

Updated Table 33-11

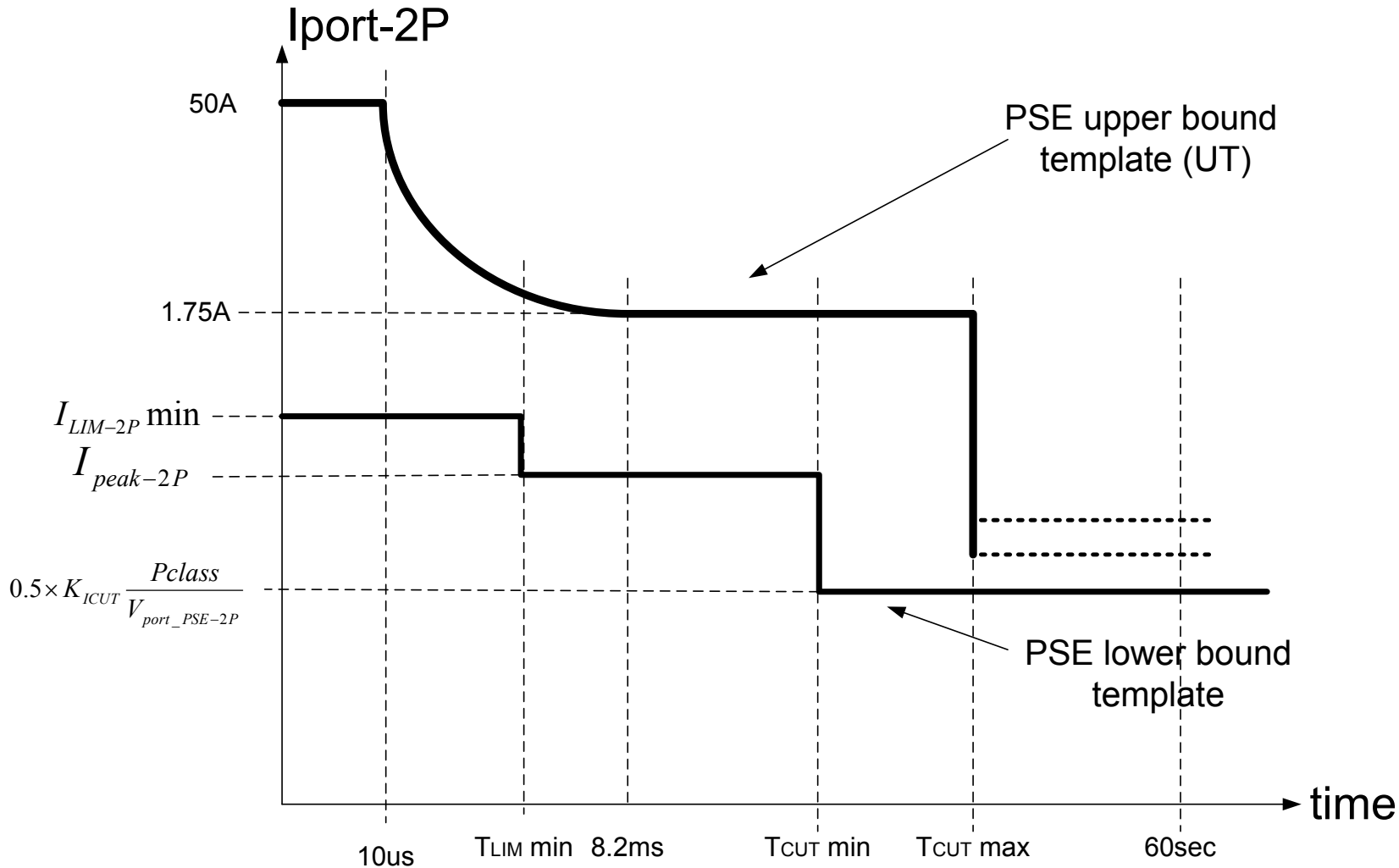
1. Update table 33-11 item 7 as follows:
2. Update Figure 33-14 accordingly. See attached below.
3. Add the following Editor Note below the above table.

Item	Parameter	Symbol	Unit	Min	Max	PSE Type	Additional Information
7	Overload current per pair set, detection range	I _{CUT-2P}	A	Pclass/Vport_PSE-2P	I _{LIM}	1, 2	Optional LIMIT; See 33.2.7.6, Table 33-7. K_icut3=0.556. K_icut4=0.538.
				Kicut3X		3	
				Pclass/Vport_PSE-2P		4	
				Kicut4 X			
				Pclass/Vport_PSE-2P			

Editor Note (to be deleted prior to publication): Icut-2P min values (K_icut3 and K_icut4) are subject to final E2EP2P_Iunb/Runb results after conducting statistical analysis (if it will be required) which will result with lower values. The current values are derived from worst case analysis model. Equation TBD will be supplied for next meeting.

Editor Note (to be deleted prior to publication): To address the following case in future: If PSE is using active or passive pair to pair current balancing circuitry, Kicut3 or Kicut4 may be lower down to 0.5 per equation TBD.

See derivation of the above numbers in Annex A



Annex A: Derivation of Icut-2P

1. Icut_min-2P = Icont-2P_unb by definition.
2. Worst case P2P_Iunb conditions in Type 3 is at short cable (0.1Ω) and in Type 4 is at long cable (12.5Ω) therefore the ratio

$Optimized_E2EP2P_Iunb_effect = \frac{I_{cont-2P_unb_max}}{I_{cont-2P_max}}$ can be used to set Pclass/Vport_PSE-2P at

E2EP2P_Iunb conditions, therefore:

$I_{cut_min-2P} = I_{cont-2P_unb} = (I_{cont-2P_unb_max}/I_{cont-2P_max}) * 0.5 * P_{class}/V_{port_PSE-2P} = (0.668/0.6) * 0.5 * P_{class}/V_{port_PSE-2P} = 1.113 * 0.5 * P_{class}/V_{port_PSE-2P}$.

$I_{cont-2P_unb} = 0.556 * P_{class}/V_{port_PSE-2P}$ for Type 3 PSE.

In similar way for Type 4: $I_{cont-2P_unb} = (0.931/0.865) * 0.5 * P_{class}/V_{port_PSE-2P} = 1.076 * 0.5 * P_{class}/V_{port_PSE-2P}$.

$I_{cont-2P_unb} = 0.538 * P_{class}/V_{port_PSE-2P}$