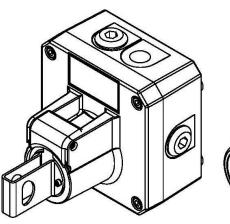
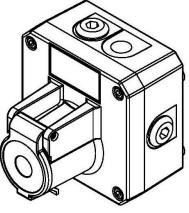


# INSTRUCTION MANUAL (WEATHER PROOF) WP7 PB/PM/PT CALL POINTS





## 1) Certification & Ratings

All units have a rating label, which carries the following important information: -

Model No.:	WP7-PB-S (Single Switch) WP7-PB-D (Dual Switch)
	WP7-PM-S (Single Switch) WP7-PM-D (Dual Switch)
	WP7-PT-S (Single Switch) WP7-PT-D (Dual Switch)
CE Marking	CE
UKCA Marking	UK CA

IP Rating: IP66/67 to EN/IEC60529

Ambient Temperature Range: -55°C to +75°C

## 2) 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 3.

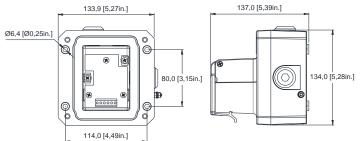


Fig. 1 View of base unit showing fixing centres (in mm).

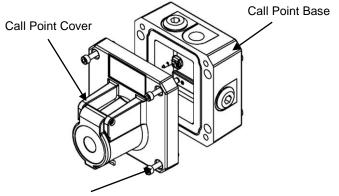
### 3) Access to the Enclosure



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

To access the chamber, remove the four off M6 x 50 stainless steel cap head cover bolts

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.



M6x50 Cap head Cover Bolts - 4 off Positions

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.

# 4) 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.

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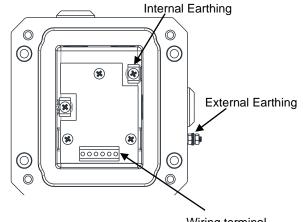


Fig 3 Earth terminals

Wiring terminal

# 5) Power Supply Selection

#### **Electrical Ratings**

Input Voltage: AC voltage 250V Max Current 5.0A Max DC voltage 75V Max Current 0.75A Max DC voltage 50V Max Current 1.0A Max DC voltage 30V Max Current 5.0A Max Resistive Load; Inductive Load 3.0A Max DC voltage 12V Max Current 5.0A Max

Electrical connections are to be made into the terminal blocks / DIN rail provided. See Section 8 for wiring options.

#### 6) Selection of Cable. Cable Glands, Blanking Elements & Adapters

The cable gland entries have an M20 x 1.5 entry thread.

The WP7 Call Point range can be supplied with the following types of adapters:

M20 to ½" NPT M20 to ¾" NPT M20 to M25

## 7) Cable Connections

Electrical Connections are to be made into the terminal blocks using solid or stranded wire. See section 3 of this manual for access to the enclosure.

Wires having a cross sectional area between 0.5 mm<sup>2</sup> to 2.5mm<sup>2</sup> (AWG 20 - 14) can be connected to each terminal way.

If an input and output wire is required the 2-off Live/Neutral or +/- terminals can be used. If fitting 2-off wires to one terminal way the sum of the 2-off wires must be a maximum cross sectional area of 2.5mm<sup>2</sup>.

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

Terminal screws need to be tightened down with a tightening torque of 0.45 Nm / 5 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 2.5mm<sup>2</sup>.

# 8) Wiring Unit

The units come with two options for the terminal block.

A DIN rail version which has 8-way connection and allows for full configuration at factory or limited wiring of EOL devices by customer.

The PCB Terminal Version has a 6-way connector but is designed to allow for full configuration with Series and EOL devices in a number of wiring configurations.

For EOL and Series device limitations and configurations see Section 9.

For full wiring details see wiring schematic D234-06-001.

#### Wiring Connections for 8-Way DIN Rail

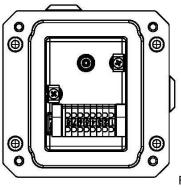


Fig. 4 DIN Rail in Base

#### Wiring Connections For 6-Way PCB Terminal Board

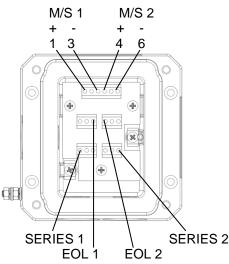


Fig. 5 PCB Terminal Block in Base

See section 9 and pages 5, 6 & 7 for details of adding Series and EOL devices on the PCB. This can either be done at the order stage or added to the correct terminal blocks afterward.

# 9) End-of-Line and Series Devices

All models can be fitted with series resistors, end-of-line monitoring resistors, monitoring diodes, zener diodes and also specific customer modules if supplied with direct current up to 50Vdc.

The following table 1 shows limitations for all possible variations:

	Suggested EOL/ Series Device Type
Type of component fitted	Value
End-of-Line Resistor	330Ω
	Suggested Min.
End-of-Line Diode	2W
Type 1N5401	
Series Resistor	330Ω
	Suggested Min.
Series Zener Diode	3.3V
Type 1N5333B	4.7V
Suggested Sizes	5.1V
	5.6V
	6.2V
	6.8V
	10V
	12V

EOL (End of line) device;

- resistor ExxxR
  - diode ED1
- zener ExxxZ
- Series (In line) device;
  - resistor SxxxR
    diode SD1
- ExxxZ
- zener SxxxZ LED

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

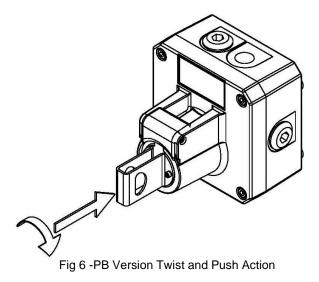
The unit can be wired with a maximum of 4 module devices. Please refer to wiring schematic D234-06-001

When customer is fitting EOL or Series device ensure device leads are insulated or routed so not to create an electrical short.

### 10) Testing unit operation

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

The -PB plunger needs to be firstly twisted by 90 degrees clockwise to position shown and then pressed in.



The -PM and -PT need to have the protective flip lid opened first and then the main plunger pressed in.

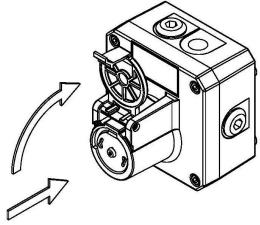
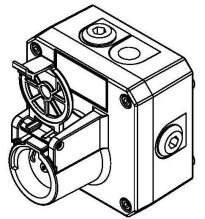


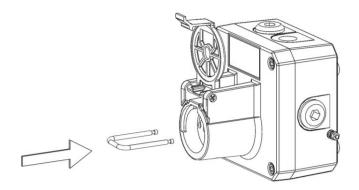
Fig 7 -PT & -PM Versions Push Action

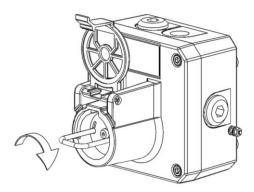
On –PM versions the operation is momentary and as such the plunger will reset automatically once the pressure on the plunger is released.

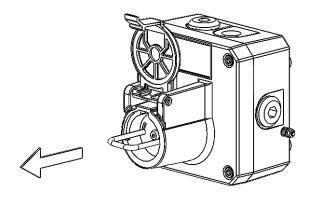


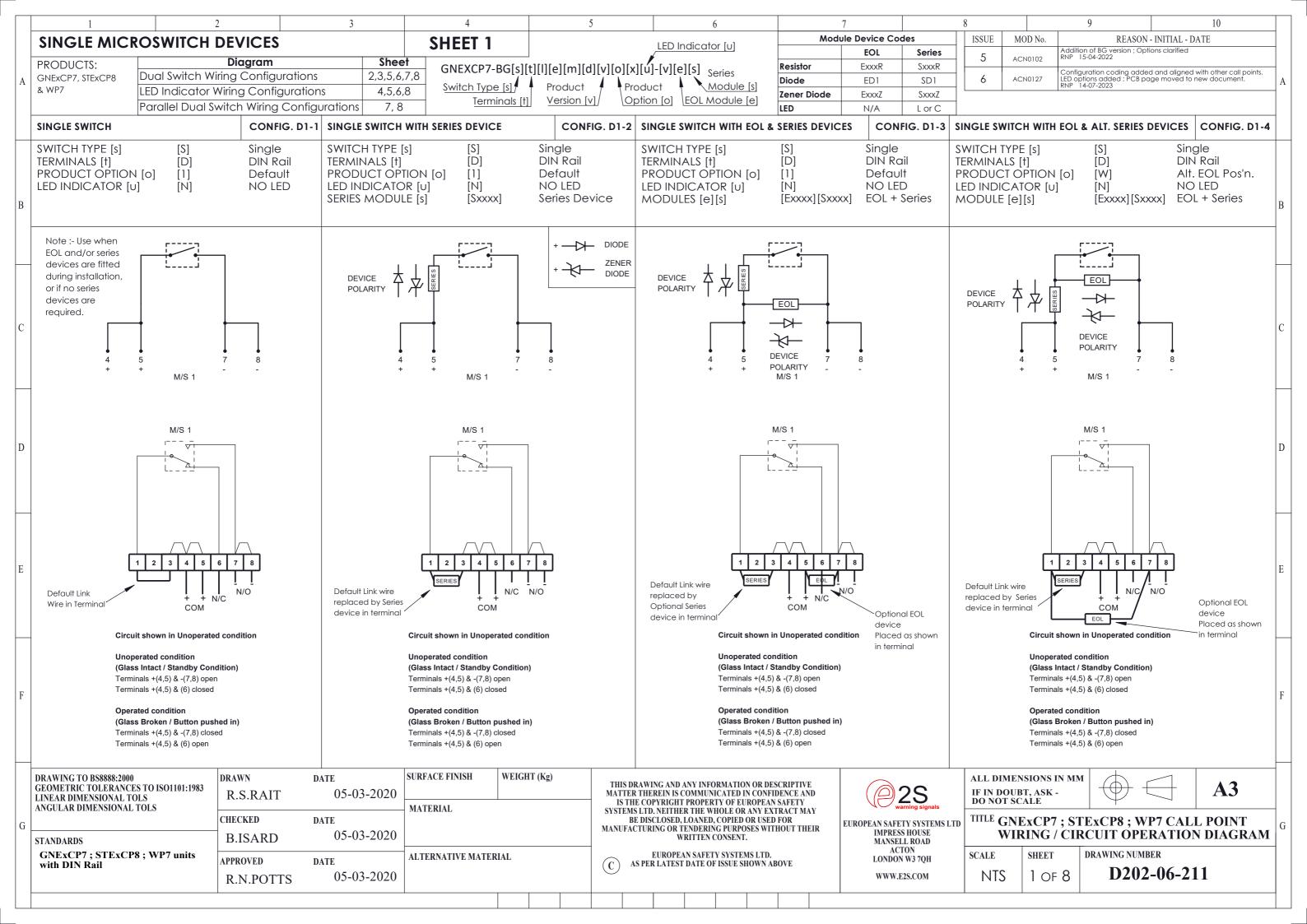
On -PB the plunger will remain in the down position until the unit is reset. This is done by pulling the plunger back up to the start position shown in fig 6. Then the plunger is twisted back 90 degrees anti-clockwise to the stop.

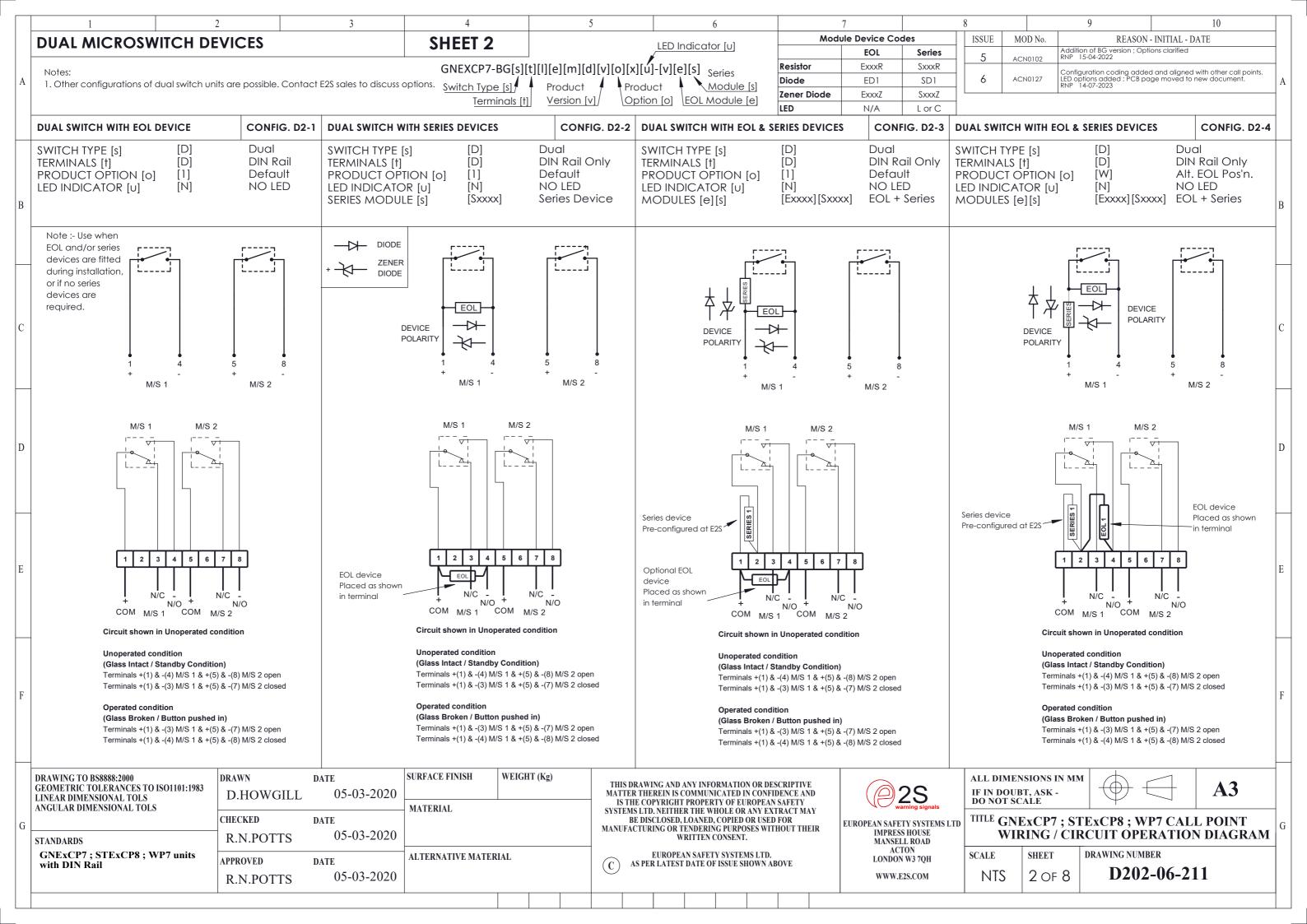
On -PT the plunger will remain in the down position until the unit is reset. This is done by lifting the plunger back up using the tool reset key provided.

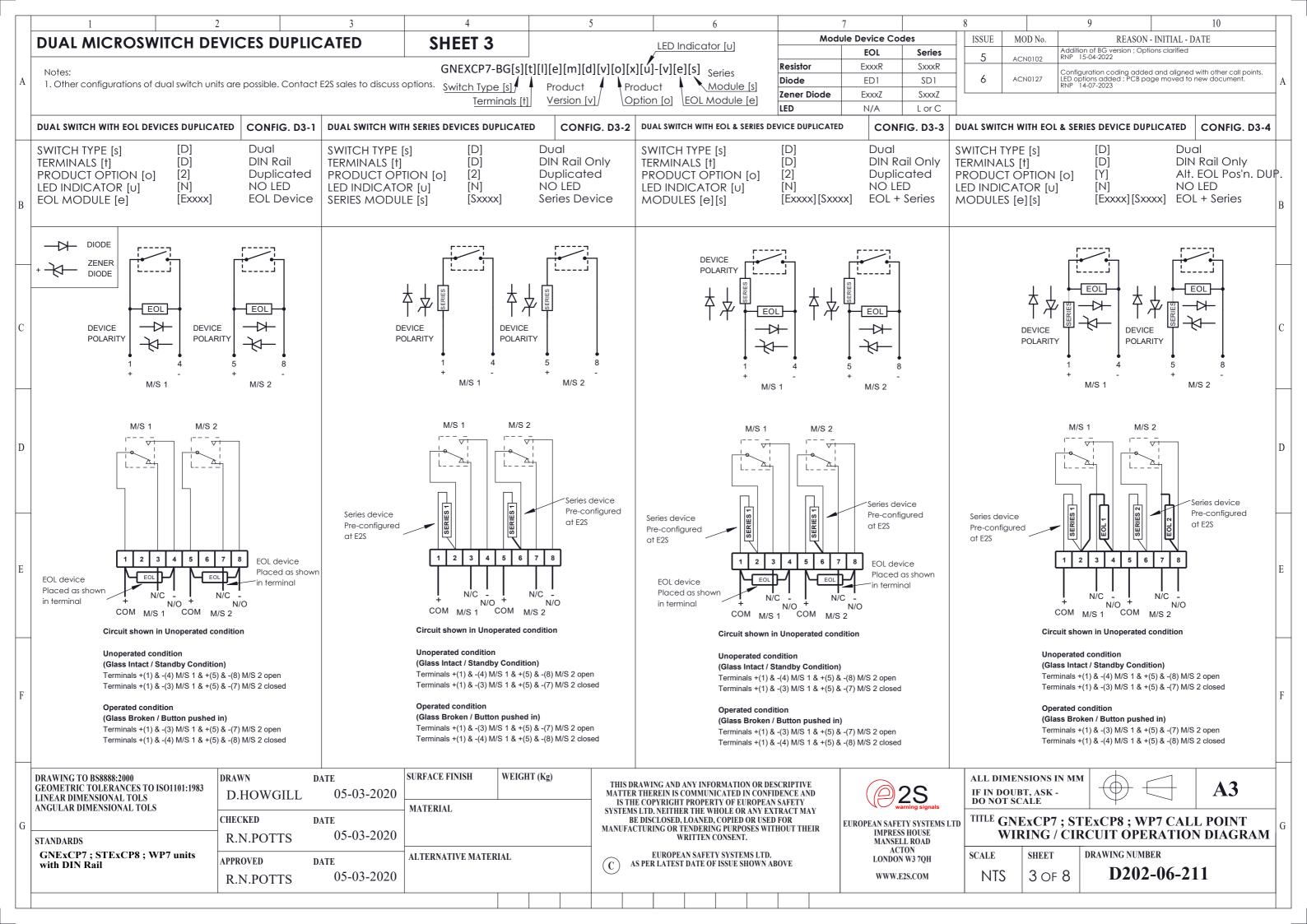


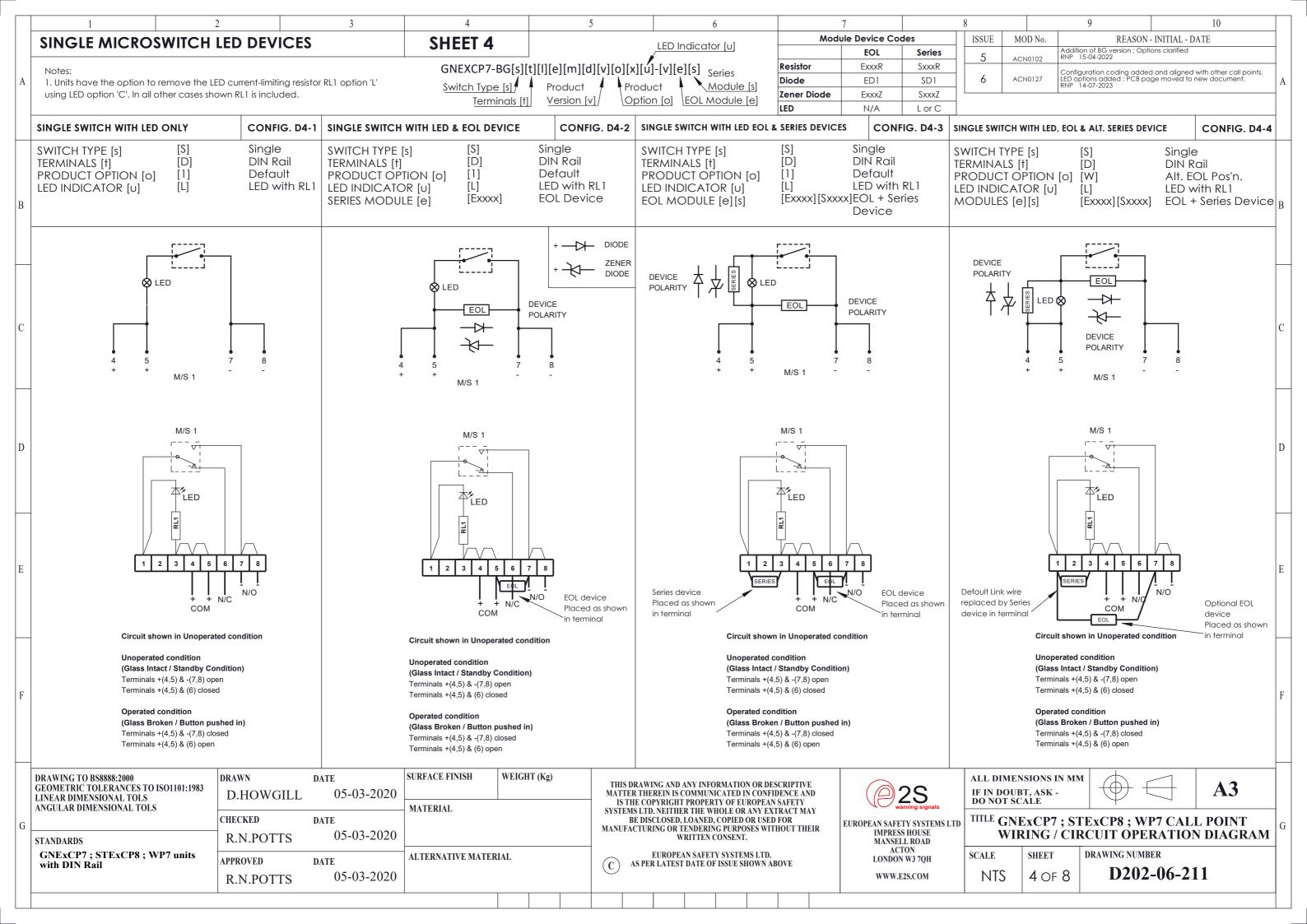


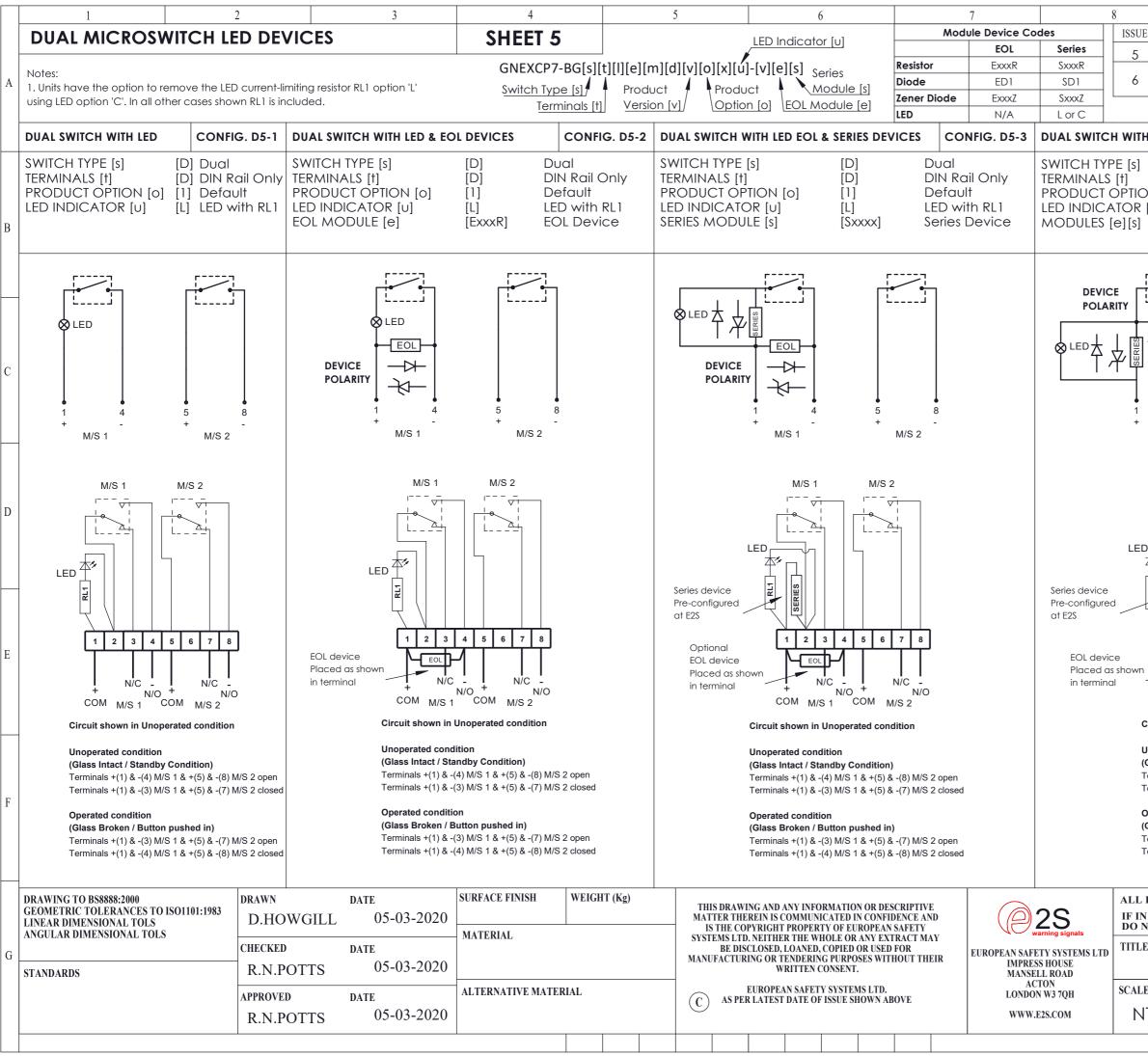




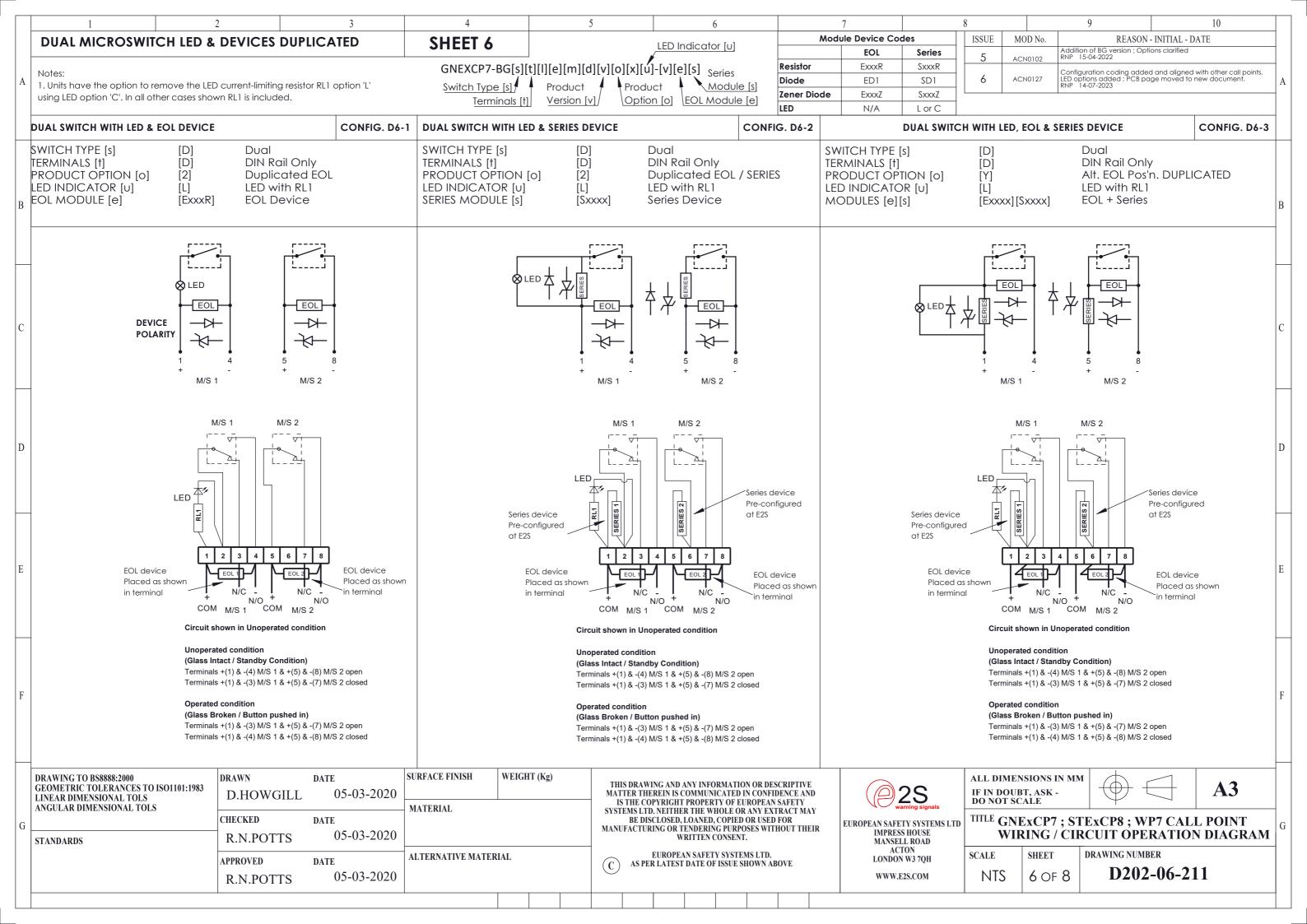


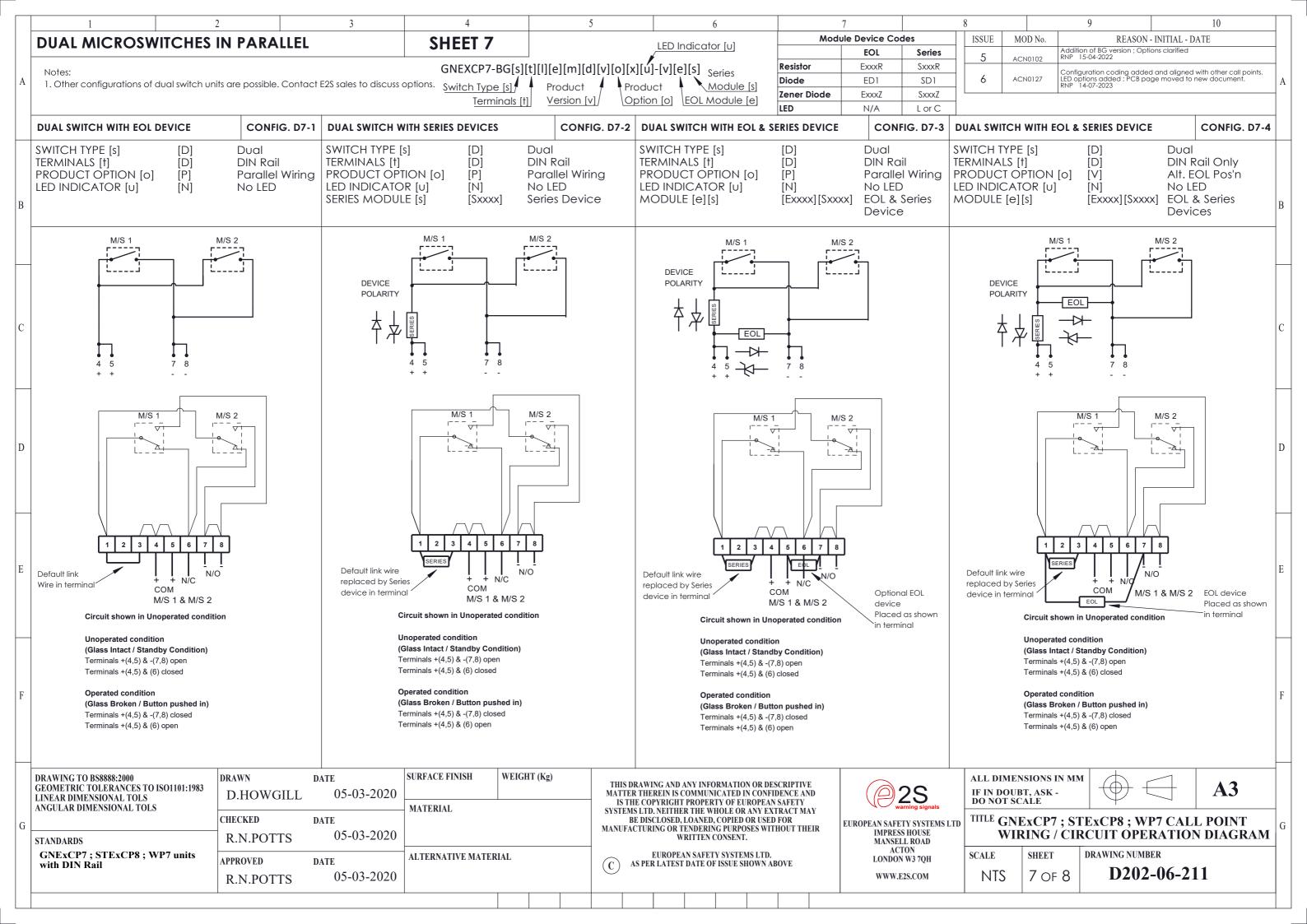


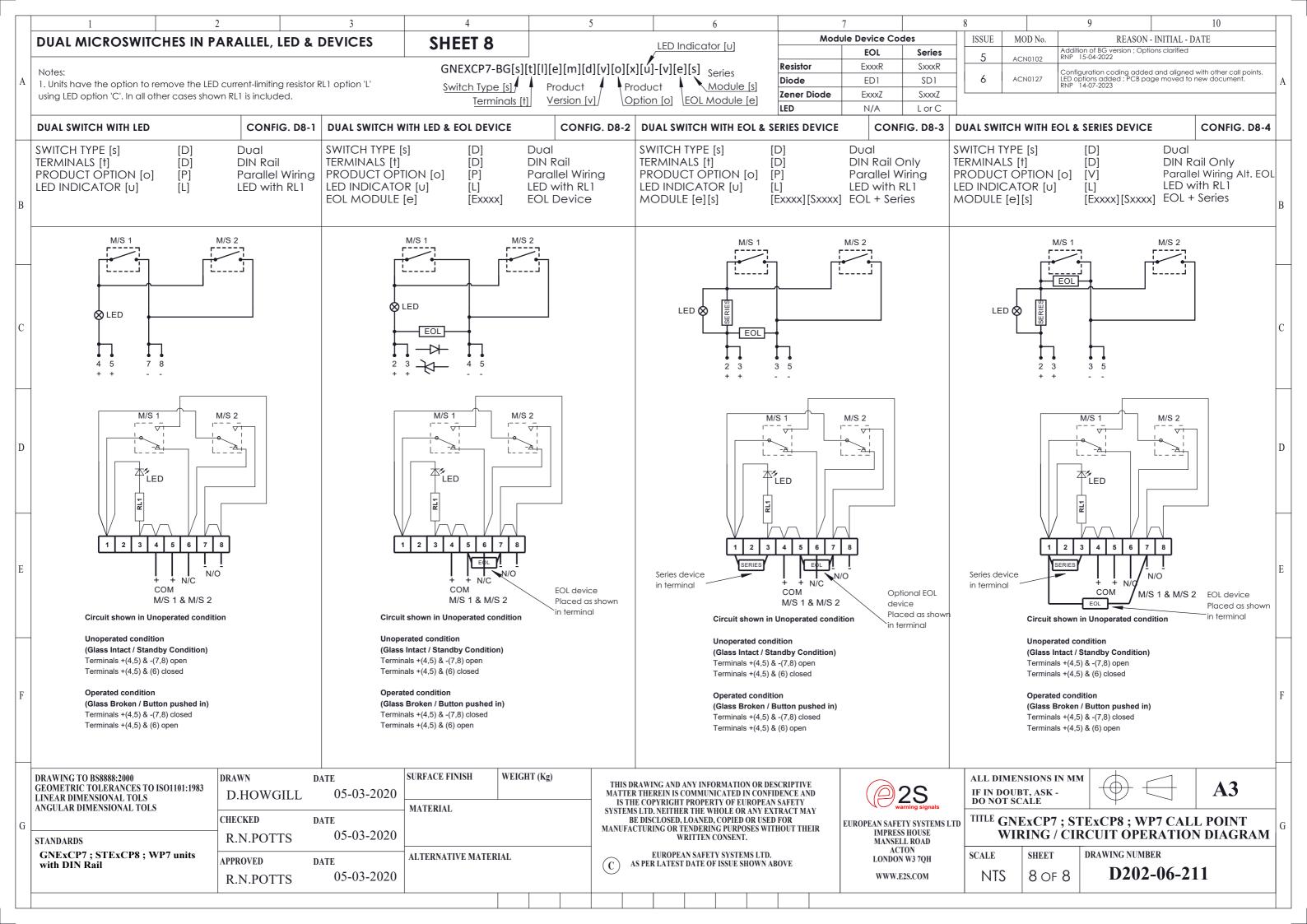


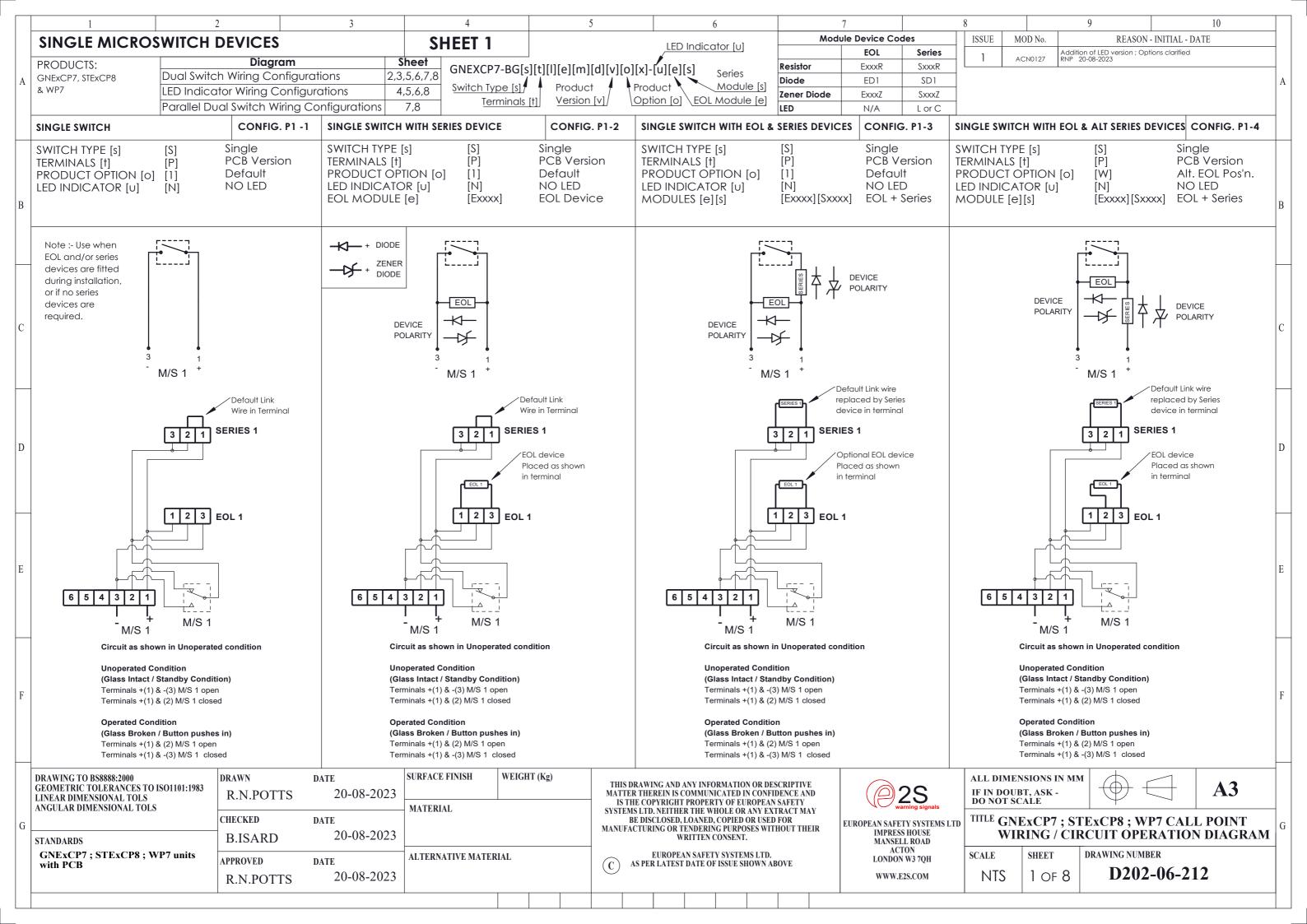


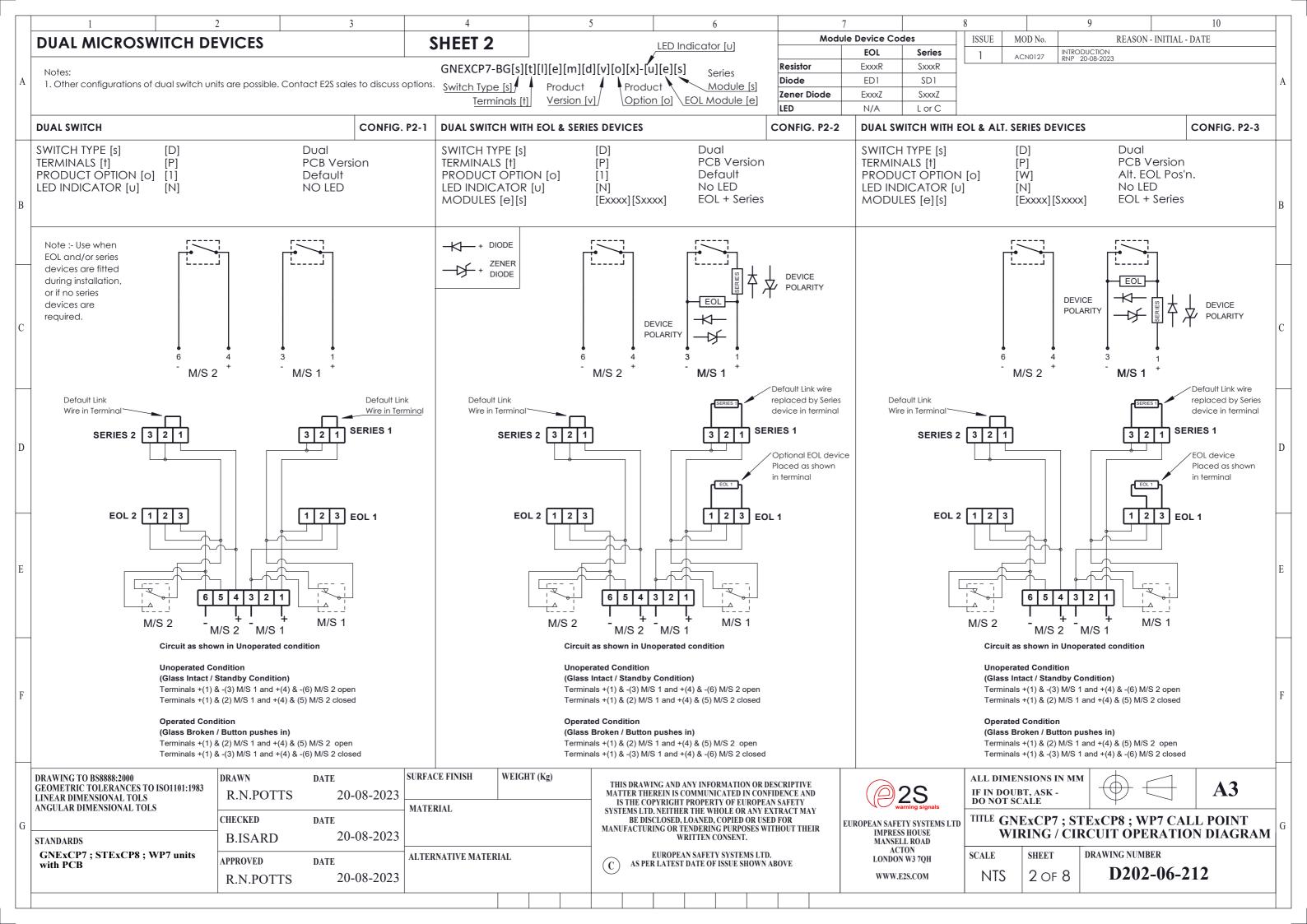
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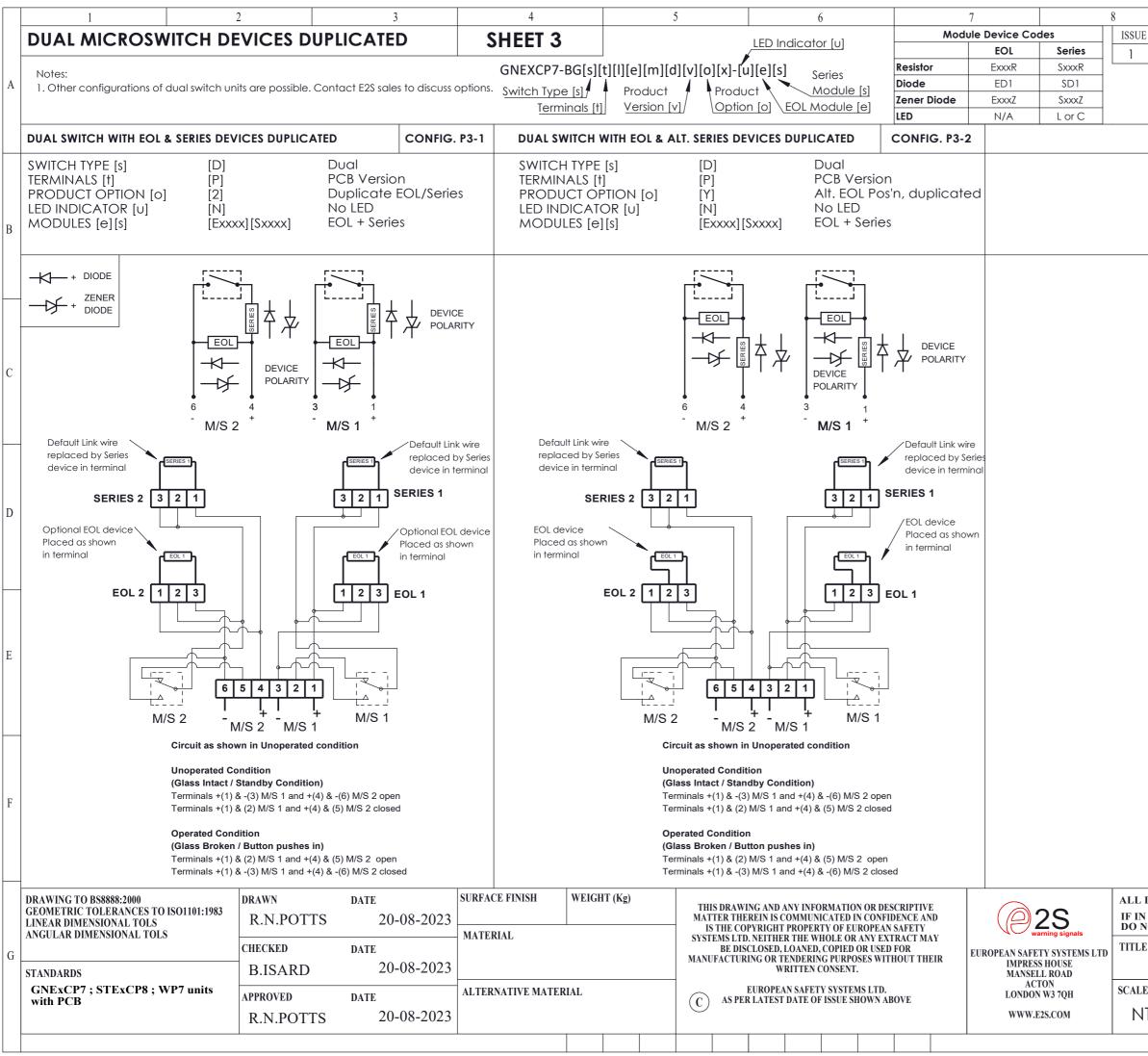




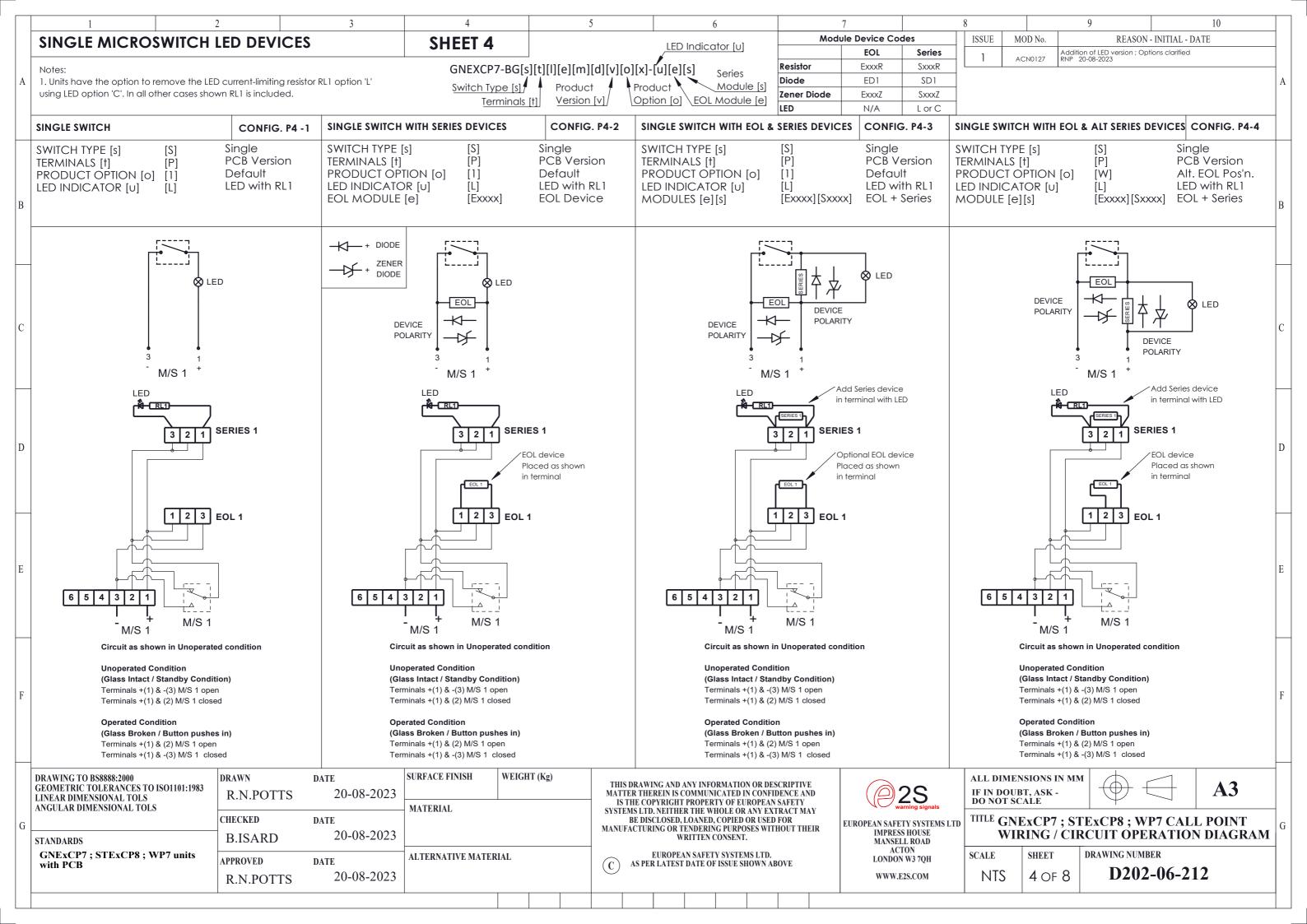


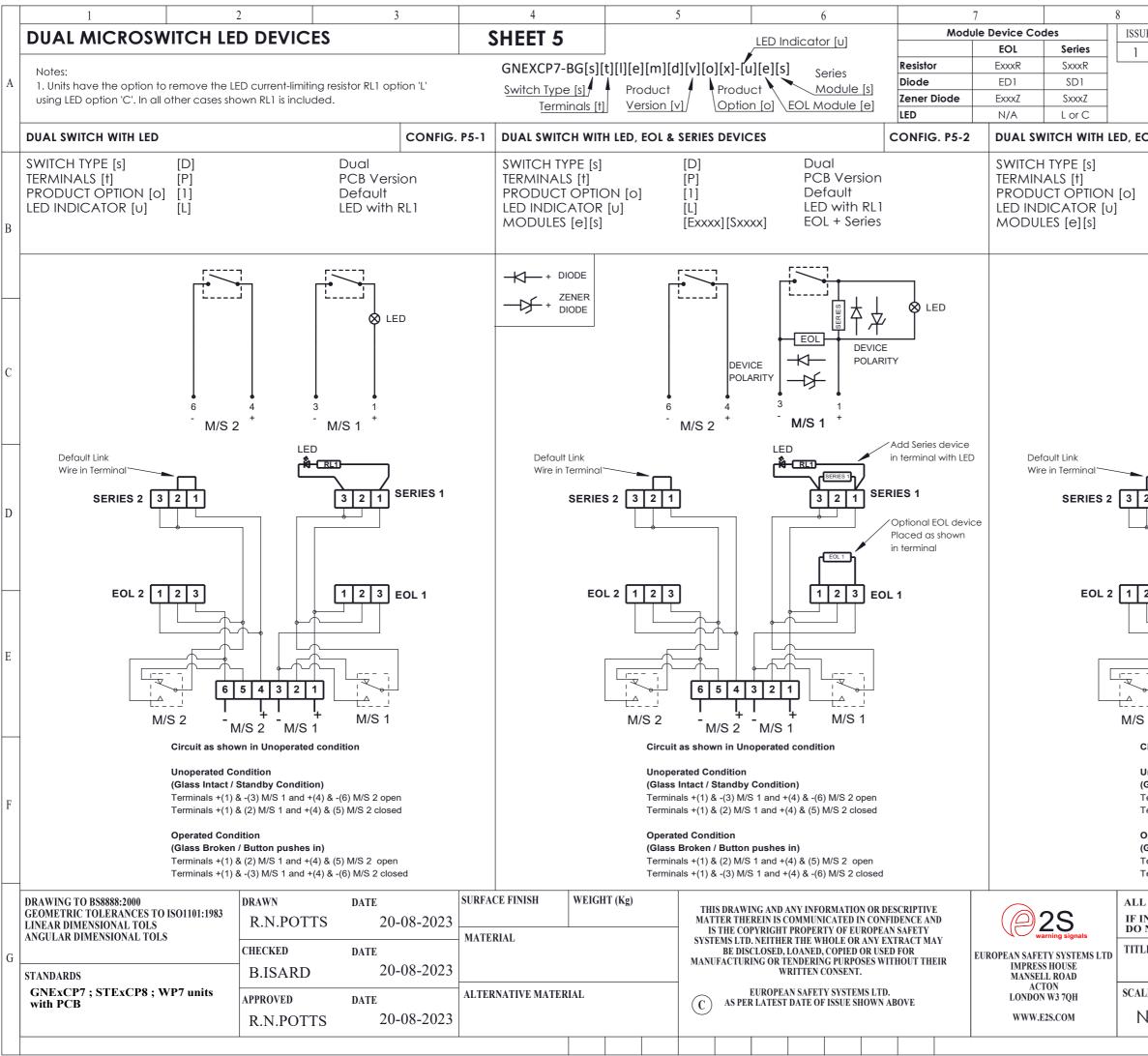




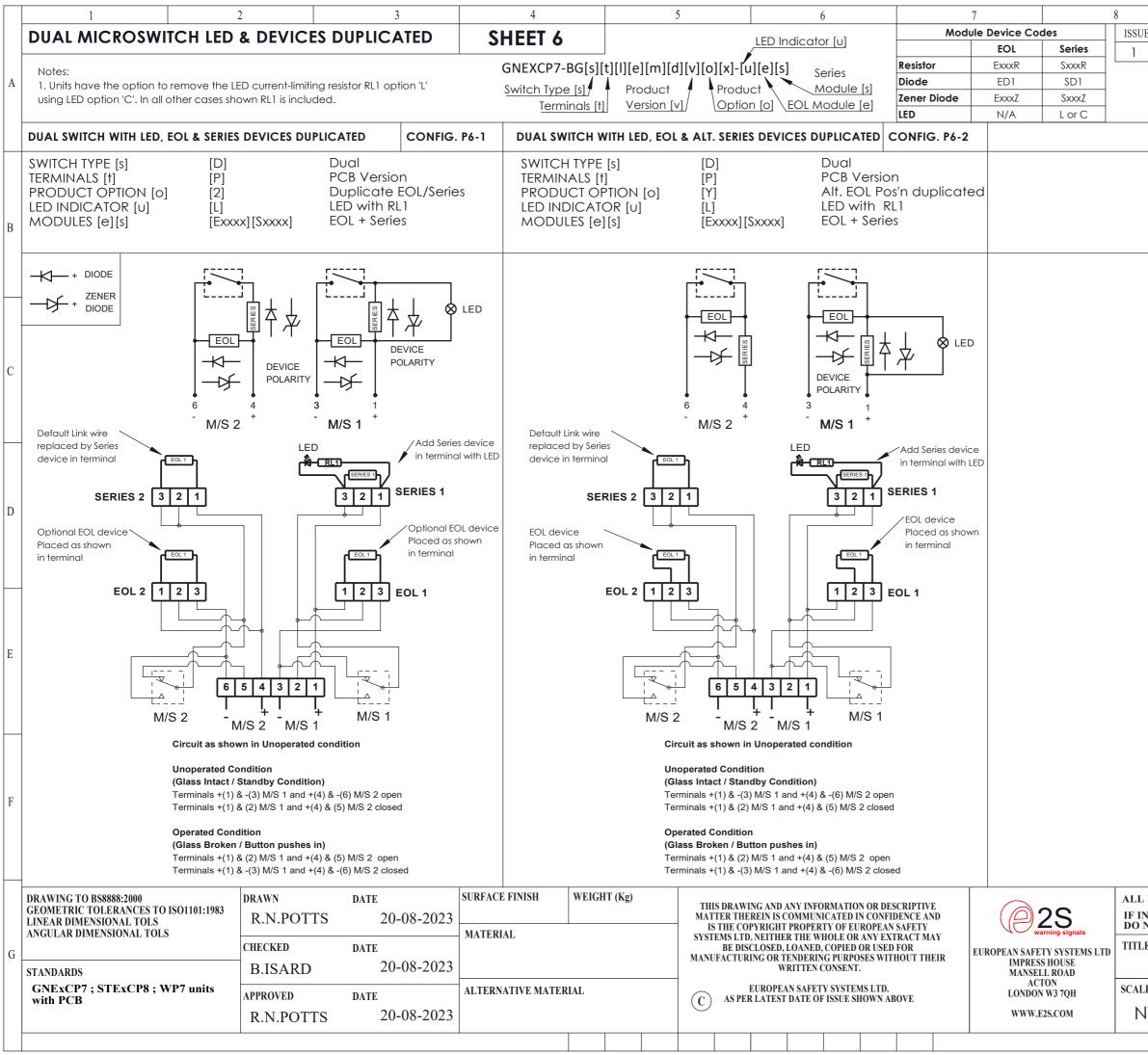


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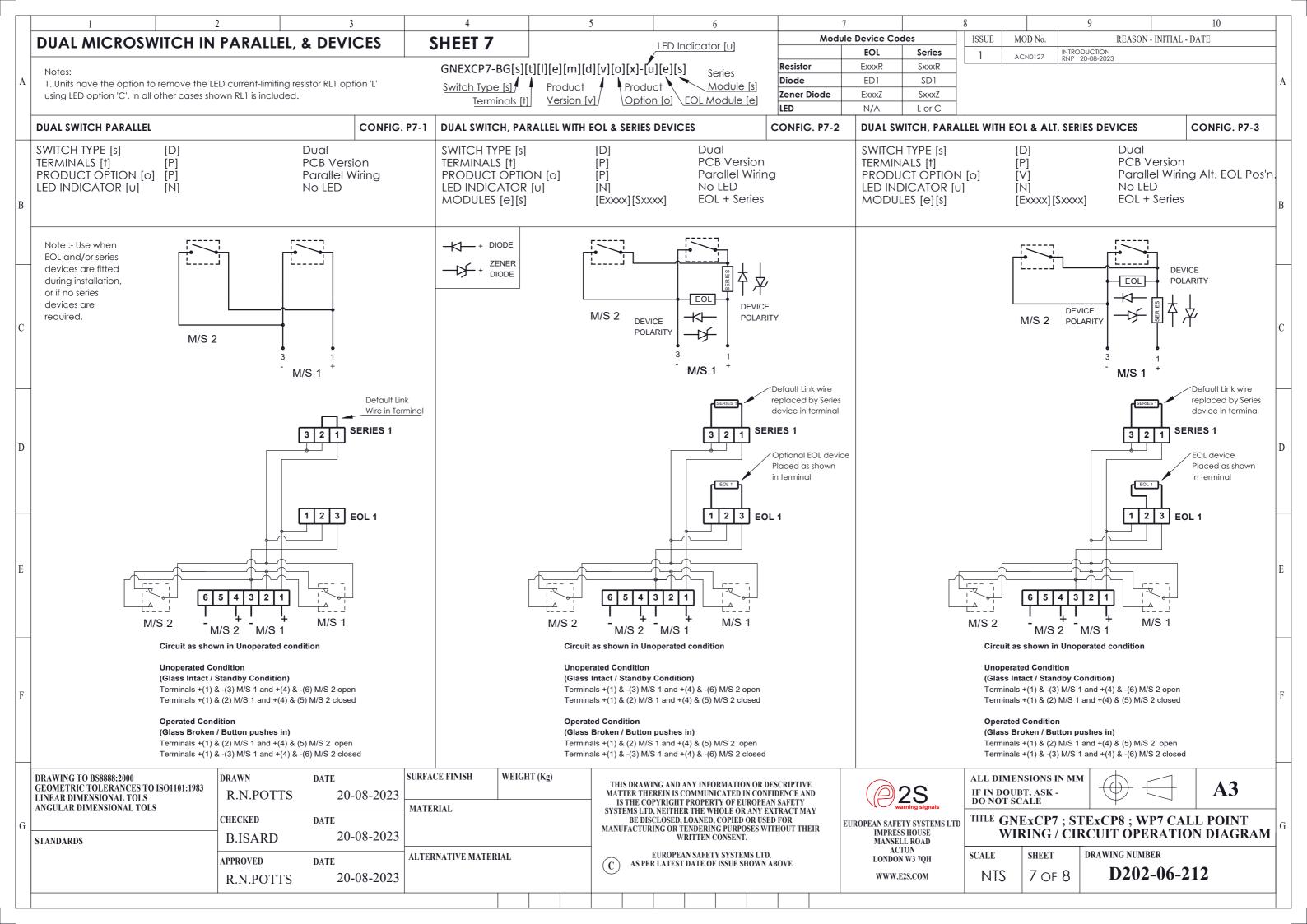


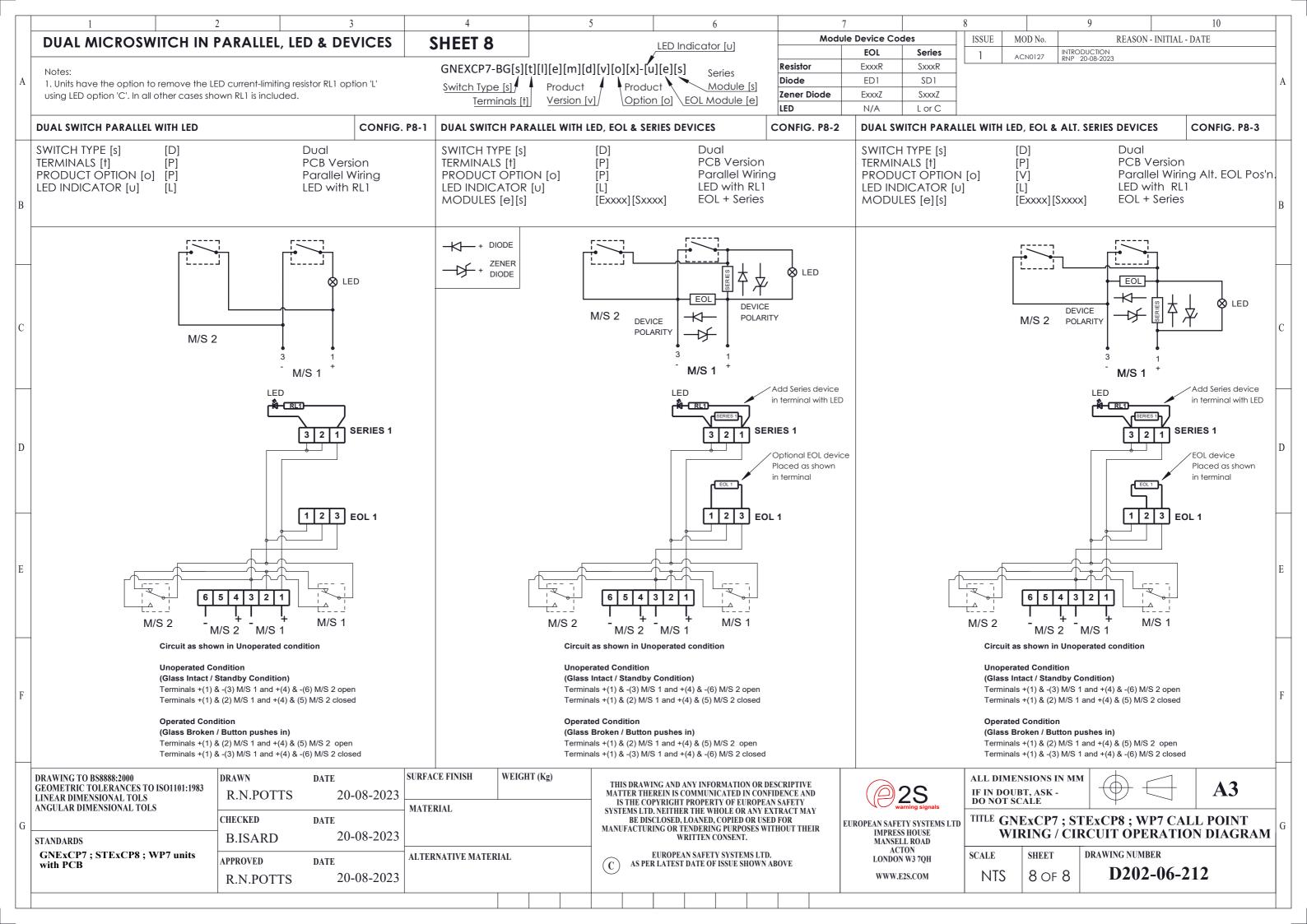


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# EU & UKCA Declaration of Conformity



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:	WP3-BG, WP6-PB, WP7-PB, WP7-PT, WP7-PM

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 2006/95/EC (until 19th April 2016) / Directive 2014/35/EU (from 20th April 2016): Low Voltage Directive (LVD)

Standards applied:

EN 60947-1:2007+A2:2014

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.

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

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.

en

Martin Streetz Quality Assurance Manager Document No.: Date and Place of Issue: DC-081\_lssue\_C London, 23/11/2022

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DC-081\_Issue\_C Page 1 of 1 QAF\_252\_Issue\_5