional N/C contact: + 3
Terminal referencing			Conforming to CENELEC EN 50013
Short-circuit protection			10 A cartridge fuse type gG (gI)
Connection		**mm²**	Screw and captive cable clamp terminals. Clamping capacity: min. 1 x 0.5 mm², max., with or without cable end: 2 x 1.5 mm² or 1 x 2.5 mm². 6.3 mm clips (on request), please consult your Regional Sales office.

Operational power

Conforming to EN/IEC 60947-5-1 Appendix C. Utilisation categories AC-15 and DC-13.
Operating rate: 3600 operating cycles/hour. Load factor: 0.5.

a.c.supply ∿ 50/60 Hz
Inductive circuit



d.c. supply ⎓
Power broken in W for 1 million operating cycles

Voltage	**V**	**24**	**48**	**120**
Inductive circuit	W	65	48	40

References: pages 6/19 to 6/22
Dimensions: page 6/30
Application schemes: page 6/31
Presentation: page 6/32

Pendant control stations

Double insulated, type XAC A

For control circuits

Complete stations “ready for use”

DF565523



XAC A271
XAC A281

DF565524



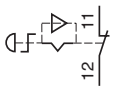
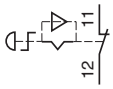
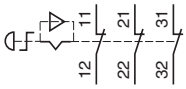
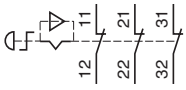
XAC A2714
XAC A2814

DF565524



XAC A27141
XAC A28141

For control of single-speed motors

Functions	Number of operators	Contact block(s) and scheme				Reference	Weight kg
		Per direction		For Emergency stop			
	**2** mechanically interlocked	1 N/O ZB2 BE101		–		**XAC A271**	0.475
		1 N/C + 1 N/O ZB2 BE102 + ZB2 BE101		–		**XAC A281**	0.500
	2 mechanically interlocked + 1 trigger action latching Emergency stop Ø 30 mm operator ZA2 BS834 *(1)*	1 N/O ZB2 BE101		1 N/C ZB2 BE102		**XAC A2714** *(1)*	0.575
		1 N/C + 1 N/O ZB2 BE102 + ZB2 BE101		1 N/C ZB2 BE102		**XAC A2814** *(1)*	0.600
		1 N/O ZB2 BE101		1 N/C + N/C + N/C XEN T1192		**XAC A27141** *(1)*	0.615
		1 N/C + 1 N/O ZB2 BE102 + ZB2 BE101		1 N/C + N/C + N/C XEN T1192		**XAC A28141** *(1)*	0.635

(1) Trigger action mechanically latching Emergency stop pushbuttons conform to standards EN/IEC 60204-32, EN/ISO 13850: 2006, Machinery directive 98/37/EC and standard EN/IEC 60947-5-5.

6

Pendant control stations
Double insulated, type XAC A
For control circuits
Complete stations “ready for use”

DF565525



XAC A471
XAC A481

530226



XAC A4714
XAC A4814
XAC A47141
XAC A48141

6

530224



530223



XAC A671
XAC A681

XAC A6714
XAC A6814

For control of single-speed motors (continued)

Functions	Number of operators	Contact block(s) and scheme: Per direction		For Emergency stop		Reference	Weight kg
	4 mechanically interlocked between pairs	1 N/O ZB2 BE101		–		**XAC A471**	0.625
		1 N/C + 1 N/O ZB2 BE102 + ZB2 BE101		–		**XAC A481**	0.675
	4 mechanically interlocked between pairs + 1 trigger action latching Emergency stop Ø 40 mm operator ZA2 BS844 *(1)*	1 N/O ZB2 BE101		1 N/C ZB2 BE102		**XAC A4714** *(1)*	0.800
		1 N/C + 1 N/O ZB2 BE102 + ZB2 BE101		1 N/C ZB2 BE102		**XAC A4814** *(1)*	0.815
		1 N/O ZB2 BE101		1 N/C + N/C + N/C XEN T1192		**XAC A47141** *(1)*	0.835
		1 N/C + 1 N/O ZB2 BE102 + ZB2 BE101		1 N/C + N/C + N/C XEN T1192		**XAC A48141** *(1)*	0.850
	6 mechanically interlocked between pairs	1 N/O ZB2 BE101		–		**XAC A671**	0.860
		1 N/C + 1 N/O ZB2 BE102 + ZB2 BE101		–		**XAC A681**	0.950
	6 mechanically interlocked between pairs + 1 trigger action latching Emergency stop Ø 40 mm operator ZA2 BS844 *(1)*	1 N/O ZB2 BE101		1 N/C ZB2 BE102		**XAC A6714** *(1)*	0.845
		1 N/C + 1 N/O ZB2 BE102 + ZB2 BE101		1 N/C ZB2 BE102		**XAC A6814** *(1)*	0.935

(1) Trigger action mechanically latching Emergency stop pushbuttons conform to standards EN/IEC 60204-32, EN/ISO 13850: 2006, Machinery directive 98/37/EC and standard EN/IEC 60947-5-5.

Characteristics: page 6/18 | Dimensions: page 6/30 | Application schemes: page 6/31 | Presentation: page 6/32

Pendant control stations
Double insulated, type XAC A
For control circuits
Complete stations “ready for use”

DF565526



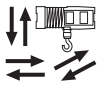
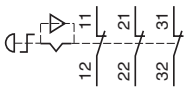
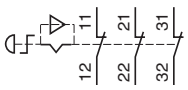
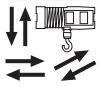
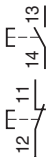
XAC A67141
XAC A68141

DF565527



XAC A871
XAC A881

For control of single-speed motors (continued)

Functions	Number of operators	Contact block(s) and scheme		Reference	Weight
		Per direction	For Emergency stop		kg
	**6** mechanically interlocked between pairs + 1 trigger action latching Emergency stop Ø 40 mm operator ZA2 BS844 *(1)*	1 N/O ZB2 BE101 	1 N/C + N/C + N/C XEN T1192 	**XAC A67141** *(1)*	0.880
		1 N/C + 1 N/O ZB2 BE102 + ZB2 BE101 	1 N/C + N/C + N/C XEN T1192 	**XAC A68141** *(1)*	0.970
 I O	**8** mechanically interlocked between pairs	1 N/O on 7 operators ZB2 BE101 and 1 N/C on the 8th operator ZB2 BE102 	–	**XAC A871**	0.940
		1 N/C + 1 N/O ZB2 BE102 + ZB2 BE101 	–	**XAC A881**	1.045

530229



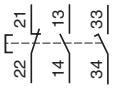
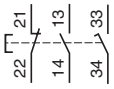
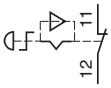
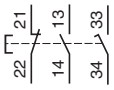
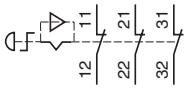
XAC A291

530230



XAC A2914
XAC A29141

For control of 2-speed motors

Functions	Number of operators	Contact block(s) and scheme		Reference	Weight
		Per direction	For Emergency stop		kg
	**2** mechanically interlocked between pairs	1 N/C + N/O + N/O staggered XEN G1191 	–	**XAC A291**	0.525
	2 mechanically interlocked between pairs + 1 trigger action latching Emergency stop Ø 30 mm operator ZA2 BS834 *(1)*	1 N/C + N/O + N/O staggered XEN G1191 	1 N/C ZB2 BE102 	**XAC A2914** *(1)*	0.570
		1 N/C + N/O + N/O staggered XEN G1191 	1 N/C + N/C + N/C XEN T1192 	**XAC A29141** *(1)*	0.605

(1) Trigger action mechanically latching Emergency stop pushbuttons conform to standards EN/IEC 60204-32, EN/ISO 13850: 2006, Machinery directive 98/37/EC and standard EN/IEC 60947-5-5.

6

Pendant control stations
Double insulated, type XAC A
For control circuits
Complete stations “ready for use”

DF565528



XAC A491

530231



XAC A4914
XAC A49141

DF565528



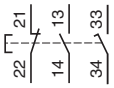
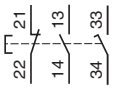
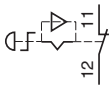
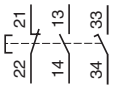
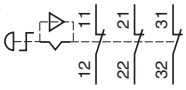
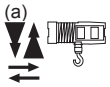
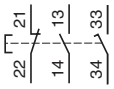
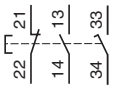
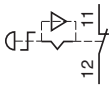
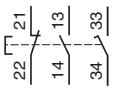
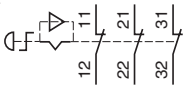
XAC A492

537743



XAC A4924
XAC A49241

For control of 2-speed motors (continued)

Functions	Number of operators	Contact block(s) and scheme Per direction	For Emergency stop	Reference	Weight kg
	**4** mechanically interlocked between pairs	1 N/C + N/O + N/O staggered XEN G1191 	–	**XAC A491**	0.625
	4 mechanically interlocked between pairs + 1 trigger action latching Emergency stop Ø 40 mm operator ZA2 BS844 *(1)*	1 N/C + N/O + N/O staggered XEN G1191 	1 N/C ZB2 BE102 	**XAC A4914** *(1)*	0.675
		1 N/C + N/O + N/O staggered XEN G1191 	1 N/C + N/C + N/C XEN T1192 	**XAC A49141** *(1)*	0.700
(a)  (b)	**4** mechanically interlocked between pairs	1 N/C + N/O + N/O staggered (a) XEN G1191 	–	**XAC A492**	0.675
		1 N/O (b) ZB2 BE101 			
	4 mechanically interlocked between pairs + 1 trigger action latching Emergency stop Ø 40 mm operator ZA2 BS844 *(1)*	1 N/C + N/O + N/O staggered (a) XEN G1191 	1 N/C ZB2 BE102 	**XAC A4924** *(1)*	0.700
		1 N/O (b) ZB2 BE101 			
		1 N/C + N/O + N/O staggered (a) XEN G1191 	1 N/C + N/C + N/C XEN T1192 	**XAC A49241** *(1)*	0.735
		1 N/O (b) ZB2 BE101 			

(1) Trigger action mechanically latching Emergency stop pushbuttons conform to standards EN/IEC 60204-32, EN/ISO 13850: 2006, Machinery directive 98/37/EC and standard EN/IEC 60947-5-5.

6

Pendant control stations
Double insulated, type XAC A
For control circuits
Empty enclosures

530233



XAC A02

530234



XAC A03

530234



XAC A12

Empty enclosures

Description	Number of cut-outs	Reference	Weight kg
Enclosure comprising: - the enclosure, - internal mounting plate, - protective cable sleeve, - internal cable clamp, - suspension ring, - cable tie (for tightening sleeve onto cable).	2	**XAC A02**	0.440
	3	**XAC A03** *(1)*	0.440
	4	**XAC A04**	0.540
	5	**XAC A05** *(1)*	0.625
	6	**XAC A06**	0.665
	8	**XAC A08**	0.770
	12	**XAC A12**	1.000

Variable composition stations, factory assembled

Use the order form on page 6/33 to define the required configuration.

Equipment: contact blocks, operating heads (control and signalling), complementary accessories	See separate components, pages 6/24 to 6/29

(1) Enclosures with 3 cut-outs XAC A03 and 5 cut-outs XAC A05 cannot be fitted with a mounting adaptor for base mounted units. The first cut-out can only be used for the Emergency stop function.

6

Pendant control stations
Double insulated, type XAC A
For control circuits
Separate components and spare parts

530238



ZB2 BE101
ZB2 BE102

530237



XEN G1191
XEN G1491

530236



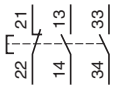
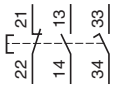
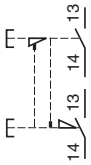
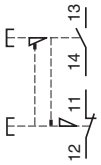
XEN G3781
XEN G3791

530239

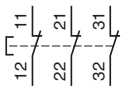


XEN T1192

Contact blocks for front mounting

Description	Application	Function	Scheme	Reference	Weight kg
Single block, spring return slow break	Single-speed	N/O		**ZB2 BE101**	0.015
		N/C		**ZB2 BE102**	0.015
		N/C + N/O + N/O simultaneous *(1)*		**XEN G1491**	0.040
	2-speed	N/C + N/O + N/O staggered (1)		**XEN G1191**	0.040
Double block, latching slow break *(2)*	Single-speed	N/O N/O		**XEN G3781**	0.060
		N/O N/C		**XEN G3791**	0.060

Isolating switch, slow break, for front mounting

For mounting in enclosures	Application	Function	Scheme	Reference	Weight kg
XAC A03 (frontal cut-out) XAC A05, A06, A08 (frontal or base cut-out)	Emergency stop	N/C + N/C + N/C with positive opening operation		**XEN T1192**	0.050

(1) Only for use with XAC A9●●● operators.
(2) Not suitable for use with the following operating heads: ZA2 BB, ZA2 BD, ZA2 BG and ZA2 BS.

6

Characteristics: page 6/18 | Dimensions: page 6/30 | Application schemes: page 6/31 | Presentation: page 6/32

Pendant control stations
Double insulated, type XAC A
For control circuits
Separate components and spare parts

530240



XAC S10●

Contact blocks for base mounting

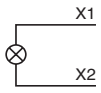
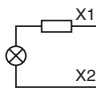
Description	Function	Scheme	Reference	Weight kg
Spring return slow break *(1)*	N/O		**XAC S101**	0.030
	N/C		**XAC S102**	0.030
	N/O + N/O		**XAC S103**	0.045
	N/C + N/C		**XAC S104**	0.045
	N/C + N/O		**XAC S105**	0.045

530241



ZB2 BV006

Pilot light bodies for front mounting

Description	Supply voltage	Scheme	Reference	Weight kg
Direct supply Bulb not included *(2)*	≤ 400 V		**ZB2 BV006**	0.015
Direct supply, through resistor Incandescent BA 9s base fitting 130 V bulb included	230 V		**ZB2 BV007**	0.020

530242



ZB2 BV007

(1) Not suitable for use with 3-position operating heads ZA2 BD and ZA2 BG or for mounting in enclosures XAC A039 and XAC A03.

(2) Bulb type for use with direct supply units: BA 9s base fitting incandescent bulb U ≤ 130 V or neon bulb 110 V ≤ U ≤ 400 V. Maximum power: 2.6 W, maximum Ø: 11 mm, maximum length: 28 mm. See page 6/26.

Pendant control stations
Double insulated, type XAC A
For control circuits
Separate components and spare parts

530243



XAC A94●●

Operating heads for front mounting

Description	Colour	Sold in lots of	Unit reference	Weight kg
Booted operators	White	10	**XAC A9411**	0.010
	Black	10	**XAC A9412**	0.010
	Green	10	**XAC A9413**	0.010
	Red	10	**XAC A9414**	0.010
	Yellow	10	**XAC A9415**	0.010
	Blue	10	**XAC A9416**	0.010
	Brown	10	**XAC A9419**	0.010

Operating heads for front or base mounting

Description	Colour	Type	Reference	Weight kg
530249  *ZA2 BS834*	**Trigger action latching Emergency stop** *(1)* Turn to release	Red	Ø 30 mm	**ZA2 BS834**	0.040
			Ø 40 mm	**ZA2 BS844**	0.050
	Trigger action latching Emergency stop *(2)* Key release (n° 455) Key withdrawal in rest (unactuated) position	Red	Ø 30 mm	**ZA2 BS934**	0.060
			Ø 40 mm	**ZA2 BS944**	0.065
DF538493  *ZA2 BS944*	**Selector switches** *(3)*, **standard handle** (Not to be used with XEN G●●●● contact blocks)	Black	2 position, stay put	**ZA2 BD2**	0.018
			3 position, stay put *(4)*	**ZA2 BD3**	0.018
530245  *ZA2 BD●*	**Key switches** *(2)* (key n° 455) Key withdrawal in left and right-hand position	–	2 position, stay put	**ZA2 BG4**	0.042
			3 position, stay put *(4)*	**ZA2 BG5**	0.042
	Key switch *(2)* (key n° 455) Key withdrawal in left-hand position	–	2 position, stay put	**ZA2 BG2**	0.042
530246  *ZA2 BG●*	**Key switch** *(2)* (key n° 455) Spring return from right to left Key withdrawal in left-hand position	–	2-position	**ZA2 BG6**	0.042
	Key switch *(4)* *(2)* (key n° 455) Key withdrawal in centre position	–	3 position, stay put	**ZA2 BG3**	0.042
DF566529  *ZA2 BB●*	**Wobblesticks** *(5)* Operates in all directions for fast stop	Black	–	**ZA2 BB2**	0.060
		Red	–	**ZA2 BB4**	0.060

(1) Trigger action mechanically latching Emergency stop pushbuttons conform to standards EN/IEC 60204-32, EN/ISO 13850: 2006, Machinery directive 98/37/EC and standard EN/IEC 60947-5-5.
(2) Other key numbers available on request, please consult your Regional Sales Office.
(3) Selector switches available with other mechanical functions, please consult your Regional Sales Office.
(4) Only suitable for front mounting.
(5) Base mounting recommended.

6

Characteristics: page 6/18 | Dimensions: page 6/30 | Application schemes: page 6/31 | Presentation: page 6/32

Pendant control stations
Double insulated, type XAC A
For control circuits
Separate components and spare parts

530250

ZA2 BV0●

530201

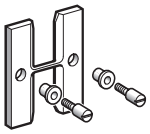
DL1 C●●●●

530202

DL1 CF●●●

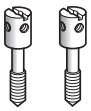
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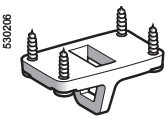
XAC A960

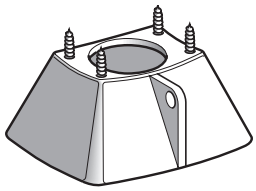
DF565531

XAC A009

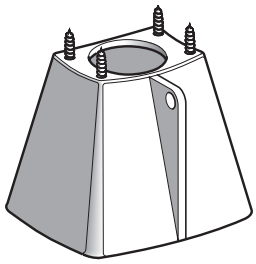
DF565530

ZB2 SZ3

530205

XAC B961

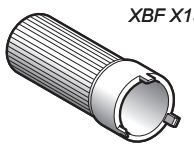
530206

XAC A971

530207

XAC A982

530208

XAC A983

530209

XBF X13

530306

ZA2 BZ905

Pilot light heads

Description	Colour	Reference	Weight kg
For use with incandescent bulbs			
Lens cap with bezel and fixing nut	White	**ZA2 BV01**	0.015
	Green	**ZA2 BV03**	0.015
	Red	**ZA2 BV04**	0.015
	Yellow	**ZA2 BV05**	0.015
	Blue	**ZA2 BV06**	0.015
	Clear	**ZA2 BV07**	0.015
For use with neon bulbs			
Lens cap with bezel and fixing nut	Green	**ZA2 BV033**	0.015
	Red	**ZA2 BV043**	0.015
	Yellow	**ZA2 BV053**	0.015
	Clear	**ZA2 BV073**	0.015

Bulbs

Description	Voltage	Sold in lots of	Unit reference	Weight kg
Incandescent BA 9s base fitting Maximum power: 2.6 W Maximum Ø: 11 mm Maximum length: 28 mm	6 V	10	**DL1 CB006**	0.002
	12 V	10	**DL1 CE012**	0.002
	24 V	10	**DL1 CE024**	0.002
	48 V	10	**DL1 CE048**	0.002
	130 V	10	**DL1 CE130**	0.002
Neon BA 9s base fitting Maximum power: 2.6 W Maximum Ø: 11 mm Maximum length: 28 mm	110 V	10	**DL1 CF110**	0.002
	230 V	10	**DL1 CF220**	0.002
	400 V	10	**DL1 CF380**	0.002

Complementary accessories, tools

Description		Reference	Weight kg
Protective cable sleeve	For cable Ø 8 to 22 mm	**XAC A950**	0.070
	For cable Ø 8 to 26 mm	**XAC A960**	0.090
Mechanical interlock for 2 operators	With fixing screws	**XAC A009**	0.003
Blanking plug	With seal and fixing nut	**ZB2 SZ3**	0.005
Tightening tool for fixing nut	–	**ZA2 BZ905**	0.060
Adaptor for self-supporting cable type BBAP	Mounted with protective sleeve for cable Ø 8 to 26 mm	**XAC B961**	0.025
Lower support ring	–	**XAC A971**	0.010
Protective guards for base mounted units	For selector switch (standard handle) or Emergency stop head pushbutton	**XAC A982**	0.025
	For key switch or key release latching Emergency stop head pushbutton	**XAC A983**	0.045
Bulb extractor	For BA 9s base fitting bulbs	**XBF X13**	0.025

Characteristics: page 6/18 | Dimensions: page 6/30 | Application schemes: page 6/31 | Presentation: page 6/32

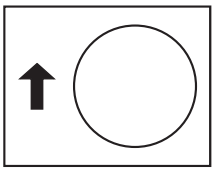
Pendant control stations

Double insulated, type XAC A

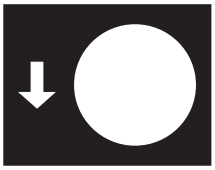
For control circuits

Legends 30 x 40 mm with symbols conforming to NF E 52-124

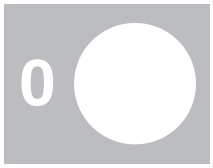
530209



White background, black symbol



Black background, white symbol



Red background, white symbol

Function Symbol	Reference	Weight kg
Raise, slow	**ZB2 BY4901**	0.001
Raise, fast	**ZB2 BY4902**	0.001
Raise, slow-fast	**ZB2 BY4903**	0.001
Right, slow	**ZB2 BY4907**	0.001
Right, fast	**ZB2 BY4908**	0.001
Right, slow-fast	**ZB2 BY4909**	0.001
Forward, slow	**ZB2 BY4913**	0.001
Forward, fast	**ZB2 BY4914**	0.001
Forward, slow-fast	**ZB2 BY4915**	0.001
Slew right, slow	**ZB2 BY4919**	0.001
Slew right, fast	**ZB2 BY4920**	0.001
Slew right, slow-fast	**ZB2 BY4921**	0.001
Slow	**ZB2 BY4933**	0.001
Klaxon	**ZB2 BY4932**	0.001
Start	**ZB2 BY4930**	0.001

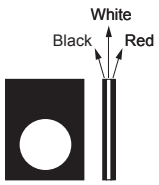
Function Symbol	Reference	Weight kg
Lower, slow	**ZB2 BY2904**	0.001
Lower, fast	**ZB2 BY2905**	0.001
Lower, slow-fast	**ZB2 BY2906**	0.001
Left, slow	**ZB2 BY2910**	0.001
Left, fast	**ZB2 BY2911**	0.001
Left, slow-fast	**ZB2 BY2912**	0.001
Reverse, slow	**ZB2 BY2916**	0.001
Reverse, fast	**ZB2 BY2917**	0.001
Reverse, slow-fast	**ZB2 BY2918**	0.001
Slew left, slow	**ZB2 BY2922**	0.001
Slew left, fast	**ZB2 BY2923**	0.001
Slew left, slow-fast	**ZB2 BY2924**	0.001
Fast	**ZB2 BY4934**	0.001
Start-Klaxon	**ZB2 BY4935**	0.001
Stop	**ZB2 BY2931**	0.001

6

Characteristics: page 6/18 | Dimensions: page 6/30 | Application schemes: page 6/31 | Presentation: page 6/32

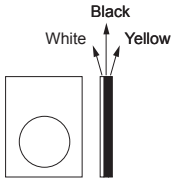
Pendant control stations
Double insulated, type XAC A
For control circuits
Legends 30 x 40 mm

530211



ZB2 BY2101

530212



ZB2 BY4101

Text	Reference	Weight kg	Text	Reference	Weight kg

- Start functions: white characters on black background
- Stop functions: white characters on red background

Blank

Black or red background	**ZB2 BY2101**	0.001	White or yellow background	**ZB2 BY4101**	0.001

With English text

For pushbuttons

Start	**ZB2 BY2303**	0.001	Marche	**ZB2 BY2103**	0.001
Stop	**ZB2 BY2304**	0.001	Arrêt	**ZB2 BY2104**	0.001
Forward	**ZB2 BY2305**	0.001	Avant	**ZB2 BY2105**	0.001
Reverse	**ZB2 BY2306**	0.001	Arrière	**ZB2 BY2106**	0.001
Up	**ZB2 BY2307**	0.001	Montée	**ZB2 BY2107**	0.001
Down	**ZB2 BY2308**	0.001	Descente	**ZB2 BY2108**	0.001
Right	**ZB2 BY2309**	0.001	Droite	**ZB2 BY2109**	0.001
Left	**ZB2 BY2310**	0.001	Gauche	**ZB2 BY2110**	0.001
On	**ZB2 BY2311**	0.001	En service	**ZB2 BY2111**	0.001
Off	**ZB2 BY2312**	0.001	Hors service	**ZB2 BY2112**	0.001
Power on	**ZB2 BY2326**	0.001	Sous tension	**ZB2 BY2126**	0.001
Slow	**ZB2 BY2327**	0.001	Lent	**ZB2 BY2127**	0.001
Fast	**ZB2 BY2328**	0.001	Vite	**ZB2 BY2128**	0.001
Klaxon	**ZB2 BY2125**	0.001	Klaxon	**ZB2 BY2125**	0.001

For selector switches

–	–	0.001	Arrêt-Marche	**ZB2 BY2166**	–
Off-On	**ZB2 BY2367**	0.001	Hors-en	**ZB2 BY2167**	0.001

With special texts

- Specify text when ordering,
- 2 lines maximum, 11 characters per line.

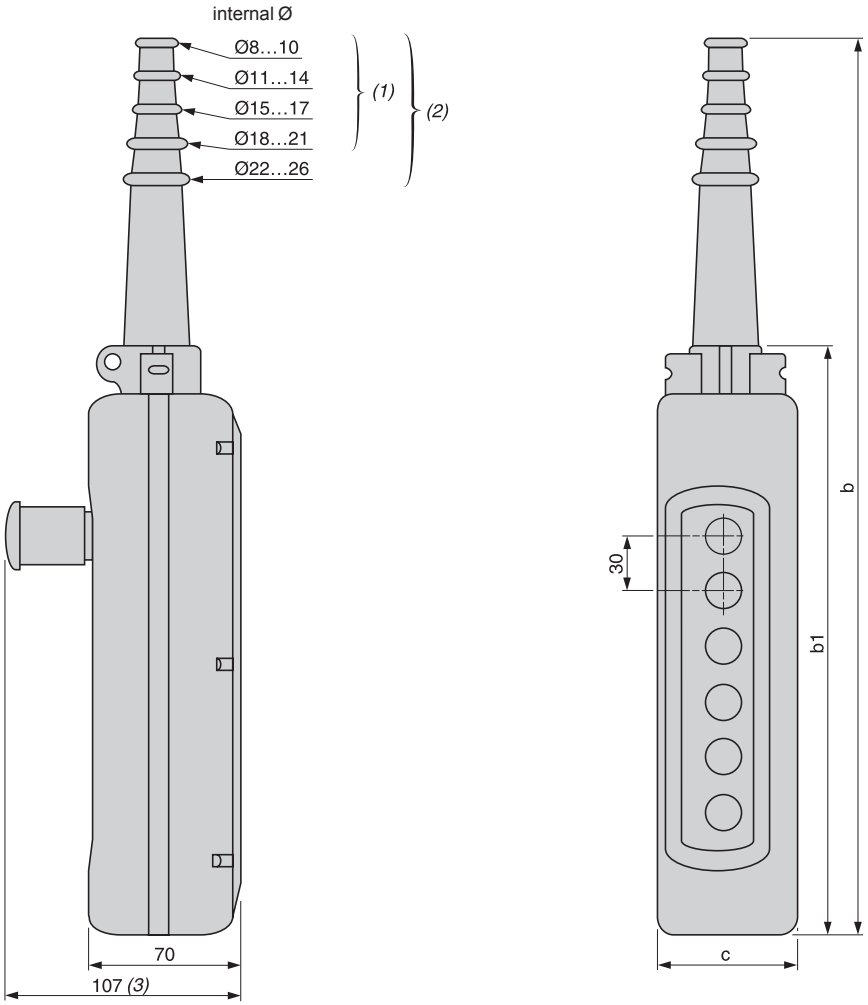
White characters on black background	**ZB2 BY2002**	0.001	Black characters on white background	**ZB2 BY4001**	0.001
White characters on red background	**ZB2 BY2004**	0.001	Black characters on yellow background	**ZB2 BY4005**	0.001

Other versions Legends with texts in other languages.
Please consult your Regional Sales Office.

Characteristics: page 6/18
Dimensions: page 6/30
Application schemes: page 6/31
Presentation: page 6/32

Pendant control stations
Double insulated, type XAC A
For control circuits

Dimensions
XAC A pendant stations for control circuits

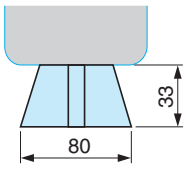


Number of operators	2	3	4	5	6	8	12
b	314	314	440	440	500	560	680
b1	190	190	250	250	310	370	490
c	80	80	80	80	80	80	92

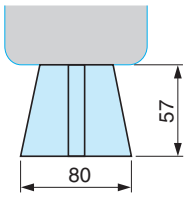
(1) For 2 and 3-way XAC A stations.
(2) For 4 to 8-way XAC A stations.
(3) With trigger action Emergency stop head operator.

Protective guards

XAC A982



XAC A983



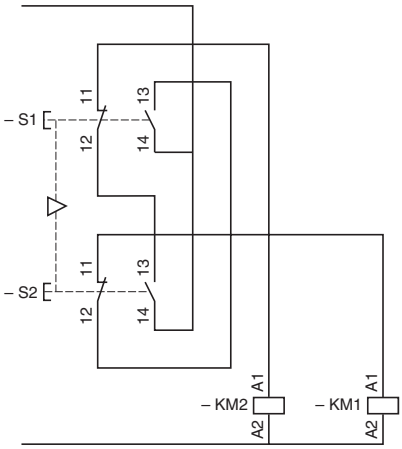
Characteristics: page 6/18
References: pages 6/19 to 6/29
Application schemes: page 6/31
Presentation: page 6/32

Pendant control stations
Double insulated, type XAC A
For control circuits

Application schemes (typical examples)

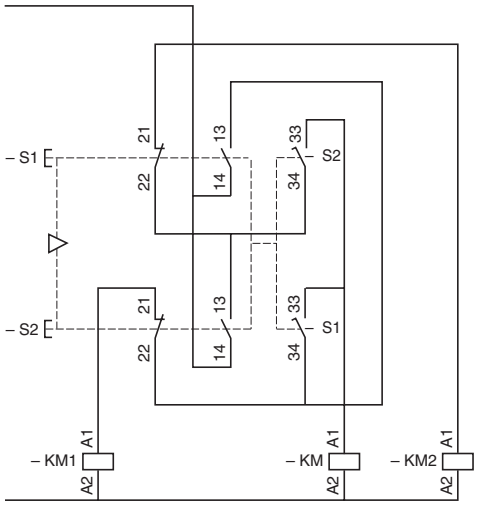
For control of single-speed reversing motor

Contact blocks **ZB2 BE101 + ZB2 BE102**



For control of 2-speed reversing motor

2 contact blocks **XEN G1191**



KM: high speed contactor

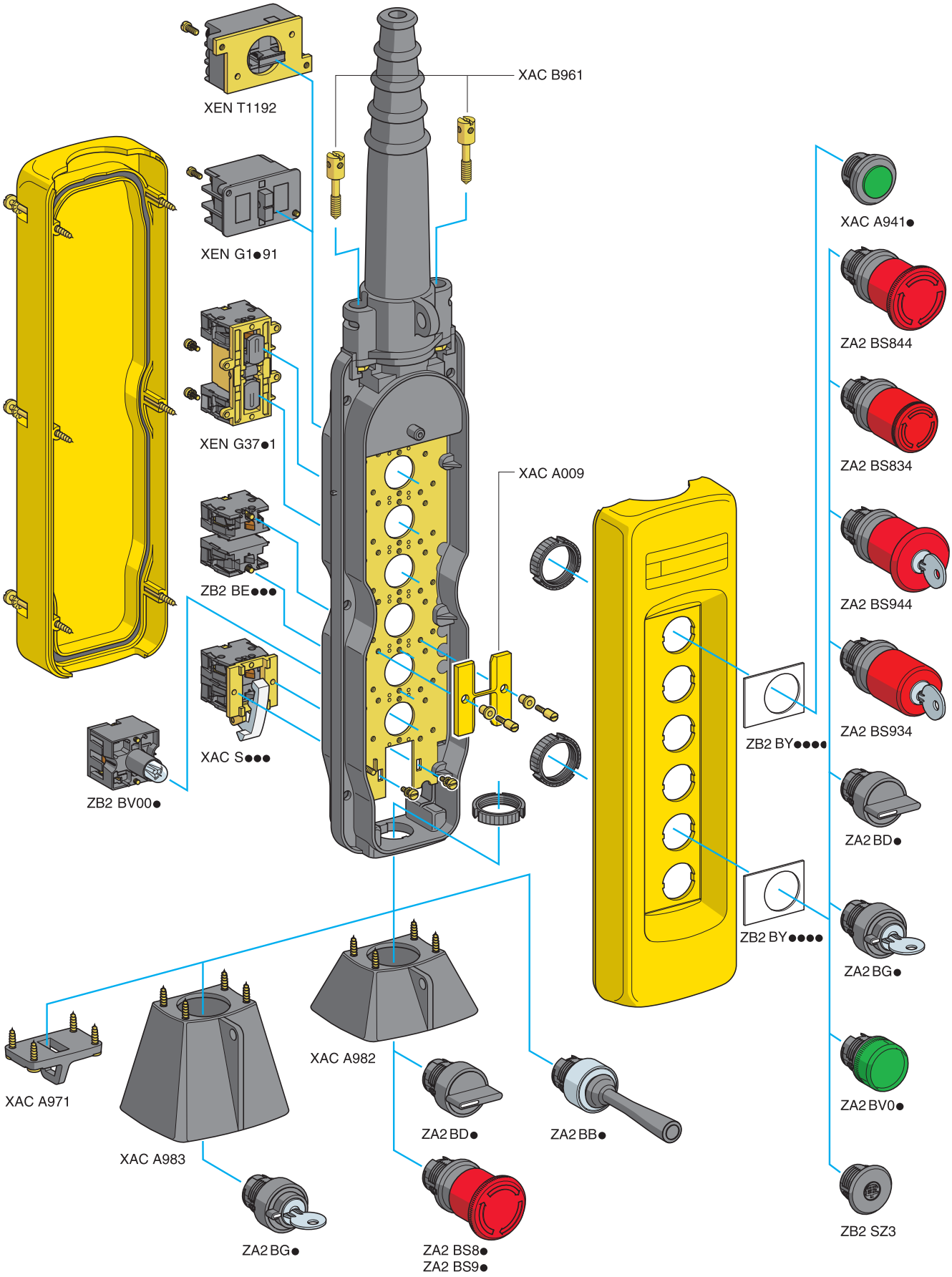
6

Pendant control stations

Double insulated, type XAC A

For control circuits

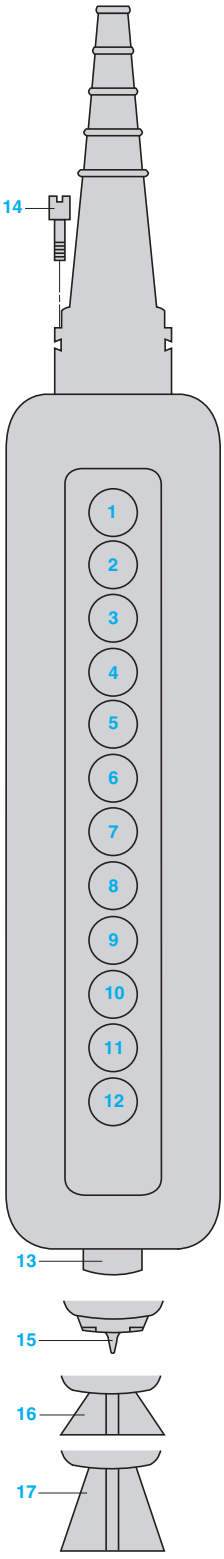
Variable composition stations, factory assembled



Order form (specimen suitable for photocopying)

Pendant control stations

Double insulated, type XAC A
For control circuits
Variable composition stations, factory assembled



Customer			Schneider Electric Industries	
Company	Order N°	Delivery date	Sales office - Subsidiary Co.	Order N°

Enter the order with XAC A09 reference

Unit reference of empty enclosure, see page 6/23	**Number of identical stations**	**Enclosure price** *(1)*
XAC **A** ☐ ☐		

	Legends see pages 6/28 and 6/29		**Contact blocks or pilot light bodies** see pages 6/24 and 6/25		**Operating heads or pilot light heads or blanking plug** see pages 6/26 and 6/27		
	Reference	Unit price	Reference	Unit price	Reference	Unit price	**Total price**
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							

Unit mounted in base of enclosure (if required) (Except when using **XAC A03 and XAC A05)**

13							

Complementary accessories, see page 6/27 (cross the appropriate box or boxes)

	Description	☒	Reference	Unit price	
14	Adaptor for self-supporting cable type BBAP for use with cable entry sleeve Ø 8 to 26 mm		**XAC B961**		
15	Lower support ring		**XAC A971**		
16	Protective guard for selector switch (std. handle) or Emergency stop head pushbutton, mounted in base		**XAC A982**		
17	Protective guard for key switch or key release Emergency stop head pushbutton, mounted in base		**XAC A983**		

Mechanical interlocking *(2)*

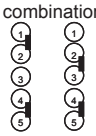
Reference	Quantity	Unit price	
XAC A009			

Factory assembly:	Number of heads or blanking plugs to be fitted		Additional cost **XAC 9VA** for fitting of 1 head or 1 blanking plug	
		X		

Total price of assembled pendant station

(1) Obtain the empty enclosure price.
(2) Connect with a line the 2 ways which require mechanical interlocking.

Examples: combinations possible



Combinations not possible



Pendant control stations
Double insulated, type XAC B
Metal, type XAC M
For control circuits

Environment

Conformity to standards			EN/IEC 60947-5-1, CSA C22-2 n° 14
Product certifications	**XAC B**		Standard version: CSA 300 V type 4
	XAC M		Standard version: CSA 300 V type 4
Protective treatment	**XAC B**		Standard version: "TH"
	XAC M		Standard version: "TC", ("TH" on request)
Ambient air temperature	For storage	**°C**	- 40…+ 70
	For operation	**°C**	- 25…+ 70
Vibration resistance			15 gn (10…500 Hz) conforming to IEC 60068-2-6
Shock resistance			100 gn conforming to IEC 60068-2-27
Electric shock protection	**XAC B**		Class II
	XAC M		Class I conforming to IEC 61140
Degree of protection			IP 65 conforming to IEC 60529; IK 08 conforming to EN 50102
Mechanical durability (in millions of operating cycles)			1
Enclosure	**XAC B**		Double insulated glass-reinforced polyester (colour: yellow)
	XAC M		Aluminium enclosure. Painted yellow
Cable entry			Rubber sleeve with stepped entry diameter for cable Ø 7…13 mm, Ø 10…22 mm or Ø 22…35 mm

Contact block characteristics

Rated operational characteristics			∼ AC-15: A300 or Ue = 240 V, Ie = 3 A ⎓ DC-13: Q300 or Ue = 250 V, Ie = 0.27 A conforming to EN/IEC 60947-5-1 Appendix A
Thermal current (Ithe)		**A**	10
Rated insulation voltage (Ui)	**XEN C●●●●, XEN D3●●●, XEN D4●●●, XES B2011, XAC S4, XES D1181, XES D1281**	**V**	500, degree of pollution 3, conforming to IEC 60947-1
	XEN B●●●●, XEN D1●●●, XEN D2●●●		400, degree of pollution 3, conforming to IEC 60947-1
Rated impulse withstand voltage (U imp)		**kV**	6, conforming to IEC 60947-1
Positive operation			Mushroom head pushbutton: N/C contact with positive opening operation conforming to EN/IEC 60947-5-1 Appendix K
Contact operation			Slow break or snap action
Resistance across terminals		**MΩ**	⩽ 25
Operating force	With booted operator	**N**	**XAC S4●●●**: 10 (N/O), 8 (N/C); **XEN C●●●●**: 6 (N/O), 4 (N/C); **XEN B●●●●, XEN D1●●●, XEN D2●●●**: Single-speed: 9; 2-speed: 20 (1st speed), 30 (2nd speed); **XEN D3●●●, XEN D4●●●**: 25; **XES B2011**: 7; **XES D1181, XES D128**: 15 (1st speed), 25 (2nd speed)
	With spring return mushroom head operator	**N**	10
	With latching mushroom head operator	**N**	40
Terminal referencing			By numbers conforming to CENELEC EN 50013
Short-circuit protection			10 A cartridge fuse type gG (gI)
Connection		**mm²**	Screw and captive cable clamp terminals. Clamping capacity: 1 x 2.5 or 2 x 1.5 with or without cable end

Operational power
conforming to EN/IEC 60947-5-1 Appendix C
Utilisation categories AC-15 and DC-13
For 1 million operating cycles
Operating rate: 3600 operating cycles/hour
Load factor: 0.5
mm Inductive circuit

Contact blocks XEN C●●●●, XEN D3●●●, XEN D4●●●, XAC S4●●●

a.c. supply ∼ 50/60 Hz

Voltage	**V**	**24**	**48**	**127**	**230**
mm	VA	140	385	525	455

d.c. supply ⎓

Voltage	**V**	**24**	**48**	**120**
mm	W	60	45	42

Contact blocks XEN B●●●●, XEN D1●●●, XEN D2●●●

a.c. supply ∼ 50/60 Hz

Voltage	**V**	**24**	**48**	**127**	**230**
mm	VA	140	210	640	680

d.c. supply ⎓

Voltage	**V**	**24**	**48**	**120**
mm	W	48	31	35

Contact blocks XES B2011, XES D1181, XES D1281

a.c. supply ∼ 50/60 Hz

Voltage	**V**	**24**	**48**	**127**	**230**
mm	VA	50	100	450	750

d.c. supply ⎓

Voltage	**V**	**24**	**48**	**120**
mm	W	140	140	95

References: page 6/35
Dimensions: page 6/55
Application schemes: page 6/56

Pendant control stations

Double insulated, type XAC B

For control circuits

Complete stations “ready for use” (with snap action contact blocks)

DF565564



XAC B281

DF565565



XAC B481

DF565566



XAC B681

DF565567



XAC B881

For control of single-speed motors

Functions	Number of operators	Contact blocks and scheme Per direction	Reference	Weight kg
	**2** without mechanical interlocking	1 C/O snap action XES B2011 	**XAC B281**	0.850
	**4** without mechanical interlocking	1 C/O snap action XES B2011 	**XAC B481**	1.100
	**6** without mechanical interlocking	1 C/O snap action XES B2011 	**XAC B681**	1.300
	**8** without mechanical interlocking	1 C/O snap action XES B2011 	**XAC B881**	1.550

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6

Characteristics: page 6/34
Dimensions: page 6/55
Application schemes: page 6/56

Pendant control stations
Double insulated, type XAC B
For power circuits (direct switching)

Environment

Conformity to standards			EN/IEC 60947-5-1 EN/IEC 60204-32, UL 508, CSA C22-2 n° 14 EN/IEC 60947-5-5 and EN/ISO 13850: 2006 for versions with trigger action Emergency stop EN/IEC 60947-3
Product certifications	Standard version		CSA type 4
Protective treatment	Standard version		"TH"
Ambient air temperature	For storage	**°C**	- 40…+ 70
	For operation	**°C**	- 25…+ 70
Vibration resistance			15 gn (10…500 Hz) conforming to IEC 60068-2-6
Shock resistance			100 gn conforming to IEC 60068-2-27
Electric shock protection			Class II conforming to IEC 61140
Degree of protection			IP 65 conforming to IEC 60529
Mechanical durability (in millions of operating cycles)			1 except for XAC B91● and XAC CB92●: 0.4
Enclosure			Double insulated glass-reinforced polyester (colour: yellow)
Cable entry			Rubber sleeve with stepped entry diameter for cable Ø 10…Ø 22 mm

Contact block characteristics

Thermal current (Ithe)	**XES D1191, XES D1291**	**A**	12
	XES D2201, XES D2241, XES D2251	**A**	20
Rated insulation voltage (Ui)	**XES D●●●●**	**V**	500, degree of pollution 3, conforming to IEC 60947-1
	XAC S●99	**V**	400, degree of pollution 3, conforming to IEC 60947-1
	XES D1●●●	**V**	600, conforming to CSA
	XES D2●●●	**V**	300, conforming to CSA
Rated impulse withstand voltage (U imp)		**kV**	6, conforming to IEC 60947-1
Contact operation			Snap action
Operating force	**XES D1●●●**	**N**	17
	XES D2●●●	**N**	32
Terminal referencing			By numbers conforming to CENELEC EN 50005
Short-circuit protection	**XES D1●●●**		10 A maximum cartridge fuse type aM
	XES D2●●●		12 A maximum cartridge fuse type aM
Connection		**mm²**	Captive screw clamp terminals Clamping capacity: 1 x 2.5 or 2 x 1.5 with or without cable end
Operational power	3 phases, 2 poles **XES D1●●●**		Utilisation categories AC-3 and AC-4 conforming to EN/IEC 60947-3 Appendix A 2.2 kW-240 V 2.2 kW-400 V
	3 phases, 3 poles **XES D2●●●**		3 kW-240 V 3 kW-400 V
	3 phases, 3 poles, isolating block **XAC S●99**		Utilisation category AC-23B 3 kW-400 V
	3 phases, 2 poles **XES D1●●●**		CSA certification 2 hp-240 V 5 hp-400 V 3 hp-600 V
	3 phases, 3 poles **XES D2●●●**		3 hp-240 V
Mechanical durability (in millions of operating cycles) Utilisation categories AC-3 and AC-4 conforming to EN/IEC 60947-3 Appendix A Duty cycle comprising 75% AC-3, 25% AC-4 Operating rate: 600 operating cycles per hour Load factor: 0.4	3 phases, 2 poles **XES D1●●●**		1.5 kW-240 V = 0.5 2.2 kW-240 V = 0.3 1.5 kW-400 V = 0.8 2.2 kW-400 V = 0.3
	3 phases, 3 poles **XES D2●●●**		3 kW-240 V = 0.7 3 kW-400 V = 1

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References: pages 6/37 and 6/38
Dimensions: page 6/55
Application schemes: pages 6/56 and 6/57

Pendant control stations

Double insulated, type XAC B

For power circuits (direct switching)
Complete stations “ready for use”



XAC B219
XAC B220



XAC B3195
XAC B3205



XAC B491
XAC B493



XAC B4916
XAC B4936



XAC B4915
XAC B4935

For control of single-speed motors

Functions	Number of operators	Contact blocks: Per direction	Contact blocks: For Emergency stop	Maximum operational power/400 V	Reference	Weight kg
	**2** mechanically interlocked	2-pole XES D1191*(1)*	–	2.2 kW	**XAC B219**	0.355
		3-pole XES D2201*(1)*	–	3 kW	**XAC B220**	0.355
	2 mechanically interlocked + 1 trigger action latching Emergency stop Ø 40 mm operator ZA2 BS844	2-pole XES D1191*(1)*	1 N/C + N/C + N/C XAC S499	2.2 kW	**XAC B3195 ▲**	0.940
		3-pole XES D2201*(1)*	1 N/C + N/C + N/C XAC S499	3 kW	**XAC B3205 ▲**	1.000
	**4** mechanically interlocked between pairs	2-pole XES D1191*(1)*	–	2.2 kW	**XAC B491**	1.200
		3-pole XES D2201*(1)*	–	3 kW	**XAC B493**	1.330
	4 mechanically interlocked between pairs + 1 trigger action latching Emergency stop Ø 40 mm operator ZA2 BS844	2-pole XES D1191*(1)*	1 N/C + N/C + N/C XAC S499	2.2 kW	**XAC B4916▲**	1.260
		3-pole XES D2201*(1)*	1 N/C + N/C + N/C XAC S499	3 kW	**XAC B4936 ▲**	1.390
	4 mechanically interlocked between pairs + 1 trigger action latching Emergency stop Ø 40 mm operator ZA2 BS844 mounted in base	2-pole XES D1191*(1)*	1 N/C + N/C + N/C XAC S3991	2.2 kW	**XAC B4915 ▲**	1.350
		3-pole XES D2201*(1)*	1 N/C + N/C + N/C XAC S3991	3 kW	**XAC B4935 ▲**	1.480

(1) Trigger action mechanically latching Emergency stop pushbuttons conform to standards EN/IEC 60204-32, EN/ISO 13850: 2006, Machinery directive 98/37/EC and standard EN/IEC 60947-5-5.

▲ Available 3rd quarter of 2011

Characteristics: page 6/36
Dimensions: page 6/55
Application schemes: pages 6/56 and 6/57

Pendant control stations
Double insulated, type XAC B
For power circuits (direct switching)
Complete stations “ready for use”

DF565573



XAC B691
XAC B693

DF565574



XAC B6916
XAC B6936

DF565575



XAC B6915
XAC B6935

DF565576



XAC B229

DF565577



XAC B3295

For control of single-speed motors (continued)

Functions	Number of operators	Contact blocks: Per direction	Contact blocks: For Emergency stop	Maximum operational power/400 V	Reference	Weight kg
	**6** mechanically interlocked between pairs	2-pole XES D1191*(1)*	–	2.2 kW	**XAC B691**	1.350
		3-pole XES D2201*(1)*	–	3 kW	**XAC B693**	1.550
	6 mechanically interlocked between pairs + 1 trigger action latching Emergency stop Ø 40 mm operator ZA2 BS844	2-pole XES D1191*(1)*	1 N/C + N/C + N/C XAC S499	2.2 kW	**XAC B6916** ▲	1.410
		3-pole XES D2201*(1)*	1 N/C + N/C + N/C XAC S499	3 kW	**XAC B6936** ▲	1.610
	6 mechanically interlocked between pairs + 1 trigger action latching Emergency stop Ø 40 mm operator ZA2 BS844 mounted in base	2-pole XES D1191*(1)*	1 N/C + N/C + N/C XAC S3991	2.2 kW	**XAC B6915** ▲	1.500
		3-pole XES D2201*(1)*	1 N/C + N/C + N/C XAC S3991	3 kW	**XAC B6935** ▲	1.700

For control of 2-speed motors

Functions	Number of operators	Contact blocks: Per direction	Contact blocks: For Emergency stop	Maximum operational power/400 V	Reference	Weight kg
	**2** mechanically interlocked	2-pole XES D1291*(1)*	–	2.2 kW	**XAC B229**	0.405
	2 mechanically interlocked + 1 trigger action latching Emergency stop Ø 40 mm operator ZA2 BS844	2-pole XES D1291*(1)*	1 N/C + N/C + N/C XAC S499	2.2 kW	**XAC B3295** ▲	0.990

(1) Trigger action mechanically latching Emergency stop pushbuttons conform to standards EN/IEC 60204-32, EN/ISO 13850: 2006, Machinery directive 98/37/EC and standard EN/IEC 60947-5-5.

▲ Available 3rd quarter of 2011

Characteristics: page 6/36
Dimensions: page 6/55
Application schemes: pages 6/56 and 6/57

Pendant control stations
Double insulated, type XAC B
For control or power circuits
Empty enclosures

DF565578



XAC B020

DF565579



XAC B030

DF565580



XAC B02●

DF565581



XAC B04●

DF565582



XAC B06●

DF565583



XAC B08●

DF565584



XAC B12●

Empty enclosures for control circuits or power circuits *(1)*

Description	Protective cable sleeve	Number of cut-outs	Cut-out in base of enclosure	Reference	Weight kg
Empty enclosures *(1)* **Double insulated for "Small hoist" applications** Operator cut-out centres: 40 mm	For cable Ø 7…13 mm	2	Without	**XAC B020**	0.760
		3	Without	**XAC B030**	0.760
Empty enclosures *(1)* **Double insulated for "General purpose" applications** Operator cut-out centres: 40 mm	For cable Ø 10…22 mm	2	Without	**XAC B02**	0.760
			With	**XAC B021**	0.760
		4	Without	**XAC B04**	1.000
			With	**XAC B041**	1.000
		6	Without	**XAC B06**	1.160
			With	**XAC B061**	1.160
		8	Without	**XAC B08**	1.330
			With	**XAC B081**	1.330
		12 in 2 rows of 6	Without	**XAC B12**	1.460
			With	**XAC B121**	1.460

(1) Enclosure comprising:
- *the enclosure,*
- *protective cable sleeve,*
- *cable tie (for tightening sleeve onto cable),*
- *internal cable clamp,*
- *suspension ring,*
- *bezel tightening key.*

Characteristics: pages 6/34 and 6/36 | Dimensions: page 6/55 | Application schemes: pages 6/56 and 6/57 | Presentation: page 6/58

Pendant control stations
Double insulated, type XAC B
For control or power circuits
Empty enclosures

DF566580



XAC B02●●

DF566581



XAC B04●●

DF566582



XAC B06●●

DF566583



XAC B08●●

DF566584



XAC B12●●

Empty enclosures for control circuits or power circuits *(1) (continued)*

Description	Protective cable sleeve	Number of cut-outs	Cut-out in base of enclosure	Reference	Weight kg
Empty enclosures *(1)* **Double insulated for "General purpose" applications** Operator cut-out centres: 40 mm	For cable Ø 22…35 mm	2	Without	**XAC B025**	0.960
			With	**XAC B0215**	0.960
		4	Without	**XAC B045**	1.200
			With	**XAC B0415**	1.200
		6	Without	**XAC B065**	1.360
			With	**XAC B0615**	1.360
		8	Without	**XAC B085**	1.530
			With	**XAC B0815**	1.530
		12 in 2 rows of 6	Without	**XAC B125**	1.660
			With	**XAC B1215**	1.660

(1) Enclosure comprising:
- *the enclosure,*
- *protective cable sleeve,*
- *cable tie (for tightening sleeve onto cable),*
- *internal cable clamp,*
- *suspension ring,*
- *bezel tightening key.*

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Characteristics: pages 6/34 and 6/36 | Dimensions: page 6/55 | Application schemes: pages 6/56 and 6/57 | Presentation: page 6/58

Pendant control stations

Double insulated, type XAC B
Metal, type XAC M
For control circuits
Empty enclosures (XAC M: products for maintenance purposes only)

DF565585



XAC B120

DF565587



DF565586



XAC M04● XAC M08●

Empty enclosures for control circuits (1)

Description	Protective cable sleeve	Number of cut-outs	Cut-out in base of enclosure	Reference	Weight kg
Empty enclosures *(1)* **Double insulated for "General purpose" applications** Operator cut-out centres: 30 mm	For cable Ø 10…22 mm	12 in 1 row	Without	**XAC B120**	1.330
			With	**XAC B1201**	1.330
	For cable Ø 22…35 mm	12 in 1 row	Without	**XAC B1205**	1.530
			With	**XAC B12015**	1.530
Empty enclosures *(1)* **Metal for "General purpose" applications** Operator cut-out centres: 40 mm	For cable Ø 10…22 mm	4	Without	**XAC M04**	1.540
			With	**XAC M041**	1.540
		8	Without	**XAC M08**	2.210
			With	**XAC M081**	2.210
	For cable Ø 22…35 mm	4	Without	**XAC M045**	1.740
			With	**XAC M0415**	1.740
		8	Without	**XAC M085**	2.410
			With	**XAC M0815**	2.410

Variable composition stations, factory assembled

Use the order form on page 6/59 to define the required configuration

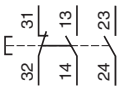
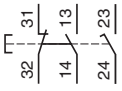
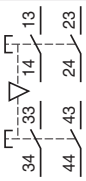
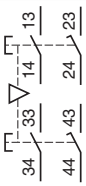
Equipment: contact blocks, operating heads (control and signalling), complementary accessories	See separate components, pages 6/42 to 6/54

(1) Enclosure comprising:
- *the enclosure,*
- *protective cable sleeve for cable Ø 10…22 mm or Ø 22…35 mm,*
- *cable tie (for tightening sleeve onto cable),*
- *internal cable clamp,*
- *suspension ring,*
- *bezel tightening key.*

Characteristics: pages 6/34 | Dimensions: page 6/55 | Application schemes: pages 6/56 and 6/57 | Presentation: page 6/58

Pendant control stations
Double insulated, type XAC B
Metal, type XAC M
For control circuits
Separate components and spare parts

Contact blocks for front mounting, slow break

Description	Application	Function	Scheme	Operator centres	Reference	Weight
				mm		kg
Spring return						
DF565588  *XEN C1111* **Single block** 1 spring return operator	Single-speed	N/O		30 or 40	**XEN C1111**	0.020
		N/C		30 or 40	**XEN C1121**	0.020
		N/O + N/O		30 or 40	**XEN C1131**	0.020
		N/C + N/C		30 or 40	**XEN C1141**	0.020
		N/C + N/O		30 or 40	**XEN C1151**	0.020
DF565589  *XEN B1181* **Double block** 2 spring return operators mechanically interlocked		C/O + N/O		30 or 40	**XEN B1491**	0.050
	2-speed	2 step N/O + N/O staggered		30 or 40	**XEN B1181**	0.050
		2 step C/O + N/O staggered		30 or 40	**XEN B1191**	0.050
DF565590  *XEN D2611*	Single-speed	N/O + N/O simultaneous		30	**XEN D1611**	0.110
				40 *(1)*	**XEN D2611**	0.110
	2-speed	2 step N/O + N/O staggered		30	**XEN D1621**	0.110
				40 *(1)*	**XEN D2621**	0.110

(1) These contact blocks cannot be mounted in enclosures XAC B120● (12 operators in 1 row).

Characteristics: pages 6/34 | Dimensions: page 6/55 | Application schemes: pages 6/56 | Presentation: page 6/58

Pendant control stations
Double insulated, type XAC B
Metal, type XAC M
For control circuits
Separate components and spare parts

DF566593



XEN D2641

DF566592



XEN D3801

DF566591



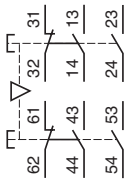
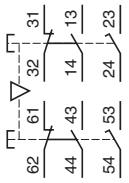
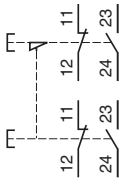
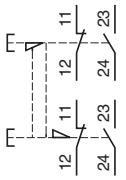
XES B2011

DF566594

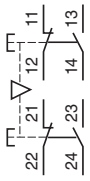
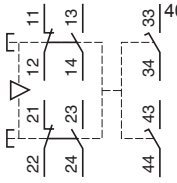


XES D1181

Contact blocks for front mounting, slow break *(continued)*

Description	Application	Function	Scheme	Operator centres	Reference	Weight
				mm		kg
Spring return *(continued)*						
Double block 2 spring return operators mechanically interlocked	Single-speed	C/O + N/O		30	**XEN D1631**	0.110
				40 *(1)*	**XEN D2631**	0.110
	2-speed	2 step C/O + N/O staggered		30	**XEN D1641**	0.110
				40 *(1)*	**XEN D2641**	0.110
Latching						
Double block 1 latching operator released by 1 spring return operator	Single-speed	N/C + N/O		30	**XEN D3801**	0.170
				40 *(1)*	**XEN D4801**	0.170
Double block 2 latching operators	Single-speed	N/C + N/O		30	**XEN D3811**	0.170
				40 *(1)*	**XEN D4811**	0.170

Contact blocks for front mounting, snap action

Description	Application	Function	Scheme	Operator centres	Reference	Weight
				mm		kg
Spring return						
Single block 1 spring return operator *(2)*	Single-speed	C/O		40 *(1)*	**XES B2011**	0.030
Double block 2 spring return operators mechanically interlocked	Single-speed	C/O		40 *(1)*	**XES D1181**	0.140
	2-speed	C/O + N/O staggered		40 *(1)*	**XES D1281**	0.190

(1) These contact blocks cannot be mounted in enclosures XAC B120● (12 operators in 1 row).
(2) Only for mounting with operators XAC B91●●.

Characteristics: pages 6/34 | Dimensions: page 6/55 | Application schemes: pages 6/56 | Presentation: page 6/58

Pendant control stations
Double insulated, type XAC B
Metal, type XAC M
For control circuits
Separate components and spare parts

530240



XAC S41●

Contact blocks for front mounting *(1)*

Description	Function	Scheme	Reference	Weight kg
Spring return **Slow break** Operator centres 30 or 40 mm	N/O		**XAC S411**	0.070
	N/C		**XAC S412**	0.070
	N/O + N/O		**XAC S413**	0.070
	N/C + N/C		**XAC S414**	0.070
	N/C + N/O		**XAC S415**	0.070

530240



XAC S4111

Contact blocks for base mounting *(1)*

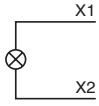
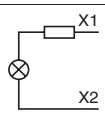
Description	Function	Scheme	Reference	Weight kg
Spring return **Slow break**	N/O		**XAC S4111**	0.100
	N/C		**XAC S4121**	0.100
	N/O + N/O		**XAC S4131**	0.100
	N/C + N/C		**XAC S4141**	0.100
	N/C + N/O		**XAC S4151**	0.100

DF966595



XAC V06

Pilot light bodies for front mounting

Description	Supply voltage	Scheme	Reference	Weight kg
Direct supply Bulb not included *(2)*	⩽ 400 V		**XAC V06**	0.050
Direct supply, through resistor Incandescent BA 9s base fitting 130 V bulb included	230 V		**XAC V07**	0.055

(1) Mounting with operating heads ZA2 B●●● (see page 6/47).
(2) Bulb type for use with direct supply units: BA 9s base fitting incandescent bulb U ⩽ 130 V or neon bulb 110 V ⩽ U ⩽ 400 V. Maximum power: 2.6 W, maximum Ø: 11 mm, maximum length: 26 mm. See page 6/50.

Characteristics: pages 6/34 | Dimensions: page 6/55 | Application schemes: pages 6/56 | Presentation: page 6/58

Schneider Electric

Pendant control stations
Double insulated, type XAC B
For power circuits (direct switching)
Separate components and spare parts

DF565594



XES D1191

530368



XES D2201

530389



XAC S399

530391



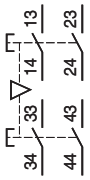
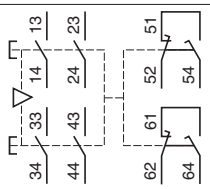
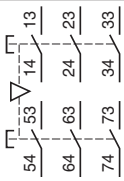
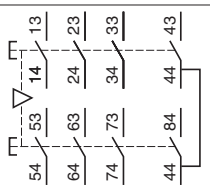
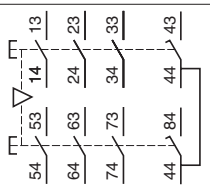
XAC S499

530366



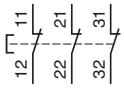
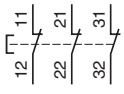
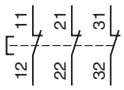
XAC S3991

Contact blocks, snap action

Description	Application	Function	Max. power/ 400 V	Scheme	Reference	Weight kg
Double block 2-pole 2 spring return operators mechanically interlocked (operator centres: 40 mm)	Single-speed	N/O + N/O	2.2 kW		**XES D1191**	0.140
	2-speed	N/O + N/O + 1 C/O staggered auxiliary contact *(1)*	2.2 kW		**XES D1291**	0.190
Double block 3-pole 2 spring return operators mechanically interlocked (operator centres: 40 mm)	Single-speed	N/O + N/O + N/O	3 kW		**XES D2201**	0.200
		N/O + N/O + N/O + 1 N/O simultaneous auxiliary contact *(1)*	3 kW		**XES D2241**	0.210
		N/O + N/O + N/O + 1 N/O staggered auxiliary contact *(1)*	3 kW		**XEN D2251**	0.210

Isolating block, slow break

In the interests of safety, it is imperative that these isolating blocks only be used with a stay put or latching type operating head to ensure complete isolation when the pendant station is not in use.

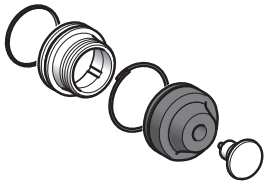
Mounting position	Application	Function	Max. power/ 400 V	Scheme	Reference	Weight kg
On front 40 mm centres *(2)*	Emergency stop	N/C + N/C + N/C with positive opening operation	3 kW		**XAC S399**	0.100
On front 30 mm centres *(2)*	Emergency stop	N/C + N/C + N/C with positive opening operation	3 kW		**XAC S499**	0.100
In base *(3)*	Emergency stop	N/C + N/C + N/C with positive opening operation	3 kW		**XAC S3991**	0.110

(1) Auxiliary contacts are slow break.
(2) Mounting with operating heads ZA2 B●●●, except ZA2 BD● and ZA2 BG● (see page 6/47).
(3) Mounting with operating head ZA2 BS944 (see page 6/47).

6

Pendant control stations
Double insulated, type XAC B
Metal, type XAC M
For control or power circuits
Separate components and spare parts

DF565596

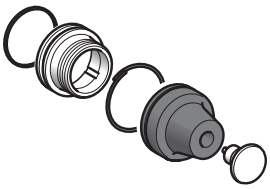


XAC B911●

Booted operators

For use with contact block	Travel	Operating temperature	Colour of insert	Sold in lots of	Unit reference	Weight kg
XEN B●●●● XEN C●●●● XEN D●●●● XES B2011 XES D2201 XES D2241 XES D2251	4 mm	- 25…+ 70 °C *(1)*	White	10	**XAC B9111**	0.005
			Black	10	**XAC B9112**	0.005
			Green	10	**XAC B9113**	0.005
			Red	10	**XAC B9114**	0.005
			Yellow	10	**XAC B9115**	0.005
			Blue	10	**XAC B9116**	0.005
			Brown	10	**XAC B9119**	0.005
		- 40…+ 70 °C *(2)*	White	10	**XAC B9121**	0.005
			Black	10	**XAC B9122**	0.005
			Green	10	**XAC B9123**	0.005
			Red	10	**XAC B9124**	0.005
			Yellow	10	**XAC B9125**	0.005
			Blue	10	**XAC B9126**	0.005
			Brown	10	**XAC B9129**	0.005

DF565597



XAC B921●

For use with contact block	Travel	Operating temperature	Colour of insert	Sold in lots of	Unit reference	Weight kg
XES D1181 XES D1191 XES D1281 XES D1291	16 mm	- 25…+ 70 °C *(1)*	White	10	**XAC B9211**	0.005
			Black	10	**XAC B9212**	0.005
			Green	10	**XAC B9213**	0.005
			Red	10	**XAC B9214**	0.005
			Yellow	10	**XAC B9215**	0.005
			Blue	10	**XAC B9216**	0.005
			Brown	10	**XAC B9219**	0.005
		- 40…+ 70 °C *(2)*	White	10	**XAC B9221**	0.005
			Black	10	**XAC B9222**	0.005
			Green	10	**XAC B9223**	0.005
			Red	10	**XAC B9224**	0.005
			Yellow	10	**XAC B9225**	0.005
			Blue	10	**XAC B9226**	0.005
			Brown	10	**XAC B9229**	0.005

Booted operators (silicone boot)

DF565598



ZA2 BP●

For use with contact block	Operating temperature	Colour of boot	Reference	Weight kg
XAC S41●	- 25…+ 70 °C	Black	**ZA2 BP2**	0.015
		Green	**ZA2 BP3**	0.015
		Red	**ZA2 BP4**	0.015
		Yellow	**ZA2 BP5**	0.015
		Blue	**ZA2 BP6**	0.015

(1) Polychloroprene boots.
(2) Silicone boots.

Characteristics: pages 6/34 and 6/36
Dimensions: page 6/55
Application schemes: pages 6/56 and 6/57
Presentation: page 6/58

Pendant control stations
Double insulated, type XAC B
Metal, type XAC M
For control or power circuits
Separate components and spare parts

DF538492



ZA2 BS844

DF538493



ZA2 BS944

530382



ZA2 BD●

530383



ZA2 BG●

530381



ZA2 BB●

530390



ZA2 BV0●

Operating heads for front or base mounting *(1)*

Description	Colour	Type	Reference	Weight kg
Trigger action latching Emergency stop *(2)* Turn to release (Emergency stop function)	Red	Ø 30 mm	**ZA2 BS834**	0.028
		Ø 40 mm	**ZA2 BS844**	0.033
Trigger action latching Emergency stop *(2) (3)* Key release (n° 455) Key withdrawal in rest (unactuated) position (Emergency stop function)	Red	Ø 30 mm	**ZA2 BS934**	0.060
		Ø 40 mm	**ZA2 BS944**	0.065
Selector switches, standard handle *(4)*	Black	2 position, stay put	**ZA2 BD2**	0.018
		3 position, stay put *(5)*	**ZA2 BD3**	0.018
Key switches (key n° 455) *(3)* Key withdrawal in left and right-hand positions	–	2 position, stay put	**ZA2 BG4**	0.042
		3 position, stay put *(5)*	**ZA2 BG5**	0.042
Key switches (key n° 455) *(3)* Key withdrawal in left-hand position	–	2 position, stay put	**ZA2 BG2**	0.042
Key switches (key n° 455) *(3)* Spring return from right to left Key withdrawal in left-hand position	–	2 position	**ZA2 BG6**	0.042
Key switches (key n° 455) *(4) (3)* Key withdrawal in centre position	–	3 position, stay put *(5)*	**ZA2 BG3**	0.042
Wobblesticks *(6)* Operates in all directions for fast stop	Black	–	**ZA2 BB2**	0.060
	Red	–	**ZA2 BB4**	0.060

Operating head for isolating block

Description	Colour	Type	Reference	Weight kg
Mushroom head, latching Key release (n° 455) Key withdrawal in rest (unactuated) position (Emergency stop function)	Red	Ø 40 mm	**ZA2 BS14**	0.065

Pilot light heads

Description	Colour	Reference	Weight kg
For use with incandescent bulbs			
Lens cap with fixing bezel	White	**ZA2 BV01**	0.015
	Green	**ZA2 BV03**	0.015
	Red	**ZA2 BV04**	0.015
	Yellow	**ZA2 BV05**	0.015
	Blue	**ZA2 BV06**	0.015
	Clear	**ZA2 BV07**	0.015
For use with neon bulbs			
Lens cap with fixing bezel	Green	**ZA2 BV033**	0.015
	Red	**ZA2 BV043**	0.015
	Yellow	**ZA2 BV053**	0.015
	Clear	**ZA2 BV073**	0.015

(1) The technical characteristics of pendant control stations XAC B and XAC M can only be guaranteed by using the operating heads ZA2 B●● listed above.
(2) Trigger action mechanically latching Emergency stop pushbuttons conform to standards EN/IEC 60204-32, EN/ISO 13850: 2006, Machinery directive 98/37/EC and standard EN/IEC 60947-5-5.
(3) Other key numbers available on request, please consult your Regional Sales Office.
(4) Selector switches or key switches with other mechanical functions: please consult your Regional Sales Office.
(5) Only suitable for front mounting.
(6) Base mounting recommended.

Characteristics: pages 6/34 and 6/36 | Dimensions: page 6/55 | Application schemes: pages 6/56 and 6/57 | Presentation: page 6/58

Pendant control stations
Double insulated, type XAC B
Metal, type XAC M
For control circuits
Separate components: pushbuttons with analogue output *(1)*

Environment

Conformity to standards			EN/IEC 60947-5-1
Ambient air temperature	For storage	**°C**	- 40…+ 70
	For operation	**°C**	- 25…+ 70
Degree of protection			IP 65 conforming to IEC 60529
Pushbutton operator travel		**mm**	11
Operating force		**N**	4 (start of travel) 9 (end of travel)
Mechanical durability (in millions of operating cycles)			1
Connection		**mm²**	Terminal connectors, maximum clamping capacity: 2 x 1.5 mm² or 1 x 2.5 mm²

Contact block characteristics

Thermal current (Ithe)	**A**	6
Rated insulation voltage (Ui)	**V**	250, degree of pollution 3, conforming to IEC 60947-1

Rated operational characteristics
conforming to 947-5-1 Appendix C
Utilisation categories AC-15 and DC-13

Inductive circuit

a.c. supply ∿ 50/60 Hz
Power broken in VA
for 1 million operating cycles

Voltage V	48	110	230
VA	30	30	30

d.c. supply ⎓
Power broken in W
for 1 million operating cycles

Voltage V	48	110
W	48	12

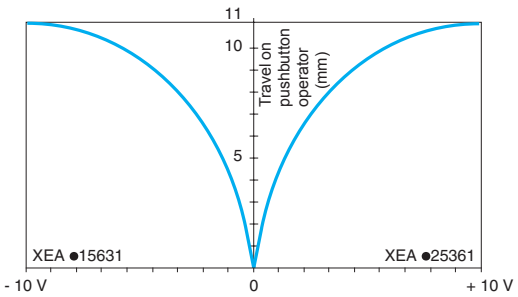
Analogue circuit characteristics

Type of current		d.c.
Rated supply voltage	**V**	15
Voltage limits	**V**	14…18
Current consumption	**mA**	< 15

Analogue signal output curves and schemes

Analogue signal output curves

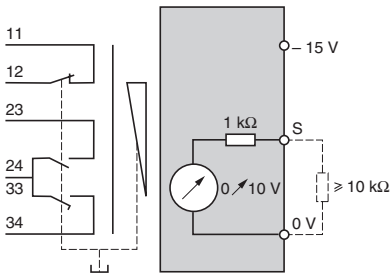
with 15 V supply voltage



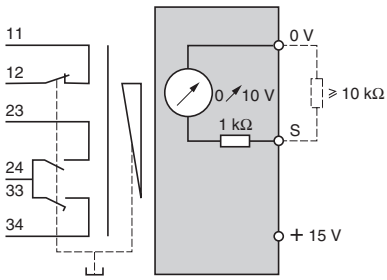
Note: *supply voltage = 15 V, output voltage = 10 V*
(if supply voltage < 15 V, output voltage < 10 V)

Equivalent output schemes

XEA ●15361



XEA ●25361



Contact state

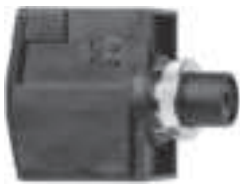


(1) Pushbuttons providing an analogue output signal proportional to the distance travelled by the pushbutton operator.

References: page 6/49
Dimensions: page 6/49

Pendant control stations
Double insulated, type XAC B
Metal, type XAC M
For control circuits
Separate components: pushbuttons with analogue output *(1)*

530386



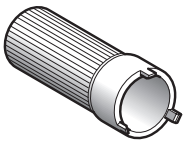
XEA C●5361

530392



XEA B●5361

530306



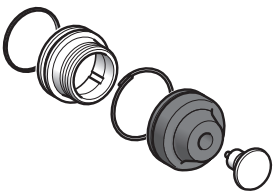
ZA2 BZ905

530305



XAC X1

DF565601



XAC B9112

References

Complete pushbuttons (body + operating head), non booted *(2)*

Supply voltage	Contact block	Reference	Weight kg
0…- 15 V	N/C + N/O at start of travel N/O at end of travel	**XEA C15361**	0.065
0…+ 15 V	N/C + N/O at start of travel N/O at end of travel	**XEA C25361**	0.065

Complete pushbuttons (body + operating head), booted (2)

Supply voltage	Contact block	Reference	Weight kg
0…- 15 V	N/C + N/O at start of travel N/O at end of travel	**XEA B15361**	0.065
0…+ 15 V	N/C + N/O at start of travel N/O at end of travel	**XEA B25361**	0.065

Mounting accessories

Description	For use with	Reference	Weight kg
Tightening key for fixing nut	XEA C●5361	**ZA2 BZ905**	0.060
	XEA B●5361	**XAC X1**	0.010

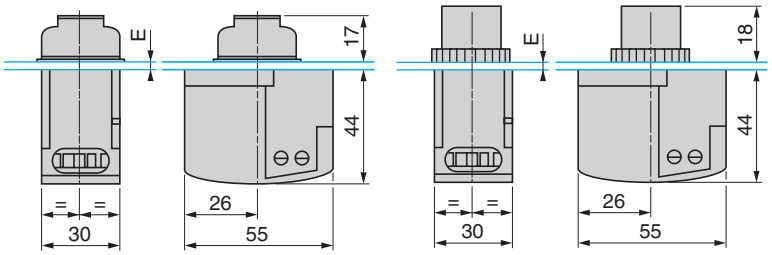
Separate components and spare parts

Description	Colour of insert	Unit reference	Weight kg
Booted operator (Sold in lots of 10)	White	**XAC B9111**	0.005
	Black	**XAC B9112**	0.005

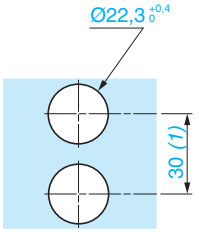
(1) Pushbuttons providing an analogue output signal proportional to the distance travelled by the pushbutton operator.
(2) Pushbutton supplied with 1 white insert and 1 black insert.

Dimensions

XEA B●5361 | **XEA C●5361**



Panel cut-out



E = support panel thickness, 1 to 3.5 mm.

(1) Minimum fixing centres between 2 operators.

Characteristics: page 6/48

Pendant control stations
Double insulated, type XAC B
Metal, type XAC M
For control or power circuits
Separate components and spare parts

530307



DL1 C●●●●

530308



DL1 CF●●●

530311



XAC B91●

530310



XAC B92●

530309



XAC B90●

Bulbs

Description	Voltage	Sold in lots of	Unit reference	Weight kg
Incandescent BA 9s base fitting Maximum power: 2.6 W Maximum Ø: 11 mm Maximum length: 28 mm	6 V	10	**DL1 CB006**	0.002
	12 V	10	**DL1 CE012**	0.002
	24 V	10	**DL1 CE024**	0.002
	48 V	10	**DL1 CE048**	0.002
	130 V	10	**DL1 CE130**	0.002
Neon BA 9s base fitting Maximum power: 2.6 W Maximum Ø: 11 mm Maximum length: 28 mm	120 V	10	**DL1 CF110**	0.002
	230 V	10	**DL1 CF220**	0.002
	400 V	10	**DL1 CF380**	0.002

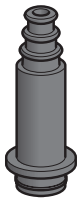
Accessories for booted operators

Description	Travel	Material/ Colour	Operating temperature	Sold in lots of	Unit reference	Weight kg
Boots with circlip, without coloured insert	4 mm	Polychloroprene	- 25…+ 70° C	10	**XAC B911**	0.002
		Silicone	- 40…+ 70° C	10	**XAC B912**	0.002
	16 mm	Polychloroprene	- 25…+ 70° C	10	**XAC B921**	0.002
		Silicone	- 40…+ 70° C	10	**XAC B922**	0.002
Coloured inserts for booted operators (4 and 16 mm travel)		White	–	10	**XAC B901**	0.001
		Black	–	10	**XAC B902**	0.001
		Green	–	10	**XAC B903**	0.001
		Red	–	10	**XAC B904**	0.001
		Yellow	–	10	**XAC B905**	0.001
		Blue	–	10	**XAC B906**	0.001
		Brown	–	10	**XAC B909**	0.001

6

Characteristics: pages 6/34 and 6/36 | Dimensions: page 6/55 | Application schemes: pages 6/56 and 6/57 | Presentation: page 6/58

Pendant control stations
Double insulated, type XAC B
Metal, type XAC M
For control or power circuits
Separate components and spare parts

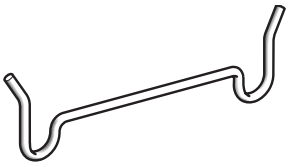
530312

XAC B913

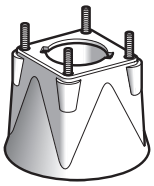
530313

XAC B960

530314

XAC B971

DF565602

XAC B972

DF565604

XAC B982

530318

XAC X1

530319

XAC X905

Complementary accessories

Description	For use with		Reference	Weight kg
Protective cable sleeve with cable tie (for tightening sleeve onto cable)	Enclosures XAC B219 and XAC B220 (2 operators)	For cable Ø 7…13 mm	**XAC B913**	0.065
	Enclosures XAC B●●● with 4 to 12 operators and XAC M●●● with 4 and 8 operators	For cable Ø 10…22 mm	**XAC B960**	0.110
		For cable Ø 22…35 mm	**XAC B965**	0.160
Blanking plug with seal and fixing nut	–		**ZB2 SZ3**	0.005
Adaptor for use with protective cable sleeve for cable Ø 10…22 mm	Self-supporting cable type BBAP		**XAC B961**	0.025
Lower support ring	Single row enclosures XAC B and XAC M		**XAC B971**	0.015
	2 row enclosures XAC B		**XAC B972**	0.020
Protective guards for base mounted units	Emergency stop pushbutton		**XAC B982**	0.050

Tools

Description	For use with	Reference	Weight kg
Tightening key	Bezels	**XAC X1**	0.010
	Units mounted in base of enclosure	**XAC X905**	0.015
Bulb extractor	BA 9s base fitting bulbs	**XBF X13**	0.003

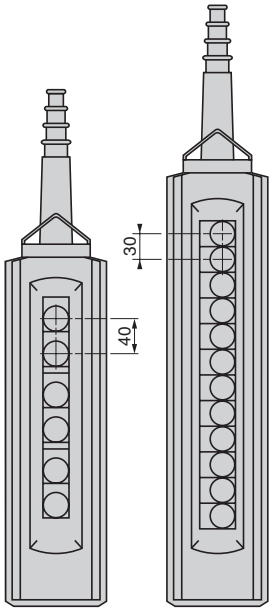
6

Characteristics: pages 6/34 and 6/36 | Dimensions: page 6/55 | Application schemes: pages 6/56 and 6/57 | Presentation: page 6/58

Pendant control stations

Double insulated, type XAC B
Metal, type XAC M
For control or power circuits
Legends 30 x 40 mm (with symbols conforming to NF E 52-124)

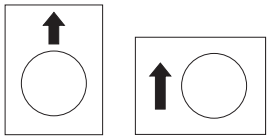
DF565666



Vertical mounting 40 mm centres

Horizontal mounting 30 mm centres

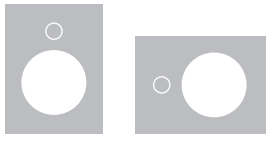
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White background, black symbol



Black background, white symbol



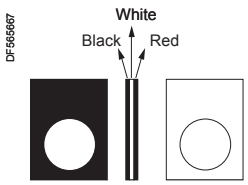
Red background, white symbol

Symbol Reference Vertical mounting 40 mm centres	Symbol Reference Horizontal mounting 30 mm centres	Weight kg
Raise, slow		
 **ZB2 BY4951**	 **ZB2 BY4901**	0.001
Raise, fast		
 **ZB2 BY4952**	 **ZB2 BY4902**	0.001
Raise, slow-fast		
 **ZB2 BY4953**	 **ZB2 BY4903**	0.001
Right, slow		
 **ZB2 BY4901**	 **ZB2 BY4907**	0.001
Right, fast		
 **ZB2 BY4902**	 **ZB2 BY4908**	0.001
Right, slow-fast		
 **ZB2 BY4903**	 **ZB2 BY4909**	0.001
Forward, slow		
 **ZB2 BY4963**	 **ZB2 BY4913**	0.001
Forward, fast		
 **ZB2 BY4964**	 **ZB2 BY4914**	0.001
Forward, slow-fast		
 **ZB2 BY4965**	 **ZB2 BY4915**	0.001
Slew right, slow		
 **ZB2 BY4919**	 **ZB2 BY4919**	0.001
Slew right, fast		
 **ZB2 BY4920**	 **ZB2 BY4920**	0.001
Slew right, slow-fast		
 **ZB2 BY4921**	 **ZB2 BY4921**	0.001
Slow		
 **ZB2 BY4933**	 **ZB2 BY4933**	0.001
Klaxon		
 **ZB2 BY4982**	 **ZB2 BY4932**	0.001
Start		
 **ZB2 BY4980**	 **ZB2 BY4930**	0.001

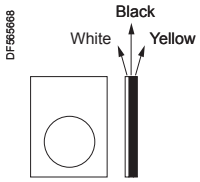
Symbol Reference Vertical mounting 40 mm centres	Symbol Reference Horizontal mounting 30 mm centres	Weight kg
Lower, slow		
 **ZB2 BY2954**	 **ZB2 BY2904**	0.001
Lower, fast		
 **ZB2 BY2955**	 **ZB2 BY2905**	0.001
Lower, slow-fast		
 **ZB2 BY2956**	 **ZB2 BY2906**	0.001
Left, slow		
ZB2 BY2904	**ZB2 BY2910**	0.001
Left, fast		
ZB2 BY2905	**ZB2 BY2911**	0.001
Left, slow-fast		
ZB2 BY2906	**ZB2 BY2912**	0.001
Reverse, slow		
ZB2 BY2966	**ZB2 BY2916**	0.001
Reverse, fast		
ZB2 BY2967	**ZB2 BY2917**	0.001
Reverse, slow-fast		
ZB2 BY2968	**ZB2 BY2918**	0.001
Slew left, slow		
ZB2 BY2922	**ZB2 BY2922**	0.001
Slew left, fast		
ZB2 BY2923	**ZB2 BY2923**	0.001
Slew left, slow-fast		
ZB2 BY2924	**ZB2 BY2924**	0.001
Fast		
ZB2 BY4934	**ZB2 BY4934**	0.001
Start-Klaxon		
ZB2 BY4985	**ZB2 BY4935**	0.001
Stop		
ZB2 BY2931	**ZB2 BY2931**	0.001

Characteristics: pages 6/34 and 6/36
Dimensions: page 6/55
Application schemes: pages 6/56 and 6/57
Presentation: page 6/58

Pendant control stations
Double insulated, type XAC B
Metal, type XAC M
For control or power circuits
Legends 30 x 40 mm



ZB2 BY2101



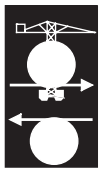
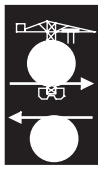
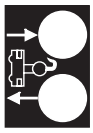
ZB2 BY4101

Text	Reference	Weight kg	Text	Reference	Weight kg
■ Start functions: white characters on black background ■ Stop functions: white characters on red background					
Blank					
Black or red background	**ZB2 BY2101**	0.001	White or yellow background	**ZB2 BY4101**	0.001
With French text			**With English text**		
For pushbuttons			**For pushbuttons**		
Marche	**ZB2 BY2103**	0.001	Start	**ZB2 BY2303**	0.001
Arrêt	**ZB2 BY2104**	0.001	Stop	**ZB2 BY2304**	0.001
Avant	**ZB2 BY2105**	0.001	Forward	**ZB2 BY2305**	0.001
Arrière	**ZB2 BY2106**	0.001	Reverse	**ZB2 BY2306**	0.001
Montée	**ZB2 BY2107**	0.001	Up	**ZB2 BY2307**	0.001
Descente	**ZB2 BY2108**	0.001	Down	**ZB2 BY2308**	0.001
Droite	**ZB2 BY2109**	0.001	Right	**ZB2 BY2309**	0.001
Gauche	**ZB2 BY2110**	0.001	Left	**ZB2 BY2310**	0.001
En service	**ZB2 BY2111**	0.001	On	**ZB2 BY2311**	0.001
Hors service	**ZB2 BY2112**	0.001	Off	**ZB2 BY2312**	0.001
Sous tension	**ZB2 BY2126**	0.001	Power on	**ZB2 BY2326**	0.001
Lent	**ZB2 BY2127**	0.001	Slow	**ZB2 BY2327**	0.001
Vite	**ZB2 BY2128**	0.001	Fast	**ZB2 BY2328**	0.001
Klaxon	**ZB2 BY2125**	0.001	–	–	–
For selector switches			**For selector switches**		
Arrêt-Marche	**ZB2 BY2166**	0.001	–	–	–
Hors-En	**ZB2 BY2167**	0.001	Off-On	**ZB2 BY2367**	0.001
With special texts					
■ Specify text when ordering, ■ 2 lines maximum, 11 characters per line.					
White characters on black background	**ZB2 BY2002**	0.001	Black characters on white background	**ZB2 BY4001**	0.001
White characters on red background	**ZB2 BY2004**	0.001	Black characters on yellow background	**ZB2 BY4005**	0.001
Other versions	Legends with texts in other languages. Please consult your Regional Sales Office.				

Characteristics: pages 6/34 and 6/36
Dimensions: page 6/55
Application schemes: pages 6/56 and 6/57
Presentation: page 6/58

Pendant control stations
Double insulated, type XAC B
Metal, type XAC M
For control or power circuits
Twin legends for tower cranes

Legends with white symbols on black background

Function	Symbol	Reference	Weight kg	Function	Symbol	Reference	Weight kg
40 mm operator centres (for enclosures with 2 to 8 operators and 12 operators in 2 rows)							
Hoist Raise Lower		**XAC Y4970**	0.002	**Long travel** Forward Reverse		**XAC Y4972**	0.002
Slew Right Left		**XAC Y4971**	0.002	**Trolley** Forward Reverse		**XAC Y4973**	0.002
30 mm operator centres (for enclosures with 12 operators in 1 row)							
Hoist Raise Lower		**XAC Y3970**	0.002	**Long travel** Forward Reverse		**XAC Y3972**	0.002
Slew Right Left		**XAC Y3971**	0.002	**Trolley** Forward Reverse		**XAC Y3973**	0.002

6

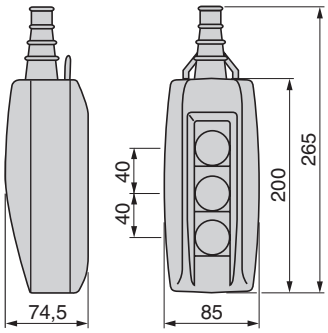
Pendant control stations

Double insulated, type XAC B
Metal, type XAC M
For control or power circuits

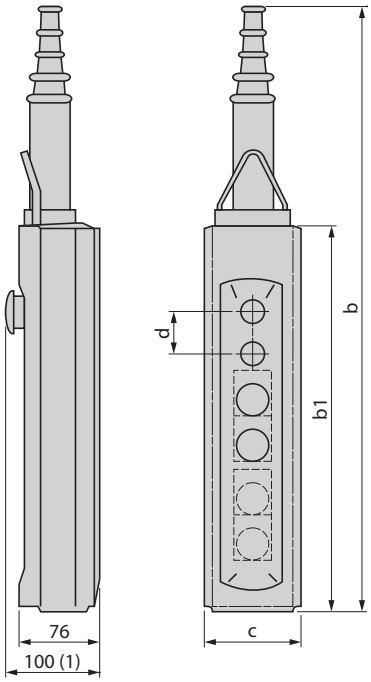
(XAC M: products for maintenance purposes only)

Pendant control stations

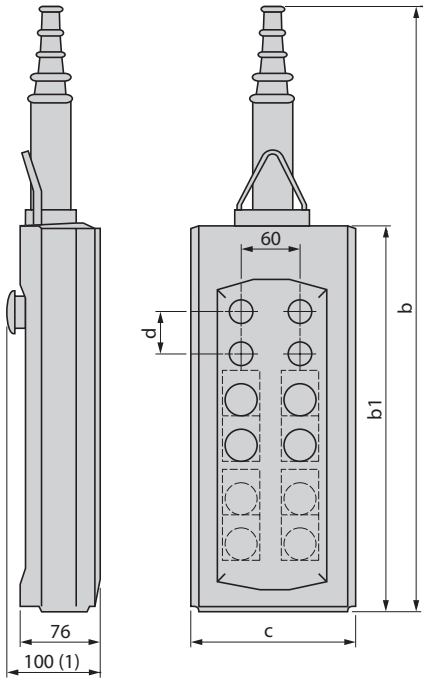
XAC B●●● (2 and 3-way)



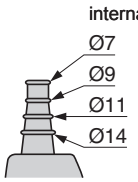
XAC B●●● (2 to 12-way, 1 row)
XAC M●●● (4 to 8-way, 1 row)

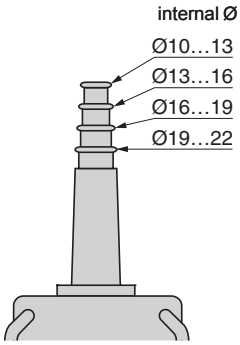


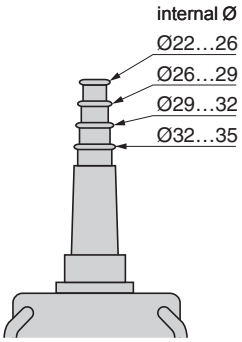
XAC B●●● (12-way, 2 rows)



Protective cable sleeves





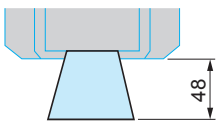


(1) With mushroom head operator.

Number of operators	2	4	6	8	12 (1 row)	12 (2 rows)
b	409	499	589	679	679	593
b1	220	310	400	490	490	404
c	98	98	98	98	98	158
d	40	40	40	40	30	40

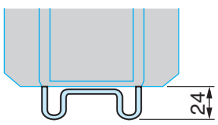
Protective guards

XAC B982



Lower support rings

XAC B971, B972

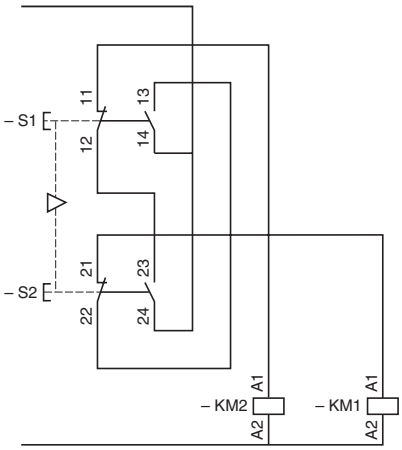


6

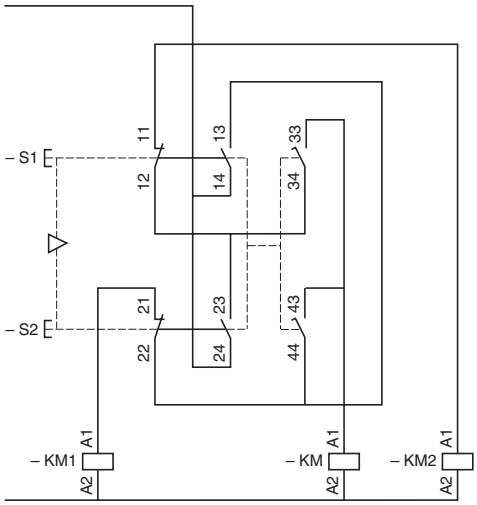
Pendant control stations
Double insulated, type XAC B
Metal, type XAC M
For control or power circuits

Control circuits

For control of single-speed reversing motor
Contact block **XES D1181**



For control of 2-speed reversing motor
Contact block **XES D1281**

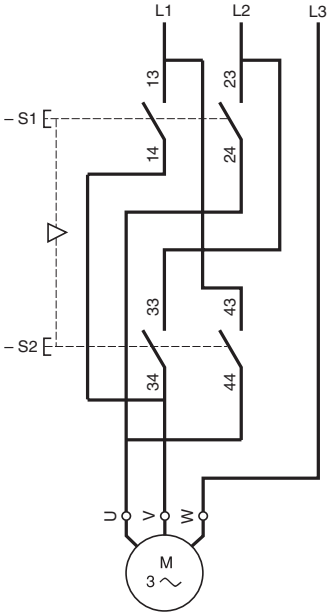


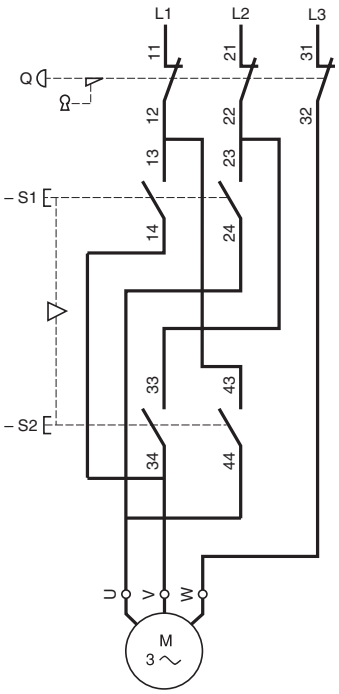
KM: high speed contactor

Power circuits

For control of single-speed reversing motor. 2-phase switching
Contact block **XES D1191**

Application example:
Combined with 3-pole isolating block XAC S399 or XAC S3991, shown in the unoperated position (pendant station “supplied”), fitted with key release trigger action latching Emergency stop operator (ZA2 BS944).





6

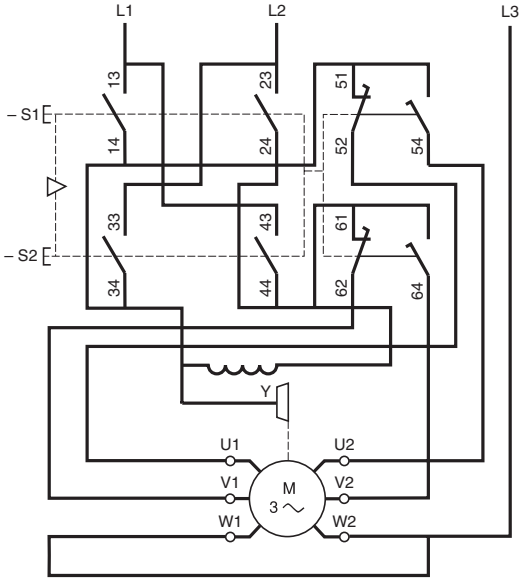
Pendant control stations
Double insulated, type XAC B
Metal, type XAC M
For control or power circuits

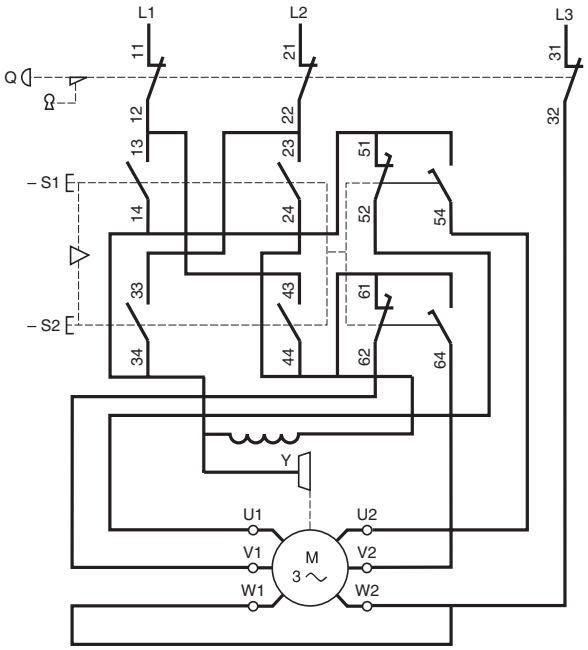
Power circuits *(continued)*

For control of 2-speed reversing motor (motors with separate windings only). 2-phase switching

Contact block **XES D1291**

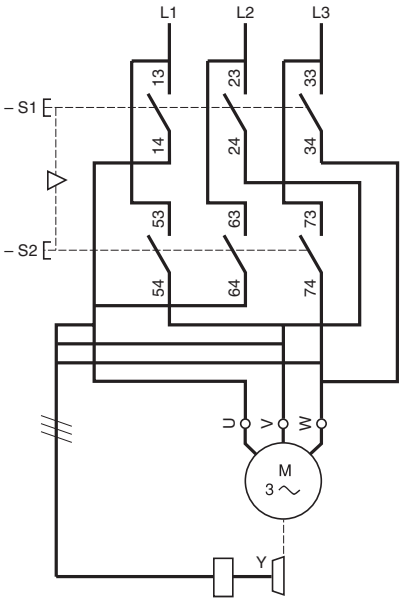
Application example:
Combined with 3-pole isolating block XAC S399 or XAC S3991, shown in the unoperated position (pendant station "supplied"), fitted with key release trigger action latching Emergency stop operator (ZA2 BS944).



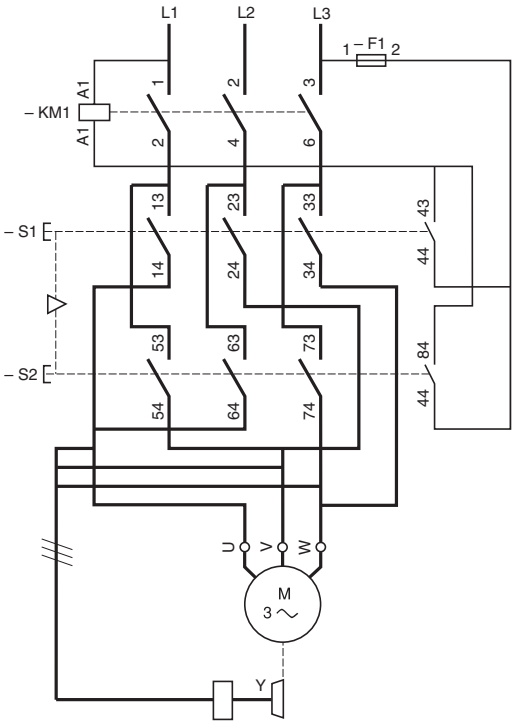


For control of single-speed reversing motor. 3-phase switching, reversing by 2-phase inversion

Contact block **XES D2201**



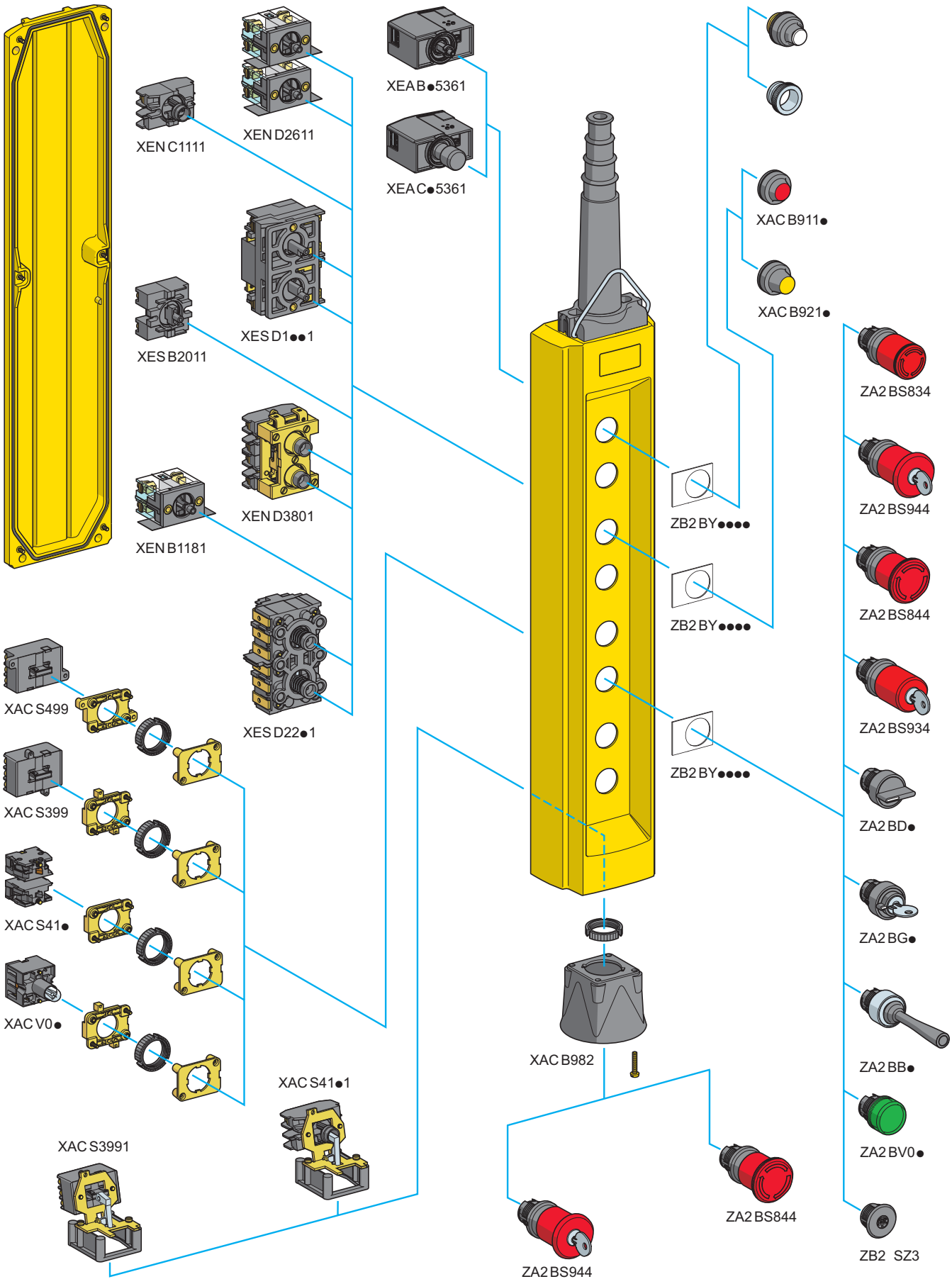
Contact block **XES D2241** with line contactor



6

Pendant control stations

Double insulated, type XAC B
Metal, type XAC M
For control or power circuits

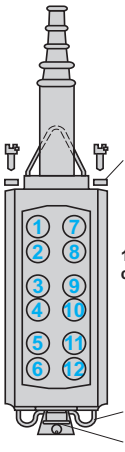


Order form (specimen suitable for photocopying)

Pendant control stations

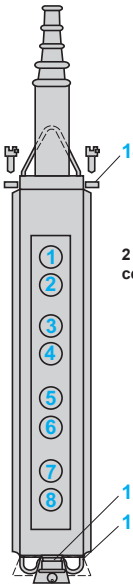
Double insulated, type XAC B
Metal, type XAC M **(XAC M: products for maintenance purposes only)**
For control or power circuits
Variable composition stations, factory assembled

530343



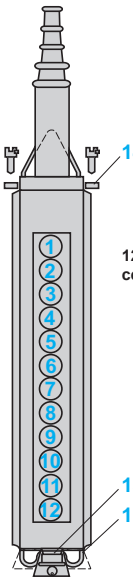
12 cut-outs, centres: 40 mm

525684



2 to 8 cut-outs, centres: 40 mm

525685



12 cut-outs, centres: 30 mm

Customer			**Schneider Electric Industries**	
Company	Order N°	Delivery date	Sales office - Subsidiary Co.	Order N°

Enter the order with XAC B09 reference (for enclosures XAC B) or XAC M09 reference (for enclosures XAC M)

Unit reference of empty enclosure, see pages 6/39 to 6/41	**Number of identical stations**	**Enclosure price** *(1)*
XAC ☐☐☐☐☐☐		

	Legends see pages 6/52 to 6/54		**Contact blocks or pilot light bodies** see pages 6/42 to 6/45		**Operating heads or pilot light heads or blanking plug** see pages 6/46 and 6/47		
	Reference	Unit price	Reference	Unit price	Reference	Unit price	**Total price**
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							

Unit mounted in base of enclosure (if required)

13							

Factory assembled: Number of heads or blanking plugs to be fitted ☐ X Additional cost **XAC 9VA** for fitting of 1 head or 1 blanking plug ☐ ☐

Complementary accessories, see page 6/51 (cross the appropriate box or boxes)

	Description	✕	Reference	Unit price	
14	Adaptor for self-supporting cable type BBAP for use with cable entry sleeve Ø 10 to 22 mm		**XAC B961**		
15	Lower support ring for single row enclosures		**XAC B971**		
15	Lower support ring for 2 row enclosures		**XAC B972**		
16	Protective guard for key release latching mushroom head pushbutton, mounted in base		**XAC B982**		

Total price of assembled pendant station ☐

(1) Obtain the empty enclosure price.

Pendant control stations
Double insulated, type XAC F
For control circuits
(XAC F: Products for maintenance purposes only)

Environment

Conformity to standards			EN/IEC 60947-5-1 EN/IEC 60204-32, UL 508, CSA C22-2 n° 14 EN/IEC 60947-5-5 and EN/ISO 13850: 2006 for versions with trigger action Emergency stop EN/IEC 60947-3
Protective treatment	Standard version		"TH"
Ambient air temperature	For storage	**°C**	- 40…+ 70
	For operation	**°C**	- 25…+ 70
Vibration resistance			15 gn (10…500 Hz) conforming to IEC 60068-2-6
Shock resistance			100 gn conforming to IEC 60068-2-27
Electric shock protection			Class II conforming to IEC 61140
Degree of protection			IP 65 conforming to IEC 60529 IK 08 conforming to EN 50102
Mechanical durability (in millions of operating cycles)			1
Enclosure			Double insulated glass-reinforced polyester (yellow)
Cable entry			Rubber sleeve with stepped entry diameter for cable Ø 10…22 mm or Ø 22…35 mm

Contact block characteristics

Rated operational characteristics			∼ AC-15: A300 or Ue = 240 V, Ie = 3 A ⎓ DC-13: Q300 or Ue = 250 V, Ie = 0.27 A conforming to EN/IEC 60947-5-1 Appendix A
Thermal current (Ithe)		**A**	10
Rated insulation voltage (Ui)	**XEN C●●●●, XEN D3●●●, XEN D4●●●, XES B2011, XAC S4, XES D1181, XES D1281**	**V**	500, degree of pollution 3
	XEN B●●●●, XEN D1●●●, XEN D2●●●		400, degree of pollution 3, conforming to IEC 60947-1
Rated impulse withstand voltage (U imp)		**kV**	6, conforming to IEC 60947-1
Positive operation			Mushroom head pushbutton: N/C contact with positive opening operation conforming to EN/IEC 60947-5-1 Appendix K
Contact operation			Slow break or snap action
Resistance across terminals		**MΩ**	⩽ 25
Operating force	With booted operator	**N**	**XAC S4●●●**: 10 (N/O), 8 (N/C); **XEN C●●●●**: 6 (N/O), 4 (N/C); **XEN B●●●●, XEN D1●●●, XEN D2●●●**: Single-speed: 9; 2-speed: 20 (1st speed), 30 (2nd speed); **XEN D3●●●, XEN D4●●●**: 25; **XES B2011**: 7; **XES D1181, XES D128:** 15 (1st speed), 25 (2nd speed)
	With spring return mushroom head operator	**N**	10
	With latching mushroom head operator	**N**	40
Terminal referencing			By numbers conforming to CENELEC EN 50013
Short-circuit protection			10 A cartridge fuse type gG (gI)
Connection		**mm²**	Screw and captive cable clamp terminals. Clamping capacity: 1 x 2.5 or 2 x 1.5 with or without cable end

Operational power
Conforming to EN/IEC 60947-5-1 Appendix C
Utilisation categories AC-15 and DC-13
For 1 million operating cycles
Operating rate: 3600 operating cycles/hour
Load factor: 0.5
⎓ Inductive circuit

Contact blocks XEN C●●●●, XEN D3●●●, XEN D4●●●, XAC S4●●●

a.c. supply ∼ 50/60 Hz

Voltage	V	24	48	127	230
⎓	VA	140	385	525	455

d.c. supply ⎓

Voltage	V	24	48	120
⎓	W	60	45	42

Contact blocks XEN B●●●●, XEN D1●●●, XEN D2●●●

a.c. supply ∼ 50/60 Hz

Voltage	V	24	48	127	230
⎓	VA	140	210	640	680

d.c. supply ⎓

Voltage	V	24	48	120
⎓	W	48	31	35

Contact blocks XES B2011, XES D1181, XES D1281

a.c. supply ∼ 50/60 Hz

Voltage	V	24	48	127	230
⎓	VA	50	100	450	750

d.c. supply ⎓

Voltage	V	24	48	120
⎓	W	140	140	95

References: page 6/61 Dimensions: page 6/62 Application schemes: page 6/63 Presentation: page 6/64

Pendant control stations
Double insulated, type XAC F
For control circuits
Empty enclosures

(XAC F: Products for maintenance purposes only)

DF565680



XAC F00●0

Empty enclosures *(1)*

Description		Protective cable sleeve	Reference	Weight kg
Enclosures without cut-outs	Without guard rails	Ø 10…22 mm	**XAC F0010**	2.100
		Ø 22…35 mm	**XAC F0050**	2.300
	With guard rails	Ø 10…22 mm	**XAC F0011**	2.300
		Ø 22…35 mm	**XAC F0051**	2.500
Enclosures with cut-outs in positions requested on the order form, see page 6/65	Without guard rails	Ø 10…22 mm	**XAC F3210**	2.100
		Ø 22…35 mm	**XAC F3250**	2.300
	With guard rails	Ø 10…22 mm	**XAC F3211**	2.300
		Ø 22…35 mm	**XAC F3251**	2.500

DF565681



XAC F00●1

Variable composition stations, factory assembled

Use the order form on page 6/65 to define the required configuration

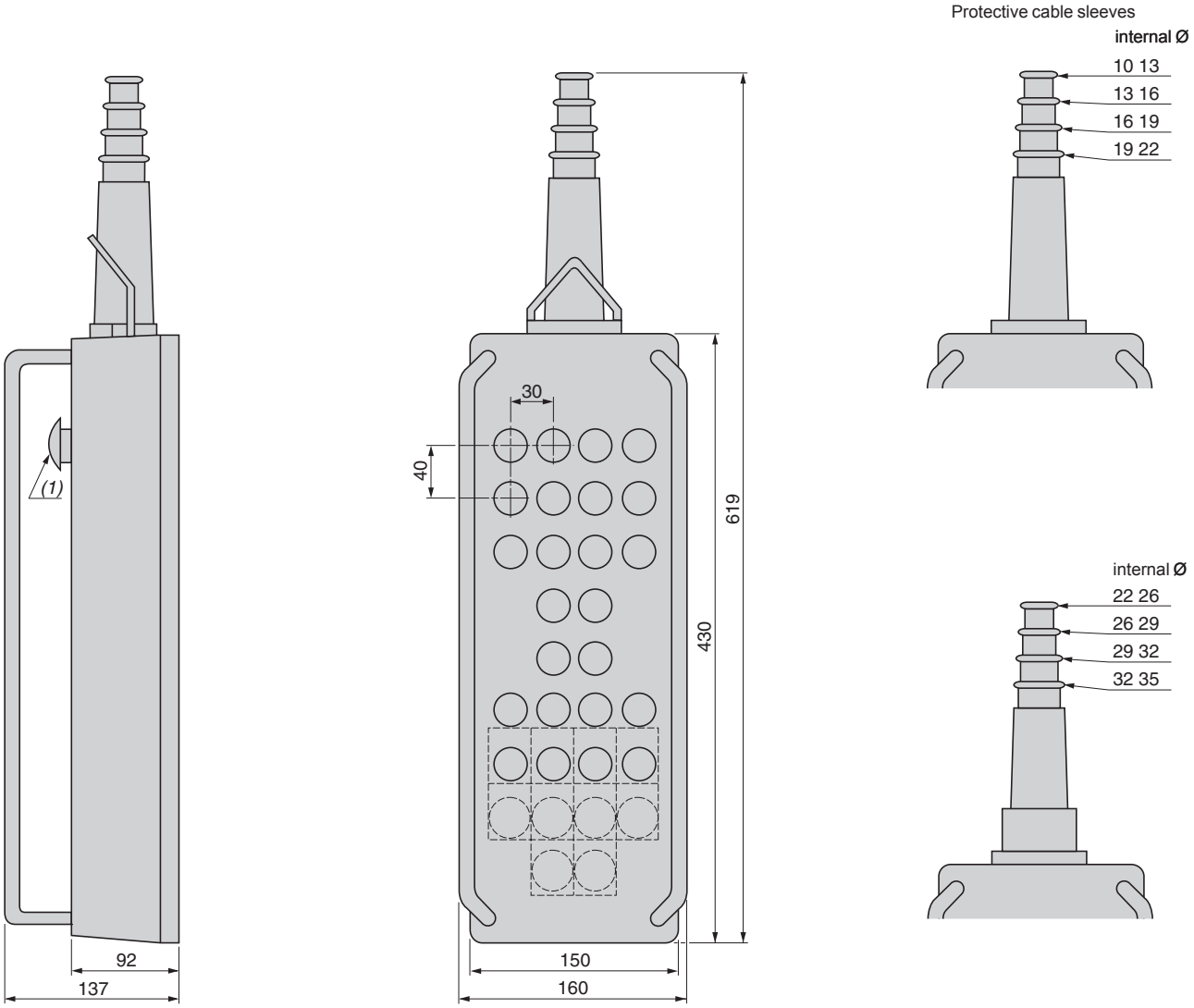
Equipment: separate components as for control circuit pendant stations XAC B and XAC M. Units XB2 B can be mounted using a stiffening plate, please consult us.	See separate components, pages 6/42 to 6/54

(1) Enclosure comprising:
- *the enclosure,*
- *protective cable sleeve for cable Ø 10…22 mm or Ø 22…35 mm,*
- *cable tie (for tightening sleeve onto cable,*
- *internal cable clamp.*

6

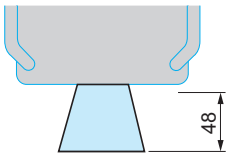
Pendant control stations
Double insulated, type XAC F
For control circuits
(XAC F: Products for maintenance purposes only)

Pendant control stations
XAC F●●●1 (30 operators maximum, front mounting)



(1) With mushroom head operator.

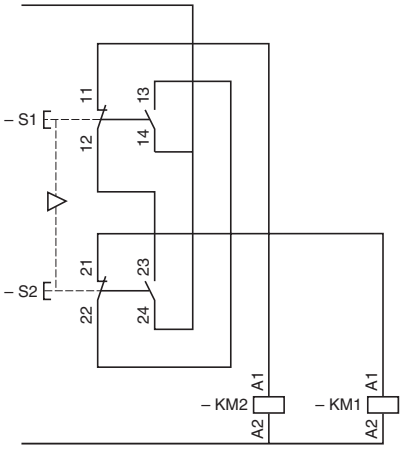
Protective guards
XAC B982



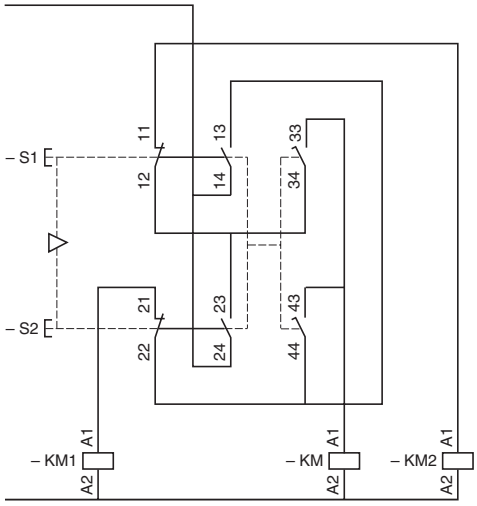
Characteristics: page 6/60
References: page 6/61
Application schemes: page 6/63
Presentation: page 6/64

Pendant control stations
Double insulated, type XAC F
For control circuits
(XAC F: Products for maintenance purposes only)

For control of single-speed reversing motor
Contact block **XES D1181**



For control of 2-speed reversing motor
Contact block **XES D1281**



KM: high speed contactor

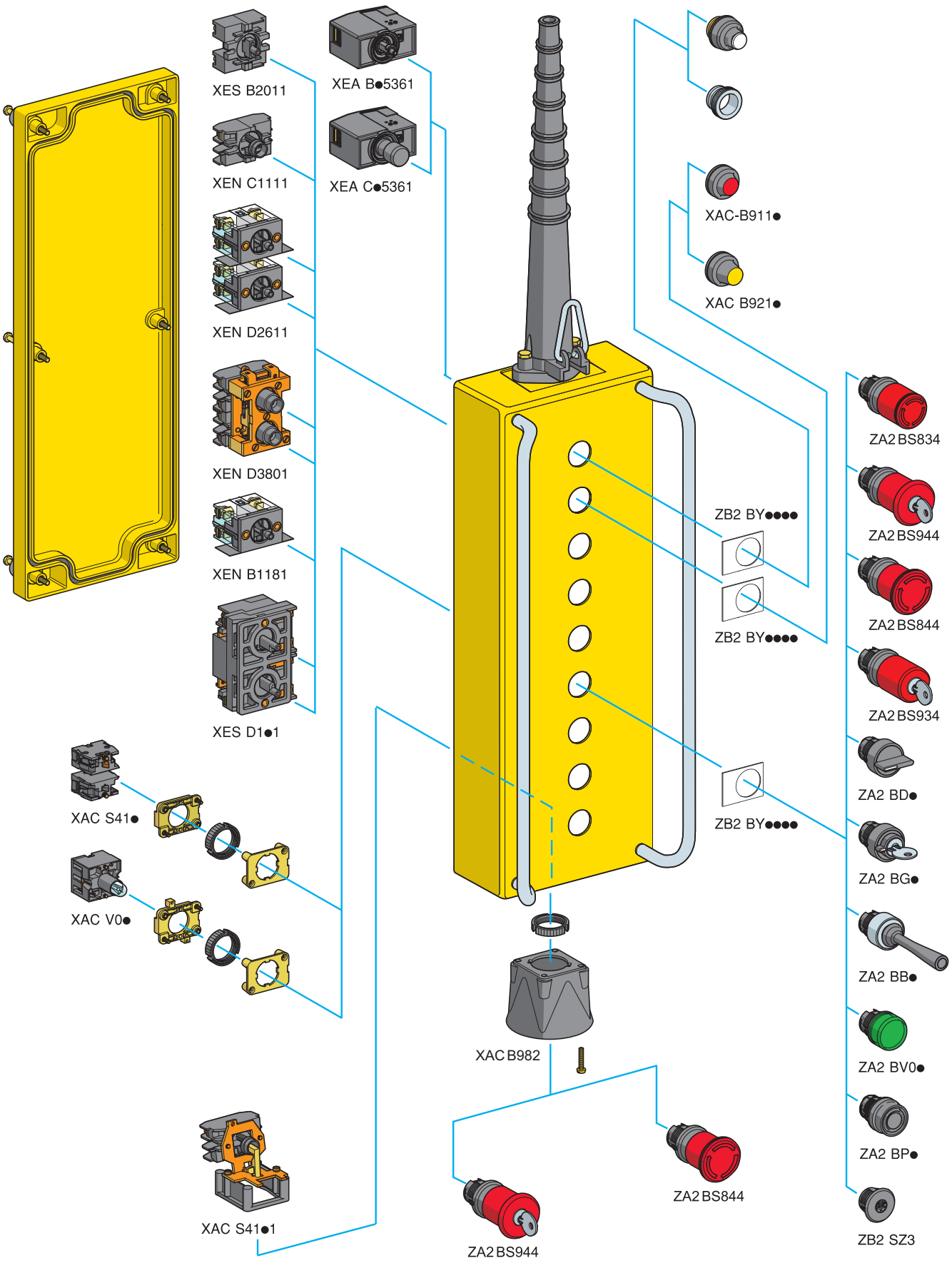
6

Pendant control stations

Double insulated, type XAC F

For control circuits

(XAC F: Products for maintenance purposes only)



Order form (specimen suitable for photocopying)

Pendant control stations
Double insulated, type XAC F
For control circuits
Variable composition stations, factory assembled

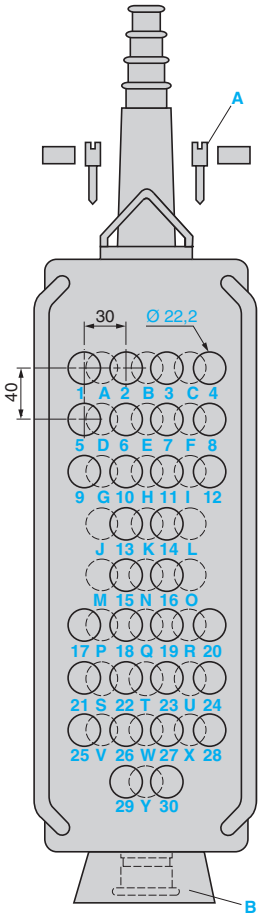
(XAC F: Products for maintenance purposes only)

Customer			**Schneider Electric Industries**	
Company	Order N°	Delivery date	Sales office - Subsidiary Co.	Order N°

Enter the order with XAC F09 reference

Unit reference of empty enclosure with cut-outs, see page 6/61	**Number of identical stations**	**Enclosure price** *(1)*
XAC **F** **3**		

The cut-outs indicated below only enable the mounting of contact and pilot light bodies XAC in association with operating heads/lenses ZA2 B. For other configurations, the arrangement of the cut-outs must be specifically designed. In this case, attach the configuration of the units to be mounted to this order form.



Position of cut-outs (number or letter)	**Legends**, see pages 6/52 to 6/54		**Contact blocks or pilot light bodies**, see pages 6/42 to 6/45		**Operating heads or pilot light heads or blanking plug**, see pages 6/46 and 6/51		**Total price**
	Reference	Unit price	Reference	Unit price	Reference	Unit price	
Unit mounted in base, if required *(2)*							

Factory assembled: Number of heads or blanking plugs to be fitted: ____ X Additional cost **XAC 9VA** for fitting of 1 head or 1 blanking plug: ____ = ____

Complementary accessories, see page 6/52 (cross the appropriate box or boxes)

	Description	✕	Reference	Unit price	
A	Adaptor for self-supporting cable type BBAP for use with cable entry sleeve Ø 10…22 mm		**XAC B961**		
B	Protective guard for mushroom head pushbutton, mounted in base		**XAC B983**		
	Protective guard for key release latching mushroom head pushbutton, mounted in base		**XAC B982**		

Total price of assembled pendant station

(1) Obtain the empty enclosure price with cut-outs.
(2) If positions Y, 29 or 30 are used, a unit cannot be mounted in the base of the enclosure.