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”

DF565568



XAC B219
XAC B220

DF565569



XAC B3195
XAC B3205

DF565570



XAC B491
XAC B493

DF565571



XAC B4916
XAC B4936

DF565572



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.*

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 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						
Single block 1 spring return operator	Single-speed	N/O	13 14	30 or 40	**XEN C1111**	0.020
		N/C	11 12	30 or 40	**XEN C1121**	0.020
		N/O + N/O	13 14 23 24	30 or 40	**XEN C1131**	0.020
		N/C + N/C	11 12 21 22	30 or 40	**XEN C1141**	0.020
		N/C + N/O	11 12 23 24	30 or 40	**XEN C1151**	0.020
		C/O + N/O	31 32 13 14 23 24	30 or 40	**XEN B1491**	0.050
	2-speed	2 step N/O + N/O staggered	33 34 43 44	30 or 40	**XEN B1181**	0.050
		2 step C/O + N/O staggered	31 32 13 14 23 24	30 or 40	**XEN B1191**	0.050
Double block 2 spring return operators mechanically interlocked	Single-speed	N/O + N/O simultaneous	13 14 23 24 33 34 43 44	30	**XEN D1611**	0.110
				40 *(1)*	**XEN D2611**	0.110
	2-speed	2 step N/O + N/O staggered	13 14 23 24 33 34 43 44	30	**XEN D1621**	0.110
				40 *(1)*	**XEN D2621**	0.110

DF565588



XEN C1111

DF565589



XEN B1181

DF565590



XEN D2611

(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



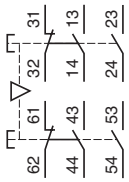
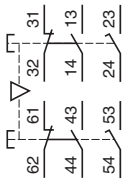
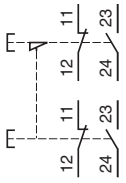
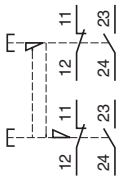
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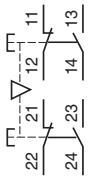
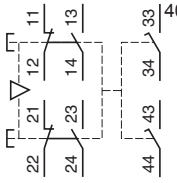


XES D1181

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)*

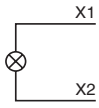
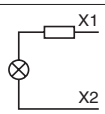
Description	Function	Scheme	Reference	Weight kg
Spring return **Slow break**	N/O		**XAC S4111**	0.100
	N/C		**XAC S4121**	0.100
	N/O + N/O		**XAC S4131**	0.100
	N/C + N/C		**XAC S4141**	0.100
	N/C + N/O		**XAC S4151**	0.100

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

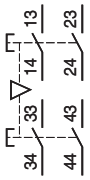
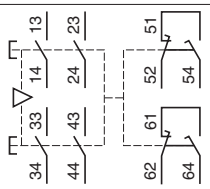
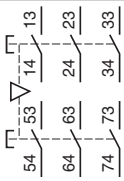
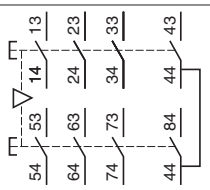
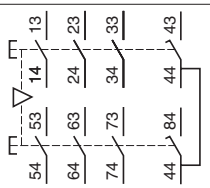
(1) Mounting with operating heads ZA2 B●●● (see page 6/47).
(2) Bulb type for use with direct supply units: BA 9s base fitting incandescent bulb U ⩽ 130 V or neon bulb 110 V ⩽ U ⩽ 400 V. Maximum power: 2.6 W, maximum Ø: 11 mm, maximum length: 26 mm. See page 6/50.

6

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

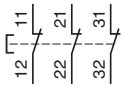
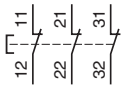
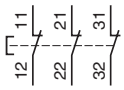
Pendant control stations
Double insulated, type XAC B
For power circuits (direct switching)
Separate components and spare parts

Contact blocks, snap action

Description	Application	Function	Max. power/ 400 V	Scheme	Reference	Weight kg
DF566594  *XES D1191* **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
530368  *XES D2201* **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.

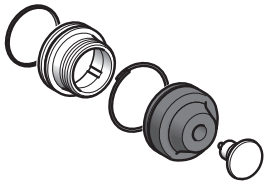
Mounting position	Application	Function	Max. power/ 400 V	Scheme	Reference	Weight kg
530389  *XAC S399* **On front** 40 mm centres *(2)*	Emergency stop	N/C + N/C + N/C with positive opening operation	3 kW		**XAC S399**	0.100
530391  *XAC S499* **On front** 30 mm centres *(2)*	Emergency stop	N/C + N/C + N/C with positive opening operation	3 kW		**XAC S499**	0.100
530366  *XAC S3991* **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).

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

DF565596

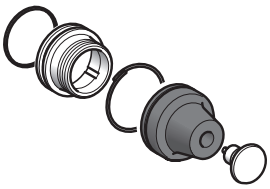


XAC B911●

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

DF565598



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.

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●

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

530390



ZA2 BV0●

(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

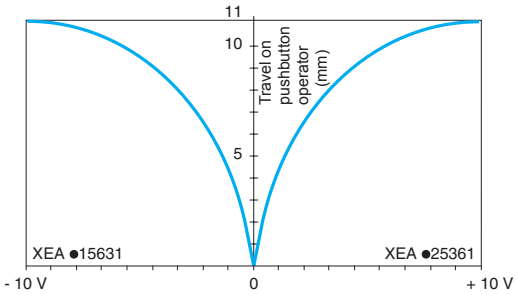
Analogue circuit characteristics

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

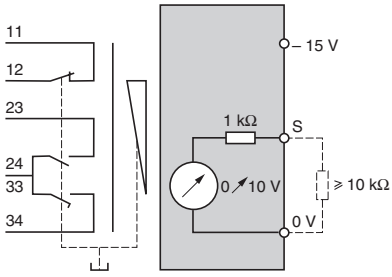
with 15 V supply voltage



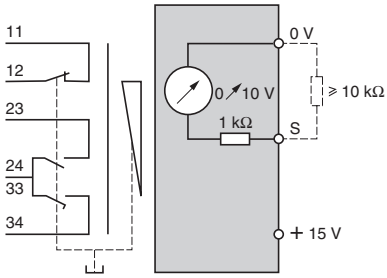
Note: *supply voltage = 15 V, output voltage = 10 V*
(if supply voltage < 15 V, output voltage < 10 V)

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.

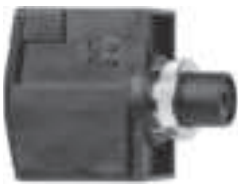
References:
page 6/49

Dimensions:
page 6/49

Schneider Electric

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

530386



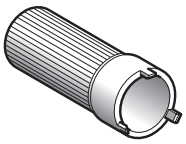
XEA C●5361

530392



XEA B●5361

530306



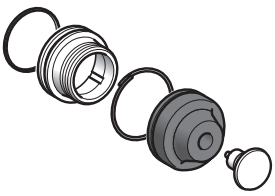
ZA2 BZ905

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

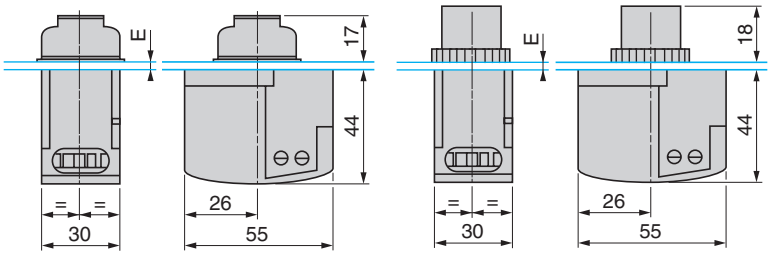
Separate components and spare parts

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

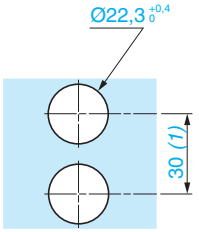
(1) Pushbuttons providing an analogue output signal proportional to the distance travelled by the pushbutton operator.
(2) Pushbutton supplied with 1 white insert and 1 black insert.

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

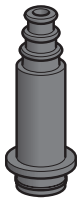
Description	Travel	Material/ Colour	Operating temperature	Sold in lots of	Unit reference	Weight kg
Boots with circlip, without coloured insert	4 mm	Polychloroprene	- 25…+ 70° C	10	**XAC B911**	0.002
		Silicone	- 40…+ 70° C	10	**XAC B912**	0.002
	16 mm	Polychloroprene	- 25…+ 70° C	10	**XAC B921**	0.002
		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

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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 or power circuits
Separate components and spare parts

530312



XAC B913

530313



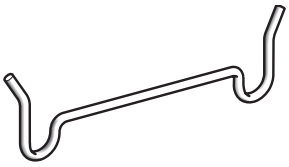
XAC B960

530314



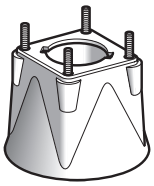
XAC B971

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

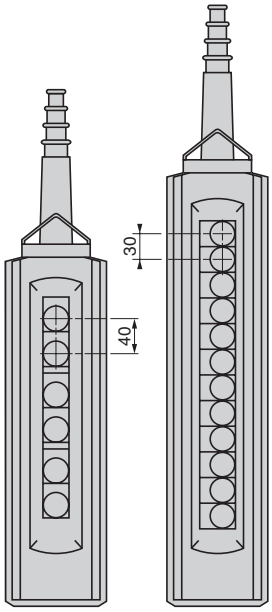
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Characteristics: pages 6/34 and 6/36 | Dimensions: page 6/55 | Application schemes: pages 6/56 and 6/57 | Presentation: page 6/58

Pendant control stations

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

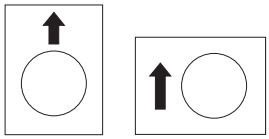
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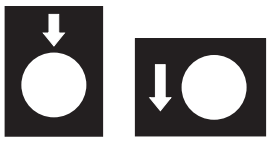
Vertical mounting 40 mm centres

Horizontal mounting 30 mm centres

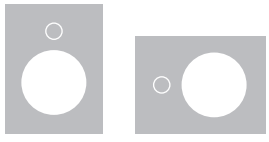
DF565665



White background, black symbol



Black background, white symbol



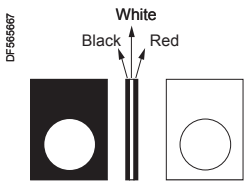
Red background, white symbol

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

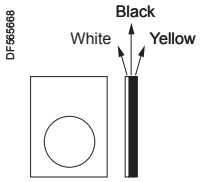
Symbol	Reference Vertical mounting 40 mm centres	Symbol	Reference Horizontal mounting 30 mm centres	Weight kg
Lower, slow	ZB2 BY2954		ZB2 BY2904	0.001
Lower, fast	ZB2 BY2955		ZB2 BY2905	0.001
Lower, slow-fast	ZB2 BY2956		ZB2 BY2906	0.001
Left, slow	ZB2 BY2904		ZB2 BY2910	0.001
Left, fast	ZB2 BY2905		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



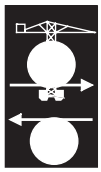
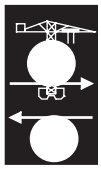
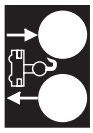
ZB2 BY4101

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

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

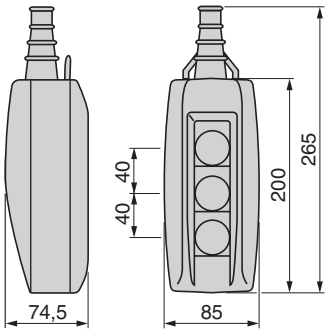
Pendant control stations

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

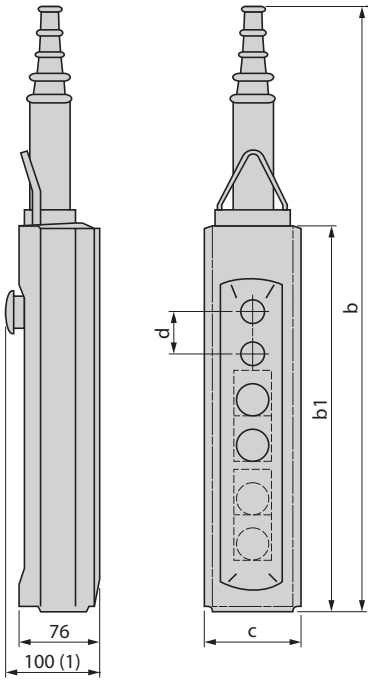
(XAC M: products for maintenance purposes only)

Pendant control stations

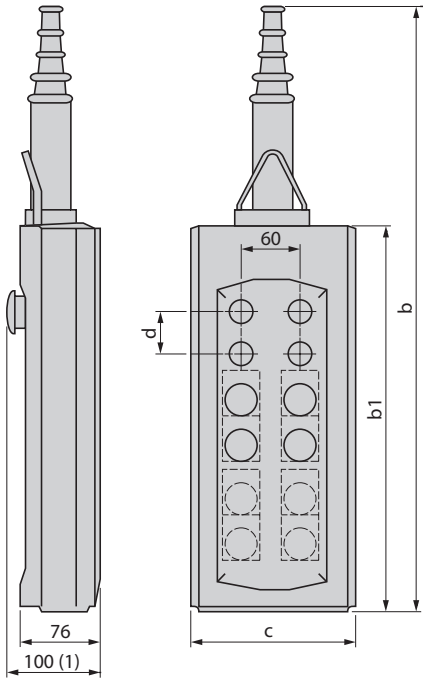
XAC B●●● (2 and 3-way)



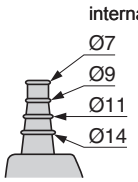
XAC B●●● (2 to 12-way, 1 row)
XAC M●●● (4 to 8-way, 1 row)

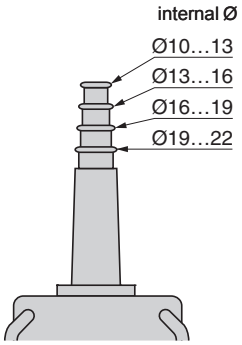


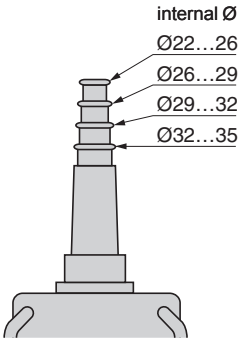
XAC B●●● (12-way, 2 rows)



Protective cable sleeves





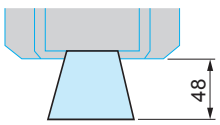


(1) With mushroom head operator.

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

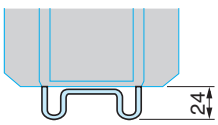
Protective guards

XAC B982



Lower support rings

XAC B971, B972

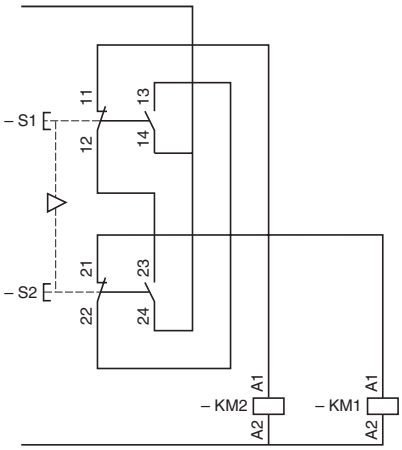


6

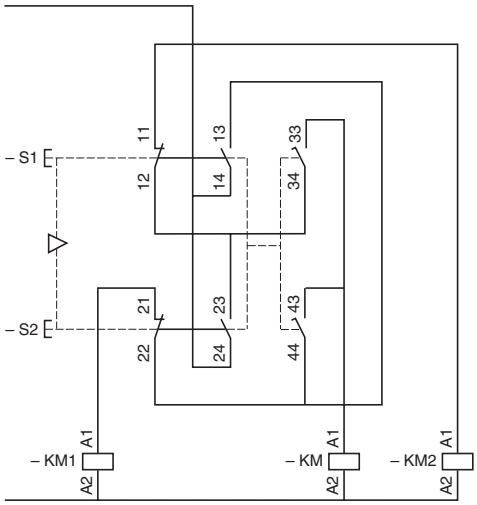
Pendant control stations
Double insulated, type XAC B
Metal, type XAC M
For control or power circuits

Control circuits

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



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

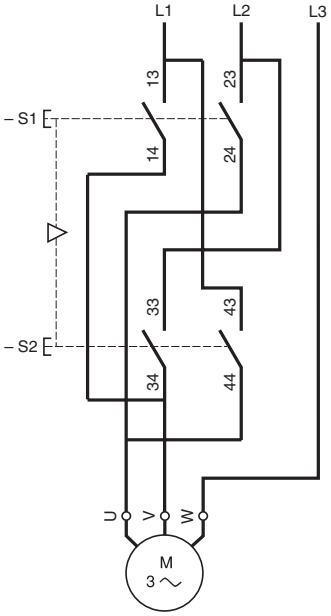


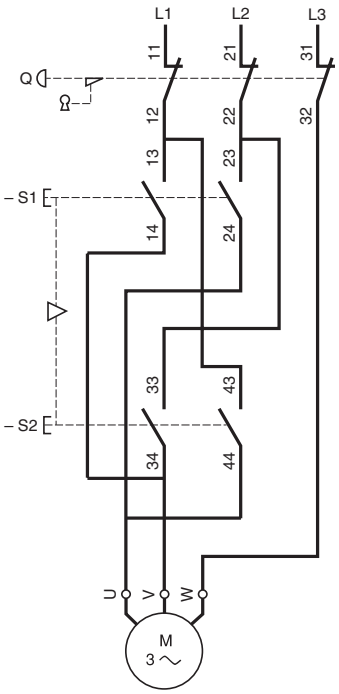
KM: high speed contactor

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

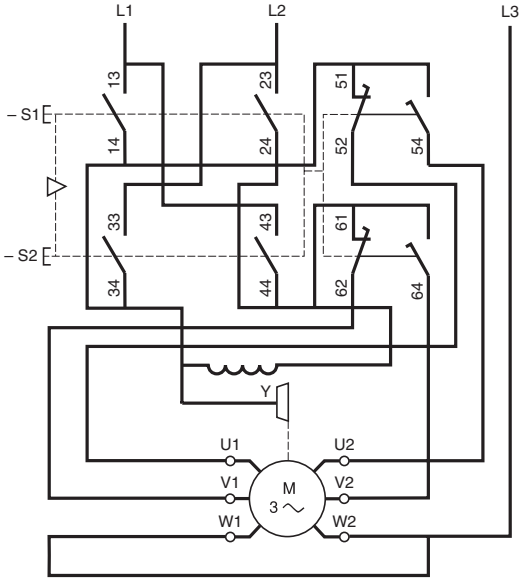
Pendant control stations
Double insulated, type XAC B
Metal, type XAC M
For control or power circuits

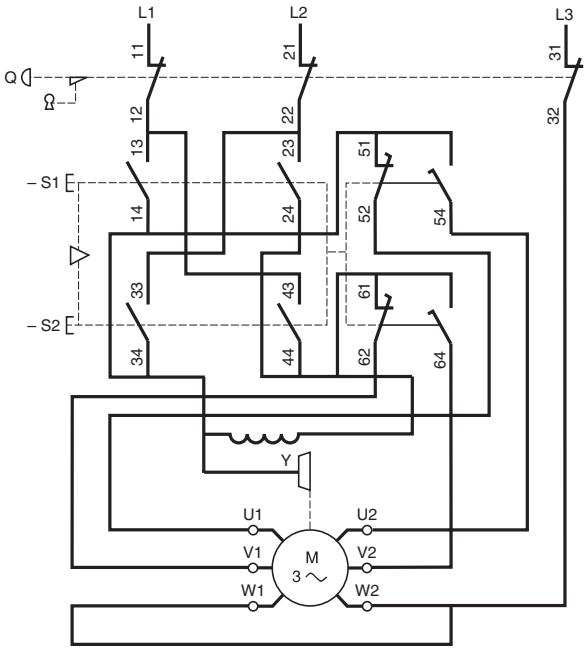
Power circuits *(continued)*

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

Contact block **XES D1291**

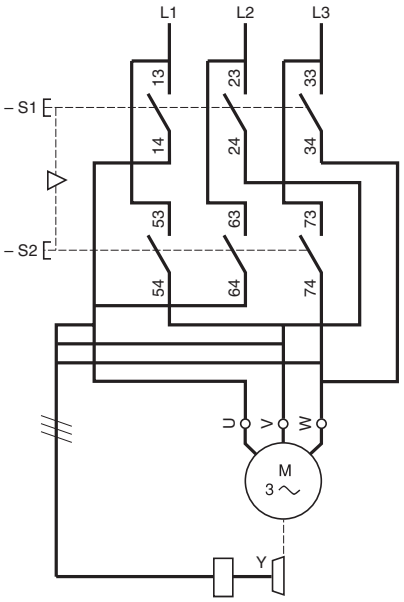
Application example:
Combined with 3-pole isolating block XAC S399 or XAC S3991, shown in the unoperated position (pendant station "supplied"), fitted with key release trigger action latching Emergency stop operator (ZA2 BS944).



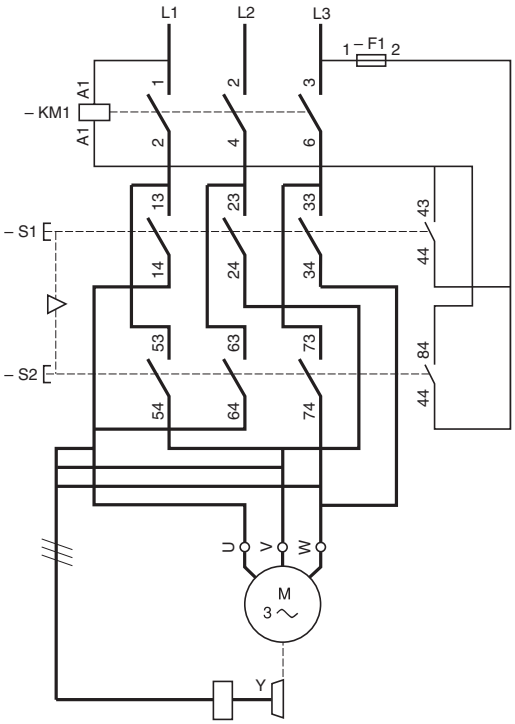


For control of single-speed reversing motor. 3-phase switching, reversing by 2-phase inversion

Contact block **XES D2201**



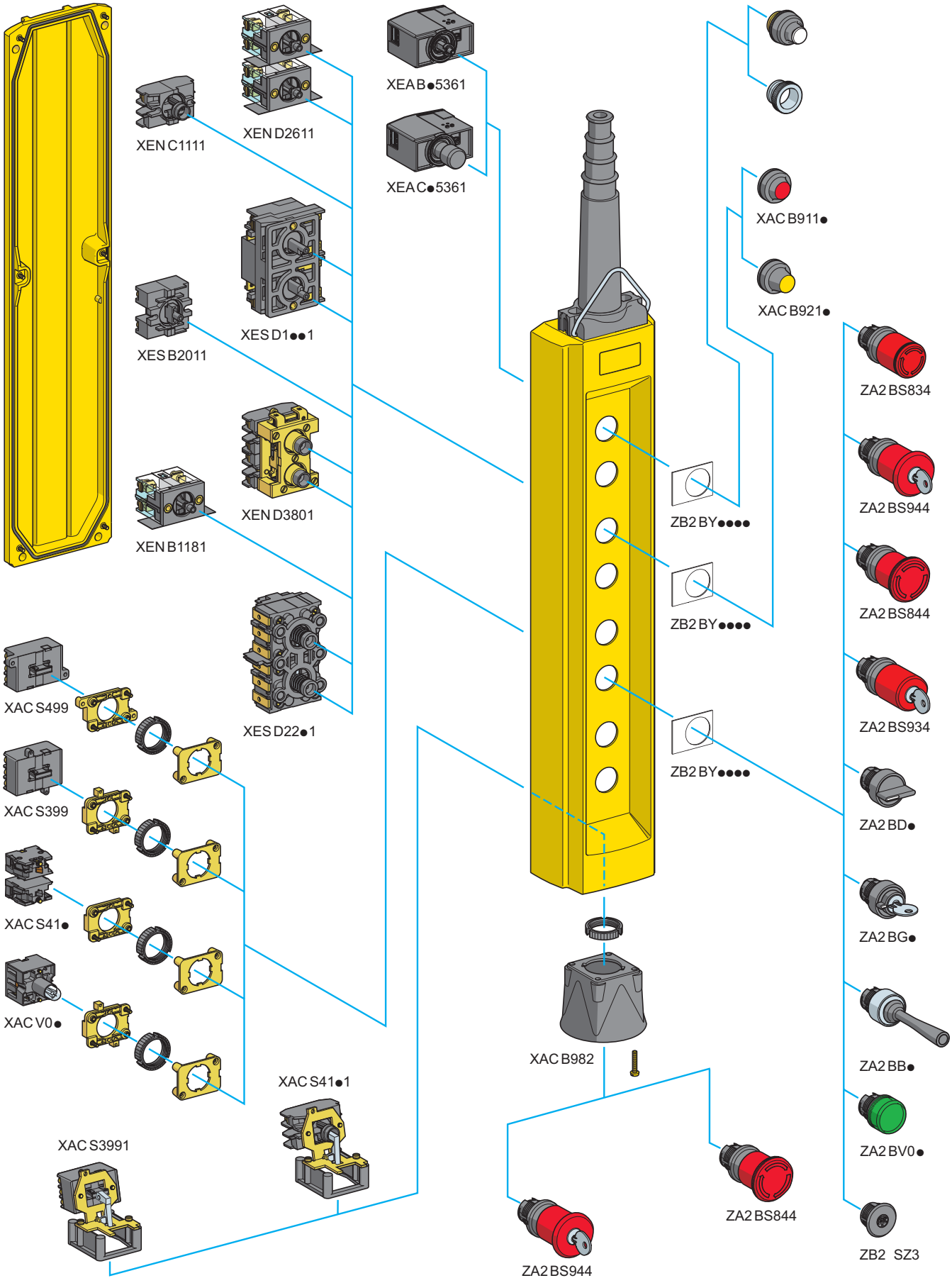
Contact block **XES D2241** with line contactor



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Pendant control stations

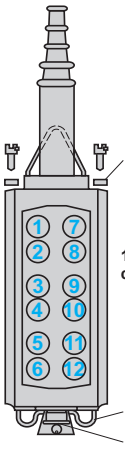
Double insulated, type XAC B
Metal, type XAC M
For control or power circuits



Order form (specimen suitable for photocopying)

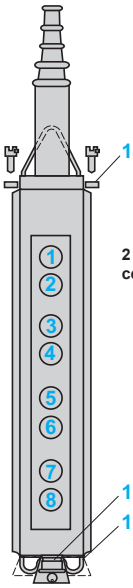
Pendant control stations
Double insulated, type XAC B
Metal, type XAC M (XAC M: products for maintenance purposes only)
For control or power circuits
Variable composition stations, factory assembled

530343



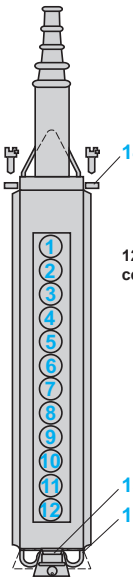
12 cut-outs, centres: 40 mm

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.