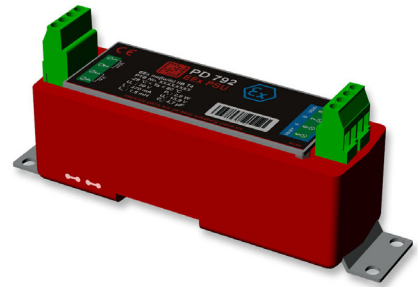


# User manual for PD 792 EX Power Supply

## FEATURES

PD 792 is a power supply for intrinsically safe P-NET modules. It has a galvanically separated, increased safety input and an intrinsically safe output.

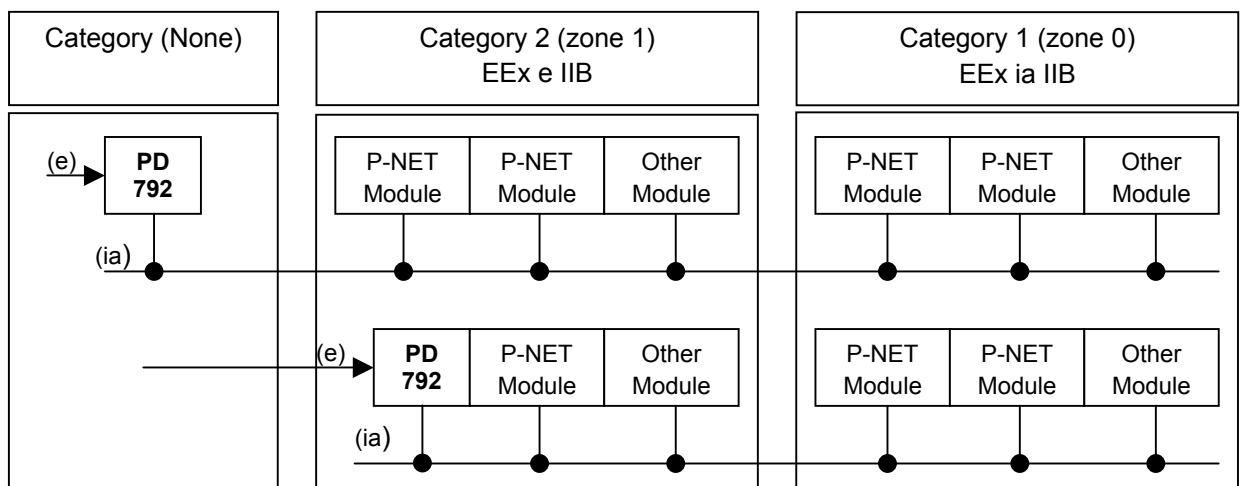
The module is also a gateway between the P-NET Light-Link interface and the P-NET 4-wire interface at the intrinsically safe output.



## APPLICATION

The power supply module is designed for EX environments. It has a limited voltage, current and power output to supply intrinsically safe P-NET modules.

Installation guide showing allowed power supply line and P-NET 4-wire configurations:



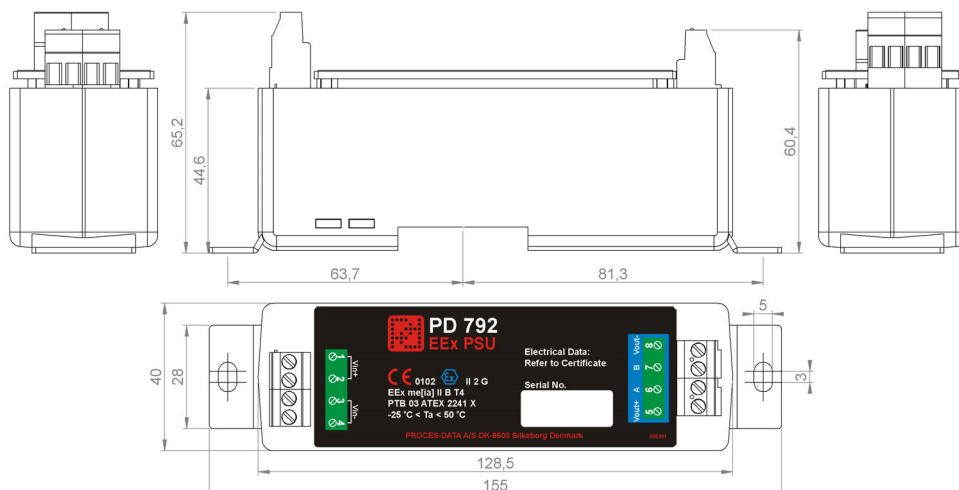
## INSTALLATION

The module must be placed within an IP 54 enclosure. It dissipates heat through the aluminium chassis and should be bolted through the chassis holes onto a heat-conducting surface.

When mounted on a DIN rail, the P-NET Light-Link will be aligned with other modules on the same rail.

Choose a set of maximum  $C_0$  and  $L_0$  in the specifications that fits your equipment and cables.

## SCALE DRAWING (in mm):

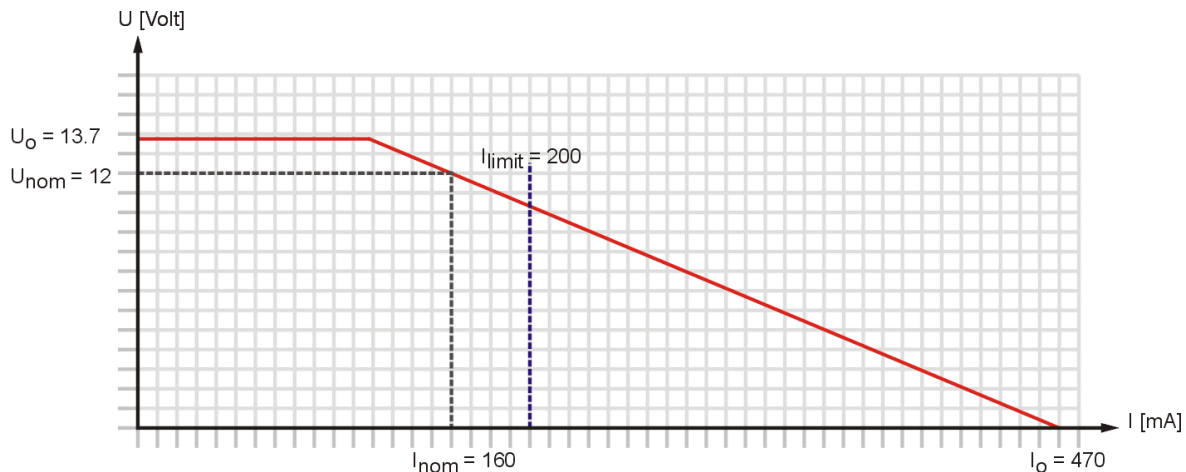


**SPECIFICATIONS:**

Increased safety (EEx(e)) Input:		Intrinsically safe output (EEx(ia)):	
Nominal input voltage	$U_{nom} = 24 \text{ V}$	Nominal output current	$I_{nom} = 160 \text{ mA}$
Minimum input voltage	$U_{min} = 22 \text{ V}$	Open circuit voltage	$U_o = 13.7 \text{ V}$
Maximum input voltage	$U_{max} = 30 \text{ V}$	Short circuit current	$I_o = 470 \text{ mA}$
Fuse (not replaceable)	1 A quick acting	Maximum power	$P_o = 2.7 \text{ W}$

Max reactive load:	Set 1	Set 2	Set 3	Set 4
Inductance $L_0$ [mH]	0.9	0.5	0.2	0.1
Capacitance $C_0$ [ $\mu\text{F}$ ]	2.0	2.9	4.5	4.9

Operating temperature:  $-25 \text{ }^\circ\text{C}$  to  $+50 \text{ }^\circ\text{C}$  Storage temperature:  $-25 \text{ }^\circ\text{C}$  to  $+70 \text{ }^\circ\text{C}$

**I-U characteristic for intrinsically safe output (EEx(ia)):****APPROVALS:**

**CE** 1020 **Ex** II 2 G  
**EEx me[ia] II B T4**  
**PTB 03 ATEX 2241 X**

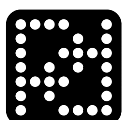
The power supply module is approved in compliance with: **EN50028** (encapsulated 'm').  
 The Increased safety (EEx(e)) input is in compliance with: **EN50019** (increased safety 'e').  
 The Intrinsically safe output (EEx(ia)) in compliance with: **EN50020** (intrinsic safety 'i').

**EMC:**

The modules are in compliance with the **EMC-directive no 89/336/EEC**.  
 Test limits are determined by the generic standards **EN 50081-1** for emission and **EN 61000-6-2** for immunity.

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