

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 IEC 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 EN/IEC 60947-1
	XEN B●●●●, XEN D1●●●, XEN D2●●●	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		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 (1 st speed), 30 (2 nd speed); XEN D3●●●, XEN D4●●●: 25; XES B2011: 7; XES D1181, XES D1281: 15 (1 st speed), 25 (2 nd speed)
	With spring return mushroom head operator	N 10
	With latching mushroom head operator	N 40
Terminal referencing		By numbers conforming to EN 50013
Short-circuit protection		10 A cartridge fuse type gG (gl)
Connection	mm ²	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
~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









Pendant control stations

Double insulated, type XAC B

For control circuits

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

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
o				



XAC B281



XAC B481



XAC B681



XAC B881

Pendant control stations

Double insulated, type XAC B

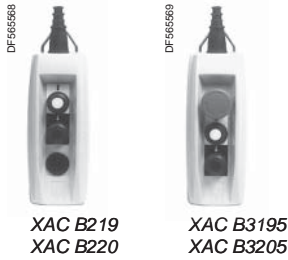
For power circuits (direct switching)

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 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 (I _{the})	XES D1191, XES D1291	A	12
	XES D2201, XES D2241, XES D2251	A	20
Rated insulation voltage (U _i)	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		mm ²	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 kW-240 V 3 kW-400 V
	3 phases, 3 poles XES D2●●●		Utilisation category AC-23B
			3 kW-400 V
	3 phases, 3 poles, isolating block XAC S●99		3 kW-400 V
			CSA certification 2 hp-240 V 5 hp-400 V 3 hp-600 V
3 phases, 2 poles XES D1●●●		3 hp-240 V	
		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●●●	

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		Maximum operational power/400 V	Reference	Weight kg
		Per direction	For Emergency stop			
	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, Machinery directive 98/37/EC and standard EN/IEC 60947-5-5.

▲ Available 3rd quarter of 2011

Pendant control stations

Double insulated, type XAC B

For power circuits (direct switching)

Complete stations "ready for use"

DF66573



XAC B691
XAC B693

For control of single-speed motors (continued)						
Functions	Number of operators	Contact blocks		Maximum operational power/400 V	Reference	Weight kg
		Per direction	For Emergency stop			
 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		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		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

DF66574



XAC B6916
XAC B6936

DF66575



XAC B6915
XAC B6935

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

DF66576



XAC B229

DF66577



XAC B3295

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

▲ Available 3rd quarter of 2011

Pendant control stations

Double insulated, type XAC B

For control or power circuits

Empty enclosures

DF566578



XAC B020

DF566579



XAC B030

DF566580



XAC B02●

DF566581



XAC B04●

DF566582



XAC B06●

DF566583



XAC B08●

DF566584



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

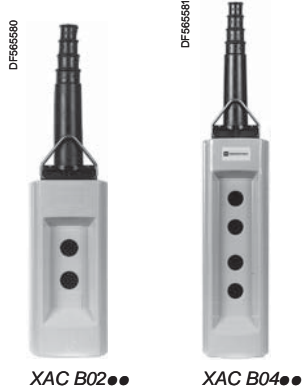
- (1) Enclosure comprising:
- the enclosure,
 - protective cable sleeve,
 - cable tie (for tightening sleeve onto cable),
 - internal cable clamp,
 - suspension ring,
 - bezel tightening key.

Pendant control stations

Double insulated, type XAC B

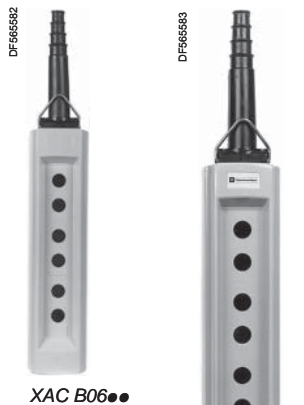
For control or power circuits

Empty enclosures



XAC B02●●

XAC B04●●



XAC B06●●

XAC B08●●



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.

Pendant control stations

Double insulated, type XAC B

Metal, type XAC M

For control circuits

Empty enclosures (XAC M: products for maintenance purposes only)

DF66586



XAC B120

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

DF66587



XAC M08

DF66588



XAC M04

Variable composition stations, factory assembled

Use the order form on page 30076-EN/27 to define the required configuration

Equipment: contact blocks, operating heads (control and signalling), complementary accessories

See separate components, pages 30076/10 to 30076/22

(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.

Pendant control stations

Double insulated, type XAC B

Metal, type XAC M

For control circuits

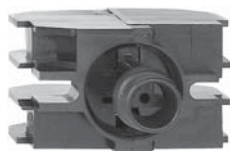
Separate components and spare parts

Contact blocks for front mounting, slow break

Description	Application	Function	Scheme	Operator centres mm	Reference	Weight kg
Spring return						
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
		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
	2 step C/O + N/O staggered		30 or 40	XEN B1191	0.050	
Double block 2 spring return operators mechanically interlocked	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).

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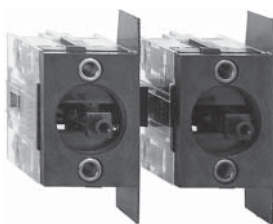
XEN C1111

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XEN B1181

DF665590



XEN D2611

Pendant control stations

Double insulated, type XAC B

Metal, type XAC M

For control circuits

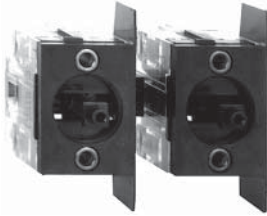
Separate components and spare parts

Contact blocks for front mounting, slow break (continued)

Description	Application Function	Scheme	Operator centres mm	Reference	Weight kg
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Spring return (continued)

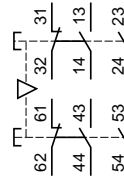
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XEN D2641

Double block
2 spring return operators
mechanically interlocked

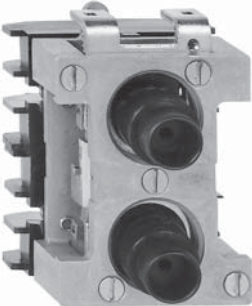
Single-speed C/O + N/O



30 **XEN D1631** 0.110

40 (1) **XEN D2631** 0.110

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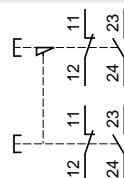


XEN D3801

Latching

Double block
1 latching operator released
by 1 spring return operator

Single-speed N/C + N/O

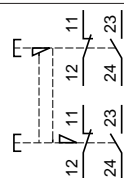


30 **XEN D3801** 0.170

40 (1) **XEN D4801** 0.170

Double block
2 latching operators

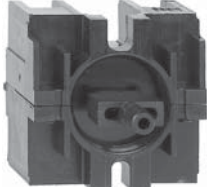
Single-speed N/C + N/O



30 **XEN D3811** 0.170

40 (1) **XEN D4811** 0.170

DF566591



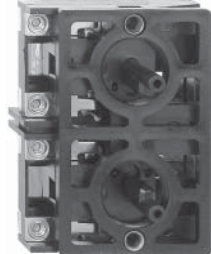
XES B2011

Contact blocks for front mounting, snap action

Description	Application Function	Scheme	Operator centres mm	Reference	Weight kg
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Spring return

DF566594



XES D1181

Single block
1 spring return operator (2)

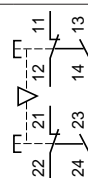
Single-speed C/O



40 (1) **XES B2011** 0.030

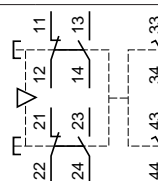
Double block
2 spring return operators
mechanically interlocked

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●●.

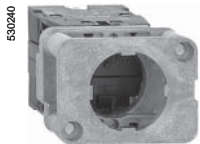
Pendant control stations

Double insulated, type XAC B

Metal, type XAC M

For control circuits

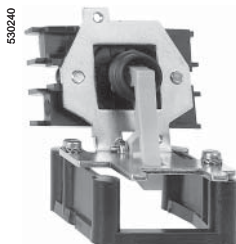
Separate components and spare parts



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



XAC S411

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



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 30076/15).

(2) Bulb type for use with direct supply units: BA 9s base fitting incandescent bulb $U \leq 130$ V or neon bulb 110 V $\leq U \leq 400$ V. Maximum power: 2.6 W, maximum \varnothing : 11 mm, maximum length: 26 mm. See page 30076/18.

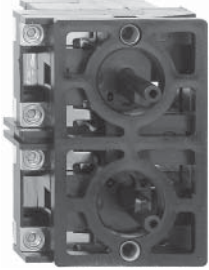
Pendant control stations

Double insulated, type XAC B

For power circuits (direct switching)

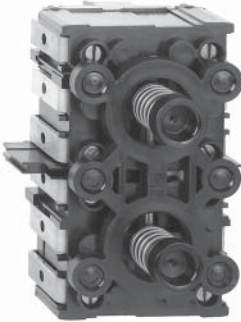
Separate components and spare parts

DFE65694



XES D1191

530388



XES D2201

530389



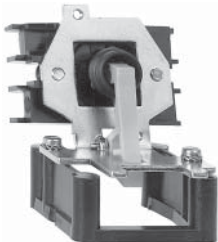
XAC S399

530391



XAC S499

530386



XAC S3991

Contact blocks, snap action

Description	Application Function	Max. power/ 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 30076/15).

(3) Mounting with operating head ZA2 BS944 (see page 30076/15).

Pendant control stations

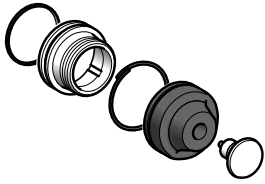
Double insulated, type XAC B

Metal, type XAC M

For control or power circuits

Separate components and spare parts

DF665696

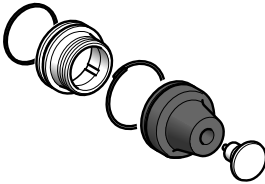


XAC B911●

Booted operators

For use with contact block	Travel	Operating temperature	Colour of insert	Sold in lots of	Unit reference	Weight kg	
XEN B●●●●	4 mm	- 25...+ 70 °C (1)	White	10	XAC B9111	0.005	
XEN C●●●●			Black	10	XAC B9112	0.005	
XEN D●●●●			Green	10	XAC B9113	0.005	
XES B2011			Red	10	XAC B9114	0.005	
XES D2201			Yellow	10	XAC B9115	0.005	
XES D2241			Blue	10	XAC B9116	0.005	
XES D2251			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		
XES D1181	16 mm	- 25...+ 70 °C (1)		White	10	XAC B9211	0.005
XES D1191				Black	10	XAC B9212	0.005
XES D1281				Green	10	XAC B9213	0.005
XES D1291			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			

DF665697



XAC B921●

DF665698



ZA2 BP●

Booted operators (silicone boot)

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.

Pendant control stations

Double insulated, type XAC B

Metal, type XAC M

For control or power circuits

Separate components and spare parts

DF539492



ZA2 BS844

DF539493



ZA2 BS944

530382



ZA2 BD

530383



ZA2 BG

530381



ZA2 BB

530380



ZA2 BV0

Operating heads for front or base mounting (1)

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

Operating head for isolating block

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

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, Machinery directive 98/37/EC and standard EN/IEC 60947-5-5.

(3) Other key numbers available on request, please consult your Customer Care Centre.

(4) Selector switches or key switches with other mechanical functions: please consult your Customer Care Centre.

(5) Only suitable for front mounting.

(6) Base mounting recommended.

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		mm ²	Terminal connectors, maximum clamping capacity: 2 x 1.5 mm ² or 1 x 2.5 mm ²

Contact block characteristics

Thermal current (I_{the})	A	6
Rated insulation voltage (U_i)	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	a.c. supply ~ 50/60 Hz Power broken in VA for 1 million operating cycles	
	Voltage V	48 110 230
mm Inductive circuit	VA	30 30 30
	d.c. supply --- Power broken in W for 1 million operating cycles	
	Voltage V	48 110
	W	48 12

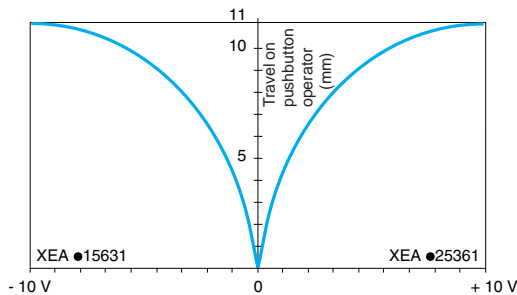
Analogue circuit characteristics

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

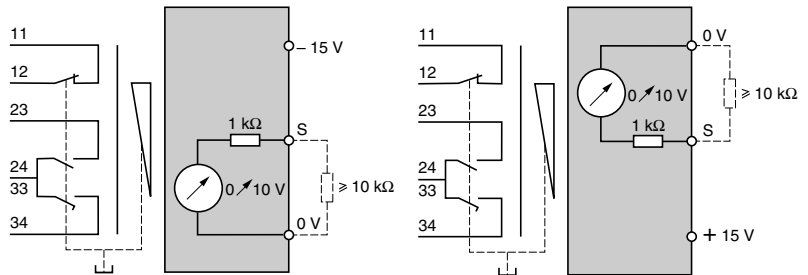


Note: supply voltage = 15 V, output voltage = 10 V
(if supply voltage < 15 V, output voltage < 10 V)

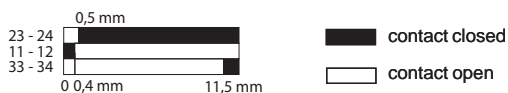
Equivalent output schemes

XEA 15631

XEA 25361



Contact state



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

Pendant control stations

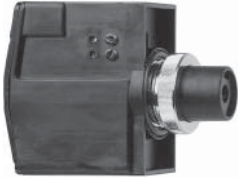
Double insulated, type XAC B

Metal, type XAC M

For control circuits

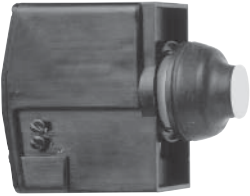
Separate components: pushbuttons with analogue output (1)

530386



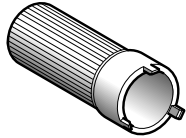
XEA C•5361

530382



XEA B•5361

530306



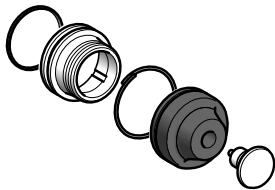
ZA2 BZ905

530305



XAC X1

DF465601



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

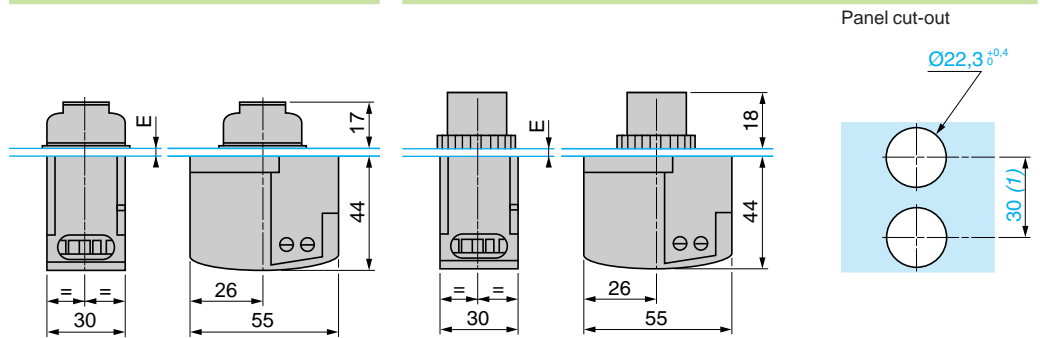
Description	Colour of insert	Unit reference	Weight kg
Booted operator (Sold in lots of 10)	White	XAC B9111	0.005
	Black	XAC B9112	0.005

(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



E = support panel thickness, 1 to 3.5 mm.

(1) Minimum fixing centres between 2 operators.

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

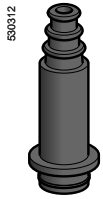
Pendant control stations

Double insulated, type XAC B

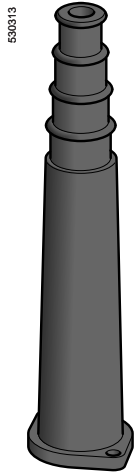
Metal, type XAC M

For control or power circuits

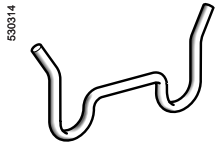
Separate components and spare parts



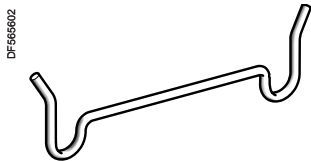
XAC B913



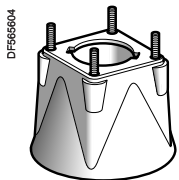
XAC B960



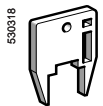
XAC B971



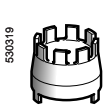
XAC B972



XAC B982



XAC X1



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			
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

Pendant control stations

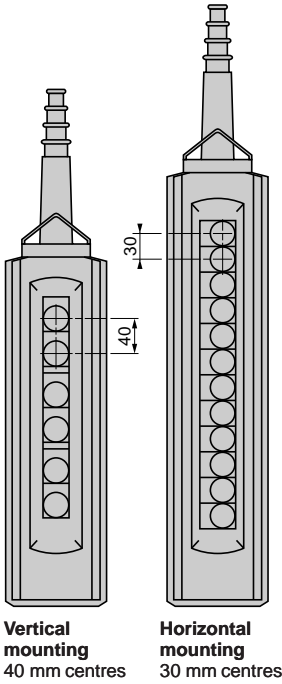
Double insulated, type XAC B

Metal, type XAC M

For control or power circuits

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

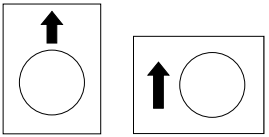
DF56686



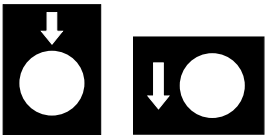
Vertical mounting
40 mm centres

Horizontal mounting
30 mm centres

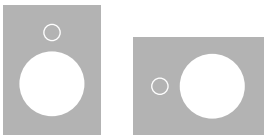
DF56686



White background, black symbol



Black background, white symbol



Red background, white symbol

Symbol Reference	Symbol	Reference	Weight
Vertical mounting 40 mm centres		Horizontal mounting 30 mm centres	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	Symbol	Reference	Weight
Vertical mounting 40 mm centres		Horizontal mounting 30 mm centres	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

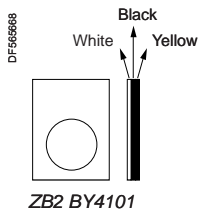
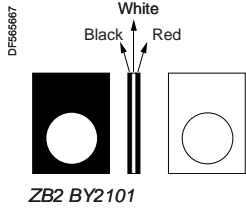
Pendant control stations

Double insulated, type XAC B

Metal, type XAC M

For control or power circuits

Legends 30 x 40 mm



Text	Reference	Weight kg	Text	Reference	Weight kg
<ul style="list-style-type: none"> ■ 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					
<ul style="list-style-type: none"> ■ 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 Customer Care Centre.


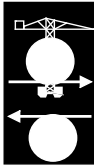

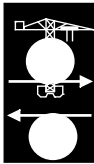
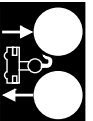
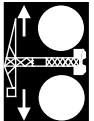

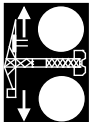
Pendant control stations

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

Pendant control stations

Double insulated, type XAC B

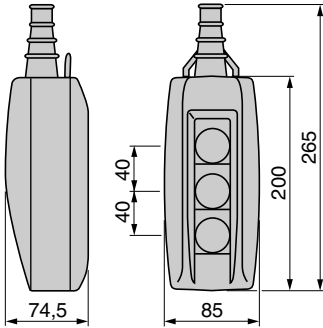
Metal, type XAC M

For control or power circuits

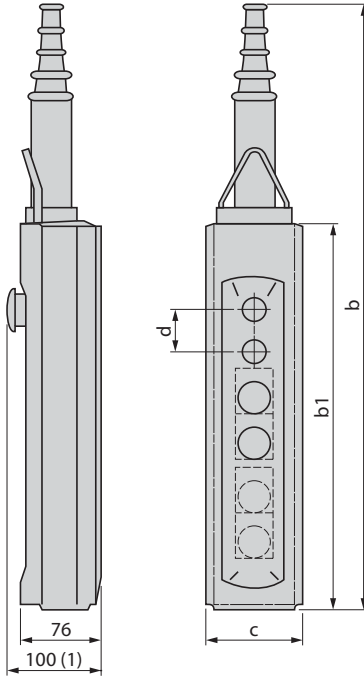
(XAC M: products for maintenance purposes only)

Pendant control stations

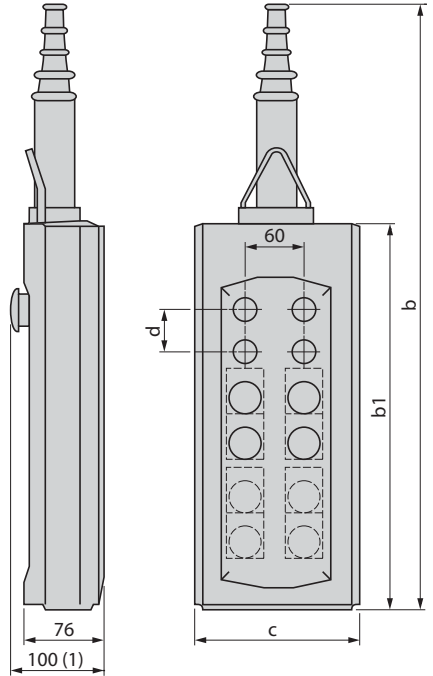
XAC B●●● (2 and 3-way)



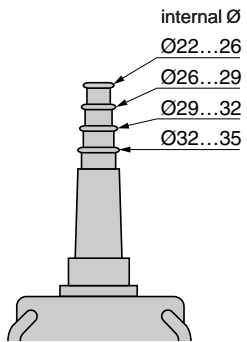
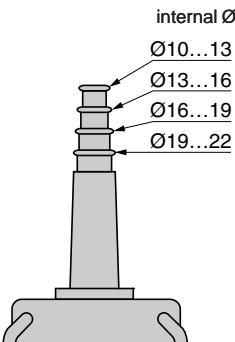
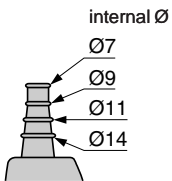
XAC B●●● (2 to 12-way, 1 row)
XAC M●●● (4 to 8-way, 1 row)



XAC B●●● (12-way, 2 rows)



Protective cable sleeves

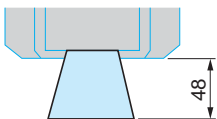


(1) With mushroom head operator.

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

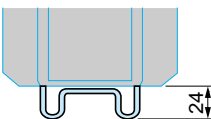
Protective guards

XAC B982



Lower support rings

XAC B971, B972



Pendant control stations

Double insulated, type XAC B

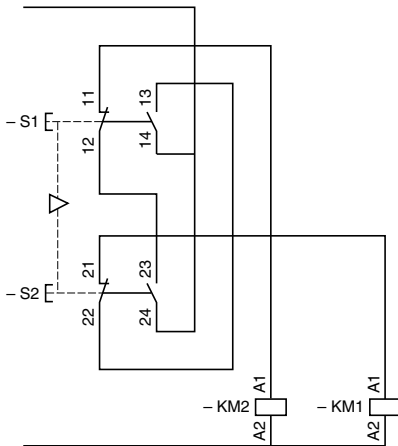
Metal, type XAC M

For control or power circuits

Control circuits

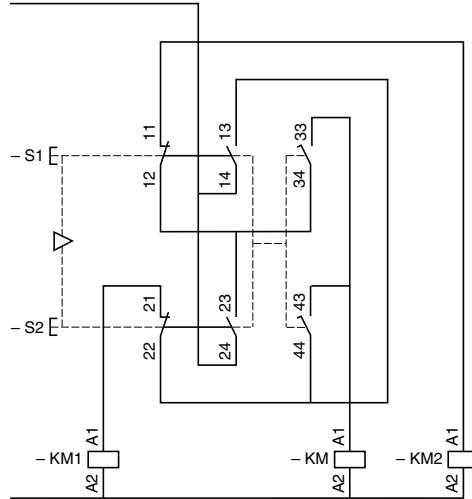
For control of single-speed reversing motor

Contact block XES D1181



For control of 2-speed reversing motor

Contact block XES D1281



KM: high speed contactor

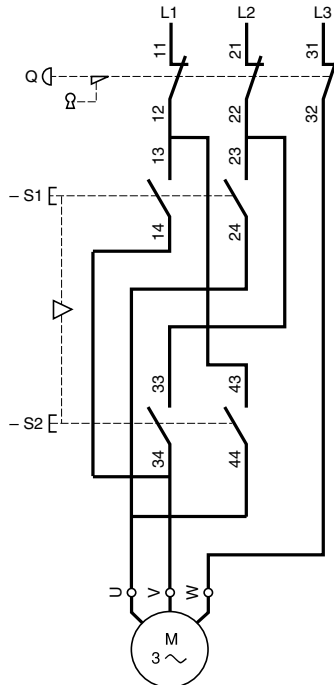
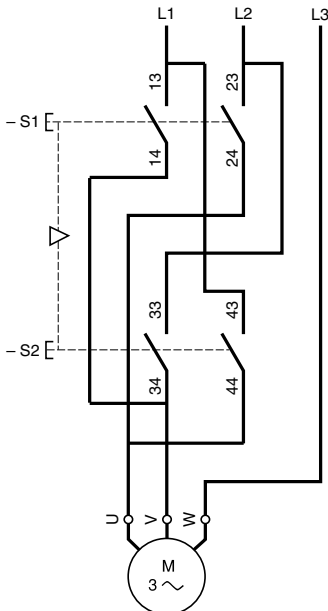
Power circuits

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).



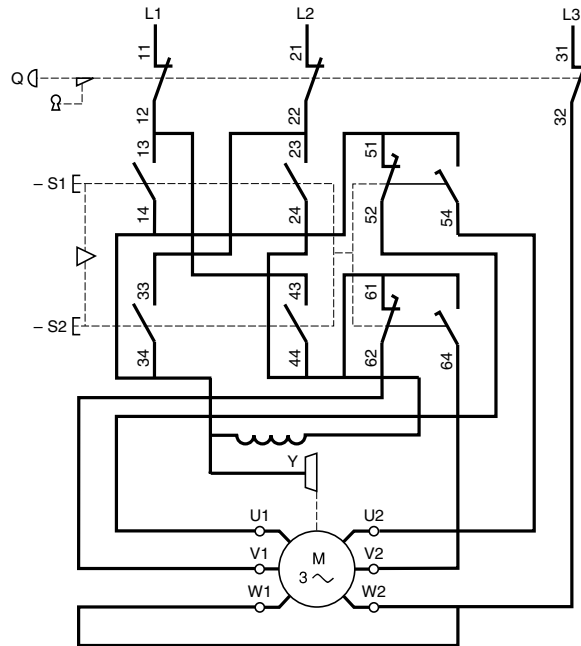
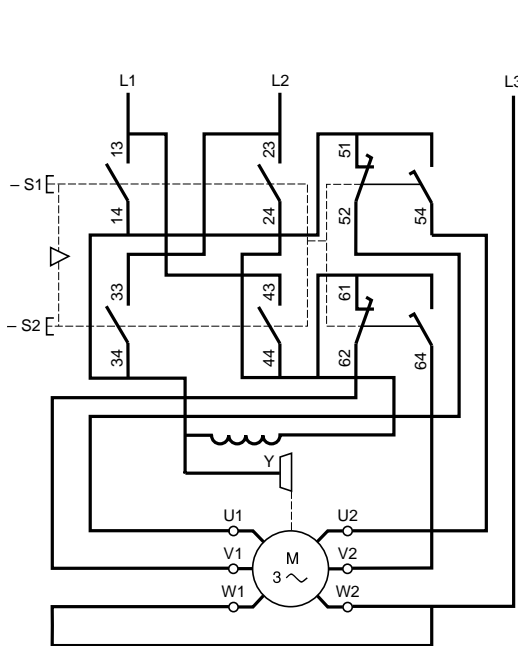
Power circuits (continued)

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

Contact block XES D1291

Application example:

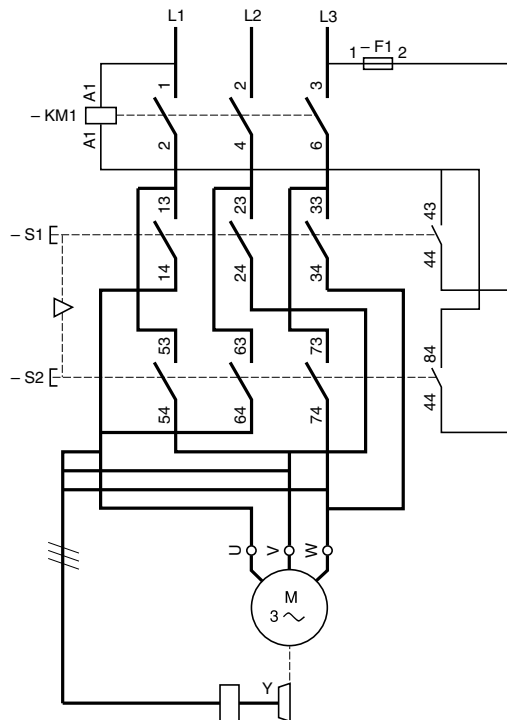
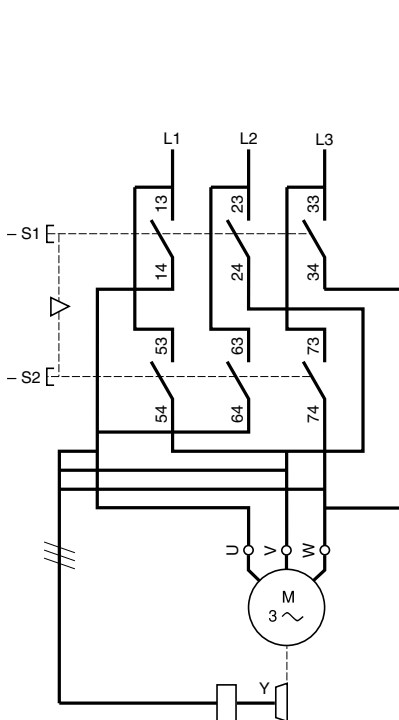
Combined with 3-pole isolating block XAC S399 or XAC S3991, shown in the unoperated position (pendant station "supplied"), fitted with key release trigger action latching Emergency stop operator (ZA2 BS944).



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

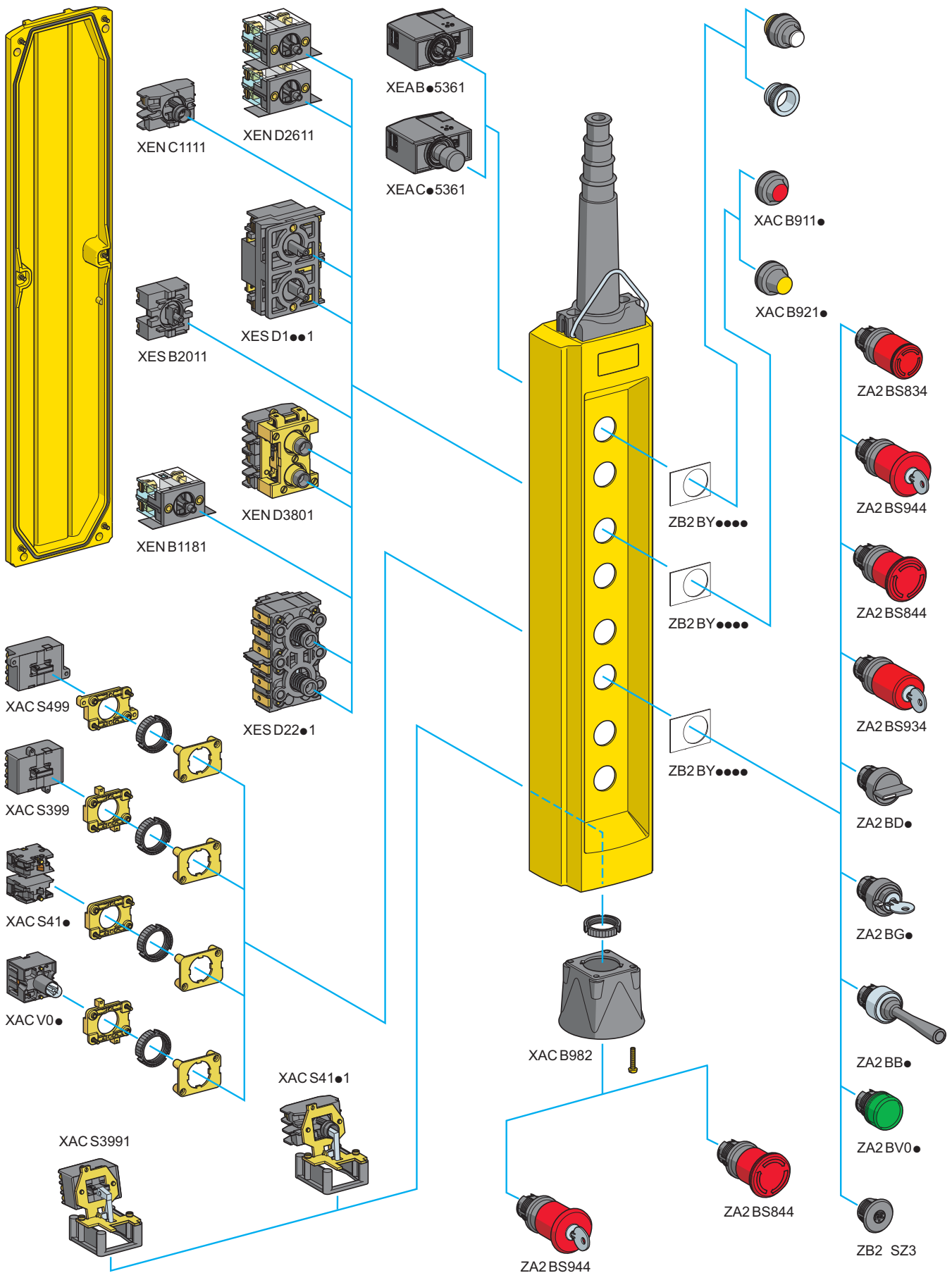


Pendant control stations

Double insulated, type XAC B

Metal, type XAC M

For control or power circuits



Pendant control stations

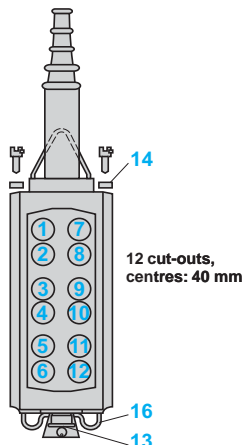
Double insulated, type XAC B

Metal, type XAC M (XAC M: products for maintenance purposes only)

For control or power circuits

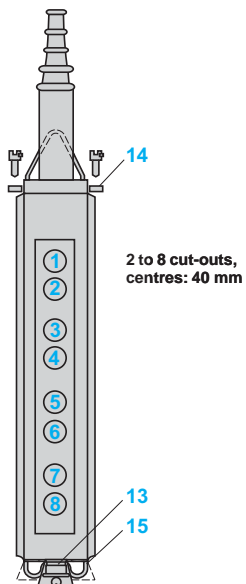
Variable composition stations, factory assembled

530343



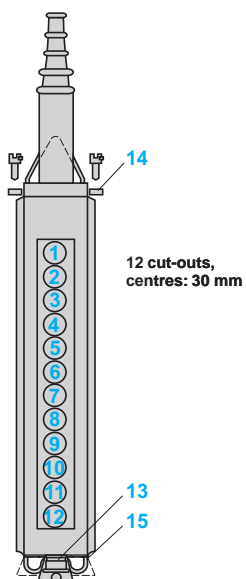
12 cut-outs, centres: 40 mm

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 page 30076/7	Number of identical stations	Enclosure price (1)
XAC <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>		

Legends see page 30076/20		Contact blocks or pilot light bodies see page 30076/10		Operating heads or pilot light heads or blanking plug see page 30076/15	
Reference	Unit price	Reference	Unit price	Reference	Unit price

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	
	<input type="text"/>		<input type="text"/>	<input type="text"/>

Complementary accessories, see page 30076/19 (cross the appropriate box or boxes)			
Description	<input checked="" type="checkbox"/>	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	<input type="text"/>
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(1) Obtain the empty enclosure price.