



Catalog

# Enclosed IEC and NEMA starters Non-combination and combination motor controllers

Power and productivity  
for a better world™

**ABB**



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# General information

## Product overview



### Description

#### AF09 – AF750 and AFN00 - AFN4

- Maximum UL/CSA horsepower ratings
- Available with non-reversing, reversing, two speed one winding and two speed two winding
- Available in non-combination and combination
- Available in UL type 1,3R,12, 4, and 4X stainless steel enclosures
- Available with non-fusible or fusible disconnect switches and thermal magnetic circuit breaker
- Compact space saving design
- Standard auxiliary contact configurations: AF09 – AF750 (AFN00-AFN4) 1 N.O. & 1 N.C.
- Double break contact design
- Lowest possible contact bounce
- Operates over an extended voltage range of 85% to 110% of rated control voltage

### Overload relay protection

Starters, sizes AF09 – AF300 (AFN00-AFN4), have Class 10 adjustable thermal bimetallic overload relay protection as standard.

Sizes AF400 – AF750, have selectable Class 10, 20, 30 adjustable electronic overload relay protection as standard.

Optional electronic overload relay protection is available for all starter sizes.

### Field modification kits

Offers a wide variety of pilot device kits for non-reversing, reversing, two speed one winding and two speed two winding starters.

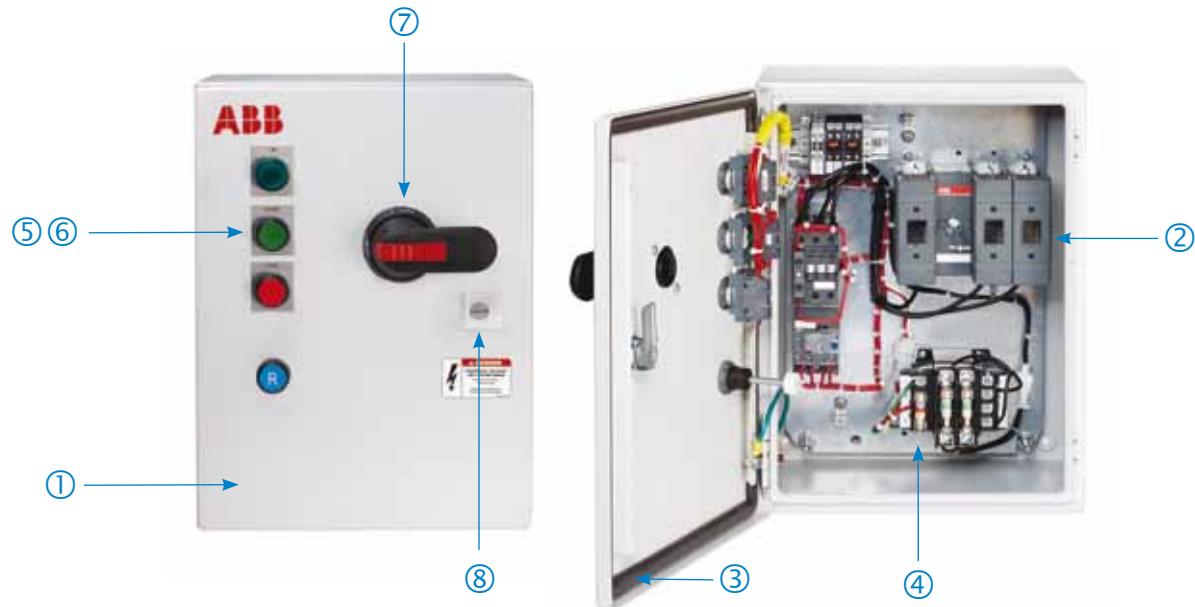
Control circuit transformer kits are also available with the following voltages:

Control Voltage	200-208	230-240	460-480	575-600
120V AC @ 50/60 Hz	A	B	C	D
24V AC @ 50/60 Hz	E	F	G	H

The field kits are pre-wired, ready to operate, making installation easy and reliable

# General information

## Features and benefits

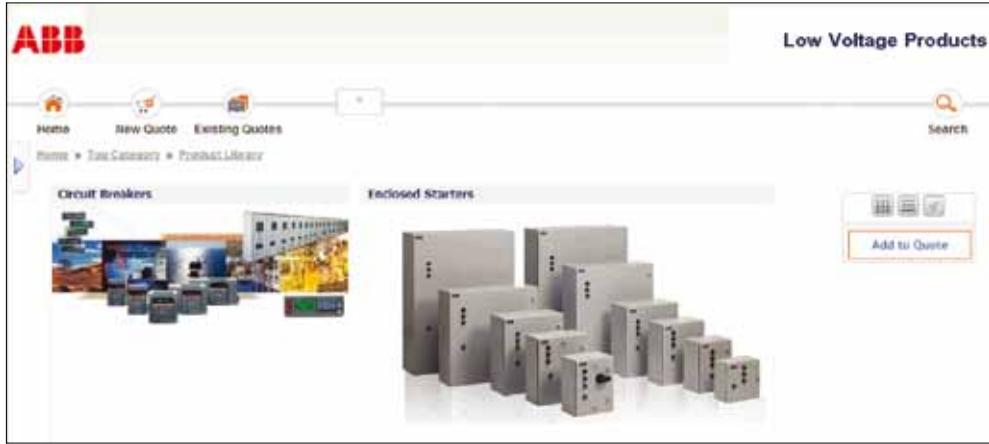


### Features and benefits

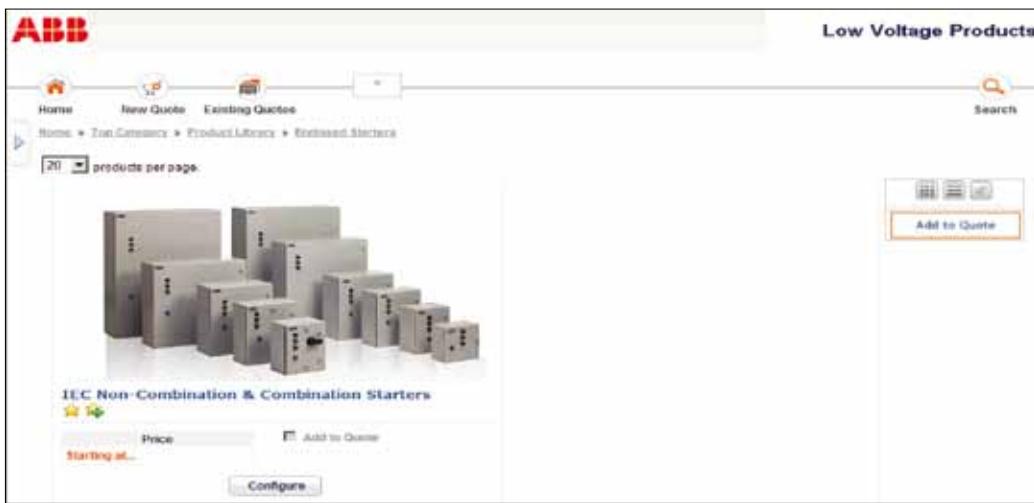
1. Durable protective finish (carbon steel enclosures)
  - Industry exclusive electrophoretic dip coat prime
  - Power coated surface for added protection
2. Flange trough collar opening
  - Channels liquids and dust away from enclosure gasket and enclosure interior
3. Seamless foamed-in-place gasket
  - Provide secure seal against contaminants
  - Ensures a dust tight and water tight seal
4. Pre-drilled mounting plate
  - Easy mounting for control circuit transformer kit
5. Rugged and compact 22 mm pilot devices
  - Meets UL/NEMA Type 1, 3R, 4, 4X, 12, 13
6. Convenient hole plugs for pilot device control
  - Allows for quick installation of pilot device kit
7. Disconnect handle accepts 3 -3/8" padlocks in off position for safe maintenance
8. Quarter turn enclosure latches
  - Allows for quick entry and proper sealing of enclosure

# Product configurator

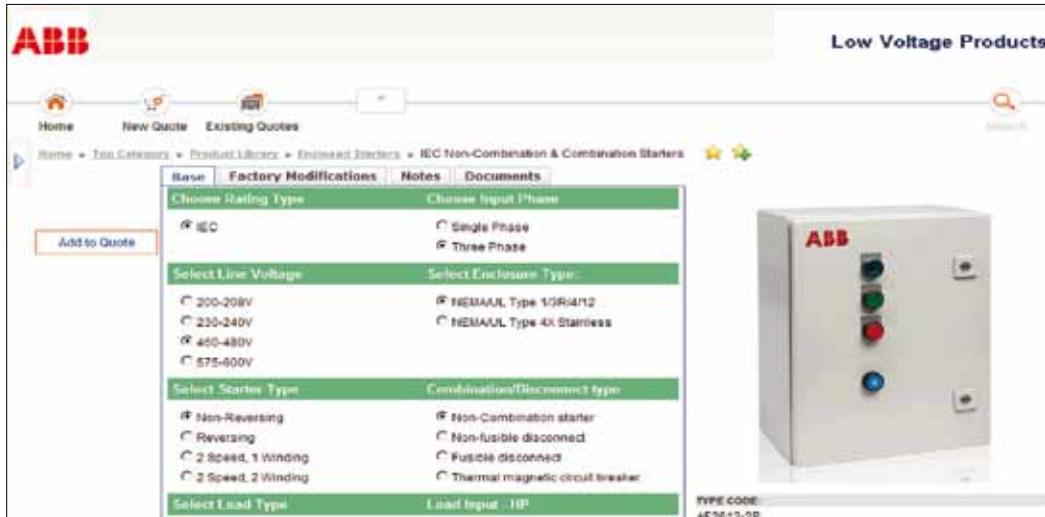
## 1. Login to the LVP CPQ guest login.



## 2. Configure product.



## 3. Configure the catalog number using radial buttons and pull down menus to generate a valid catalog number and list price.



# Catalog number explanation

## Non-combination starter

**AF26 1 S N 1 - 2 H A**

**Contactor size**

AF26	AF210	AFN00
AF30	AF260	AFN0
AF50	AF300	AFN1
AF63	AF400	AFN2
AF75	AF460	AFN3
AF110	AF580	AFN4
AF145	AF750	
AF185		

**Option 1**

See factory installed modifications on pages 29 & 30

**Starter type**

- 1 - Non reversing
- 2 - Reversing
- 3 - 2 Speed, 1 winding
- 4 - 2 Speed, 2 winding

**Single phase**

S - Single phase (insert only for single phase)

**Disconnect type**

Blank - Non-combination (starter only)  
N - Non-fusible disconnect

**Enclosure type**

2 - NEMA/UL Type 1, 3R, 4, 12  
X - NEMA/UL Type 4X (Stainless steel)

**Coil voltage CCT**

Coil voltage selection

AC Volts, 40-60 Hz

24 AC	100 - 250 AC	250 - 500 AC
1	2	3

CCT Selection

Control Voltage	200-208	230-240	460-480	575-600
120V AC @ 50/60 Hz	A	B	C	D
24V AC @ 50/60 Hz	E	F	G	H

# Catalog number explanation

## Combination starter

**AF09 1 S F 1 - 2 H 1 A**

**Contactor size**

AF09	AF145	AFN00
AF12	AF185	AFN0
AF16	AF210	AFN1
AF26	AF260	AFN2
AF30	AF300	AFN3
AF63	AF460	AFN4
AF75	AF580	
AF110	AF750	

**Starter type**

- 1 - Non reversing
- 2 - Reversing
- 3 - 2 Speed, 1 winding
- 4 - 2 Speed, 2 winding

**Single phase**

S - Single phase (insert only for single phase)

**Disconnect type**

B - Thermal magnetic circuit breaker (MCCB)  
F - Fusible disconnect

**IEC Enclosure type**

2 - NEMA/UL Type 1, 3R, 4, 12  
X - NEMA/UL Type 4X (Stainless steel)

**Coil voltage CCT**

Coil voltage selection				
AC Volts, 40-60 Hz				
24 AC	100 - 250 AC	250 - 500 AC		
1	2	3		
CCT Selection				
Control Voltage	200-208	230-240	460-480	575-600
120V AC @ 50/60 Hz	A	B	C	D
24V AC @ 50/60 Hz	E	F	G	H

**Overload selection**

See Overload Relay Selection Chart on pages 34 - 37

**Option 1**

See factory installed modifications on pages 29 & 30

**Fuse clip rating / voltage fuse type**

- 1 - 30A, 600V Class J
- 2 - 60A, 600V Class J
- 3 - 100A, 600V Class J
- 4 - 200A, 600V Class J
- 5 - 400A, 600V Class J
- 6 - 600A, 600V Class J
- 7 - 800A, 600V Class L
- 8 - 1200A, 600V Class L

**Circuit breaker amp rating (200 - 600V)**

1 - 15A	B - 150A	M - 800A
2 - 20A	C - 200A	N - 1000A
3 - 25A	D - 250A	P - 1200A
4 - 30A	E - 300A	
5 - 35A	F - 350A	
6 - 40A	G - 400A	
7 - 50A	H - 450A	
8 - 80A	J - 500A	
9 - 100A	K - 600A	
A - 125A	L - 700A	

# IEC & NEMA Non-combination AF26 - AF750; AFN00 - AFN4 Non-reversing, three phase

## IEC Non-combination

UL motor switching current	Contactor Size	Maximum ratings - UL Listed				UL Type 1, 3R, 4, 12	UL Type 4X
		Maximum motor horsepower ratings				General Purpose, Rainproof, Waterproof, Dusttight	Watertight Corrosion Resistant Stainless steel
		200/208V	230/240V	460V/480V	575/600V	Catalog number	Catalog number
28	AF26	7.5	7.5	15	20	AF2612-2Δ	AF261X-2Δ
34	AF30	10	10	20	25	AF3012-2Δ	AF301X-2Δ
54	AF50	15	20	40	50	AF5012-2Δ	AF501X-2Δ
68	AF63	20	25	50	60	AF6312-2Δ	AF631X-2Δ
80	AF75	25	30	60	75	AF7512-2Δ	AF751X-2Δ
110	AF110	30	40	75	100	AF11012-2Δ	AF1101X-2Δ
130	AF145	40	50	100	125	AF14512-2Δ	AF1451X-2Δ
156	AF185	50	60	125	150	AF18512-2Δ	AF1851X-2Δ
192	AF210	60	75	150	200	AF21012-2Δ	AF2101X-2Δ
248	AF260	75	100	200	250	AF26012-2Δ	AF2601X-2Δ
302	AF300	100	-	250	300	AF30012-2Δ	AF3001X-2Δ
414	AF400	125	150	350	400	AF40012-2Δ	AF4001X-2Δ
480	AF460	150	200	400	500	AF46012-2Δ	AF4601X-2Δ
590	AF580	200	250	500	600	AF58012-2Δ	AF5801X-2Δ
722	AF750	250	300	600	700	AF75012-2Δ	AF7501X-2Δ

Δ Overload relay suffix code. Select from the overload relay selection chart on pages 34 & 35.

## NEMA Non-combination

NEMA size	Contactor	Continuous	Maximum ratings - UL Listed			UL Type 1, 3R, 4, 12	UL Type 4X
			Maximum motor horsepower ratings			General Purpose, Rainproof, Waterproof, Dusttight	Watertight Corrosion Resistant Stainless steel
			200V	230V	460/575V	Catalog number	Catalog number
00	AFN00	9	1.5	1.5	2	AFN0012-2Δ	AFN001X-2Δ
0	AFN0	18	3	3	5	AFN012-2Δ	AFN01X-2Δ
1	AN1	27	7.5	7.5	10	AFN112-2Δ	AFN11X-2Δ
2	AFN2	45	10	15	25	AFN212-2Δ	AFN21X-2Δ
3	AFN3	90	25	30	50	AFN312-2Δ	AFN31X-2Δ
4	AFN4	135	40	50	100	AFN412-2Δ	AFN41X-2Δ

Δ Overload relay suffix code. Select from the overload relay selection chart on pages 36 & 37.

### Coil voltage selection <sup>1)</sup>

All AC operated catalog numbers include a 100-250V AC coil. To select other coil voltages, substitute the code from the Coil Voltage Selection Chart for the suffix code after the dash in the catalog number. Ex.: A 24V AC coil is required for an AF26 starter: AF2612-1K

### Control transformer voltage selection

To select starter with control transformer, substitute the code from the control transformer voltage selector chart after the dash in the catalog number. Ex.: A 480V primary voltage with a 120V secondary voltage is required for an AF26 starter: AF2612-CK

### Coil voltage selection chart

Coil voltage		
AC Volts, 40-60 Hz		
24 AC	100 - 250 AC	250 - 500 AC
1	2	3

### Control transformer voltage selection chart

Control Voltage	200-208	230-240	460-480	575-600
120V AC @ 50/60 Hz	A	B	C	D
24V AC @ 50/60 Hz	E	F	G	H

1) 24 AC coil voltage is available only with AF26 & AF30, AFN00 - AFN1, For factory modifications, see pages 29 & 30.

# IEC & NEMA Non-combination AF26 - AF110; AFN00 - AFN2 Non-reversing, single phase

## IEC Non-combination

UL motor switching current	Contactor Size	Maximum ratings - UL Listed		UL Type 1	UL Type 4X
		Maximum motor horsepower ratings		General Purpose, Rainproof, Waterproof, Dusttight	Watertight Corrosion Resistant Stainless steel
		120V	240V	Catalog number	Catalog number
28	AF26	2	3	AF261S2-2Δ	AF261SX-2Δ
34	AF30	-	5	AF301S2-2Δ	AF301SX-2Δ
54	AF50	-	10	AF501S2-2Δ	AF501SX-2Δ
80	AF75	-	15	AF751S2-2Δ	AF751SX-2Δ
110	AF110	-	25	AF1101S2-2Δ	AF1101SX-2Δ

Δ Overload relay suffix code. Select from the overload relay selection chart on page 34.

## NEMA Non-combination

NEMA size	Contactor	Continuous	Maximum ratings - UL Listed		UL Type 1, 3R, 4, 12	UL Type 4X
			Maximum motor horsepower ratings		General Purpose, Rainproof, Waterproof, Dusttight	Watertight Corrosion Resistant Stainless steel
			120V	230V	Catalog number	Catalog number
00	AFN00	9	1/3	1	AFN001S2-2Δ	AFN001SX-2Δ
0	AFN0	18	1	2	AFN01S2-2Δ	AFN01SX-2Δ
1	AN1	27	2	3	AFN11S2-2Δ	AFN11SX-2Δ
2	AFN2	45	-	7.5	AFN21S2-2Δ	AFN21SX-2Δ

Δ Overload relay suffix code. Select from the overload relay selection chart on page 36.

### Coil voltage selection 1)

All rated AC catalog numbers include a 120V AC coil. To select other coil voltages, substitute the code from the Coil Voltage Selection Chart for the suffix code after the dash in the catalog number. Ex.: A 24V AC coil is required for an AF26 starter: AF261S2-1S

### Coil voltage selection chart

Coil voltage	
AC Volts, 40-60 Hz	
24 AC	100 - 250 AC
1	2

### Control transformer voltage selection

To select starter with control transformer, substitute the code from the control transformer voltage selector chart after the dash in the catalog number. Ex.: A 230V primary voltage with a 120V secondary voltage is required for an AF12 starter: AF121S2-BS

### Control transformer voltage selection chart

Control Voltage	230-240
120V AC @ 50/60 Hz	B
24V AC @ 50/60 Hz	F

1) 24 AC coil voltage is available only with AF26 & AF30, AFN00 - AFN1.  
For factory modifications, see page 29 & 30.

# IEC & NEMA Non-fusible disconnect switch

## AF26 - AF750; AFN00 - AFN4

### Non-reversing, three phase

#### IEC Non-fusible disconnect switch

UL motor switching current	Contactor Size	Maximum ratings - UL Listed				UL Type 1, 3R, 4, 12	UL Type 4X
		Maximum motor horsepower ratings				General Purpose, Rainproof, Waterproof, Dusttight	Watertight Corrosion Resistant Stainless steel
		200/208V	230/240V	460V/480V	575/600V	Catalog number	Catalog number
28	AF26	5	7.5	15	20	AF261N2-2Δ	AF261NX-2Δ
34	AF30	10	10	20	25	AF301N2-2Δ	AF301NX-2Δ
54	AF50	15	20	40	50	AF501N2-2Δ	AF501NX-2Δ
68	AF63	20	25	50	60	AF631N2-2Δ	AF631NX-2Δ
80	AF75	25	30	60	75	AF751N2-2Δ	AF751NX-2Δ
110	AF110	30	40	75	100	AF110N2-2Δ	AF110NX-2Δ
130	AF145	40	50	100	125	AF1451N2-2Δ	AF1451NX-2Δ
156	AF185	50	60	125	150	AF1851N2-2Δ	AF1851NX-2Δ
192	AF210	60	75	150	200	AF2101N2-2Δ	AF2101NX-2Δ
248	AF260	75	100	200	250	AF2601N2-2Δ	AF2601NX-2Δ
302	AF300	100	-	250	300	AF3001N2-2Δ	AF3001NX-2Δ
414	AF400	125	150	350	400	AF4001N2-2Δ	AF4001NX-2Δ
480	AF460	150	200	400	500	AF4601N2-2Δ	AF4601NX-2Δ
590	AF580	200	250	500	600	AF5801N2-2Δ	AF5801NX-2Δ
722	AF750	250	300	600	700	AF7501N2-2Δ	AF7501NX-2Δ

Δ Overload relay suffix code. Select from the overload relay selection chart on pages 34 & 35.

#### NEMA Non-fusible disconnect switch

NEMA size	Contactor	Continuous	Maximum ratings - UL Listed			UL Type 1, 3R, 4, 12	UL Type 4X
			Maximum motor horsepower ratings			General Purpose, Rainproof, Waterproof, Dusttight	Watertight Corrosion Resistant Stainless steel
			200V	230V	460/575V	Catalog number	Catalog number
00	AFN00	9	1.5	1.5	2	AFN001N2-2Δ	AFN001NX-2Δ
0	AFN0	18	3	3	5	AFN01N2-2Δ	AFN01NX-2Δ
1	AFN1	27	7.5	7.5	10	AFN11N2-2Δ	AFN11NX-2Δ
2	AFN2	45	10	15	25	AFN21N2-2Δ	AFN21NX-2Δ
3	AFN3	90	25	30	50	AFN31N2-2Δ	AFN31NX-2Δ
4	AFN4	135	40	50	100	AFN41N2-2Δ	AFN41NX-2Δ

Δ Overload relay suffix code. Select from the overload relay selection chart on pages 36 & 37.

#### Coil voltage selection <sup>1)</sup>

All AC operated catalog numbers include a 100-250V AC coil. To select other coil voltages, substitute the code from the Coil Voltage Selection Chart for the suffix code after the dash in the catalog number. Ex.: A 24V AC coil is required for an AF26 starter: AF261N2-1K

#### Coil voltage selection chart

Coil voltage		
AC Volts, 40-60 Hz		
24 AC	100 - 250 AC	250 - 500 AC
1	2	3

#### Control transformer voltage selection

To select starter with control transformer, substitute the code from the control transformer voltage selector chart after the dash in the catalog number. Ex.: A 480V primary voltage with a 120V secondary voltage is required for an AF26 starter: AF261N2-CK

#### Control transformer voltage selection chart

Control Voltage	200-208	230-240	460-480	575-600
120V AC @ 50/60 Hz	A	B	C	D
24V AC @ 50/60 Hz	E	F	G	H

1) 24 AC coil voltage is available only with AF26 & AF30, AFN00 - AFN1.  
For factory modifications, see pages 29 & 30.

# IEC & NEMA Non-fusible disconnect switch

## AF26 - AF110; AFN00 - AFN2

### Non-reversing, single phase

#### IEC Non-fusible disconnect switch

UL motor switching current	Contactor Size	Maximum ratings - UL Listed		UL Type 1	UL Type 4X
		Maximum motor horsepower ratings		General Purpose, Rainproof, Waterproof, Dusttight	Watertight Corrosion Resistant Stainless steel
		120V	240V	Catalog number	Catalog number
28	AF26	2	3	AF261SN2-2Δ	AF261SNX-2Δ
34	AF30	-	5	AF301SN2-2Δ	AF301SNX-2Δ
54	AF50	-	10	AF501SN2-2Δ	AF501SNX-2Δ
80	AF75	-	15	AF751SN2-2Δ	AF751SNX-2Δ
110	AF110	-	25	AF1101SN2-2Δ	AF1101SNX-2Δ

Δ Overload relay suffix code. Select from the overload relay selection chart on page 34.

#### NEMA Non-fusible disconnect switch

NEMA size	Contactor	Continuous	Maximum ratings - UL Listed		UL Type 1, 3R, 4, 12	UL Type 4X
			Maximum motor horsepower ratings		General Purpose, Rainproof, Waterproof, Dusttight	Watertight Corrosion Resistant Stainless steel
			120V	230V	Catalog number	Catalog number
00	AFN00	9	1/3	1	AFN001SN2-2Δ	A9N001SNX-2Δ
0	AFN0	18	1	2	AFN01SN2-2Δ	A16N01SNX-2Δ
1	AN1	27	2	3	AFN11SN2-2Δ	A26N11SNX-2Δ
2	AFN2	45	-	7.5	AFN21SN2-2Δ	A50N21SNX-2Δ

Δ Overload relay suffix code. Select from the overload relay selection chart on page 36.

#### Coil voltage selection <sup>1)</sup>

All AC operated catalog numbers include a 100-250V AC coil. To select other coil voltages, substitute the code from the Coil Voltage Selection Chart for the suffix code after the last dash in the catalog number. Ex.: A 24V AC coil is required for an AF12 starter: AF261SN2-1S

#### Coil voltage selection chart

Coil voltage	
AC Volts, 40-60 Hz	
24 AC	100 - 250 AC
1	2

#### Control transformer voltage selection

To select starter with control transformer, substitute the code from the Control transformer voltage selector chart for the two digits after the last dash in the catalog number. Ex.: A 230V primary voltage with a 120V secondary voltage is required for an AF26 starter: AF261SN2-BS

#### Control transformer voltage selection chart

Control Voltage	230-240
120V AC @ 50/60 Hz	B
24V AC @ 50/60 Hz	F

1) 24 AC coil voltage is available only with AF26 & AF30, AFN00 - AFN1.  
For factory modifications, see page 29 & 30.

# IEC & NEMA Fusible disconnect switch

## AF09 - AF750; AFN00 - AFN4

### Non-reversing, three phase

#### IEC Fusible disconnect switch

UL motor switching current	Contactor Size	Maximum ratings - UL Listed				Fuse clip rating amp/volts	UL Type 1, 3R, 4, 12	UL Type 4X	
		Maximum motor horsepower ratings					General Purpose, Rainproof, Waterproof, Dusttight	Watertight Corrosion Resistant Stainless steel	
		200/208V	230/240V	460V/480V	575/600V		Catalog number	Catalog number	
9	AF09	2	2	5	7.5	30/600	AF091F2-2Δ1	AF091FX-2Δ1	
11	AF12	3	3	7.5	10	30/600	AF121F2-2Δ1	AF121FX-2Δ1	
17	AF16	5	5	10	15	30/600	AF161F2-2Δ1	AF161FX-2Δ1	
28	AF26	7.5	7.5	15	20	60/600	AF261F2-2Δ2	AF261FX-2Δ2	
34	AF30	10	10	20	25	60/600	AF301F2-2Δ2	AF301FX-2Δ2	
54	AF50	15	20	40	50	100/600	AF501F2-2Δ3	AF501FX-2Δ3	
68	AF63	20	25	50	60	200/600	AF631F2-2Δ4	AF631FX-2Δ4	
80	AF75	25	30	60	75	200/600	AF751F2-2Δ4	AF751FX-2Δ4	
110	AF110	30	40	75	100	200/600	AF1101F2-2Δ4	A1101FX-2Δ4	
130	AF145	40	50	100	125	400/600	AF1451F2-2Δ5	AF1451FX-2Δ5	
156	AF185	50	60	125	150	400/600	AF1851F2-2Δ5	AF1851FX-2Δ5	
192	AF210	60	75	150	200	400/600	AF2101F2-2Δ5	AF2101FX-2Δ5	
248	AF260	75	-	-	-	400/600	AF2601F2-2Δ5	AF2601FX-2Δ5	
248	AF260	-	100	200	250	600/600	AF2601F2-2Δ6	AF2601FX-2Δ6	
302	AF300	100	-	250	300	600/600	AF3001F2-2Δ6	AF3001FX-2Δ6	
414	AF400	125	150	350	400	800/600	AF4001F2-2Δ7	AF4001FX-2Δ7	
480	AF460	150	200	400	500	800/600	AF4601F2-2Δ7	AF4601FX-2Δ7	
590	AF580	200	250	500	600	1200/600	AF5801F2-2Δ8	AF5801FX-2Δ8	
720	AF750	250	300	600	700	1200/600	AF7501F2-2Δ8	AF7501FX-2Δ8	

Δ Overload relay suffix code. Select from the overload relay selection chart on pages 34 & 35.

#### NEMA Fusible disconnect switch

NEMA size	Contactor	Continuous	Maximum ratings - UL Listed			Fuse clip rating amp/volts	UL Type 1, 3R, 4, 12	UL Type 4X	
			Maximum motor horsepower ratings				General Purpose, Rainproof, Waterproof, Dusttight	Watertight Corrosion Resistant Stainless steel	
			200V	230V	460/575V		Catalog number	Catalog number	
00	AFN00	9	1.5	1.5	2	30/600	AFN001F2-2Δ1	AFN001FX-2Δ1	
0	AFN0	18	3	3	5	30/600	AFN01F2-2Δ1	AFN01FX-2Δ1	
1	AFN1	27	-	-	10	30/600	AFN11F2-2Δ1	AFN11FX-2Δ1	
1	AFN1	27	7.5	7.5	-	60/600	AFN11F2-2Δ2	AFN11FX-2Δ2	
2	AFN2	45	10	-	25	60/600	AFN21F2-2Δ2	AFN21FX-2Δ2	
2	AFN2	45	-	15	-	100/600	AFN21F2-2Δ3	AFN21FX-2Δ3	
3	AFN3	90	25	30	50	200/600	AFN31F2-2Δ4	AFN31FX-2Δ4	
4	AFN4	135	40	50	100	400/600	AFN41F2-2Δ5	AFN41FX-2Δ5	

Δ Overload relay suffix code. Select from the overload relay selection chart on pages 36 & 37.

#### Coil voltage selection 1)

All AC operated catalog numbers include a 100-250V AC coil. To select other coil voltages, substitute the code from the Coil Voltage Selection Chart for the suffix code after the last dash in the catalog number. Ex.: A 24V AC coil is required for an AF12 starter: AF121F2-1R1

#### Control transformer voltage selection

To select starter with control transformer, substitute the code from the Control transformer voltage selector chart for the two digits after the last dash in the catalog number. Ex.: A 480V primary voltage with a 120V secondary voltage is required for an AF12 starter: AF121F2-CR1

#### Coil voltage selection chart

Coil voltage		
AC Volts, 40-60 Hz		
24 AC	100 - 250 AC	250 - 500 AC
1	2	3

#### Control transformer voltage selection chart

Control Voltage	200-208	230-240	460-480	575-600
120V AC @ 50/60 Hz	A	B	C	D
24V AC @ 50/60 Hz	E	F	G	H

1) 24 AC coil voltage is available only with AF09 - AF30, AFN00 - AFN1.  
For factory modifications, see page 29 & 30.

# IEC & NEMA Fusible disconnect

## AF09 - AF110; AFN00 - AFN2

### Non-reversing, single phase

#### IEC Fusible disconnect switch

UL motor switching current	Contactor Size	Maximum ratings - UL Listed		UL Type 1	UL Type 4X
		Maximum motor horsepower ratings		General Purpose, Rainproof, Waterproof, Dusttight	Watertight Corrosion Resistant Stainless steel
		120V	240V	Catalog number	Catalog number
9	AF09	1/2	1	AF091SF2-2Δ1	AF91SFX-2Δ1
11	AF12	-	2	AF121SF2-2Δ1	AF121SFX-2Δ1
17	AF16	3/4, 1	-	AF161SF2-2Δ1	AF161SFX-2Δ1
28	AF26	-	3	AF261SF2-2Δ1	AF261SFX-2Δ1
28	AF26	2	-	AF261SF2-2Δ2	AF261SFX-2Δ2
34	AF30	-	5	AF301SF2-2Δ2	AF301SFX-2Δ2
54	AF50	-	10	AF501SF2-2Δ3	AF501SFX-2Δ3
80	AF75	-	15	AF751SF2-2Δ4	AF751SFX-2Δ4
110	AF110	-	25	AF1101SF2-2Δ4	AF1101SFX-2Δ4

Δ Overload relay suffix code. Select from the overload relay selection chart on page 34.

#### NEMA Fusible disconnect switch

NEMA size	Contactor	Continuous	Maximum ratings - UL Listed		UL Type 1, 3R, 4, 12	UL Type 4X
			Maximum motor horsepower ratings		General Purpose, Rainproof, Waterproof, Dusttight	Watertight Corrosion Resistant Stainless steel
			120V	230V	Catalog number	Catalog number
00	AFN00	9	1/3	1	AFN001SF2-2Δ1	AFN001SFX-2Δ1
0	AFN0	18	1	2	AFN01SF2-2Δ1	AFN01SFX-2Δ1
1	AFN1	27	-	3	AFN11SF2-2Δ1	AFN11SFX-2Δ1
1	AFN1	27	2	-	AFN11SF2-2Δ2	AFN11SFX-2Δ2
2	AFN2	45	-	7.5	AFN21SF2-2Δ2	AFN21SFX-2Δ2

Δ Overload relay suffix code. Select from the overload relay selection chart on page 36.

#### Coil voltage selection <sup>1)</sup>

All AC operated catalog numbers include a 100-250V AC coil. To select other coil voltages, substitute the code from the Coil Voltage Selection Chart for the suffix code after the last dash in the catalog number. Ex.: A 24V AC coil is required for an AF12 starter: AF121SF2-2R1

#### Coil voltage selection chart

Coil voltage	
AC Volts, 40-60 Hz	
24 AC	100 - 250 AC
1	2

#### Control transformer voltage selection

To select starter with control transformer, substitute the code from the Control transformer voltage selector chart for the two digits after the last dash in the catalog number. Ex.: A 230V primary voltage with a 120V secondary voltage is required for an AF12 starter: AF121SF2-BR1

#### Control transformer voltage selection chart

Control Voltage	230-240
120V AC @ 50/60 Hz	B
24V AC @ 50/60 Hz	F

1) 24 AC coil voltage is available only with AF09 - AF30, AFN00 & AFN1.  
For factory modifications, see pages 29 & 30.

# IEC Circuit breaker type

## AF26 - AF750

### Non-reversing, three phase

UL motor switching current	Contactor Size	Maximum ratings - UL Listed				Circuit Breaker Amp Rating	UL Type 1, 3R, 4, 12	UL Type 4X	
		Maximum motor horsepower ratings					General Purpose, Rainproof, Waterproof, Dusttight	Watertight Corrosion Resistant Stainless steel	
		200/208V	230/240V	460V/480V	575/600V		Catalog number	Catalog number	
28	AF26	2	3	5	7.5	15 A	AF261B2-2Δ1	AF261BX-2Δ1	
28	AF26	3	-	7.5	10	20 A	AF261B2-2Δ2	AF261BX-2Δ2	
28	AF26	-	5	10	-	25 A	AF261B2-2Δ3	AF261BX-2Δ3	
28	AF26	5	-	-	15	30 A	AF261B2-2Δ4	AF261BX-2Δ4	
28	AF26	-	7.5	15	20	35 A	AF261B2-2Δ5	AF261BX-2Δ5	
34	AF30	7.5	-	-	-	40 A	AF301B2-2Δ6	AF301BX-2Δ6	
34	AF30	10	10	20	25	50 A	AF301B2-2Δ7	AF301BX-2Δ7	
54	AF50	-	-	-	30	50 A	AF501B2-2Δ7	AF501BX-2Δ7	
54	AF50	15	15	40	50	80 A	AF501B2-2Δ8	AF501BX-2Δ8	
68	AF63	20	20	50	60	100 A	AF631B2-2Δ9	AF631BX-2Δ9	
80	AF75	25	30	60	75	125 A	AF751B2-2ΔA	AF751BX-2ΔA	
110	AF110	30	-	75	100	150 A	AF1101B2-2ΔB	AF1101BX-2ΔB	
110	AF110	-	40	-	-	200 A	AF1101B2-2ΔC	AF1101BX-2ΔC	
130	AF145	40	50	100	125	200 A	AF1451B2-2ΔC	AF1451BX-2ΔC	
156	AF185	50	60	125	150	250 A	AF1851B2-2ΔD	AF1851BX-2ΔD	
192	AF210	60	-	-	-	250 A	AF2101B2-2ΔD	AF2101BX-2ΔD	
192	AF210	-	75	150	200	300 A	AF2101B2-2ΔE	AF2101BX-2ΔE	
248	AF260	75	-	-	-	350 A	AF2601B2-2ΔF	AF2601BX-2ΔF	
248	AF260	-	100	200	250	400 A	AF2601B2-2ΔG	AF2601BX-2ΔG	
302	AF300	100	-	-	300	450 A	AF3001B2-2ΔH	AF3001BX-2ΔH	
302	AF300	-	-	250	-	500 A	AF3001B2-2ΔJ	AF3001BX-2ΔJ	
414	AF400	-	125	-	-	500 A	AF4001B2-2ΔJ	AF4001BX-2ΔJ	
414	AF400	125	150	300	400	600 A	AF4001B2-2ΔK	AF4001BX-2ΔK	
414	AF400	-	-	350	-	700 A	AF4001B2-2ΔL	AF4001BX-2ΔL	
480	AF460	150	-	-	-	600 A	AF4601B2-2ΔK	AF4601BX-2ΔK	
480	AF460	-	200	400	500	800 A	AF4601B2-2ΔM	AF4601BX-2ΔM	
590	AF580	200	-	-	-	800 A	AF5801B2-2ΔM	AF5801BX-2ΔM	
590	AF580	-	250	500	600	1000 A	AF5801B2-2ΔN	AF5801BX-2ΔN	
722	AF750	250	-	-	-	1000 A	AF7501B2-2ΔN	AF7501BX-2ΔN	
722	AF750	-	300	600	700	1200 A	AF7501B2-2ΔP	AF7501BX-2ΔP	

Δ Overload relay suffix code. Select from the overload relay selection chart on pages 34 & 35.

#### Coil voltage selection <sup>1)</sup>

All AC operated catalog numbers include a 100-250V AC coil. To select other coil voltages, substitute the code from the Coil Voltage Selection Chart for the suffix code after the last dash in the catalog number. Ex.: A 24V AC coil is required for an AF26 starter: AF261B2-1K1

#### Coil voltage selection chart

Coil voltage		
AC Volts, 40-60 Hz		
24 AC	100 - 250 AC	250 - 500 AC
1	2	3

#### Control transformer voltage selection

To select starter with control transformer, substitute the code from the Control transformer voltage selector chart for the two digits after the last dash in the catalog number. Ex.: A 480V primary voltage with a 120V secondary voltage is required for an AF26 starter: AF261B2-CK1

#### Control transformer voltage selection chart

Control Voltage	200-208	230-240	460-480	575-600
120V AC @ 50/60 Hz	A	B	C	D
24V AC @ 50/60 Hz	E	F	G	H

1) 24 AC coil voltage is available only with AF26 & AF30. For factory modifications, see pages 29 & 30.

# NEMA Circuit breaker type AFN00 - AFN4

## Non-reversing, three phase

NEMA size	Contactor	Continuous	Maximum ratings - UL Listed				Circuit breaker rating Amps	UL Type 1, 3R, 4, 12	UL Type 4X	
			Maximum motor horsepower ratings					General Purpose, Rainproof, Waterproof, Dusttight	Watertight Corrosion Resistant Stainless steel	
			208V	230V	460V	575V		Catalog number	Catalog number	
00	AFN00	9	1.5	1.5	2	2	15 A	AFN001B2-2Δ1	AFN001BX-2Δ1	
0	AFN0	18	2	3	5	5	15 A	AFN01B2-2Δ1	AFN01BX-2Δ1	
			3	-	-	-	20 A	AFN01B2-2Δ2	AFN01BX-2Δ2	
			-	-	-	7.5	15 A	AFN11B2-2Δ1	AFN11BX-2Δ1	
			-	-	7.5	10	20 A	AFN11B2-2Δ2	AFN11BX-2Δ2	
1	AFN1	27	-	5	10	-	25 A	AFN11B2-2Δ3	AFN11BX-2Δ3	
			5	-	-	-	30 A	AFN11B2-2Δ4	AFN11BX-2Δ4	
			-	7.5	-	-	35 A	AFN11B2-2Δ5	AFN11BX-2Δ5	
			7.5	-	-	-	40 A	AFN11B2-2Δ6	AFN11BX-2Δ6	
			-	-	15	20	40 A	AFN21B2-2Δ6	AFN21BX-2Δ6	
2	AFN2	45	10	10	20	25	50 A	AFN21B2-2Δ7	AFN21BX-2Δ7	
			-	-	25	-	80 A	AFN21B2-2Δ8	AFN21BX-2Δ8	
			-	15	-	-	80 A	AFN21B2-2Δ8	AFN21BX-2Δ8	
			-	-	-	30	50 A	AFN31B2-2Δ7	AFN31BX-2Δ7	
			-	-	30	-	80 A	AFN31B2-2Δ8	AFN31BX-2Δ8	
3	AFN3	90	15	-	-	40	80 A	AFN31B2-2Δ8	AFN31BX-2Δ8	
			-	-	40	50	80 A	AFN31B2-2Δ8	AFN31BX-2Δ8	
			-	-	50	-	100 A	AFN31B2-2Δ9	AFN31BX-2Δ9	
			25	30	-	-	125 A	AFN31B2-2ΔA	AFN31BX-2ΔA	
4	AFN4	135	-	-	60	75	125 A	AFN41B2-2ΔA	AFN41BX-2ΔA	
			30	-	75	100	150 A	AFN41B2-2ΔB	AFN41BX-2ΔB	
			40	50	100	-	200 A	AFN41B2-2ΔC	AFN41BX-2ΔC	

Δ Overload relay suffix code. Select from the overload relay selection chart on pages 36 & 37.

### Coil voltage selection 1)

All AC operated catalog numbers include a 100-250V AC coil. To select other coil voltages, substitute the code from the Coil Voltage Selection Chart for the suffix code after the last dash in the catalog number. Ex.: A 24V AC coil is required for an AFN1B2-1R1

### Coil voltage selection chart

Coil voltage	
AC Volts, 40-60 Hz	
24 AC	100 - 250 AC
1	2

### Control transformer voltage selection

To select starter with control transformer, substitute the code from the Control transformer voltage selector chart for the two digits after the last dash in the catalog number. Ex.: A 230V primary voltage with a 120V secondary voltage is required for an AFN1B2-CR1

### Control transformer voltage selection chart

Control Voltage	200-208	230-240	460-480	575-600
120V AC @ 50/60 Hz	A	B	C	D
24V AC @ 50/60 Hz	E	F	G	H

1) 24 AC coil voltage is available only with AFN00 - AFN1.  
For factory modifications, see pages 29 & 30.

# IEC & NEMA Circuit breaker disconnect

## AF26 - AF110; AFN00 - AFN2

### Non-reversing, single phase

#### IEC Circuit breaker disconnect

UL motor switching current	Contactor Size	Maximum ratings - UL Listed			Circuit breaker amp rating	UL Type 1	UL Type 4X	
		Maximum motor horsepower ratings		Catalog number		Catalog number	Catalog number	
		120V	240V					
28	AF26	1/2	1	15 A	AF261SB2-2Δ1	AF261SBX-2Δ1		
28	AF26	-	2	20 A	AF261SB2-2Δ2	AF261SBX-2Δ2		
28	AF26	1	-	25 A	AF261SB2-2Δ3	AF261SBX-2Δ3		
28	AF26	1.5	3	30 A	AF261SB2-2Δ4	AF261SBX-2Δ4		
28	AF26	2	-	40 A	AF261SB2-2Δ6	AF261SBX-2Δ6		
34	AF30	-	5	50 A	AF301SB2-2Δ7	AF301SBX-2Δ7		
54	AF50	-	10	80 A	AF501SB2-2Δ8	AF501SBX-2Δ8		
80	AF75	-	15	125 A	AF751SB2-2ΔA	AF751SBX-2ΔA		
110	AF110	-	20	150 A	AF1101SB2-2ΔB	AF1101SBX-2ΔB		
110	AF110	-	25	200 A	AF1101SB2-2ΔC	AF1101SBX-2ΔC		

Δ Overload relay suffix code. Select from the overload relay selection chart on page 34.

#### NEMA Circuit breaker disconnect

NEMA size	Contactor	Continuous	Maximum ratings - UL Listed			Circuit breaker amp rating	UL Type 1, 3R, 4, 12	UL Type 4X	
			Maximum motor horsepower ratings		Catalog number		Catalog number	Catalog number	
			120V	230V					
00	AFN00	9	1/3	1	15 A	AFN001SB2-2Δ1	AFN001SBX-2Δ1		
0	AFN0	18	1/2	1.5	15 A	AFN01SB2-2Δ1	AFN01SBX-2Δ1		
0	AFN0	18	-	2	20 A	AFN01SB2-2Δ2	AFN01SBX-2Δ2		
0	AFN0	18	1	-	25 A	AFN01SB2-2Δ3	AFN01SBX-2Δ3		
1	AFN1	27	-	3	30 A	AFN11SB2-2Δ4	AFN11SBX-2Δ4		
1	AFN1	27	2	-	40 A	AFN11SB2-2Δ6	AFN11SBX-2Δ6		
2	AFN2	45	-	7.5	80 A	AFN21SB2-2Δ8	AFN21SBX-2Δ8		

Δ Overload relay suffix code. Select from the overload relay selection chart on page 36.

#### Coil voltage selection 1)

All AC operated catalog numbers include a a 100-250V AC coil. To select other coil voltages, substitute the code from the Coil Voltage Selection Chart for the suffix code after the last dash in the catalog number. Ex.: A 24V AC coil is required for an AF26 starter: AF261SB2-1R1

#### Coil voltage selection chart

Coil voltage	
AC Volts, 40-60 Hz	
24 AC	100 - 250 AC
1	2

#### Control transformer voltage selection

To select starter with control transformer, substitute the code from the Control transformer voltage selector chart for the two digits after the last dash in the catalog number. Ex.: A 230V primary voltage with a 120V secondary voltage is required for an AF26 starter: AF261SB2-BR1

#### Control transformer voltage selection chart

Control Voltage	230-240
120V AC @ 50/60 Hz	B
24V AC @ 50/60 Hz	F

1) 24 AC coil voltage is available only with AF26 & AF30, AFN00 - AFN1.  
For factory modifications, see pages 29 & 30.

# IEC & NEMA Non-combination AF26 - AF750; AFN00 - AFN4 Reversing, three phase

## IEC Non-combination

UL motor switching current	Contactor Size	Maximum ratings - UL Listed				UL Type 1, 3R, 4, 12	UL Type 4X		
		Maximum motor horsepower ratings							
		200/208V	230/240V	460V/480V	575/600V				
28	AF26	7.5	7.5	15	20	AF2622-2Δ	AF262X-2Δ		
34	AF30	10	10	20	25	AF3022-2Δ	AF302X-2Δ		
54	AF50	15	20	40	50	AF5022-2Δ	AF502X-2Δ		
68	AF63	20	25	50	60	AF6322-2Δ	AF632X-2Δ		
80	AF75	25	30	60	75	AF7522-2Δ	AF752X-2Δ		
110	AF110	30	40	75	100	AF11022-2Δ	AF1102X-2Δ		
130	AF145	40	50	100	125	AF14522-2Δ	AF1452X-2Δ		
156	AF185	50	60	125	150	AF18522-2Δ	AF1852X-2Δ		
192	AF210	60	75	150	200	AF21022-2Δ	AF2102X-2Δ		
248	AF260	75	100	200	250	AF26022-2Δ	AF2602X-2Δ		
302	AF300	100	-	250	300	AF30022-2Δ	AF3002X-2Δ		
414	AF400	125	150	350	400	AF40022-2Δ	AF4002X-2Δ		
480	AF460	150	200	400	500	AF46022-2Δ	AF4602X-2Δ		
590	AF580	200	250	500	600	AF58022-2Δ	AF5802X-2Δ		
720	AF750	250	300	600	700	AF75022-2Δ	AF7502X-2Δ		

Δ Overload relay suffix code. Select from the overload relay selection chart on pages 34 & 35.

## NEMA Non-combination

NEMA size	Contactor	Continuous	Maximum ratings - UL Listed			UL Type 1, 3R, 4, 12	UL Type 4X		
			Maximum motor horsepower ratings						
			200V	230V	460/575V				
00	AFN00	9	1.5	1.5	2	AFN0022-2Δ	AFN002X-2Δ		
0	AFN0	18	3	3	5	AFN022-2Δ	AFN02X-2Δ		
1	AN1	27	7.5	7.5	10	AFN122-2Δ	AFN12X-2Δ		
2	AFN2	45	10	15	25	AFN222-2Δ	AFN22X-2Δ		
3	AFN3	90	25	30	50	AFN322-2Δ	AFN32X-2Δ		
4	AFN4	135	40	50	100	AFN422-2Δ	AFN42X-2Δ		

Δ Overload relay suffix code. Select from the overload relay selection chart on pages 36 & 37.

### Coil voltage selection <sup>1)</sup>

All AC operated catalog numbers include a 100-250V AC coil. To select other coil voltages, substitute the code from the Coil Voltage Selection Chart for the suffix code after the last dash in the catalog number. Ex.: A 24V AC coil is required for an AF26 starter: AF2622-1K

### Coil voltage selection chart

Coil voltage		
AC Volts, 40-60 Hz		
24 AC	100 - 250 AC	250 - 500 AC
1	2	3

### Control transformer voltage selection

To select starter with control transformer, substitute the code from the Control transformer voltage selector chart for the two digits after the last dash in the catalog number. Ex.: A 480V primary voltage with a 120V secondary voltage is required for an AF26 starter: AF2622-CK

### Control transformer voltage selection chart

Control Voltage	200-208	230-240	460-480	575-600
120V AC @ 50/60 Hz	A	B	C	D
24V AC @ 50/60 Hz	E	F	G	H

1) 24 AC coil voltage is available only with AF26 & AF30, AFN00 - AFN1. For factory modifications, see pages 29 & 30.

# IEC & NEMA Non-fusible disconnect switch

## AF26 - AF750; AFN00 - AFN4

### Reversing, three phase

#### IEC Non-combination

UL motor switching current	Contactor Size	Maximum ratings - UL Listed				UL Type 1, 3R, 4, 12	UL Type 4X
		Maximum motor horsepower ratings				General Purpose, Rainproof, Waterproof, Dusttight	Watertight Corrosion Resistant Stainless steel
		200/208V	230/240V	460V/480V	575/600V	Catalog number	Catalog number
28	AF26	7.5	7.5	15	20	AF262N2-2Δ	AF262NX-2Δ
24	AF30	10	10	20	25	AF302N2-2Δ	AF302NX-2Δ
54	AF50	15	20	40	50	AF502N2-2Δ	AF502NX-2Δ
68	AF63	20	25	50	60	AF632N2-2Δ	AF632NX-2Δ
80	AF75	25	30	60	75	AF752N2-2Δ	AF752NX-2Δ
110	AF110	30	40	75	100	AF110N2-2Δ	AF1102NX-2Δ
130	AF145	40	50	100	125	AF1452N2-2Δ	AF1452NX-2Δ
156	AF185	50	60	125	150	AF1852N2-2Δ	AF1852NX-2Δ
192	AF210	60	75	150	200	AF2102N2-2Δ	AF2102NX-2Δ
248	AF260	75	100	200	250	AF2602N2-2Δ	AF2602NX-2Δ
302	AF300	100	-	250	300	AF3002N2-2Δ	AF3002NX-2Δ
414	AF400	125	150	350	400	AF4002N2-2Δ	AF4002NX-2Δ
480	AF460	150	200	400	500	AF4602N2-2Δ	AF4602NX-2Δ
590	AF580	200	250	500	600	AF5802N2-2Δ	AF5802NX-2Δ
722	AF750	250	300	600	700	AF7502N2-2Δ	AF7502NX-2Δ

Δ Overload relay suffix code. Select from the overload relay selection chart on pages 34 & 35.

#### NEMA Non-combination

NEMA size	Contactor	Continuous	Maximum ratings - UL Listed			UL Type 1, 3R, 4, 12	UL Type 4X
			Maximum motor horsepower ratings			General Purpose, Rainproof, Waterproof, Dusttight	Watertight Corrosion Resistant Stainless steel
			200V	230V	460/575V	Catalog number	Catalog number
00	AFN00	9	1.5	1.5	2	AFN002N2-2Δ	AFN002NX-2Δ
0	AFN0	18	3	3	5	AFN02N2-2Δ	AFN02NX-2Δ
1	AN1	27	7.5	7.5	10	AFN12N2-2Δ	AFN12NX-2Δ
2	AFN2	45	10	15	25	AFN22N2-2Δ	AFN22NX-2Δ
3	AFN3	90	25	30	50	AFN32N2-2Δ	AFN32NX-2Δ
4	AFN4	135	40	50	100	AFN42N2-2Δ	AFN42NX-2Δ

Δ Overload relay suffix code. Select from the overload relay selection chart on pages 36 & 37.

#### Coil voltage selection <sup>1)</sup>

All AC operated catalog numbers include a 100-250V AC coil. To select other coil voltages, substitute the code from the Coil Voltage Selection Chart for the suffix code after the last dash in the catalog number. Ex.: A 24V AC coil is required for an AF26 starter: AF262N2-1K

#### Control transformer voltage selection

To select starter with control transformer, substitute the code from the Control transformer voltage selector chart for the two digits after the last dash in the catalog number. Ex.: A 480V primary voltage with a 120V secondary voltage is required for an AF26 starter: AF262N2-CK

#### Coil voltage selection chart

Coil voltage		
AC Volts, 40-60 Hz		
24 AC	100 - 250 AC	250 - 500 AC
1	2	3

#### Control transformer voltage selection chart

Control Voltage	200-208	230-240	460-480	575-600
120V AC @ 50/60 Hz	A	B	C	D
24V AC @ 50/60 Hz	E	F	G	H

1) 24 AC coil voltage is available only with AF26 & AF30, AFN00 - AFN1. For factory modifications, see pages 29 & 30.

# IEC & NEMA Fusible disconnect switch

## AF09 - AF750; AFN00 - AFN4

### Reversing, three phase

#### IEC Fusible disconnect switch

UL motor switching current	Contactor Size	Maximum ratings - UL Listed				Fuse clip rating amp/volts	UL Type 1, 3R, 4, 12	UL Type 4X	
		Maximum motor horsepower ratings					General Purpose, Rainproof, Waterproof, Dusttight	Watertight Corrosion Resistant Stainless steel	
		200/208V	230/240V	460V/480V	575/600V		Catalog number	Catalog number	
9	AF9	2	2	5	7.5	30/600	AF092F2-2Δ1	AF092FX-2Δ1	
11	AF12	3	3	7.5	10	30/600	AF122F2-2Δ1	AF122FX-2Δ1	
17	AF16	5	5	10	15	30/600	AF162F2-2Δ1	AF162FX-2Δ1	
28	AF26	7.5	7.5	15	20	60/600	AF262F2-2Δ2	AF262FX-2Δ2	
34	AF30	10	10	20	25	60/600	AF302F2-2Δ2	AF302FX-2Δ2	
54	AF50	15	20	40	50	100/600	AF502F2-2Δ3	AF502FX-2Δ3	
68	AF63	20	25	50	60	200/600	AF632F2-2Δ4	AF632FX-2Δ4	
80	AF75	25	30	60	75	200/600	AF752F2-2Δ4	AF752FX-2Δ4	
110	AF110	30	40	75	100	200/600	AF1102F2-2Δ4	AF1102FX-2Δ4	
130	AF145	40	50	100	125	400/600	AF1452F2-2Δ5	AF1452FX-2Δ5	
156	AF185	50	60	125	150	400/600	AF1852F2-2Δ5	AF1852FX-2Δ5	
192	AF210	60	75	150	200	400/600	AF2102F2-2Δ5	AF2102FX-2Δ5	
248	AF260	75	-	-	-	400/600	AF2602F2-2Δ5	AF2602FX-2Δ5	
248	AF260	-	100	200	250	600/600	AF2602F2-2Δ6	AF2602FX-2Δ6	
302	AF300	100	100	250	300	600/600	AF3002F2-2Δ6	AF3002FX-2Δ6	
414	AF400	125	150	350	400	800/600	AF4002F2-2Δ7	AF4002FX-2Δ7	
480	AF460	150	200	400	500	800/600	AF4602F2-2Δ7	AF4602FX-2Δ7	
590	AF580	200	250	500	600	1200/600	AF5802F2-2Δ8	AF5802FX-2Δ8	
722	AF750	250	300	600	700	1200/600	AF7502F2-2Δ8	AF7502FX-2Δ8	

Δ Overload relay suffix code. Select from the overload relay selection chart on pages 34 & 35.

#### NEMA Fusible disconnect switch

NEMA size	Contactor	Continuous	Maximum ratings - UL Listed			Fuse clip rating amp/volts	UL Type 1, 3R, 4, 12	UL Type 4X	
			Maximum motor horsepower ratings				General Purpose, Rainproof, Waterproof, Dusttight	Watertight Corrosion Resistant Stainless steel	
			200V	230V	460/575V		Catalog number	Catalog number	
00	AFN00	9	1.5	1.5	2	30/600	AFN002F2-2Δ1	AFN002FX-2Δ1	
0	AFN0	18	3	3	5	30/600	AFN02F2-2Δ1	AFN02FX-2Δ1	
1	AFN1	27	-	-	10	30/600	AFN12F2-2Δ1	AFN12FX-2Δ1	
1	AFN1	27	7.5	7.5	-	60/600	AFN12F2-2Δ2	AFN12FX-2Δ2	
2	AFN2	45	10	-	25	60/600	AFN22F2-2Δ2	AFN22FX-2Δ2	
2	AFN2	45	-	15	-	100/600	AFN22F2-2Δ3	AFN22FX-2Δ3	
3	AFN3	90	25	30	50	200/600	AFN32F2-2Δ4	AFN32FX-2Δ4	
4	AFN4	135	40	50	100	400/600	AFN42F2-2Δ5	AFN42FX-2Δ5	

Δ Overload relay suffix code. Select from the overload relay selection chart on pages 36 & 37.

#### Coil voltage selection 1)

All AC operated catalog numbers include a 100-250V AC coil. To select other coil voltages, substitute the code from the Coil Voltage Selection Chart for the suffix code after the last dash in the catalog number. Ex.: A 24V AC coil is required for an AF12 starter: AF122F2-1K1

#### Coil voltage selection chart

Coil voltage		
AC Volts, 40-60 Hz		
24 AC	100 - 250 AC	250 - 500 AC
1	2	3

#### Control transformer voltage selection

To select starter with control transformer, substitute the code from the Control transformer voltage selector chart for the two digits after the last dash in the catalog number. Ex.: A 480V primary voltage with a 120V secondary voltage is required for an AF12 starter: AF122F2-CR1

#### Control transformer voltage selection chart

Control Voltage	200-208	230-240	460-480	575-600
120V AC @ 50/60 Hz	A	B	C	D
24V AC @ 50/60 Hz	E	F	G	H

1) 24 AC coil voltage is available only with AF09 - AF30, AFN00 - AFN1.  
For factory modifications, see pages 29 & 30.

# IEC Circuit breaker type

## AF26 - AF750

### Reversing, three phase

UL motor switching current	Contactor Size	Maximum ratings - UL Listed				Circuit Breaker Amp Rating	UL Type 1, 3R, 4, 12	UL Type 4X	
		Maximum motor horsepower ratings					General Purpose, Rainproof, Waterproof, Dusttight	Watertight Corrosion Resistant Stainless steel	
		200/208V	230/240V	460V/480V	575/600V		Catalog number	Catalog number	
28	AF26	2	3	5	7.5	15 A	AF262B2-2Δ1	AF262BX-2Δ1	
28	AF26	3	-	7.5	10	20 A	AF262B2-2Δ2	AF262BX-2Δ2	
28	AF26	-	5	10	-	25 A	AF262B2-2Δ3	AF262BX-2Δ3	
28	AF26	5	-	-	15	30 A	AF262B2-2Δ4	AF262BX-2Δ4	
28	AF26	-	7.5	15	20	35 A	AF262B2-2Δ5	AF262BX-2Δ5	
34	AF30	7.5	-	-	-	40 A	AF302B2-2Δ6	AF302BX-2Δ6	
34	AF30	10	10	20	25	50 A	AF302B2-2Δ7	AF302BX-2Δ7	
54	AF50	-	-	-	30	50 A	AF502B2-2Δ7	AF502BX-2Δ7	
54	AF50	15	15	40	50	80 A	AF502B2-2Δ8	AF502BX-2Δ8	
68	AF63	20	20	50	60	100 A	AF632B2-2Δ9	AF632BX-2Δ9	
80	AF75	25	30	60	75	125 A	AF752B2-2ΔA	AF752BX-2ΔA	
110	AF110	30	-	75	100	150 A	AF1102B2-2ΔB	AF1102BX-2ΔB	
110	AF110	-	40	-	-	200 A	AF1102B2-2ΔC	AF1102BX-2ΔC	
130	AF145	40	50	100	125	200 A	AF1452B2-2ΔC	AF1452BX-2ΔC	
156	AF185	50	60	125	150	250 A	AF1852B2-2ΔD	AF1852BX-2ΔD	
192	AF210	60	-	-	-	250 A	AF2102B2-2ΔD	AF2102BX-2ΔD	
192	AF210	-	75	150	200	300 A	AF2102B2-2ΔE	AF2102BX-2ΔE	
248	AF260	75	-	-	-	350 A	AF2602B2-2ΔF	AF2602BX-2ΔF	
248	AF260	-	100	200	250	400 A	AF2602B2-2ΔG	AF2602BX-2ΔG	
302	AF300	100	-	-	300	450 A	AF3002B2-2ΔH	AF3002BX-2ΔH	
302	AF300	-	-	250	-	500 A	AF3002B2-2ΔJ	AF3002BX-2ΔJ	
414	AF400	-	125	-	-	500 A	AF4002B2-2ΔJ	AF4002BX-2ΔJ	
414	AF400	125	150	300	400	600 A	AF4002B2-2ΔK	AF4002BX-2ΔK	
414	AF400	-	-	350	-	700 A	AF4002B2-2ΔL	AF4002BX-2ΔL	
480	AF460	150	-	-	-	600 A	AF4602B2-2ΔK	AF4602BX-2ΔK	
480	AF460	-	200	400	500	800 A	AF4602B2-2ΔM	AF4602BX-2ΔM	
590	AF580	200	-	-	-	800 A	AF5802B2-2ΔM	AF5802BX-2ΔM	
590	AF580	-	250	500	600	1000 A	AF5802B2-2ΔN	AF5802BX-2ΔN	
722	AF750	250	-	-	-	1000 A	AF7502B2-2AN	AF7502BX-2ΔN	
722	AF750	-	300	600	700	1200 A	AF7502B2-2ΔP	AF7502BX-2ΔP	

Δ Overload relay suffix code. Select from the overload relay selection chart on pages 34 & 35.

#### Coil voltage selection 1)

All AC operated catalog numbers include a 100-250V AC coil. To select other coil voltages, substitute the code from the Coil Voltage Selection Chart for the suffix code after the last dash in the catalog number. Ex.: A 24V AC coil is required for an AF26 starter: AF262B2-1K1

#### Coil voltage selection chart

Coil voltage		
AC Volts, 40-60 Hz		
24 AC	100 - 250 AC	250 - 500 AC
1	2	3

#### Control transformer voltage selection

To select starter with control transformer, substitute the code from the Control transformer voltage selector chart for the two digits after the last dash in the catalog number. Ex.: A 480V primary voltage with a 120V secondary voltage is required for an AF26 starter: AF261B2-CK1

#### Control transformer voltage selection chart

Control Voltage	200-208	230-240	460-480	575-600
120V AC @ 50/60 Hz	A	B	C	D
24V AC @ 50/60 Hz	E	F	G	H

1) 24 AC coil voltage is available only with AF26 & AF30.  
For factory modifications, see page 29 & 30.

# NEMA Circuit breaker type AFN00 - AFN4

## Reversing, three phase

NEMA size	Contactor	Continuous	Maximum ratings - UL Listed				Circuit breaker rating Amps	UL Type 1, 3R, 4, 12	UL Type 4X	
			Maximum motor horsepower ratings					General Purpose, Rainproof, Waterproof, Dusttight	Watertight Corrosion Resistant Stainless steel	
			208V	230V	460V	575V		Catalog number	Catalog number	
00	AFN00	9	1.5	1.5	2	2	15 A	AFN002B2-2Δ1	AFN002BX-2Δ1	
0	AFN0	18	2	3	5	5	15 A	AFN02B2-2Δ1	AFN02BX-2Δ1	
			3	-	-	-	20 A	AFN02B2-2Δ2	AFN02BX-2Δ2	
			-	-	-	7.5	15 A	AFN12B2-2Δ1	AFN12BX-2Δ1	
			-	-	7.5	10	20 A	AFN12B2-2Δ2	AFN12BX-2Δ2	
1	AFN1	27	-	5	10	-	25 A	AFN12B2-2Δ3	AFN12BX-2Δ3	
			5	-	-	-	30 A	AFN12B2-2Δ4	AFN12BX-2Δ4	
			-	7.5	-	-	35 A	AFN12B2-2Δ5	AFN11BX-2Δ5	
			7.5	-	-	-	40 A	AFN12B2-2Δ6	AFN11BX-2Δ6	
2	AFN2	45	-	-	15	20	40 A	AFN22B2-2Δ6	AFN22BX-2Δ6	
			10	10	20	25	50 A	AFN22B2-2Δ7	AFN22BX-2Δ7	
			-	15	25	-	80 A	AFN22B2-2Δ8	AFN22BX-2Δ8	
3	AFN3	90	-	-	-	30	50 A	AFN32B2-2Δ7	AFN32BX-2Δ7	
			-	-	30	-	80 A	AFN32B2-2Δ8	AFN32BX-2Δ8	
			15	-	-	40	80 A	AFN32B2-2Δ8	AFN32BX-2Δ8	
			-	-	40	50	80 A	AFN32B2-2Δ8	AFN32BX-2Δ8	
			-	-	50	-	100 A	AFN32B2-2Δ9	AFN32BX-2Δ9	
			25	30	-	-	125 A	AFN32B2-2ΔA	AFN32BX-2ΔA	
4	A145N4	135	-	-	60	75	125 A	AFN42B2-2ΔA	AFN42BX-2ΔA	
			30	-	75	100	150 A	AFN42B2-2ΔB	AFN42BX-2ΔB	
			40	50	100	-	200 A	AFN42B2-2ΔC	AFN42BX-2ΔC	

Δ Overload relay suffix code. Select from the overload relay selection chart on pages 36 & 37.

### Coil voltage selection <sup>1)</sup>

All AC operated catalog numbers include a 100-250V AC coil. To select other coil voltages, substitute the code from the Coil Voltage Selection Chart for the suffix code after the last dash in the catalog number. Ex.: A 24V AC coil is required for an AFN0 starter: AFN12B2-1K1.

### Coil voltage selection chart

Coil voltage		
AC Volts, 40-60 Hz		
24 AC	100 - 250 AC	250 - 500 AC
1	2	3

### Control transformer voltage selection

To select starter with control transformer, substitute the code from the Control transformer voltage selector chart for the two digits after the last dash in the catalog number. Ex.: A 480V primary voltage with a 120V secondary voltage is required for an AFN0 starter: AFN12B2-CK1.

### Control transformer voltage selection chart

Control Voltage	200-208	230-240	460-480	575-600
120V AC @ 50/60 Hz	A	B	C	D
24V AC @ 50/60 Hz	E	F	G	H

1) 24 AC coil voltage is available only with AFN00 - AFN1.  
For factory modifications, see pages 29 & 30.

# IEC Non-combination

## AF26 - AF75

### 2 Speed, 1 winding; three phase

UL motor switching current	Contactor Size	Maximum ratings - UL Listed				UL Type 1, 3R, 4, 12	UL Type 4X Watertight Corrosion Resistant Stainless steel		
		Maximum motor horsepower ratings							
		200/208V	230/240V	460V/480V	575/600V				
28	AF26	7.5	7.5	15	20	AF2632-2ΔΔ	AF263X-2ΔΔ		
34	AF30	10	10	20	25	AF3032-2ΔΔ	AF303X-2ΔΔ		
54	AF50	15	20	40	50	AF5032-2ΔΔ	AF503X-2ΔΔ		
68	AF63	20	25	50	60	AF6332-2ΔΔ	AF633X-2ΔΔ		
80	AF75	25	30	60	75	AF7532-2ΔΔ	AF753X-2ΔΔ		

Δ Overload relay suffix code. Select from the overload relay selection chart on page 34. 1st Δ low speed; 2nd Δ high speed.

#### Coil voltage selection <sup>1)</sup>

All AC operated catalog numbers include a 100-250V AC coil. To select other coil voltages, substitute the code from the Coil Voltage Selection Chart for the suffix code after the last dash in the catalog number. Ex.: A 24V AC coil is required for an AF26 starter: AF2632-1KP

#### Coil voltage selection chart

Coil voltage	
AC Volts, 40-60 Hz	
24 AC	100 - 250 AC
1	2

#### Control transformer voltage selection

To select starter with control transformer, substitute the code from the Control transformer voltage selector chart for the two digits after the last dash in the catalog number. Ex.: A 480V primary voltage with a 120V secondary voltage is required for an AF26 starter: AF2632-CKP

#### Control transformer voltage selection chart

Control Voltage	200-208	230-240	460-480	575-600
120V AC @ 50/60 Hz	A	B	C	D
24V AC @ 50/60 Hz	E	F	G	H

1) 24 AC coil voltage is available only with AF26 & AF30.  
For factory modifications, see pages 29 & 30.

# IEC Non-fusible disconnect switch

**AF26 - AF75**

**2 Speed, 1 winding; three phase**

UL motor switching current	Contactor Size	Maximum ratings - UL Listed				UL Type 1, 3R, 4, 12	UL Type 4X		
		Maximum motor horsepower ratings							
		200/208V	230/240V	460V/480V	575/600V				
28	AF26	7.5	7.5	15	20	AF263N2-2ΔΔ	AF263NX-2ΔΔ		
34	AF30	10	10	20	25	AF303N2-2ΔΔ	AF303NX-2ΔΔ		
54	AF50	15	20	40	50	AF503N2-2ΔΔ	AF503NX-2ΔΔ		
68	AF63	20	25	50	60	AF633N2-2ΔΔ	AF633NX-2ΔΔ		
80	AF75	25	30	60	75	AF753N2-2ΔΔ	AF753NX-2ΔΔ		

Δ Overload relay suffix code. Select from the overload relay selection chart on page 34. 1st Δ low speed; 2nd Δ high speed.

## Coil voltage selection <sup>1)</sup>

All AC operated catalog numbers include a 100-250V AC coil. To select other coil voltages, substitute the code from the Coil Voltage Selection Chart for the suffix code after the last dash in the catalog number. Ex.: A 24V AC coil is required for an AF26 starter: AF263N2-1KP

## Coil voltage selection chart

Coil voltage	
AC Volts, 40-60 Hz	
24 AC	100 - 250 AC
1	2

## Control transformer voltage selection

To select starter with control transformer, substitute the code from the Control transformer voltage selector chart for the two digits after the last dash in the catalog number. Ex.: A 480V primary voltage with a 120V secondary voltage is required for an AF26 starter: AF263N2-CKP

## Control transformer voltage selection chart

Control Voltage	200-208	230-240	460-480	575-600
120V AC @ 50/60 Hz	A	B	C	D
24V AC @ 50/60 Hz	E	F	G	H

1) 24 AC coil voltage is available only with AF26 & AF30.  
For factory modifications, see pages 29 & 30.

# Fusible disconnect switch

## AF09 - AF75

### 2 Speed, 1 winding; three phase

UL motor switching current	Contactor Size	Maximum ratings - UL Listed				Fuse clip rating amp/volts	UL Type 1, 3R, 4, 12	UL Type 4X	
		Maximum motor horsepower ratings					General Purpose, Rainproof, Waterproof, Dusttight	Watertight Corrosion Resistant Stainless steel	
		200/208V	230/240V	460V/480V	575/600V		Catalog number	Catalog number	
9	AF09	2	2	5	7.5	30/600	AF093F2-2ΔΔ1	AF093FX-2ΔΔ1	
11	AF12	3	3	7.5	10	30/600	AF123F2-2ΔΔ1	AF123FX-2ΔΔ1	
17	AF16	5	5	10	15	30/600	AF163F2-2ΔΔ1	AF163FX-2ΔΔ1	
28	AF26	7.5	7.5	15	20	60/600	AF263F2-2ΔΔ2	AF263FX-2ΔΔ2	
34	AF30	10	10	20	25	60/600	AF303F2-2ΔΔ2	AF303FX-2ΔΔ2	
54	AF50	15	20	40	50	100/600	AF503F2-2ΔΔ3	AF503FX-2ΔΔ3	
68	AF63	20	25	50	60	200/600	AF633F2-2ΔΔ4	AF633FX-2ΔΔ4	
80	AF75	25	30	60	75	200/600	AF753F2-2ΔΔ4	AF753FX-2ΔΔ4	

Δ Overload relay suffix code. Select from the overload relay selection chart on page 34. 1st Δ low speed; 2nd Δ high speed.

#### Coil voltage selection 1)

All AC operated catalog numbers include a 100-250V AC coil. To select other coil voltages, substitute the code from the Coil Voltage Selection Chart for the suffix code after the last dash in the catalog number. Ex.: A 24V AC coil is required for an AF09 starter: AF093F121KP1

#### Coil voltage selection chart

Coil voltage	
AC Volts, 40-60 Hz	
24 AC	100 - 250 AC
1	2

#### Control transformer voltage selection

To select starter with control transformer, substitute the code from the Control transformer voltage selector chart for the two digits after the last dash in the catalog number. Ex.: A 480V primary voltage with a 120V secondary voltage is required for an AF09 starter: AF093F2-CKP1

#### Control transformer voltage selection chart

Control Voltage	200-208	230-240	460-480	575-600
120V AC @ 50/60 Hz	A	B	C	D
24V AC @ 50/60 Hz	E	F	G	H

1) 24 AC coil voltage is available only with AF09 - AF30,  
For factory modifications, see pages 29 & 30.

# IEC Circuit breaker type

## AF26 - AF75

### 2 Speed, 1 winding; three phase

UL motor switching current	Contactor Size	Maximum ratings - UL Listed				Circuit Breaker Amp Rating	UL Type 1, 3R, 4, 12	UL Type 4X	
		Maximum motor horsepower ratings					General Purpose, Rainproof, Waterproof, Dusttight	Watertight Corrosion Resistant Stainless steel	
		200/208V	230/240V	460V/480V	575/600V		Catalog number	Catalog number	
28	AF26	2	3	5	7.5	15 A	AF263B2-2ΔΔ1	AF263BX-2ΔΔ1	
28	AF26	3	-	7.5	10	20 A	AF263B2-2ΔΔ2	AF263BX-2ΔΔ2	
28	AF26	-	5	10	-	25 A	AF263B2-2ΔΔ3	AF263BX-2ΔΔ3	
28	AF26	5	-	-	15	30 A	AF263B2-2ΔΔ4	AF263BX-2ΔΔ4	
28	AF26	-	7.5	15	20	35 A	AF263B2-2ΔΔ5	AF263BX-2ΔΔ5	
34	AF30	7.5	-	-	-	40 A	AF303B2-2ΔΔ6	AF303BX-2ΔΔ6	
34	AF30	10	10	20	25	50 A	AF303B2-2ΔΔ7	AF303BX-2ΔΔ7	
54	AF50	-	-	-	30	50 A	AF503B2-2ΔΔ7	AF503BX-2ΔΔ7	
54	AF50	15	15	40	50	80 A	AF503B2-2ΔΔ8	AF503BX-2ΔΔ8	
68	AF63	20	20	50	60	100 A	AF633B2-2ΔΔ9	AF633BX-2ΔΔ9	
80	AF75	25	30	60	75	125 A	AF753B2-2ΔΔA	AF753BX-2ΔΔA	

Δ Overload relay suffix code. Select from the overload relay selection chart on page 34. 1st Δ low speed; 2nd Δ high speed.

#### Coil voltage selection <sup>1)</sup>

All AC operated catalog numbers include a 100-250V AC coil. To select other coil voltages, substitute the code from the Coil Voltage Selection Chart for the suffix code after the last dash in the catalog number. Ex.: A 24V AC coil is required for an AF26 starter: AF263B2-1KP1

#### Coil voltage selection chart

Coil voltage	
AC Volts, 40-60 Hz	
24 AC	100 - 250 AC
1	2

#### Control transformer voltage selection

To select starter with control transformer, substitute the code from the control transformer voltage selector chart for the two digits after the last dash in the catalog number. Ex.: A 480V primary voltage with a 120V secondary voltage is required for an AF26 starter: AF263B2-CKP1

#### Control transformer voltage selection chart

Control Voltage	200-208	230-240	460-480	575-600
120V AC @ 50/60 Hz	A	B	C	D
24V AC @ 50/60 Hz	E	F	G	H

1) 24 AC coil voltage is available only with AF26 & AF30.  
For factory modifications, see pages 29 & 30.

# IEC Non-combination

## AF26 - AF75

### 2 Speed, 2 winding; three phase

UL motor switching current	Contactor Size	Maximum ratings - UL Listed				UL Type 1, 3R, 4, 12 General Purpose, Rainproof, Waterproof, Dusttight	UL Type 4X Watertight Corrosion Resistant Stainless steel		
		Maximum motor horsepower ratings							
		200/208V	230/240V	460V/480V	575/600V				
28	AF26	7.5	7.5	15	20	AF2642-2ΔΔ	AF264X-2ΔΔ		
34	AF30	10	10	20	25	AF3042-2ΔΔ	AF304X-2ΔΔ		
54	AF50	15	20	40	50	AF5042-2ΔΔ	AF504X-2ΔΔ		
68	AF63	20	25	50	60	AF6342-2ΔΔ	AF634X-2ΔΔ		
80	AF75	25	30	60	75	AF7542-2ΔΔ	AF754X-2ΔΔ		

Δ Overload relay suffix code. Select from the overload relay selection chart on page 34. 1st Δ low speed; 2nd Δ high speed.

#### Coil voltage selection <sup>1)</sup>

All AC operated catalog numbers include a 100-250V AC coil. To select other coil voltages, substitute the code from the Coil Voltage Selection Chart for the suffix code after the last dash in the catalog number. Ex.: A 24V AC coil is required for an AF26 starter: AF2642-1KP

#### Coil voltage selection chart

Coil voltage	
AC Volts, 40-60 Hz	
24 AC	100 - 250 AC
1	2

#### Control transformer voltage selection

To select starter with control transformer, substitute the code from the Control transformer voltage selector chart for the two digits after the last dash in the catalog number. Ex.: A 480V primary voltage with a 120V secondary voltage is required for an AF26 starter: AF2642-CKP

#### Control transformer voltage selection chart

Control Voltage	200-208	230-240	460-480	575-600
120V AC @ 50/60 Hz	A	B	C	D
24V AC @ 50/60 Hz	E	F	G	H

1) 24 AC coil voltage is available only with AF26 & AF30.  
For factory modifications, see pages 29 & 30.

# IEC Non-fusible disconnect switch

## AF26 - AF75

### 2 Speed, 2 winding; three phase

UL motor switching current	Contactor Size	Maximum ratings - UL Listed				UL Type 1, 3R, 4, 12	UL Type 4X		
		Maximum motor horsepower ratings							
		200/208V	230/240V	460V/480V	575/600V				
28	AF26	7.5	7.5	15	20	AF264N2-2ΔΔ	AF264NX-2ΔΔ		
34	AF30	10	10	20	25	AF304N2-2ΔΔ	AF304NX-2ΔΔ		
54	AF50	15	20	40	50	AF504N2-2ΔΔ	AF504NX-2ΔΔ		
68	AF63	20	25	50	60	AF634N2-2ΔΔ	AF634NX-2ΔΔ		
80	AF75	25	30	60	75	AF754N2-2ΔΔ	AF754NX-2ΔΔ		

Δ Overload relay suffix code. Select from the overload relay selection chart on page 34. 1st Δ low speed; 2nd Δ high speed.

#### Coil voltage selection <sup>1)</sup>

All AC operated catalog numbers include a 100-250V AC coil. To select other coil voltages, substitute the code from the Coil Voltage Selection Chart for the suffix code after the last dash in the catalog number. Ex.: A 24V AC coil is required for an AF26 starter: AF264N2-1KP

#### Coil voltage selection chart

Coil voltage	
AC Volts, 40-60 Hz	
24 AC	100 - 250 AC
1	2

#### Control transformer voltage selection

To select starter with control transformer, substitute the code from the Control transformer voltage selector chart for the two digits after the last dash in the catalog number. Ex.: A 480V primary voltage with a 120V secondary voltage is required for an AF26 starter: AF264N2-CKP

#### Control transformer voltage selection chart

Control Voltage	200-208	230-240	460-480	575-600
120V AC @ 50/60 Hz	A	B	C	D
24V AC @ 50/60 Hz	E	F	G	H

1) 24 AC coil voltage is available only with AF26 & AF30.  
For factory modifications, see pages 29 & 30.

# IEC Fusible disconnect switch

## AF09 - AF75

### 2 Speed, 2 winding; three phase

UL motor switching current	Contactor Size	Maximum ratings - UL Listed				Fuse clip rating amp/volts	UL Type 1, 3R, 4, 12	UL Type 4X	
		Maximum motor horsepower ratings					General Purpose, Rainproof, Waterproof, Dusttight	Watertight Corrosion Resistant Stainless steel	
		200/208V	230/240V	460V/480V	575/600V		Catalog number	Catalog number	
9	AF09	2	2	5	7.5	30/600	AF094F2-2ΔΔ1	AF094FX-2ΔΔ1	
11	AF12	3	3	7.5	10	30/600	AF124F2-2ΔΔ1	AF124FX-2ΔΔ1	
17	AF16	5	5	10	15	30/600	AF164F2-2ΔΔ1	AF164FX-2ΔΔ1	
28	AF26	7.5	7.5	15	20	60/600	AF264F2-2ΔΔ2	AF264FX-2ΔΔ2	
34	AF30	10	10	20	25	60/600	AF304F2-2ΔΔ2	AF304FX-2ΔΔ2	
54	AF50	15	20	40	50	100/600	AF504F2-2ΔΔ3	AF504FX-2ΔΔ3	
68	AF63	20	25	50	60	200/600	AF634F2-2ΔΔ4	AF634FX-2ΔΔ4	
80	AF75	25	30	60	75	200/600	AF754F2-2ΔΔ4	AF754FX-2ΔΔ4	

Δ Overload relay suffix code. Select from the overload relay selection chart on page 34. 1st Δ low speed; 2nd Δ high speed.

#### Coil voltage selection <sup>1)</sup>

All AC operated catalog numbers include a 100-250V AC coil. To select other coil voltages, substitute the code from the Coil Voltage Selection Chart for the suffix code after the last dash in the catalog number. Ex.: A 24V AC coil is required for an AF12 starter: AF124F2-1KP1

#### Coil voltage selection chart

Coil voltage	
AC Volts, 40-60 Hz	
24 AC	100 - 250 AC
1	2

#### Control transformer voltage selection

To select starter with control transformer, substitute the code from the Control transformer voltage selector chart for the two digits after the last dash in the catalog number. Ex.: A 480V primary voltage with a 120V secondary voltage is required for an AF12 starter: AF124F2-CKP1

#### Control transformer voltage selection chart

Control Voltage	200-208	230-240	460-480	575-600
120V AC @ 50/60 Hz	A	B	C	D
24V AC @ 50/60 Hz	E	F	G	H

1) 24 AC coil voltage is available only with AF09 - AF30,  
For factory modifications, see pages 29 & 30.

# IEC Circuit breaker type

## AF26 - AF75

### 2 Speed, 2 winding; three phase

UL motor switching current	Contactor Size	Maximum ratings - UL Listed				Circuit Breaker Amp Rating	UL Type 1, 3R, 4, 12	UL Type 4X	
		Maximum motor horsepower ratings					General Purpose, Rainproof, Waterproof, Dusttight	Watertight Corrosion Resistant Stainless steel	
		200/208V	230/240V	460V/480V	575/600V		Catalog number	Catalog number	
28	AF26	2	3	5	7.5	15 A	AF264B2-2ΔΔ1	AF264BX-2ΔΔ1	
28	AF26	3	-	7.5	10	20 A	AF264B2-2ΔΔ2	AF264BX-2ΔΔ2	
28	AF26	-	5	10	-	25 A	AF264B2-2ΔΔ3	AF264BX-2ΔΔ3	
28	AF26	5	-	-	15	30 A	AF264B2-2ΔΔ4	AF264BX-2ΔΔ4	
28	AF26	-	7.5	15	20	35 A	AF264B2-2ΔΔ5	AF264BX-2ΔΔ5	
34	AF30	7.5	-	-	-	40 A	AF304B2-2ΔΔ6	AF304BX-2ΔΔ6	
32	AF30	10	10	20	25	50 A	AF304B2-2ΔΔ7	AF304BX-2ΔΔ7	
54	AF50	-	-	-	30	50 A	AF504B2-2ΔΔ7	AF504BX-2ΔΔ7	
54	AF50	15	15	40	50	80 A	AF504B2-2ΔΔ8	AF504BX-2ΔΔ8	
68	AF63	20	20	50	60	100 A	AF634B2-2ΔΔ9	AF634BX-2ΔΔ9	
80	AF75	25	30	60	75	125 A	AF754B2-2ΔΔA	AF754BX-2ΔΔA	

Δ Overload relay suffix code. Select from the overload relay selection chart on page 34. 1st Δ low speed; 2nd Δ high speed.

Overload relays are required for all combination starters.

#### Coil voltage selection 1)

All AC operated catalog numbers include a 100-250V AC coil. To select other coil voltages, substitute the code from the Coil Voltage Selection Chart for the suffix code after the last dash in the catalog number. Ex.: A 24V AC coil is required for an AF26 starter: AF264B2-1KP1

#### Coil voltage selection chart

Coil voltage	
AC Volts, 40-60 Hz	
24 AC	100 - 250 AC
1	2

#### Control transformer voltage selection

To select starter with control transformer, substitute the code from the Control transformer voltage selector chart for the two digits after the last dash in the catalog number. Ex.: A 480V primary voltage with a 120V secondary voltage is required for an AF26 starter: AF264B2-CKP1

#### Control transformer voltage selection chart

Control Voltage	200-208	230-240	460-480	575-600
120V AC @ 50/60 Hz	A	B	C	D
24V AC @ 50/60 Hz	E	F	G	H

1) 24 AC coil voltage is available only with AF26 & AF30.  
For factory modifications, see pages 29 & 30.

# General information

## Factory installed options

### Control cover factory modifications - NEMA/UL Type 1, 3R, 4, 4X & 12

Pilot device kits

	Starter type	Description	Nameplate	Suffix code
One operator	DOL	2-Position Switch	OFF-ON	C
	DOL	3-Position Switch	HAND-OFF-AUTO	D
	DOL	Pilot Light	"ON" Red pilot light	E
	REV	3-Position Switch	FOR-OFF-REV	L
	2 Speed	3-Position Switch	SLOW-OFF-FAST	M
Two operators	DOL	Push Buttons	START/STOP	A
	DOL	Push Buttons	START/ EMERGENCY STOP	N
	DOL	2 Position Switch & Pilot Light	OFF-ON/"ON"	H
	DOL	3 Position Switch & Pilot Light	HAND-OFF-AUTO/"ON"	J
Three operators	DOL	Push Buttons & Pilot Light	START/STOP/"ON"	F
	DOL	2 Position Switch & Pilot Lights	OFF-ON/"ON"/"FAULT"	P
	DOL	3 Position Switch & Pilot Lights	HAND-OFF-AUTO/"ON"/"FAULT"	Q
	REV	Push Buttons	FORWARD- REVERSE-STOP	B
	REV	3 Position Switch & Pilot Lights	FOR-OFF-REV/"FORWARD"/"REVERSE"	G
	2 Speed	Push Buttons	FAST-SLOW-STOP	K
	2 Speed	3 Position Switch & Pilot Lights	SLOW-OFF-FAST/"SLOW"/"FAST"	R

# General information

## Factory installed options

### Control circuit transformers

Contactor size	Description	Option
AF09 -AF30 AFN00 & AFN1	50VA, 200-208/120 VAC	A
	50VA, 230-240/120 VAC	B
	50VA, 460-480/120 VAC	C
	50VA, 575-600/120 VAC	D
	50VA, 200-208/24 VAC	E
	50VA, 230-240/24 VAC	F
	50VA, 460-480/24 VAC	G
	50VA, 575-600/24 VAC	H
AF50 -AF75 AFN2 & AFN3	75VA, 200-208/120 VAC	A
	75VA, 230-240/120 VAC	B
	75VA, 460-480/120 VAC	C
	75VA, 575-600/120 VAC	D
AF110	100VA, 200-208/120 VAC	A
	100VA, 230-240/120 VAC	B
	100VA, 460-480/120 VAC	C
	100VA, 575-600/120 VAC	D
AF145 - AF185 AF400-AF460 AFN4	150VA, 200-208/120 VAC	A
	150VA, 230-240/120 VAC	B
	150VA, 460-480/120 VAC	C
	150VA, 575-600/120 VAC	D
AF210 - AF300 AF580-AF750	250VA, 200-208/120 VAC	A
	250VA, 230-240/120 VAC	B
	250VA, 460-480/120 VAC	C
	250VA, 575-600/120 VAC	D

# General information

## Field modification kits

### Pilot device field modifications kits- NEMA/UL Type 1, 3R, 4, 4X & 12

	Starter type	Description	Nameplate	Catalog number
One operator	DOL	2-Position Switch	OFF-ON	SS2P-1
	DOL	3-Position Switch	HAND-OFF-AUTO	SS3P-2
	DOL	Pilot Light (120V AC)	"ON" Green pilot light	PL-120VAC
	DOL	Pilot Light (24V AC)	"ON" Green pilot light	PL-24VAC
	REV	3-Position Switch	FOR-OFF-REV	SS3P-3
	2 Speed	3-Position Switch	SLOW-OFF-FAST	SS3P-4
Two operators	DOL	Push Buttons	START/STOP	PB-SS
	DOL	Push Buttons	START/ EMERGENCY STOP	PB-SES
	DOL	2 Position Switch & Pilot Light (120V AC)	OFF-ON/"ON"	SS2PPL-120VAC
	DOL	2 Position Switch & Pilot Light (24V AC)	OFF-ON/"ON"	SS2PPL-24VAC
	DOL	3 Position Switch & Pilot Light (120V AC)	HAND-OFF-AUTO/"ON"	SS3PPL-120VAC
	DOL	3 Position Switch & Pilot Light (24V AC)	HAND-OFF-AUTO/"ON"	SS3PPL-24VAC
Three operators	DOL	Push Buttons & Pilot Light (120V AC)	START/STOP/"ON"	PBPL-SS120VAC
	DOL	Push Buttons & Pilot Light (24V AC)	START/STOP/"ON"	PBPL-SS24VAC
	DOL	2 Position Switch & Pilot Lights (120V AC)	OFF-ON/"ON"/"FAULT"	SS2PPL-FLT-120VAC
	DOL	2 Position Switch & Pilot Lights (24V AC)	OFF-ON/"ON"/"FAULT"	SS2PPL-FLT-24VAC
	DOL	3 Position Switch & Pilot Lights (120V AC)	HAND-OFF-AUTO/"ON"/"FAULT"	SS3PPL-FLT-120VAC
	DOL	3 Position Switch & Pilot Lights (24V AC)	HAND-OFF-AUTO/"ON"/"FAULT"	SS3PPL-FLT-24VAC
	REV	Push Buttons	FORWARD- REVERSE-STOP	PB-FRS
	REV	3 Position Switch & Pilot Lights (120V AC)	FOR-OFF-REV//FORWARD//REVERSE	SS3PPL-FR-120VAC
	REV	3 Position Switch & Pilot Lights (24V AC)	FOR-OFF-REV//FORWARD//REVERSE	SS3PPL-FR-24VAC
	2 Speed	Push Buttons	FAST-SLOW-STOP	PB-FSS
	2 Speed	3 Position Switch & Pilot Lights(120V AC)	SLOW-OFF-FAST//SLOW//FAST	SS3PPL-SF-120VAC
	2 Speed	3 Position Switch & Pilot Lights (24V AC)	SLOW-OFF-FAST//SLOW//FAST	SS3PPL-SF-24VAC

# General information

## Field modification kits

### Control circuit transformer field modifications kits

Contactor size	Description	Catalog number
AF9 - AF30 AFN00 - AFN1	50VA, 200-208/120 VAC	CCT50-208/120
	50VA, 230-240/120 VAC	CCT50-240/120
	50VA, 460-480/120 VAC	CCT50-480/120
	50VA, 575-600/120 VAC	CCT50-600/120
	50VA, 200-208/24 VAC	CCT50-208/24
	50VA, 230-240/24 VAC	CCT50-240/24
	50VA, 460-480/24 VAC	CCT50-480/24
	50VA, 575-600/24 VAC	CCT50-600/24
	75VA, 200-208/120 VAC	CCT75-208/120
	75VA, 230-240/120 VAC	CCT75-240/120
AF50 - AF75 AFN2 & AFN3	75VA, 460-480/120 VAC	CCT75-480/120
	75VA, 575-600/120 VAC	CCT75-600/120
	100VA, 200-208/120 VAC	CCT100-208/120
	100VA, 230-240/120 VAC	CCT100-240/120
AF110	100VA, 460-480/120 VAC	CCT100-480/120
	100VA, 575-600/120 VAC	CCT100-600/120
AF145 - AF185 AF400 - AF460 AFN4	150VA, 200-208/120 VAC	CCT150-208/120
	150VA, 230-240/120 VAC	CCT150-240/120
	150VA, 460-480/120 VAC	CCT150-480/120
	150VA, 575-600/120 VAC	CCT150-600/120
AF210 - AF300 AF580 - AF750	250VA, 200-208/120 VAC	CCT250-208/120
	250VA, 230-240/120 VAC	CCT250-240/120
	250VA, 460-480/120 VAC	CCT250-480/120
	250VA, 575-600/120 VAC	CCT250-600/120

# General information

## Motor data

### Ampere ratings of 3 phase, AC induction motors

Horse power	110 – 120V			200 – 208V			220 – 240V			380 – 415V <sup>①</sup>			440 – 480V			550 – 600V		
	Single phase	Two phase	Three phase	Single phase	Two phase	Three phase	Single phase	Two phase	Three phase	Single phase	Two phase	Three phase	Single phase	Two phase	Three phase	Single phase	Two phase	Three phase
1/10	3.0	—	—	1.65	—	—	1.5	—	—	1.0	—	—	—	—	—	—	—	—
1/8	3.8	—	—	2.1	—	—	1.9	—	—	1.2	—	—	—	—	—	—	—	—
1/6	4.4	—	—	2.4	—	—	2.2	—	—	1.4	—	—	—	—	—	—	—	—
1/4	5.8	—	—	3.2	—	—	2.9	—	—	1.8	—	—	—	—	—	—	—	—
1/3	7.2	—	—	4.0	—	—	3.6	—	—	2.3	—	—	—	—	—	—	—	—
1/2	9.8	4.0	4.4	5.4	2.2	2.4	4.9	2.0	2.2	3.2	1.3	2.5	1.0	1.1	2.0	0.8	0.9	
3/4	13.8	4.8	6.4	7.6	2.6	3.5	6.9	2.4	3.2	4.5	1.8	3.5	1.2	1.6	2.8	1.0	1.3	
1	16.0	6.4	8.4	8.8	3.6	4.6	8.0	3.2	4.2	5.1	2.3	4.0	1.6	2.1	3.2	1.3	1.7	
1 1/2	20.0	9.0	12.0	11.0	5.0	6.6	10.0	4.5	6.0	6.4	3.3	5.0	2.3	3.0	4.0	1.8	2.4	
2	24.0	11.8	13.6	13.2	6.5	7.5	12.0	5.9	6.8	7.7	4.3	6.0	3.0	3.4	4.8	2.4	2.7	
3	34.0	16.6	19.2	18.7	9.2	10.6	17.0	8.3	9.6	10.9	6.1	8.5	4.2	4.8	6.8	3.3	3.9	
5	56.0	26.4	30.4	30.8	14.5	16.8	28.0	13.2	15.2	17.9	9.7	14.0	6.6	7.6	11.2	5.3	6.1	
7 1/2	80.0	38.0	44.0	44.0	21.0	24.2	40.0	19.0	22.0	27.0	14.0	21.0	9.0	11.0	16.0	8.0	9.0	
10	100.0	48.0	56.0	55.0	26.4	30.8	50.0	24.0	28.0	33.0	18.0	26.0	12.0	14.0.	20.0	10.0	11.0	
15	135.0	72.0	84.0	75.0	39.6	46.2	68.0	36.0	42.0	44.0	27.0	34.0	18.0	21.0	27.0	14.0	17.0	
20	—	94.0	108.0	96.8	52.0	60.0	88.0	47.0	54.0	56.0	34.0	44.0	23.0	27.0	35.0	19.0	22.0	
25	—	118.0	136.0	121.0	65.0	75.0	110.0	59.0	68.0	70.0	44.0	55.0	29.0	34.0	44.0	24.0	27.0	
30	—	138.0	160.0	150.0	76.0	88.0	136.0	69.0	80.0	87.0	51.0	68.0	35.0	40.0	54.0	28.0	32.0	
40	—	180.0	208.0	194.0	100.0	115.0	176.0	90.0	104.0	112.0	66.0	88.0	45.0	52.0	70.0	36.0	41.0	
50	—	226.0	260.0	238.0	125.0	143.0	216.0	113.0	130.0	139.0	83.0	108.0	56.0	65.0	86.0	45.0	52.0	
60	—	—	—	—	147.0	160.0	—	133.0	154.0	—	103.0	—	67.0	77.0	—	53.0	62.0	
75	—	—	—	—	183.0	212.0	—	166.0	192.0	—	128.0	—	83.0	96.0	—	66.0	77.0	
100	—	—	—	—	240.0	273.0	—	218.0	248.0	—	165.0	—	109.0	124.0	—	87.0	99.0	
125	—	—	—	—	—	344.0	—	—	312.0	—	208.0	—	135.0	156.0	—	108.0	125.0	
150	—	—	—	—	—	396.0	—	—	360.0	—	240.0	—	156.0	180.0	—	125.0	144.0	
200	—	—	—	—	—	528.0	—	—	480.0	—	320.0	—	208.0	240.0	—	167.0	192.0	
250	—	—	—	—	—	663.0	—	—	602.0	—	403.0	—	—	302.0	—	—	242.0	
300	—	—	—	—	—	—	—	—	—	—	482.0	—	—	361.0	—	—	289.0	
350	—	—	—	—	—	—	—	—	—	—	560.0	—	—	414.0	—	—	336.0	
400	—	—	—	—	—	—	—	—	—	—	636.0	—	—	477.0	—	—	382.0	
500	—	—	—	—	—	—	—	—	—	—	786.0	—	—	590.0	—	—	472.0	

# General information - IEC Starter Standard thermal overload relays

## Standard - Thermal, Type TF and TA, Class 10

### Correct sizing of overload relay per motor HP

1-phase		3-phase				Catalog Number	Code	Setting Range (A)	Contactor Size
120V	240V	208V	240V	480V	600V				
-	-	-	-	-	-	TF42-0.13	A	0.10-0.13	
-	-	-	-	-	-	TF42-0.17	B	0.13-0.17	
-	-	-	-	-	-	TF42-0.23	C	0.17-0.23	
-	-	-	-	-	-	TF42-0.41	D	0.31- 0.41	
-	-	-	-	-	-	TF42-0.55	E	0.41-0.55	
-	-	-	-	-	-	TF42-0.74	F	0.55-0.74	
-	-	-	-	-	1/2	TF42-1.0	G	0.74-1.0	
-	-	-	-	1/2	3/4	TF42-1.3	H	1.0-1.3	
-	1/10	-	-	3/4	1	TF42-1.7	J	1.3-1.7	
-	1/8, 1/6	-	1/2	1	-	TF42-2.3	K	1.7-2.3	
1/10	1/4	1/2	-	1 1/2	1 1/2, 2	TF42-3.1	L	2.3-3.1	
1/8	1/3	3/4	3/4,1	2	3	TF42-4.2	M	3.1-4.2	
1/6	1/2	1		3	-	TF42-5.7	N	4.2-5.7	
1/4, 1/3	3/4	1 1/2, 2	1 1/2, 2	5	5	TF42-7.6	P	5.7-7.6	
1/2	1	-	-	-	7.5	TF42-10	Q	7.6-10	
-	-	-	3	-	-	TF42-13	R	10-13	AF12/AF26*
-	1 1/2, 2	3	-	7.5	10	TF42-16	S	13-16	AF16/AF26*
3/4,1	-	-	5	10	-	TF42-20	T	16-20	
-	3				15	TF42-24	U	20-24	AF26*
1 1/2, 2	-	-	7.5	15	20	TF42-29	V	24-29	
-	5	7.5	10	20	25	TF42-35	W	29-35	AF30
-	-	10	-	-	-	TA75DU25	A	18-25	
-	-	-	-	-	-	TA75DU32	B	22-32	
-	7 1/2	-	15	25, 30	30, 40	TA75DU42	C	29-42	AF50
-	10	15		40	50	TA75DU52	D	36-52	
-	-	20	20	-	-	TA75DU63	E	45-63	
-	-	25	25	50	-	TA75DU80	F	60-80	AF63
-	15	25	30	60	75	TA110DU90	A	65-90	
-	20	30	-	-	-	TA110DU110	B	80-110	AF75
-	25	-	40	75	100	TA200DU90	A	65-90	
-	-	-	-	-	-	TA200DU110	B	80-110	AF110
-	-	40	50	100	125	TA200DU135	C	100-135	
-	-	-	-	-	-	TA200DU150	D	110-150	AF145
-	-	50	60	125	150	TA200DU175	E	130-175	
-	-	60	-	150	-	TA450DU185	A	130-185	AF185
-	-	-	75	-	200	TA450DU235	B	165-235	
-	-	75	-	-	-	TA450DU310	C	220-310	AF210
-	-	100	100	200	250				AF260
-	-	-	125	300	300				AF300
-	-	125	150	350	400				AF400
-	-	200	250	500	600				AF460
-	-	250	300	600	700				AF580
						Only available with an electronic overload			AF750

\* Note: AF26 contactor used with non-combination and circuit breaker disconnect.

# General information - IEC Starter

## Electronic overload relays

**Optional - Electronic, Type E, Class 10, 20 & 30 Selectable**

**Correct sizing of overload relay per motor HP**

3-phase				Catalog Number	Code	Setting Range (A)	Contactor Size
208V	240V	480V	600V				
-	-	-	-	EF19-0.32	A1	0.10-0.32	
-	-	-	-	EF19-1.0	B1	0.3-1.0	
-	-	1/2	1/2, 3/4				
-	-	3/4	1				
-	1/2	1	1 1/2				
1/2		1 1/2	2				
3/4	3/4	2	3	EF19-6.3	D1	1.9-6.3	
1	1	3	-				
1 1/2	1 1/2	-	5				
2	2	5	7.5	EF19-18.9	E1	5.7-18.9	
3	3	7.5	10				
-	5	10	-				
5	7.5	15	15, 20	EF45-30	E2	9-30	
7.5	10	20	25				
10	-	-	-	EF45-45	E3	15-45	
-	-	25	30				
-	15	30	40				
15	20	40	50	E80DU80	E1	27-80	
20	25	50	60				
25	30	60	75				
30	40	75	100	E140DU140	E1	50-140	
40	50	100	125	E200DU200	E2	65-200	
50	60	125	150				
60	75	150	200				
75	100	200	250	E320DU320	E3	105-320	
100	-	250	300				
-	125	300	350				
125	150	350	400	E500DU500	E5	170-500	
150	200	400	500				
200	250	500	600				
250	300	600	700	E800DU800	E8	270-800	
							AF750

\* Note: AF26 contactor used with non-combination and circuit breaker disconnect.

# General information - NEMA Starter Standard thermal overload relays

## Standard - Thermal, Type TF and TA, Class 10

Correct sizing of overload relay per motor HP

1-phase		3-phase				Catalog Number	Code	Setting Range (A)	Contactor Size
120V	240V	208V	240V	480V	600V				
-	-	-	-	-	-	TF42-0.13	A	0.10-0.13	
-	-	-	-	-	-	TF42-0.17	B	0.13-0.17	
-	-	-	-	-	-	TF42-0.23	C	0.17-0.23	
-	-	-	-	-	-	TF42-0.41	D	0.31-0.41	
-	-	-	-	-	-	TF42-0.55	E	0.41-0.55	
-	-	-	-	-	-	TF42-0.74	F	0.55-0.74	
-	-	-	-	-	1/2	TF42-1.0	G	0.74-1.0	
-	-	-	-	1/2	3/4	TF42-1.3	H	1.0-1.3	
-	1/10	-	-	3/4	1	TF42-1.7	J	1.3-1.7	
-	1/8	-	1/2	1		TF42-2.3	K	1.7-2.3	
1/10	1/6, 1/4	1/2	-	1 1/2	1 1/2, 2	TF42-3.1	L	2.3-3.1	
1/8	1/3	3/4	3/4	2	-	TF42-4.2	M	3.1-4.2	
1/6	1/2	1	1	-	-	TF42-5.7	N	4.2-5.7	
1/4	3/4	1 1/2	1 1/2	-	-	TF42-7.6	P	5.7-7.6	
1/3	1	-	-	-	-	TF42-10	Q	7.6-10	
-	-	-	-	-	3	TF42-4.2	M	3.1-4.2	
-	-	-	-	3		TF42-5.7	N	4.2-5.7	
-	-	2	2	5	5	TF42-7.6	P	5.7-7.6	
1/2	1 1/2	-	3	-	-	TF42-10	Q	7.6-10	
-	2	3	-	-	-	TF42-13	R	10-13	
3/4, 1	-	-	-	-	-	TF42-16	S	13-16	
-	-	-	-	-	7.5	TF42-10	Q	7.6-10	
-	-	-	-	7.5	10	TF42-13	R	10-13	
-	-	-	5	10	-	TF42-16	S	13-16	
-	3	5	-	-	-	TF42-20	T	16-20	
2	-	-	7.5	-	-	TF42-24	U	20-24	
-	-	7.5	-	-	-	TF42-29	V	24-29	
-	-	-	-	15	20	TA75DU25	A	18-25	
-	-	10	10	20	25	TA75DU32	B	22-32	
3	7 1/2	-	15	25	-	TA75DU42	C	29-42	
-	-	-	-	-	30	TA75DU42	C	29-42	
-	-	15	-	30	40	TA75DU52	D	36-52	
-	-	20	20	40	50	TA75DU63	E	45-63	
-	-	25	25, 30	50	-	TA75DU80	F	60-80	
-	-	30	-	60	75	TA200DU90	A	65-90	
-	-	-	40	75	100	TA200DU110	B	80-110	
-	-	40	50	100	-	TA200DU135	C	100-135	

1) AFN1 contactor can use AFN00 and AFN0 overloads.

# General information - NEMA Starter

## Electronic overload relays

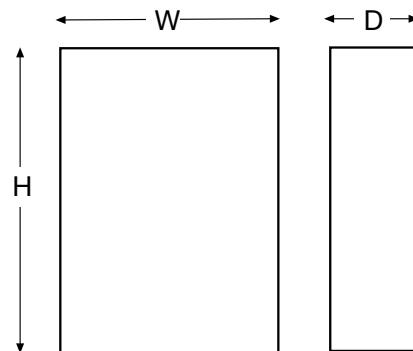
### Optional - Electronic, Type E, Class 10, 20, & 30 Selectable

Correct sizing of overload relay per motor HP

3-phase				Catalog Number	Code	Setting Range (A)	Contactor Size
208V	240V	480V	600V				
-	-	-	-	EF19-0.32	A1	0.10-0.32	
-	-	-	-	EF19-1.0	B1	0.3-1.0	
-	-	3/4, 1/2	3/4, 1/2	EF19-2.7	C1	0.9-2.7	
-	1/2	1	1, 1.5				AFN00
1/2	-	-	-				
3/4	3/4	-	-	EF19-6.3	D1	1.9-6.3	
1	1	1.5, 2	2				
1.5	1.5	-	-				
-	-	3	3	EF19-18.9	E1	5.7 -18.9	AFN0
2	2	-	-				
3	3	5	5				
5	5	7.5	7.5	E45DU30	E1	9-30	AFN1 1)
7.5	7.5	10	10				
-	10,15	20	20				
10		25	25				AFN2
15	20, 25	30, 40	30, 40	E80DU80	E1	27-80	
20, 25	30	50	50				AFN3
30	40	60	-				
40	50	75, 100	75, 100	E200DU200	E2	40-140	AFN4

1) AFN1 contactor can use AFN00 and AFN0 overloads.

# Approximate dimensions Non-combination starters



## IEC and NEMA starters

### Non reversing and reversing

Contactor Size	Enclosure Type	H (in)	H (mm)	W (in)	W (mm)	D (in)	D (mm)
AF09-AF30, AFN00-AFN1	1, 3R, 4, 4X, 12	12	300	12	300	6	150
AF50-AF75, AFN3		16	400	12	300	8	200
AF110		24	600	20	500	10	250
AF145-AF185, AFN4		36	900	30	760	10	250
AF210-AF300		48	1200	36	900	12	300
AF400-AF460		48	1200	36	900	16	400
AF580-AF750		60	1500	60	1500	18	449

### Two speed 1 winding & 2 winding

AF09-AF30	1, 3R, 4, 4X, 12	16	400	12	300	8	200
AF50-AF75		20	500	16	400	8	200
AF110		24	600	20	500	10	250
AF145-AF185		36	900	30	760	10	250
AF210-AF300		48	1200	36	900	12	300
AF400-AF460		48	1200	36	900	16	400
AF580-AF750		60	1500	60	1500	18	449

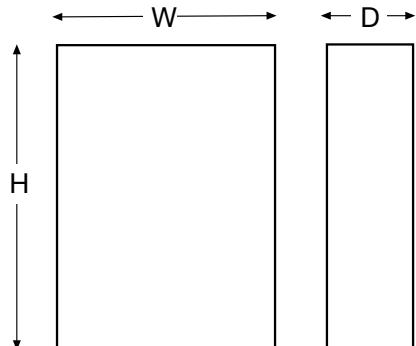
## Enclosure accessories for non-combination and combination controllers

Description	Catalog number
12Hx16D Flormount Kit	RC-FSK1212C
12Hx16D Flormount Kit	RC-FSK1216C
12Hx12D Flormount Kit Type 304 SS	RC-FSK12124
12Hx12D Flormount Kit Type 304 SS	RC-FSK12164
Padlock lockout carbon steel 1)	RC-WMPADRCS
Padlock lockout stainless steel 1)	RC-WMPADRS6
Wallmount Bracket Kit	RC-2508.200
Wallmount Bracket Kit Type 304 SS	RC-2433.000

**Exact dimensions can be obtained using the on line configurator**

1) Used on enclosures below 36" in height.

# Approximate dimensions Combination starters



## IEC and NEMA starters

### Non reversing

Contactor Size	Enclosure Type	H (in)	H (mm)	W (in)	W (mm)	D (in)	D (mm)
AF09-AF30, AFN00-AFN1	1, 3R, 4, 4X, 12	16	400	12	300	8	200
AF50-AF75, AFN2-AFN3		20	500	16	400	8	200
AF110		24	600	20	500	10	250
AF145-AF185, AFN4		36	900	30	760	10	250
AF210-AF460		48	1200	36	900	16	400
AF580-AF750		60	1500	60	1500	18	449

### Reversing

AF09-AF30, AFN00-AFN1	1, 3R, 4, 4X, 12	20	500	16	400	8	200
AF50-AF75, AFN2-AFN3		24	600	20	500	10	250
AF110-AF185, AFN4		30	760	30	760	10	250
AF210-AF300		36	900	48	1200	12	300
AF400-AF460		60	1500	60	1500	18	449
AF580-AF750		60	1500	60	1500	18	449

### Two speed 1 winding & 2 winding

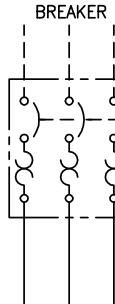
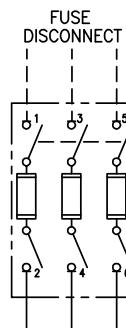
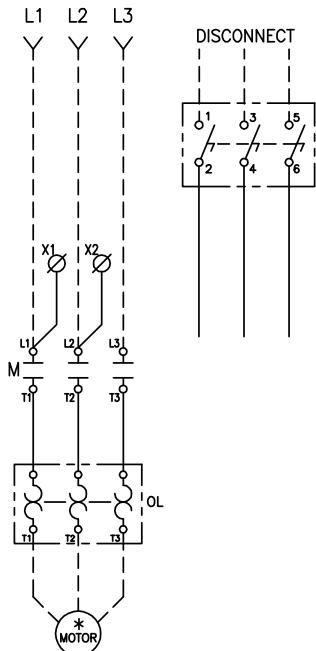
AF09-AF30	1, 3R, 4, 4X, 12	24	600	20	500	10	250
AF50-AF110		30	760	30	760	10	250
AF145- AF300		36	900	48	1200	12	300
AF400-AF460		72	900	60	1500	18	449
AF580-AF750		72	900	60	1500	18	449

*Exact dimensions can be obtained using the on line configurator*

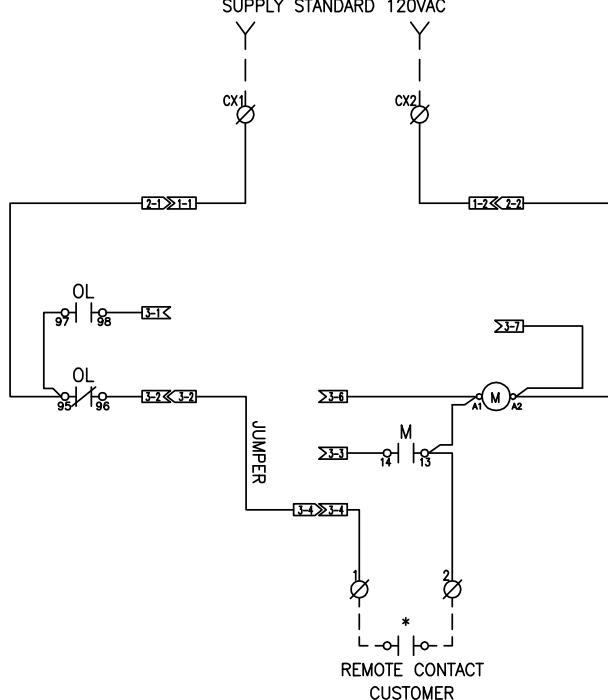
# Circuit diagrams

## Non-reversing, reversing AF09 - AF750, AFN00 - AFN4

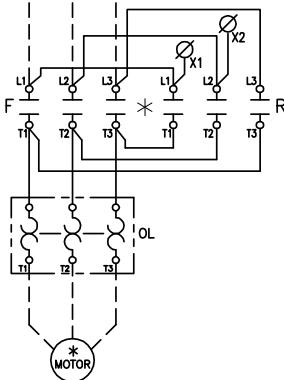
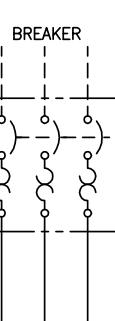
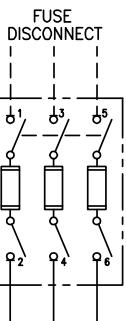
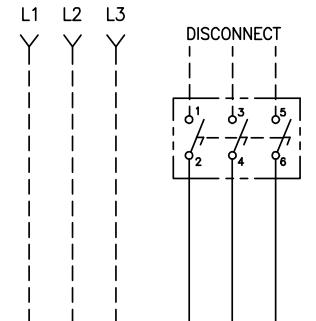
INCOMING LINES



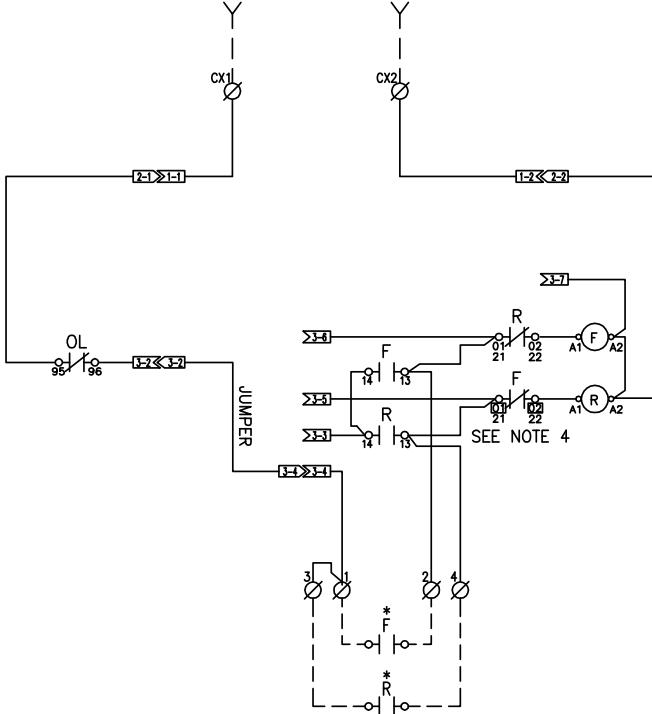
EXTERNAL CONTROL  
SUPPLY STANDARD 120VAC



INCOMING LINES



EXTERNAL CONTROL  
SUPPLY STANDARD 120VAC

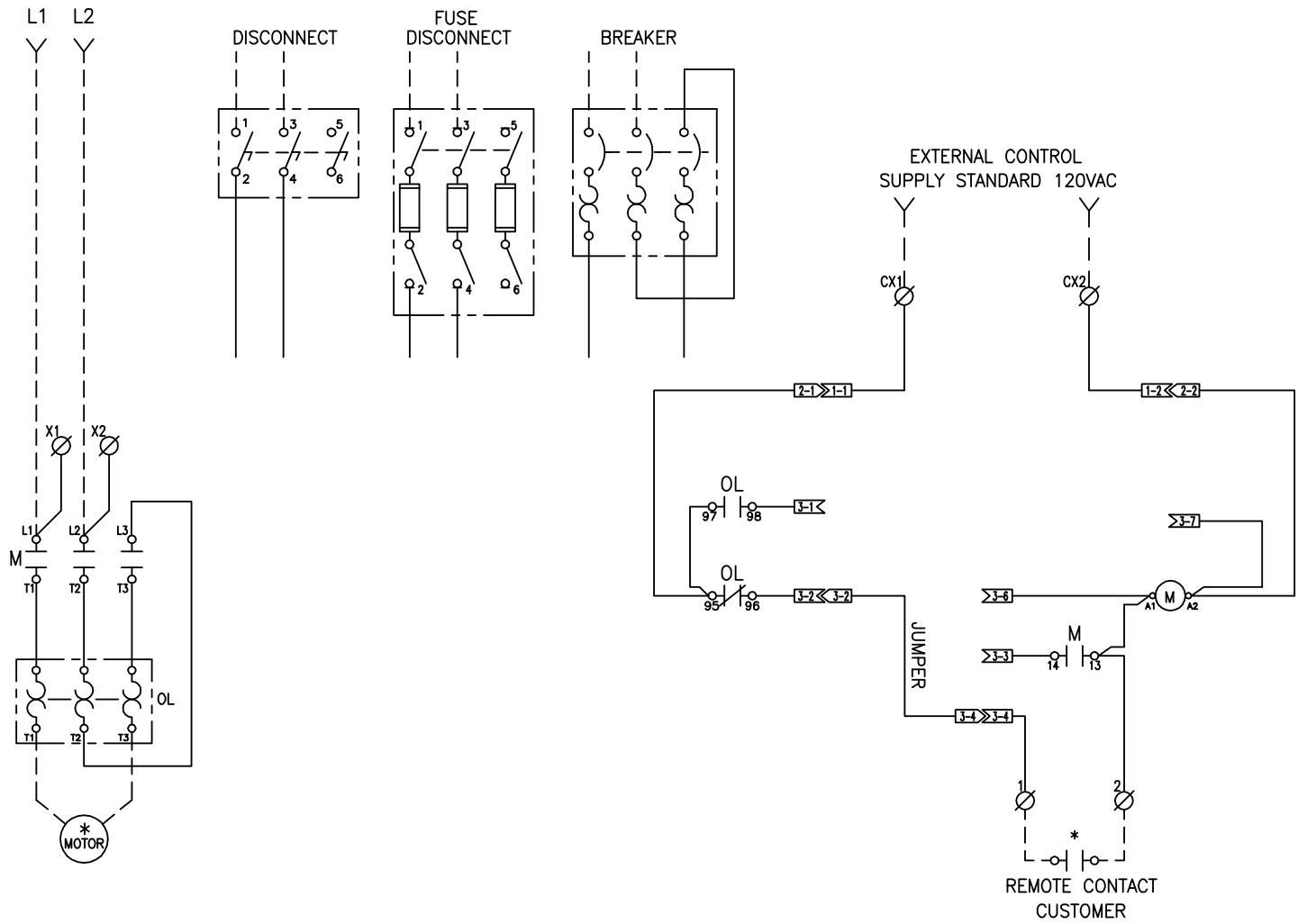


All units ship with a NO & NC contacts.  
Additional contacts can be added in the field.

# Circuit diagrams

## Non-reversing, single phase AF09 - AF110, AFN00 - AFN2

INCOMING LINES

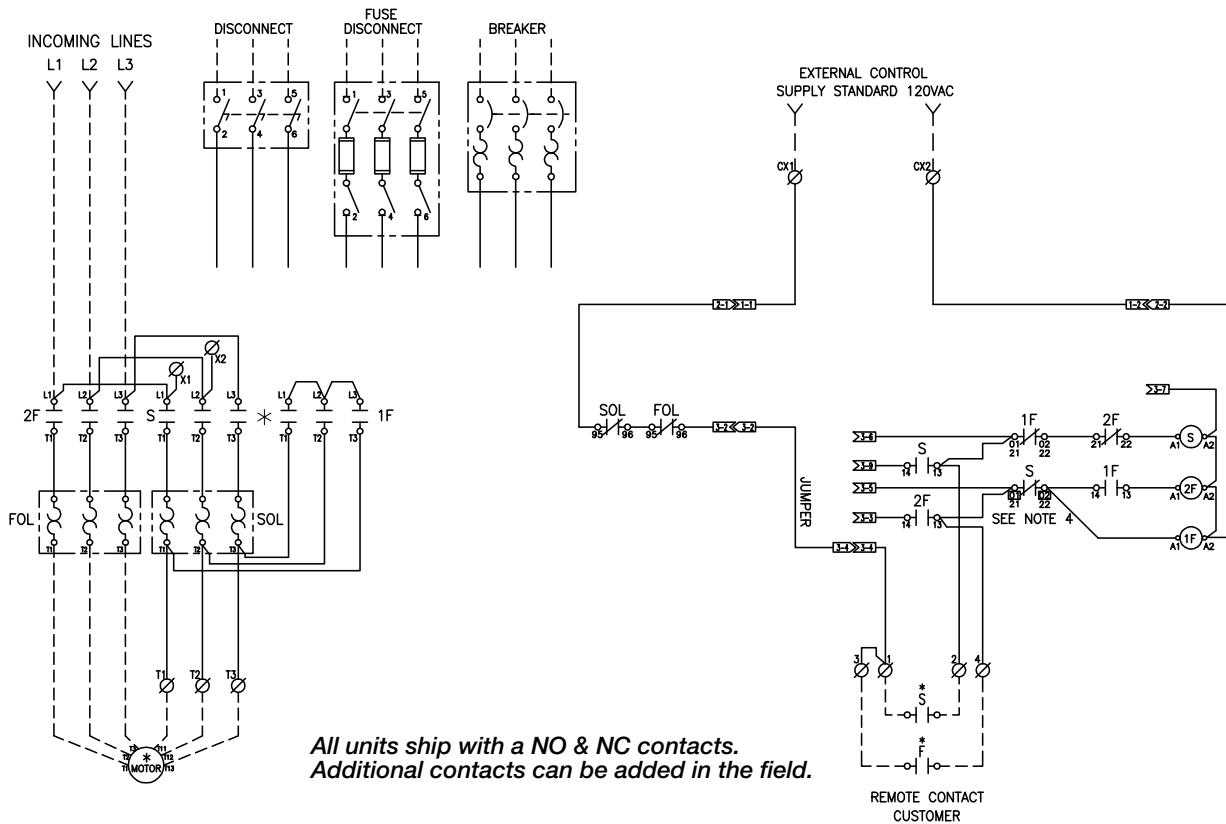
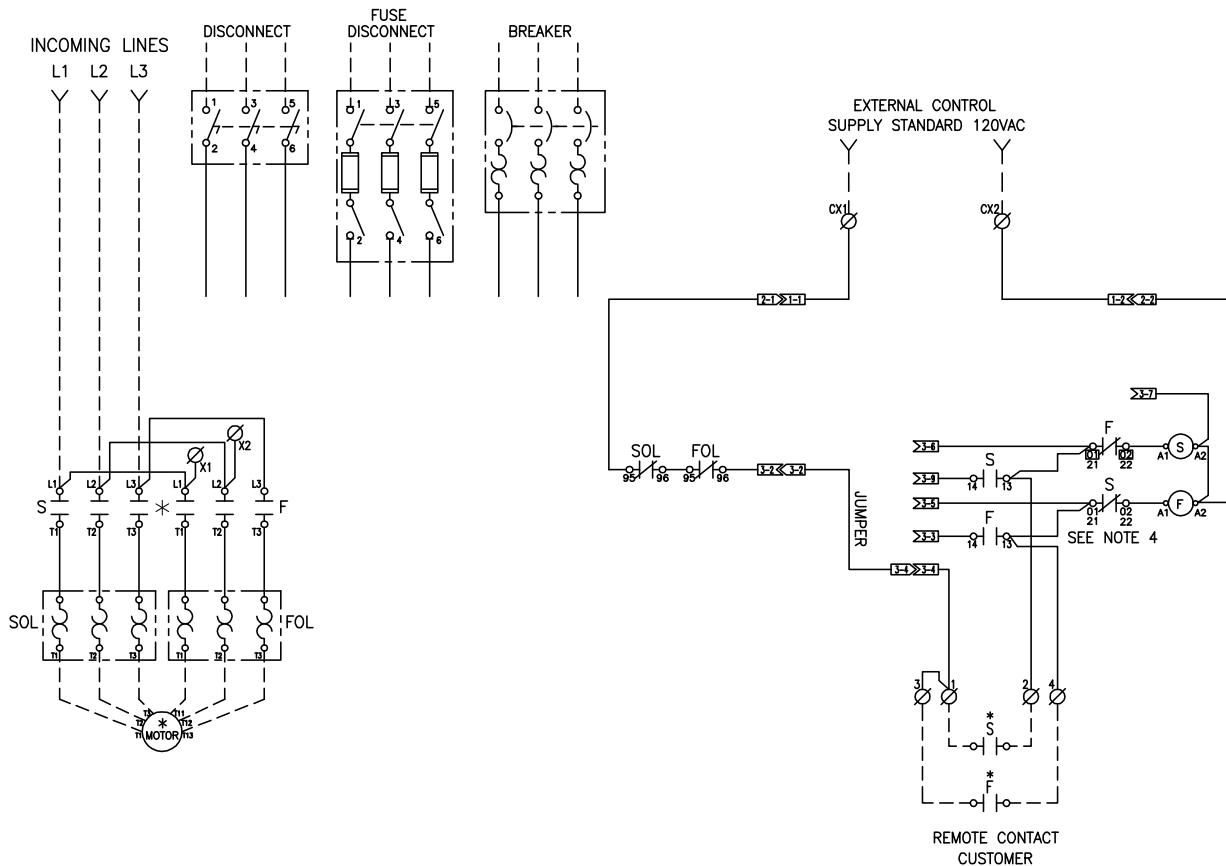


All units ship with a NO & NC contacts.  
Additional contacts can be added in the field.

# Circuit diagrams

2 Speed, 1 winding; 2 speed, 2 winding

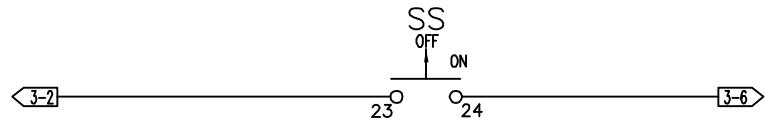
AF09 - AF75



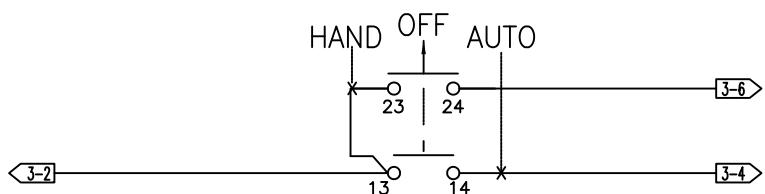
# Circuit diagrams

## Pilot device kits, one operator

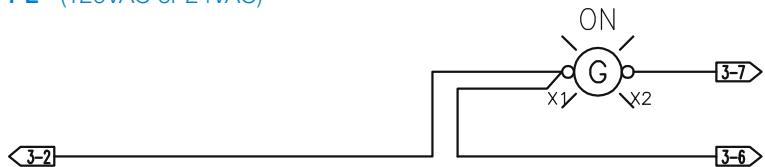
SS2P-1



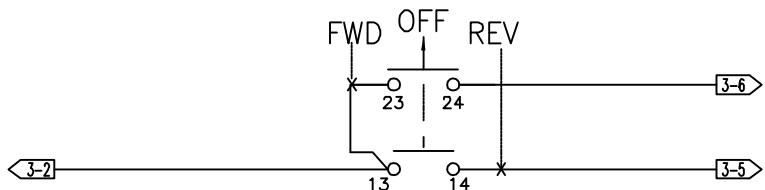
SS3P-2



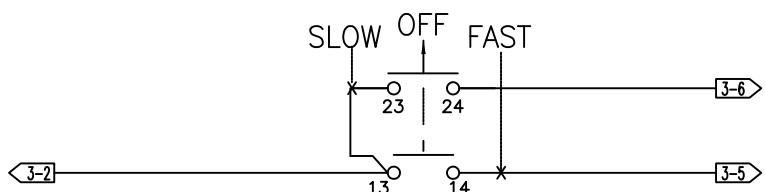
PL - (120VAC or 24VAC)



SS3P-3



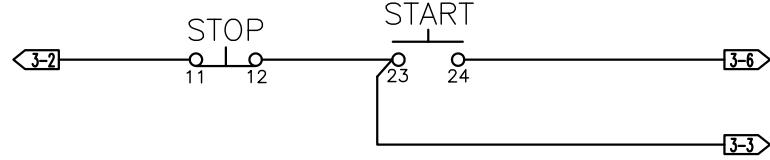
SS3P-4



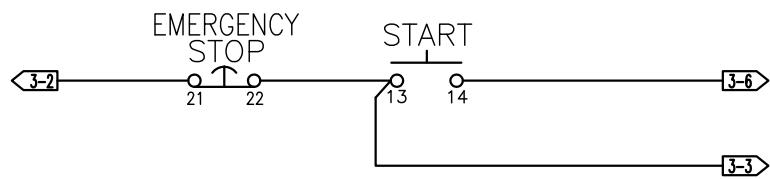
# Circuit diagrams

## Pilot device kits, two operators

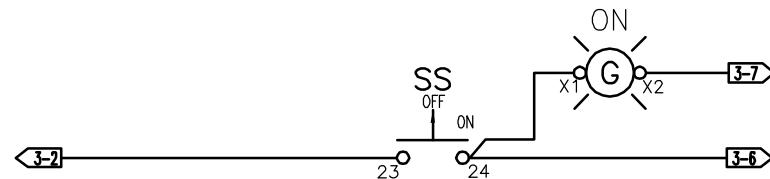
**PB-SS**



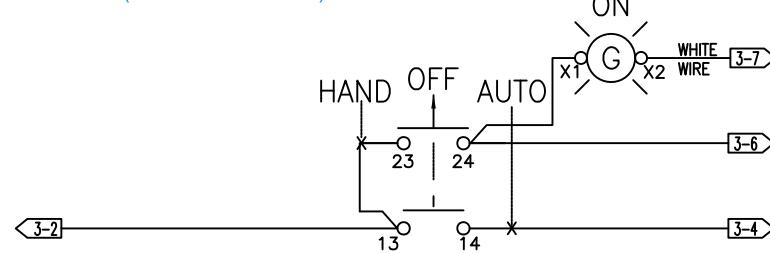
**PB-SES**



**SS2PPL - (120VAC or 24VAC)**

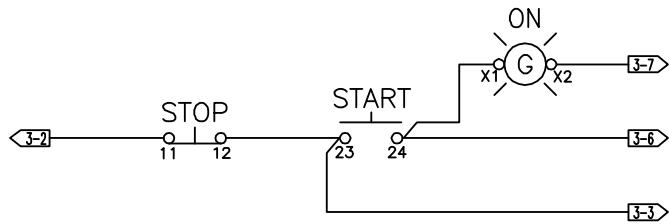


**SS3PPL - (120VAC or 24VAC)**

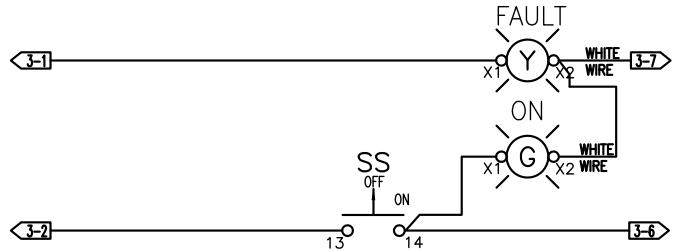


# Circuit diagrams Pilot device kits, three operators

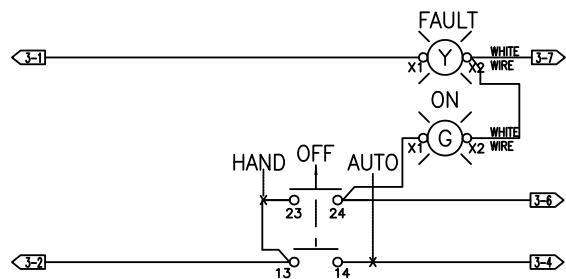
## PBPL-SS - (120VAC or 24VAC)



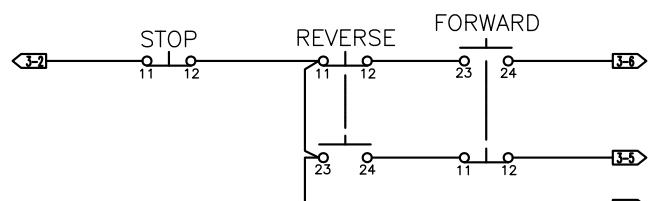
## **SS2PPL-FLT - (120VAC or 24VAC)**



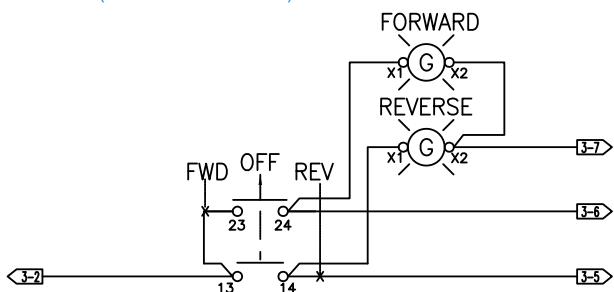
## **SS3PPL-FLT - (120VAC or 24VAC)**



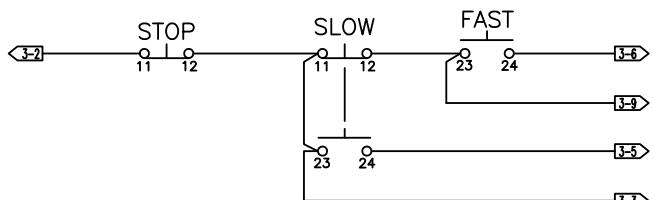
PB-FRS



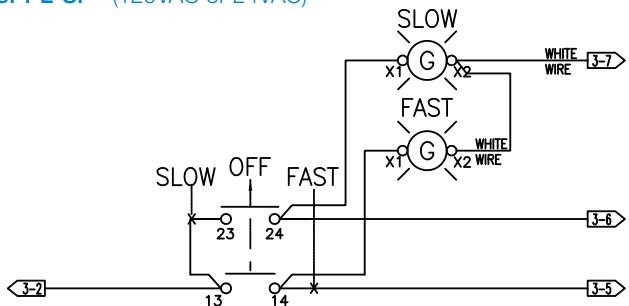
## SS3PPL-FR - (120VAC or 24VAC)



PB-FSS



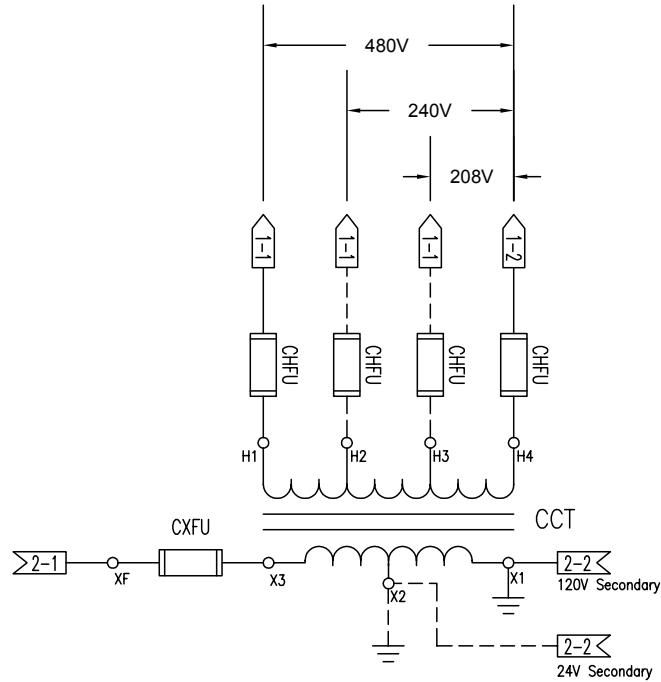
## **SS3PPL-SF - (120VAC or 24VAC)**



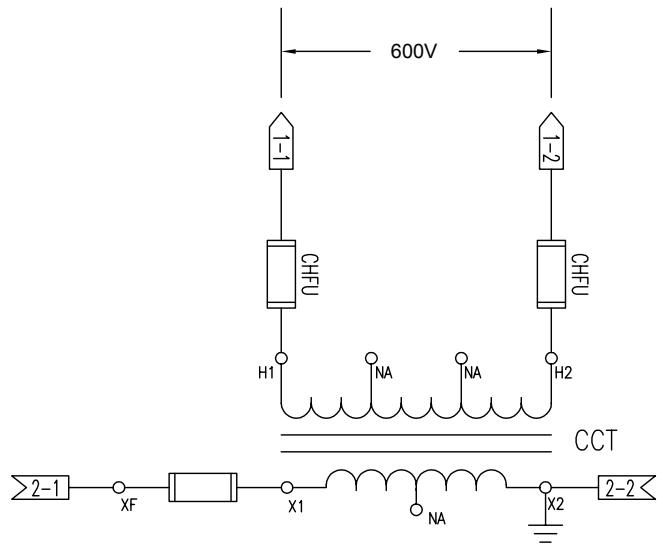
# Circuit diagrams

## Control circuit transformer

Primary voltages: 208V, 240V & 480V



Primary voltages: 600V



# Enclosure rating definitions

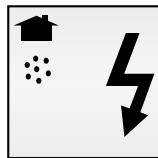
## Introduction

An enclosure is a surrounding case constructed to provide a degree of protection to personnel against accidental contact with the enclosed equipment and to provide a degree of protection to the enclosed equipment against specified environmental conditions.

A brief description of the more common types of enclosures used by the electrical industry relating to their environmental capabilities follows. Refer to NEMA Standards Publication for more information regarding applications, features and design tests.

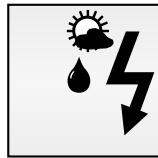
Individual NEMA product Standards Publications or third party certification standards may contain additional requirements for product testing and performance.

## Definitions pertaining to nonhazardous locations



Type 1

Enclosures are intended for indoor use primarily to provide a degree of protection against limited amounts of falling dirt. (NEMA Standard 7-15-1991.)



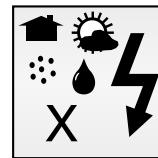
Type 3R

Enclosures are intended for outdoor use primarily to provide a degree of protection against rain, sleet and damage from external ice formation. (NEMA Standard 7-15-1991.)



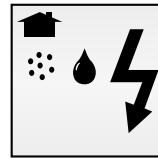
Type 4

Enclosures are intended for indoor or outdoor use primarily to provide a degree of protection against windblown dust and rain, splashing water, hose-directed water and damage from external ice formation. (NEMA Standard 1-10-1979.)



Type 4X

Enclosures are intended for indoor or outdoor use primarily to provide a degree of protection against corrosion, windblown dust and rain, splashing water, hose-directed water and damage from external ice formation. (NEMA Standard 1-10-1979)



Type 12

Enclosures are intended for indoor use primarily to provide a degree of protection against circulating dust, falling dirt, and dripping noncorrosive liquids. (NEMA Standard 7-15-1991.)

Legend	
	- Indoors
	- Outdoors
	- Water
	- Dirt/dust
	- Corrosion

# Short circuit current ratings

## Maximum short circuit current ratings for combination starters

### Fusible disconnect

Contactor Size	Switch @ 600 VAC	Fuse size (A)	UL Fuse type @ 600 VAC	kA @ 600 VAC
AF09, AFN00				
AF12	OS30	30		
AF16, AFN0				
AF26, AFN1				
AF30	OS60GJ12	60		
AF50, AFN2	OS100GJ12	100		
AF63			J	
AF75, AFN3	OS200J12	200		100
AF110				
AF145, AFN4				
AF185	OS400J12	400		
AF210				
AF260	OS600J12	600		
AF300				
AF400	OS800L12	800	L	
AF460				
AF580	OS1200L12	1200		30
AF750				42

### Circuit breaker disconnect

Contactor Size	Circuit breaker	kA @ 480 VAC	kA @ 600 VAC
AF26, AFN00-AFN1	Ts3L040TW		
AF30	Ts3L050TW	65	25
AF50, AFN2	Ts3L090TW		
AF63	Ts3L100TW	50	25
AF75, AFN3	Ts3L125TW		
AF110	T4H200TW		25
AF145, AFN4	T4H200TW	65	35
AF185	T4H250TW		
AF210	T5L300TW		
AF260	T5L400TW		
AF300	T6L600TW	100	42
AF400	T6L800TW		
AF460	T6L800TW		
AF580	T7L1000BW	30	30
AF750	T7L1200BW	42	42



# Contact us

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Web: [www.abb.us/lowvoltage](http://www.abb.us/lowvoltage)