AC Disconnects





Midwest Electric Products

Application Information

Article 440 of the National Electrical Code applies to electric motor-driven air conditioning and refrigerating equipment and to the branch circuits and controllers for such equipment. It provides for the special considerations necessary for circuits supplying hermetic refrigerant motor-compressors and for any air conditioning and/or refrigerating equipment that is supplied from an individual branch circuit that supplies a hermetic refrigerant motor-compressor.



Features and Benefits

Flexibility

- 30-100 Amps
- 240 Volts AC
- 1-phase or 3-phase, fusible or non-fusible
- Horsepower rated
- 10kAIC
- Available with GFCI receptacle

Rugged Durability

- NEMA 3R weatherproof enclosure
- Noryl[®] thermoplastic enclosure is corrosion resistant and extremely durable, giving long maintenance-free service
- Metallic models are made of G90 galvanized steel for superior corrosion protection and have a durable polyester powder coat finish which resists chipping and fading

User Safety

• Padlock provision on door helps prevent unauthorized access

Installation Ease

- Three-piece construction that opens up mounting and wiring areas
- Terminals approved for 60°C and 75°C wire, accepts solid 14-8 copper, 12-8 aluminum or stranded 14-3 copper, 12-3 aluminum
- Numerous knockouts reduce installation time
- Straight-in, straight-out wiring saves time and money

Non-Automatic Disconnect Switch, 1-phase, 120/240V

Model Number	Amp	Horsepower Rating	Wire Range	Cabinet Size	Unit Wt.	Std. Pkg.	UL
Metallic							
U065NA1	60	10	D	5 x 7	2.5	6	Y ¹
Non-Metallic			•		•		
P065NA1	60	10	D	5 x 7	2	6	Y ¹

Fusible disconnects are available in 30 and 60 Amp models. Pullers are removable

Non-Metallic, Fusible Disconnects, 1-phase, 120/240V

or reinstallable in the OFF position for user safety during equipment maintenance. The P065F UL Listing includes the ability to field replace the 60 Amp puller with 30 Amp puller (FR352) for installation flexibility. Listed for use as service entrance.

Model Number	Amp	Horsepower Rating	Wire Range	Cabinet Size	Unit Wt.	Std. Pkg.	UL
P035F	30	3	D	6 x 8	2	6	V 1
P065F	60	10	D	6 x 8		0	I

Metallic, Non-Fusible Disconnects, 1-phase or 3-phase

Non-fusible disconnect pullers are removable or reinstalled in the OFF position for user safety during equipment maintenance.

Model Number	Rating		Cabinet Size	Unit Wt.	Std. Pkg.	UL	
Phase 1 – 120/240V							
U065P	60	10	D	5 x 7	3	6	Y^1
Phase 3 – 240V							
U0653P	60	7.5-15	D	6 x 14	8.5	4	Y ¹

Metallic, Fusible Disconnects, 1-phase or 3-phase

Amp

Horsepower

Rating

Fusible disconnects are available in 30 and 60 Amp models. Pullers are removable or reinstallable in the OFF position for user safety during equipment maintenance. Listed for use as service entrance.

Wire Range

Dhass 1 100/040						
Phase 1 – 120/240	V					
U035F2	30	3	D	5 x 7	2.5	6
U065F1	60	10	D	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		
Phase 3 – 240V					•	
U0353F	30	3-7.5	D	6 x 14	9.5	1
U0653F	60	7.5-15	D	6 x 14	0.0	4

Featured Models

Non-Metallic, Non-Fusible Disconnects, 1-phase, 120/240V

Non-fusible disconnect pullers are removable or reinstalled in the OFF position for user safety during equipment maintenance.

Model Number	Amp	Horsepower Rating	Wire Range	Cabinet Size	Unit Wt.	Std. Pkg.	UL
P065P1	60	10	D	5 x 7	2	6	V 1
P065P	60	10	D	6 x 8	2		





P035F



U065P



Std.

Pkg.

UL

 Y^1

 Y^1

Unit

Wt.

Cabinet Size

U065F1



Model Number

Heat Pump, Fusible Disconnects, 1-phase, 120/240V

Horsepower

Rating

10

Amp

90

100

Model Number

Fusible U045F

U610F

Model Number

Fusible

U22OH

U261F

Multiple disconnect devices are offered for heat pump applications that require individual disconnects for the heating and cooling cycles. All pullers are removable or reinstalled in the OFF position for user safety during equipment maintenance. Their UL Listing includes the ability to field replace the 60 Amp puller in the left fuse block with a 30 Amp puller (FH352) for installation flexibility but prohibits the interchageability of pullers between fuse blocks to ensure the proper fuse/puller combination is always reinstalled in the proper fuse block.

Neutral Bar

NU100B2

Wire Range

Υ

Wire Range

AR

Е

Evaporation Cooler, Fusi	ble Disconnects 1-nhas	e 120/240V

Circuit

Protection

(2) FH1

(3) FH1

Evaporation cooler applications not only require fusing but switching or receptacle function depending on equipment type and local codes. Two models are offered to meet these varied evaporation cooler applications.

Amp

20

40

Disconnects, Ground Fault	, 1-phase, 120/240V
----------------------------------	---------------------

Receptacles

DPST. SPST

Switch

14-20R,

5-20R2

Combination AC disconnects are designed for use as an AC unit, an outdoor GFCI or an in-use weather-proof cover for an outdoor GFCI receptacle. The three models offered meet NEC requirements.

Model Number	Receptacles	Amp	Horsepower Rating	Wire Range	Cabinet Size	Unit Wt.	Std. Pkg.	UL
U065P010	5-15R2GFI					4.3	6	
U065NA1010	5-15R2GFI	60	10	D	5 x 7	4	6	Y ¹
U065PC2	5-20R2					4.3	4	

Exterior Mounting Bracket STC1

Exterior Mounting Bracket for single-phase AC & AC/GFCI disconnects in aluminum, vinyl siding and stucco applications. Order quantity in multiples of six. Mounting hardware for fastening AC disconnect to STC1 included.





U065P010







Unit

Wt.

13.5

Unit

Wt.

4.5

6

Cabinet Size

9 x 17

Cabinet Size

5 x 7

6 x 9

Std.

Pkg.

1

Std.

Pkg.

4

UL

Υ

UL

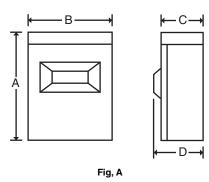
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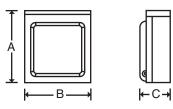
 Y^1

Technical Data

		lacement Pa	rts	Cabinat	Enclosure	Cat	oinet Dimer	nsions (incl	nes)	Knockout
Model Number	Complete Block and Puller	Fuse Block Only	Puller Only	Size	Style	Height (A)	Width (B)	Depth (C)	Depth (D)	Figure
P035F	FR39		FR352	6 x 8	С	8	5-3/4	3-1/8		1
P065F	FR69		FH682	6 x 8	С	8	5-3/4	3-1/8		1
P065NA1	_	_		5 x 7	D	7-1/4	5	2-1/8	2-3/4	2
P065P		NF65	NF652	6 x 8	D	8	6	5-3/4	2-3/4	2
P065P1		NF65	NF652	5 x 7	D	7	5	2-1/8	2-3/4	2
U035F2	FR35R	_	FR352R	5 x 7	A	7	5	2-1/8	2-3/4	2
U0353F	265A6035G27	_	265A6035G27	6 x 14	В	14-3/8	7-1/4	5-3/16	—	3
U045F	FR35XFR67	_	FR352, FH682	9 x 17	В	17-3/8	9-3/4	5-3/16	_	4
U0653F	265A6036G69		265A6036G69	6 x 14	В	14-3/8	7-1/4	5-3/16	_	3
U0653P	265A6036G73		265A6036G73	6 x 14	В	14-3/8	7-1/4	5-3/16		3
U065F1	FR65	—	FH682	5 x 9	A	9	5	2-1/8	2-3/4	2
U065NA1			_	5 x 7	D	7	5	2-1/8	2-3/4	2
U065NA1010			_	5 x 7	D	7	5	3-5/8	5-3/16	2
U065P	_	NF65	NF652	5 x 7	A	7-1/4	5	2-1/8	2-3/4	2
U065P010		NF65	NF652	5 x 7	D	7	5	3-5/8	5-3/16	2
U065PC2		NF65	NF652	5 x 7	D	7	5	2-1/8	2-3/4	2
U220H		FH1	_	5 x 7	В	7-1/8	5-3/4	5-3/16		5
U261F		FH1	_	6 x 9	В	9-1/8	7-1/4	5-3/16	_	3
U610F	FR67X2	_	FH682	9 x 17	В	17-3/8	9-3/4	5-3/16	_	4

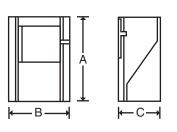
Cabinet Dimensions



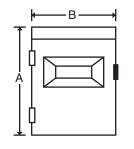


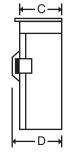
Fig, B

Fig, D

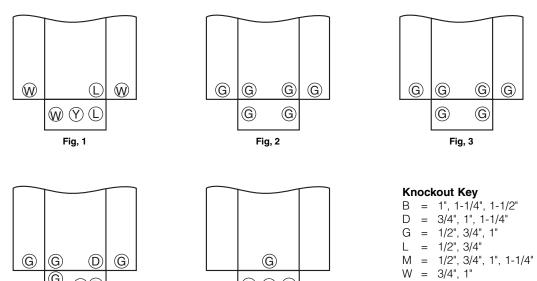


Fig, C





Knockout Configurations



 \mathbb{C} \mathbb{M} \mathbb{C}

Fig, 5

* Knockouts shown for size not for exact positions.

G GBB

Fig, 4

Wire Range Tables

D

Connector	Cop	opper Aluminum		
Connector	Solid	Strand	Solid	Strand
Line	14-8	14-2	12-8	12-2
Load	14-8	14-2	12-8	12-2
Neutral	—	—	_	
Equipment Ground	12-8	12-2	12-8	12-2

Ε

Connector	Cop	oper	Aluminum		
Connector	Solid		Solid	Strand	
Line	14-10	14-10	—		
Load	14-10	14-10	_		
Neutral	14-10	14-10			
Equipment Ground	12-8	12-2	_	_	

Υ

Connector	Cop	Copper Alum		
Connector	Solid	Strand	Solid	Strand
Line	14-8	14-1/0	12-8	12-1/0
Load	14-8	14-2	12-1/0	12-2
Neutral	14-8	14-1/0	12-8	12-1/0

= 1", 1-1/4"

Υ

AR

Connector	Cop	oper	Aluminum		
Connector	Solid	Strand	Solid	Strand	
Line	14-10	14-10		_	
Load	14-10	14-10			
Neutral	—			—	
Equipment Ground	12-8	12-2	_	—	

Information provided is subject to change without notice. Please verify all details with Midwest. All values are design or typical values when measured under laboratory condition, and Midwest makes no warranty or guarantee, express or implied, that such performance will be obtained under end-use conditions.

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Features and Benefits

Flexibility

- 30-100 Amps
- 240 Volts AC
- 1-phase or 3-phase, fusible or non-fusible
- Horsepower rated
- 10kAIC
- Available with GFCI receptacle

Rugged Durability

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- Noryl[®] thermoplastic enclosure is corrosion resistant and extremely durable, giving long maintenance-free service
- Metallic models are made of G90 galvanized steel for superior corrosion protection and have a durable polyester powder coat finish which resists chipping and fading

User Safety

• Padlock provision on door helps prevent unauthorized access

Installation Ease

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- Numerous knockouts reduce installation time
- Straight-in, straight-out wiring saves time and money

Non-Automatic Disconnect Switch, 1-phase, 120/240V

Model Number	Amp	Horsepower Rating	Wire Range	Cabinet Size	Unit Wt.	Std. Pkg.	UL
Metallic							
U065NA1	60	10	D	5 x 7	2.5	6	Y ¹
Non-Metallic			•		•		
P065NA1	60	10	D	5 x 7	2	6	Y ¹

Fusible disconnects are available in 30 and 60 Amp models. Pullers are removable

Non-Metallic, Fusible Disconnects, 1-phase, 120/240V

or reinstallable in the OFF position for user safety during equipment maintenance. The P065F UL Listing includes the ability to field replace the 60 Amp puller with 30 Amp puller (FR352) for installation flexibility. Listed for use as service entrance.

Model Number	Amp	Horsepower Rating	Wire Range	Cabinet Size	Unit Wt.	Std. Pkg.	UL
P035F	30	3	D	6 x 8	2	6	V 1
P065F	60	10	D	6 x 8		0	I

Metallic, Non-Fusible Disconnects, 1-phase or 3-phase

Non-fusible disconnect pullers are removable or reinstalled in the OFF position for user safety during equipment maintenance.

Model Number	Amp	Horsepower Rating Wire Range Cabinet Size		Unit Wt.	Std. Pkg.	UL			
Phase 1 – 120/240V									
U065P	60	10	D	5 x 7	3	6	Y^1		
Phase 3 – 240V									
U0653P	60	7.5-15	D	6 x 14	8.5	4	Y ¹		

Metallic, Fusible Disconnects, 1-phase or 3-phase

Amp

Horsepower

Rating

Fusible disconnects are available in 30 and 60 Amp models. Pullers are removable or reinstallable in the OFF position for user safety during equipment maintenance. Listed for use as service entrance.

Wire Range

Dhass 1 100/040						
Phase 1 – 120/240	V					
U035F2	30	3	D	5 x 7	2.5	6
U065F1	60	10	D	5 x 9	3.5	
Phase 3 – 240V					•	
U0353F	30	3-7.5	D	6 x 14	8.5	1
U0653F	60	7.5-15	D	6 x 14	0.0	4

Featured Models

Non-Metallic, Non-Fusible Disconnects, 1-phase, 120/240V

Non-fusible disconnect pullers are removable or reinstalled in the OFF position for user safety during equipment maintenance.

Model Number	Amp	Horsepower Rating	Wire Range	Cabinet Size	Unit Wt.	Std. Pkg.	UL
P065P1	60	10	D	5 x 7	2	6	V 1
P065P	60	10	D	6 x 8	2		





P035F



U065P



Std.

Pkg.

UL

 Y^1

 Y^1

Unit

Wt.

Cabinet Size

U065F1



Model Number

Heat Pump, Fusible Disconnects, 1-phase, 120/240V

Horsepower

Rating

10

Amp

90

100

Model Number

Fusible U045F

U610F

Model Number

Fusible

U22OH

U261F

Multiple disconnect devices are offered for heat pump applications that require individual disconnects for the heating and cooling cycles. All pullers are removable or reinstalled in the OFF position for user safety during equipment maintenance. Their UL Listing includes the ability to field replace the 60 Amp puller in the left fuse block with a 30 Amp puller (FH352) for installation flexibility but prohibits the interchageability of pullers between fuse blocks to ensure the proper fuse/puller combination is always reinstalled in the proper fuse block.

Neutral Bar

NU100B2

Wire Range

Υ

Wire Range

AR

Е

Evaporation Cooler, Fusi	ble Disconnects 1-nhas	e 120/240V

Circuit

Protection

(2) FH1

(3) FH1

Evaporation cooler applications not only require fusing but switching or receptacle function depending on equipment type and local codes. Two models are offered to meet these varied evaporation cooler applications.

Amp

20

40

Disconnects, Ground Fault	, 1-phase, 120/240V
----------------------------------	---------------------

Receptacles

DPST. SPST

Switch

14-20R,

5-20R2

Combination AC disconnects are designed for use as an AC unit, an outdoor GFCI or an in-use weather-proof cover for an outdoor GFCI receptacle. The three models offered meet NEC requirements.

Model Number	Receptacles	Amp	Horsepower Rating	Wire Range	Cabinet Size	Unit Wt.	Std. Pkg.	UL
U065P010	5-15R2GFI					4.3	6	
U065NA1010	5-15R2GFI	60	10	D	5 x 7	4	6	Y ¹
U065PC2	5-20R2					4.3	4	

Exterior Mounting Bracket STC1

Exterior Mounting Bracket for single-phase AC & AC/GFCI disconnects in aluminum, vinyl siding and stucco applications. Order quantity in multiples of six. Mounting hardware for fastening AC disconnect to STC1 included.





U065P010







Unit

Wt.

13.5

Unit

Wt.

4.5

6

Cabinet Size

9 x 17

Cabinet Size

5 x 7

6 x 9

Std.

Pkg.

1

Std.

Pkg.

4

UL

Υ

UL

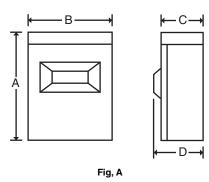
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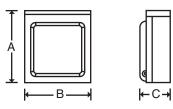
 Y^1

Technical Data

		Replacement Parts			Enclosure	Cat	oinet Dimer	nsions (incl	nes)	Knockout
Model Number	Complete Block and Puller	Fuse Block Only	Puller Only	Size	Style	Height (A)	Width (B)	Depth (C)	Depth (D)	Figure
P035F	FR39		FR352	6 x 8	С	8	5-3/4	3-1/8		1
P065F	FR69		FH682	6 x 8	С	8	5-3/4	3-1/8		1
P065NA1	_	_		5 x 7	D	7-1/4	5	2-1/8	2-3/4	2
P065P		NF65	NF652	6 x 8	D	8	6	5-3/4	2-3/4	2
P065P1		NF65	NF652	5 x 7	D	7	5	2-1/8	2-3/4	2
U035F2	FR35R	_	FR352R	5 x 7	A	7	5	2-1/8	2-3/4	2
U0353F	265A6035G27	_	265A6035G27	6 x 14	В	14-3/8	7-1/4	5-3/16	_	3
U045F	FR35XFR67	_	FR352, FH682	9 x 17	В	17-3/8	9-3/4	5-3/16	_	4
U0653F	265A6036G69		265A6036G69	6 x 14	В	14-3/8	7-1/4	5-3/16	_	3
U0653P	265A6036G73		265A6036G73	6 x 14	В	14-3/8	7-1/4	5-3/16		3
U065F1	FR65	—	FH682	5 x 9	A	9	5	2-1/8	2-3/4	2
U065NA1				5 x 7	D	7	5	2-1/8	2-3/4	2
U065NA1010				5 x 7	D	7	5	3-5/8	5-3/16	2
U065P	_	NF65	NF652	5 x 7	A	7-1/4	5	2-1/8	2-3/4	2
U065P010		NF65	NF652	5 x 7	D	7	5	3-5/8	5-3/16	2
U065PC2		NF65	NF652	5 x 7	D	7	5	2-1/8	2-3/4	2
U220H		FH1	_	5 x 7	В	7-1/8	5-3/4	5-3/16		5
U261F		FH1	_	6 x 9	В	9-1/8	7-1/4	5-3/16	_	3
U610F	FR67X2	_	FH682	9 x 17	В	17-3/8	9-3/4	5-3/16	_	4

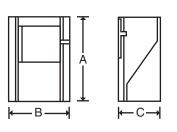
Cabinet Dimensions



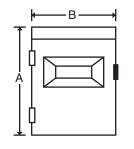


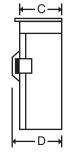
Fig, B

Fig, D

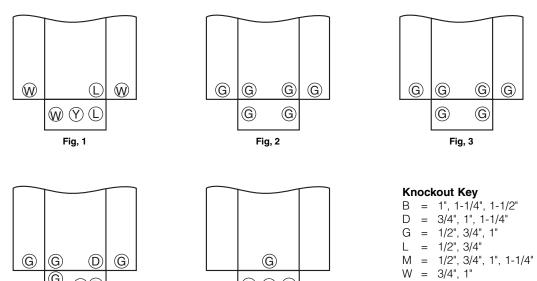


Fig, C





Knockout Configurations



 \mathbb{C} \mathbb{M} \mathbb{C}

Fig, 5

* Knockouts shown for size not for exact positions.

G GBB

Fig, 4

Wire Range Tables

D

Connector	Cop	oper	Aluminum		
Connector	Solid	Strand	Solid	Strand	
Line	14-8	14-2	12-8	12-2	
Load	14-8	14-2	12-8	12-2	
Neutral	—	—	_		
Equipment Ground	12-8	12-2	12-8	12-2	

Ε

Connector	Cop	oper	Aluminum		
Connector	Solid	Strand	Solid	Strand	
Line	14-10	14-10	—		
Load	14-10	14-10	_		
Neutral	14-10	14-10			
Equipment Ground	12-8	12-2	_	_	

Υ

Connector	Copper		Aluminum	
	Solid	Strand	Solid	Strand
Line	14-8	14-1/0	12-8	12-1/0
Load	14-8	14-2	12-1/0	12-2
Neutral	14-8	14-1/0	12-8	12-1/0

= 1", 1-1/4"

Υ

AR

Connector	Copper		Aluminum	
	Solid	Strand	Solid	Strand
Line	14-10	14-10		_
Load	14-10	14-10		
Neutral				—
Equipment Ground	12-8	12-2	—	—

Information provided is subject to change without notice. Please verify all details with Midwest. All values are design or typical values when measured under laboratory condition, and Midwest makes no warranty or guarantee, express or implied, that such performance will be obtained under end-use conditions.

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