



**IEEE802.3 4P Task Force  
Annex 33A.5 Updates  
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## Annex 33A.5 PD PI pair-to-pair current unbalance requirements

The following design guide lines may be implemented to ensure meeting PD PI P2P\_Iunb requirements:

For PD Type 4 class 8:  $R_{\text{pair\_max\_pd}} = \del{1.760}1.763 * R_{\text{pair\_min\_pd}} + 0.089$ .

For PD Type 4 class 7:  $R_{\text{pair\_max\_pd}} = \del{k1(TBD)}1.819 * R_{\text{pair\_min\_pd}} + \del{0.098}k_{pd1}(TBD)$ .

For PD Type 3 class 6:  $R_{\text{pair\_max\_pd}} = \del{1.8925}1.894 * R_{\text{pair\_min\_pd}} + 0.109$ .

For PD Type 3 class 5:  $R_{\text{pair\_max\_pd}} = \del{k2(TBD)}2.037 * R_{\text{pair\_min\_pd}} + \del{k_{pd2}(TBD)}0.130$

### Editor Note:

**Additional set of requirements per class is required for extended power in order to make sure that Icon-2P\_unb is kept in extended power mode as well.**

----- End of Baseline text -----

### Notes:

1. Constant in class 8 and 6 was updated due to round down error.
2. Values will be changed if PSE Vdiff will be changed from 2mV to 10mV and PD Vdiff from 58mV to 50mV respectively.