



# Industry Notification

## Product Alert

Product Management – Coal Mining Industry Notification | IN00010 May 2022

### IPE, OCS, IPX – Under Voltage Protection

#### PURPOSE

The Ampcontrol Integrated Protection relays offer a broad suite of protection functions designed to ensure compliance with AS/NZS 2081. Although the relay is designed to this standard, the user can still operate it such that it may not comply with the objectives of AS/NZS 2081 or AS/NZS 4871, i.e. selecting protection settings that would not detect conditions which could give rise to excessive touch potentials.

#### APPLICABLE ITEMS

Item	Description
159325	OCS PROTECTION RELAY - ETHERNET-IP
178819	OCS PROTECTION RELAY - MODBUS-TCP
197358	IPE PROTECTION RELAY

#### ISSUE

The Under-Voltage Protection feature (UV) included in the protection suite provides protection against system voltage sags, which can lead to other issues like excessive current draw. However the protection function is considered to also provide additional back up protection for the physical termination of the cable connection module (CCM) to the outlet circuit during operation.

With UV protection enabled, if the CCM is disconnected, a UV trip will occur during operation. This ensures that the relay's LV EFLO and HV IT tests are applied to the outlet's circuit and performs tests to correctly identify earth faults as per AS/NZS 2081 and AS/NZS 4871.

With UV protection disabled, a CCM disconnection can go undetected allowing the relay to perform LV EFLO and HV IT tests on an open circuit. As a result, the protection relay may not have visibility of potential earth faults on the outlet circuit. Under such circumstances, the outlet circuit will be operating outside of the requirements set out by AS/NZS 2081 and AS/NZS 4871, and thus resulting in a non-conformance and potentially hazardous situation.

#### WHAT TO DO

Ampcontrol recommends **NOT** disabling UV protection (which is switched on by default). This ensures the relay has a closed loop feedback in place to validate the CCM connections are maintained during operation.

Should a specific application arise where it is necessary to disable the protection relay's UV protection feature, a risk assessment should be conducted and alternative protection measures put in place.

#### FIND OUT MORE

For more information on this Notification, contact Ampcontrol Customer Service on +61 1300 267 373 or [customerservice@ampcontrolgroup.com](mailto:customerservice@ampcontrolgroup.com)

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