Certificate Number
 20190809-E164353

 Report Reference
 E39281-19981027

 Issue Date
 2019-AUGUST-09

Issued to: Schneider Electric Industries S A, DBA Telemecanique

8001 Knightdale Blvd Knightdale NC 27545

This certificate confirms that AUXILIARY DEVICES

representative samples of See Addendum Page for Models

Have been investigated by UL in accordance with the

Standard(s) indicated on this Certificate.

Standard(s) for Safety: Standard for Industrial Control Equipment, UL 508

Additional Information: See the UL Online Certifications Directory at

https://ig.ulprospector.com for additional information.

This *Certificate of Compliance* does not provide authorization to apply the UL Mark. Only the UL Follow-Up Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.



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Certificate Number 20190809-E164353

Report Reference E39281-19981027

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This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

Push button and pilot light assemblies (22 mm line) Cat. No. XB4B or XB5A-, followed by A, C, D, G, H, J, K, L, P, R, S, T, V, W or X, followed by two, three, four, five or six numbers and / or letter suffixes,C0, C1 or CUST.

Contact blocks, Cat. No. ZBE, followed by 0, 1 or 2, followed by two digit number, may be followed by 6 or 6P, may be followed by 3, 5 or 9, may be followed by J. ZENL followed by 1111 or 1121.

Pilot light blocks, Cat. No. ZBV6 followed by one digit, may be followed by 3, 5 or 9, Cat. No. ZBV or ZBV18 followed by B, J, G, M, or BG, followed by one digit, may be followed by 3, 5, 9 or S. Cat. No. ZALV or ZALV18 followed by B, J, G, M, or BG followed by one digit.

Test output unit, Cat. No. ZB..V156, ZB..VB.156 and ZBZ.156.

Contact Subunit, Cat. No. ZB4BZ or ZB5AZ followed by a three digit or four digit number, Cat. No. ZD4PA or ZD5PA followed by a three digit number.

Pilot light subunit, Cat. No. ZB4BV or ZB5AV, followed by one, two, three or four numbers and / or letter suffixes.

LED pilot light transient voltage suppressors subunit, Cat. No. ZBZVG or ZBZVM.

Illuminated push button subunit, Cat. No. ZB4BW0 or ZB5AW0, followed by two, three, four or five numbers and / or letter suffixes.

Operators, Cat. No. ZB4B, ZB5A or ZB5C, followed by A, B, C, D, F, G, H, J, K, L, P, R, S, T or X, followed by 1, 2, 3, 4 5, 6, 7, 8 or 9, followed by one, two, three or four numbers, may be followed by M and/or 7, C0, C1 or CUST . . Cat. No. ZD4-PA or ZD5-PA followed by a two digit number.

Pilot light heads, Cat. No. ZB4BV0, ZB5AV0 or ZB5CV0, followed by one or two numbers may be followed by S, C0, C1 or CUST ..

Illuminated operators, Cat. No. ZB4B, ZB5A or ZB5C followed by W, A, H, P, K or L followed by one, two, three, four or five numbers may be followed by 3, may be followed by S, may be followed by 7, C0, C1 or CUST ..

Joystick controllers, Cat. No. XD4PA or XD5PA followed by a two digit number may be followed by a letter.

Accessories: Legend holders, legend plates, metal and plastic guards, Cat. No. ZBY, ZBZ, ZBCY or ZBCZ followed by any alphanumeric digits. Padlockable flaps, Cat. No. ZB4BZ6 followed by one digit. Add-on square trim, Cat. No. ZB5AZ31.

Bambles

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Certificate Number 20190809-E164353

Report Reference E39281-19981027

Issue Date 2019-AUGUST-09

Boots, Cat. No. ZBD, ZBG, ZBP, or ZB2BP followed by any alphanumeric number.

Plugs, Cat. No. ZB4SZ3, ZB5SZ3 and ZB5SZ5.Cat. No. ZB5SZ followed by C0, C1 or CUST.

Accessories for flush kit: Metal bezel, earthplates, Cat. No. ZB4BZ, followed by three digit number. Plastic bezel, plastic bezel label support, plastic brace, Cat. No. ZB5AZ followed by three digit number.

Accessories: Illuminated rings for pushbuttons, Cat. No. ZBY9W followed by one digit, followed by B, G or M, followed by three or four digits.

RATINGS:

The contacts blocks Type ZBE are rated A600, Q600 except for ZBE1016, 1016P, 1026, and 1026P rated 24 V – 100 mA resistive maximum and type ZBE-201 and contact block with quick connect terminals rated A300-Q300.

The contact blocks ZENL are rated A600, R300.

The pilot lights are rated:

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

LED Type:

12 V ac/dc 24 V ac/dc 110 / 120 V ac 230 / 240 V ac 230 V ac 24 / 120 V ac/dc

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

Secondary 6 V or 24 V

(The joystick controllers are rated A600-R300 except when quick connect terminals rated A300-R300).

Cat. No. XB4B or XB5A D9.2 R....K (potentiometer)

1 – 470K – 1W max 42Vdc 30Vac Class 2

The operators and the plugs are rated Type 1, 2, 3, 4, 4x, 12 and 13, with or without legend holders, legend plates, metal or plastic guards, padlockable flaps, the add-on square trim and boots.



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Certificate Number 20190809-E164353

Report Reference E39281-19981027

Issue Date 2019-AUGUST-09

At the manufacturer's request, Cat. No. ZBExxx contact blocks have been evaluated for use with two No. 14 AWG solid or stranded wires.

Spring clamps: 24 AWG to 14 AWG solid or stranded wires.

NOMENCLATURE:

They are designated as follows.

XB4B... or ZB4B... for metallic range and XB5A... or ZB5A.. or ZB5C.... for plastic range

OPERATORS:

Pushbuttons: ZB4B

ZB5A

Flush (1) (3)

Mushroom 40 mm diameter

Cush push (1) (3)

Extended (1) (3)

Booted

Pushroom 60 mm diameter

Rushroom push-pull 40 mm diameter (2)

Mushroom push-pull 60 mm diameter

Xushroom push-pull 60 mm diameter

Xushroom push-pull 60 mm diameter

Xushroom push-pull 60 mm diameter

 White
 1

 Black
 2

 Green
 3

 Red
 4

 Yellow
 5

 Blue
 6

 Gray
 8

 Blue Sky
 9

Additionally may be followed by a one, two, three or four digit number determining other characteristics of the operator (marking, etc...)

- (1): These operators can also be used for illuminated push button when the last digit is 8 or 3.
- (2): Exception: ZB4BT 84 which is a red push-pull, 40 mm diameter with trigger action.
- (3): Can be also symbolized with ZB5C for plastic square type.
- (4): These operators can also be used for harsh environment when the first digit is 8.

Bamely

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20190809-E164353 **Certificate Number** E39281-19981027 **Report Reference** 2019-AUGUST-09 **Issue Date**

Mushroom with key or turn to release		ZB4BS ZB5AS
Turn to release, tri	gger action	8
Key release, trigge	eraction	9
Key release, 40 m	m diameter	1
Key release, 60 m		2
Turn to release, 30) mm diameter	4
Turn to release, 40) mm diameter	5
Turn to release, 60) mm diameter	6
Key release, 30 m		7

Additionally may be followed by a one, two, three or four digit number determining other characteristics of the operator (color, key number, head diameter for trigger action type, etc...)

Two operators P. B. ZB4B ZB5A

Two flush	Α
One flush + one extended	
Enclosure Type 4 New design	7
Enclosure Type 1	8
Enclosure Type 4	9

Two flush w/o marking Two flush w marking 2 One flush + one extended w/o marking 3 One flush + one extended w marking

Additionally may be followed by a one, two, three or four digit number determining other characteristics of the operator (marking, etc...)

Two operators P. B. ZB4B ZB5A

> Two flush One flush + one extended Enclosure Type 4 New design

North American Certification Program



Certificate Number 20190809-E164353

Report Reference E39281-19981027

Issue Date 2019-AUGUST-09

Two pushers without caps - followed by 9
Two pushers without caps + one central pusher -followed by 91
Two pushers with caps -followed by three digits
Two pushers with caps + one central pusher - followed by four digits

The digit numbers indicate color caps and marking for each pusher.

May be followed by 7 for black metal collar.

Selectors: ZB4B

ZB5A

With knob D
With lever J

Two maintained positions 2
With one return position 4

Three maintained positions 3 with two return positions 5 with one from loft return position 7 with one from right return position 8

May be followed by M for three contact blocks actuated

Key operators: ZB4BG

ZB5AG

Two maintained positions
with recess in the left position 2
with recess in the two positions 4

Two positions with return from right to left and recess in the left position 6

Three maintained positions
with recess in neutral position 3
with recess in left and right position 5
with recess in left position 9
with recess in the three positions 0

Three positions with return from left to neutral and recess in right position.



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20190809-E164353 Certificate Number E39281-19981027 Report Reference **Issue Date** 2019-AUGUST-09

Three positions with two return positions and recess in neutral position.

Additionally may be followed by a one, two or three digit number determining other characteristics of the operator (color, key number, etc...)

Pushbuttons with key-operated push: ZB4BFD

ZB5AFD

Followed by one letter for locking positions and key withdrawal position.

Operators for potentiometer: ZB4B

ZB5A

D912 for potentiometer with 6 mm shaft for potentiometer with 6.35 mm shaft D922

Only for potentiometer with 6 mm shaft(D912)and complete device Cat. No. XB4B or XB5A:

XB4B or XB5A f/b D9.2 R...K

R indicating resistor device, and followed by two, three or four alphanumeric digits, indicating potentiometer

Toggle operator: ZB4BD ZB5AD

Two maintained positions, black lever

28

Two maintained positions with one return position,

48 black lever

Additionally may be followed by a two digit number determining other color of the operator.

Legend holders:

For circular head, legend not provided ZBZ For circular head, legend provided **ZBY** For square head, legend not provided **ZBCZ** For square head, legend provided **ZBCY**

Followed by any alphanumeric number indicating legend holder size, legend size and wording content.

Legend plates: ZBY

Followed by any alphanumeric number indicating size and wording content.

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Certificate Number 20190809-E164353

Report Reference E39281-19981027

Issue Date 2019-AUGUST-09

Metal guards:

For Emergency stop pushbuttons ZBZ160
Padlock metal guard ZBZ1700

Followed by one digit indicating the color of the guard.

Plastic guard:

For rotary and selector heads ZBZ2102

Padlockable flaps:

For pushbuttons ZB4BZ6

Followed by one digit indicating the color of the flap.

Add-on square trim:

Gives a square appearance to ZB5A circular heads ZB5AZ31

Boots:

Clear, singleZBPClear, SwitchZBDClear, KeysZBGColoured, singleZB2BP

Followed by any alphanumeric number indicating size and/or color.

Plugs:

Metal, for circular head	ZB4SZ3
Plastic, for circular head	ZB5SZ3
Plastic, for square head	ZB5SZ5

<u>Contact elements</u>: ZBE

Empty	000
only provided with terminals	002
with one NO	101
with one NC	102
with one NO (early make)	201
with one NC (late break)	202



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20190809-E164353 Certificate Number E39281-19981027 **Report Reference** 2019-AUGUST-09 **Issue Date**

with two NO 203 with two NC 204 with one NC + one NO 205 low power switching 6 low power switching and dust protected 6P Quick connect terminals 3 5 Spring clamp terminals Ring tongue terminals 9 Option for specific marking (not critical)

Contact elements for use in

control station Type XAL: ZENL

> with one NO 1111 with one NC 1121

Contact element subunits (with fixing base): ZB4BZ

ZB5AZ

with one NO 101 with one NC 102 with one NO + one NO 103 with one NC + one NC 104 with one NO + one NO + one NC 105 with one NO + one NC late break 106 with one NO + one NO early make 107 with one NO + two NC 141

3 Quick connect terminals Spring clamp terminals 5

LED pilot light energy limiter subunit:

For pilot light 120V **ZBZVG ZBZVM** For pilot light 230V

Kit flush:

Metal ZB4BZ Plastic ZB5AZ

Barrelly

North American Certification Program



20190809-E164353 **Certificate Number** E39281-19981027 Report Reference 2019-AUGUST-09 **Issue Date**

Followed by an alphanumeric number indicating size and/or label support size.

A complete device (operator plus fixing base plus contact) is symbolized by XB4B or XB5A followed by:

A letter determining the type of operator, a number determining the characteristic of the operator (Colors and / or duty) and the nature and number of contacts, may include additional digits C0, C1 or CUST. (C0- Paint in grey, C1- Paint in White, CUST-Paint in any other color.)

The designation of the complete device appears on the packaging only.

COMPLETE DEVICES: (only commercialized in complete devices)

Push-to-test Pilot Light: XB4BW2

XB5AW2

White	1	
Green	3	
Red	4	
Orange	5	
Blue	6	
Yellow	8	
24V	В	
110120 V	G	

Followed by 5

Pilot light heads: ZB4BV0 ZB5AV0

ZB5CV0

Heads delivered with 6 different colored lenses 0 White green 3 4 red 5 orange 6 blue yellow 8

Optional: Heads for integrated LED pilot light

May be followed by S for grooved lens

Bambles

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3



ZBV18

Certificate Number 20190809-E164353

Report Reference E39281-19981027

Issue Date 2019-AUGUST-09

Pilot light element:

Full voltage type ZBV6

With integrated LED (steady light) ZBV

or

With integrated LED for use in control

With integrated LED (flashing light)

station type XAL ZALV or ZALV18

24 V В 12 V J 110...120 V G 230 V M BG 24...120 V 16 V S White 1 3 Green 4 Red 5 Orange Blue 6 Yellow 8

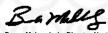
Quick connect terminals3Spring clamp terminals5Ring tongue terminals9Bright LEDS

Test output unit for connection with ZBV elements:

For full voltage type ZB..V156
For 24 V integrated LED type ZB..VB.156
For use with integral LED type ZBZ.156

<u>Pilot light subunit (With fixing base)</u>: ZB4BV ZB5AV

Full voltage type 6
With integrated LED With integrated flashing LED 18



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UL LLC





 Certificate Number
 20190809-E164353

 Report Reference
 E39281-19981027

 Issue Date
 2019-AUGUST-09

12 V 24 V 110120 V 230 V 24120 V	J B G M BG
Transformer type Primary voltage 110 /120 V 230 V 50 Hz, 220/240 V 60 Hz 400 V 440 / 480 V 550 / 600	3 4 5 8 9
Ring tongue terminals (suffix)	9

Additionally may be followed by D and / or one, two or three digit determining color of the LED or the type of bulb supplied or type of terminals.

Complete Pilot light, transformer type, with 24V LED:	XB4BV XB5AV
Primary voltage	(Ui)
400 V	5B
440 / 460 V	8B
550 / 600	9B
White	1
Green	3
Red	4
Orange	5
Blue	6

Double illuminated pushbutton operator:	ZB4BW ZB5AW	
Enclosure Type 4	7	
Enclosure Type 1	8	
Enclosure Type 4	9	





UL LLC





20190809-E164353 **Certificate Number** E39281-19981027 **Report Reference** 2019-AUGUST-09 **Issue Date**

Two flush w/o marking	1
Two flush w marking	2
One flush + one extended w/o marking	3
One flush + one extended w marking	4

Additionally may be followed by a four digit number determining color of the operators and lens, may be followed by 3.

Double illuminated pushbutton operator

+ a central pilot light lens:	ZB4BW ZB5AW
Enclosure Type 4 New design	
Two flush One flush + one extended	AL

Two pushers without caps-followed by 9 Two pushers with caps - followed by four digits

The four digit number indicate color and marking for caps, and color for pilot light lens.

May be followed by 7 for black metal collar.

Illumir	nated push button heads:	ZB4BW ZB5AW
	Flush (1)	3
	Extended head (1)	1
	Transparent booted flush head	1 5
	Flush head with "ring"	9
	Mushroom, spring return	4
	Mushroom, pull to release	6
	Mushroom, turn to release	7
	White	111
	green	3 4
	red	4
	orange	5
	blue	6
	Clear	7
	vellow	8



North American Certification Program





 Certificate Number
 20190809-E164353

 Report Reference
 E39281-19981027

 Issue Date
 2019-AUGUST-09

May be followed by 3 for LED pilot light type May be followed by S for grooved lens May be followed by 7 for black metal collar

(1) Can be also symbolized with ZB5C for plastic square type.

Illuminated operators for use with: ZB4B field installed label: ZB5A

Transparent flush head A
Transparent extended head L
Booted label support P
Push/push operator HO

 White
 18

 green
 38

 red
 48

 orange
 58

 blue
 68

 yellow
 88

May be followed by 3, for LED pilot light type.

Illuminated push/push operators: ZB4BH

ZB5AH Flush head 0 Extended head 13 White green 33 43 red 53 orange 63 blue yellow 83

Illuminated square push/push operators: ZB5CH

3 Flush head Extended head 1 white 13 33 green 43 red orange 53 63 blue yellow 83

Illuminated selector operator: ZB4BK1 ZB5AK1

Two maintained positions

Bambles

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20190809-E164353 Certificate Number E39281-19981027 **Report Reference Issue Date** 2019-AUGUST-09

With one return position 4 3 5 7 Three maintained positions with two return positions with one from left return position with one from right return position 8 White 33 green 43 red 53 orange 63 blue 83 yellow

May be followed by V, for varnish protection

Illuminated push button subunit: ZB4BW0 (With fixing base + pilot light + contact) ZB5AW0 Full voltage type 6 With integrated LED 12V B 24V G 110...120V 230V M Transformer type Primary voltage 3 110 /120V 230V 50Hz, 220/240V 60 Hz 45899 400V 440 / 480V 550 / 600V Ring tongue terminals (suffix)

Additionally may be followed by D and / or one, two or three digit determining color of the LED or the type of bulb supplied and / or type and number of contacts.

Note: The transformer Sub unit bears the reference ZB..V. or ZB..W.. or ZBV.B, eq: ZB..V3 or ZBV5B

A complete device (operator plus fixing base plus pilot light plus contact) is symbolized by: XB4B or XB5A followed by three, four or five numbers and / or letter suffixes determining the type of the operator, the type of the pilot light and the type and number of contacts, may include additional digits C0, C1 or CUST.

The designation of the complete device appears on the packaging only.

Joystick controllers

- Metallic range XD4PA

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20190809-E164353 **Certificate Number** E39281-19981027 **Report Reference** 2019-AUGUST-09 **Issue Date**

XD5PA - Plastic range - Maintained position 2 - with spring return position to off position - two directions 2 - four directions 4

May be followed by a letter determining joystick finished features

Joystick contact block subunit (with fixing base)

- for two directions ZD4 or ZD5 PA103 ZD4 or ZD5 PA203 - for four directions

Joystick operators

- Metallic range ZD4PA ZD5PA - Plastic range

 Maintained position - Spring return to off position 2 - two directions 2 - four directions

Illuminated ring for emergency stop pushbuttons and basic pushbuttons:

В ZBY9W 103 П Ш

- Illuminated ring, plastic type
- Illuminated, type
 - 2 1 color Fixing Red
 - 3 Bi-color Fixed lighting White + Fixed lighting Red
 - 4 1 color Blinking Red
 - 5 1 color Fixing white



North American Certification Program



Certificate Number Report Reference

Issue Date

20190809-E164353 E39281-19981027 2019-AUGUST-09

III - Illuminated, voltage

B – 24 Vac/dc G – 120 Vac

M - 230 Vac

IV - Label content, up to four digits

Bambles

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