



Earthswitch Operation on Hypact and DCB Switchgear

EVENT

Operator earthmats have not been installed in the positions where you operate the earthswitch (either electrically or manually) on 110 kV Alstom Hypact Circuit Breakers (“Hypacts”) and 110 kV and 66 kV ABB Disconnecting Circuit Breakers (“DCBs”).

If an earthfault occurs when an earthswitch is operated and the operator is not standing on an operating earthmat they may receive a hazardous touch voltage. This hazard exists irrespective of whether the earthswitch is operated electrically from the device control panel or via the mechanical crank handle.

Note: Some Hypacts and DCBs may already have one earthmat installed, however until each installation has been inspected and modified please assume that there are no earthmats on any Hypacts/DCBs and follow the operating advice given below.

The table below lists all known Hypacts and DCBs in service.

APS-DCB-102	EDG-CSA-322	MS1-CSA-2	TKR-CSA-132	WIL-DCB-118
APS-DCB-122	HEN-CSA-242	MST-DCB-72	TKR-CSA-138	WIL-DCB-128
BOB-CSA-212	HEN-CSA-332	MST-DCB-82	TKR-CSA-182	WIL-DCB-142
BOB-CSA-222	HTI-CSA-72	MST-DCB-92	TMU-CSA-48	WIL-DCB-152
BOB-CSA-232	KPO-CSA-102	OKN-DCB-82	WES-CSA-108	WIL-DCB-162
BOB-CSA-242	KPO-CSA-112	PAO-DCB-212	WES-DCB-142	WIL-DCB-178
BOB-CSA-252	KPO-CSA-72	PAO-DCB-232	WH-ADD-STNS	WIL-DCB-188
BOB-CSA-262	MCH-DCB-42	RDF-CSA-72	WH-BPE-STNS	WIL-DCB-192
BOB-CSA-272	MCH-DCB-52	RDF-CSA-78	WH-BPE-STNS	WIL-DCB-202
BOB-CSA-278	MKE-DCB-102	RDF-CSA-82	WH-BPE-STNS	WIL-DCB-222
BOB-CSA-282	MPE-CSA-262	SBK-DCB-68	WH-BPE-STNS	WIL-DCB-52
BOB-CSA-292	MPE-CSA-272	TIM-DCB-102	WH-OTA-STNS	WIL-DCB-92
BOB-CSA-332	MPE-CSA-282	TKH-CSA-62	WH-OTA-STNS	
BWK-CSA-172	MPE-CSA-288	TKR-CSA-102	WH-OTA-STNS	
CLH-DCB-142	MPE-CSA-292	TKR-CSA-122	WH-OTA-STNS	

IMMEDIATE ACTION TO BE TAKEN

Wear insulated switching gloves when operating the earthswitch of any Hypact or DCB, irrespective of whether you are using the electrical control or the mechanical crank handle, and irrespective of whether or not the device appears to have an operating earthmat.



TRANSPOWER

SAFETY! ALERT!

18 March 2016



FUTURE ACTIONS

The standard design drawings for Hypacts and DCBs will be modified to include operator earthmats under the electrical control panels and the mechanical crank handles for all future installations.

All existing Hypact and DCB installations will be modified to include the necessary operator earthmats. Please wear insulating switching gloves when operating any Hypact or DCB earthswitch until further notice.

LEARNINGS

- Ensure that when new types of switchgear are introduced on the grid that their earthing arrangements comply with the design standard TP.DS 52.01 which requires operator earthmats for all disconnectors and earthswitches.



For more information,
please contact:

Name: Wendy Edwards
Designation: Operational Engineering Manager
Ph: 04 590 6799 Mob: 021 486 795
wendy.edwards@transpower.co.nz