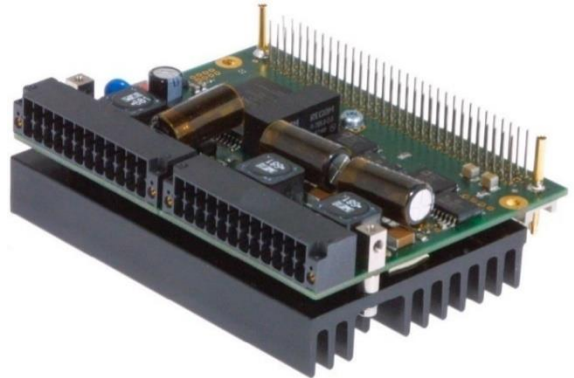


24. COP-PIEZO (Piezo Output Stage)

COP-PIEZO 611346900

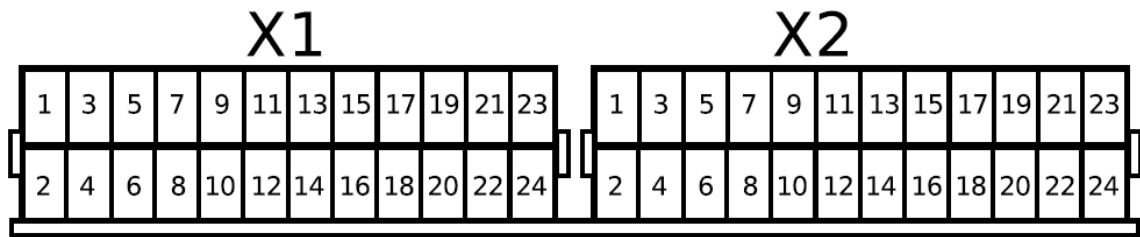
The COP-PIEZO module has two piezo output stages. The required intermediate circuit power is either generated by the module itself and supplied via step-up circuit or supplied from an external power source. The step-up circuit is activated as soon as the rated voltage is applied to V_{cc} and the U_{cc} voltage is generated. The power section is isolated from the logics.



24.1. Technical Specifications

Output Stages and Intermediate Circuit		
Number of output stages	2	
Maximum continuous power (both output stages)	5	W
Intermediate circuit power supply via integrated step-up circuit	150	V_{DC}
Slew rate	30	V/ms
Intermediate circuit capacity	66	μF
V_{cc_24V} power supply rated voltage	24	V_{DC}
PIEZO_ U_{cc} power supply rated voltage	24 ... 180	V_{DC}
Module		
Maximum power consumption at 24V node power supply	200	mA

24.2. Pin Assignment



X1					
No.	Dir	Id.	Id.	Dir	No.
2					1
4	In	Vcc_24v	Vcc_24V	In	3
6		PIEZO_GND	PIEZO_GND		5
8					7
10					9
12					11
14					13
16		PIEZO_GND	PIEZO_GND		15
18					17
20	In	PIEZO_Ucc	PIEZO_Ucc	In	19
22					21
24		Shield	Shield		23

X2					
No.	Dir	Id.	Id.	Dir	No.
2	Out	POut 0	POut 0	Out	1
4					3
6		PIEZO_GND	PIEZO_GND		5
8					7
10					9
12					11
14	Out	POut 1	POut 1	Out	13
16					15
18		PIEZO_GND	PIEZO_GND		17
20					19
22					21
24		Shield	Shield		23



Remarks:

- The low-voltage sections is isolated from the rest of the COP module.
- Due to the heat sink, the COP-PIEZO requires two COP slots.

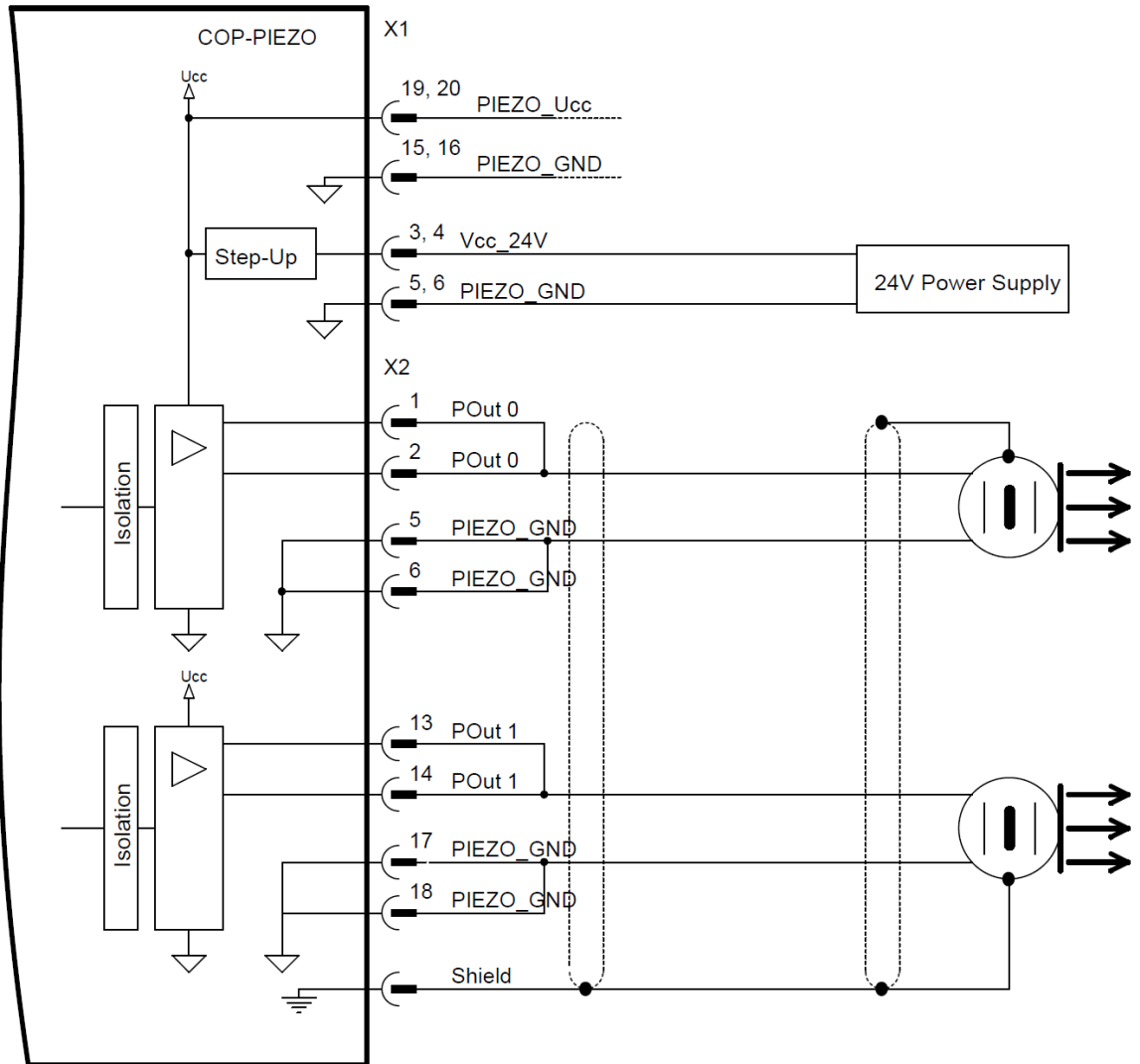
24.3. Low Voltage



With the COP-PIEZO, low voltages occur. The Low-Voltage Directive has to be observed by the user. Contact with low voltages may result in death or severe bodily injury or property damage. The measures described in section 2.1.5 to protect against contact with electrical parts must be observed.

24.4. Connection Examples

Connection of two piezo elements and step-up power supply



24.5. Available Options

Item Number	Label	Option	Description
611346900	COP-PIEZO		2 x Piezo output stages, up to max 150V, 5W in total