

Air Condition Disconnects



Air Condition Disconnects

Application Description

Typically used as an outdoor motor disconnect for 240V residential and 600V commercial heating, ventilating and air conditioning applications. Per Section 28-604(5) CEC Part 1, "motor disconnecting means for air-conditioning and refrigeration equipment shall be located within sight of and within 3m of the equipment".

Product Description

240VAC single phase 30A, 60A, and 600VAC three phase 30A, 40A, 60A, 80A, horsepower rated motor disconnects. Rugged 3R outdoor rated padlockable metallic enclosure, ANSI 61 (light grey) electrocoat finish. CSA certified as a motor disconnect.

Single Phase 2 Wire 240VAC 30, 60A.

- 240VAC @10,000 amperes rms short circuit rating when protected by 60A fuse or breaker
- Available in four designs.
- Standard pullout, fused, and non fusible.
- Moulded case switch.
- Pullout c/w 1/2" x 6' WHIP prewired, factory installed, all inclusive time saver.
- For additional safe power source, 15A GFI receptacle c/w pullout.
- Swing-up cover remains in place when in the open position. Cover can be easily removed for wiring and mounting. Cover snaps into place and no screws required. Includes provision for padlocking.

Contents

Description	Page
Selection Guide	2
Product Overview.	3
Catalogue Configurator.	4
Options and Accessories	5
Technical Data and Specifications	7
Standard Terminal Capacities	7
Fuse Dimensions	8
Short Circuit Ratings.	10
Flex/Satellite Modifications	12
Air Condition Disconnects	15
Product Description, Features	15
Standards and Certifications	15
Product Selection	16
Technical Data and Dimensions.	17
General Duty Switches.	18
Heavy Duty Switches	22
Heavy Duty Six-Pole Switches	32
Heavy Duty Double Throw Switches	35
Enviroline Switches	41
Heavy Duty Window Switches.	44
Heavy Duty Receptacle Switches	48
Heavy Duty Voltage Indicator Switches	52
Hazardous Location Switches	54
Heavy Duty Quick Connect Switches	56
Solar Switches	60
Zone Blasting Switches	64
Elevator Control Switches	66
Grounding Switches.	68
Enclosed Motor Disconnects	70
Pringle Bolted Pressure Switches	78
OEM Operating Mechanisms.	85
CSA Enclosure Designations	91

3 ph 3 w 600VAC, 30A, 40A, 60A, 80A non-fusible motor disconnect

- 600VAC @ 65KA rms short circuit rating when protected by J fusing. Applies to 'B' series, effective March 2011, non 'B' series rated 10KA
- 600V unit complies with CEC rule 28-602(3)(b) and are labelled "suitable for motor disconnect." cCSAus approved
- For ease of wiring, din rail mounted removable 600V disconnect
- Versatile cable entry - bottom, sides or back. Both 240V and 600VAC

Standards and Certifications

- 240V meets C22.2 No.4
- 600V meets C22.2 No.14, "suitable for motor disconnect"
- See page 16 for specific catalogue number certifications



Switching Devices

Safety Switches

3GAC222NF



120/240VAC HVAC Air Condition Disconnect

System	Ampere Rating	Maximum Horsepower Ratings ^①					Type 3R Catalogue Number
		Single-Phase AC		Three-Phase AC			
		120V	240V	240V	480V	600V	
Two Pole, Two-Wire - 240Vac - Fusible - Pullout design^②							
	30	—	3	—	—	—	3GAC221^{②③}
	60	—	10	—	—	—	3GAC222^{②③}
Two Pole, Two-Wire - 240Vac - Non Fusible - Pullout design^②							
	60	—	10	—	—	—	3GAC222NF^{②③}
	60	—	10	—	—	—	3GAC222NF12W^{②③④}
	60	—	10	—	—	—	3GAC222NFGF^{②③⑤}

DPB222R



Two Pole, Two-Wire - 240Vac - Non Fusible - Moulded Case Switch^⑥

System	Ampere Rating	120V	240V	240V	480V	600V	Type 3R Catalogue Number
	60	—	10	—	—	—	DPB222R^⑦

3GAC362NFB



600Vac HVAC Air Condition Disconnect

System	Ampere Rating	Maximum Horsepower Ratings ^①					Type 3R Catalogue Number
		Single-Phase AC		Three-Phase AC			
		120V	240V	240V	480V	600V	
Three Pole, Three-Wire - 600Vac - Non Fusible - Toggle design							
	30	—	3	7.5	15	20	3GAC361NFB^{⑧⑨}
	40	—	3	7.5	20	25	3GAC3640NFB^{⑧⑨}
	60	—	7.5	15	30	30	3GAC362NFB^{⑧⑨}
	80	—	10	20	40	40	3GAC3680NFB^{⑧⑨}

Notes

- ① Hp ratings apply when time delay fuses used.
- ② Replacement pullout head 96-3258-4.
- ③ cUL listed.
- ④ c/w factory installed pre wired 1/2" x 6' whip.
- ⑤ c/w factory installed 15A GFI receptacle.
Note fusible disconnect not approved for service entrance.
- ⑥ c/w factory installed Moulded Case Switch.
- ⑦ CSA certified
- ⑧ "B" series effective March 2011, 600V @ 65kA rms when protected by J fuse on line side, otherwise 10ka rms.
- ⑨ cCSAus (approved by CSA to CSA and UL standards).

Technical Data and Specifications for Air Condition Disconnects

Short-Circuit Ratings Terminal Capacity 240VAC Single Phase Pullout and Moulded Case Switch Design

Ampere Rating	Short Circuit Withstand/Voltage	Upstream Protection	Terminal Capacity
30	10kA @ 240V	30A max Fuse or Breaker [Ⓞ]	#14 - #3 cu/al
60	10kA @ 240V	60A max Fuse or Breaker [Ⓞ]	#14 - #3 cu/al

600Vac Three Phase Toggle Design

Ampere Rating	Short Circuit Withstand/Voltage	Upstream Protection	Terminal Capacity
30	10kA @ 600V	60A max J Fuse	#14 - #4
30	65kA @ 600V	30A max J Fuse	#14 - #4
40	10kA @ 600V	60A max J Fuse	#14 - #4
40	65kA @ 600V	30A max J Fuse	#14 - #4
60	50kA @ 600V	100A max J Fuse	#14 - #1
60	65kA @ 600V	60A max J Fuse	#14 - #1
80	50kA @ 600V	100A max J Fuse	#14 - #1
80	65kA @ 600V	60A max J Fuse	#14 - #1

[Ⓞ] Fuse or Circuit Breaker utilized must have a minimum 10kA short circuit rating

Dimensions

Approximate Dimensions in inches/mm

240Vac Single Phase 1 phase - 2 wire

Ampere Rating	Disconnect Type	Height (H)	Width (W)	Depth (D)	Weight lbs(kg)
30	Fusible	8.79 (223.4)	5.4 (137.16)	3.152 (80.1)	2.7 (1.23)
60	Fusible/ Non fusible	8.79 (223.4)	5.4 (137.16)	3.152 (80.1)	2.7 (1.23)
60	Non fusible with 1/2" x 6' whip	8.79 (223.4)	5.4 (137.16)	3.75 (95.25)	6 (2.7)
60	Non fusible with molded case switch	8.79 (223.4)	5.4 (137.16)	3.75 (95.25)	3.4 (1.5)
60	Non fusible with 15A GFI receptacle	11.63 (295.4)	6.63 (168.4)	4.44 (112.8)	8 (3.6)

600Vac 3 phase - 3 wire

Ampere Rating	Disconnect Type	Height (H)	Width (W)	Depth (D)	Weight lbs(kg)
30	Non fusible toggle	8.79 (223.4)	5.4 (137.16)	3.75 (95.25)	3.8 (1.7)
40	Non fusible toggle	8.79 (223.4)	5.4 (137.16)	3.75 (95.25)	3.8 (1.7)
60	Non fusible toggle	8.79 (223.4)	5.4 (137.16)	3.75 (95.25)	4 (1.8)
80	Non fusible toggle	8.79 (223.4)	5.4 (137.16)	3.75 (95.25)	4 (1.8)

