

SERIES VN
HEAVY DUTY
CAM SWITCHES
25 AMP - 1200 AMP

600 Volt & 1000 Volt
Load Make/Load Break
Positive Opening

SERIES VN
IDEAL FOR HEAVY
INDUSTRIAL DUTY

- Bypass Switch
- Reversing Switch
- Machine Disconnect
- Motor Switch
- Step Switch
- Two Speed Switch
- Ammeter Switch
- Voltmeter Switch
- Custom Versions

To 12 Pole, 12 Positions
(25 Amp - 20 Poles max)
for AC or DC Applications



ELEKTRA CAM SWITCHES
MACHINE SAFETY DISCONNECT OPTION

FEATURING

- **HANDLE-SHAFT SELF-ALIGNING SYSTEM**
 - IP65 DUSTTIGHT / WATERTIGHT
 - METAL / NON-METAL ENCLOSURES
 - STEEL SHAFT
 - HORSEPOWER RATED



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Series VN Cam Switch by Elektra includes one of the most complete Cam Switch product lines available in the world. Elektra, a specialty made switch manufacturer with 75 years experience as a major international supplier, manufactures industrial cam switches and disconnects through 1200 amp, 600 volt and 1000 volt ratings.

GENERAL CONTENTS SERIES VN

- **11 Sizes to 1200 Amp** • **1000 Volt AC, size 400 Amp to 1200 Amp** • **600 Volt AC and DC Ratings**
- **Multi-Circuit 12 poles** • **Multi-Step 12 Positions** • **Front Operators, IP65 Dust Tight / Water Tight**
- **Complete Enclosure Selection - Metal or Non Metal**

MAIN POWER SWITCH PRODUCTS:

Series D Disconnects to 1200 Amp with Auto Alignment Operator Handles. Disconnects with Undervoltage Trip.
(Catalog ET, 32 pages)

Series D1 Multi-Purpose 25 Amp Switches (Catalog D1, 12 pages)

Series VN Heavy Duty Cam Switches (Catalog VN, 20 pages)

INTERNATIONAL STANDARDS All Elektra Switches meet International Standards and CE specifications as well as UL and CSA specifications. All switches are designed with Positive Break and Quick Make - Quick Break mechanisms.

PRODUCT INDEX SERIES VN CATALOG

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“S” Safety Door Interlock is standard with the Auto Alignment system for ease of mounting. The safety Door Interlock System interlocks the door so the panel door cannot be opened with power “ON”. The switch must be turned “OFF” before door can be opened.

This **auto alignment system** includes extra mounting tolerance in the door coupling to allow for both extra installation mounting drilling tolerance and future door sag. Too often users and installers are frustrated due to the exact mounting tolerance required by most other designs.



“F” Front Mount provides mounting directly to the enclosure with the external operator handle and name plate directly connected to the contact mechanism mounted to the inside. Front mounting to the door is with two or four screws.

Operator handle B knob is standard on all Series VN switches. The silver black (Type SI) name plate is also standard. Type SI name plates can be engraved with special markings as required.



“B” Base Mount provides mounting directly to the base panel inside enclosure. The marking name plate and B knob can be secured directly to the top of the switch.



“H” Single Hole Mounting is available as an option for 22mm (7/8”). When full size 30mm mounting is desired, ring washer (P/N #ED 134353) is included.



FZD Cylinder Lock
Key Operated
Sizes V2N, V3N

Cylinder Lock Off
BZD version lock off is available on special order for sizes V2N through VN200.

Cam Switch - Mixed Ratings For switching applications where the contacts have very different power current ratings on the poles or low current auxiliary switching requirements, switch chambers of various sizes can be coupled together.

EXTRA POLES



Switch VN80 Coupled with V2N Aux.

***NOTE:** If overlapping contacts are required, Add: \$5 to the list price and specify overlapping contacts are required.

POWER POLE PRICE ADDITION Additional Cost to add poles of same current rating to switch			AUXILIARY CONTACTS (25 Amp) Cost Addition each pole	
Series	* Add 1 Power Pole List	* Add 2 Power Poles List	V2N Auxiliary List	Gold Concave Auxiliary Design List
V2N	+\$18	+\$36	+\$18	+\$30
V3N	+\$19	+\$38		
VN 32	+\$22	+\$44		
VN 50	+\$22	+\$44		
VN 80	+\$56	+\$112		
VN 125	+\$65	+\$130		
VN 200	+\$160	+\$320		

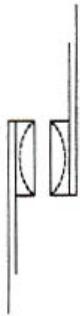
ATTACHMENT PLATE	
Base Switch Type	Attachment Cost List
V2N	-
V3N	+\$20
VN 32, 50	+\$30
VN 80	+\$40
VN 125, 200	+\$50

PRICE EXAMPLE: Additional cost to add poles to different current rated switches, or adding Gold Contact Auxiliary Poles, use above pole cost plus one attachment plate charge. To determine cost, the base switch type is the higher current unit.

CAM SWITCHES TO 1200 AMPS

Auxiliary Contacts

Extra auxiliary contacts can easily be added to higher power Cam Switches, for switching light currents or low power switch currents. Designers recognize high contact pressure as a basic requirement for highly reliable circuit continuity on pilot duty circuits.



Gold Flash Concave Contact Design

Type V2N, with a high 25 Amp auxiliary rating, provides the needed high fidelity switching. Through the years, many companies specify these higher current switches for needed reliable meter circuits, temperature and monitor circuits and similar applications.

Gold Flash Auxiliary Contacts. Special Auxiliary Contact Design. Specially designed gold concave moveable and stationary contacts are also available and provide extreme long life highly reliable auxiliary contact operation. Concave auxiliary contact design provides high pressure contact at two points on the ridge of the contact. Because of random movement of the movable contact on each operation, these contact points change location on each operation. The concave design also greatly reduces the possibility of dust particles which can cause intermittent operation and yet provides the higher current capability.

Continuity Problems

Low current continuity contact problems can be caused by wiping action design, one contact point designs, or serrated contacts. The use of the Elektra concave contact design provides increased contact switching reliability. Other auxiliary design possibilities are not the final answer.



Wipe Direction Design



Center Point Design



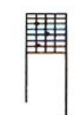
Serrated Contact Design



Dust pile up can make mound



Normal Contact Pressure pounds down point



Dust Collector

GOLD FLASH CONTACTS, CORROSIVE ENVIRONMENTS. Corrosive areas, particularly sulfuric, require gold contact auxiliaries to maintain reliable switching of low current circuits. The above noted gold plated auxiliary contacts are readily available on request and can be added to higher power cam switches.

OPERATORS - IP65

ENCLOSURES - IP65

IP65 is standard with VN operator handles

NEMA / IP65

IP65 is for Industrial and Outdoor Applications and is capable of hose test water tightness.

IP65 is used internationally for similar applications as NEMA 4, or 4X.

1st Digit
6



Complete protection against dust.

2nd Digit
5



Protected against water sprayed from a hose from all directions.

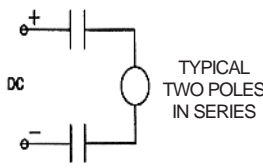
(See IP standard for exact specifications)

CAM SWITCHES TO 1200 AMPS

DC Ratings

Series VN Cam Switches can be applied on DC applications, however, depending on the D.C. voltage, contacts must be wired in series for reliable DC circuit interruption. Correct cam switch selection is based on Load Current, Load DC Voltage, and Circuit Time Constant (L/R). Low D.C. voltages and resistive D.C. loads are much easier to switch than highly inductive loads and higher D.C. voltages.

The following table lists for each type VN Switch the maximum DC current allowed and the number of contacts to be connected in series for a range of voltages and for two different utilization categories (time constants). By connecting additional poles in series the switch can be used for higher voltages. This chart test load had mixed, resistive and inductive and is used for guidance.

DC Current Ratings Type VN Cam Switch									
Motor Cam Switch DC Rating. () designates number of poles in series									
			V2N	V3N	VN32	VN50	VN80	VN12	VN200
DC-23A L/R=15ms 	24VDC	Amp	16 (1)	25 (1)	40 (1)	50 (1)	100 (1)	125 (1)	150 (1)
	48VDC	Amp	16 (2)	25 (2)	40 (2)	50 (2)	100 (2)	125 (2)	150 (2)
	60VDC	Amp	16 (3)	25 (3)	40 (3)	50 (3)	100 (3)	125 (3)	150 (3)
	120VDC	Amp	8 (3)	12 (3)	20 (3)	25 (3)	40 (3)	50 (3)	60 (3)
	240VDC	Amp	8 (5)	10 (5)	16 (6)	20 (6)	-	-	-
DC-13 Control Switch Rating									
L/R=50ms Rated Current I _e									
Voltage per contact connected in series		Amp	10	20	25	-	-	-	-
		Volt	32	32	24	-	-	-	-

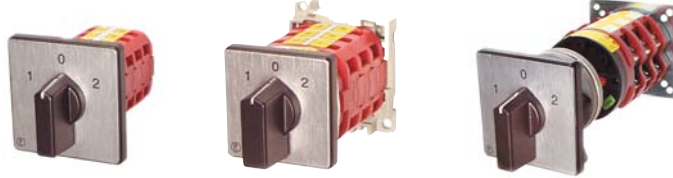
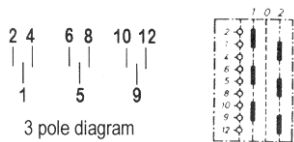
BYPASS SWITCH with "OFF" position
(Change over switch) **Open Type**

To 250 Amp, 600 Volt
400 Amp to 1200 Amp, 690 Volt



Load Make/Load Break

Positive Opening



Safety door interlock includes misalignment feature

CAM SWITCHES TO 1200 AMPS

1-0-2 600V	Amps CSA/UL General Purpose	Amps IEC	No. Chambers	Catalog Number	Front Mount	List	Base Mount	List	Safety Door Interlock	List
2 P O L E	25	25	2	E V2N-2U B1-	-FS	\$69	-BS	\$78	-SS	\$102
	35	32	2	E V3N-2U B3-	-FS	\$100	-BS	\$110	-SS	\$134
	50	45	2	E VN32-2U B3-	-FS	\$178	-BS	\$198	-SS	\$229
	60	63	2	E VN50-2U B4-	-FS	\$268	-BS	\$296	-SS	\$323

1-0-2 600V	Amps CSA/UL General Purpose	Amps IEC	No. Chambers	Catalog Number	Front Mount	List	Base Mount	List	Safety Door Interlock	List
3 P O L E	25	25	3	E V2N-3U B1-	-FS	\$84	-BS	\$102	-SS	\$121
	35	32	3	E V3N-3U B3-	-FS	\$108	-BS	\$117	-SS	\$141
	50	45	3	E VN32-3U B3-	-FS	\$206	-BS	\$223	-SS	\$263
	60	63	3	E VN50-3U B4-	-FS	\$322	-BS	\$338	-SS	\$354
	100	100	3	E VN80-3U B4-	-FS	\$390	-BS	\$412	-SS	\$435
	100	150	3	E VN125-3U B5-	-FS	\$890	-BS	\$919	-SS	\$965
	200	250	6	E VN200-3U B5-	-FS	\$1522	-BS	\$1560	-SS	\$1600

1-0-2 600V	Amps CSA/UL General Purpose	Amps IEC	No. Chambers	Catalog Number	Front Mount	List	Base Mount	List	Safety Door Interlock	List
4 P O L E	25	25	4	E V2N-4UB1-	-FS	\$102	-BS	\$114	-SS	\$126
	35	32	4	E V3N-4UB3-	-FS	\$126	-BS	\$135	-SS	\$160
	50	45	4	E VN32-4UB3-	-FS	\$243	-BS	\$260	-SS	\$300
	60	63	4	E VN50-4UB4-	-FS	\$373	-BS	\$390	-SS*	\$405
	100	100	4	E VN80-4UB4-	-FS	\$471	-BS	\$493	-SS*	\$515
	100	150	4	E VN125-4UB5-	-FS	\$1068	-BS	\$1097	-SS*	\$1143
	200	250	4	E VN200-4UB5-	-FS	\$1912	-BS	\$1965	-SS*	\$2005

(Applications requiring 4 pole units above 250 Amp, please contact EE Controls.)

1-0-2 1000V	Amps IEC	No. Chambers	Catalog Number	Front Mount	List	Base Mount	List	Safety Door Interlock	List
3 P O L E	400	3	E NLU-400-3U	-FS	+	-BS	+	-SS	+
	630	3	E NLU-630-3U	-FS	+	-BS	+	-SS	+
	800	6	E NLU-800-3U	-FS	+	-BS	+	-SS	+
	1200	6	E NLU-1200-3U	-FS	+	-BS	+	-SS	+

Ratings were requested from UL/CSA. Higher ratings are possible to match IEC.

+ Contact Factory for Pricing

Name plate is 1-0-2. Many other standard name plates are available at no extra cost. Check with factory.

Example: **DRIVE-OFF-BYPASS**

*Size 4 and 5 plate not available on B Operator with safety door interlocks.

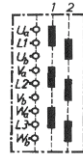
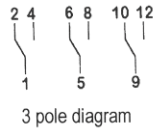
BYPASS SWITCH *without* "OFF" position
(Change over switch) **Open Type**

To 250 Amp, 600 Volt
400 Amp to 1200 Amp, 1000 Volt



Load Make/Load Break

Positive Opening



					- Suffix			
1- 2 600V	Amps CSA/UL General Purpose	Amps IEC	No. Chambers	Catalog Number	Front Mount	List	Base Mount	List
2 P O L E	25	25	2	E V2N-2UD B1-	-FS	\$69	-BS	\$78
	35	32	2	E V3N-2UD B3-	-FS	\$100	-BS	\$110
	50	45	2	E VN32-2UD B3-	-FS	\$178	-BS	\$198
	60	63	2	E VN50-2UD B4-	-FS	\$268	-BS	\$296

1- 2 600V	Amps CSA/UL General Purpose	Amps IEC	No. Chambers	Catalog Number	Front Mount	List	Base Mount	List
3 P O L E	25	25	3	E V2N-3UD B1-	-FS	\$84	-BS	\$102
	35	32	3	E V3N-3UD B3-	-FS	\$108	-BS	\$117
	50	45	3	E VN32-3UD B3-	-FS	\$206	-BS	\$223
	60	63	3	E VN50-3UD B4-	-FS	\$322	-BS	\$338
	100	100	3	E VN80-3UD B4-	-FS	\$390	-BS	\$412
	100	150	3	E VN125-3UD B5-	-FS	\$890	-BS	\$919
	200	250	6	E VN200-3UD B5-	-FS	\$1522	-BS	\$1560

1- 2 690V	Amps IEC	No. Chambers	Catalog Number	Front Mount	List	Base Mount	List
3 P O L E	400	3	E NLU-400 3UD-	-FS	+	-BS	+
	630	3	E NLU-630 3UD-	-FS	+	-BS	+
	800	6	E NLU-800- 3UD-	-FS	+	-BS	+
	1200	6	E NLU-1200- 3UD-	-FS	+	-BS	+

+ Contact factory for pricing

1- 2 600V	Amps CSA/UL General Purpose	Amps IEC	No. Chambers	Catalog Number	Front Mount	List	Base Mount	List
4 P O L E	25	25	4	E V2N-4UD B1-	-FS	\$102	-BS	\$114
	35	32	4	E V3N-4UD B3-	-FS	\$126	-BS	\$135
	50	45	4	E VN32-4UD B3-	-FS	\$243	-BS	\$260
	60	63	4	E VN50-4UD B4-	-FS	\$373	-BS	\$390
	100	100	4	E VN80-4UD B4-	-FS	\$471	-BS	\$493
	100	150	4	E VN125-4UD B5-	-FS	\$1068	-BS	\$1097
	200	250	4	E VN200-4UD B5-	-FS	\$1912	-BS	\$1965

CAM SWITCHES
TO 1200 AMPS

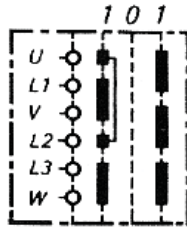
REVERSING

3 phase / Single phase

Open and Enclosed

To 100 HP 200 Amp / 600 Volt
400 Amp to 1200 Amp / 1000 Volt
FOR OFF REV

CAM SWITCHES
TO 1200 AMPS



3 Phase Diagram



-FS Open



-S4 Enclosed
T24

REVERSING - MAINTAINED OPERATION

Amps	Max Horse Power					No. of Chambers	Catalog No.	-Suffix			
	1 phase ▲ 120 V 240V		3 phase ▲ 230V 480V 600V					Open -FS List	Enclosed -S4 List	-4X List	Enclosed -M65 List
25	1	1	5	7.5	7.5	-	See Series D1	\$69	\$108 (1)	-	\$133 (4)
25	1.5	2	5	10	10	3	E V2N- 3W B1*	\$92	\$114(1)	\$139 (3)	\$151 (4)
35	2	3	7.5	15	20	3	E V3N- 3W B3-*	\$114	\$160 (2)	\$164 (3)	\$223 (4)
50	3	7.5	10	25	20	3	E VN32- 3W B3-*	\$209	\$331 (2)	\$383 (3)	\$401 (4)
60	5	10	20	40	30	3	E VN50- 3W B4-*	\$264	\$383 (2)	\$438 (3)	\$456 (5)
100	5	15	25	50	50	3	E VN80- 3W B4-*	\$331	\$514 (2)	\$514 (2)	\$529 (5)
100	7.5	15	30	60	50	3	E VN125- 3W B5-*	\$919	-	\$1265 (3)	\$1302 (5)
200	10	20	40	75	100	3	E NV200- 3W B5-*	\$1502	-	-	\$2140 (5)

Amp IEC	No. Chambers	Catalog No.	Front Mount	- Suffix		
				List	Base Mount	List
400	3	E NLU 400-3W-	-FS	+	-BS	+
630	3	E NLU 630-3W-	-FS	+	-BS	+
800	6	E NLU 800-3W-	-FS	+	-BS	+
1200	6	E NLU 1200-3W-	-FS	+	-BS	+

+ Contact factory for pricing

Enclosure Notes:

- (1) IP65 (4) Metal IP65
- (2) IP55 (5) Metal Nema 4 /12
- (3) Nema 4X

▲ Reversing Wiring Diagram
Both 1 phase units and 3 phase units are identical, except for addition of one wire jumper A.
For factory inclusion of jumper A change catalog number from 3W to 1W. No extra charge.

M65 Metal Enclosed with Molded Drip Shield, size Type D1 or VN2 only.



-S4 Enclosed
T25



-MK2 Enclosed

To supply M65 with **Drip Shield** (per photo) replace M65 with MK2.
K - Ball Handle Design add \$4 List
2 - For Drip Shield for sizes D1, V2N add \$4 List

P/N Example:

E V2N-3WB1-**M65**
E V2N-3WB1-**MK2**

\$151 List
\$159 List

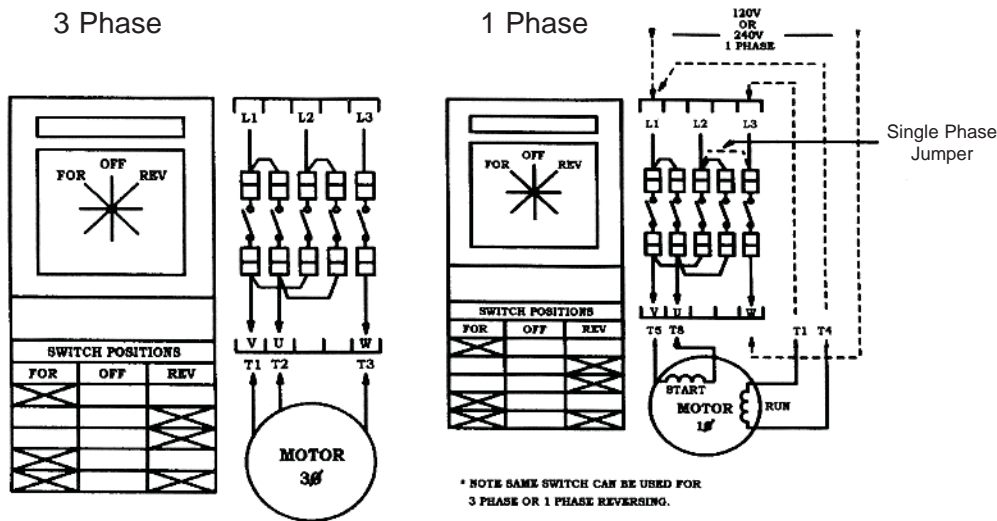
REVERSING Spring Return to Center (FOR-OFF-REV) 3 Phase

CAM SWITCHES TO 1200 AMPS

Amps	Max Horse Power					No. of Chambers	Catalog No.	-Suffix			
	1 phase ▲ 120 V 240V		3 phase ▲ 230V 480V 600V					Open -FS List	Enclosed -S4 List	-4X List	Enclosed -M65 List
25	1	2	5	7.5	7.5		See Series D1	\$69	\$108 (1)	-	\$133 (4)
25	1.5	2	5	10	10	3	E V2N- 3WR2 B1-	\$92	\$114(1)	\$139 (3)	\$151 (4)
35	2	3	7.5	15	20	3	E V3N- 3WR2 B3-	\$114	\$160 (2)	\$164 (3)	\$223 (4)
50	3	7.5	10	25	20	3	E VN32- 3WR2 B3-	\$209	\$331 (2)	\$383 (3)	\$401 (4)
60	5	10	20	40	30	3	E VN50- 3WR2 B4-	\$264	\$383 (2)	\$438 (3)	\$456 (5)

SPRING RETURN from left side only to center is available. In catalog number, replace "WR2" with "WR1"

REVERSING WIRING DIAGRAM



Note: K1, L Type for V2N & V3N only

Handle Options for Reversing Motor Switches

Type VN Operators have "B" handle design as standard. Reversing Units can be supplied with optional handle styles: "K1" Metal Ball Handle Design add \$4 list or "L" Plastic Handle Design add \$4 list LR-Red, LB-Black

ENCLOSURES IP65

NEMA / IP65

IP65 is for Industrial and Outdoor Applications and is capable of hose test water tightness.

IP65 is used internationally for similar applications as NEMA 4, or 4X.

IP55 Protected against dust. (No harmful deposit) and against water sprayed from a hose from all directions.

1st Digit
6



Complete protection against dust.

2nd Digit
5



Protected against water sprayed from a hose from all directions.

(See IP standard for exact specifications)

TWO SPEED MOTOR SWITCHES / 3 PHASE

TWO SPEED: Constant or Variable Torque

Max. Horse Power 3 Phase			Catalog No.	-Suffix Single Winding (1-0-2) (LOW-OFF-HIGH)▲				-Suffix Two Winding (0-1-2) (OFF-LOW-HIGH)▲ ▲			
230V	460V	600V		Open Front Panel Mount	List	S4 Enclosed	List	Open Front Panel Mount	List	S4 Enclosed	List
5	7.5	7.5	See series D1 catalog	-	-	-	-	-	-	-	-
5	10	10	E V2N-P2T B1-*	-FS	\$112	-S4	\$166	-	-	-	-
5	10	10	E V2N-PP1T B1-*	-	-	-	-	-FS	\$112	-S4	\$166
7.5	15	20	E V3N-P2T B3-*	-FS	\$141	-S4	\$219	-	-	-	-
7.5	15	20	E V3N-PP1T B3-*	-	-	-	-	-FS	\$141	-S4	\$219
10	25	20	E VN32-P2T B3-*	-FS	\$242	-S4	\$328	-	-	-	-
10	25	20	E VN32-PP1T B3-*	-	-	-	-	-FS	\$242	-S4	\$328
20	40	30	E VN50-P2T B4-*	-FS	\$332	-S4	\$461	-	-	-	-
20	40	30	E VN50-PP1T B4-*	-	-	-	-	-FS	\$332	-S4	\$461
25	50	50	E VN80-P2T B4-*	-FS	\$424	-S4	\$590	-	-	-	-
25	50	50	E VN80-PP1T B4-*	-	-	-	-	-FS	\$424	-S4	\$590

CAM SWITCHES TO 1200 AMPS

TWO SPEED: Constant or Variable Torque

For Constant Horse Power, use same part number as above, except change T to H (for constant HP).

Example: Constant torque #E V2N-P2TI-
 Constant H.P. #E V2N-P2TH-
 Price does not change.

CONNECTION DIAGRAMS



▲ 2 Speed, 1 Winding
(LOW-OFF-HIGH)



▲ ▲ 2 Speed, 2 Winding
(OFF-LOW-HIGH)



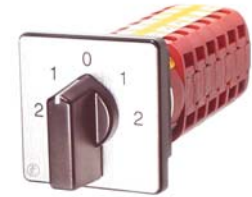
Type S4 Enclosed

M65 Metal Enclosures and NEMA 4X Enclosures are also available, similar to reversing units.

OTHER TWO SPEED CAM SWITCH OPTIONS

TWO SPEED: 3 PHASE - CONNECTION DIAGRAMS

For SINGLE WINDING MOTORS (2 speed)

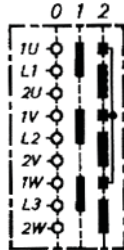


Two Speed Reversing

VN-P11 ▲
1-0-2
(LOW-OFF-HIGH)



VN-P1
0-1-2
(OFF-LOW-HIGH)

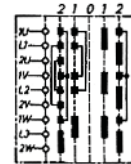


VN-PJ
0-1-2
(OFF-LOW-HIGH)



with "J" contact for
contactor pick up
(see circuit)

VN-WP
2-1-0-1-2
REVERSING
2 Speed

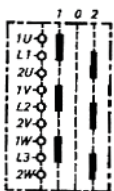


FORWARD HIGH-LOW OFF REVERSE LOW-HIGH

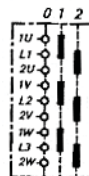
CAM SWITCHES
TO 1200 AMPS

For TWO WINDING MOTORS (2 speed)

VN-P11
1-0-2
(LOW-OFF-HIGH)



VN-PP1 ▲ ▲
0-1-2
(OFF-LOW-HIGH)



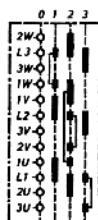
VN-PPJ
0-1-2
(OFF-LOW-HIGH)



with "J" contact for
contactor pick up
(see circuit)

THREE SPEED 3 PHASE 1-75HP Selection

VN-P31
0-1-2-3



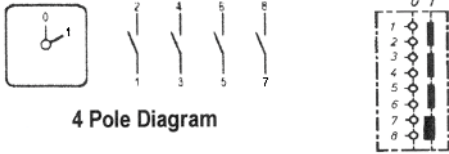
Circuit P31 is for motor with 1st and 2nd speed single winding and 3rd speed separate winding. Other motor winding versions are also available.

(▲) (▲ ▲) Part Number and prices for these specific units are on previous page.

OFF - ON SWITCH ▲

Load Make/Load Break Open Type
Positive Opening

25 Amp to 250 Amp, 600 Volt
400 Amp to 1200 Amp, 690 Volt



Standard Handle

1 Pole (0-1) Available to 1200 Amp.
(Check with factory)

2 Pole (0-1) 45° Switch Angle 600 Volt

				- Suffix					
Amps CSA/UL General Purpose	Amps IEC	No. Chambers	Catalog Number	Front Mount	List	Base Mount	List	Safety Door Interlock	List
25	25	1	E V2N-2B1-	-FS	\$61	-BS	\$64	-SS	\$95
35	32	1	E V3N-2B3-	-FS	\$89	-BS	\$95	-SS	\$129
50	45	1	E VN32-2B3-	-FS	\$128	-BS	\$134	-SS	\$168
60	63	1	E VN50-2B4-	-FS	\$173	-BS	\$184	-SS	\$244



Operator Handle Options



Handle Options

3 Pole (0-1) 45° Switch Angle ▲ 600 Volt

				- Suffix					
Amps CSA/UL General Purpose	Amps IEC	No. Chambers	Catalog Number	Front Mount	List	Base Mount	List	Safety Door Interlock	List
25	25	2	E V2N-3B1-	-FS	\$73	-BS	\$75	-SS	\$109
35	32	2	E V3N-3B3-	-FS	\$100	-BS	\$106	-SS	\$140
50	45	2	E VN32-3B3-	-FS	\$139	-BS	\$145	-SS	\$179
60	63	2	E VN50-3B4-	-FS	\$190	-BS	\$206	-SS	\$266
100	100	2	E VN80-3B4-	-FS	\$251	-BS	\$279	-SS	\$339
100	150	2	EVN125-3B5-	-FS	\$669	-BS	\$725	-SS	\$792
200	250	4	E VN200-3B5-	-FS	\$1112	-BS	\$1170	-SS	\$1238

For different handle options, replace "B" in part # with:
 "D" for 3 padlock red/yellow handle. Add \$16 list
 "BE" for 1 padlock red/yellow handle. Add \$ 9 list
 P/N Example:
 E V3N-3B3-FS becomes E V3N-3BE-FS. \$109 list

3 Pole (0-1) 400 Amp to 1200 Amp 690 Volt

				- Suffix					
Amps IEC	No. Chambers	Catalog Number	Front Mount	List	Base Mount	List	Safety Door Interlock	List	
400	2	E NL-400-3-	-FS	+	-BS	+	-SS	+	
630	2	E NL-600-3-	-FS	+	-BS	+	-SS	+	
800	3	E NL-800-3-	-FS	+	-BS	+	-SS	+	
1200	3	E NL-1200-3-	-FS	+	-BS	+	-SS	+	

+ Contact factory for pricing

Operators Only **List**
 E B-* \$ 7
 E BE-RG-*
 E D-RG-*

*Select Switch size:

Switch Size: *
 V2N S1
 V3N, VN32 S3
 VN50, VN80 S4
 VN125, VN200 S5

E BE-RG-S1, E D-RG-S1 \$20 List each
 E BE-RG-S3, E D-RG-S3 \$33 List each
 E BE-RG-S4, E D-RG-S4 \$35 List each
 E BE-RG-S5, E D-RG-S5 \$37 List each

▲ SEE SERIES D SWITCHES for "ON-OFF" straight through wiring and **LOWER COST.**

Example: E V2N-3B1-FS \$73 List E VN200-3B5-FS \$1112
 25 Amp E D1-3BE1-FM-SI \$50List 250 Amp E D7-3D 5FM-RG \$717

CAM SWITCHES TO 1200 AMPS

OFF - ON SWITCH Open Type

25 Amp to 1200 Amp, 600 Volt
400 Amp to 1200 Amp, 690 Volt



4 Pole (0-1) 45° Switch Angle ▲				600 Volt						- Suffix	
Amps CSA/UL General Purpose	Amps IEC	No. Chambers	Catalog Number	Front Mount	List	Base Mount	List	Safety Door Interlock	List		
25	25	2	E V2N-4B1-	-FS	\$78	-BS	\$81	-SS	\$115		
35	32	2	E V3N-4B3-	-FS	\$112	-BS	\$117	-SS	\$151		
50	45	2	E VN32-4B3-	-FS	\$167	-BS	\$173	-SS	\$207		
60	63	2	E VN50-4B4-	-FS	\$223	-BS	\$240	-SS	\$300		
100	100	2	E VN80-4B4-	-FS	\$318	-BS	\$335	-SS	\$395		
100	150	2	EVN125-4B5-	-FS	\$781	-BS	\$836	-SS	\$903		
200	250	4	E VN200-4B5-	-FS	\$1255	-BS	\$1294	-SS	\$1361		

4 Pole (0-1) 400 Amp to 1200 Amp				690 Volt						- Suffix	
Amps IEC	No. Chambers	Catalog Number	Front Mount	List	Base Mount	List	Safety Door Interlock	List			
400	2	E NL400-4-	-FS	+	-BS	+	-SS	+			
630	2	E NL630-4-	-FS	+	-BS	+	-SS	+			
800	4	E NL800-4-	-FS	+	-BS	+	-SS	+			
1200	4	E NL1200-4-	-FS	+	-BS	+	-SS	+			

6 Pole (0-1) 45° Switch Angle ▲				600 Volt						- Suffix	
Amps CSA/UL General Purpose	Amps IEC	No. Chambers	Catalog Number	Front Mount	List	Base Mount	List	Safety Door Interlock	List		
25	25	3	E V2N-6B1-	-FS	\$133	-BS	\$138	-SS	\$153		
35	32	3	E V3N-6B3-	-FS	\$155	-BS	\$160	-SS	\$175		
50	45	3	E VN32-6B3-	-FS	\$201	-BS	\$212	-SS	\$246		
60	63	3	E VN50-6B4-	-FS	\$279	-BS	\$298	-SS	\$358		
100	100	3	E VN80-6B4-	-FS	\$382	-BS	\$390	-SS	\$409		
100	150	3	EVN125-6B5-	-FS	\$886	-BS	\$902	-SS	\$970		
200	250	6	E VN200-6B5-	-FS	\$1502	-BS	\$1528	-SS	\$1593		

6 Pole (0-1) 400 Amp to 1200 Amp				690 Volt						- Suffix	
Amps IEC	No. Chambers	Catalog Number	Front Mount	List	Base Mount	List	Safety Door Interlock	List			
400	3	E NL400-6-	-FS	+	-BS	+	-SS	+			
630	3	E NL630-6-	-FS	+	-BS	+	-SS	+			
800	6	E NL800-6-	-FS	+	-BS	+	-SS	+			
1200	6	E NL1200-6-	-FS	+	-BS	+	-SS	+			

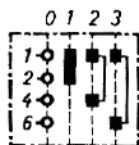
+ Contact factory for pricing

Ratings were requested from UL/CSA. Higher ratings are possible to match IEC ratings.
Name plate is "OFF-ON". Many other standard name plates are available at no extra cost. Check with factory.
For 25 Amp to 1200 Amp bypass cam switches (see following pages)

CAM SWITCHES
TO 1200 AMPS

STEP SWITCH *with* "OFF" position OPEN TYPE FRONT PANEL MOUNT

Typical 3 Step
0-1-2-3



Front Panel Mount



Base Mount Option*

Circuit	No. Steps	No. Chambers	Amp*	Catalog No.	List
0-1-2	2	1	25	E V2N S02 B1-FS	\$59
0-1-2-3	3	2	25	E V2N S03 B1-FS	\$70
0-1-2-3-4	4	2	25	E V2N S04 B1-FS	\$81
0-1-2-3-4-5	5	3	25	E V2N S05 B1-FS	\$92
0-1-2-3-4-5-6	6	3	25	E V2N S06 B1-FS	\$103
0-1-2-3-4-5-6-7	7	4	25	E V2N S07 B1-FS	\$114
0-1-2-3-4-5-6-7-8	8	4	25	E V2N S08 B1-FS	\$125

Amp*	Catalog No.	List
35	E V3N S02 B3-FS	\$100
35	E V3N S03 B3-FS	\$117
35	E V3N S04 B3-FS	\$134
35	E V3N S05 B3-FS	\$151
35	E V3N S06 B3-FS	\$167
35	E V3N S07 B3-FS	\$184
35	E V3N S08 B3-FS	\$201

Switching Angle: 45°, 8 step is 30°. Switches are available to 12 steps and to 63 Amp. Multiple pole step switches are also available.

STEP SWITCH *without* "OFF" position OPEN TYPE FRONT PANEL MOUNT

Typical 3 Step
0-1-2-3



Front Panel Mount



Base Mount Option*

Circuit	No. Steps	No. Chambers	Amp*	Catalog No.	List
1-2	2	1	25	E V2N S2 B1-FS	\$56
1-2-3	3	2	25	E V2N S3 B1-FS	\$67
1-2-3-4	4	2	25	E V2N S4 B1-FS	\$78
1-2-3-4-5	5	3	25	E V2N S5 B1-FS	\$89
1-2-3-4-5-6	6	3	25	E V2N S6 B1-FS	\$100
1-2-3-4-5-6-7	7	4	25	E V2N S7 B1-FS	\$112
1-2-3-4-5-6-7-8	8	4	25	E V2N S8 B1-FS	\$123

Amp*	Catalog No.	List
35	E V3N S2 B3-FS	\$98
35	E V3N S3 B3-FS	\$114
35	E V3N S4 B3-FS	\$131
35	E V3N S5 B3-FS	\$148
35	E V3N S6 B3-FS	\$165
35	E V3N S7 B3-FS	\$181
35	E V3N S8 B3-FS	\$198

Stock

Single Hole Mount

For catalog number - change FS above to HS

Example: FV3U S2 B3-HS

Add \$5.00 to list price

ENCLOSED STEP SWITCHES

Both Metal and Non Metal Enclosed Switches are available from stock.

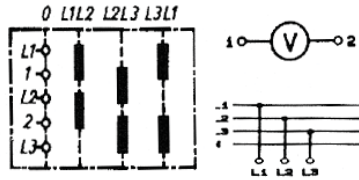
*Base Mount (BM) Option. Substitute BS for FS in catalog number. Add \$5.00 list.

METER SWITCHES (Front Mount)

See Bulletin D1 for Series D1 Meter Selections



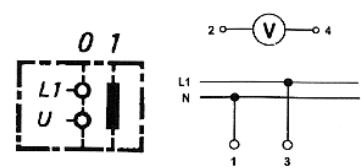
Voltmeter Switch 3 Phase
(line to line)



Catalog No.	List	No. Chambers
E D1-2V 1FM-SO	\$65	2
E V2N 2V 1-FS	\$72	2



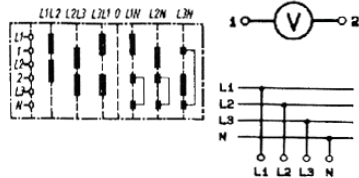
Voltmeter Switch 1 Phase



Catalog No.	List	No. Chambers
ED 1V 1FM-SO	\$55	1
E V2N 1V1-FS (25 Amp)	\$72	2



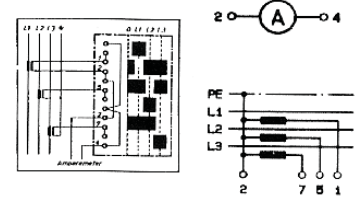
Voltmeter Switch 3 Phase
(line to line plus line to neutral)



Catalog No.	List	No. Chambers
E D1-3V 1FM-SO	\$108	4
E V2N 3V 1-FS	\$84	4



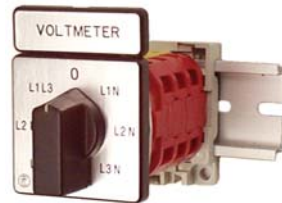
Ammeter Switch 3 Phase
(3 circuits with 3 current transformers)



Catalog No.	List	No. Chambers
E D1-1MA 1FM-SO	\$88	3

CAM SWITCHES
TO 1200 AMPS

For Base Mount, substitute "BS" for FS in catalog number. Same price.



For Single Hole Mount, (22mm (7/8")) substitute "HS" for FS in catalog numbers. Add \$5.00 list.

To convert 22mm mount to Full Size, 30.5mm mount, add adapter ring:
P/N# ED-134353 \$0.80 list

Ammeter Switch 3 Phase
(3 circuits with or without current transformers)



Catalog No.	List	No. Chambers
E V2N-MT3-1FM-SI	\$104	5

Other Meter Switches are also available, including combination 3 phase ammeter/voltmeter type.