

TECHNICAL BULLETIN

Implementation of SASO 2203 for 220
Volts General Use at KAUST



ISSUE DATE: August 15, 2012

SUBJECT: This bulletin describes the implementation of the Saudi Arabian Standards Organization (SASO) 2203 - Plugs and Socket-Outlets for General Use 220VAC.

APPLICABILITY: This bulletin supersedes all previous guidelines and specifications describing 220 VAC General Use electrical socket-outlets and plugs.

DESCRIPTION

Effective February 23, 2010, it is mandatory for 220 Volts domestic electrical plugs and sockets to comply with the specifications defined by Saudi Arabian Standards Organization namely, SASO 2203, which is the UK 3-pin plugs and socket-outlet relevant to dimensions in SASO 2203 page 12, in compliance with British Standard 1363 – 13A Plugs, Socket Outlets, Adaptors and Connection Units, Fig 2.

OVERVIEW

To date all receptacles and plugs at the University are in compliance with HOK Project Manual specifying convenience receptacles and plugs 16A/250V in compliance with CEE 7/4, Type F, German 2 pin, side clip earth (German "Schuko"), Fig. 1.



Fig 1 Type F (German "Schuko") - Existing at KAUST

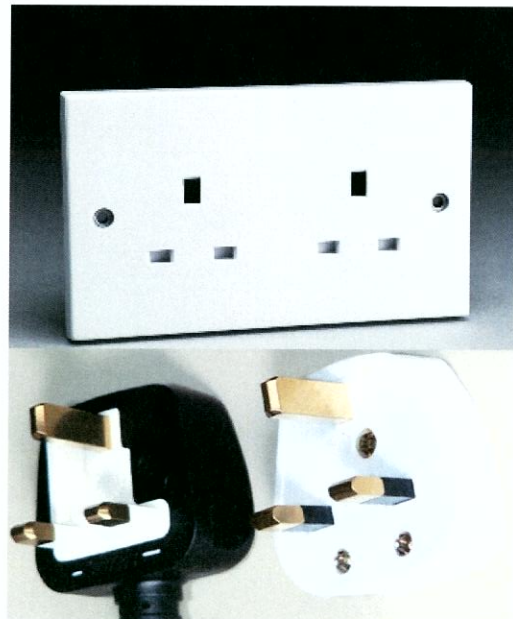


Fig 2 BS1363 Standards - Mandatory

Effective upon release of this Technical Bulletin, KAUST will adopt the BS 1363 throughout the University as specified in the following sections of this document.

TIMELINE

The implementation of the BS 1363 Standard for plugs and sockets will include;

Milestones	Effective Date
Procurement of all equipment with electrical plugs and socket-outlets. All new Purchase Orders, Scope of Works, Contracts, and requisitions shall include the SASO 2203 provision. This requirement must be included in all Purchasing documents, requisitions and attachments.	Release of Bulletin
All new and re-model construction involving provisions for the installation or modification of electrical plugs and socket-outlets.	
Pending equipment procurement and in-progress projects. Efforts must be made to comply with the BS 1363 on a case-by-case basis.	
In cases where equipment with "Schuko" plugs must plug into a BS 1363 socket, efforts should be made to replace the "Schuko" plug on the equipment in a code qualified manner. Alternatively; qualified adaptors or conversion plugs manufactured in compliance with the BS 1363 Standards may be used.	As needed
In cases where equipment with BS1363 plug are installed and must plug into a "Schuko" type socket, efforts should be made to replace the sockets in accordance with the applicable code as noted in the section below. Alternatively, qualified adaptors or conversion plugs manufactured in compliance with the BS 1363 Standards may be used.	

EXCEPTIONS

Specialized equipment, whereas, socket-outlets or plugs are an integral part of the equipment; as well as specialty equipment where it's not practical for socket or plug conversion at the source will be exempted from this bulletin.

CODE COMPLIANCE REQUIREMENT

Plugs are individually fused and individually (over current) protected per BS1363 and SASO 2203. Thus, the existing circuit breakers and wiring do not need to be modified.

DEFINITIONS OF TERMS USED IN THIS BULLETIN

Adaptor or Conversion Plug - A special plug designed to facilitate the connection of one type to plug into a different type of socket.

Plug – A device having two or three metallic pins designed to engage with the contacts of a corresponding socket-outlet and arranged for attachment to a flexible cord or cable.


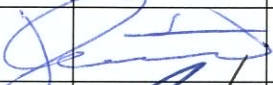


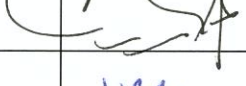
Socket-Outlet - A device having three metallic contacts designed for engagement with corresponding plug pins and arrange for connection to a field wiring. The socket shall have provisions for screening the current carrying socket contacts automatically with the shutter, when they are not in engagement with the corresponding plug.

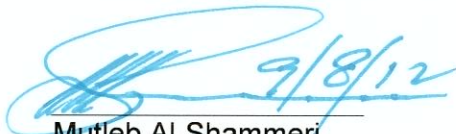
TECHNICAL SPECIFICATIONS REFERENCES

1. HOK Project Manual
King Abdullah University of Science and Technology, released on Aug. 31, 2008
Division 26 – Electrical
Section 26 27 26 – Wiring Devices
Part 2 – Products
Paragraph 2.1 Receptacle
Paragraph 2.2 Cord and Plug Sets
2. Saudi Aramco Construction Specifications
Division 16 – Electrical
Section 16140 – Wiring Devices
Part 2 – Products
Paragraph 2.06 Receptacle German Type, International Standard

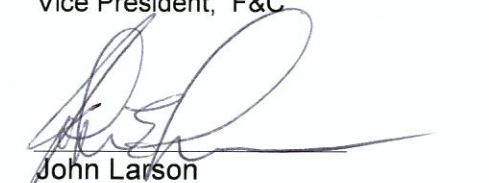
REVIEW AND APPROVAL

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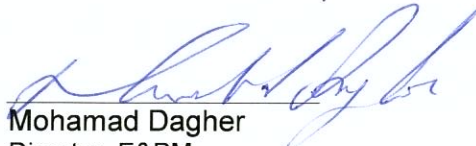
Departments	Initials	Date
Health, Safety and Environment (HSE)		8/28/12
Lab Equipment Maintenance (LEM)		8/24/12
Lab Design & Development (LD&D)		9/11/12
Campus Support Department (CSD)		9/3/12
F&C Maintenance and Utilities (M&U)		8/27/2012
Procurement Services	IRU	9/3/12

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