

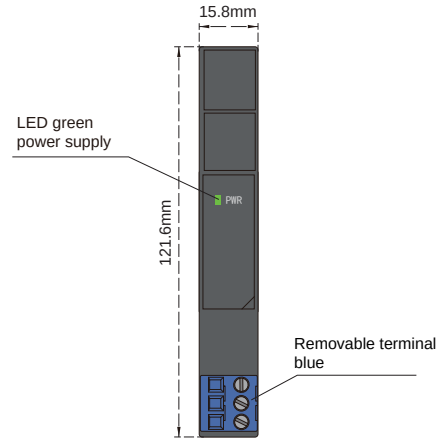
NPEXA-HM411

single input, double output

Input: 1 ~ 5 V

Output: 4 ~ 20 mA

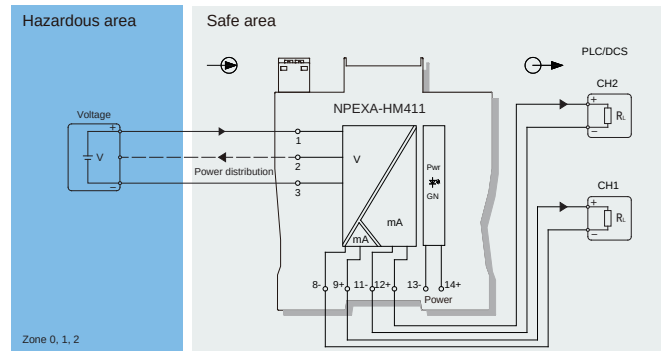
This isolated safety barrier detects loop voltage and converts it from a hazardous area into current signals to a safe area by isolation, and also provides transmitters with power in the hazardous area. The input, output, and power supply are galvanically isolated from each other.



Technical data

Power supply:	18 V DC~32 V DC (Reverse power protection)
Power dissipation:	1.8 W (24V DC, double output)
Input signal:	1 ~ 5V
Input resistance:	≥ 1MΩ
Available voltage:	open-circuit voltage ≤ 26 V voltage: ≥ 15.5 V at 20 mA
Output signal:	4 ~ 20mA
Load resistance:	$R_L \leq 450\Omega$
Accuracy:	± 0.1%F.S.
Temperature drift:	0.005%F.S./°C
Response time:	≤ 2ms
Electromagnetic compatibility:	IEC 61326-3-1
Dielectric strength:	≥ 2500 V AC (intrinsically safe side / non-intrinsically safe side) ≥ 500 V AC (Power supply side /non-intrinsically safe side)
Insulation resistance:	≥ 100 MΩ (Input /Output/Power supply)
Operation temperature:	-20°C ~ +60°C
Storage temperature:	-40°C ~ +80°C
Dimension:	15.8 mm (W) × 121.6 mm (H) × 104.8 mm (D)

Wiring diagram



Explosive-proof parameters

National Supervision and Inspection Center for Explosion Protection and Safety of Instrumentation (NEPSI)

Explosive-proof grade: [Ex ia Ga] II C

Um: 250 V

Certified parameters (Terminals 1, 3):

$U_o=5V$, $I_o=1mA$, $P_o=2mW$

II C : $C_o=70\mu F$, $L_o=999mH$

II B : $C_o=700\mu F$, $L_o=999mH$

II A : $C_o=700\mu F$, $L_o=999mH$

Certified parameters (Terminals 2, 3):

$U_o=28V$, $I_o=93mA$, $P_o=651mW$

II C : $C_o=0.08\mu F$, $L_o=4mH$

II B : $C_o=0.6\mu F$, $L_o=12mH$

II A : $C_o=2.1\mu F$, $L_o=32mH$

Other ordering information

Type	Input	Output1	Output2	Power supply
NPEXA-HM412	1 ~ 5V	4 ~ 20mA	1 ~ 5V	backplane mounting
NPEXA-HM422	1 ~ 5V	1 ~ 5V	1 ~ 5V	backplane mounting
NPEXA-HM455	0 ~ 10V	0 ~ 10V	0 ~ 10V	backplane mounting