

Date: 23-Sep-2021

Ref. : DP-VP-CS-GEN-0153-2021

To:

Consultants/ Contractors/Project owners
Air-conditioning equipment Manufacturers & Suppliers

Under Voltage (UV) Relays with Auto Reset Timer for Air-conditioning Loads/Equipment

Dear Customer,

The Authority is constantly endeavoring to provide safe and reliable supply to its consumers. We thank you for your valuable cooperation and coordination with us to provide you the best services from DEWA.

In order to provide clarity on Clauses 8.2.1 and 8.2.2 of DEWA Regulations for Electrical Installations 2017 Edition, related to the requirement of providing UV (Under Voltage) relays for the Air-conditioning loads/equipment, below clarification/amendment shall be considered as part of the above clauses:

All air-conditioners and air-conditioning units / plants / equipment installed within the consumers' installation shall be provided with under voltage (UV) relays that trip the circuit breakers / contactors associated with these relays.

The tripping shall occur immediately and without any intentional time delay if the supply voltage drops to or below 75% of nominal and remains at or below 75% for a duration of 0.2 seconds. Tripping shall not occur if the supply voltage recovers above 75% within 0.2 seconds.

The UV relays auto-reset timer shall have an adjustable time setting between 5 and 10 minutes.

The circuit breakers / contactors associated with the UV relays, shall have 'auto closing' facility to restore supply to the chillers / air conditioning units, after normalization of supply voltage, when the relay is reset automatically. The auto closing facility shall have a motorized operation. The auto-reset timer of the UV relays shall be set at values specified in the manufacturer's schedules, approved by DEWA, to suit individual installation. Necessary provision for sealing may be incorporated in the relay to restrict access for adjustments of the setting.





The UV relays with auto-reset timer shall normally be incorporated within the respective air-conditioning unit / equipment or in their control panels. For normal air-conditioners, UV relays with auto-reset timer may be provided within the consumer's distribution board for individual or group of air-conditioning units. Prior approval shall be obtained from DEWA for each application.

The UV relays shall only be applied to trip the respective air-conditioning units / plant or equipment sensitive to voltage variations. The UV relays shall not be applied to trip LV incomer circuit-breakers/ ACB within the Main LV Panel.

The UV relays with associated controls shall be checked and maintained regularly.

The 75% voltage threshold and tripping time of the air-conditioning units / plants / equipment shall be confirmed to DEWA after installation.

Thanking you in anticipation of your full cooperation.

For DUBAI ELECTRICITY & WATER AUTHORITY

Rashed Humaidan
EVP - Distribution Power

Obaid Saif Atiq Al Falasi,

VP - Distribution Connection Services, Signed on 22-09-2021 20:58:10

Yusuf Kutty Rafiudeen,

Sr Mgr - Design Approvals, Signed on 22-09-2021 13:27:28

