

Certification Record

| CUSTOMER | CLASS | FILE |
|--|--|----------------|
| Telemecanique/Schneider Electric Industries S.A. | 3211-03 | 044087-S-000 |
| 33 bis avenue du Marechal Joffre BP 204 | INDUSTRIAL CONTROL EQUIPMENT-Motor Controllers - Auxiliary Devices | |
| Nanterre Cedex, , 92002 France | Refer to Class Description for pr | rogram details |

- Proximity switches, open types, Types XSA-A...., up to 240V ac max, 0.5A max; XSA-C...., up to 48V dc max, 0.05A max; XSA-H...., up to 24V dc max, 0.2A max; XSA-J...., up to 24V dc, 0.2A max; XSA-V...., up to 240V ac, 0.4A max or up to 48V dc, 0.2A max.
- Proximity switches, CSA Encl 4, Types XSB-A...., up to 240V ac, 0.35A max; XSB-C...., up to 48V dc, 0.2A max.
- Proximity switches, in general purpose enclosure, Types XSC-A...., up to 240V ac, 0.5A max; XSC-C...., up to 48V dc, 0.2A max; XSC-H...., up to 48V dc, 0.2A max; XSC-J...., up to 48V dc, 0.2A max.
- Proximity switches, in general purpose enclosure, Types XSD-A...., up to 240V ac, 0.5A max; XSD-C...., up to 48V dc, 0.05A max; XSD-H...., up to 48V dc, 0.2A max; XSD-J...., up to 48V dc, 0.2A max.
- Proximity switches, open types, Types XSE-C...., up to 48V dc, 0.1A max.
- Proximity switches, open types, Types XSG-A...., up to 120V ac, 0.2A max; XSG-H...., up to 24V dc, 0.2A max.
- Proximity switches, open types, Types XSP-A...., up to 240V ac, 0.4A max; XSP-H...., up to 24V dc, 0.2A max; XSP-J...., up to 24V dc, 0.2A max.
- Proximity switches, open types, Types XSL-H...., up to 24V dc, 0.2A max.
- Proximity switches, open type, Series XSM-H, XSM-J and XSM-C, 0 to 50V dc, 200mA max; Types XSM-H0831 and XSM-J0831, 0 to 30V dc, 100mA max.
- Proximity switches Type XSN, open type, 12-24V dc, 100mA.

- 1. The type designations are completed by suffixes indicating construction details and function.
- 2. The proximity switches Types XSB-A...., may carry an inrush current of 6 times the rated current, power factor less than 35 percent.
- 3. Proximity switches, Series XSM-H, XSM-J and XSM-C, XSF, except Types XSM-H0831 and XSM-J0831 have been tested for compliance with the requirements of CSA Standard C22.2 No 94-1976 for watertight enclosures (ENCL 4); however, they are Certified as open type devices as they do not have provision for conduit connection.
 - Rotary switch, 12 contacts max, Type XB2-D 5A, 600V ac and/or rating codes A600 and Q600. Note: Type XB2-D is only Certified in circuits over 300V where the short circuit capacity is limited by fuses not exceeding the ratings of the devices.
 - Pendant pushbutton stations, Type XAC-A, followed by a 1 or 2 digit number, followed by a 2 digit number or 1 or 1, 2 or 3 letters, may be followed by a 1 digit number, may be followed by a 1 digit number, followed by H7, Types 4 and 12, including contacts, blocks, A600, Q600 and pilot lights, 120V max, 2.6W max.
 - Pushbutton stations, pendant type, water tight (CSA Encl. 4), with up to 12 pushbuttons and/or

pilot lights, Types XAC-B for 300V max with built-in devices rated as follows: for use in auxiliary circuits 600V ac HD, 600V dc SD or 60VA max (XES-B1011, XES-D1181 and -1281) or 300V ac HD, 300V dc SD (XEN-C) for use in 3-ph motor circuits 3 hp, 600V ac (XES-D1191 and -1291) or 3 hp, 240V ac (XES-D22...) with aux. contacts SPDT 300V ac HD with or without pilot lights; Types XBF-LO, 220V, 1.2W max; XAC-M, for 300V max with built-in devices rated as follows: for use in auxiliary circuits, 600V ac HD, 600V dc SD or 60VA max (XES-B1011, XES-B2011, XES-D1181 and -1282) or 300V ac HD, 300V dc SD (XEN-C).

Notes:

- 1. The pushbutton stations Types XAC-B and XAC-M are Certified only for use as component part of other equipment where the acceptability of the combination has been determined by the Canadian Standards Association.
- 2. The built-in contacts, for use in auxiliary circuits, bear the note: WIRING MUST BE SAME POLARITY (except for XEN-C).
- 3. Cam operated master switches, open type, Type XKB, 300V ac HD, 300V dc SD, XKD, with built-in contacts Types ZB2-BE and XES-B 1011, 5A, 600V ac and/or rating Codes A600, O600.
- Cam operated master switches, open type, Type XK2-B and XK3-A, 300V ac; XK3-M, XK4-C and XD4, 600V, 20A ac, 0.6A dc.
- Cam operated master switches, open type, Type XKM-A, XKM-B and XKM-C, 600V ac/dc heavy duty.

Note: The type designation is completed with letters and/or numbers indicating the contact arrangement, type of operating mechanism, etc.

• Pressure operated switches, in special purpose enclosure, CSA ENC 4, Types XMG-B..., 1PDT or 2PDT, rating code A300, Q300 and/or 300V dc 60W, each pole same polarity.

Notes:

- 1. The type designation is completed with numbers and letters indicating operating pressure and mechanical details.
- 2. The switches are certified as components for use only in other certified equipment where the suitability of the combination is to be determined by the Canadian Standards Association.
- Pressure operated switches, Type XMJ-A, Type 4 enclosure, contact A300, O300.
- Pressure switch, Types XML-A..., -B..., -C..., Type 4 enclosure, contact B300 and R300.
- Pressure operated switches, polymeric enclosure, Cat. No. XMP, rated 2 hp 120V, 3 hp 240V ac, 1 ph, 2 poles; 3 hp 120V, 5 hp 240V, 1 hp 600V ac, 3 ph and/or rated A600. Enclosure Type 1.

Pressure operated switches, polymeric enclosure, Cat. Nos. XMA and XMX, rated B300, Q300 pilot duty. Contacts of same polarity. Enclosure Type 12.

- 1. The type designation is completed with numbers and letters indicating operating pressure and mechanical details.
- 2. The switches without NPT conduit entries are accepted as "Special Component Devices" having a general purpose enclosure and are only for use where the acceptability of the combination is to be determined by the Canadian Standard Association.
- 3. The devices over 300V are certified as components for use in circuits where the short circuit

capacity is limited by fuses having ratings not exceeding the ratings of the device.

- Liquid level controls, in general purpose enclosure, Type XL1.A, 300V ac HD; XL1.B 600V ac HD.
- Foot switches, enclosed (CSA ENCL 4), Type XPE.M, Rating Codes A300, Q300 each pole same polarity.
- Limit switches, enclosed, Type 4 and 12, Type XCR, Rating Codes A300, Q300, each pole same polarity or opposite polarity.
- Limit switches, enclosed, CSA Enc. 4, Types XCM and XCB, code rated A150 (same polarity) water-tight, metal enclosure; XC2-JC, 1 pole or 2 poles, 300V ac HD or code rated A300, Q300, 300V dc, 60VA max (same polarity for each pole.
- Limit switches, enclosed, CSA Enc. 4, Type XY2-CC, 600V ac HD.
- Limit switch, Cat. No. XCK-A followed by suffixes, enclosure type 4X indoor and 12, rated A300 and R300.
- Cam type controller, Type XBC-D, code rated A600, Q600. Note: The type designation may be completed by numbers and letters, indicating contact shape and mechanical details.
- Pushbutton stations, Type 4, 4X and 12, Types XAL-B, XAL-J, with contact units Types XEN-L or ZB2-BE, 600V ac HD, and/or rating codes A600, Q600 and/or 5A, 600V ac with or without pilot lights Types XAL-V6, lamp Ba9S, 130V max, XAL-V7 with resistor 230V max or with transformer 600V/6V, 1.5W or with illuminated contact units Types XAL-W6 contacts 300V ac HD for same polarity with lamp Ba9S, 130V max or XAL-W7 with series resistor 230V max.

Note: Types XAL-B and XAL-J, with built-in units are Certified as components for use only with other Certified equipment.

- Pilot lights, XVL-A1, XVL-A2 and XVL-A3, LED Types for 48V dc max.
- Proximity detectors, CSA ENCL 4, Types XSD-H and XSD-J, 48V dc max, 200mA; Type XSD-C, 48V dc max, 100mA; Type XSD-M, 240V ac/320V dc max, 500/100mA; Types XSD-T and XSD-A, 240V ac max, 500mA; Type XSD-H603629, 19-30V dc, analog output 0-16mA or 4-20mA; Type XSD-H606729, 19-58V dc, analog output 0-10mA or 4-14mA.

Note: The type designations are completed by suffixes indicating construction details and function.

- Pushbutton switches, open type, Type XBJ, 6A, 300V ac HD.
- Pilot lights, open type, Type XBJ-V, 60V, 1.2W, lamp BA7S.
- Illuminated pushbutton switches, open type, Types XBJ-W, lamp BA7S, 60V, 1.2W, contacts 6A, 300V ac HD.
- Pushbutton switches, open type, Types XB2-M, 4 contact sets max, 600V ac HD, dc SD or 60W max.
- Pilot lights, open type, Types XB2-MV10, 240V max, 6W lamp Ba15d, E14, E10 or Ba9S; XB2-MV7 or -8, with transformer 600V max/6V, lamp Ba9S.
- Illuminated pushbutton switches, open type, Types XB2-MW7. or -8. with transformer 600V max/6V lamp Ba9S or Ba7S, 1.2W, contacts 600V ac HD dc SD or 60W max.

Note: The type designations of the above pushbutton switches may be completed by letters and/or numbers indicating the contact arrangement, etc.

- Auxiliary devices, 22 mm line:
 - -Master Switches, open types, Types XD2-PA or XDL-PA, followed by a number, 4 contacts max; XD2-GA, followed by a number, 8 contacts max; 5A, 600V ac and/or code rating A600, Q600.
 - -Push-button Switches, open types, Series ZA2-B or ZB2-B provided with contact block with screws or quick connect terminals Type ZB2-BE followed by 10 or 20, followed by 1 or 2,

may be followed by 3, 6, 7 or 9; Type ZBE-BE followed by a 7 digit number; 5A, 600V ac and/or code rating A600, Q600; except for ZB2-BE1016, 1026, 1017 and 1027, 24V-100mA resistive.

-Pilot Lights, open types, lamp base, Series ZA2-B or ZB2-B provided with transformer pilot light body, rated 600V max, 50/60Hz, 6V-1.5W max Type Z..-BV followed by 1, 2, 3, 4, 94, 95 or 98, may be followed by a number; or with full voltage pilot body rated 125V, 2.6W max Type Z..-BV followed by 6 or 006, may be followed by a number; or with a resistor pilot light body rated 220V, 2.6W max Type Z..-BV7 may be followed by a number; or a flashing light body Type Z..-BV followed by 18 or 19 followed by one digit number. Suitable for use with Type 4 enclosure.

Notes:

- 1. The contact block ZB2-BE and the pilot light Z..BV may be combined. The combinations are Z..BW01, 02, etc. followed by a reference number indicating the type of pilot light.
- 2. The combination of units mentioned above with operating heads are symbolized XA2-B or XB2-B
- 3. The type designations of the combinations are completed by a digit indicating number of contacts and contact shape.
 - Pilot devices and signalling devices for use in industrial control assemblies, open type, 600V ac or less, contacts rated A600/Q600. Details of product lines are given in the table below:

| Series Designation Radix | Function | |
|--------------------------|---|--|
| XB3-B, ZB2-BE | Pushbuttons and selector switches, illuminated or non-illuminated | |
| XB3-D | Cam-type switches | |
| XD3-P | Joystick-type switches | |
| ZBV | Pilot lights | |
| ZBWO | Illuminated pushbutton | |
| XD2-PA, XD2-GA | Master switches | |

Note: The dots shown in the series designation above are replaced by letters or numbers denoting variations in function, contact arrangements.

- Master switches, open types, Type XD2-PA, 4 contacts max; XD2-GA, 8 contacts max, 5A, 600V ac and/or code rating A600, Q600.
- Pushbutton switches, open types, with screw type terminals or with male terminals for use with quick disconnect female terminals, Type ZB2-BE, 5A, 600V ac, and/or code rating A600, O600.
- Pilot lights, open type, lamp base, 1.2W, Type ZB2-BV1, -2, -3 and -4, with transformer Types ZB2-BV94, ZB2-BV95 and ZB2-BV96, 600V max, 60Hz/6V-1.5W max; ZB2-BV6. 125V, 2.6W max; ZB2-BV7 with resistor, 220V, 2.6W max, ZB2-BV18 and BV19.

- 1. The pushbutton switches ZB2-BE and the pilot lights ZB2-BV may be combined. The combinations are ZB2-BW01, -02 etc., followed by a reference number, indicating the type of pilot light.
- 2. The pushbutton switches Type ZB2-BE and the master switches Type XD2-.. are limited by fuses not exceeding the ratings of the device.
- 3. The type designations of the combination are completed by a digit indicating number of contacts and contact shape.

- Proximity switches, in general purpose enclosure, Types XSC-A.... up to 240V ac, 0.5A max; XSC-C.... up to 48V dc, 0.2A max; XSC-H.... up to 48V dc, 0.2A max; XSC-J up to 48V ac, 0.2A max; XSC-T.... up to 240V ac, 0.5A max.
- Pilot lights, open types, Types XV1-AB, 220V, 7W, (screw shell E14); XB2-MV, 250V, 6W (bayonet base BA15 or screw shell E14) or 125V, 6W, (miniature base BA9s or E10) or 600V, 50/60Hz, (with transformer and lamp 6V, 1.2W, BA7s and BA9s); XB2-AV, 125 or 300V (with transformer and lamp 6V, 1.2W).
- Pushbutton stations, enclosed, Types XY2-SA31 (Encl. 3), XY2-SA33 and XY2-SA35, safety units for presses etc., 600V ac heavy duty, 600V dc standard duty; XY2-SA1 (Encl. 3); XY2-SA25 (Encl. 4); XY2-SA26 (Encl. 4); XY2-CA and XY2-CB, emergency control untis, 600V ac/dc heavy duty.
- Limit switches, enclosed, (Encl. 4), Types XC2-JD (plug-in type), 600V ac heavy duty, 600V dc, standard duty.
- Limit switches, enclosed, screw spindle operated, Types XR2-A, 600V ac/dc heavy duty; XR2-B, 600V, 20A ac, 0.6A dc.
- Limit switches, Types XF9-DB, 25A, 20 hp, 600V, 3-ph, 5 hp, 250V, single-phase, 2 pole, XF9-EB, 50A, 40 hp, 600V, 3-ph, 10 hp, 230V, single-phase, 2 pole, XF9-FC, 80A, 75 hp, 600V, 3-ph, XF9-GC, 125A, 100 hp, 600V, 3-ph, XF9-HC, 180A, 150 hp, 600V, 3-ph; Types XF9-D and XF9-F, 600V ac max, 3 ph, 200 hp max.

Note: The limit switches, XF9 are for breaking purposes only and are Certified only as a component of other equipment where the acceptability of the combination has been determined by the Canadian Standards Association.

- Monolever switch assembly, Joystick, for use in industrial control equipment where the suitability of the combination is to be determined by CSA, Series XDP, rated A600 and Q600, pilot duty or 1/2A, 125V dc, 1/4A, 250V dc, 11A, 1/3 hp, 125/250/277V ac.
- Pushbuttons XB2-EA rated D150 and pilot lights XB2-EV, XB2-EV3, 130V, 2.5W max.
- Proximity switches Cat. XSF-A, XSF-H, XSF-J, plug-in type, CSA Encl. Type 1, 2, 3, 4 and 5, one NO/NC output, rated 120V, 0.5A ac, power supply 120V, 60Hz; one NO and NC output, rated 12-24V dc, 0.2A max, supply 12-24V dc.
- Trip wire operated emergency stop, Type XY2-CE, followed by 1, 2, 3, 4, 5, 6 or 7, followed by A or C, followed by 0, 1, 2, 3, 4, 5, 9, followed by 1, 2, 5, 7 or 9, followed by 0 or 6, followed by H7. Type 4 enclosure, rated A300-Q300, pilot light 120V max.
- Trip wire emergency stop switch, rated A300 Q300, Types 4, 12, Model XY2CH.
- Safety interlock switch, rated A300 Q300, polymeric, Type 4X and 12 enclosure, Models XCS-PA, -PR, -PL, -TA, -TL and -TR, followed by a three digit number.
- Limit switches Type XCK-J, XCL-J and XCS-L, A300 or Q300, Type 4 or Type 4X indoor use or Type 12, with or without magnetic latching 12V dc to 48V dc or 110V ac to 240V ac; Types XCK-J11, plug-in type, 1PDT rated A600 or Q600 same polarity; XCK-J21 and -J41, plug-in type, 2PDT, rated A300 or Q600 same polarity.

Note: Limit switches XCK-J and XCL-J equipped with M12 threaded receptacle are rated pilot duty 30V ac/dc -3A max.

- 1. The type designation may be completed with numbers and letters indicating contact shape and mechanical details.
- 2. The switch units Types XEN-P2151, XEN-P2161, XEN-P2141 and XES-P20S1 has been endurance tested for 100,000 operations.
- 3. The limit switch Type XCK-T has been accepted as end of the line device, where only one conduit is used.
- Digital display Type XA2-VA.., 24V dc, 40mA, composed of body and head sub-assembly

- ZA2-VA.., suitable for CSA Enc. Type 5.
- Inductive proximity switches, cylindrical housing, Cat. No. XS, followed by 1, 2, 3 or 4, followed by L, M, N or P, followed by suffixes; versions with a 2, 5 or 10 m cable connection, with a plug connector or with cable gland entry; 240V ac max, 300mA ac max; 210V dc max, 200mA dc max. Special purpose enclosure Type 4, 4X indoor and 12, Type XSA-V... with flexible cord, Type 4, 4X indoor, 6P and 12.

Note: The type designation is followed by characters indicating contact shape and mechanical details.

- Proximity switches, Cat No XS7-C, XS8-C or XT7-C, followed by 40, followed by D, F, K, M, N, or P followed by A, B, C, or P followed by a three digit number may be followed by A, D, H7 or H29, may be followed by TF, TT or W, enclosure Types 4X, 6P and 12.
- Proximity switches, XS7-H or XS8-H, followed by 10, followed by N or P, followed b A or B, followed by a three digit number, may be followed by L with a one or two digit number, enclosure Types 4X, 6P, 12, rectangular housing.
- Proximity switches, Cat. Nos. XS7-G and XS8-G, followed by 12, followed by M, N or P, followed by A, B or C, followed by a three digit number, may be followed by S or L with a one or two digit number, cord connected: enclosure Types 4X and 12, plug connected: enclosure Type 1.
- Analog joystick controller Cat. No. XDA..., 24V dc, 25mA max, in CSA Encl. 4 or 5.
- Enclosures for industrial control panels, Types 4, 4X and 12, Types XAP.M, metal, XAP.A insulating material; XAP.G, metal.

Notes:

- 1. The type designations are completed with suffixes indicating dimensions.
- 2. These enclosures are intended for use with open type industrial control panels, for indoor and/or outdoor use 'CSA ENC. 4 and 5' without mounting holes for pushbuttons and/or pilot lights, or with Certified XB2-M or ZB2-B pushbuttons and/or pilot lights, if provided with appropriate fittings and where the acceptability of the combination has been determined by the Canadian Standards Association.

Photo-relay systems

| Type | Supply | Output |
|----------|-------------------------|-------------------------------|
| XUEH3000 | 24-240V ac or 12-48V dc | None |
| XUEH | 12-48V dc | 48V dc, 0.2A |
| XUEF | 24-240V ac/dc | 240V ac/dc, 0.5A |
| XUEA | 24-240V ac/dc | 240V ac/dc, 0.35A ac, 0.1A dc |
| XUET | 24-240V ac/dc | 240V ac/dc, 0.5A |
| XURH | 12-48V dc | 48V dc, 0.2A |
| XUEH75 | 12-24V dc | 24V dc, 0.2A |
| XUPH | 12-24V dc | 24V dc, 0.2A |
| XUPJ | 12-24V dc | 24V dc, 0.2A |
| XUBH | 12-24V dc | 24V dc, 0.2A |
| XUBJ | 12-24V dc | 24V dc, 0.2A |
| XUBA | 24-240V ac | 240V ac, 0.18A |
| | | |

- 1. The type designation is followed by suffix numbers which describe the supply voltage, the output's normal state (NO, NC, SPDT), whether a Power On indicator light is provided, the type of system (Receiver only, Reflex system, Proximity system).
- 2. These devices are Certified only as component parts of other Certified equipment where the suitability of the combination is determined by the Canadian Standards Association.
- 3. Series XUE, XUJ-M and XUL are suitable for applications requiring Type 4, (XUL, Type 4X) and 12 enclosures.
 - Photo-Electric Detectors, amplifiers for optical head, Type XUV-H, -J, open type, 24V dc, 0.1A.
 - Photo-Electric Sensors, Cat. Nos. XU followed by 1, 2, 5, 8 or 9, followed by B, P or S, followed by 18, followed by K, N or P, followed by a three digit number, may be followed by D or L followed by a one or two digit number, may be followed by L, R, T, LR or LT, cylindrical polymeric, Types 4X indoor and 12, cord connected or connector version, 24V dc, 0.1mA.
 - Photo-Electric Sensors, Cat. No. XUB followed by H or J, followed by 01353, may be followed by D or L followed by a one or two digit number, cylindrical polymeric, Types 4X indoor and 12, cord connected or connector version, 24V dc, 0.1mA.
 - Photo-Electric Detectors, Type XUM-H or -J, followed by a five digit number, may be followed by a one digit number, may be followed by L followed by a two digit number, cord connected, Type 4X indoor and type 12, connector: Type 1, general use, 24V dc, 0.1A.
 - Photo-Electric Detectors, Type XUM-L, cord connected, Type 4X indoor and Type 12 connector: Type 1 general use, 24V dc, 0.1A res.
 - Photo-Electric Detectors, Amplifier for optic fibres, Type XUD, followed by H or J, followed by a six digit number, may be followed by S, 24V dc, 0.1A res., open type.
 - Photo-Electric Detectors, Amplifier for optical head, open type, Model XUV-F,
- Photo-Electric Detectors, Model XUA, cord connected: Type 4X indoor and 12, connectors: Type 1, 24V dc, 0.1A res.
- Photo-Electric Detectors, Type XU, followed by 1, 2, 5, 8 or 9, followed by M, N, P or S, followed by 18, followed by A, K, M, N, P or U1, may be followed by A, B, C or P, may be followed by a two or three digit number, may be followed by D, K, R, T, W or L with one or two digit number, or an association of these digits, cylindrical polymeric or metallic, Type 4X indoor and Type 12, cord connected or connector Models XU.-N, -P and -S are rated 12-24V dc, 100mA while Model XU.-M is rated 12-24V dc, 100mA or 24-240V ac/dc, 200mA resistive load.
- Limit Switches, Cat. No. XCE, rated B300 R300, 250V ac, 5A resistive, Type 4 Enclosure.
- Auxiliary Devices, 16 mm line, Type 4, 4X and 13 enclosures:
 - Push buttons, Cat No. XB6-AA, -AS, -CA or -DA; pilot lights, Cat No. XB6-AV, -CV or -DV; illuminated push buttons and selectors, Cat Nos. XB6-AE, -AF, -AW, -AK, -CE, -CF, -CW, -CK, -DE, -DF, -DK or -DW; key switches, Cat No. XB6-AG, -CG or -DG; selector switches, Cat No. XB6-AD, -CD or -DD; both followed by a three or four numbers and/or letters suffix and rated B300 or R300.
 - Contact blocks, Cat No. ZB6 followed by E or Z, followed by 1 or 2, followed by A, B, D or E, rated B300 or R300.
 - Pilot light blocks, Cat No. ZB6 followed by E or Z, followed by B, G, H or M, followed by one digit, followed by A or B, LED type: 24V ac/dc, neon type: 230V ac max, incandescent type: 24V max, 0.6W max.
 - Illuminated push buttons/selector blocks, Cat No. ZB6 followed by Z, followed by B, G, H or M, followed by a two digit number, followed by B or E, LED type: 24V ac/dc, neon type: 230V ac max, incandescent type: 24V max, 0.6W max.
 - Operating heads, Cat No. ZB6 followed by A, C or D, followed by a letter, followed by one digit or one letter may be followed by 1 through 7.
 - Accessory kits, Cat No. ZB6-Y followed by a three digit number
- Auxiliary devices, 22 mm line, electrical blocks and accessories for printed circuit board connection:

- Contact blocks, Cat. No. ZBE-701, -702, rated B300 or R300.
- Pilot light blocks, Cat. No. ZBV-B followed by suffixes, LED Type 24V ac/dc.
- Accessory kits, Cat. No. ZBZ-010, ZB4-BZ079, ZB5-AZ079.
- Electronic pressure sensors Cat. No. XML-E followed by suffixes, rated 11-33V dc (Class 2 input only), analogue output 4-20mA, solid state output 100mA; Cat. No. XML-K followed by suffixes, rated 11-30V dc (Class 2 input only), analogue output 4-20mA.
- Limit switches for safety application, rated A300-Q300, type 4, 4X and 12 enclosure, Models XCS-A, XCS-B, XCS-C and XCS-E followed by a three, four or seven digit number.
- Push-buttons, 22 mm line, Cat No. XB7-EA or -EH; selector switches, Cat No. XB7-ED or -EG; emergency stop switches, Cat. No. XB7-ES; both followed by suffixes and rated D300. Pilot lights, 22 mm line, Cat No. XB7-EV followed by suffixes; direct supply (incandescent or neon): 250V ac max, 50/60Hz, 2.6W max; direct through resistor: 230V ac max, 50/60Hz, lamp 130V-2.6W; integral LED: 24V dc max, 26mA max, 120V ac max, 50/60Hz or 230V ac max, 50/60Hz, 16mA max; via integral transformer: 120V or 230V ac max, 50/60Hz, lamp 6V-1.2VA.
- Illuminated push-buttons, 22 mm line, Cat. No. XB7-EH or -EW followed by suffixes; direct supply (incandescent or neon): 250V ac max, 50/60Hz, 1.2W max; integral LED: 24V dc max or 230V ac max, 50/60Hz.

Notes:

- 1. The series XB7-E without suffix digit P is open type.
- 2. The series XB7-E with suffix digit P is suitable for use on Type 12 enclosure.
 - Push-button switches, Series Domino, Types D..., 1 up to 4 contacts, 10A, 600V ac HD.
 - Class 9001, Type D, 22mm line, open type, contact blocks, pilot lights, push-button pilots and push on/off pilots. Switching units are rated 600V ac, 10A, heavy pilot duty, Q300 and pilot lights are rated 250V, 2.6W max.
 - Class 9001, Type DU, DV, D5, D6, D8 and D9, 16 mm line, open type, contact blocks, pilot light blocks, push-button pilot light blocks, push on/off light blocks, operators and accessories. Switching units are rated B150, Q150 and pilot lights are rated 60V max, 1.2W max.

Notes:

- 1. The type designations of the contact blocks may be completed with suffixes indicating operator type, colour, legend plate, mounting, contact configuration, etc.
- 2. Type type designation of the pilot lights may be completed with suffixes indicating operator material, operator types, colour, legend plate, mounting and lampholder/lampholder transformer assemblies.
- 3. The type designations of the pushbuttons pilots and push on/off pilots may be completed with suffixes indicating operator material, operator types, colour, legend plate, mounting, lampholder/lampholder transformer assemblies and contact arrangement.
- 4. The above may be provided for Enclosures Type 4, 4X, 12 or 13.5. Open type relays are Certified components for use in other Certified equipment where the suitability of the combination is determined by the Canadian Standards Association.
 - Pushbutton stations, provided with pushbutton switches and pilot lights, Series Domino, Types DMG1 up to -5 and DMM1 up to -5, cast aluminum enclosure, CSA Enclosure 3, DMI1 up to -5, polycarbonate enclosure; DWG1 up to -7 and DWW1 up to -7, cast aluminum desk type enclosure; DFP1 up to -8, aluminum frontplates for flush mounting.

Notes:

1. Type type designation of the above pushbutton switches and pushbutton stations is completed

- with suffix letters and numbers indicating the contact arrangement, the type of mounting and of operating means and/or addition of quick disconnect male terminals, etc.
- 2. Enclosures of insulation material are provided with suitable bonding jumpers, etc. for through conduit connection or are marked that suitable bonding is required opon installation, both in English and French.
- 3. The pushbutton stations may be provided with a special purpose cast aluminum enclosure, "Encl. 2" or "Encl. 3".
 - Class 9001 pilot lights, open type, Series Domino, Types D..., 125V, 2.6W max, if provided with transformer, 24-600V/6-24V, 1.2W max, if provided with Series capacitor block, 220V, 60Hz/80V, 2W max, if provided with series diode/resistor block, 220V ac/130V, 2.6W max.
 - Class 9001 pilot light control unit, Type DLT, 220V ac max.
 - Class 9001, Type D.. fuseholder, 6.3A, 250V ac max, built in a series Domino type mounting flange.

Notes:

- 1. The type designation of the above pilot lights may be completed with suffixes indicating the type of window, the type of securing means and addition of quick-disconnect male terminals.
- 2. The above pushbutton switches and pilot lights may be combined. The type designation of the combinations may be marked on the containing carton.
- 3. The pilot lights Series Domino, Types D..., provided with a transformer with a primary voltage rating over 300V are for use only in equipment where the short-circuit capacity of the circuit in which they are connected is limited by fuses having ratings not exceeding the ratings of the units.
- Class 9001, Type D (with suffixes), open type, contact blocks, pilot light blocks, pushbutton pilot light blocks, and push on/push off light blocks. Switching units are rated B300, Q300 and pilot lights are rated 250V max, 1.2W max.

Note: The type designations may be completed with suffixes indicating terminations, mounting, contact arrangement and accessories.

- Limit switches for safety applications, rated B300-Q300, Type 4X indoor and 12 enclosures, Model XCS-TE followed by a four digit number.
- Inductive proximity switches, rectangular shaped housing, metal case, Type XS5-L followed by suffixes, Type 4X indoor use or 12 for cord connected version and Type 1 for plug version, rated 12-24V dc, 100mA max resistive load.
- Auxiliary devices, 22 mm line:
 - Push-buttons and pilot lights assembly, Cat. No. XB4-B or XB5-A followed by suffixes.
 - Contact blocks, Cat. No. ZBE, followed by 1 or 2, followed by two digit number, may be followed by 4, 6 or 6P, may be followed by 3 or 9.
 - Contact blocks, Cat. No. ZEN-L followed by 1111 or 1121.
 - Pilot light blocks, Cat. No. ZAL-V or ZAL-V18 followed by B, G, J, M or BG, followed by one digit.
 - Pilot light blocks, Cat. No. ZBV-6 followed by one digit, may be followed by 3 or 9; Cat. No. ZBV or ZBV-18 followed by B, G, J, M or BG followed by one digit, may be followed by 3, 4 or 9.
 - Contact subunit, Cat. No. ZB4 BZ or ZB5 AZ followed by a three or four digit number; Cat. No. ZD4-PA or ZD5-PA followed by a three digit number.
 - Pilot light subunit, Cat. No. ZB4 BV or ZB5 AV followed by one, two, three or four numbers and/or letter suffixes.
 - Illuminated push-button subunit, Cat. No. ZB4 BW0 or ZB5 AW0 followed by two, three, four or five numbers and/ or letter suffixes.

- Operators, Cat. No. ZB4 B, ZB5 A or ZB5 C, followed by A, C, D, G, H, J, K, L, P, R, S, T or X, followed by one, two, three or four numbers; Cat. No. ZD4-PA or ZD5-PA followed by a two digit number.
- Pilot light heads, Cat. No. ZB4 BV0, ZB5 AV0 or ZB5 CV0 followed by one or two numbers.
- Illuminated push-button operators, Cat. No. ZB4 B, ZB5-A or ZB5 C followed by W, A, H, K or L followed by two numbers, may be followed by 3.
- Joystick controllers, Cat. No. XD4-PA or XD5-PA followed by a two digit number.

Ratings:

- The contact blocks Cat. No. ZBE are rated A600, Q600, except for Cat. No. ZBE-1014 and -1015 rated A300, R300 for plug-in connector type and for Cat. No. ZBE-1016 and -1026 rated 24-100mA resistive and contact block with wuick-connect terminals rated A300, Q300.
- The contact blocks Cat. No. ZEN-L are A600, R300.
- The joysticks are rated A600, R300
- The pilot lights are rated:

Direct supply for BA9 s bulb: 250V max, 2.4 W max

LED type: 12V ac/dc

24V ac/dc

120V ac

230/240V ac

24...120V ac/dc

Transformer type: Primary - 110 -120V, 50/60Hz; 230V, 50Hz or 220 - 240V, 60Hz; 400V, 50Hz; 440 - 480V, 60Hz; 550 - 600V, 60Hz, Secondary 6V.

- The operators are rated Type 1, 2, 3, 4, 4X, 12 and 13, except for the two operators push-buttons Cat. No. ZB4-BA8, ZB4-BL8, ZB5-AA8 and ZB5-AL8 that are only Type 1 enclosure

Note: These devices are certified for use in other certified equipment where the suitability of the combination is determined by the Canadian Standards Association.

- Photo-electric sensors, Type XUC followed by 2, 8 or 9, followed by A or B, followed by K or R, followed by C or S, followed by A, N or T, followed by L2, L5, L10, M12 or U78, may be followed by R or T, polymeric, cord connected version, Type 3, 4, 4X indoor, 6, 6P, 12 and 13; connector version, Type 3, 4, 4X, 12 and 13 enclosures. DC models: 12-24V input; 0.1A resistive output. AC/DC models: 24-240V input; 3A, 250V max output.
- Photo-electric sensors, polymeric, cord connected, Cat. No. XUK followed by T, 1, 2, 5, 8 or 9, followed by A or 1, followed by K or R, followed by C or S, followed by A, M, N or T, followed by L2, L5, L10 or M12, may be followed by R or T. Type 4X (indoor), 12 and 13 enclosures. DC models 12-240V input; 3A max, 240V max output. AC models 24-240V input; 3A max, 240V max output.
- Beacons and indicating banks, Cat. No. XVB followed by C or L, followed by 0, 1, 2, 3, 4, 5, 6 or 8, may be followed by B, G or M, followed by one digit; Cat. No. XVD followed by C or L, followed by 0, 1, 3, 4, 6 or 8, may be followed by B, G or M, followed by one digit. Cat. No. XVD-LS followed by 3 or 6, may be followed by B, G or M, followed by one digit; Cat. No. XVB or XVD followed by C, followed by one or two digit number, may be followed by B or M. Enclosure Types 4X indoor use and 12 for XVB; Type 1 for XVD model. Incandescent pilot light models: 250V max, 10W max for XVB-L and XVD-L, 5W max for XVD-LS; LED cluster models: 24V ac/dc, 120V ac or 230V ac, 1.5W max; strobe models: 24V, 850mA max, 120V, 260mA max, 230V, 210mA max.
- Inductive proximity switches, rectangular shaped housing, polymeric, Type XS7-T and XS8-T followed by suffixes, Type 4x indoor use and 12 for cable version and Type 1 for cable with moulded end connector, rated 12-48V dc, 200mA resistive load.

• Control stations, Cat. No. XAL-D or -K, followed by 01, 02 or 03, followed by 1, 2 or 3, followed by a two digit number, may be followed by a letter, followed by H7. Enclosure Type 4X.

Ratings:

- The contact blocks are rated A600, R300.
- The pilot lights LED Type are rated: 24V ac/dc, 120V ac, 230/240 V ac.

Note: These devices are enclosed manually operated control stations for use with CSA certified operating heads Cat. No. ZB5-A, contact blocks Cat. No. ZEN-L and/or pilot lights Cat No. ZAL-V.

- Pressure operated switches, Cat. No. XML-F, followed by a three alphanumeric digit number, followed by D or E followed by a four digit number. DC models, input: 24V dc, output: 10V dc max or 0.2A dc max. AC models, input: 120V ac, output: C300 pilot duty. Pressure: 60MPa max (8708 psi). Enclosure Types 4, 6, 12 and 13.
- Pendant push-button stations, Cat. No. XAC-A, followed by 20 or 21, followed by 1, 3, 5 or 7, may be followed by 3 or 4. Rated: A600-Q600. Enclosures Types 1, 4 and 4X.

Note: The devices are certified only as component parts of other equipment where the acceptability of the combination has been determined by CSA International.

- Photo-Electric Detectors, Model XUL followed by A, H, J, K or M, followed by a four, five or six digit number, may be followed by L with two digit number, D or K, may be followed by H7, supply 24-240V ac or 12-240V dc; contact 5A, 250V ac or 0.5A max, Enclosure Types 4 and 12.
- Photo-Electric Detectors, Model XUJ followed by B, K, LM, M or T, followed by a four, five or six digit number, may be followed by D, H or P, followed by a one digit number, supply 24-240V ac or 12-48V dc; contact 2A, 250V ac or 30V dc, Enclosure Type 4.
- Proximity switches, Cat. No. XS7, XS8 and XS9 followed by C, D, E, F or J, followed by five digits, followed by L, M or U with a one or two digit number, may be additionally followed by M or U with a one or two digit number. Types 1, 3, 4X indoor, use, 6, 12 and 13 enclosures.
- Photo-electric senros, Cat. No. XUX followed by 0, 1, 2, 5 or 9, followed by four digits, followed by M12 or T16, may be followed by R or T. Types 1, 3, 4X indoor use, 6, 12 and 13 enclosure.
- Safety modules Series Preventa Types XPS-AL, -AM, -AP, -AS, -AT, -AX, -AMF, -APF, -ASF, -BA, -BC, -CEN, -CEP, -DA, -ECM, -ECP, -FB, -NS, -OT, -PVK, -PVT and -VN followed by a four or five digit number, may be followed by Z, may be followed by P, HS, LS or T followed by a number, open type, input, 24, 48, 115/120 or 230V ac, 50/60Hz, or dc.
- Safety modules Series Preventa Types XPS-AC, -AF, -AFL, -AK, -AV, -BF, -CM, -DMB, -DME, -MP and -VC, followed by a four, five or six digit number, may be followed by P, may be followed by T with a three digit number, open type, input, 24, 48, 110, 115/120, 120 or 230V ac, 50/60Hz, or dc.
- Limit Switches, Cat. No. XCK-N, followed by 21, followed by a two digit number, followed by P20 or G11. Contact ratings: A300, R300. Types 1, 4X indoor use and 12 enclosures.
- Limit Switches, Cat. No. XCK, followed by D, P or T, followed by a four digit number, followed by F, G, N, or P, followed by a two digit number. Contacts ratings: A300, Q300 when XE2 contact blocks are used and B300, R300 when XE3 contact blocks are used. Types 1, 3, 4, 4X, 12 and 13 enclosures for Cat. No. XCK-D and Types 1, 3, 4, 4X indoor and 12 for Cat. No. XCK-P and XCK-T.
 - Body for limit switches, Cat. No. ZC, followed by D, P or T, followed by a two digit number, may be followed by F, G, N or P, followed by a two digit number. Contacts ratings: A300, Q300 when XE2 contact blocks are used and B300, R300 when XE3 contact blocks are used. Types 1, 3, 4, 4X, 12 and 13 enclosures for Cat. No. ZC-D and Types 1, 3, 4, 4X indoor and 12 for Cat. No. ZC-P and ZC-T.

Notes:

- 1. XCK-T limit switches are certified as end of the line device, where only one metallic conduit is used.
- 2. ZC body for limit switches shall be used with ZCE operating heads and ZC cable entry supports.
 - Limit Switches, enclosed, Types XCK-L, XCK-M, XCK-ML and XCK-MR, code rated A300 and/or Q300, same polarity or opposite polarity.

Note:

The type designation may be completed with numbers and letters, indicating contact shape and mechanical details.

• Limit Swithes, with snap cover, Cat Nos XCK-S or ZCK-S, followed by 1, 2, 3, 4, 5, 6, 7, 8 or 9, followed by a two digit number, may be followed by H7 or H29, Type 4 and 12, A300, Q300.

Note:

The switches without NPT conduit entry may be marked with special purpose enclosure rating when provided with instructions in package indicating the kit of NPT-Metric adaptors necessary to maintain the effectiveness of the special purpose rating and the NPT conduit entry.

• Limit Switches, general purpose enclosure, Types XCK-P, XCK-T and XCK-B, followed by 1, 5, 6, 7, 8 or 9, followed by 01, 02, 06, 10, 11, 18, 19, 21, 27, 28, 39, 45, 46, 54 or 55, may be followed by H7, H29 or H44, code rated A300 and/or Q300 same polarity or opposite polarity, enclosure Types 4X indoor and 12.

Notes:

- 1. The switches without NPT conduit entry may be marked with special purpose enclosure rating when provided with instructions in package indicating the kit of NPT-Metric adaptors necessary to maintain the effectiveness of the special purpose rating and the NPT conduit entry.
- 2. The limit switch Types XCK-B and XCK-T has been accepted as end of the line device, where only one conduit is used.
 - -Miniature limit switches, Cat. No. XCM, followed by D or N, followed by 21, 25, 29, 37 or 39, followed by a two digit or alphanumeric number, followed by C12, M12 or L with a two digit number. Type 12 enclosure for XCM-N and Types 4, 4X, 6, 6P, 12 and 13 enclosures for XCM-D.
 - Body for limit switches, Cat. No. ZCM-D, followed by 21, 25, 29, 37 or 39, may be followed by C12, M12 or L with a two digit number. Types 4, 4X, 6, 6P, 12 and 13 enclosures.

Electrical Ratings:

| XCM-N | B300 - R300 |
|------------------------------|-----------------------|
| XCM-D or ZCM-D21, -D25, -D29 | B300 - R300 |
| XCM-D or ZCM-D37, -D39 | C300 - R300 |
| XCM-D or ZCM-DM12 | C300 - R300 |
| XCM-D or ZCM-DC12 | 50V ac, 3A pilot duty |