

## Technical Report

# **Consideration of reference impedances and public supply network impedances for use in determining the disturbance characteristics of electrical equipment having a rated current $\leq 75$ A per phase**



### **SA/SNZ TR IEC 60725:2013**

This Joint Australian/New Zealand Technical Report was prepared by Joint Technical Committee EL-034, Power Quality. It was approved on behalf of the Council of Standards Australia on 22 May 2013 and on behalf of the Council of Standards New Zealand on 24 May 2013.

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*This Technical Report was issued in draft form for comment as DR TR IEC 60725.*

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## PREFACE

This Technical Report was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-034, Power Quality.

The objective of this Technical Report is to record the information and the factors that were taken into account in arriving at the reference impedances that are incorporated in some parts of AS/NZS 61000.3 series of publications. AS/NZS 61000.3 series provides manufacturers and suppliers of electricity and users of electrical equipment intended for connection to an electrical network with limits for voltage disturbances and harmonics produced by that equipment, and the methods for ascertaining compliance to them in order to maintain electromagnetic compatibility within the electrical network.

This Technical Report is identical with, and has been reproduced from IEC/TR 60725, Ed 3.0 (2012), *Consideration of reference impedances and public supply network impedances for use in determining the disturbance characteristics of electrical equipment having a rated current  $\leq 75$  A per phase*. The IEC processes related to development and approval of a Technical Report are subject to a more moderate level of transparency and consensus than the processes related to developing and approving a normative Standard.

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<i>Reference to International Standard</i>		<i>Australian/New Zealand Standard</i>	
IEC		AS/NZS	
61000	Electromagnetic compatibility (EMC)	61000	Electromagnetic compatibility (EMC)
61000-3-3	Part 3-3: Limits—Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current $\leq 16$ A per phase and not subject to conditional connection	61000.3.3	Part 3.3: Limits—Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current $\leq 16$ A per phase and not subject to conditional connection
61000-3-11	Part 3-11: Limits—Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems—Equipment with rated current $\leq 75$ A and subject to conditional connection	61000.3.11	Part 3.11: Limits—Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems—Equipment with rated current less than or equal to 75 A and subject to conditional connection
61000-3-12	Part 3-12: Limits—Limits for harmonic currents produced by equipment connected to public low-voltage systems with input current $> 16$ A and $\leq 75$ A per phase	61000.3.12	Part 3.12: Limits—Limits for harmonic currents produced by equipment connected to public low-voltage systems with input current $> 16$ A and $\leq 75$ A per phase

The term ‘informative’ has been used in this Technical Report to define the application of the annex to which it applies. An ‘informative’ annex is only for information and guidance.

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