Joystick controllers

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Characteristics

Environment

Conforming to standards	IEC 947-5-1, EN 60 947-5-1, IEC 337-1, VDE 0660-200
Approvals	Standard version : CSA A600-Q600, LROS
Protective treatment	Standard version : “TC”
Ambient air temperature	Operation : - 25... + 70 °C. Storage : - 40... + 70 °C
Operating position	All positions
Vibration resistance	5 gn (40 Hz < frequency < 500 Hz) conforming to IEC 68-2-6
Shock resistance	20 gn conforming to IEC 68-2-27
Electric shock protection	Class I conforming to IEC 536 and NF C 20-030 (except XDL-PA●●, class 2)
Degree of protection	IP 66 conforming to IEC 529 and NF C 20-010
Mechanical durability	1 million operating cycles

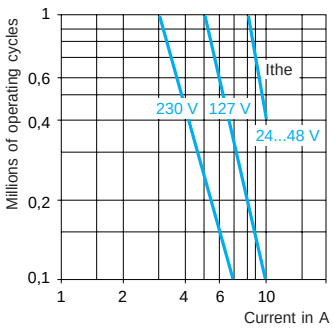
Contact block characteristics

Rated operational characteristics	∼ AC-15 ; A 300 or Ue = 240 V and Ie = 3 A ⎓ DC-13 ; Q 300 or Ue = 250 V and Ie = 0.27 A conforming to IEC 947-5-1 Appendix A
Rated insulation voltage	Ui : 500 V conforming to IEC 947-1 ; degree of pollution 3 ; 600 V conforming to UL 508 and CSA C 22-2 n° 14
Rated impulse withstand voltage	U imp = 6 kV conforming to IEC 947-1
Contact operation	Slow break N/O
Short-circuit protection	10 A cartridge fuse type gG (gI) or N conforming to IEC 947-5-1, VDE 0660-200
Terminal referencing	Conforming to CENELEC EN 50013

Rated operational power

Conforming to IEC 947-5-1 Appendix C. Utilisation categories AC-15 and DC-13. Operating rate : 3600 op. cycles/hour. Load factor : 0.5

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



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

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

Electrical reliability	Failure rate < 1 fault for 100 million operating cycles (programmable controller inputs, 24 V d.c.)
Cabling	- Screw and captive cable clamp terminals. Capacity : min. 1 x 0.5 mm², max., with or without cable end : 2 x 1.5 mm² or 1 x 2.5 mm². - 6.3 mm Faston connectors (on request).

Joystick controllers

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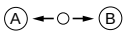
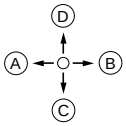
References

Complete units type XD2-P, with circular chromium plated metal bezel



XD2-PA12 XD2-PA14

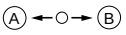
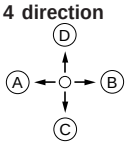
Compact, contact blocks non interchangeable

Description	Operation	Spring return to zero position	Bezel finish	Reference	Weight kg
2 direction 30 x 85 mm fixing centres 	1 notch 1 N/O contact per direction	Without	Chromium	**XD2-PA12**	0.115
			Black	**XD2-PA127**	0.115
		With	Chromium	**XD2-PA22**	0.115
			Black	**XD2-PA227**	0.115
4 direction 85 x 85 mm fixing centres 	1 notch 1 N/O contact per direction	Without	Chromium	**XD2-PA14**	0.145
			Black	**XD2-PA147**	0.145
		With	Chromium	**XD2-PA24**	0.145
			Black	**XD2-PA247**	0.145

Complete units type XDL-P, with circular black insulated bezel



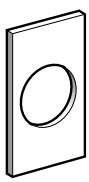
XDL-PA14

2 direction 	1 notch 1 N/O contact per direction	Without	**XDL-PA12**	0.095
		With	**XDL-PA22**	0.095
4 direction 	1 notch 1 N/O contact per direction	Without	**XDL-PA14**	0.125
		With	**XDL-PA24**	0.125

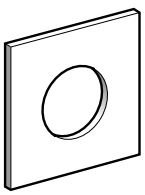
Legend plates

Description	Text	Colour	Reference	Weight kg
2 direction 30 x 48 mm	Without	Black one side, red reverse	**ZD2-GY2201**	0.002
		White one side, yellow reverse	**ZD2-GY2401**	0.002
	With (1) (specify when ordering)	Black letters, white background	**ZD2-GY2001**	0.002
		White letters, black background	**ZD2-GY2002**	0.002
		White letters, red background	**ZD2-GY2004**	0.002
		Black letters, yellow background	**ZD2-GY2005**	0.002
4 direction 48 x 48 mm	Without	Black one side, red reverse	**ZD2-GY4201**	0.003
		White one side, yellow reverse	**ZD2-GY4401**	0.003
	With (1) (specify when ordering)	Black letters, white background	**ZD2-GY4001**	0.003
		White letters, black background	**ZD2-GY4002**	0.003
		White letters, red background	**ZD2-GY4004**	0.003
		Black letters, yellow background	**ZD2-GY4005**	0.003

(1) 2 lines of 11 characters maximum per direction.



ZD2-GY2201



ZD2-GY4201

Other versions

XD2-PA joystick controllers with :
- contact blocks with Faston connectors conforming to NF C 20-120,
- gold flashed contacts for low power switching.

Please consult your Regional Sales Office.

Joystick controllers

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References

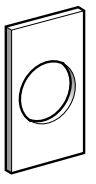
Complete units type XD2-G, with circular chromium plated metal bezel



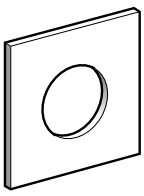
XD2-GA8211



XD2-GA8441



ZD2-GY5201

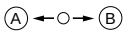
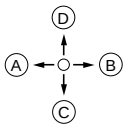


ZD2-GY6201



ZB2-BE101

Interchangeable contact blocks

Description	Operation	Spring return to zero position	Bezel finish	Reference	Weight kg
2 direction 90 x 90 mm fixing centres 	1 notch 1 N/O contact per direction	Without	Chromium	**XD2-GA8211**	0.300
			Black	**XD2-GA82117**	0.300
		With	Chromium	**XD2-GA8221**	0.300
			Black	**XD2-GA82217**	0.300
	2 notches 2 N/O contacts per direction	Without	Chromium	**XD2-GA8231**	0.500
			Black	**XD2-GA82317**	0.500
		With	Chromium	**XD2-GA8241**	0.500
			Black	**XD2-GA82417**	0.500
		1st notch stay put 2nd notch with spring return to 1st	Chromium	**XD2-GA8251**	0.500
			Black	**XD2-GA82517**	0.500
4 direction 90 x 90 mm fixing centres 	1 notch 1 N/O contact per direction	Without	Chromium	**XD2-GA8411**	0.330
			Black	**XD2-GA84117**	0.330
		With	Chromium	**XD2-GA8421**	0.330
			Black	**XD2-GA84217**	0.330
	2 notches 2 N/O contacts per direction	Without	Chromium	**XD2-GA8431**	0.550
			Black	**XD2-GA84317**	0.550
		With	Chromium	**XD2-GA8441**	0.550
			Black	**XD2-GA84417**	0.550
		1st notch stay put 2nd notch with spring return to 1st	Chromium	**XD2-GA8451**	0.550
			Black	**XD2-GA84517**	0.550

Legend plates

Description	Text	Colour	Reference	Weight kg
2 direction 40 x 64 mm	Without	Black one side, red reverse	**ZD2-GY5201**	0.002
		White one side, yellow reverse	**ZD2-GY5401**	0.002
	With (1) (specify when ordering)	White letters, black background	**ZD2-GY5002**	0.002
		White letters, red background	**ZD2-GY5004**	0.002
		Black letters, white background	**ZD2-GY5001**	0.002
		Black letters, yellow background	**ZD2-GY5005**	0.002
4 direction 64 x 64 mm	Without	Black one side, red reverse	**ZD2-GY6201**	0.003
		White one side, yellow reverse	**ZD2-GY6401**	0.003
	With (1) (specify when ordering)	White letters, black background	**ZD2-GY6002**	0.003
		White letters, red background	**ZD2-GY6004**	0.003
		Black letters, white background	**ZD2-GY6001**	0.003
		Black letters, yellow background	**ZD2-GY6005**	0.003

Contact blocks

Description		Contact	Reference	Weight kg
Slow break	Additional or replacement	N/O	**ZB2-BE101**	0.015

(1) 2 lines of 11 characters maximum per direction.

Other versions

XD2-G joystick controllers with :
- variable composition ; 2, 3, 4 or 8 direction,
- contact blocks with Faston connectors conforming to NF C 20-120,
- gold flashed contacts for low power switching.

Please consult your Regional Sales Office.

Characteristics :
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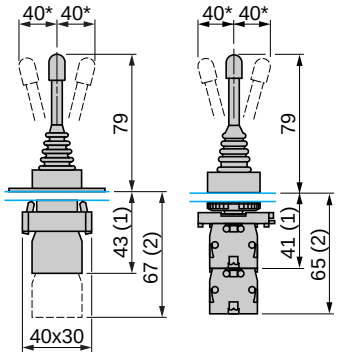
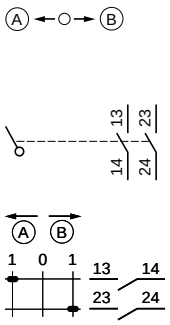
Joystick controllers
XD2-PA●● **XDL-PA●●**

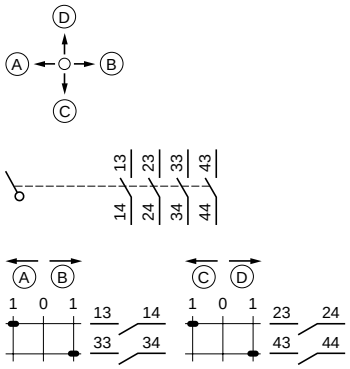


* in each of the 4 directions
(1) 2 direction
(2) 4 direction

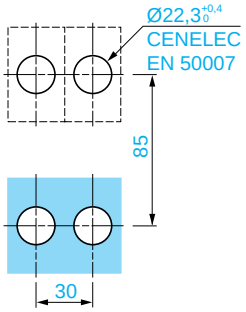
XD2-PA12, PA127
XD2-PA22, PA227
XDL-PA12, PA22



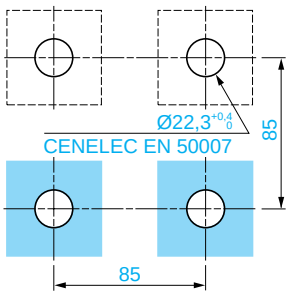
XD2-PA14, PA147
XD2-PA24, PA247
XDL-PA14, PA24



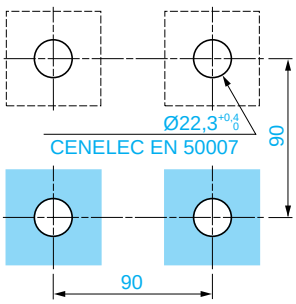
Panel cut-out
(thickness 1 to 6 mm)
XD2-PA, XDL (2 direction)



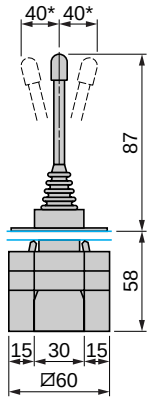
XD2-PA, XDL (4 direction)



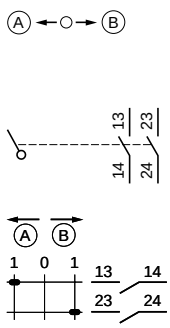
XD2-GA (2 and 4 direction)



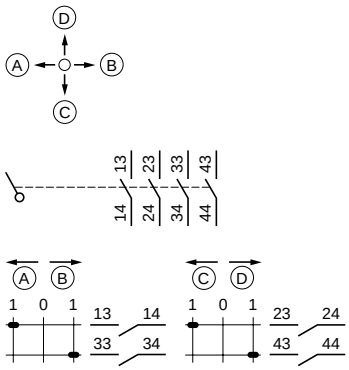
Joystick controllers
XD2-GA●●
1 notch
1 N/O contact per direction



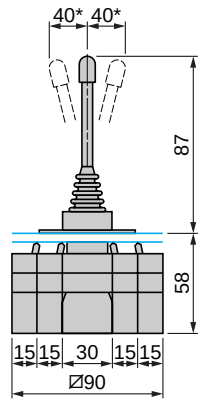
XD2-GA8211, GA82117
XD2-GA8221, GA82217



XD2-GA8411, GA84117
XD2-GA8421, GA84217

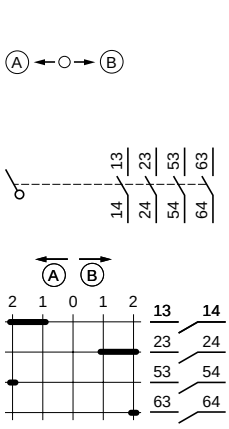


2 notches
2 N/O contacts per direction

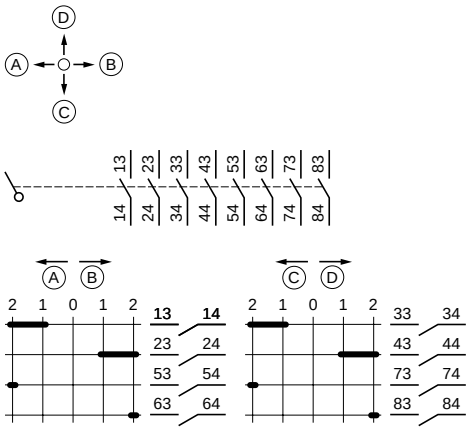


* in each of the 4 directions

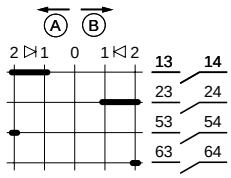
XD2-GA8231, GA82317
XD2-GA8241, GA82417



XD2-GA8431, GA84317
XD2-GA8441, GA84417



XD2-GA8251, GA82517



XD2-GA8451, GA84517

