February 2023 EPS 9492-PS-PLUS Rev 3 

# MTL 9492-PS-PLUS

12V DC intrinsically safe power supply

- Isolated power supply
- Zone 2 mountable
- DIN-rail or backplane mounting
- ATEX / IECEx / UKEX / North America (MET<sub>c/us</sub>) certified
- 480mA @ 10.00V DC Ex ia
- 550mA @ 11.90V DC Ex ib output
- Power over Ethernet option

The MTL 9492-PS-PLUS power supply is the preferred method for

and is based on an isolating power supply. It takes a 24V DC safe area

output capable of powering the ethernet modules mounted in a Zone 1

Each 9492-PS-PLUS can power a single ethernet module. In order

to provide multiple outputs required for several ethernet modules,

the 9492-PS-PLUS power supply module is ganged up to the required number of ways, either DIN-rail mounted or using the power distribution backplane to simplify the 24VDC input connection to the

hazardous area. The 9492-PS-PLUS may be mounted in a safe area or

supplying the 9460-ET series of intrinsically safe ethernet modules

/ Zone 2 supply and produces an intrinsically safe, 12V DC nominal

- Multiple outputs achieved by ganging 9492-PS-PLUS modules using 24V DC power distribution backplane
- Wide operating temperature -40°C to +70°C

The 9492-PS-PLUS module has LED power indication for both input and output along with internal current limiting and electronic auto-reset circuit breaker action to protect the module in the event of its output being short circuited or overloaded. This also minimises the power dissipation during the fault to a negligible level, thus improving reliability.

The output can be from either the Ex ia or Ex ib output connectors depending upon application. The 'ib' output provides a higher useable output power where the Gas Group and Zone allows.



Zone 2 hazardous area.

modules.

Eaton Electric Limited, Great Marlings, Butterfield, Luton Beds, LU2 8DL, UK. Tel: + 44 (0)1582 723633 Fax: + 44 (0)1582 422283 E-mail: mtlenquiry@eaton.com www.eaton.com © 2023 Eaton All Rights Reserved Publication No. EPS 9492-PS-PLUS Rev 3

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## **SPECIFICATION**

#### See also System Specification

#### **POWER INPUT**

Separately powered Input voltage

24V DC (20–30V) Input current

#### 390mA

## Input protection

Fuse + supply reversal diode

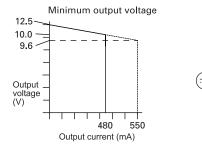
#### **Connectors (see dimension drawing)**

DIN rail mounting: screw terminals – capacity 2.5mm<sup>3</sup> stranded or single core Backplane mounting: multipin connector

## **POWER OUTPUT**

#### [Ex ia] output (pins 1 & 3)

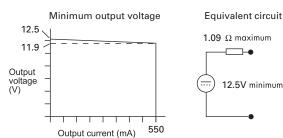
Graph shows normal working range & total available range





Equivalent circuit

## [Ex ib] output (pins 5 & 6)



#### Connectors

9492-PS-PLUS is supplied with two IS output connectors. Capacity 2.5mm<sup>2</sup> stranded or single core

(When using crimp ferrules for the IS connectors the metal tube length should be 12mm and the wire trim length 14mm.)

## **ISOLATION**

Isolation - input to output Um = 253V rms

## SAFETY

Location of module Safe area, Zone 2 Location of field wiring

# [Ex ia] output

Zone 0, hazardous area [**Ex ib] output** Zone 1, hazardous area



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Great Marlings, Butterfield, Luton Beds, LU2 8DL, UK. Tel: + 44 (0)1582 723633 Fax: + 44 (0)1582 422283 E-mail: mtlenquiry@eaton.com www.eaton.com

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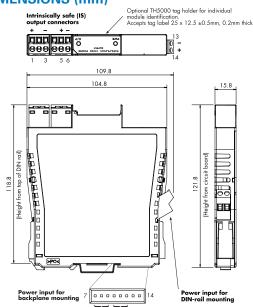
#### **Certification Code**

See approvals

#### Safety description

See certificates CML 15ATEX2071X, CML ATEX 4072X, IECEx CML 15.0034X, IECEx TRA 17.0003X CML 21UKEX21069X, CML 21UKEX41070X, MET File E115585.

## **DIMENSIONS** (mm)



## MECHANICAL

### Mounting

DIN rail

Please contact Eaton MTL product line for 'backplane' option Dimensions

See diagram

Weight

130 g

## ENVIRONMENTAL

Ambient temp Operating -40°C to +70°C

Storage -40°C to +70°C

**Relative Humidity** 

5 to 95% RH (non-condensing)

#### **Ingress Protection**

Select enclosure to suit application, see certificate for information

## LED INDICATORS

	OFF	Flash	ON
Pwr (green)	24V power fail	N/A	24V power OK
IS (green)	IS power fail	output overload or short circuit present	IS power OK

EUROPE (EMEA): +44 (0)1582 723633 mtlenguiry@eaton.com

THE AMERICAS: +1 800 835 7075 mtl-us-info@eaton.com

ASIA-PACIFIC: +65 6 645 9888 sales.mtlsing@eaton.com The given data is only intended as a product description and should not be regarded as a legal warranty of properties or guarantee. In the interest of further technical developments, we reserve the right to make design changes.

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