

Maximum Loop Impedances (ST:SD5R)

Condition	Phase-Neutral Loop Impedance (Ω)	Earth Fault Loop Impedance (Ω)
New Network:		
PME (TN-C-S) and PNB	0.35	0.35
SNE (TN-S)	0.35	Typically $\leq 0.8^*$
TT	0.35	Typically $\leq 21.0^{**}$
Existing Network:		
PME (TN-C-S) and PNB	0.47	0.47
SNE (TN-S)	0.47	Typically $\leq 0.8^*$
TT	0.47	Typically $\leq 21.0^{**}$
Infill (i.e. adding new properties to an existing network):		
PME (TN-C-S) and PNB	i) \leq existing max. loop impedance, and ii) ≤ 0.47	i) \leq existing max. loop impedance, and ii) ≤ 0.47
SNE (TN-S)	i) \leq existing max. loop impedance, and ii) ≤ 0.47	Typically $\leq 0.8^*$
TT	i) \leq existing max. loop impedance, and ii) ≤ 0.47	Typically $\leq 21.0^{**}$

* Where the customer has Class 1 equipment that is protected by WPDs cut-out fuse the maximum operating time of the cut-out fuse is 5s.

** For TT connections the typical maximum earth fault loop impedance values exclude the resistance of the customer's earth electrode (but include the resistance of the substation earth electrode).