

PSE Polarity ^{v110}

Lennart Yseboodt, Matthias Wendt

Philips Research

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Supporters

Christian Beia / ST Microelectronics

Chris Bullock / Cisco

Dylan Walker / Cisco

Sesha Panguluri / Broadcom

Rick Frosh / PhiHong

Gaoling Zou / Maxim

Faisal Ahmad / Akros Silicon

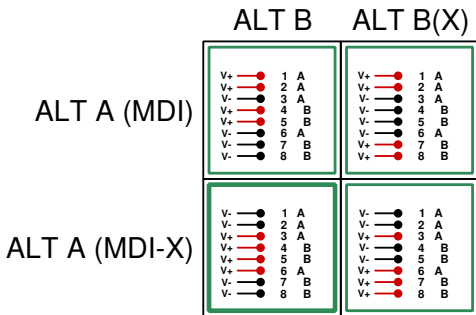
Alternative B (X)

Conductor	Alt A (MDI-X)	Alt A (MDI)	Alt B	Alt B (X)
1	Negative V_{PSE}	Positive V_{PSE}		
2	Negative V_{PSE}	Positive V_{PSE}		
3	Positive V_{PSE}	Negative V_{PSE}		
4			Positive V_{PSE}	Negative V_{PSE}
5			Positive V_{PSE}	Negative V_{PSE}
6	Positive V_{PSE}	Negative V_{PSE}		
7			Negative V_{PSE}	Positive V_{PSE}
8			Negative V_{PSE}	Positive V_{PSE}

A new polarity configuration "Alternative B (X)" is introduced.

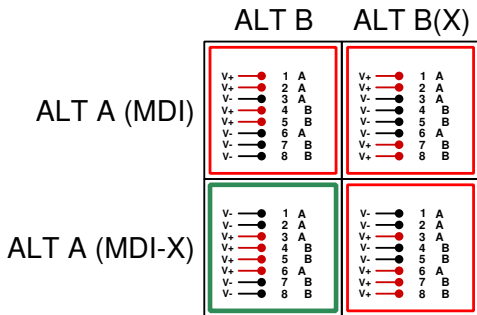
Type 3

Configuration Alternative B (X) can be used by Type 3 PSEs that need to be compatible with pre-standard devices that were not designed to accept 3-pair or 4-pair power. For Type 3 PSEs, all 4 polarity permutations are permitted.



Type 4

For Type 4 only a single polarity configuration is permitted: Alternative A (MDI-X) and Alternative B.



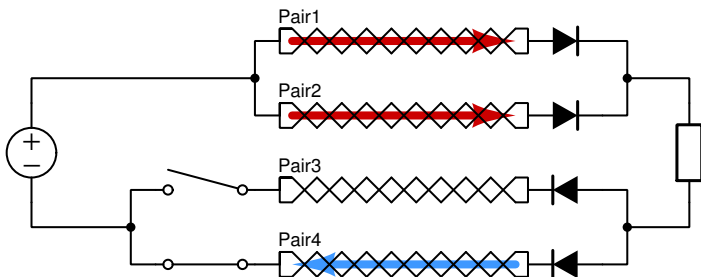
Permitted polarities overview

PSE Type	Alternative A (MDI)	Alternative A (MDI-X)	Alternative B	Alternative B (X)
Type 1, 2	Yes	Yes	Yes	No
Type 3	Yes	Yes	Yes	Yes
Type 4	No	Yes	Yes	No

This table shows a complete overview of permitted polarity configurations per Type.



3-pair power ?



A typical two channel PSE is capable of operating in four-pair or in three-pair mode. True two-pair operation would require a top switch as well.