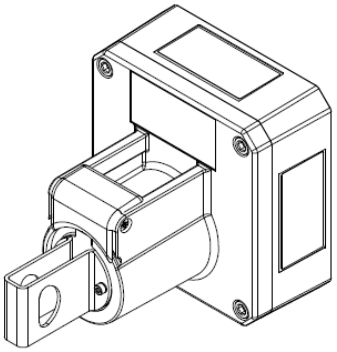
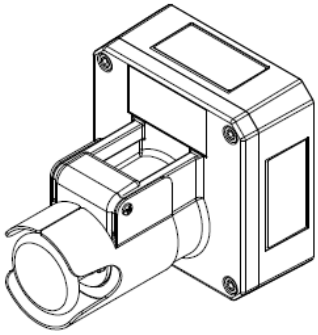
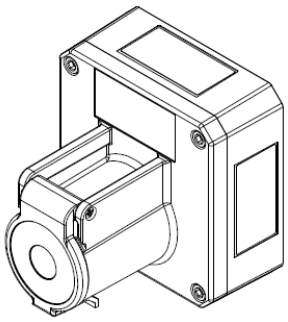
INSTRUCTION MANUAL
STExCP8-PB-S, STExCP8-PB-D, STExCP8-PM-S, STExCP8-PM-D, STExCP8-PT-S, STExCP8-PT-D Call Points
Class I & II Div 2 ; UL60947
NEC / CEC / IECEx / UKEx Zone 1, 2, 21, 22 / DNV



STExCP8-PB



STExCP8-PB
Mushroom Head



STExCP8-PM
STExCP8-PT

1) Product Table

Model No.	Input Voltage	Input Current
STExCP8-PB-S (Single Switch) STExCP8-PT-S (Single Switch) STExCP8-PM-S (Single Switch) STExCP8-PB-D (Dual Switch) STExCP8-PT-D (Dual Switch) STExCP8-PM-D (Dual Switch)	250Vac Max	5.0A Max ATEX/IECEx/UKEx 3.33A Max Class Div/Zone
STExCP8-PB-S (Single Switch) STExCP8-PT-S (Single Switch) STExCP8-PM-S (Single Switch) STExCP8-PB-S-L (Single Switch with LED) STExCP8-PT-S-L (Single Switch with LED) STExCP8-PM-S-L (Single Switch with LED) STExCP8-PB-D (Dual Switch) STExCP8-PT-D (Dual SwitchExCP8-PM-D (Dual Switch) STExCP8-PB-D-L (Dual Switch with LED) STExCP8-PT-D-L (Dual Switch with LED) STExCP8-PM-D-L (Dual Switch with LED)	48Vdc Max	1.0A Max
	24Vdc Max	3.0 Max
STExCP8-PB-S-C (Single Switch with LED) STExCP8-PT-D-C (Dual Switch with LED) STExCP8-PM-S-C (Single Switch with LED) STExCP8-PB-D-C (Dual Switch with LED) STExCP8-PT-S-C (Single Switch with LED) STExCP8-PM-D-C (Dual Switch with LED)	48Vdc Max	20mA Max

Table 1: Electrical Ratings

2) Warnings

WARNINGS:
USE COVER BOLTS CLASS A4-70
DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT
POTENTIAL ELECTROSTATIC CHARGING HAZARD – SEE INSTRUCTIONS
ALL ENTRIES M20 X 1.5
TO REDUCE THE RISK OF IGNITION OF HAZARDOUS ATMOSPHERES, CONDUIT RUNS MUST HAVE A SEALING FITTING CONNECTED WITHIN 2 INCHES OF ENCLOSURE

AVERTISSEMENT:
UTILISER COUVRIR BOULONS CLASSE A4-70
NE PAS OUVRIR UN PRESENCE D'ATMOSPHERE EXPLOSIVE
DANGER POTENTIEL CHARGE ÉLECTROSTATIQUE - VOIR LES INSTRUCTIONS
TOUTES LES ENTRÉES M20 x 1.5
POUR RÉDUIRE LE RISQUE D'INFLAMMATION DES ATMOSPHÈRES DANGEREUSES, LES CONDUITES DE CONDUIT DOIVENT AVOIR UN RACCORD D'ÉTANCHÉITÉ RACCORDÉ À MOINS DE 2 POUCES DE ENCLOS

3) Marking & Rating Information

The STExCP8-PB , -PT, -PM Call Points comply with the following standards for hazardous locations:

3.1 Class/Division Ratings for US & Canada

All models are approved for use as Alarm System use:

UL 60947-4-1 LOW-VOLTAGE SWITCHGEAR AND CONTROLGEAR - PART 4-1: CONTACTORS AND MOTORSTARTERS - ELECTROMECHANICAL CONTACTORS AND MOTOR-STARTERS- Edition 3 - Revision Date 2017/10/17

CSA C22.2 NO. 60947-4-1-14 LOW-VOLTAGE SWITCHGEAR AND CONTROLGEAR — PART 4-1: CONTACTORS AND MOTOR-STARTERS — ELECTROMECHANICAL CONTACTORS AND MOTOR-STARTERS- Edition 2 - Issue Date 2014/01/04

For Indoor and Outdoor Use
Pour usage Interier INTÉRIEUR

Ambient Temperature Range:
-55°C to +60°C

Standards	
UL 60079-0:2017 (Ed 6): Explosive Atmospheres - Part 0: Equipment - General requirements UL 60079-1:2015 (Ed7): Explosive Atmospheres - Part 1: Equipment protection by flameproof enclosures “d” CSA C22.2 NO. 60079-0:2015 (Ed 3) Explosive Atmospheres – Part 0: Equipment – General requirements CSA C22.2 NO. 60079-1:2016 (Ed 3): Explosive Atmospheres – Part 1: Equipment protection by flameproof enclosures “d”	
Class Division Ratings for US (NEC) & Canada (CEC)	
Model No:	**Rating**
STExCP8-PB-S STExCP8-PT-S STExCP8-PM-S STExCP8-PB-S-L STExCP8-PB-S-C STExCP8-PT-S-L STExCP8-PT-S-C STExCP8-PM-S-L STExCP8-PM-S-C STExCP8-PB-D STExCP8-PT-D STExCP8-PM-D	Class I Div 2 Group ABCD T6 Ta -55°C to +60°C
STExCP8-PB-D-L STExCP8-PB-D-C STExCP8-PT-D-L STExCP8-PT-D-C STExCP8-PM-D-L STExCP8-PM-D-C	Class I Div 2 Group ABCD T5 Ta -55°C to +60°C Class I Div 2 Group ABCD T6 Ta -55°C to +50°C
Class Zone Ratings for US (NEC)	
Model No:	**Rating**
STExCP8-PB-S STExCP8-PT-S STExCP8-PM-S STExCP8-PB-S-L STExCP8-PB-S-C STExCP8-PT-S-L STExCP8-PT-S-C STExCP8-PM-S-L STExCP8-PM-S-C STExCP8-PB-D STExCP8-PT-D STExCP8-PM-D	Class I Zone 1 AEx db IIC T6 Gb Ta -55°C to +60°C
STExCP8-PB-D-L STExCP8-PB-D-C STExCP8-PT-D-L STExCP8-PT-D-C STExCP8-PM-D-L STExCP8-PM-D-C	Class I Zone 1 AEx db IIC T5 Gb Ta -55°C to +60°C Class I Zone 1 AEx db IIC T6 Gb Ta -55°C to +50°C
Class Zone Ratings for Canada (CEC)	
Model No:	**Rating**
STExCP8-PB-S STExCP8-PT-S STExCP8-PM-S STExCP8-PB-S-L STExCP8-PB-S-C STExCP8-PT-S-L STExCP8-PT-S-C STExCP8-PM-S-L STExCP8-PM-S-C STExCP8-PB-D STExCP8-PT-D STExCP8-PM-D	Ex db IIC T6 Gb Ta -55°C to +60°C
STExCP8-PB-D-L STExCP8-PB-D-C STExCP8-PT-D-L STExCP8-PT-D-C STExCP8-PM-D-L STExCP8-PM-D-C	Ex db IIC T5 Gb X Ta -55°C to +60°C Ex db IIC T6 Gb X Ta -55°C to +50°C
Installation must be carried out in compliance with the National Electric Code / Canadian Electric Code	

3.2 ATEX / IECEx & UKEx Ratings

Standards
EN60079-0:2018/IEC60079-0:2017 (ed.7): Explosive Atmospheres - Equipment General Requirements. EN60079-1:2014/IEC60079-1:2014 (ed.7): Explosive Atmospheres - Equipment Protection by Flameproof Enclosures “d”.

Model No:	Rating
STExCP8-PB-S STExCP8-PT-S STExCP8-PM-S	Ex db IIC T6 Gb Ta –55°C to +70°C
STExCP8-PB-S-L STExCP8-PB-S-C STExCP8-PT-S-L STExCP8-PT-S-C STExCP8-PM-S-L STExCP8-PM-S-C	Ex db IIC T5 Gb Ta –55°C to +70°C Ex db IIC T6 Gb Ta –55°C to +65°C
STExCP8-PB-D STExCP8-PT-D STExCP8-PM-D	Ex db IIC T5 Gb Ta –55°C to +70°C Ex db IIC T6 Gb Ta –55°C to +60°C
STExCP8-PB-D-L STExCP8-PB-D-C STExCP8-PT-D-L STExCP8-PT-D-C STExCP8-PM-D-L STExCP8-PM-D-C STExCP8-PB-D STExCP8-PT-D STExCP8-PM-D	Ex db IIC T4 Gb Ta –55°C to +70°C Ex db IIC T5 Gb Ta –55°C to +65°C Ex db IIC T6 Gb Ta –55°C to +50°C
See Product table for electrical ratings of each unit model	

Certificate No. DEMKO 15 ATEX 1589X
IECEx ULD 15.0018X
UL21UKEX2133X

ATEX Marking Equipment Group and Category: **II 2G**

CE Marking Notified Body No. **2813**

UKCA Marking Notified Body No. **0518**

3.3 DNV Type Approval

The units have been tested and approved for the installation on ships in the following locations:

Temperature: Class A,B,C & D (all locations including open decks and masts)
Humidity: Class A & B (all locations)
Vibration: Class A (all locations except installation on machinery such as combustion engines, compressors, pumps, including piping on such machinery)
EMC: Class A & B (all locations including open decks and bridge)
Enclosure: Class A, B & C – IP56 (all locations except submerged applications and bilges)

4) Zones, Gas Group, Category and Temperature Classification

The units can be installed in locations with the following conditions:

Area Classification Gas	
Zone 1	Explosive gas air mixture likely to occur in normal operation.
Zone 2	Explosive gas air mixture not likely to occur in normal operation, and if it does, it will only exist for a short time.
Gas Groupings	
Group IIA	Propane
Group IIB	Ethylene
Group IIC	Hydrogen and Acetylene
Temperature Classification for Gas Applications	
T1	450º C
T2	300º C
T3	200º C
T4	135º C
T5	100ºC (STEXCP8-P*-D-L or C only up to Tamb 65°C)
T6	85ºC (STExCP8-P*-D only up to Tamb 60°C) (STEXCP8- P*-S-L or C only up to Tamb 65°C) (STEXCP8- P*-D-L or C only up to Tamb 50°C)
Equipment Category	
2G	
Equipment Protection Level	
Gb, Gc	
Ambient Temperature Range	
-55°C to +70°C (-67°F to +158°F) ATEX/IECEx/UKEx -55°C to +60°C (-67°F to +140°F) Class Zone	
IP Rating	
IP66 to EN60529 4 / 4X / 3R / 13 to UL50E / NEMA250	

5) Specific Conditions for Safe Use

On completion of the installation the flameproof joint surfaces should be inspected to ensure that they are clean and that they have not been damaged during installation. Flameproof joints are not permitted to be repaired.

Equipment is permitted to be wall mounted only in vertical position. The enclosure base is permitted in two mounting positions, with the double entry lowermost or uppermost.

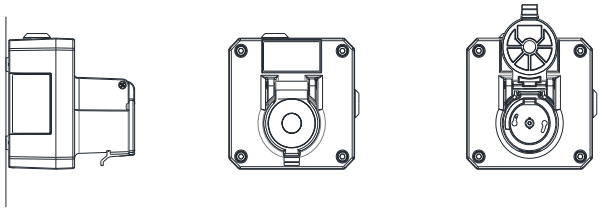


Fig 1 Wall Mounting

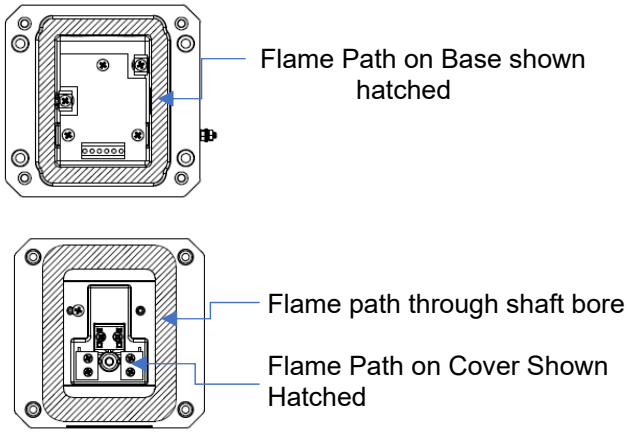
When fitting the flameproof cover ensure the cover is sitting flat and correctly positioned on the base. Insert the M6 x 25

cover bolts and fully tighten down (tightening torque 8.8Nm), ensuring no gap is visible between the cover and base of the enclosure.

The metallic enclosure has a non-conductive coating. These may generate an ignition-capable level of electrostatic charges under certain extreme conditions. The user should ensure that the equipment is not installed in a location where it may be subjected to external conditions that might cause a build-up of electrostatic charges on non-conducting surfaces.

Additionally, cleaning of the equipment should be done only with a damp cloth.

6) Flame Path Positions



No repair to the Flamepaths is permitted

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7) Location and Mounting

The location of the call point should enable ease of access for operation and testing. The unit should be mounted using the 4 off fixing holes which will accept up to M5 sized fixings. They should only be fixed to services that can carry the weight of the unit.
To gain access to the mounting holes in the base the front cover must be removed. See Section 7.

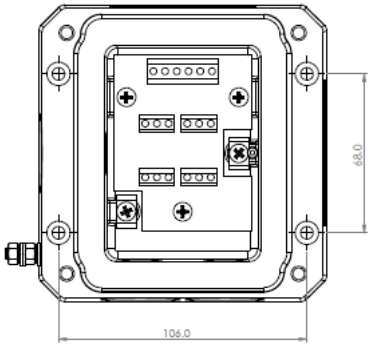


Fig. 1 View of base unit showing fixing centres (in mm).

8) Access to the Flameproof Enclosure

Warning – High voltage may be present, risk of electric shock. DO NOT open when energised, disconnect power before opening.

Warning – Hot surfaces. External surfaces and internal components may be hot after operation, take care when handling the equipment.

To access the Ex d chamber, remove the four off M6 x 25 hexagon socket head screws and withdraw the flameproof cover taking extreme care not to damage the flameproof joints in the process. M6 cover screws are Class A4-70 stainless steel and only screws of this category can be used for the enclosure.

Once the screws are removed the cover will hang down out of the way to gain access to the terminals, the internal earth terminal and mounting hole recesses.

On completion of the installation, the flameproof joints should be inspected to ensure that they are clean and that they have not been damaged during installation. Flamepaths are not intended to be repaired.

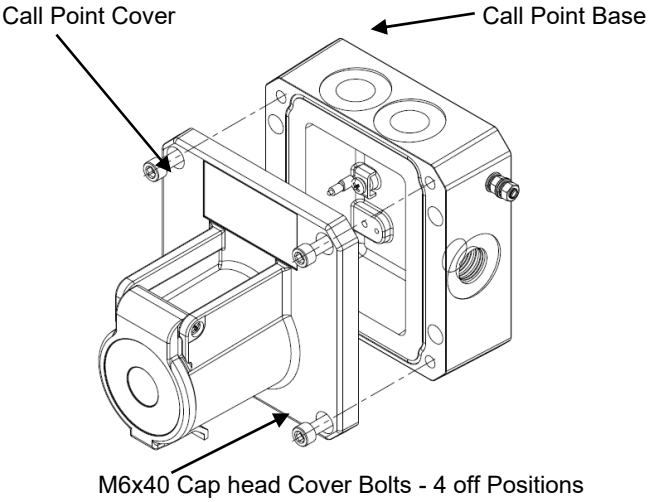


Fig. 2 Accessing the Explosion proof Enclosure.

Check that the earth bonding wire between the two castings is secure and the 'O' ring seal is in place. When replacing the flameproof cover casting ensure that it is square with the flameproof chamber casting before inserting.

Carefully place the cover on the base. Only after the cover is fully in place should the four M6 Stainless Steel A4-70 cover bolts and their spring washer be tightened down (tightening torque 3.5Nm), ensuring no gap is visible between the cover and base of the enclosure.
Never use the cover bolts to force the cover into position.

9) Earthing

The units are provided with internal and external earth terminals which are mounted in the base of the unit.

Internal earthing connections should be made to the Internal Earth terminal in the base of the housing using a ring crimp terminal to secure the earth conductor under the earth clamp. The earth conductor should be at least equal in size and rating to the incoming power conductors.

When using the internal earth terminal ensure that the stainless steel M4 flat washer is between the incoming earth wire and the enclosure.

External earthing connections should be made to the M5 earth stud, using a ring crimp terminal to secure the earth conductor to the earth stud. The external earth conductor should be at least 4mm^2 in size.

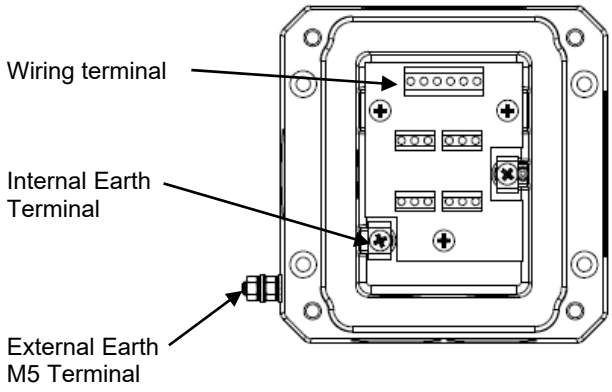


Fig 3 Earth terminals

10) Power Supply Selection

Electrical Ratings

See table 1
250Vac max. / 5.0A max (3.33A max NEC/CEC)
48Vdc max. / 1.0A max
24Vdc max / 3.0A max
48Vdc max / 20mA (LED -C option with no ballast resistor)

11) Selection of Cable. Cable Glands, Blanking Elements & Adapters

ATEx/IECEx & UKEx Installations:

The equipment must only be installed by suitably qualified personnel in accordance with the latest issues of the relevant standards:

EN60079-14 / IEC60079-14: Explosive atmospheres - Electrical installations design, selection and erection
EN60079-10-1 / IEC60079-10-1: Explosive atmospheres - Classification of areas. Explosive gas atmospheres

The installation of the units must also be in accordance with any local codes that may apply and should only be carried out by a competent electrical engineer who has the necessary training.

The equipment must not be installed with any obstruction to the flanged flameproof joint any closer than permitted as per EN/IEC60079-14, table 13.

For high ambient temperatures the cable entry temperature may exceed +70ºC or the cable branching point temperature may exceed 80ºC and therefore suitable heat resisting cables and cable glands must be used, with a rated service temperature of at least the values stated below:

For Single Switch models STExCP8-PT-S / STExCP8-PM-S / STExCP8-PB-S:

Max. ambient temperature ºC	55	60	65	70
req. Cable / Cable Gland rating: ºC	80	85	90	95

For Dual Switch models STExCP8-PT-D / STExCP8-PM-D / STExCP8-PB-D:

Max. ambient temperature ºC	45	50	55	60	65	70
req. Cable / Cable Gland rating: ºC	80	85	90	95	100	105

The cable gland entries have an M20 x 1.5 entry thread. Only suitably rated and ATEX / IECEx or UKEX certified cable glands which must be suitable for the type of cable being used and also meet the requirements of the current Ex 'd' flameproof installation standards EN 60079-14 / IEC60079-14.

When only one cable entry is used the other entries must be closed with suitably rated and ATEX / IECEx / UKEX certified blanking plugs that meet the requirements of the current Ex 'db' flameproof installation standards EN 60079-14 / IEC60079-14 (tightening torque 10Nm).

NEC / CEC Installations:

The equipment must only be installed by suitably qualified personnel in accordance with the latest issues of the relevant standards:

The installation of the units must also be in accordance with any local codes that may apply and should only be carried out by a competent electrical engineer who has the necessary training.
The equipment must not be installed with any obstruction to the flanged flameproof joint any closer than permitted as per the NEC/CEC.

For high ambient temperatures the cable entry temperature may exceed +60ºC or the cable branching point temperature may exceed 60ºC and therefore suitable heat resisting cables and cable glands must be used, with a rated service temperature of at least the values stated below:

For Single Switch model STExCP8-PB-S:

Max. ambient temperature ºC	40	45	50	55	60
req. Cable / Cable Gland rating: ºC	65	70	75	80	85

For Dual Switch model STExCP8-PB-D:

Max. ambient temperature ºC	30	35	40	45	50	55	60
req. Cable / Cable Gland rating: ºC	65	70	75	80	85	90	95

For use in Class I Division II locations, in order to maintain the db type protection, flameproof conduit seals and/or cable glands must be used.

The cable gland entries have an M20 x 1.5 entry thread. Only suitably rated and certified cable glands which must be suitable for the type of cable being used and also meet the requirements of the current Ex 'db' flameproof and NEC/CEC installation standards (tightening torque 10Nm).

When only one cable entry is used the other entries must be closed with suitably rated and certified blanking plugs that meet the requirements of the current Ex 'db' and Ex 'tb' flameproof and NEC/CEC installation standards (tightening torque 10Nm).

All Installations:

To access the Ex d chamber, remove the four off M6 x 60 stainless steel A4-70 Cap Head cover bolts.

If the installation is made using conduit, openings must have a sealing fitting connected as close as practical to the wall of the enclosure, but in no case more than the size of the conduit or 2" of enclosure, whichever is the lesser.

If a high IP (Ingress Protection) rating is required then a suitable sealing washer must be fitted under the cable glands or blanking plugs.

The STExCP8 Call Point range can be supplied with the following types of adapters:
M20 to ½" NPT
M20 to ¾" NPT
M20 to M25

It is important to note that stopping plugs cannot be fitted onto adapters, only directly onto the M20 entries.

Any other adapters used must be suitably rated and ATEX / IECEx / UKEx or NEC/CEC certified adapters.

12) Cable & Wiring Connections

The units come with two options.
A DIN rail version which has 8-way connection and allows for limited wiring of EOL devices by customer, or, full pre-wired configurations if outlined with order to E2S.
For full wiring details see wiring diagrams D202-06-211

The PCB Terminal Version has a 6-way connector but is designed to allow for full customer configuration with Series and EOL devices in a number of wiring configurations. E2S can also configure unit at time of order to E2S
For full wiring details see wiring diagrams D202-06-212

For EOL and Series device limitations and configurations see Section 13. Fitting can be requested by E2S at the order stage or added to the correct terminal blocks afterward. All devices must comply with the requirements stipulated in section 15.

Electrical Connections are to be made into the terminal blocks using solid or stranded wire.

Wires having a cross sectional area between 0.5 mm² to 2.5mm² (AWG 20 – 14) can be connected to each terminal way.

In most configuration an input and output wire can be fitted to individual terminals, where these are more complex and if fitting 2-off wires to one terminal way, the sum of the 2-off wires must be a maximum cross sectional area of 2.5mm².

Strip wires to 8mm. Wires may also be fitted using ferrules.

DIN Rail Terminals: 0.51 Nm / 4.5 Lb-in;
Connector Block Terminals: 0.87 Nm / 7.7 Lb-in;

PCBA Main Terminals: 0.45 Nm / 4.0 Lb-in;
PCBA EOL and Series (1 & 2) Terminals: 0.38 Nm / 3.4 Lb-in

When connecting wires to the terminals great care should be taken to dress the wires so that when the cover is inserted into the chamber the wires do not exert excess pressure on the terminal blocks. This is particularly important when using cables with large cross-sectional areas such as 2.5mm².

13) Testing unit operation

The push button types -PB -PT and -PM are all operated by pressing in the main plunger down activating the switch.

PB – Dual Action Push Button
The -PB plunger needs to be firstly twisted by 90 degrees clockwise to position shown and then pressed in. There will be a click sound to indicate positive engagement and the plunger will stay in place.

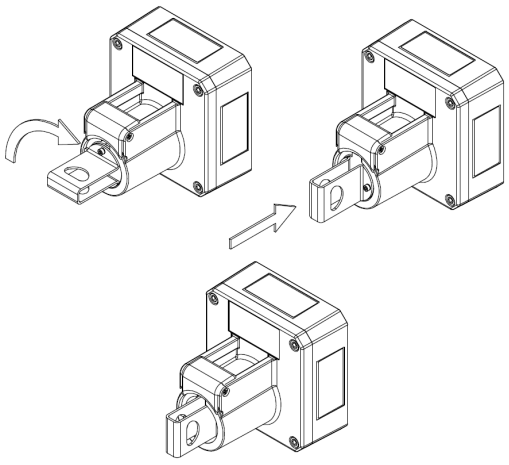


Fig 6 -PB Version - Twist and Push Action

On -PB versions, the plunger will remain in position until the unit is reset. This is done by pulling the plunger back up to the start position shown in fig 6. Then the plunger is twisted back 90 degrees anti-clockwise to the stop.

PB – Push Button – Mushroom headed
A mushroom headed push button version of the PB is available under product version [v] = B

This operates in the same way but only needs to be pressed in to operate. There will be a click sound to indicate positive engagement and the plunger will stay in place.

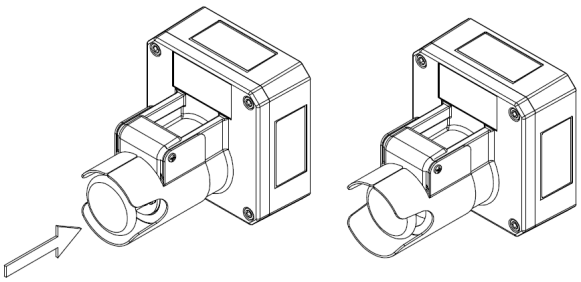


Fig 6b -PB Mushroom Head Version - Push Action

On -PB versions, the mushroom head will remain in position until the unit is reset. This is done by pulling the mushroom head back up to the start position shown in fig 6b.

PM – Momentary Push Button

The -PM needs to have the protective flip lid opened first and then the main plunger pressed in. There will be a click sound to indicate positive engagement, the plunger will spring back up if not held pressed.

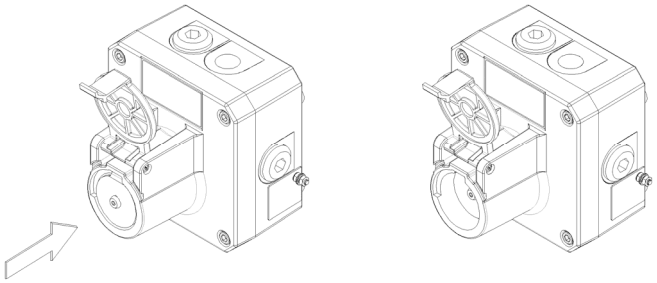


Fig 7 -PM Version Push Action

On –PM versions the operation is momentary and as such the plunger will reset automatically once the pressure on the plunger is released.

PT – Tool Reset Push Button

The -PT needs to have the protective flip lid opened first and then the main plunger pressed in. There will be a click sound to indicate positive engagement and the plunger will stay in place.

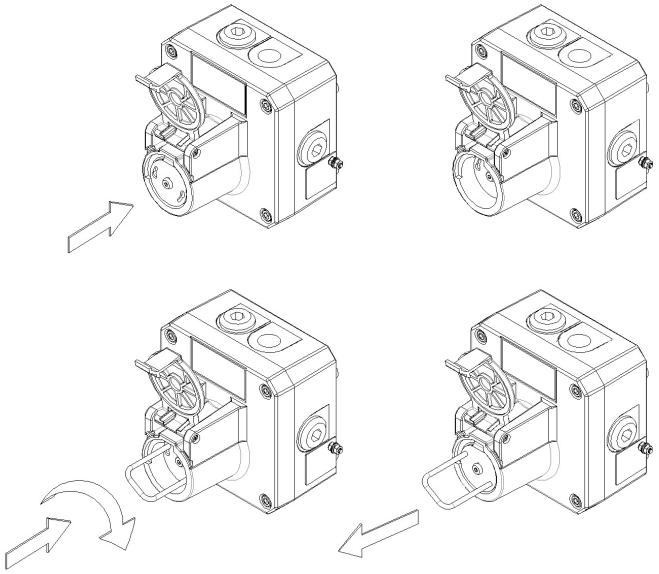


Fig 8 -PT Version Push Action

To reset, insert the reset tool supplied with the unit into the 2-off holes in the button plate, rotate clockwise along the curved slots and then pull the button plate back up. Rotate the tool anti clockwise and remove through the 2-off holes in the button plate.

14) End-of-Line and Series Devices

All models can be fitted with series resistors, end-of-line monitoring resistors, monitoring diodes and zener diodes if supplied with direct current up to 48Vdc.

Min. resistor values and current limitations must be observed depending on supply voltage and type of components fitted. If a combination of resistors / diodes / zener diodes is used, values for all components must be observed and lowest current limit for either component becomes overall limit.
Current limitation for units fitted with end-of-line resistors, diodes or zener diodes must be ensured by using a current limited power supply or fitting a current limiting resistor at the control panel (not provided).

The following table 1 shows limitations for all possible variations:

	Supply voltage 24Vdc		Supply voltage 48Vdc	
Type of component fitted	value	Max. current (mA)	value	Max. current
End-of-Line Resistor *See note	min. 470R/ 2W or min. 2k2 / 0.5W	3000	min. 2k2 / 2W or min. 8k2 / 0.5W	1000
End-of-Line Diode Type 1N5401	2W	59.13	2W	25.26
Series Resistor *See note	min. 470R/ 2W or min. 2k2 / 0.5W	3000	min. 2k2 / 2W or min. 8k2 / 0.5W	1000
Series Diode Type 1N5401	2W	59.13	2W	25.26
Series Zener Diode Type 1N5333B	3.3V	230	3.3V	230
	4.7V	162	4.7V	162
	5.1V	149	5.1V	149
	5.6V	136	5.6V	136
	6.2V	122	6.2V	122
	6.8V	112	6.8V	112
	10V	76	10V	76
	12V	63	12V	63

* note :- EOL and series resistor values are listed as the minimum resistor value allowable at the specified minimum wattage.

EOL (End of line) device;

- resistor – ExxxR
- diode – ED1
- zener – ExxxZ

Series (In line) device;

- resistor – SxxxR
- diode – SD1
- zener – SxxxZ
- LED

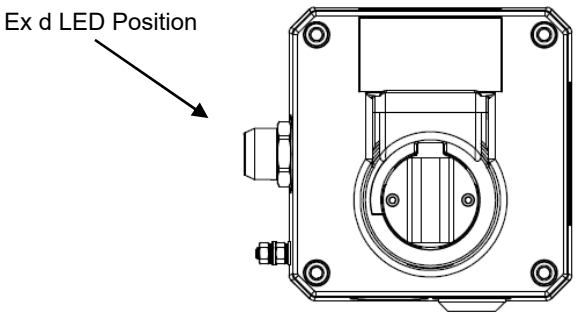
Microswitch 1 = M/S 1
Microswitch 2 = M/S 2

The unit can be wired with a maximum of 4 module devices – see wiring diagrams.

Note:- The maximum voltage stated must not be exceeded, as the internal resistor modules are rated as compliant with Ex d according to the units voltage

An optional Ex d LED monitoring module is designated after the model no. as either,
STExCP8-P*-S-L or STExCP8- P*-D-L to include an LED and power limiting resistor
or,
STExCP8-P*-S-C or STExCP8-P*-D-C with includes the LED but where the units current must be limited to 20mA. As the LED has no power limiting resistor.

The optional Ex d LED monitoring module is fitted in the M20 side entry as shown, when the main M20 entries are at the bottom of unit. The wiring is shown as per wiring diagrams D202-06-211 or D202-06-212 see the various LED configuration options.



15) Maintenance, Overhaul & Repair

Maintenance, repair and overhaul of the equipment should only be carried out by suitably qualified personnel in accordance with the current relevant standards:

For ATEX / IECEx / UKEx
EN 60079-19 Explosive atmospheres – Equipment
IEC 60079-19 repair, overhaul and reclamation

EN 60079-17 Explosive atmospheres – Electrical
IEC 60079-17 installations inspections and maintenance

Units must not be opened while an explosive atmosphere is present.

Electrostatic charging hazard – clean only with a damp cloth.

For US & CEC Class / Div / Zone
UL 60079-19 Explosive atmospheres - Equipment repair, overhaul and reclamation

UL 60079-17 Explosive atmospheres - Electrical installations inspection and maintenance

16) SIL 2 Reliability Data

Reliability and Functional safety IEC/EN61508 which has been assessed and is considered suitable for use in low demand safety function:

- Random Hardware Failures and Systematic Failures (route 2H)
- As an unvoted item (i.e. hardware fault tolerance of 0) at SIL 2

The product was assessed against failure modes:

- Failure to close a contact when the call point is struck with specified force
- Failure to open a contact when the call point is struck with specified force
- Spurious output despite no input

Integrity in respect of failure to close	SIL 2
System Type	A
Hardware Fault Tolerance	0
Safe Failure Fraction (credible claim)	75%
PFD (hazardous failure)	2.3×10^{-3}
Proof Test Interval	Up to 1 year

SINGLE MICROSWITCH DEVICES

SHEET 1

Diagram	Sheet
Dual Switch Wiring Configurations	2,3,5,6,7,8
LED Indicator Wiring Configurations	4,5,6,8
Parallel Dual Switch Wiring Configurations	7, 8

GNEXCP7-BG[s][t][l][e][m][d][v][o][x][u]-[e][s]

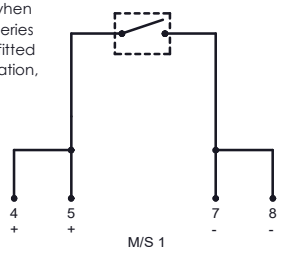
Switch Type [s] · Terminals [t] · Product Version [v] · Product Option [o] · LED Indicator [u] · Series Module [s] · EOL Module [e]

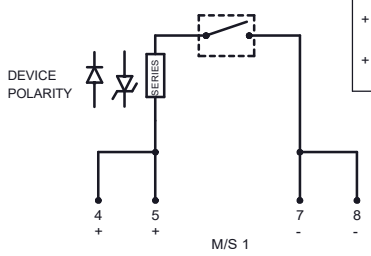
Module Device Codes	EOL	Series
Resistor	ExxxR	SxxxR
Diode	ED1	SD1
Zener Diode	ExxxZ	SxxxZ
LED	N/A	L or C

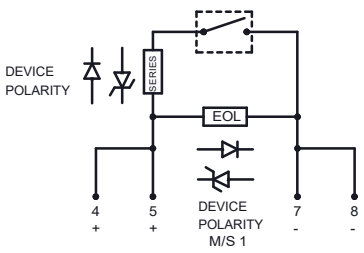
ISSUE	MOD No.	REASON - INITIAL - DATE
7	ACN0178	Correction to LED wiring in option W RNP 15-04-2025
8	ACN0187	LED put on N/C side of circuit, note on LED LD1 detailed RNP 28-05-2025

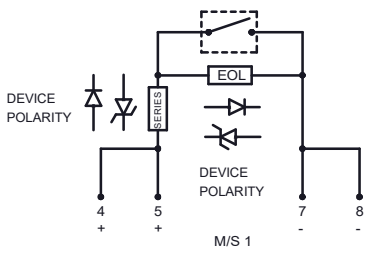
SINGLE SWITCH	CONFIG. D1-1	SINGLE SWITCH WITH SERIES DEVICE	CONFIG. D1-2	SINGLE SWITCH WITH EOL & SERIES DEVICES	CONFIG. D1-3	SINGLE SWITCH WITH EOL & ALT. SERIES DEVICES	CONFIG. D1-4
SWITCH TYPE [s]	[S] Single	SWITCH TYPE [s]	[S] Single	SWITCH TYPE [s]	[S] Single	SWITCH TYPE [s]	[S] Single
TERMINALS [t]	[D] DIN Rail	TERMINALS [t]	[D] DIN Rail	TERMINALS [t]	[D] DIN Rail	TERMINALS [t]	[D] DIN Rail
PRODUCT OPTION [o]	[1] Default	PRODUCT OPTION [o]	[1] Default	PRODUCT OPTION [o]	[1] Default	PRODUCT OPTION [o]	[W] Alt. EOL Pos'n.
LED INDICATOR [u]	[N] NO LED	LED INDICATOR [u]	[N] NO LED	LED INDICATOR [u]	[N] NO LED	LED INDICATOR [u]	[N] NO LED
		SERIES MODULE [s]	[Sxxxx] Series Device	MODULES [e][s]	[Exxxx][Sxxxx] EOL + Series	MODULE [e][s]	[Exxxx][Sxxxx] EOL + Series

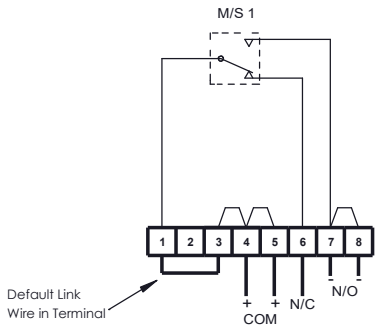
Note :- Use when EOL and/or series devices are fitted during installation, or if no series devices are required.







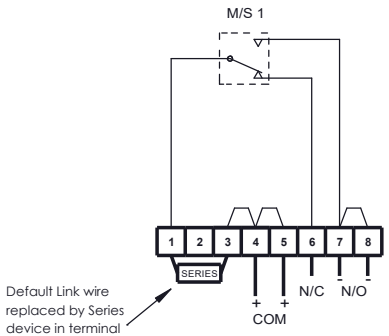




Circuit shown in Unoperated condition

Unoperated condition
(Glass Intact / Standby Condition)
Terminals +(4,5) & -(7,8) open
Terminals +(4,5) & (6) closed

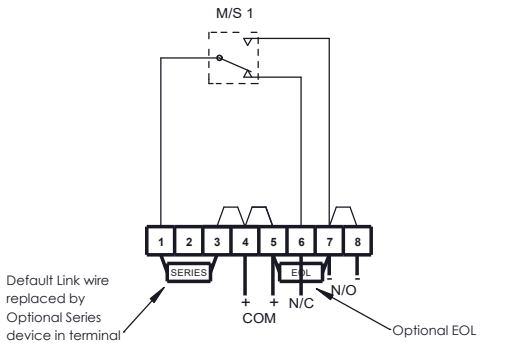
Operated condition
(Glass Broken / Button pushed in)
Terminals +(4,5) & -(7,8) closed
Terminals +(4,5) & (6) open



Circuit shown in Unoperated condition

Unoperated condition
(Glass Intact / Standby Condition)
Terminals +(4,5) & -(7,8) open
Terminals +(4,5) & (6) closed

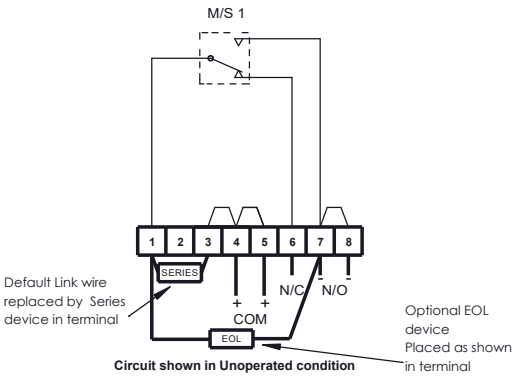
Operated condition
(Glass Broken / Button pushed in)
Terminals +(4,5) & -(7,8) closed
Terminals +(4,5) & (6) open



Circuit shown in Unoperated condition

Unoperated condition
(Glass Intact / Standby Condition)
Terminals +(4,5) & -(7,8) open
Terminals +(4,5) & (6) closed

Operated condition
(Glass Broken / Button pushed in)
Terminals +(4,5) & -(7,8) closed
Terminals +(4,5) & (6) open



Circuit shown in Unoperated condition

Unoperated condition
(Glass Intact / Standby Condition)
Terminals +(4,5) & -(7,8) open
Terminals +(4,5) & (6) closed

Operated condition
(Glass Broken / Button pushed in)
Terminals +(4,5) & -(7,8) closed
Terminals +(4,5) & (6) open

DRAWING TO BS8888:2000
GEOMETRIC TOLERANCES TO ISO1101:1983
LINEAR DIMENSIONAL TOLS
ANGULAR DIMENSIONAL TOLS

STANDARDS
GNExCP7 ; STExCP8 ; WP7 units with DIN Rail

DRAWN	R.S.RAIT	DATE 05-03-2020
CHECKED	B.ISARD	DATE 05-03-2020
APPROVED	R.N.POTTS	DATE 05-03-2020

SURFACE FINISH · WEIGHT (Kg) · MATERIAL · ALTERNATIVE MATERIAL

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IF IN DOUBT, ASK - DO NOT SCALE

A3

TITLE **GNExCP7 ; STExCP8 ; WP7 CALL POINT WIRING / CIRCUIT OPERATION DIAGRAM**

SCALE	SHEET	DRAWING NUMBER
NTS	1 OF 8	D202-06-211

DUAL MICROSWITCH DEVICES

SHEET 2

Notes:
1. Other configurations of dual switch units are possible. Contact E2S sales to discuss options.

GNEXCP7-BG[s][t][l][e][m][d][v][o][x][u]-[e][s]

- [s] Switch Type
- [t] Terminals
- [l] Product Version
- [o] Product Option
- [u] LED Indicator
- [e] EOL Module
- [s] Series Module

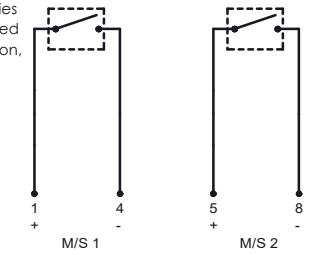
Module Device Codes	EOL	Series
Resistor	ExxxR	SxxxR
Diode	ED1	SD1
Zener Diode	ExxxZ	SxxxZ
LED	N/A	L or C

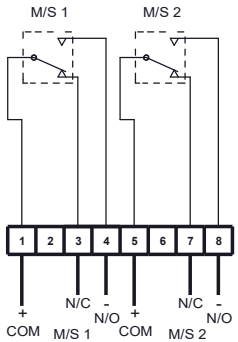
ISSUE	MOD No.	REASON - INITIAL - DATE
7	ACN0178	Correction to LED wiring in option W RNP 15-04-2025
8	ACN0187	LED put on N/C side of circuit, note on LED LD1 detailed RNP 28-05-2025

DUAL SWITCH WITH EOL DEVICE — CONFIG. D2-1

SWITCH TYPE [s]	[D]	Dual
TERMINALS [t]	[D]	DIN Rail
PRODUCT OPTION [o]	[1]	Default
LED INDICATOR [u]	[N]	NO LED

Note :- Use when EOL and/or series devices are fitted during installation, or if no series devices are required.





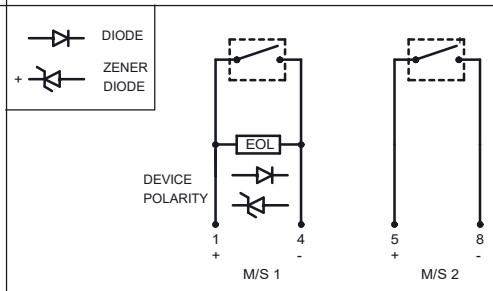
Circuit shown in Unoperated condition

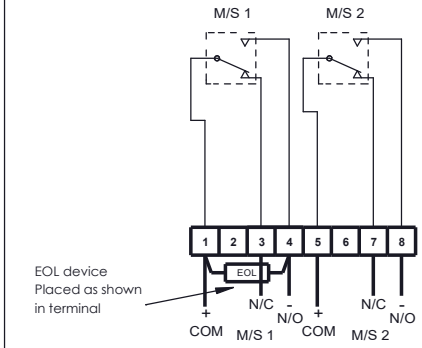
Unoperated condition
(Glass Intact / Standby Condition)
Terminals +(1) & -(4) M/S 1 & +(5) & -(8) M/S 2 open
Terminals +(1) & -(3) M/S 1 & +(5) & -(7) M/S 2 closed

Operated condition
(Glass Broken / Button pushed in)
Terminals +(1) & -(3) M/S 1 & +(5) & -(7) M/S 2 open
Terminals +(1) & -(4) M/S 1 & +(5) & -(8) M/S 2 closed

DUAL SWITCH WITH SERIES DEVICES — CONFIG. D2-2

SWITCH TYPE [s]	[D]	Dual
TERMINALS [t]	[D]	DIN Rail Only
PRODUCT OPTION [o]	[1]	Default
LED INDICATOR [u]	[N]	NO LED
SERIES MODULE [s]	[Sxxxx]	Series Device





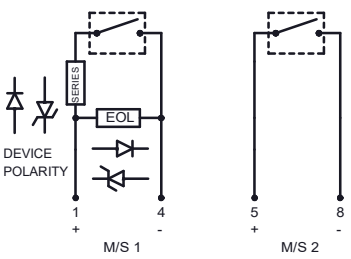
Circuit shown in Unoperated condition

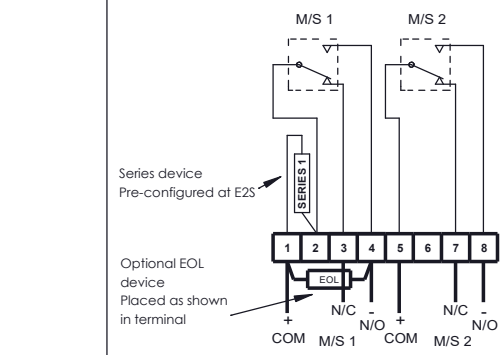
Unoperated condition
(Glass Intact / Standby Condition)
Terminals +(1) & -(4) M/S 1 & +(5) & -(8) M/S 2 open
Terminals +(1) & -(3) M/S 1 & +(5) & -(7) M/S 2 closed

Operated condition
(Glass Broken / Button pushed in)
Terminals +(1) & -(3) M/S 1 & +(5) & -(7) M/S 2 open
Terminals +(1) & -(4) M/S 1 & +(5) & -(8) M/S 2 closed

DUAL SWITCH WITH EOL & SERIES DEVICES — CONFIG. D2-3

SWITCH TYPE [s]	[D]	Dual
TERMINALS [t]	[D]	DIN Rail Only
PRODUCT OPTION [o]	[1]	Default
LED INDICATOR [u]	[N]	NO LED
MODULES [e][s]	[Exxxx][Sxxxx]	EOL + Series





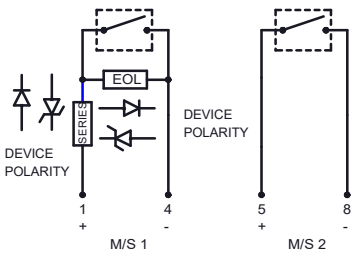
Circuit shown in Unoperated condition

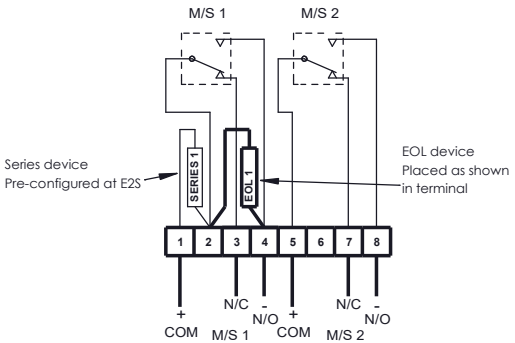
Unoperated condition
(Glass Intact / Standby Condition)
Terminals +(1) & -(4) M/S 1 & +(5) & -(8) M/S 2 open
Terminals +(1) & -(3) M/S 1 & +(5) & -(7) M/S 2 closed

Operated condition
(Glass Broken / Button pushed in)
Terminals +(1) & -(3) M/S 1 & +(5) & -(7) M/S 2 open
Terminals +(1) & -(4) M/S 1 & +(5) & -(8) M/S 2 closed

DUAL SWITCH WITH EOL & SERIES DEVICES — CONFIG. D2-4

SWITCH TYPE [s]	[D]	Dual
TERMINALS [t]	[D]	DIN Rail Only
PRODUCT OPTION [o]	[W]	Alt. EOL Pos'n.
LED INDICATOR [u]	[N]	NO LED
MODULES [e][s]	[Exxxx][Sxxxx]	EOL + Series





Circuit shown in Unoperated condition

Unoperated condition
(Glass Intact / Standby Condition)
Terminals +(1) & -(4) M/S 1 & +(5) & -(8) M/S 2 open
Terminals +(1) & -(3) M/S 1 & +(5) & -(7) M/S 2 closed

Operated condition
(Glass Broken / Button pushed in)
Terminals +(1) & -(3) M/S 1 & +(5) & -(7) M/S 2 open
Terminals +(1) & -(4) M/S 1 & +(5) & -(8) M/S 2 closed

DRAWING TO BS8888:2000
GEOMETRIC TOLERANCES TO ISO1101:1983
LINEAR DIMENSIONAL TOLS
ANGULAR DIMENSIONAL TOLS

STANDARDS
GNExCP7 ; STExCP8 ; WP7 units with DIN Rail

DRAWN	D.HOWGILL	DATE 05-03-2020
CHECKED	R.N.POTTS	DATE 05-03-2020
APPROVED	R.N.POTTS	DATE 05-03-2020

SURFACE FINISH | WEIGHT (Kg)
MATERIAL
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A3

TITLE **GNExCP7 ; STExCP8 ; WP7 CALL POINT WIRING / CIRCUIT OPERATION DIAGRAM**

SCALE	SHEET	DRAWING NUMBER
NTS	2 OF 8	D202-06-211

DUAL MICROSWITCH DEVICES DUPLICATED

SHEET 3

Notes:
1. Other configurations of dual switch units are possible. Contact E2S sales to discuss options.

GNEXCP7-BG[s][t][l][e][m][d][v][o][x][u]-[e][s]

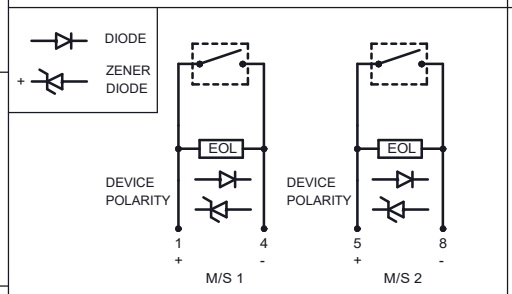
- [s] Switch Type
- [t] Terminals
- [l] Product Version
- [o] Product Option
- [u] LED Indicator
- [e] EOL Module
- [s] Series Module

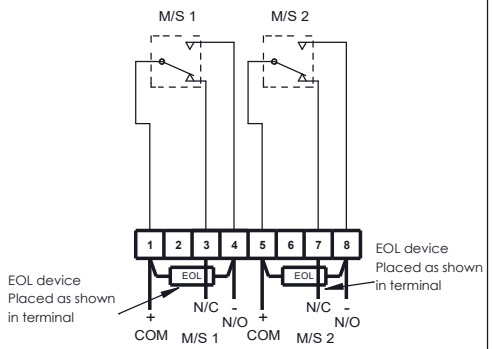
Module Device Codes	EOL	Series
Resistor	ExxxR	SxxxR
Diode	ED1	SD1
Zener Diode	ExxxZ	SxxxZ
LED	N/A	L or C

ISSUE	MOD No.	REASON - INITIAL - DATE
7	ACN0178	Correction to LED wiring in option W RNP 15-04-2025
8	ACN0187	LED put on N/C side of circuit, note on LED LD1 detailed RNP 28-05-2025

DUAL SWITCH WITH EOL DEVICES DUPLICATED — CONFIG. D3-1

SWITCH TYPE [s]	[D]	Dual
TERMINALS [t]	[D]	DIN Rail
PRODUCT OPTION [o]	[2]	Duplicated
LED INDICATOR [u]	[N]	NO LED
EOL MODULE [e]	[Exxxx]	EOL Device





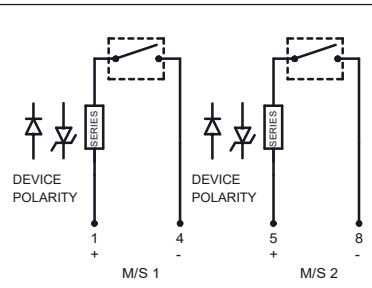
Circuit shown in Unoperated condition

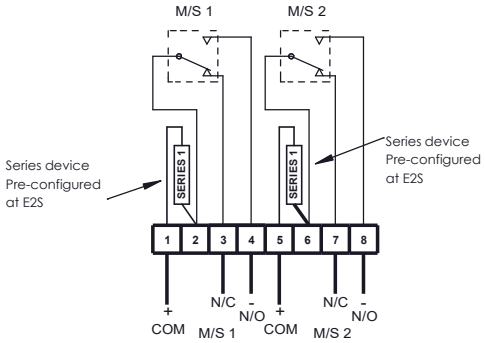
Unoperated condition
(Glass Intact / Standby Condition)
Terminals +(1) & -(4) M/S 1 & +(5) & -(8) M/S 2 open
Terminals +(1) & -(3) M/S 1 & +(5) & -(7) M/S 2 closed

Operated condition
(Glass Broken / Button pushed in)
Terminals +(1) & -(3) M/S 1 & +(5) & -(7) M/S 2 open
Terminals +(1) & -(4) M/S 1 & +(5) & -(8) M/S 2 closed

DUAL SWITCH WITH SERIES DEVICES DUPLICATED — CONFIG. D3-2

SWITCH TYPE [s]	[D]	Dual
TERMINALS [t]	[D]	DIN Rail Only
PRODUCT OPTION [o]	[2]	Duplicated
LED INDICATOR [u]	[N]	NO LED
SERIES MODULE [s]	[Sxxxx]	Series Device





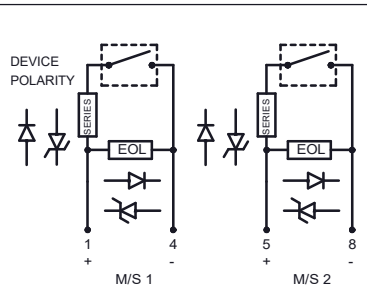
Circuit shown in Unoperated condition

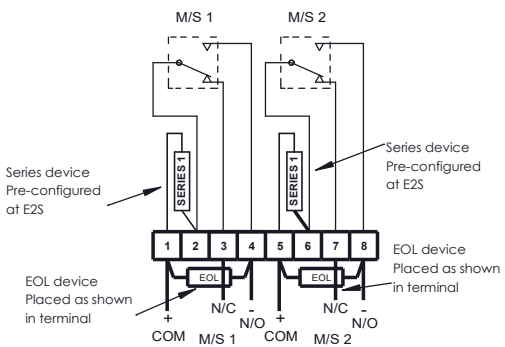
Unoperated condition
(Glass Intact / Standby Condition)
Terminals +(1) & -(4) M/S 1 & +(5) & -(8) M/S 2 open
Terminals +(1) & -(3) M/S 1 & +(5) & -(7) M/S 2 closed

Operated condition
(Glass Broken / Button pushed in)
Terminals +(1) & -(3) M/S 1 & +(5) & -(7) M/S 2 open
Terminals +(1) & -(4) M/S 1 & +(5) & -(8) M/S 2 closed

DUAL SWITCH WITH EOL & SERIES DEVICE DUPLICATED — CONFIG. D3-3

SWITCH TYPE [s]	[D]	Dual
TERMINALS [t]	[D]	DIN Rail Only
PRODUCT OPTION [o]	[2]	Duplicated
LED INDICATOR [u]	[N]	NO LED
MODULES [e][s]	[Exxxx][Sxxxx]	EOL + Series





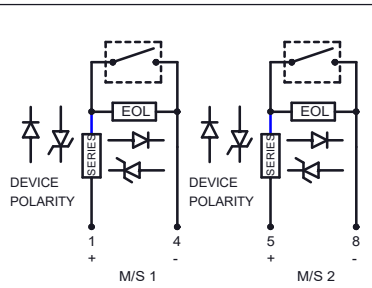
Circuit shown in Unoperated condition

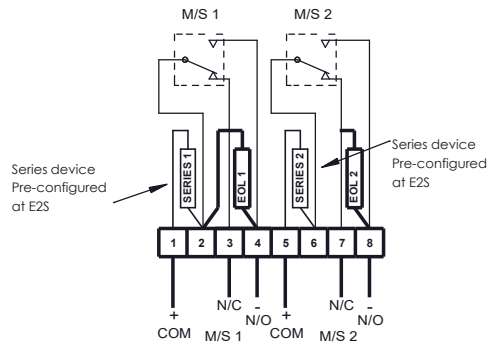
Unoperated condition
(Glass Intact / Standby Condition)
Terminals +(1) & -(4) M/S 1 & +(5) & -(8) M/S 2 open
Terminals +(1) & -(3) M/S 1 & +(5) & -(7) M/S 2 closed

Operated condition
(Glass Broken / Button pushed in)
Terminals +(1) & -(3) M/S 1 & +(5) & -(7) M/S 2 open
Terminals +(1) & -(4) M/S 1 & +(5) & -(8) M/S 2 closed

DUAL SWITCH WITH EOL & SERIES DEVICE DUPLICATED — CONFIG. D3-4

SWITCH TYPE [s]	[D]	Dual
TERMINALS [t]	[D]	DIN Rail Only
PRODUCT OPTION [o]	[Y]	Alt. EOL Pos'n. DUP.
LED INDICATOR [u]	[N]	NO LED
MODULES [e][s]	[Exxxx][Sxxxx]	EOL + Series





Circuit shown in Unoperated condition

Unoperated condition
(Glass Intact / Standby Condition)
Terminals +(1) & -(4) M/S 1 & +(5) & -(8) M/S 2 open
Terminals +(1) & -(3) M/S 1 & +(5) & -(7) M/S 2 closed

Operated condition
(Glass Broken / Button pushed in)
Terminals +(1) & -(3) M/S 1 & +(5) & -(7) M/S 2 open
Terminals +(1) & -(4) M/S 1 & +(5) & -(8) M/S 2 closed

DRAWING TO BS8888:2000
GEOMETRIC TOLERANCES TO ISO1101:1983
LINEAR DIMENSIONAL TOLS
ANGULAR DIMENSIONAL TOLS

STANDARDS
GNExCP7 ; STExCP8 ; WP7 units with DIN Rail

DRAWN	D.HOWGILL	DATE 05-03-2020
CHECKED	R.N.POTTS	DATE 05-03-2020
APPROVED	R.N.POTTS	DATE 05-03-2020

SURFACE FINISH | WEIGHT (Kg)
MATERIAL
ALTERNATIVE MATERIAL

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LONDON W3 7QH
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IF IN DOUBT, ASK - DO NOT SCALE

A3

TITLE **GNExCP7 ; STExCP8 ; WP7 CALL POINT WIRING / CIRCUIT OPERATION DIAGRAM**

SCALE	SHEET	DRAWING NUMBER
NTS	3 OF 8	D202-06-211

SINGLE MICROSWITCH LED DEVICES

SHEET 4

GNEXCP7-BG[s][t][l][e][m][d][v][o][x][u]-[e][s]

Switch Type [s] | Terminals [t] | Product Version [v] | Product Option [o] | LED Indicator [u] | EOL Module [e] | Series Module [s]

Module Device Codes	EOL	Series
Resistor	ExxxR	SxxxR
Diode	ED1	SD1
Zener Diode	ExxxZ	SxxxZ
LED	N/A	L or C

ISSUE	MOD No.	REASON - INITIAL - DATE
7	ACN0178	Correction to LED wiring in option W RNP 15-04-2025
8	ACN0187	LED put on N/C side of circuit, note on LED LD1 detailed RNP 28-05-2025

SINGLE SWITCH WITH LED ONLY — CONFIG. D4-1

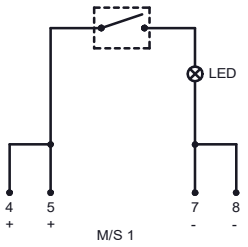
SWITCH TYPE [s] [S] Single
TERMINALS [t] [D] DIN Rail
PRODUCT OPTION [o] [1] Default
LED INDICATOR [u] [L] LED with RL1

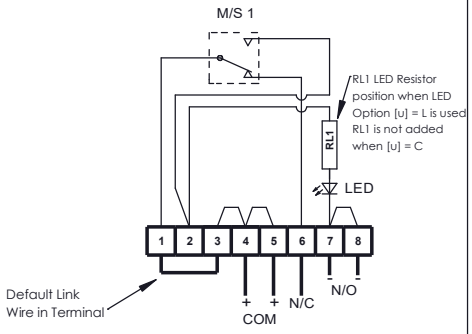
Notes - For all LED Options:

1) The LED is configured as LED indicator option 'C' for this version the LED must be protected by a series resistor of a minimum value of 1.5K Ohm or by limiting the systems current to 20mA max

2) Units have the option to add the LED current-limiting resistor RL1 LED indicator option 'L' which is 1.5K Ohms.

3) Note that in both cases the total value of the series resistors and if fitted RL1 will impact the brightness of the LED.





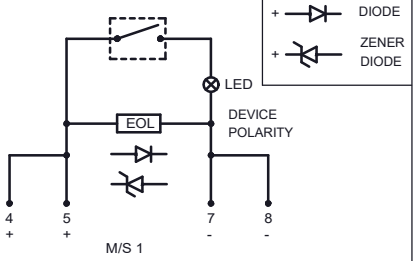
Circuit shown in Unoperated condition

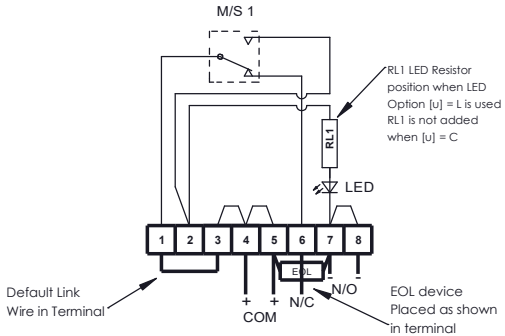
Unoperated condition
(Glass Intact / Standby Condition)
Terminals +(4,5) & -(7,8) open
Terminals +(4,5) & (6) closed

Operated condition
(Glass Broken / Button pushed in)
Terminals +(4,5) & -(7,8) closed
Terminals +(4,5) & (6) open

SINGLE SWITCH WITH LED & EOL DEVICE — CONFIG. D4-2

SWITCH TYPE [s] [S] Single
TERMINALS [t] [D] DIN Rail
PRODUCT OPTION [o] [1] Default
LED INDICATOR [u] [L] LED with RL1
SERIES MODULE [e] [Exxxx] EOL Device





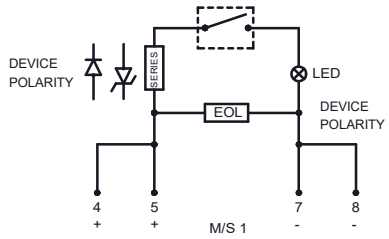
Circuit shown in Unoperated condition

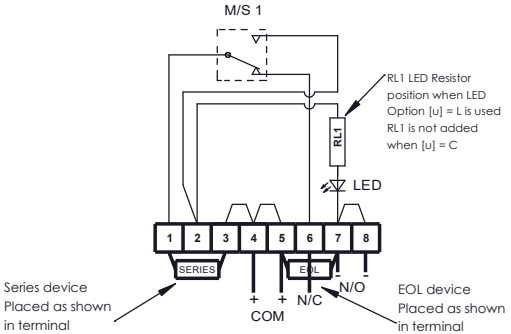
Unoperated condition
(Glass Intact / Standby Condition)
Terminals +(4,5) & -(7,8) open
Terminals +(4,5) & (6) closed

Operated condition
(Glass Broken / Button pushed in)
Terminals +(4,5) & -(7,8) closed
Terminals +(4,5) & (6) open

SINGLE SWITCH WITH LED EOL & SERIES DEVICES — CONFIG. D4-3

SWITCH TYPE [s] [S] Single
TERMINALS [t] [D] DIN Rail
PRODUCT OPTION [o] [1] Default
LED INDICATOR [u] [L] LED with RL1
EOL MODULE [e][s] [Exxxx][Sxxxx] EOL + Series Device





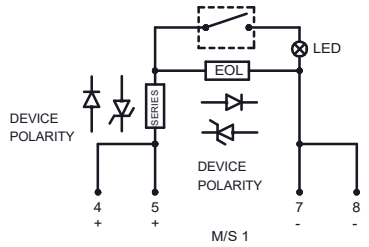
Circuit shown in Unoperated condition

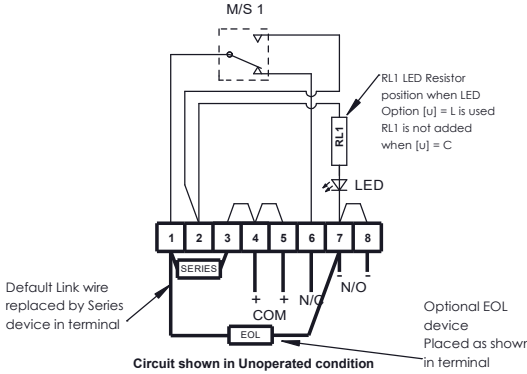
Unoperated condition
(Glass Intact / Standby Condition)
Terminals +(4,5) & -(7,8) open
Terminals +(4,5) & (6) closed

Operated condition
(Glass Broken / Button pushed in)
Terminals +(4,5) & -(7,8) closed
Terminals +(4,5) & (6) open

SINGLE SWITCH WITH LED, EOL & ALT. SERIES DEVICE — CONFIG. D4-4

SWITCH TYPE [s] [S] Single
TERMINALS [t] [D] DIN Rail
PRODUCT OPTION [o] [W] Alt. EOL Pos'n.
LED INDICATOR [u] [L] LED with RL1
MODULES [e][s] [Exxxx][Sxxxx] EOL + Series Device





Circuit shown in Unoperated condition

Unoperated condition
(Glass Intact / Standby Condition)
Terminals +(4,5) & -(7,8) open
Terminals +(4,5) & (6) closed

Operated condition
(Glass Broken / Button pushed in)
Terminals +(4,5) & -(7,8) closed
Terminals +(4,5) & (6) open

DRAWING TO BS8888:2000
GEOMETRIC TOLERANCES TO ISO1101:1983
LINEAR DIMENSIONAL TOLS
ANGULAR DIMENSIONAL TOLS

STANDARDS
GNExCP7 ; STExCP8 ; WP7 units with DIN Rail

DRAWN D.HOWGILL DATE 05-03-2020
CHECKED R.N.POTTS DATE 05-03-2020
APPROVED R.N.POTTS DATE 05-03-2020

SURFACE FINISH | WEIGHT (Kg)
MATERIAL
ALTERNATIVE MATERIAL

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A3

TITLE **GNExCP7 ; STExCP8 ; WP7 CALL POINT WIRING / CIRCUIT OPERATION DIAGRAM**

SCALE NTS | SHEET 4 OF 8 | DRAWING NUMBER **D202-06-211**

DUAL MICROSWITCH LED DEVICES

SHEET 5

GNEXCP7-BG[s][t][l][e][m][d][v][o][x][u]-[e][s]

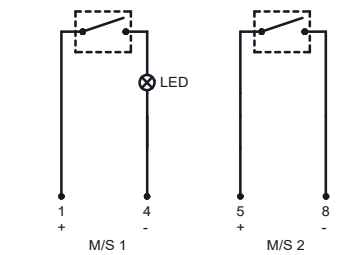
LED Indicator [u]
Series Module [s]
Switch Type [s]
Terminals [t]
Product Version [v]
Product Option [o]
EOL Module [e]

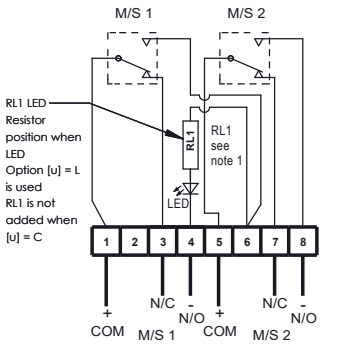
Module Device Codes	EOL	Series
Resistor	ExxxR	SxxxR
Diode	ED1	SD1
Zener Diode	ExxxZ	SxxxZ
LED	N/A	L or C

ISSUE	MOD No.	REASON - INITIAL - DATE
7	ACN0178	Correction to LED wiring in option W RNP 15-04-2025
8	ACN0187	LED put on N/C side of circuit, note on LED LD1 detailed RNP 28-05-2025

DUAL SWITCH WITH LED — CONFIG. D5-1

SWITCH TYPE [s] [D] Dual
TERMINALS [t] [D] DIN Rail Only
PRODUCT OPTION [o] [1] Default
LED INDICATOR [u] [L] LED with RL1





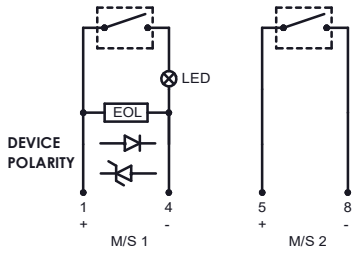
Circuit shown in Unoperated condition

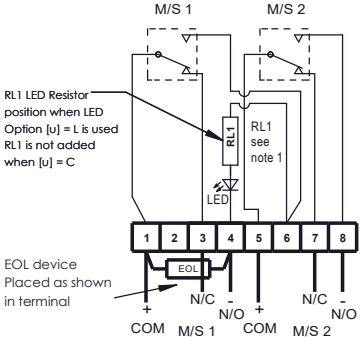
Unoperated condition
(Glass Intact / Standby Condition)
Terminals +(1) & -(4) M/S 1 & +(5) & -(8) M/S 2 open
Terminals +(1) & -(3) M/S 1 & +(5) & -(7) M/S 2 closed

Operated condition
(Glass Broken / Button pushed in)
Terminals +(1) & -(3) M/S 1 & +(5) & -(7) M/S 2 open
Terminals +(1) & -(4) M/S 1 & +(5) & -(8) M/S 2 closed

DUAL SWITCH WITH LED & EOL DEVICES — CONFIG. D5-2

SWITCH TYPE [s] [D] Dual
TERMINALS [t] [D] DIN Rail Only
PRODUCT OPTION [o] [1] Default
LED INDICATOR [u] [L] LED with RL1
EOL MODULE [e] [ExxxR] EOL Device





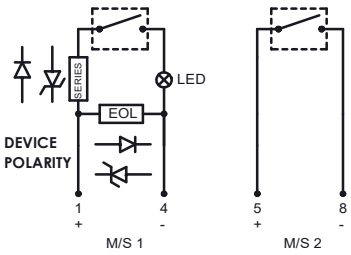
Circuit shown in Unoperated condition

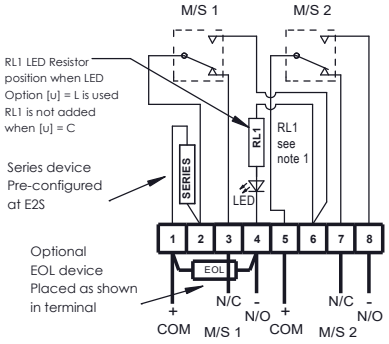
Unoperated condition
(Glass Intact / Standby Condition)
Terminals +(1) & -(4) M/S 1 & +(5) & -(8) M/S 2 open
Terminals +(1) & -(3) M/S 1 & +(5) & -(7) M/S 2 closed

Operated condition
(Glass Broken / Button pushed in)
Terminals +(1) & -(3) M/S 1 & +(5) & -(7) M/S 2 open
Terminals +(1) & -(4) M/S 1 & +(5) & -(8) M/S 2 closed

DUAL SWITCH WITH LED EOL & SERIES DEVICES — CONFIG. D5-3

SWITCH TYPE [s] [D] Dual
TERMINALS [t] [D] DIN Rail Only
PRODUCT OPTION [o] [1] Default
LED INDICATOR [u] [L] LED with RL1
SERIES MODULE [s] [Sxxxx] Series Device





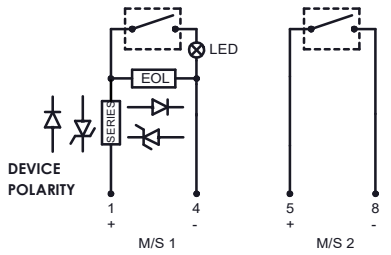
Circuit shown in Unoperated condition

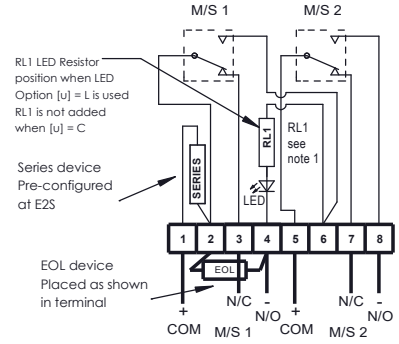
Unoperated condition
(Glass Intact / Standby Condition)
Terminals +(1) & -(4) M/S 1 & +(5) & -(8) M/S 2 open
Terminals +(1) & -(3) M/S 1 & +(5) & -(7) M/S 2 closed

Operated condition
(Glass Broken / Button pushed in)
Terminals +(1) & -(3) M/S 1 & +(5) & -(7) M/S 2 open
Terminals +(1) & -(4) M/S 1 & +(5) & -(8) M/S 2 closed

DUAL SWITCH WITH LED, EOL & ALT. SERIES DEVICE — CONFIG. D5-4

SWITCH TYPE [s] [D] Dual
TERMINALS [t] [D] DIN Rail Only
PRODUCT OPTION [o] [W] Alt. EOL Pos'n.
LED INDICATOR [u] [L] LED with RL1
MODULES [e][s] [Exxxx][Sxxxx] EOL + Series





Circuit shown in Unoperated condition

Unoperated condition
(Glass Intact / Standby Condition)
Terminals +(1) & -(4) M/S 1 & +(5) & -(8) M/S 2 open
Terminals +(1) & -(3) M/S 1 & +(5) & -(7) M/S 2 closed

Operated condition
(Glass Broken / Button pushed in)
Terminals +(1) & -(3) M/S 1 & +(5) & -(7) M/S 2 open
Terminals +(1) & -(4) M/S 1 & +(5) & -(8) M/S 2 closed

Notes - For all LED Options:

1) The LED is configured as LED indicator option 'C' for this version the LED must be protected by a series resistor of a minimum value of 1.5K Ohm or by limiting the systems current to 20mA max

2) Units have the option to add the LED current-limiting resistor RL1 LED indicator option 'L' which is 1.5K Ohms.

3) Note that in both cases the total value of the series resistors and if fitted RL1 will impact the brightness of the LED.

DRAWING TO BS8888:2000
GEOMETRIC TOLERANCES TO ISO1101:1983
LINEAR DIMENSIONAL TOLS
ANGULAR DIMENSIONAL TOLS

STANDARDS

DRAWN	D.HOWGILL	DATE 05-03-2020
CHECKED	R.N.POTTS	DATE 05-03-2020
APPROVED	R.N.POTTS	DATE 05-03-2020

SURFACE FINISH | WEIGHT (Kg)

MATERIAL

ALTERNATIVE MATERIAL

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IF IN DOUBT, ASK - DO NOT SCALE

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TITLE **GNExCP7 ; STExCP8 ; WP7 CALL POINT WIRING / CIRCUIT OPERATION DIAGRAM**

SCALE	SHEET	DRAWING NUMBER
NTS	5 OF 8	D202-06-211

DUAL MICROSWITCH LED & DEVICES DUPLICATED

SHEET 6

GNEXCP7-BG[s][t][l][e][m][d][v][o][x][u]-[e][s]

- [u] LED Indicator
- [s] Series Module
- [e] EOL Module
- [o] Product Option
- [v] Product Version
- [t] Terminals
- [s] Switch Type

Module Device Codes	EOL	Series
Resistor	ExxxR	SxxxR
Diode	ED1	SD1
Zener Diode	ExxxZ	SxxxZ
LED	N/A	L or C

ISSUE	MOD No.	REASON - INITIAL - DATE
7	ACN0178	Correction to LED wiring in option W RNP 15-04-2025
8	ACN0187	LED put on N/C side of circuit, note on LED LD1 detailed RNP 28-05-2025

DUAL SWITCH WITH LED & EOL DEVICE — CONFIG. D6-1

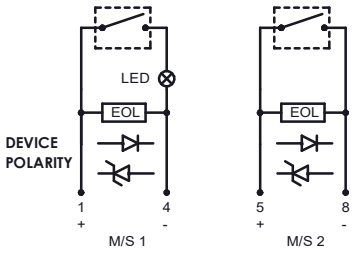
SWITCH TYPE [s]	[D]	Dual
TERMINALS [t]	[D]	DIN Rail Only
PRODUCT OPTION [o]	[2]	Duplicated EOL
LED INDICATOR [u]	[L]	LED with RL1
EOL MODULE [e]	[ExxxR]	EOL Device

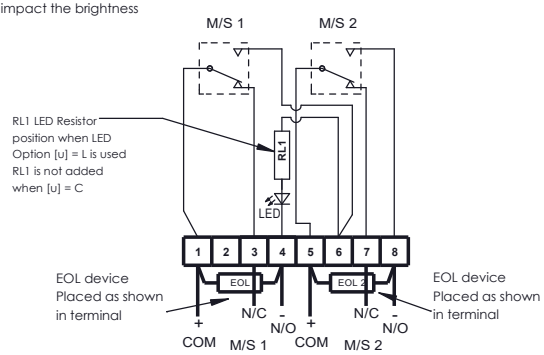
Notes - For all LED Options:

1) The LED is configured as LED indicator option 'C' for this version the LED must be protected by a series resistor of a minimum value of 1.5K Ohm or by limiting the systems current to 20mA max

2) Units have the option to add the LED current-limiting resistor RL1 LED indicator option 'L' which is 1.5K Ohms.

3) Note that in both cases the total value of the series resistors and if fitted RL1 will impact the brightness of the LED.





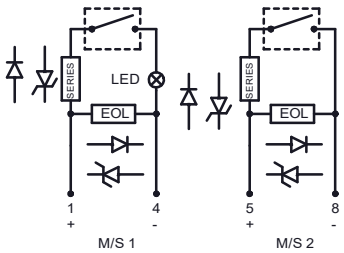
Circuit shown in Unoperated condition

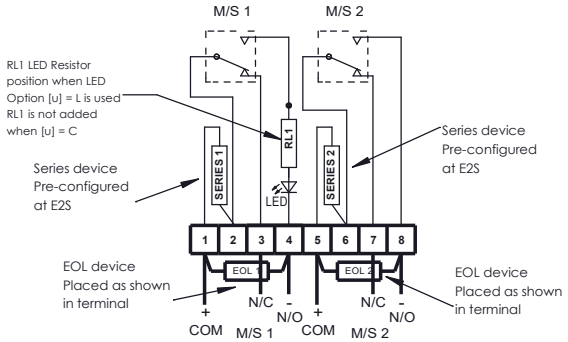
Unoperated condition
(Glass Intact / Standby Condition)
Terminals +(1) & -(4) M/S 1 & +(5) & -(8) M/S 2 open
Terminals +(1) & -(3) M/S 1 & +(5) & -(7) M/S 2 closed

Operated condition
(Glass Broken / Button pushed in)
Terminals +(1) & -(3) M/S 1 & +(5) & -(7) M/S 2 open
Terminals +(1) & -(4) M/S 1 & +(5) & -(8) M/S 2 closed

DUAL SWITCH WITH LED & SERIES DEVICE — CONFIG. D6-2

SWITCH TYPE [s]	[D]	Dual
TERMINALS [t]	[D]	DIN Rail Only
PRODUCT OPTION [o]	[2]	Duplicated EOL / SERIES
LED INDICATOR [u]	[L]	LED with RL1
SERIES MODULE [s]	[Sxxxx]	Series Device





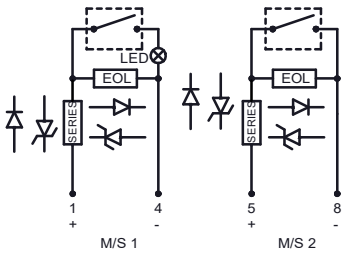
Circuit shown in Unoperated condition

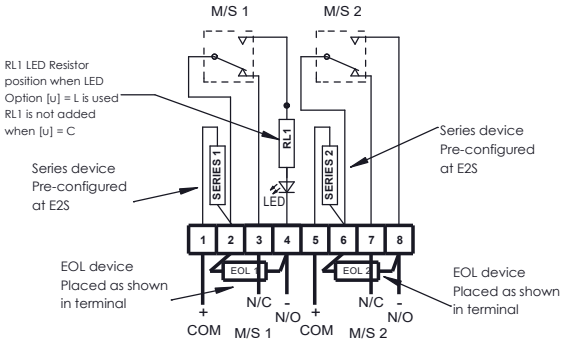
Unoperated condition
(Glass Intact / Standby Condition)
Terminals +(1) & -(4) M/S 1 & +(5) & -(8) M/S 2 open
Terminals +(1) & -(3) M/S 1 & +(5) & -(7) M/S 2 closed

Operated condition
(Glass Broken / Button pushed in)
Terminals +(1) & -(3) M/S 1 & +(5) & -(7) M/S 2 open
Terminals +(1) & -(4) M/S 1 & +(5) & -(8) M/S 2 closed

DUAL SWITCH WITH LED, EOL & SERIES DEVICE — CONFIG. D6-3

SWITCH TYPE [s]	[D]	Dual
TERMINALS [t]	[D]	DIN Rail Only
PRODUCT OPTION [o]	[Y]	Alt. EOL Pos'n. DUPLICATED
LED INDICATOR [u]	[L]	LED with RL1
MODULES [e] [s]	[Exxxx] [Sxxxx]	EOL + Series





Circuit shown in Unoperated condition

Unoperated condition
(Glass Intact / Standby Condition)
Terminals +(1) & -(4) M/S 1 & +(5) & -(8) M/S 2 open
Terminals +(1) & -(3) M/S 1 & +(5) & -(7) M/S 2 closed

Operated condition
(Glass Broken / Button pushed in)
Terminals +(1) & -(3) M/S 1 & +(5) & -(7) M/S 2 open
Terminals +(1) & -(4) M/S 1 & +(5) & -(8) M/S 2 closed

DRAWING TO BS8888:2000
GEOMETRIC TOLERANCES TO ISO1101:1983
LINEAR DIMENSIONAL TOLS
ANGULAR DIMENSIONAL TOLS

STANDARDS

DRAWN	D.HOWGILL	DATE 05-03-2020
CHECKED	R.N.POTTS	DATE 05-03-2020
APPROVED	R.N.POTTS	DATE 05-03-2020

SURFACE FINISH | WEIGHT (Kg)

MATERIAL

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IF IN DOUBT, ASK - DO NOT SCALE

A3

TITLE **GNExCP7 ; STExCP8 ; WP7 CALL POINT WIRING / CIRCUIT OPERATION DIAGRAM**

SCALE	SHEET	DRAWING NUMBER
NTS	6 OF 8	D202-06-211

DUAL MICROSWITCHES IN PARALLEL

SHEET 7

Notes:
1. Other configurations of dual switch units are possible. Contact E2S sales to discuss options.

GNEXCP7-BG[s][t][l][e][m][d][v][o][x][u]-[e][s]

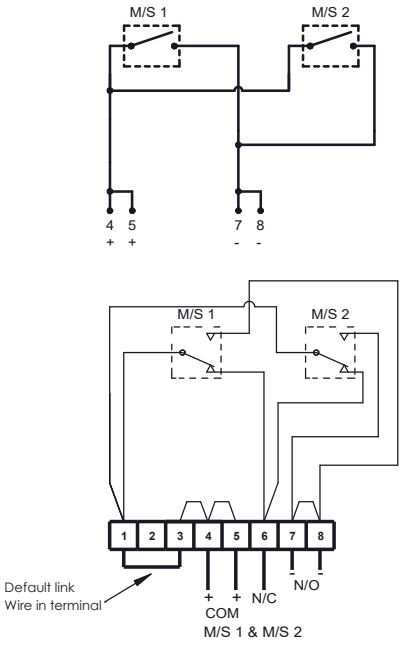
- [s] Switch Type
- [t] Terminals
- [v] Product Version
- [o] Product Option
- [u] LED Indicator
- [e] EOL Module
- [s] Series Module

Module Device Codes	EOL	Series
Resistor	ExxxR	SxxxR
Diode	ED1	SD1
Zener Diode	ExxxZ	SxxxZ
LED	N/A	L or C

ISSUE	MOD No.	REASON - INITIAL - DATE
7	ACN0178	Correction to LED wiring in option W RNP 15-04-2025
8	ACN0187	LED put on N/C side of circuit, note on LED LD1 detailed RNP 28-05-2025

DUAL SWITCH WITH EOL DEVICE — CONFIG. D7-1

SWITCH TYPE [s]	[D]	Dual
TERMINALS [t]	[D]	DIN Rail
PRODUCT OPTION [o]	[P]	Parallel Wiring
LED INDICATOR [u]	[N]	No LED



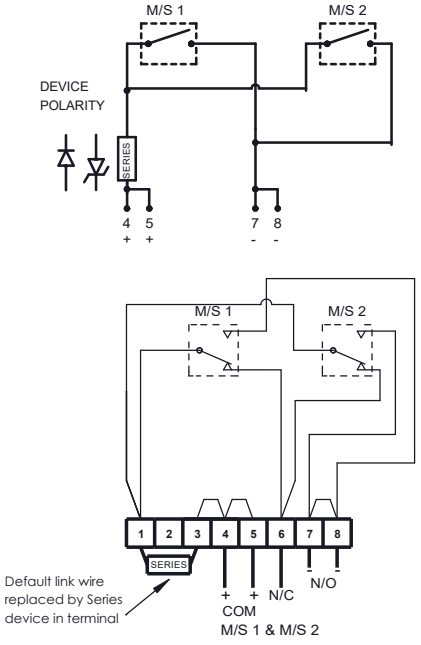
Circuit shown in Unoperated condition

Unoperated condition
(Glass Intact / Standby Condition)
Terminals +(4,5) & -(7,8) open
Terminals +(4,5) & (6) closed

Operated condition
(Glass Broken / Button pushed in)
Terminals +(4,5) & -(7,8) closed
Terminals +(4,5) & (6) open

DUAL SWITCH WITH SERIES DEVICES — CONFIG. D7-2

SWITCH TYPE [s]	[D]	Dual
TERMINALS [t]	[D]	DIN Rail
PRODUCT OPTION [o]	[P]	Parallel Wiring
LED INDICATOR [u]	[N]	No LED
SERIES MODULE [s]	[Sxxxx]	Series Device



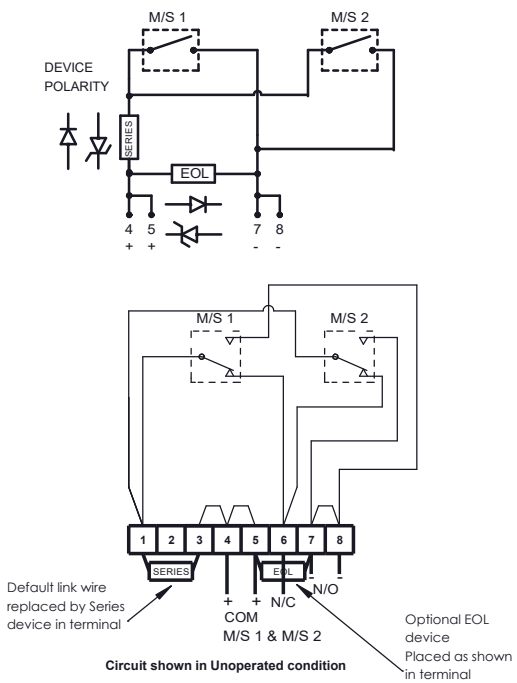
Circuit shown in Unoperated condition

Unoperated condition
(Glass Intact / Standby Condition)
Terminals +(4,5) & -(7,8) open
Terminals +(4,5) & (6) closed

Operated condition
(Glass Broken / Button pushed in)
Terminals +(4,5) & -(7,8) closed
Terminals +(4,5) & (6) open

DUAL SWITCH WITH EOL & SERIES DEVICE — CONFIG. D7-3

SWITCH TYPE [s]	[D]	Dual
TERMINALS [t]	[D]	DIN Rail
PRODUCT OPTION [o]	[P]	Parallel Wiring
LED INDICATOR [u]	[N]	No LED
MODULE [e][s]	[Exxxx][Sxxxx]	EOL & Series Device



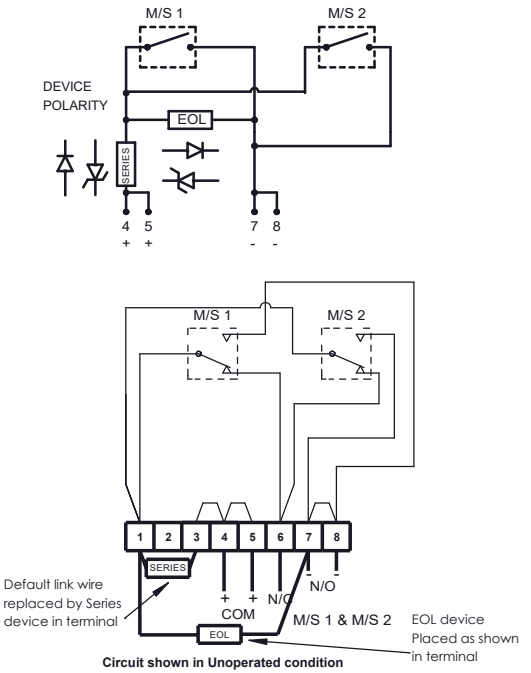
Circuit shown in Unoperated condition

Unoperated condition
(Glass Intact / Standby Condition)
Terminals +(4,5) & -(7,8) open
Terminals +(4,5) & (6) closed

Operated condition
(Glass Broken / Button pushed in)
Terminals +(4,5) & -(7,8) closed
Terminals +(4,5) & (6) open

DUAL SWITCH WITH EOL & SERIES DEVICE — CONFIG. D7-4

SWITCH TYPE [s]	[D]	Dual
TERMINALS [t]	[D]	DIN Rail Only
PRODUCT OPTION [o]	[V]	Alt. EOL Pos'n
LED INDICATOR [u]	[N]	No LED
MODULE [e][s]	[Exxxx][Sxxxx]	EOL & Series Devices



Circuit shown in Unoperated condition

Unoperated condition
(Glass Intact / Standby Condition)
Terminals +(4,5) & -(7,8) open
Terminals +(4,5) & (6) closed

Operated condition
(Glass Broken / Button pushed in)
Terminals +(4,5) & -(7,8) closed
Terminals +(4,5) & (6) open

DRAWING TO BS8888:2000
GEOMETRIC TOLERANCES TO ISO1101:1983
LINEAR DIMENSIONAL TOLS
ANGULAR DIMENSIONAL TOLS

STANDARDS
GNExCP7 ; STExCP8 ; WP7 units with DIN Rail

DRAWN	D.HOWGILL	DATE 05-03-2020
CHECKED	R.N.POTTS	DATE 05-03-2020
APPROVED	R.N.POTTS	DATE 05-03-2020

SURFACE FINISH | WEIGHT (Kg)
MATERIAL
ALTERNATIVE MATERIAL

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TITLE **GNExCP7 ; STExCP8 ; WP7 CALL POINT WIRING / CIRCUIT OPERATION DIAGRAM**

SCALE	SHEET	DRAWING NUMBER
NTS	7 OF 8	D202-06-211

DUAL MICROSWITCHES IN PARALLEL, LED & DEVICES

SHEET 8

GNEXCP7-BG[s][t][l][e][m][d][v][o][x][u]-[e][s]

- [u] LED Indicator
- [s] Series Module
- [e] EOL Module
- [o] Product Option
- [v] Product Version
- [t] Terminals
- [s] Switch Type

Module Device Codes	EOL	Series
Resistor	ExxxR	SxxxR
Diode	ED1	SD1
Zener Diode	ExxxZ	SxxxZ
LED	N/A	L or C

ISSUE	MOD No.	REASON - INITIAL - DATE
7	ACN0178	Correction to LED wiring in option W RNP 15-04-2025
8	ACN0187	LED put on N/C side of circuit, note on LED LD1 detailed RNP 28-05-2025

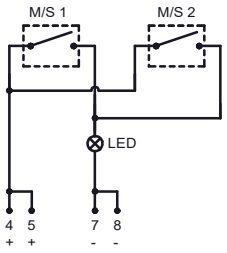
DUAL SWITCH WITH LED	CONFIG. D8-1	DUAL SWITCH WITH LED & EOL DEVICE	CONFIG. D8-2	DUAL SWITCH WITH EOL & SERIES DEVICE	CONFIG. D8-3	DUAL SWITCH WITH EOL & SERIES DEVICE	CONFIG. D8-4
SWITCH TYPE [s] [D] Dual		SWITCH TYPE [s] [D] Dual		SWITCH TYPE [s] [D] Dual		SWITCH TYPE [s] [D] Dual	
TERMINALS [t] [D] DIN Rail		TERMINALS [t] [D] DIN Rail		TERMINALS [t] [D] DIN Rail Only		TERMINALS [t] [D] DIN Rail Only	
PRODUCT OPTION [o] [P] Parallel Wiring		PRODUCT OPTION [o] [P] Parallel Wiring		PRODUCT OPTION [o] [P] Parallel Wiring		PRODUCT OPTION [o] [V] Parallel Wiring Alt. EOL	
LED INDICATOR [u] [L] LED with RL1		LED INDICATOR [u] [L] LED with RL1		LED INDICATOR [u] [L] LED with RL1		LED INDICATOR [u] [L] LED with RL1	
		EOL MODULE [e] [Exxxx] EOL Device		MODULE [e][s] [Exxxx][Sxxxx] EOL + Series		MODULE [e][s] [Exxxx][Sxxxx] EOL + Series	

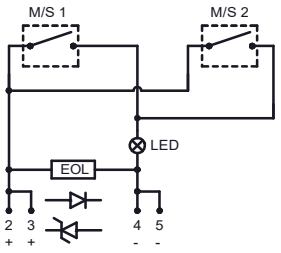
Notes - For all LED Options:

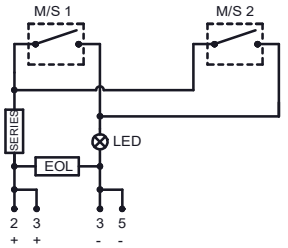
1) The LED is configured as LED indicator option 'C' for this version the LED must be protected by a series resistor of a minimum value of 1.5K Ohm or by limiting the systems current to 20mA max

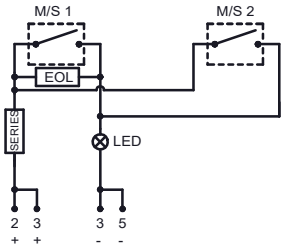
2) Units have the option to add the LED current-limiting resistor RL1 LED indicator option 'L' which is 1.5K Ohms.

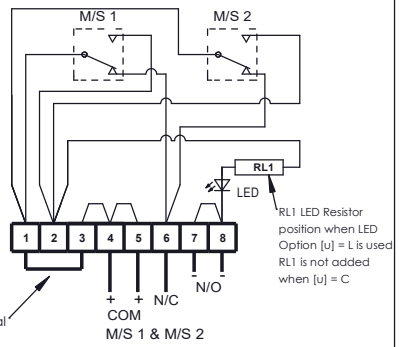
3) Note that in both cases the total value of the series resistors and if fitted RL1 will impact the brightness of the LED.







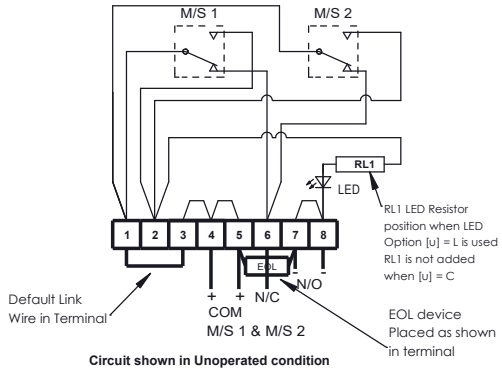




Circuit shown in Unoperated condition

Unoperated condition
(Glass Intact / Standby Condition)
Terminals +(4,5) & -(7,8) open
Terminals +(4,5) & (6) closed

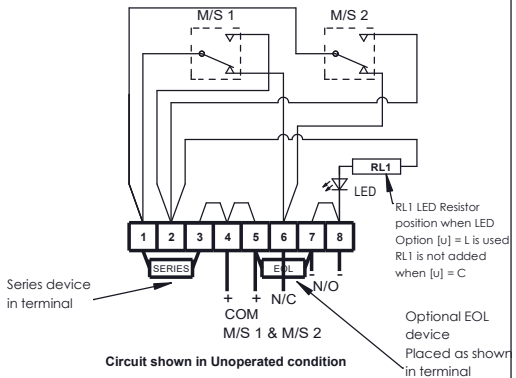
Operated condition
(Glass Broken / Button pushed in)
Terminals +(4,5) & -(7,8) closed
Terminals +(4,5) & (6) open



Circuit shown in Unoperated condition

Unoperated condition
(Glass Intact / Standby Condition)
Terminals +(4,5) & -(7,8) open
Terminals +(4,5) & (6) closed

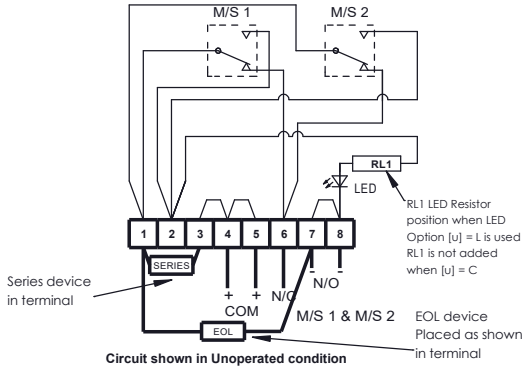
Operated condition
(Glass Broken / Button pushed in)
Terminals +(4,5) & -(7,8) closed
Terminals +(4,5) & (6) open



Circuit shown in Unoperated condition

Unoperated condition
(Glass Intact / Standby Condition)
Terminals +(4,5) & -(7,8) open
Terminals +(4,5) & (6) closed

Operated condition
(Glass Broken / Button pushed in)
Terminals +(4,5) & -(7,8) closed
Terminals +(4,5) & (6) open



Circuit shown in Unoperated condition

Unoperated condition
(Glass Intact / Standby Condition)
Terminals +(4,5) & -(7,8) open
Terminals +(4,5) & (6) closed

Operated condition
(Glass Broken / Button pushed in)
Terminals +(4,5) & -(7,8) closed
Terminals +(4,5) & (6) open

DRAWING TO BS8888:2000
GEOMETRIC TOLERANCES TO ISO1101:1983
LINEAR DIMENSIONAL TOLS
ANGULAR DIMENSIONAL TOLS

STANDARDS
GNExCP7 ; STExCP8 ; WP7 units with DIN Rail

DRAWN	D.HOWGILL	DATE 05-03-2020
CHECKED	R.N.POTTS	DATE 05-03-2020
APPROVED	R.N.POTTS	DATE 05-03-2020

SURFACE FINISH | WEIGHT (Kg)

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DO NOT SCALE

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TITLE **GNExCP7 ; STExCP8 ; WP7 CALL POINT WIRING / CIRCUIT OPERATION DIAGRAM**

SCALE	SHEET	DRAWING NUMBER
NTS	8 OF 8	D202-06-211

SINGLE MICROSWITCH DEVICES

SHEET 1

PRODUCTS:
GNExCP7, STExCP8
& WP7

Diagram	Sheet
Dual Switch Wiring Configurations	2,3,5,6,7,8
LED Indicator Wiring Configurations	4,5,6,8
Parallel Dual Switch Wiring Configurations	7,8

GNEXCP7-BG[s][t][l][e][m][d][v][o][x]-[u][e][s]

- [s] Switch Type
- [t] Terminals
- [v] Product Version
- [o] Product Option
- [u] LED Indicator
- [e] EOL Module
- [s] Series Module

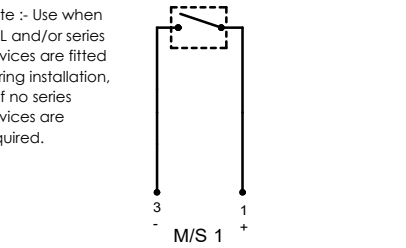
Module Device Codes	EOL	Series
Resistor	ExxxR	SxxxR
Diode	ED1	SD1
Zener Diode	ExxxZ	SxxxZ
LED	N/A	L or C

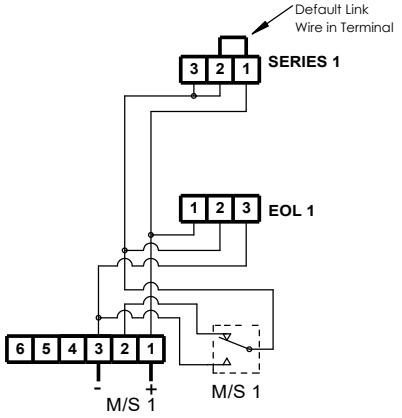
ISSUE	MOD No.	REASON - INITIAL - DATE
1	ACN0127	Addition of LED version ; Options clarified RNP 20-08-2023
2	ACN0178	LED C and L version claried ; LED mounted in N/O position on switch RNP 04-04-2025

SINGLE SWITCH — CONFIG. P1 -1

SWITCH TYPE [s]	[S]	Single
TERMINALS [t]	[P]	PCB Version
PRODUCT OPTION [o]	[1]	Default
LED INDICATOR [u]	[N]	NO LED

Note :- Use when EOL and/or series devices are fitted during installation, or if no series devices are required.





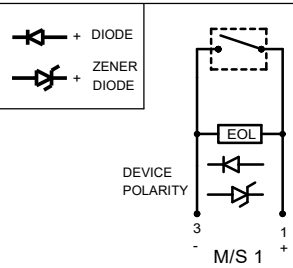
Circuit as shown in Unoperated condition

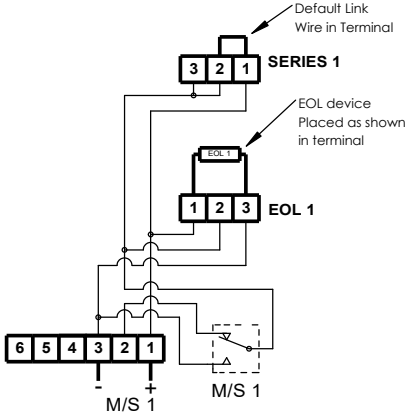
Unoperated Condition
(Glass Intact / Standby Condition)
Terminals +(1) & -(3) M/S 1 open
Terminals +(1) & (2) M/S 1 closed

Operated Condition
(Glass Broken / Button pushes in)
Terminals +(1) & (2) M/S 1 open
Terminals +(1) & -(3) M/S 1 closed

SINGLE SWITCH WITH SERIES DEVICE — CONFIG. P1-2

SWITCH TYPE [s]	[S]	Single
TERMINALS [t]	[P]	PCB Version
PRODUCT OPTION [o]	[1]	Default
LED INDICATOR [u]	[N]	NO LED
EOL MODULE [e]	[Exxxx]	EOL Device





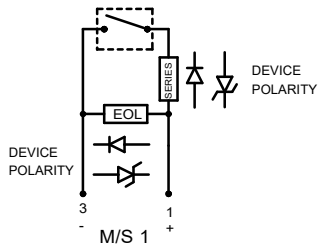
Circuit as shown in Unoperated condition

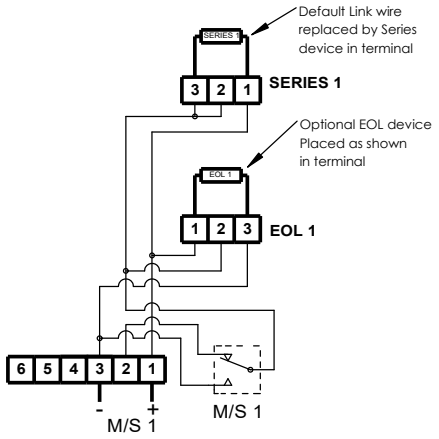
Unoperated Condition
(Glass Intact / Standby Condition)
Terminals +(1) & -(3) M/S 1 open
Terminals +(1) & (2) M/S 1 closed

Operated Condition
(Glass Broken / Button pushes in)
Terminals +(1) & (2) M/S 1 open
Terminals +(1) & -(3) M/S 1 closed

SINGLE SWITCH WITH EOL & SERIES DEVICES — CONFIG. P1-3

SWITCH TYPE [s]	[S]	Single
TERMINALS [t]	[P]	PCB Version
PRODUCT OPTION [o]	[1]	Default
LED INDICATOR [u]	[N]	NO LED
MODULES [e][s]	[Exxxx][Sxxxx]	EOL + Series





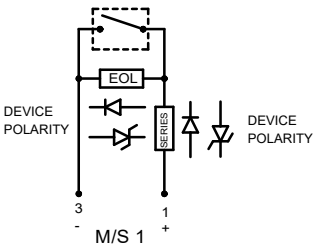
Circuit as shown in Unoperated condition

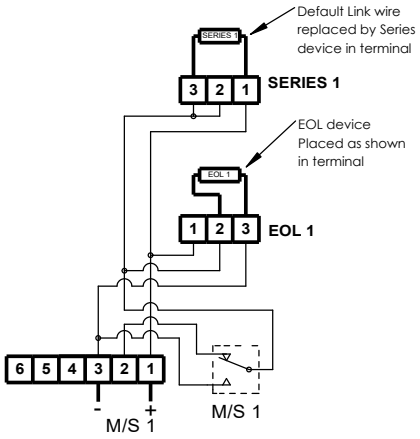
Unoperated Condition
(Glass Intact / Standby Condition)
Terminals +(1) & -(3) M/S 1 open
Terminals +(1) & (2) M/S 1 closed

Operated Condition
(Glass Broken / Button pushes in)
Terminals +(1) & (2) M/S 1 open
Terminals +(1) & -(3) M/S 1 closed

SINGLE SWITCH WITH EOL & ALT SERIES DEVICES — CONFIG. P1-4

SWITCH TYPE [s]	[S]	Single
TERMINALS [t]	[P]	PCB Version
PRODUCT OPTION [o]	[W]	Alt. EOL Pos'n.
LED INDICATOR [u]	[N]	NO LED
MODULE [e][s]	[Exxxx][Sxxxx]	EOL + Series





Circuit as shown in Unoperated condition

Unoperated Condition
(Glass Intact / Standby Condition)
Terminals +(1) & -(3) M/S 1 open
Terminals +(1) & (2) M/S 1 closed

Operated Condition
(Glass Broken / Button pushes in)
Terminals +(1) & (2) M/S 1 open
Terminals +(1) & -(3) M/S 1 closed

DRAWING TO BS8888:2000
GEOMETRIC TOLERANCES TO ISO1101:1983
LINEAR DIMENSIONAL TOLS
ANGULAR DIMENSIONAL TOLS

STANDARDS
GNExCP7 ; STExCP8 ; WP7 units with PCB

DRAWN	R.N.POTTS	DATE 20-08-2023
CHECKED	B.ISARD	DATE 20-08-2023
APPROVED	R.N.POTTS	DATE 20-08-2023

SURFACE FINISH | WEIGHT (Kg)
MATERIAL
ALTERNATIVE MATERIAL

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A3

TITLE **GNExCP7 ; STExCP8 ; WP7 CALL POINT WIRING / CIRCUIT OPERATION DIAGRAM**

SCALE	SHEET	DRAWING NUMBER
NTS	1 OF 8	D202-06-212

DUAL MICROSWITCH DEVICES

SHEET 2

Notes:
1. Other configurations of dual switch units are possible. Contact E2S sales to discuss options.

GNEXCP7-BG[s][t][l][e][m][d][v][o][x]-[u][e][s]

Switch Type [s] · Terminals [t] · Product Version [v] · Product Option [o] · LED Indicator [u] · EOL Module [e] · Series Module [s]

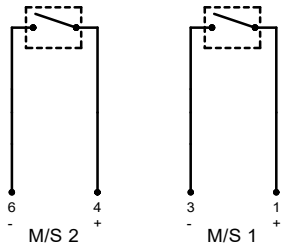
Module Device Codes	EOL	Series
Resistor	ExxxR	SxxxR
Diode	ED1	SD1
Zener Diode	ExxxZ	SxxxZ
LED	N/A	L or C

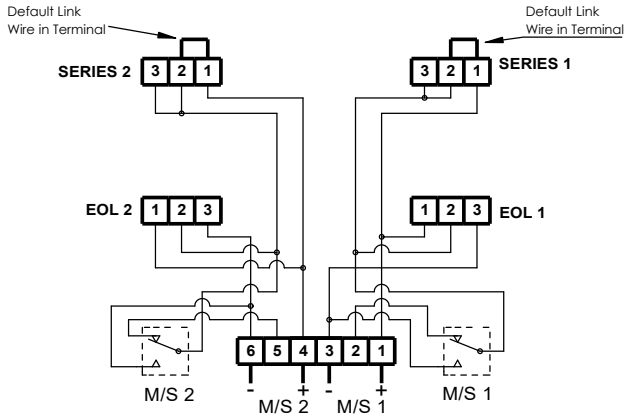
ISSUE	MOD No.	REASON - INITIAL - DATE
1	ACN0127	INTRODUCTION RNP 20-08-2023
2	ACN0178	LED C and L version claried ; LED mounted in N/O position on switch RNP 04-04-2025

DUAL SWITCH — CONFIG. P2-1

SWITCH TYPE [s]	[D]	Dual
TERMINALS [t]	[P]	PCB Version
PRODUCT OPTION [o]	[1]	Default
LED INDICATOR [u]	[N]	NO LED

Note :- Use when EOL and/or series devices are fitted during installation, or if no series devices are required.





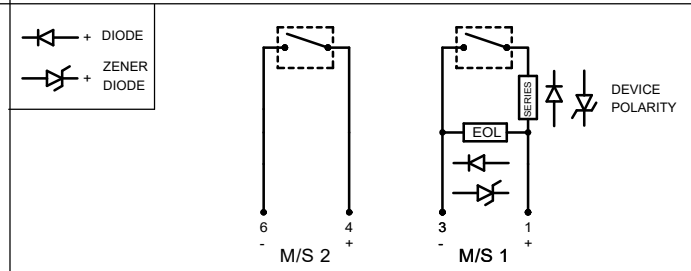
Circuit as shown in Unoperated condition

Unoperated Condition
(Glass Intact / Standby Condition)
Terminals +(1) & -(3) M/S 1 and +(4) & -(6) M/S 2 open
Terminals +(1) & (2) M/S 1 and +(4) & (5) M/S 2 closed

Operated Condition
(Glass Broken / Button pushes in)
Terminals +(1) & (2) M/S 1 and +(4) & (5) M/S 2 open
Terminals +(1) & -(3) M/S 1 and +(4) & -(6) M/S 2 closed

DUAL SWITCH WITH EOL & SERIES DEVICES — CONFIG. P2-2

SWITCH TYPE [s]	[D]	Dual
TERMINALS [t]	[P]	PCB Version
PRODUCT OPTION [o]	[1]	Default
LED INDICATOR [u]	[N]	No LED
MODULES [e][s]	[Exxxx][Sxxxx]	EOL + Series



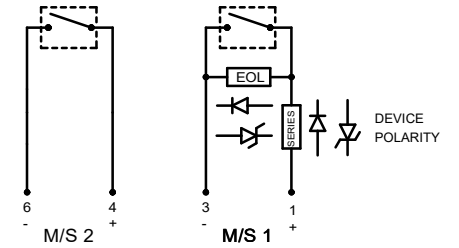
Circuit as shown in Unoperated condition

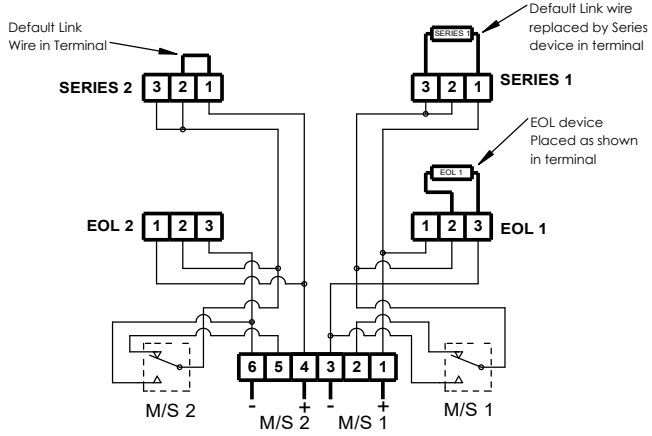
Unoperated Condition
(Glass Intact / Standby Condition)
Terminals +(1) & -(3) M/S 1 and +(4) & -(6) M/S 2 open
Terminals +(1) & (2) M/S 1 and +(4) & (5) M/S 2 closed

Operated Condition
(Glass Broken / Button pushes in)
Terminals +(1) & (2) M/S 1 and +(4) & (5) M/S 2 open
Terminals +(1) & -(3) M/S 1 and +(4) & -(6) M/S 2 closed

DUAL SWITCH WITH EOL & ALT. SERIES DEVICES — CONFIG. P2-3

SWITCH TYPE [s]	[D]	Dual
TERMINALS [t]	[P]	PCB Version
PRODUCT OPTION [o]	[W]	Alt. EOL Pos'n.
LED INDICATOR [u]	[N]	No LED
MODULES [e][s]	[Exxxx][Sxxxx]	EOL + Series





Circuit as shown in Unoperated condition

Unoperated Condition
(Glass Intact / Standby Condition)
Terminals +(1) & -(3) M/S 1 and +(4) & -(6) M/S 2 open
Terminals +(1) & (2) M/S 1 and +(4) & (5) M/S 2 closed

Operated Condition
(Glass Broken / Button pushes in)
Terminals +(1) & (2) M/S 1 and +(4) & (5) M/S 2 open
Terminals +(1) & -(3) M/S 1 and +(4) & -(6) M/S 2 closed

DRAWING TO BS8888:2000
GEOMETRIC TOLERANCES TO ISO1101:1983
LINEAR DIMENSIONAL TOLS
ANGULAR DIMENSIONAL TOLS

STANDARDS
GNExCP7 ; STExCP8 ; WP7 units with PCB

DRAWN	R.N.POTTS	DATE 20-08-2023
CHECKED	B.ISARD	DATE 20-08-2023
APPROVED	R.N.POTTS	DATE 20-08-2023

SURFACE FINISH · WEIGHT (Kg)
MATERIAL
ALTERNATIVE MATERIAL

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TITLE **GNExCP7 ; STExCP8 ; WP7 CALL POINT WIRING / CIRCUIT OPERATION DIAGRAM**

SCALE	SHEET	DRAWING NUMBER
NTS	2 OF 8	D202-06-212

DUAL MICROSWITCH DEVICES DUPLICATED

SHEET 3

Notes:
1. Other configurations of dual switch units are possible. Contact E2S sales to discuss options.

GNEXCP7-BG[s][t][l][e][m][d][v][o][x]-[u][e][s]

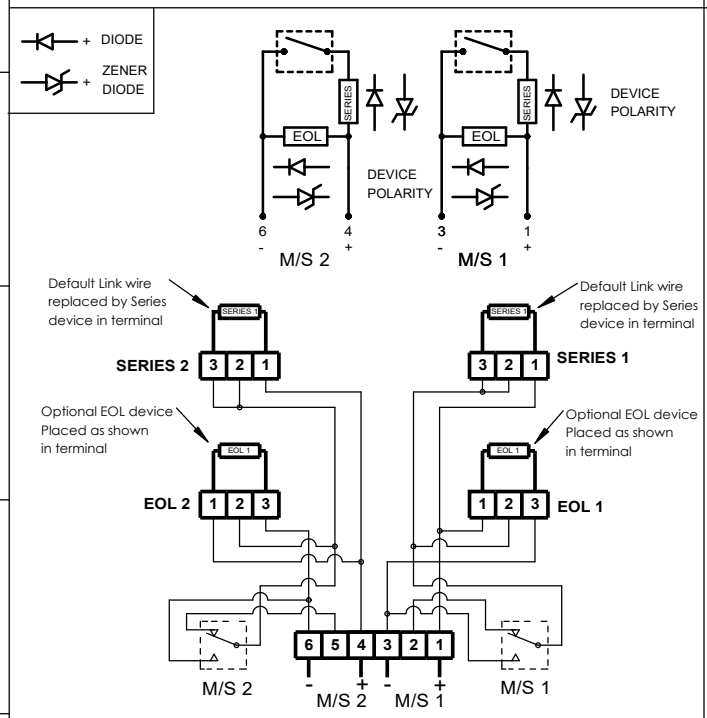
LED Indicator [u]
Series Module [s]
Switch Type [s]
Terminals [t]
Product Version [v]
Product Option [o]
EOL Module [e]

Module Device Codes	EOL	Series
Resistor	ExxxR	SxxxR
Diode	ED1	SD1
Zener Diode	ExxxZ	SxxxZ
LED	N/A	L or C

ISSUE	MOD No.	REASON - INITIAL - DATE
1	ACN0127	INTRODUCTION RNP 20-08-2023
2	ACN0178	LED C and L version claried ; LED mounted in N/O position on switch RNP 04-04-2025

DUAL SWITCH WITH EOL & SERIES DEVICES DUPLICATED — CONFIG. P3-1

SWITCH TYPE [s]	[D]	Dual
TERMINALS [t]	[P]	PCB Version
PRODUCT OPTION [o]	[2]	Duplicate EOL/Series
LED INDICATOR [u]	[N]	No LED
MODULES [e][s]	[Exxxx][Sxxxx]	EOL + Series



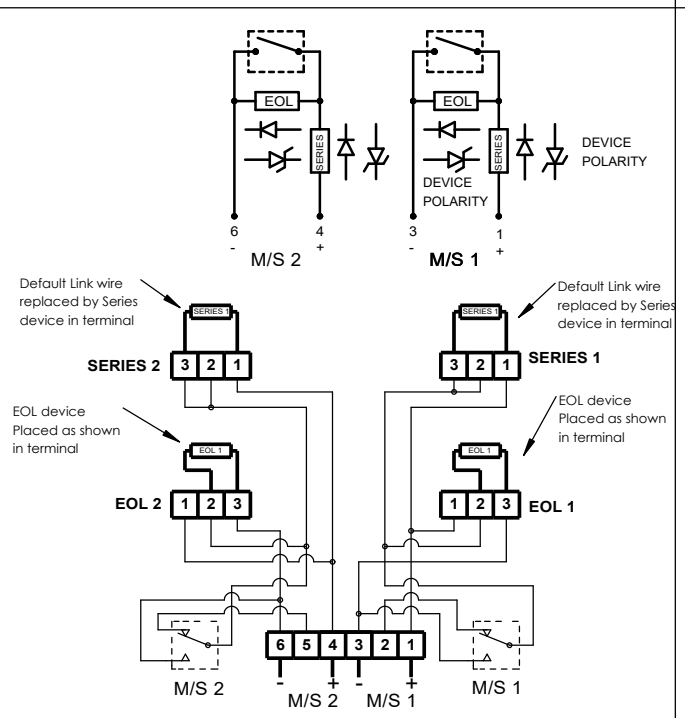
Circuit as shown in Unoperated condition

Unoperated Condition
(Glass Intact / Standby Condition)
Terminals +(1) & -(3) M/S 1 and +(4) & -(6) M/S 2 open
Terminals +(1) & (2) M/S 1 and +(4) & (5) M/S 2 closed

Operated Condition
(Glass Broken / Button pushes in)
Terminals +(1) & (2) M/S 1 and +(4) & (5) M/S 2 open
Terminals +(1) & -(3) M/S 1 and +(4) & -(6) M/S 2 closed

DUAL SWITCH WITH EOL & ALT. SERIES DEVICES DUPLICATED — CONFIG. P3-2

SWITCH TYPE [s]	[D]	Dual
TERMINALS [t]	[P]	PCB Version
PRODUCT OPTION [o]	[Y]	Alt. EOL Pos'n, duplicated
LED INDICATOR [u]	[N]	No LED
MODULES [e][s]	[Exxxx][Sxxxx]	EOL + Series



Circuit as shown in Unoperated condition

Unoperated Condition
(Glass Intact / Standby Condition)
Terminals +(1) & -(3) M/S 1 and +(4) & -(6) M/S 2 open
Terminals +(1) & (2) M/S 1 and +(4) & (5) M/S 2 closed

Operated Condition
(Glass Broken / Button pushes in)
Terminals +(1) & (2) M/S 1 and +(4) & (5) M/S 2 open
Terminals +(1) & -(3) M/S 1 and +(4) & -(6) M/S 2 closed

DRAWING TO BS8888:2000
GEOMETRIC TOLERANCES TO ISO1101:1983
LINEAR DIMENSIONAL TOLS
ANGULAR DIMENSIONAL TOLS

STANDARDS
GNExCP7 ; STExCP8 ; WP7 units with PCB

DRAWN	R.N.POTTS	DATE 20-08-2023
CHECKED	B.ISARD	DATE 20-08-2023
APPROVED	R.N.POTTS	DATE 20-08-2023

SURFACE FINISH | WEIGHT (Kg)
MATERIAL
ALTERNATIVE MATERIAL

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A3

TITLE **GNExCP7 ; STExCP8 ; WP7 CALL POINT WIRING / CIRCUIT OPERATION DIAGRAM**

SCALE	SHEET	DRAWING NUMBER
NTS	3 OF 8	D202-06-212

SINGLE MICROSWITCH LED DEVICES

SHEET 4

GNEXCP7-BG[s][t][l][e][m][d][v][o][x]-[u][e][s]

- [s] Switch Type
- [t] Terminals
- [v] Product Version
- [o] Product Option
- [u] LED Indicator
- [e] EOL Module
- [s] Series Module

Module Device Codes	EOL	Series
Resistor	ExxxR	SxxxR
Diode	ED1	SD1
Zener Diode	ExxxZ	SxxxZ
LED	N/A	L or C

ISSUE	MOD No.	REASON - INITIAL - DATE
1	ACN0127	Addition of LED version ; Options clarified RNP 20-08-2023
2	ACN0178	LED C and L version claried ; LED mounted in N/O position on switch RNP 04-04-2025

SINGLE SWITCH — CONFIG. P4 -1

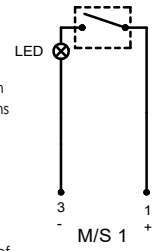
SWITCH TYPE [s]	[S]	Single
TERMINALS [t]	[P]	PCB Version
PRODUCT OPTION [o]	[1]	Default
LED INDICATOR [u]	[L]	LED with RL1

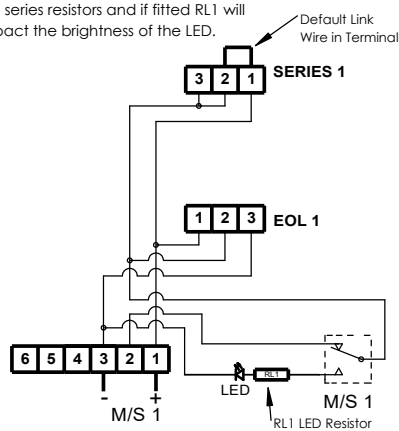
Notes - For all LED Options:

1) The LED is configured as LED indicator option 'C' for this version the LED must be protected by a series resistor of a minimum value of 1.5K Ohm or by limiting the systems current to 20mA max

2) Units have the option to add the LED current-limiting resistor RL1 LED indicatior option 'L' which is 1.5K Ohms.

3) Note that in both cases the total value of the series resistors and if fitted RL1 will impact the brightness of the LED.





Circuit as shown in Unoperated condition

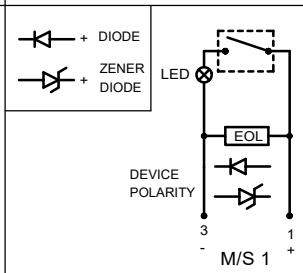
Unoperated Condition
(Glass Intact / Standby Condition)
Terminals +(1) & -(3) M/S 1 open
Terminals +(1) & (2) M/S 1 closed

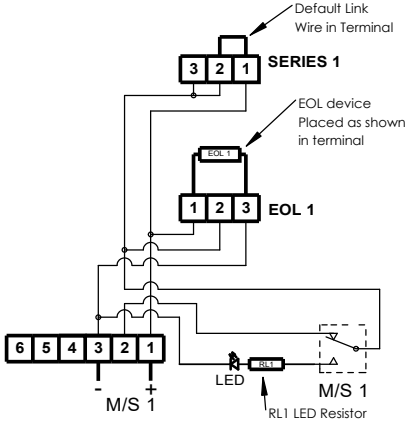
Operated Condition
(Glass Broken / Button pushes in)
Terminals +(1) & (2) M/S 1 open
Terminals +(1) & -(3) M/S 1 closed

RL1 LED Resistor position when LED Option [u] = L is used RL1 is not added when [u] = C

SINGLE SWITCH WITH SERIES DEVICES — CONFIG. P4-2

SWITCH TYPE [s]	[S]	Single
TERMINALS [t]	[P]	PCB Version
PRODUCT OPTION [o]	[1]	Default
LED INDICATOR [u]	[L]	LED with RL1
EOL MODULE [e]	[Exxxx]	EOL Device





Circuit as shown in Unoperated condition

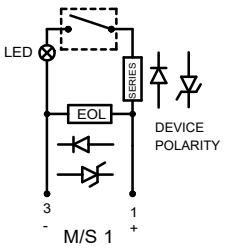
Unoperated Condition
(Glass Intact / Standby Condition)
Terminals +(1) & -(3) M/S 1 open
Terminals +(1) & (2) M/S 1 closed

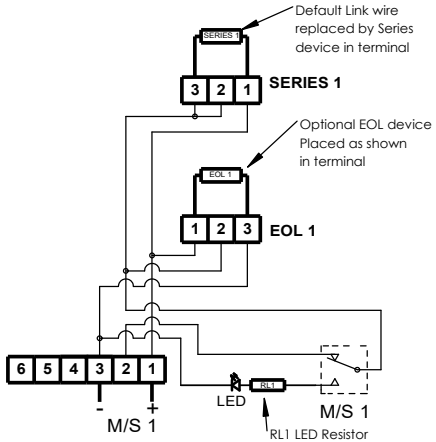
Operated Condition
(Glass Broken / Button pushes in)
Terminals +(1) & (2) M/S 1 open
Terminals +(1) & -(3) M/S 1 closed

RL1 LED Resistor position when LED Option [u] = L is used RL1 is not added when [u] = C

SINGLE SWITCH WITH EOL & SERIES DEVICES — CONFIG. P4-3

SWITCH TYPE [s]	[S]	Single
TERMINALS [t]	[P]	PCB Version
PRODUCT OPTION [o]	[1]	Default
LED INDICATOR [u]	[L]	LED with RL1
MODULES [e][s]	[Exxxx][Sxxxx]	EOL + Series





Circuit as shown in Unoperated condition

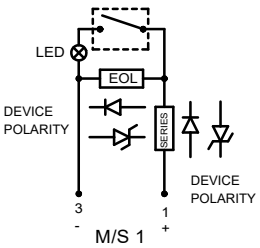
Unoperated Condition
(Glass Intact / Standby Condition)
Terminals +(1) & -(3) M/S 1 open
Terminals +(1) & (2) M/S 1 closed

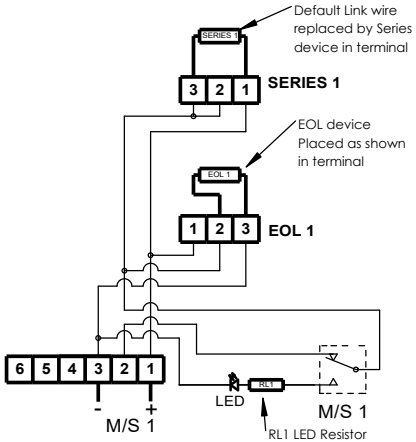
Operated Condition
(Glass Broken / Button pushes in)
Terminals +(1) & (2) M/S 1 open
Terminals +(1) & -(3) M/S 1 closed

RL1 LED Resistor position when LED Option [u] = L is used RL1 is not added when [u] = C

SINGLE SWITCH WITH EOL & ALT SERIES DEVICES — CONFIG. P4-4

SWITCH TYPE [s]	[S]	Single
TERMINALS [t]	[P]	PCB Version
PRODUCT OPTION [o]	[W]	Alt. EOL Pos'n.
LED INDICATOR [u]	[L]	LED with RL1
MODULE [e][s]	[Exxxx][Sxxxx]	EOL + Series





Circuit as shown in Unoperated condition

Unoperated Condition
(Glass Intact / Standby Condition)
Terminals +(1) & -(3) M/S 1 open
Terminals +(1) & (2) M/S 1 closed

Operated Condition
(Glass Broken / Button pushes in)
Terminals +(1) & (2) M/S 1 open
Terminals +(1) & -(3) M/S 1 closed

RL1 LED Resistor position when LED Option [u] = L is used RL1 is not added when [u] = C

DRAWING TO BS8888:2000
GEOMETRIC TOLERANCES TO ISO1101:1983
LINEAR DIMENSIONAL TOLS
ANGULAR DIMENSIONAL TOLS

STANDARDS
GNExCP7 ; STExCP8 ; WP7 units with PCB

DRAWN	R.N.POTTS	DATE 20-08-2023
CHECKED	B.ISARD	DATE 20-08-2023
APPROVED	R.N.POTTS	DATE 20-08-2023

SURFACE FINISH | WEIGHT (Kg)
MATERIAL
ALTERNATIVE MATERIAL

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TITLE **GNExCP7 ; STExCP8 ; WP7 CALL POINT WIRING / CIRCUIT OPERATION DIAGRAM**

SCALE	SHEET	DRAWING NUMBER
NTS	4 OF 8	D202-06-212

DUAL MICROSWITCH LED DEVICES

SHEET 5

GNEXCP7-BG[s][t][l][e][m][d][v][o][x]-[u][e][s]

- [u] LED Indicator
- [s] Series Module
- [e] EOL Module
- [o] Product Option
- [v] Product Version
- [t] Terminals
- [s] Switch Type

Module Device Codes		
	EOL	Series
Resistor	ExxxR	SxxxR
Diode	ED1	SD1
Zener Diode	ExxxZ	SxxxZ
LED	N/A	L or C

ISSUE	MOD No.	REASON - INITIAL - DATE
1	ACN0127	INTRODUCTION RNP 20-08-2023
2	ACN0178	LED C and L version claried ; LED mounted in N/O position on switch RNP 04-04-2025

DUAL SWITCH WITH LED — CONFIG. P5-1

SWITCH TYPE [s]	[D]	Dual
TERMINALS [t]	[P]	PCB Version
PRODUCT OPTION [o]	[1]	Default
LED INDICATOR [u]	[C] or [L]	C = LED without RL1

DUAL SWITCH WITH LED, EOL & SERIES DEVICES — CONFIG. P5-2

SWITCH TYPE [s]	[D]	Dual
TERMINALS [t]	[P]	PCB Version
PRODUCT OPTION [o]	[1]	Default
LED INDICATOR [u]	[C] or [L]	C = LED without RL1
MODULES [e][s]	[Exxxx][Sxxxx]	EOL + Series

DUAL SWITCH WITH LED, EOL & ALT. SERIES DEVICES — CONFIG. P5-3

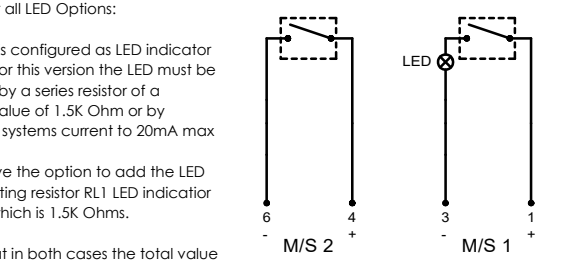
SWITCH TYPE [s]	[D]	Dual
TERMINALS [t]	[P]	PCB Version
PRODUCT OPTION [o]	[W]	Alt. EOL Pos'n.
LED INDICATOR [u]	[C] or [L]	C = LED without RL1
MODULES [e][s]	[Exxxx][Sxxxx]	EOL + Series

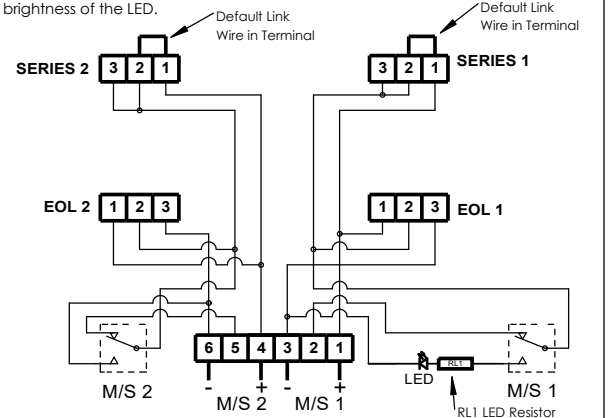
Notes - For all LED Options:

1) The LED is configured as LED indicator option 'C' for this version the LED must be protected by a series resistor of a minimum value of 1.5K Ohm or by limiting the systems current to 20mA max

2) Units have the option to add the LED current-limiting resistor RL1 LED indicatior option 'L' which is 1.5K Ohms.

3) Note that in both cases the total value of the series resistors and if fitted RL1 will impact the brightness of the LED.





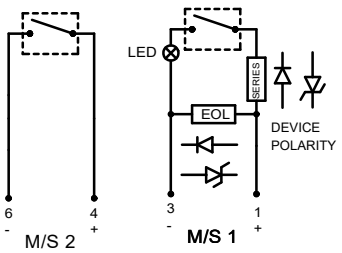
RL1 LED Resistor position when LED Option [u] = L is used RL1 is not added when [u] = C

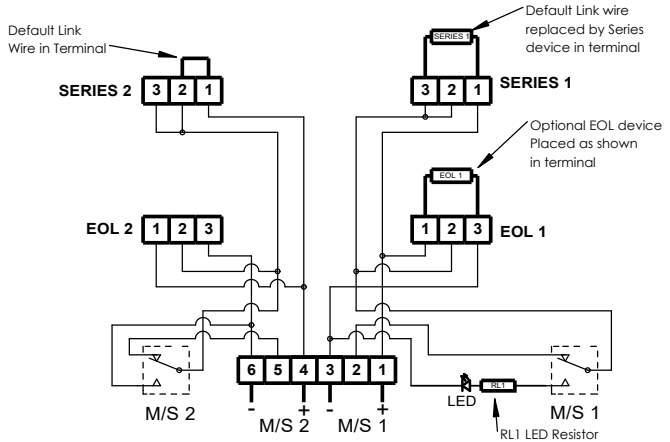
Circuit as shown in Unoperated condition

Unoperated Condition
(Glass Intact / Standby Condition)
Terminals +(1) & -(3) M/S 1 and +(4) & -(6) M/S 2 open
Terminals +(1) & (2) M/S 1 and +(4) & (5) M/S 2 closed

Operated Condition
(Glass Broken / Button pushes in)
Terminals +(1) & (2) M/S 1 and +(4) & (5) M/S 2 open
Terminals +(1) & -(3) M/S 1 and +(4) & -(6) M/S 2 closed

+ DIODE
+ ZENER DIODE



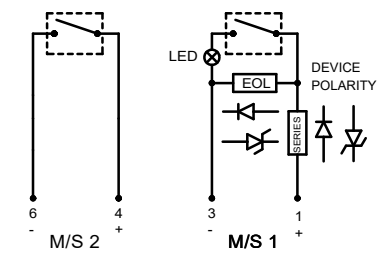


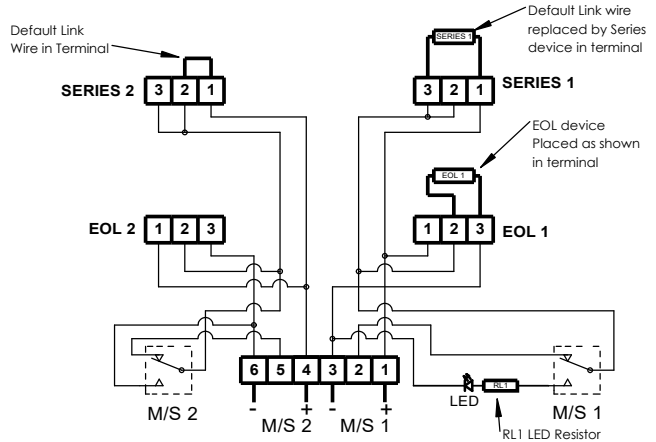
RL1 LED Resistor position when LED Option [u] = L is used RL1 is not added when [u] = C

Circuit as shown in Unoperated condition

Unoperated Condition
(Glass Intact / Standby Condition)
Terminals +(1) & -(3) M/S 1 and +(4) & -(6) M/S 2 open
Terminals +(1) & (2) M/S 1 and +(4) & (5) M/S 2 closed

Operated Condition
(Glass Broken / Button pushes in)
Terminals +(1) & (2) M/S 1 and +(4) & (5) M/S 2 open
Terminals +(1) & -(3) M/S 1 and +(4) & -(6) M/S 2 closed





RL1 LED Resistor position when LED Option [u] = L is used RL1 is not added when [u] = C

Circuit as shown in Unoperated condition

Unoperated Condition
(Glass Intact / Standby Condition)
Terminals +(1) & -(3) M/S 1 and +(4) & -(6) M/S 2 open
Terminals +(1) & (2) M/S 1 and +(4) & (5) M/S 2 closed

Operated Condition
(Glass Broken / Button pushes in)
Terminals +(1) & (2) M/S 1 and +(4) & (5) M/S 2 open
Terminals +(1) & -(3) M/S 1 and +(4) & -(6) M/S 2 closed

DRAWING TO BS8888:2000
GEOMETRIC TOLERANCES TO ISO1101:1983
LINEAR DIMENSIONAL TOLS
ANGULAR DIMENSIONAL TOLS

STANDARDS
GNExCP7 ; STExCP8 ; WP7 units with PCB

DRAWN	R.N.POTTS	DATE 20-08-2023
CHECKED	B.ISARD	DATE 20-08-2023
APPROVED	R.N.POTTS	DATE 20-08-2023

SURFACE FINISH | WEIGHT (Kg)

MATERIAL

ALTERNATIVE MATERIAL

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A3

TITLE **GNExCP7 ; STExCP8 ; WP7 CALL POINT WIRING / CIRCUIT OPERATION DIAGRAM**

SCALE	SHEET	DRAWING NUMBER
NTS	5 OF 8	D202-06-212

DUAL MICROSWITCH LED & DEVICES DUPLICATED

SHEET 6

GNEXCP7-BG[s][t][l][e][m][d][v][o][x]-[u][e][s]

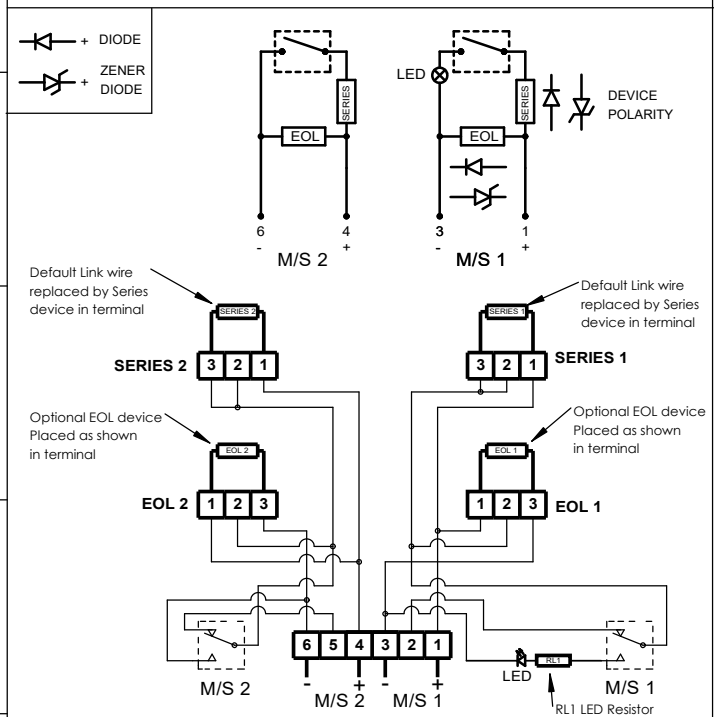
Switch Type [s] | Terminals [t] | Product Version [v] | Product Option [o] | LED Indicator [u] | EOL Module [e] | Series Module [s]

Module Device Codes		
	EOL	Series
Resistor	ExxxR	SxxxR
Diode	ED1	SD1
Zener Diode	ExxxZ	SxxxZ
LED	N/A	L or C

ISSUE	MOD No.	REASON - INITIAL - DATE
1	ACN0127	INTRODUCTION RNP 20-08-2023
2	ACN0178	LED C and L version claried ; LED mounted in N/O position on switch RNP 04-04-2025

DUAL SWITCH WITH LED, EOL & SERIES DEVICES DUPLICATED — CONFIG. P6-1

SWITCH TYPE [s]	[D]	Dual
TERMINALS [t]	[P]	PCB Version
PRODUCT OPTION [o]	[2]	Duplicate EOL/Series
LED INDICATOR [u]	[C] or [L]	C = LED without RL1
MODULES [e][s]	[Exxxx][Sxxxx]	EOL + Series



Circuit as shown in Unoperated condition

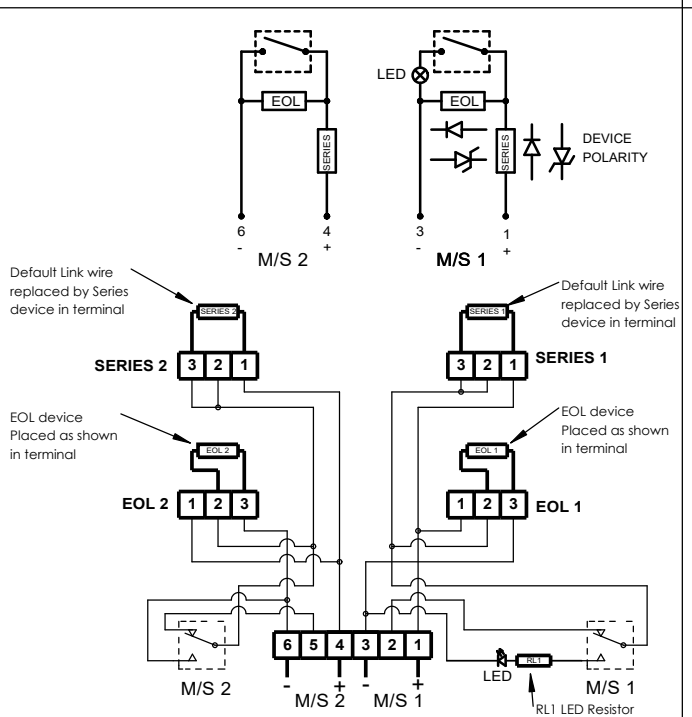
Unoperated Condition
(Glass Intact / Standby Condition)
Terminals +(1) & -(3) M/S 1 and +(4) & -(6) M/S 2 open
Terminals +(1) & (2) M/S 1 and +(4) & (5) M/S 2 closed

Operated Condition
(Glass Broken / Button pushes in)
Terminals +(1) & (2) M/S 1 and +(4) & (5) M/S 2 open
Terminals +(1) & -(3) M/S 1 and +(4) & -(6) M/S 2 closed

RL1 LED Resistor position when LED Option [u] = L is used RL1 is not added when [u] = C

DUAL SWITCH WITH LED, EOL & ALT. SERIES DEVICES DUPLICATED — CONFIG. P6-2

SWITCH TYPE [s]	[D]	Dual
TERMINALS [t]	[P]	PCB Version
PRODUCT OPTION [o]	[Y]	Alt. EOL Pos'n duplicated
LED INDICATOR [u]	[C] or [L]	C = LED without RL1
MODULES [e][s]	[Exxxx][Sxxxx]	EOL + Series



Circuit as shown in Unoperated condition

Unoperated Condition
(Glass Intact / Standby Condition)
Terminals +(1) & -(3) M/S 1 and +(4) & -(6) M/S 2 open
Terminals +(1) & (2) M/S 1 and +(4) & (5) M/S 2 closed

Operated Condition
(Glass Broken / Button pushes in)
Terminals +(1) & (2) M/S 1 and +(4) & (5) M/S 2 open
Terminals +(1) & -(3) M/S 1 and +(4) & -(6) M/S 2 closed

RL1 LED Resistor position when LED Option [u] = L is used RL1 is not added when [u] = C

Notes - For all LED Options:

1) The LED is configured as LED indicator option 'C' for this version the LED must be protected by a series resistor of a minimum value of 1.5K Ohm or by limiting the systems current to 20mA max

2) Units have the option to add the LED current-limiting resistor RL1 LED indicatior option 'L' which is 1.5K Ohms.

3) Note that in both cases the total value of the series resistors and if fitted RL1 will impact the brightness of the LED.

DRAWING TO BS8888:2000
GEOMETRIC TOLERANCES TO ISO1101:1983
LINEAR DIMENSIONAL TOLS
ANGULAR DIMENSIONAL TOLS

STANDARDS
GNExCP7 ; STExCP8 ; WP7 units with PCB

DRAWN	R.N.POTTS	DATE 20-08-2023
CHECKED	B.ISARD	DATE 20-08-2023
APPROVED	R.N.POTTS	DATE 20-08-2023

SURFACE FINISH | WEIGHT (Kg)
MATERIAL
ALTERNATIVE MATERIAL

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TITLE **GNExCP7 ; STExCP8 ; WP7 CALL POINT WIRING / CIRCUIT OPERATION DIAGRAM**

SCALE	SHEET	DRAWING NUMBER
NTS	6 OF 8	**D202-06-212**

DUAL MICROSWITCH IN PARALLEL, & DEVICES

SHEET 7

GNEXCP7-BG[s][t][l][e][m][d][v][o][x]-[u][e][s]

Switch Type [s] | Terminals [t] | Product Version [v] | Product Option [o] | LED Indicator [u] | EOL Module [e] | Series Module [s]

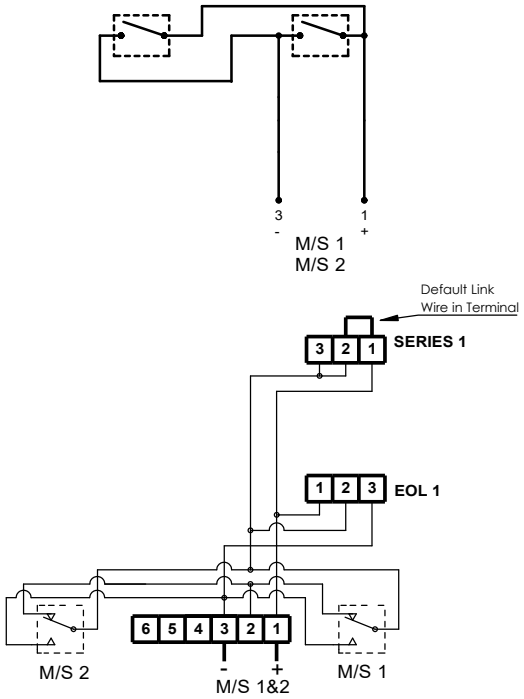
Module Device Codes		
	EOL	Series
Resistor	ExxxR	SxxxR
Diode	ED1	SD1
Zener Diode	ExxxZ	SxxxZ
LED	N/A	L or C

ISSUE	MOD No.	REASON - INITIAL - DATE
1	ACN0127	INTRODUCTION RNP 20-08-2023
2	ACN0178	LED C and L version claried ; LED mounted in N/O position on switch RNP 04-04-2025

DUAL SWITCH PARALLEL — CONFIG. P7-1

SWITCH TYPE [s]	[D]	Dual
TERMINALS [t]	[P]	PCB Version
PRODUCT OPTION [o]	[P]	Parallel Wiring
LED INDICATOR [u]	[N]	No LED

Note :- Use when EOL and/or series devices are fitted during installation, or if no series devices are required.



Circuit as shown in Unoperated condition

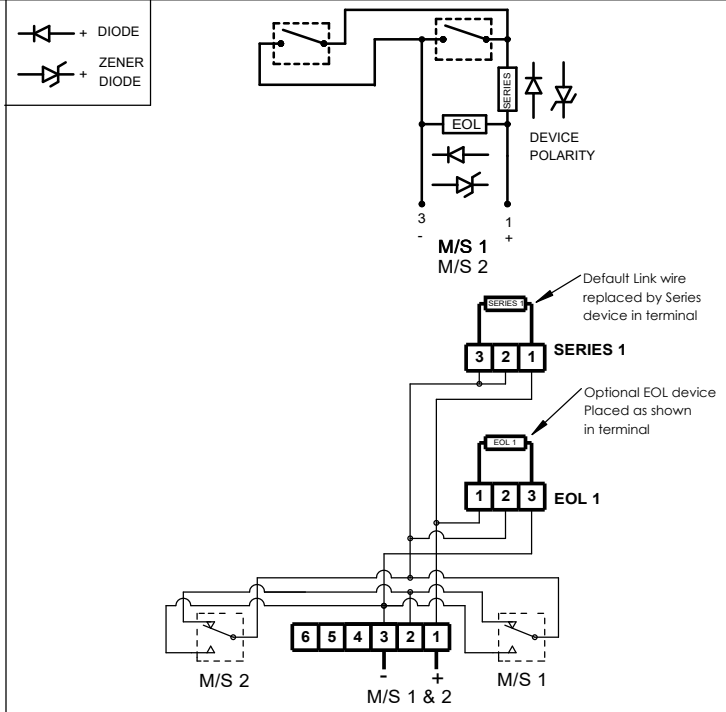
Unoperated Condition
(Glass Intact / Standby Condition)
Terminals +(1) & -(3) M/S 1 and M/S 2 open
Terminals +(1) & (2) M/S 1 and M/S 2 closed

Operated Condition
(Glass Broken / Button pushes in)
Terminals +(1) & (2) M/S 1 and M/S 2 open
Terminals +(1) & -(3) M/S 1 and M/S 2 closed

DUAL SWITCH, PARALLEL WITH EOL & SERIES DEVICES — CONFIG. P7-2

SWITCH TYPE [s]	[D]	Dual
TERMINALS [t]	[P]	PCB Version
PRODUCT OPTION [o]	[P]	Parallel Wiring
LED INDICATOR [u]	[N]	No LED
MODULES [e] [s]	[Exxxx] [Sxxxx]	EOL + Series

+ DIODE
+ ZENER DIODE



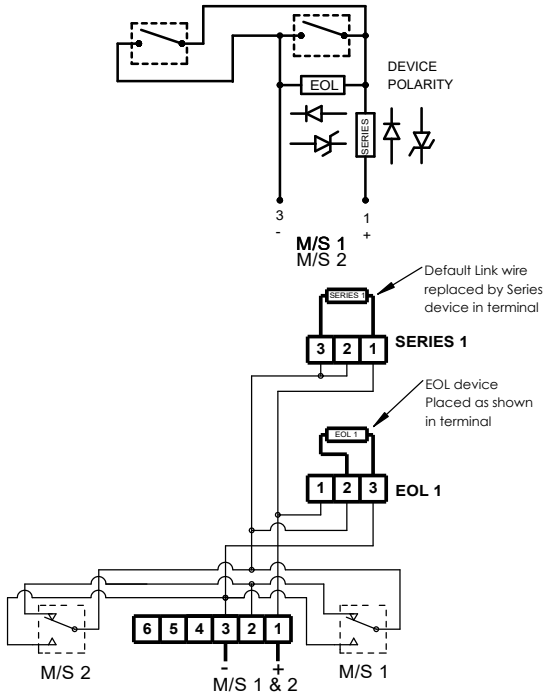
Circuit as shown in Unoperated condition

Unoperated Condition
(Glass Intact / Standby Condition)
Terminals +(1) & -(3) M/S 1 and M/S 2 open
Terminals +(1) & (2) M/S 1 and M/S 2 closed

Operated Condition
(Glass Broken / Button pushes in)
Terminals +(1) & (2) M/S 1 and M/S 2 open
Terminals +(1) & -(3) M/S 1 and M/S 2 closed

DUAL SWITCH, PARALLEL WITH EOL & ALT. SERIES DEVICES — CONFIG. P7-3

SWITCH TYPE [s]	[D]	Dual
TERMINALS [t]	[P]	PCB Version
PRODUCT OPTION [o]	[V]	Parallel Wiring Alt. EOL Pos'n.
LED INDICATOR [u]	[N]	No LED
MODULES [e] [s]	[Exxxx] [Sxxxx]	EOL + Series



Circuit as shown in Unoperated condition

Unoperated Condition
(Glass Intact / Standby Condition)
Terminals +(1) & -(3) M/S 1 and M/S 2 open
Terminals +(1) & (2) M/S 1 and M/S 2 closed

Operated Condition
(Glass Broken / Button pushes in)
Terminals +(1) & (2) M/S 1 and M/S 2 open
Terminals +(1) & -(3) M/S 1 and M/S 2 closed

DRAWING TO BS8888:2000
GEOMETRIC TOLERANCES TO ISO1101:1983
LINEAR DIMENSIONAL TOLS
ANGULAR DIMENSIONAL TOLS

STANDARDS
GNExCP7 ; STExCP8 ; WP7 units with PCB

DRAWN	R.N.POTTS	DATE 20-08-2023
CHECKED	B.ISARD	DATE 20-08-2023
APPROVED	R.N.POTTS	DATE 20-08-2023

SURFACE FINISH | WEIGHT (Kg)
MATERIAL
ALTERNATIVE MATERIAL

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TITLE **GNExCP7 ; STExCP8 ; WP7 CALL POINT WIRING / CIRCUIT OPERATION DIAGRAM**

SCALE	SHEET	DRAWING NUMBER
NTS	7 OF 8	D202-06-212

DUAL MICROSWITCH IN PARALLEL, LED & DEVICES

SHEET 8

GNEXCP7-BG[s][t][l][e][m][d][v][o][x]-[u][e][s]

Switch Type [s] | Terminals [t] | Product Version [v] | Product Option [o] | LED Indicator [u] | EOL Module [e] | Series Module [s]

Module Device Codes		
	EOL	Series
Resistor	ExxxR	SxxxR
Diode	ED1	SD1
Zener Diode	ExxxZ	SxxxZ
LED	N/A	L or C

ISSUE	MOD No.	REASON - INITIAL - DATE
1	ACN0127	INTRODUCTION RNP 20-08-2023
2	ACN0178	LED C and L version claried ; LED mounted in N/O position on switch RNP 04-04-2025

DUAL SWITCH PARALLEL WITH LED — CONFIG. P8-1

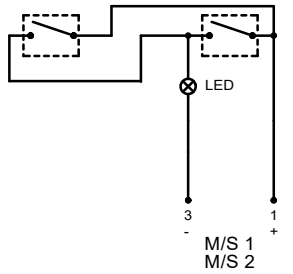
SWITCH TYPE [s]	[D]	Dual
TERMINALS [t]	[P]	PCB Version
PRODUCT OPTION [o]	[P]	Parallel Wiring
LED INDICATOR [u]	[C] or [L]	C = LED without RL1

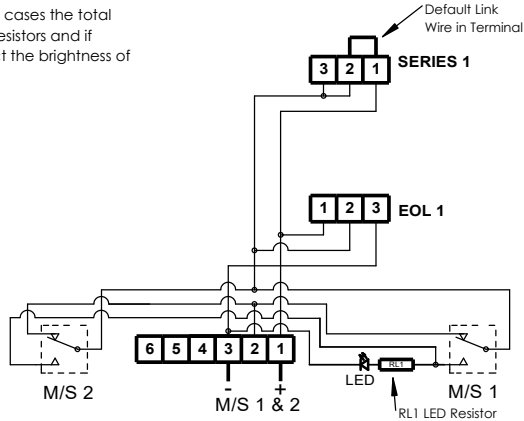
Notes - For all LED Options:

1) The LED is configured as LED indicator option 'C' for this version the LED must be protected by a series resistor of a minimum value of 1.5K Ohm or by limiting the systems current to 20mA max

2) Units have the option to add the LED current-limiting resistor RL1 LED indicatior option 'L' which is 1.5K Ohms.

3) Note that in both cases the total value of the series resistors and if fitted RL1 will impact the brightness of the LED.





RL1 LED Resistor position when LED Option [u] = L is used RL1 is not added when [u] = C

Circuit as shown in Unoperated condition

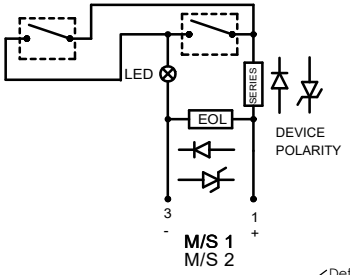
Unoperated Condition
(Glass Intact / Standby Condition)
Terminals +(1) & -(3) M/S 1 and M/S 2 open
Terminals +(1) & (2) M/S 1 and M/S 2 closed

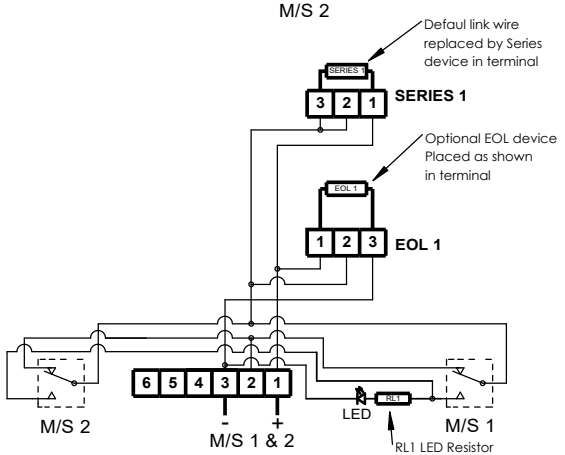
Operated Condition
(Glass Broken / Button pushes in)
Terminals +(1) & (2) M/S 1 and M/S 2 open
Terminals +(1) & -(3) M/S 1 and M/S 2 closed

DUAL SWITCH PARALLEL WITH LED, EOL & SERIES DEVICES — CONFIG. P8-2

SWITCH TYPE [s]	[D]	Dual
TERMINALS [t]	[P]	PCB Version
PRODUCT OPTION [o]	[P]	Parallel Wiring
LED INDICATOR [u]	[C] or [L]	C = LED without RL1
MODULES [e][s]	[Exxxx][Sxxxx]	EOL and/or Series

+ DIODE
+ ZENER DIODE





RL1 LED Resistor position when LED Option [u] = L is used RL1 is not added when [u] = C

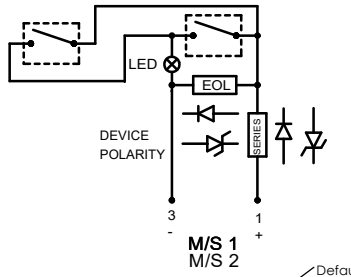
Circuit as shown in Unoperated condition

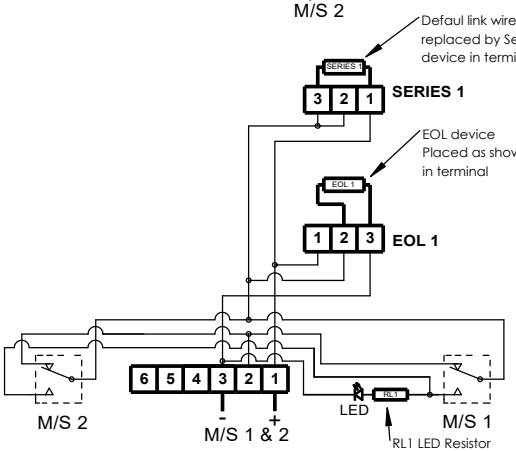
Unoperated Condition
(Glass Intact / Standby Condition)
Terminals +(1) & -(3) M/S 1 and M/S 2 open
Terminals +(1) & (2) M/S 1 and M/S 2 closed

Operated Condition
(Glass Broken / Button pushes in)
Terminals +(1) & (2) M/S 1 and M/S 2 open
Terminals +(1) & -(3) M/S 1 and M/S 2 closed

DUAL SWITCH PARALLEL WITH LED, EOL & ALT. SERIES DEVICES — CONFIG. P8-3

SWITCH TYPE [s]	[D]	Dual
TERMINALS [t]	[P]	PCB Version
PRODUCT OPTION [o]	[V]	Parallel Wiring Alt. EOL Pos'n.
LED INDICATOR [u]	[C] or [L]	C = LED without RL1
MODULES [e][s]	[Exxxx][Sxxxx]	EOL and/or Series





RL1 LED Resistor position when LED Option [u] = L is used RL1 is not added when [u] = C

Circuit as shown in Unoperated condition

Unoperated Condition
(Glass Intact / Standby Condition)
Terminals +(1) & -(3) M/S 1 and M/S 2 open
Terminals +(1) & (2) M/S 1 and M/S 2 closed

Operated Condition
(Glass Broken / Button pushes in)
Terminals +(1) & (2) M/S 1 and M/S 2 open
Terminals +(1) & -(3) M/S 1 and M/S 2 closed

DRAWING TO BS8888:2000
GEOMETRIC TOLERANCES TO ISO1101:1983
LINEAR DIMENSIONAL TOLS
ANGULAR DIMENSIONAL TOLS

STANDARDS
GNExCP7 ; STExCP8 ; WP7 units with PCB

DRAWN	R.N.POTTS	DATE 20-08-2023
CHECKED	B.ISARD	DATE 20-08-2023
APPROVED	R.N.POTTS	DATE 20-08-2023

SURFACE FINISH | WEIGHT (Kg)

MATERIAL

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A3

TITLE **GNExCP7 ; STExCP8 ; WP7 CALL POINT WIRING / CIRCUIT OPERATION DIAGRAM**

SCALE	SHEET	DRAWING NUMBER
NTS	8 OF 8	**D202-06-212**

EU Declaration of Conformity

Manufacturer:	European Safety Systems Ltd. Impress House, Mansell Road, Acton London, W3 7QH United Kingdom
Authorised Representative:	E2S Warnsignaltechnik UG Charlottenstrasse 45-51 72764 Reutlingen Germany
Equipment Type:	STExCP8-BG-S, STExCP8-BG-D, STExCP8-BG-S-L or C, STExCP8-BG-D-L or C STExCP8-PB-S, STExCP8-PM-S, STExCP8-PT-S, STExCP8-PB-S-L or C, STExCP8-PM-S-L or C, STExCP8-PT-S-L or C, STExCP8-PB-D, STExCP8-PM-D, STExCP8-PT-D STExCP8-PB-D-L or C, STExCP8-PM-D-L or C, STExCP8-PT-D-L or C

Directive 2014/34/EU: Equipment and Protective Systems for use in Potentially Explosive Atmospheres (ATEX)

Notified Body for EU type Examination (Module B):	UL International Demko A/S Notified Body No.: 0539 Borupvang 5A, 2750 Ballerup, Denmark
EU-type Examination Certificate (Module B):	DEMKO 15ATEX1589X
Notified Body for Quality Assurance Notification / Conformity to EU-type based on quality assurance of the production process (Module D):	Sira Certification Service Notified Body No.: 2813 CSA Group Netherlands B.V, Utrechtseweg 310, 6812 AR, Arnhem, Netherlands
Quality Assurance Notification (Module D):	SIRA 05 ATEX M342
Provisions fulfilled by the equipment:	II 2G Ex db IIC T4 Gb II 2G Ex db IIC T5 Gb II 2G Ex db IIC T6 Gb
Standards applied:	EN 60079-0: 2012 + A11: 2013 EN 60079-1: 2014

Directive 2014/30/EU: Electromagnetic Compatibility Directive (EMC)

Standards applied:	EN 61000-6-1:2007 EN 61000-6-2:2005 EN 61000-6-3:2007 / A1:2011 / AC: 2012 EN 61000-6-4:2007 / A1: 2011

Directive 2011/65/EU: Restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

The product and all the components contained within it are in accordance with the restriction of the use of hazardous substances in electrical and electronic equipment, including amendment by Directive 2015/863/EU.

Regulation (EC) 1907/2006: Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

The product and all the components contained within it are free from substances of very high concern.

Other Standards and Regulations

EN 60529:1992+A2:2013 - Degrees of protection provided by enclosures (IP code) – enclosure rated IP66

EU Declaration of Conformity

On behalf of European Safety Systems Ltd., I declare that, on the date the equipment accompanied by this declaration is placed on the market, the equipment conforms with all technical and regulatory requirements of the above listed directives, regulations and standards.

This Declaration is issued under the sole responsibility of the manufacturer.

Martin Streetz
Quality Assurance Manager

Document No.: DC-071_Issue_E
Date and Place of Issue: London 10/09/2023

UKCA Declaration of Conformity

Manufacturer:	European Safety Systems Ltd. Impress House, Mansell Road, Acton London, W3 7QH United Kingdom
Equipment Type:	STExCP8-BG-S, STExCP8-BG-D, STExCP8-BG-S-L or C, STExCP8-BG-D-L or C STExCP8-PB-S, STExCP8-PM-S, STExCP8-PT-S, STExCP8-PB-S-L or C, STExCP8-PM-S-L or C, STExCP8-PT-S-L or C, STExCP8-PB-D, STExCP8-PM-D, STExCP8-PT-D STExCP8-PB-D-L or C, STExCP8-PM-D-L or C, STExCP8-PT-D-L or C

Directive UKSI 2016:1107 (as amended by UKSI 2019:696) – Schedule 3A, Part 1 : Product or Protective System Intended for use in Potentially Explosive Atmospheres (UKCA)

Notified Body for UK type Examination (Module B):	UL International (UK) Ltd Notified Body No.: 0843 Unit 1-3 Horizon Kingsland Business Park, Wade Road, Basingstoke, Hampshire RG24 8AH UK
UK-type Examination Certificate (Module B):	UL21UKEX2133X
Notified Body for Quality Assurance Notification / Conformity to EU-type based on quality assurance of the production process (Module D):	Sira Certification Service Notified Body No.: 0518 Rake Lane, Eccleston, Chester CH4 9JN, UK
Quality Assurance Notification (Module D):	CSAE 22UKQAN0046
Provisions fulfilled by the equipment:	II 2G Ex db IIC T4 Gb II 2G Ex db IIC T5 Gb II 2G Ex db IIC T6 Gb
Standards applied:	EN IEC 60079-0:2018 EN 60079-1: 2014

Directive 2014/30/EU: Electromagnetic Compatibility Directive (EMC)

Standards applied:	EN 61000-6-1:2007 EN 61000-6-2:2005 EN 61000-6-3:2007 / A1:2011 / AC: 2012 EN 61000-6-4:2007 / A1: 2011

Directive 2011/65/EU: Restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

The product and all the components contained within it are in accordance with the restriction of the use of hazardous substances in electrical and electronic equipment, including amendment by Directive 2015/863/EU.

Regulation (EC) 1907/2006: Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

The product and all the components contained within it are free from substances of very high concern.

Other Standards and Regulations

EN 60529:1992+A2:2013 - Degrees of protection provided by enclosures (IP code) – enclosure rated IP66

UKCA Declaration of Conformity

On behalf of European Safety Systems Ltd., I declare that, on the date the equipment accompanied by this declaration is placed on the market, the equipment conforms with all technical and regulatory requirements of the above listed directives, regulations and standards.

This Declaration is issued under the sole responsibility of the manufacturer.

Martin Streetz
Quality Assurance Manager

Document No.: DC-101_Issue_B
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