6.1 Air Conditioning Disconnects

Fused, Unfused and Molded Case Switch

Air Conditioning Disconnects

Complete Line of Fused, Unfused and Molded Case Switch Type Air Conditioning Disconnects

Contents

Product Description

An air conditioning disconnect (ACD) is a disconnect located between a loadcenter (distribution panel) and air conditioner. Eaton's ACD product line provides an installer or repair personnel with a visible disconnecting means when performing maintenance. ACDs are also known as disconnects, pullouts or air conditioning switches.

Non-fused pullout and molded case switch devices provide personnel with a visible ON-OFF disconnecting means. While fused pullout units also perform this function, they also provide an additional level of protection for the air conditioner.

Fused and non-fused devices are of a pullout design, where the user physically removes or "pulls out" a tab to break the electrical connection. A molded case switch is similar to a light switch where the user "switches" the unit to the indicated ON-OFF position.

Fused and Non-Fused Pullouts

- ON/OFF control provided by a pullout handle
- Pullout handle can be conveniently stored in the compartment in the OFF position, helping to prevent the handle from being misplaced
- Protective shield cannot be removed until the pullout handle is removed, disconnecting the power

Molded Case Switch

- Rugged molded case construction in a disconnect switch that looks like a circuit breaker but operates like an ordinary household light switch
- Plug-in molded case switch (included) eliminates the need for pullout handles
- No need for replacement pullout handles due to loss or theft

Application Description

The most widely used application for ACDs is for residential and light commercial air conditioning units. An ACD is installed outdoors, in visible proximity to the air conditioner condensing unit. ACDs are also found in use with heat pumps, swimming pools, spas, whirlpools and pump houses, and meet 2008 NEC Article 422.31 (B) requirements for servicing electric water heaters. Metallic enclosures are galvanized steel and are installed in various locations. Non-metallic enclosures are a plastic (polycarbonate) enclosure commonly used in coastal or salt-water areas.

Features, Benefits and Functions

- Single-phase, two-wire, 240 Vac and three-phase, three-wire, 240 Vac
- NEMA 3R outdoor enclosures offered in metallic and non-metallic versions
- Easy-to-remove high-strength protective shield for easier wiring and mounting
- Easy-to-remove front cover (no screws or fasteners to remove)
- 1-inch knockouts on the bottom, back and side of unit
- Copper-rated line and load lugs that are easily accessible
- Ample wiring space for mounting with a stud gun (single keyhole, two- or three-point mounting)
- Fused devices are service entrance rated

Note: Fused non-metallic units require the addition of **GB4NM** ground bar to obtain a Service Entrance rating.

- Horsepower rated (10 hp maximum at 240 Vac)
- Padlockable door provision for safety and reduction of tampering
- Metallic enclosures are bottom entry and exit only
- Non-metallic enclosures have knockouts and a hub provision for top access
- Non-metallic enclosures have a single unit door and protective shield for installer convenience
- Non-metallic enclosures are durable and provide excellent resistance to climate changes
- Factory-installed tamper-resistant/weather-resistant receptacles are available as an option on some products

Standards and Certifications

- UL listed File No. E132354, E143893, E196365

Contact Eaton for details and part numbers for CSA approved units.

Product Selection

DPU222R

Non-Fused Pullouts

Main Ampere Rating	Maximum hp Rating 120 V	240 V	Wire Size Range Cu/Al 60 °C or 75 °C	Catalog Number
Galvanized Steel				
60	—	10	#14–3	**DPU222R** ①
Non-Metallic/Polycarbonate Enclosure				
60	—	10	#14–2	**ACD222URNM-A2** ①

DPF222R

Fused Pullouts

Main Ampere Rating	Maximum hp Rating 120 V	240 V	Wire Size Range Cu/Al 60 °C or 75 °C	Catalog Number
Galvanized Steel				
30 ②	2	3	#14–3	**DPF221R** ①
60 ②	3	10	#14–3	**DPF222R** ①
Non-Metallic				
30	2	3	#14–2	**ACD221RNM-A2** ①
60	3	10	#14–2	**ACD222RNM-A2** ①

For Service Entrance applications, see footnotes below.

DPB222R

Molded Case Switch

Main Ampere Rating	Maximum hp Rating 120 V	240 V	Wire Size Range Cu/Al 60 °C or 75 °C	Catalog Number
Galvanized Steel				
60	—	10	#14–3	**DPB222R** ③
Non-Metallic/Polycarbonate Enclosure				
60	—	10	#14–2	**B60NARNM-A2** ③

Notes

① For replacement pullout head, order part number **96-3258-4**.

② To obtain a Service Entrance Rating, the addition of a **DPFG** (ground bar kit) is required.

③ For replacement molded case switch, order part number **BR260NA**.