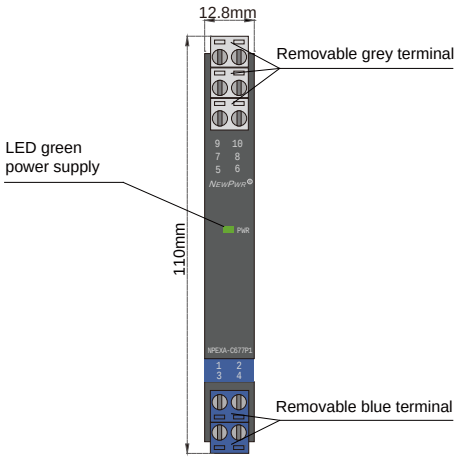
NPEXA-C67P1 Single input, single output

NPEXA-C677P1 Single input, double output

Input: frequency
Output: 1:1

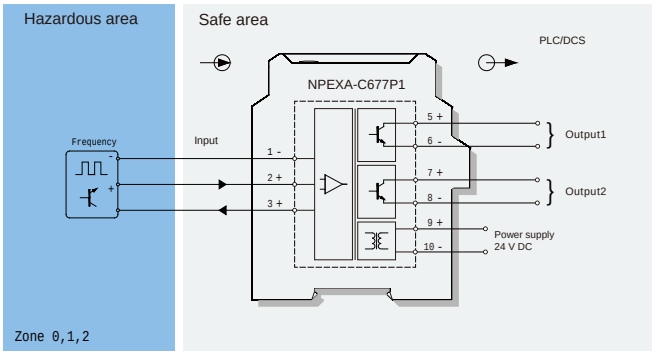
This isolated safety barrier converts the frequency signals from a hazardous area to a safe area by isolation.The input, output, and power supply are galvanically isolated from each other.



Parameters

Power supply:	18V DC ~ 60V DC (Reverse power protection)	
Power dissipation:	0.8W (single output)	
Input signal:	1.3W (double output)	
Frequency range:	frequency	
Pulse width:	0.1Hz ~ 100kHz	
Switching trigger point:	≥ 5μs	
Distribution voltage:	Low level: 0V ~ 2V, High level: 4V ~ 30V	
	≥ 9V, when loaded with 20mA	
Output signal:	Open collector	High level: Vcc (≤ 30V)
		Low level: ≤ 2V
		drive current: ≤ 10mA
	Emitter follower	High level: Vcc-2V
		Low level: ≤ 0.5V
		drive current: ≤ 10mA
	Logic level	High level: 9V ≤ VH ≤ 12V
		Low level: VL ≤ 2V
		Load resistance: ≥ 1kΩ
Electromagnetic compatibility:	IEC 61326-3-1	
Dielectric strength:	≥ 3000V AC (intrinsically safe side / non-intrinsically safe side)	
	≥ 1500V AC (Power supply/non-intrinsically safe side)	
Insulation resistance:	≥ 100MΩ (Input /Output/Power supply)	
Operation temperature:	-20°C ~ +60°C	
Storage temperature:	-40°C ~ +80°C	
Dimension:	12.8mm (W) × 110mm (H) × 117mm (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: 250V
Certified parameters (Terminals 1, 2):
Uo=8.7V, Io=1mA, Po=3mW
II C: Co=5μF, Lo=1000mH
II B: Co=35μF, Lo=1000mH
II A: Co=700μF, Lo=1000mH
Certified parameters (Terminals 1, 3):
Uo=15.8V, Io=107mA, Po=423mW
II C: Co=0.478μF, Lo=1.8mH
II B: Co=2.88μF, Lo=5.4mH
II A: Co=11.6μF, Lo=14.4mH