

DATE: 1/21/2020

INVITATION TO BID  
THIS IS NOT AN ORDER

Page: 4

BID NO.: 50-00129402

JEFFERSON PARISH

PURCHASING DEPARTMENT  
P.O. BOX 9  
GRETN, LA. 70054-0009  
504-364-2678

VENDOR:

BUYER: MBUTTERY

As per LSA-RS 47:301 et seq., all governmental bodies are excluded from payment of sales taxes to any Louisiana taxing body. Quotations shall be based on F.O.B. Agency warehouse or jobsite, anywhere within the Parish as designated by the Purchasing Department.

JEFFERSON PARISH reserves the right to cancel all or any part of an order if not shipped promptly. No charges will be allowed for parking or cartage unless specified in quotation. The order must not be filled at a higher price than quoted. JEFFERSON PARISH reserves the right to cancel at any time and for any reason by issuing a THIRTY (30) day written notice to the contractor.

JEFFERSON PARISH is expecting all products to be new and all work to be done in workman-like manner, according to standard practices. Any deviations or alteration from the specifications must be indicated on the bid form for each item and upon request, product data for same must be submitted by the time specified by the Purchasing Department.

DELIVERY: FOB JEFFERSON PARISH

INDICATE DELIVERY DATE ON EQUIPMENT AND SUPPLIES

INDICATE STARTING TIME (IN DAYS) FOR CONSTRUCTION WORK

INDICATE COMPLETION TIME (IN DAYS) FOR CONSTRUCTION WORK

7-10 DAYS ARD

In the event that addenda are issued with this bid, bidders MUST acknowledge all addenda on the bid form. Bidder must acknowledge receipt of an addendum on the bid form as indicated. Failure to acknowledge any addendum on the bid form will result in bid rejection.

Acknowledge Receipt of Addenda: NUMBER: \_\_\_\_\_

NUMBER: \_\_\_\_\_

NUMBER: \_\_\_\_\_

NUMBER: \_\_\_\_\_

LOUISIANA CONTRACTOR'S LICENSE NO.: (if applicable) \_\_\_\_\_

*** ALL BIDDERS MUST COMPLETE SECTION BELOW ***	
FIRM NAME: INDUSTRIAL-COMMERCIAL MOTORS & CONTROLS	
SIGNATURE: (Must be signed here) William Pappas	TITLE: PRESIDENT
PRINT OR TYPE NAME: William Pappas	
ADDRESS: P.O. BOX 1842	
CITY, STATE: MANDEVILLE, LA.	ZIP: 70470
TELEPHONE: ( ) 504 415-7288	FAX: ( ) 985 727-7725
EMAIL ADDRESS: WPAPPAS@ICMCLLC.COM	

TOTAL PRICE OF ALL BID ITEMS: \$ 6,112.00

## INVITATION TO BID FROM JEFFERSON PARISH - continued

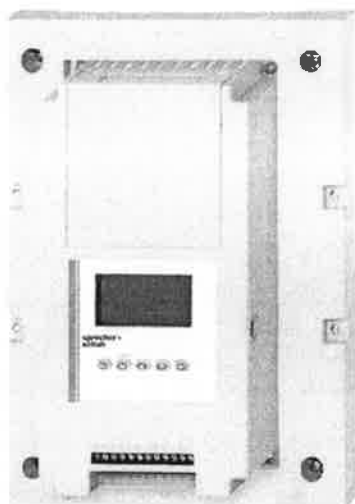
BID NO.: 50-00129402

SEALED BID

ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
1	1.00	EA	<p>PURCHASE OF SOFT START STARTER W/LUGS FOR THE PUBLIC WORKS EAST BANK WAREHOUSE</p> <p>0001 - Starter, soft start with lugs (kit) included, 400 HP, 480V, 3 phase, Allen-Bradley 150-F-480NBD (0861260)</p> <p>Please have items shipped to:</p> <p>Eastbank Warehouse Attention: Curtis McFarland 4901 Jefferson Hwy Suite C Jefferson, LA 70121</p> <p>Quoting Sprecher &amp; Schuh CAT# PFS-0480-600V SPEC SHEETS ATTACHED THIS IS AN EQUAL TO THE ALLEN BRADLEY CONTROLLER SPECIFIED IN FORM, FIT AND FUNCTION. BOTH A/B &amp; Sprecher &amp; Schuh ARE ROCKWELL AUTOMATION COMPANIES</p>	6,112 <sup>00</sup>	6,112 <sup>00</sup>

# PF Controllers

The Intelligent Controller with extensive starting and stopping configurations up to 1000HP (3-wire), 1400HP (6-wire)



PF Control module with standard built in keypad and backlit LCD display

The PF Softstarter Controller provides intelligence, unmatched performance, flexibility, and diagnostics in a modular compact design for controlling either a standard squirrel-cage induction motor or a star-delta motor. Seven standard, and two optional modes of operation are available within a single controller.

## Standard Modes of Operation

- Soft Start with selectable kick start
- Current Limit Starting
- Dual ramp start
- Full voltage starting
- Linear speed acceleration
- Preset slow speed
- Soft stop

## Optional Modes of Operation

- Pump Control
- Brake Control - Smart Motor Brake, Accu-stop and Slow Speed with Braking

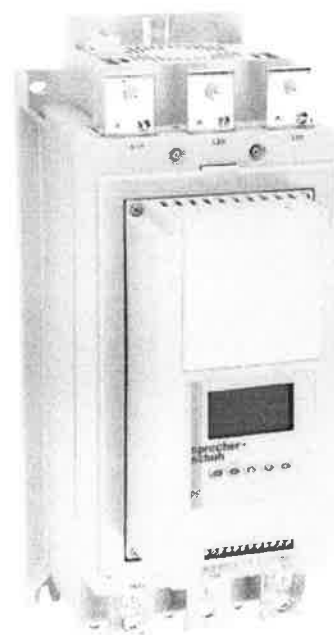
## Product Features

- Built-in SCR Bypass/Run Contactor
- Built in Electronic Motor Overload Protection
- CT on each phase
- LCD Display
- Keypad programming
- Four programming Auxiliary Contacts

The PF Softstarter is available for motors rated 1...1,250A, 200....600V AC, 50 and 60Hz. In addition to motors, the PF Softstarter can be used to control resistive loads.

## Modular and Compact Softstarter

The PF Softstarter reduces both product size and the total cost to the customer. As standard, the PF Softstarter includes electronic overload, integral bypass and motor starting capabilities for both star-delta and standard squirrel-cage induction motors, advanced protection and diagnostics in a compact maintainable modular, cost-effective package.



**D**  
PFS Softstarters

## Large or small HP and options for any application

The basic PF Controller combines large horsepower capacity with the most popular starting modules (up to 1,000HP @ 460V, 3-wire). Even in middle and low horsepower applications, PF Softstarters can be configured to provide exactly the right starting and stopping profile (see descriptions on following pages).

## Precise programming set-up with built-in keypad & LCD display

The PF Controller comes equipped with a built-in keypad and LCD display for programming the controller parameter settings for the specific industrial application. The three-line 16-character backlit LCD display provides parameter identification using clear informative text. Parameters are arranged in an organized four-level menu structure for ease of programming and fast access to parameters which allows the PF Softstarters set-up to be performed quickly and easily.

## Product Overview

### Modular Design

The PF Softstarter provides intelligence, unmatched performance, flexibility and diagnostics in a modular compact design for controlling either a standard squirrel-cage induction motor or a star-delta motor.

### Compact Size

The PF Softstarter integrates a bypass to minimize heat generation during run time. The bypass automatically closes when the motor reaches its nominal speed, resulting in a cooler-running component and reduction in enclosure size.

**PFS Softstarters**

### Current Range - 16 Models

Product Rating	Line Current	Delta Current
5	5	9
25	25	43
43	43	74
60	60	104
85	85	147
108	108	187
135	135	234
201	201	348
251	251	435
317	317	549
361	361	625
480	480	831
625	625	850
780	780	900
970	970	1200
1250	1250	1600

### Voltage Range

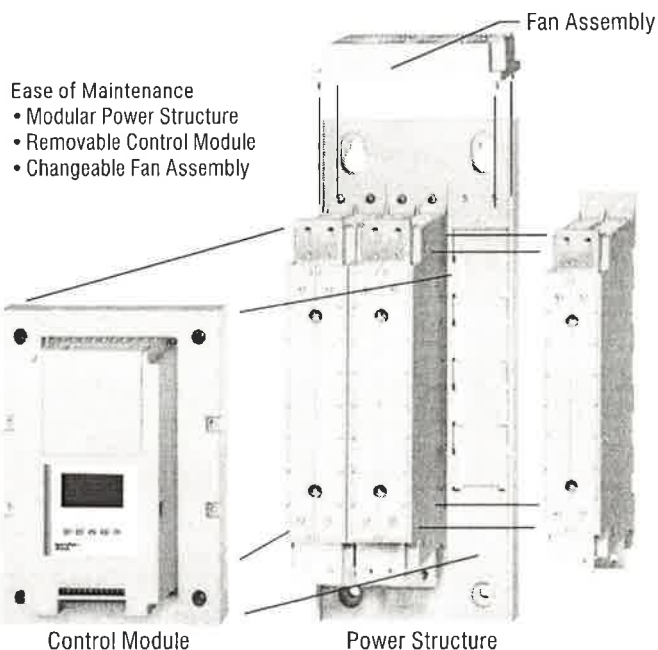
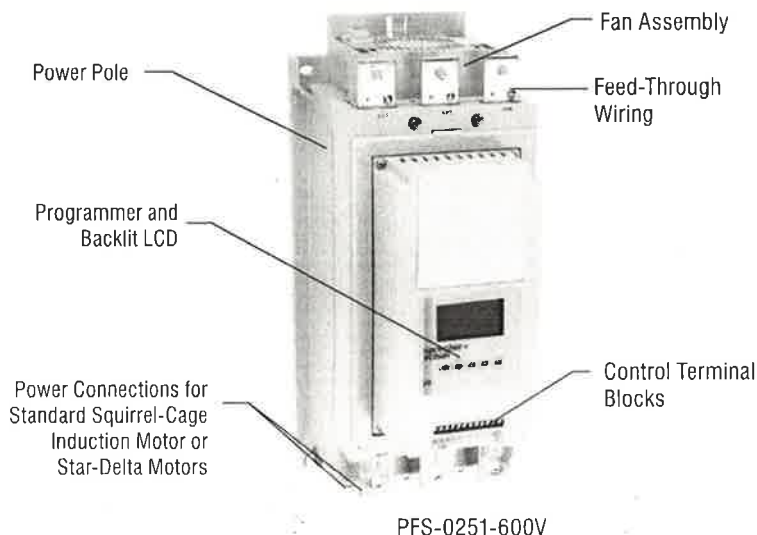
200...600V AC, 50/60 Hz

### Control Range

100...240V AC or 24V AC/DC

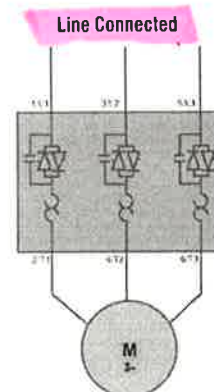
### Starting Modes

	PFS Standard	PFB Pump Control	PFD Braking Control
Soft Start	X	X	X
Soft Stop	X		
Current Limit	X	X	X
Full Voltage	X	X	X
Kick Start	X	X	X
Preset Slow Speed	X		X
Linear Speed Start and Stop	X		
Dual Ramp	X		
Pump Start and Stop		X	
Smart Motor Brake			X
Accu-Stop			X
Slow Speed with Braking			X



**Open Type Controller - Line Connected ①②**

Rated Voltage [V AC]	Motor Current (Amps) ②	Max. kW 50 Hz	Max. Hp 60 Hz ③	100...240V AC 50/60Hz Control Voltage ④	Price	24V AC/DC Control Voltage ④	Price
				Catalog Number		Catalog Number	
400/415/460	1...5	2.2	3	PFS-0005-600V	3,151.53	PFS-0005-600V-024	3,151.53
	5...25	11	15	PFS-0025-600V	3,388.26	PFS-0025-600V-024	3,388.26
	8.6...43	22	30	PFS-0043-600V	3,574.95	PFS-0043-600V-024	3,574.95
	12...60	30	40	PFS-0060-600V	3,961.21	PFS-0060-600V-024	3,961.21
	17...85	45	60	PFS-0085-600V	4,297.55	PFS-0085-600V-024	4,297.55
	27...108	55	75	PFS-0108-600V	4,808.16	PFS-0108-600V-024	4,808.16
	34...135	75	100	PFS-0135-600V	6,489.86	PFS-0135-600V-024	6,489.86
	67...201	110	150	PFS-0201-600V	7,199.94	PFS-0201-600V-024	7,199.94
	84...251	132	200	PFS-0251-600V	7,997.18	PFS-0251-600V-024	7,997.18
	106...317	160	250	PFS-0317-600V	8,408.17	PFS-0317-600V-024	8,408.17
	120...361	200	300	PFS-0361-600V	9,043.48	PFS-0361-600V-024	9,043.48
	160...480	250	400	PFS-0480-600V	12,705.73	PFS-0480-600V-024	12,705.73
	208...625	355	500	PFS-0625-600V-120 ⑤	19,307.73	~	~
	260...780	450	600	PFS-0780-600V-120 ⑤	21,798.99	~	~
	323...970	560	800	PFS-0970-600V-120 ⑤	27,030.80	~	~
	416...1250	710	1000	PFS-1250-600V-120 ⑤	34,255.58	~	~
500/575	1...5	2.2	3	PFS-0005-600V	3,151.53	PFS-0005-600V-024	3,151.53
	5...25	15	20	PFS-0025-600V	3,388.26	PFS-0025-600V-024	3,388.26
	8.6...43	22	40	PFS-0043-600V	3,574.95	PFS-0043-600V-024	3,574.95
	12...60	37	50	PFS-0060-600V	3,961.21	PFS-0060-600V-024	3,961.21
	17...85	55	75	PFS-0085-600V	4,297.55	PFS-0085-600V-024	4,297.55
	27...108	75	100	PFS-0108-600V	4,808.16	PFS-0108-600V-024	4,808.16
	34...135	90	125	PFS-0135-600V	6,489.86	PFS-0135-600V-024	6,489.86
	67...201	132	200	PFS-0201-600V	7,199.94	PFS-0201-600V-024	7,199.94
	84...251	160	250	PFS-0251-600V	7,997.18	PFS-0251-600V-024	7,997.18
	160...317	200	300	PFS-0317-600V	8,408.17	PFS-0317-600V-024	8,408.17
	120...361	250	350	PFS-0361-600V	9,043.48	PFS-0361-600V-024	9,043.48
	160...480	315	500	PFS-0480-600V	12,705.73	PFS-0480-600V-024	12,705.73
	208...625	450	600	PFS-0625-600V-120 ⑤	19,307.73	~	~
	260...480	560	800	PFS-0780-600V-120 ⑤	21,798.99	~	~
	323...970	710	1000	PFS-0970-600V-120 ⑤	27,030.80	~	~
	416...1250	900	1300	PFS-1250-600V-120 ⑤	34,255.58	~	~


**D**  
PFS Softstarters

① Controllers rated 108 A and greater are not equipped with line and load terminal lugs. See page D49 for terminal lug kits.

② Motor FLA rating must fall within specified current range for unit to operate properly. Special consideration should be given when using a motor with a potentially high starting current (greater than ten times motor FLA) with the PF in the "Full Voltage" starting mode. Contact Sprecher+Schuh technical support for further guidance.


③ Hp ratings at motor terminal voltages for 200, 230, 460, and 575 line volts, respectively.

④ Separate 120V or 240V single phase is required for PF fan operation.

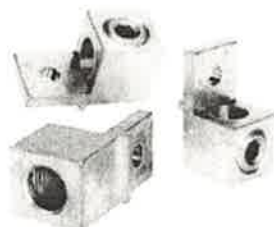
⑤ See page D48 if ordering factory installed PFB Pump Control or PFD Smart Motor Bake Control Modules, or other options.

⑥ 110/120V control power only. For 230V control power only, change catalog number suffix "-120" to "-230". Price remains the same.


**Options - Field Modifications**
**Protective Modules ❶**

 PFP-0085-600V	Current Rating	Description	Catalog Number	Price
	5...85	600V Protective Module • PF (3 Lead) Line Connected Applications: Protective modules may be installed on the line and/or load side • PF (6 Lead) Delta Connected Applications: Protective modules must be installed on the line side only. • Clamping voltage range 705V...1750V, energy rating 290 joules	PFP-0085-600V	488.20
	108...480		PFP-0480-600V	529.66

**Terminal Lug Kits (108...1250 A) ❷**

	Current Rating (A)	Conductor Size	Total No. of Line Controller Terminal Lugs Possible Each Side		Pkg. Qty.	Catalog Number	Price
			Line Side	Load Side			
	108...135	#6...250 MCM AWG	3	3	3	PNX-1120	99.09
	201...251	16 mm2...120mm2	6	6			
	317...480	#4...500 MCM AWG 25 mm2...240MM2	6	6		PNX-1240	150.29
	625...780	2/0...500 MCM AWG	6	6		CA6-L630	See Section A
	970	4/0...500 MCM AWG	3	3		CA6-L860	
	1250	2/0...500 MCM AWG	3	3		CA6-L630	
		4/0...500 MCM AWG	3	3		CA6-L860	

**IEC Terminal Covers ❸❹**

	Description	Pkg. Qty.	Catalog Number	Price
	IEC line or load terminal covers for 108...135A devices. Dead front protection	1	PFT-0135	62.51
	IEC line or load terminal covers for 201...251A devices. Dead front protection		PFT-0251	74.74
	IEC line or load terminal covers for 317...480A devices. Dead front protection.		PFT-0480	82.82

- ❶ The same protective module mounts on the line or load side of the PF Softstarter. For applications requiring both line and load side protection, two protective modules must be ordered.
- ❷ Line and Load terminals are provided as standard on enclosed PF Softstarters.
- ❸ PF 5...85A units have box lugs as standard. No additional lugs are required. The 1250 A device requires (1) CA6-L630 and (1) CA6-L860 per connection. When a multi-conductor lug is required, refer to the PF User Manual for appropriate lug catalog number.
- ❹ PFX-108...480 units include one terminal guard as standard.

### Approximate Dimensions and Shipping Weights

#### Open Type Controllers

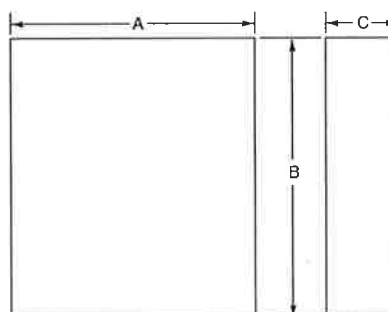
Dimensions are in millimeters (inches). Dimensions not intended for manufacturing purposes.

Rating (A)	Height	Width	Depth	Weight
5...85	321 (12.6)	150 (5.9)	203 (8.0)	5.7 kg (12.6 lbs)
108...135	443.7 (17.47)	196.4 (7.74)	205.2 (8.08)	15.0 kg (33 lbs)
201...251	560 (22.05)	225 (8.86)	253.8 (9.99)	304 kg (67 lbs)
317...480	600 (23.62)	290 (11.42)	276.5 (10.89)	45.8 kg (101 lbs)
625...780	1041.1 (41.0)	596.9 (23.5)	346.2 (13.63)	179 kg (395 lbs)
970...1250	1041.1 (41.0)	596.9 (23.5)	346.2 (13.63)	224 kg (495 lbs)

#### Enclosed Type Line-Connected Controllers

##### IMPORTANT NOTE:

Factory-installed options may affect enclosure size requirements.  
Exact dimensions can be obtained after order entry.  
Please consult your local Sprecher + Schuh representative.



Controller Rating (A)	Disconnect Rating (A)	IP65 (Type 4/12)		
		Height B	Width A	Depth C
Non-Combination Controller				
5	—	610 (24)	508 (20)	254 (10)
25	—	610 (24)	508 (20)	254 (10)
43	—	610 (24)	508 (20)	254 (10)
60	—	610 (24)	508 (20)	254 (10)
85	—	610 (24)	508 (20)	254 (10)
108	—	762 (30)	610 (24)	305 (12)
135	—	762 (30)	610 (24)	305 (12)
201	—	914 (36)	762 (30)	406 (16)
251	—	914 (36)	762 (30)	406 (16)
317	—	1524 (60)	914 (36)	406 (16)
361	—	1524 (60)	914 (36)	406 (16)
480	—	1524 (60)	914 (36)	406 (16)
625	—	2286 (90)	1829 (72)	508 (20)
780	—	2286 (90)	1829 (72)	508 (20)
970 ①	—	2286 (90)	1829 (72)	508 (20)
1250 ①	—	2286 (90)	1829 (72)	508 (20)

① 970...1250 rated devices are only available as Type 1 and require a door-mounted fan, capable of delivering 204 cfm.

Open and Non-Combination

*F480 N B D*

**150 - F135 - F - B - D - B - 8L**

*a b c d e f g*

**a**

Code	Description
150	Solid-State Controller
150B	Enclosed Solid-State Controller with Isolation Contactor

**b**

Code	Description
F5	5 A, 3 Hp @ 460V AC
F25	25 A, 15 Hp @ 460V AC
F43	43 A, 30 Hp @ 460V AC
F60	60 A, 40 Hp @ 460V AC
F85	85 A, 60 Hp @ 460V AC
F108	108 A, 75 Hp @ 460V AC
F135	135 A, 100 Hp @ 460V AC
F201	201 A, 150 Hp @ 460V AC
F251	251 A, 200 Hp @ 460V AC
F317	317 A, 250 Hp @ 460V AC
F361	361 A, 300 Hp @ 460V AC
<b>F480</b>	<b>480 A, 400 Hp @ 460V AC</b>
F625	625 A, 500 Hp @ 460V AC
F780	780 A, 600 Hp @ 460V AC
F970	970 A, 800 Hp @ 460V AC
F1250	1250 A, 1000 Hp @ 460V AC

**c**

Code	Description
F	NEMA Type 4/12 (IP65) (Non-Combination Only)
J	NEMA Type 12 (IP54)
<b>N</b>	<b>Open</b>

**d**

Input Line Voltage	
Open Type	
Code	Description
<b>B</b>	<b>200...460V AC, 3-phase, 50 and 60 Hz</b>
C	200...575V AC, 3-phase, 50 and 60 Hz
Z	230...690V AC, 3-phase, 50 and 60 Hz (Open Only, 108 A and above)
Non-Combination Enclosed Only	
H	200...208V AC, 3-phase, 50 and 60 Hz
A	230V AC, 3-phase, 50 and 60 Hz
B	400...460V AC, 3-phase, 50 and 60 Hz
C	500...575V AC, 3-phase, 50 and 60 Hz

**e**

Code	Description
<b>D</b>	<b>100...240V AC (5...480 A units)</b>
R	24V AC/DC (5...480 A units) (Open Only)
E	110/120V AC (625...1250 A units)
A	230/240V AC (625...1250 A units)

**f**

Options (Select Only One)	
Code	Description
Blank	Standard
B	Pump Control
D	Braking Control

**g**

Options (Non-Combination only) (see page 19 for a full listing)	
Code	Description
8L	Line-Mounted Protective Module (enclosed only)
8M	Load-Mounted Protective Module (enclosed only)
8B	Line- and Load-Mounted Protective Modules (enclosed only)

Load-side MOVs are not available with Pump and Braking options, or on delta-connected motors. MOVs can be field installed for open type units.

Combination

**152H - F480 - F - BD - B - 59 - 8B**

*a b c d e f g*

**a**

Code	Description
152H	Solid-State Controller with Fusible Disconnect
152B	Solid-State Controller with Fusible Disconnect and Isolation Contactor
153H	Solid-State Controller with Circuit Breaker
153B	Solid-State Controller with Circuit Breaker and Isolation Contactor

**b**

Code	Description
F5	5 A, 3 Hp @ 460V AC
F25	25 A, 15 Hp @ 460V AC
F43	43 A, 30 Hp @ 460V AC
F60	60 A, 40 Hp @ 460V AC
F85	85 A, 60 Hp @ 460V AC
F108	108 A, 75 Hp @ 460V AC
F135	135 A, 100 Hp @ 460V AC
F201	201 A, 150 Hp @ 460V AC
F251	251 A, 200 Hp @ 460V AC
F317	317 A, 250 Hp @ 460V AC
F361	361 A, 300 Hp @ 460V AC
F480	480 A, 400 Hp @ 460V AC
F625	625 A, 500 Hp @ 460V AC
F780	780 A, 600 Hp @ 460V AC

**c**

Code	Description
F	NEMA Type 4/12 (IP65)
J	NEMA Type 12 (IP54)

**d**

Line Voltage, 120V AC Control Voltage	
Code	Description
HD	200...208V AC, 3-phase, 50 and 60 Hz
AD	230V AC, 3-phase, 50 and 60 Hz
BD	400...460V AC, 3-phase, 50 and 60 Hz
CD	500...575V AC, 3-phase, 50 and 60 Hz

**e**

Code	Description
Blank	Standard
B	Pump Control
D	Braking Control

**g**

Options (see page 19 for a full listing)	
Code	Description
8L	Line-Mounted Protective Module
8M	Load-Mounted Protective Module
8B	Line- and Load-Mounted Protective Modules

Load-side MOVs are not available with Pump and Braking options, or when used with inside-the-delta connections.

**f**

Horsepower									
Cat. No.	Hp Rating	Cat. No.	Hp Rating	Cat. No.	Hp Rating	Cat. No.	Hp Rating	Cat. No.	Hp Rating
33	0.5	39	5	46	40	52	150	60	450
34	0.75	40	7.5	47	50	54	200	61	500
35	1	41	10	48	60	56	250	62	600
36	1.5	42	15	49	75	57	300	63	700
37	2	43	20	50	100	58	350	65	800
38	3	44	25	51	125	59	400	67	1000
—	—	45	30	—	—	—	—	—	—