

SLYRNA, TN	ENGINEERING STANDARD	E
SUBJECT		52300
DESIGN INDEX, VACUUM CIRCUIT BREAKER, VAD-3		PAGE 1 OF 12

VAD-3 BREAKERS

1. PURPOSE

To document breaker catalog number, schematic, and wiring diagrams for releases of factory orders.

2. APPLICABLE TO

Application Engineering

3. PROCEDURE

UNCONTROLLED

To Order Standard Breaker:

- Enter catalog number in MB01, using "Catalog Number Structure" page 2 or "Standard Breaker Catalogs" page 6,7,8.
- If not item mastered but features are listed in "Catalog Number Structure" and wiring diagram is shown on page 5. Fill out "Breaker Order Form" page 9 and give to Breaker Engineer. A bill for the catalog number will be prepared and item mastered before release.

To Order Non-Standard Breaker:

- When features such as special control voltages, interlock, or any features not listed on page 2 are required, complete Order Form page 9, specify the special feature and give to Breaker Engineer.
- Breaker Engineer will initiate design of the special feature, complete and approve the order form and complete rating nameplate data and return to originator.
- Release components (not catalog number) into MB01 and include order form and rating nameplate data in release package.

Notes

- All features shown on page 2 are designed but may not be item mastered to keep database low.
- Standard Features include: Latch Check Switch, TOC Actuator, Racking Lockout.
- Non-standard features (not available at this time): Fixed mounted breakers, Second Trip Coil, Undervoltage Trip, Kirklock Trip Position, Close Bar Cover.
- To order Mexico plug place "-" in digit 6 and "V" in digit 10.

A	5/91	JWM	C	8/92	WRB	E	8/93	JWD	PREPARED		
B	1/92	JWM	D	3/93	JWM				BY	DATE	APPROVED
									JWM	3/31/90	JWM

3.4. BREAKER CATALOG NUMBER STRUCTURE - VAD-3

Digit	:	1	2	3	4	5	6	7	8	9	10	11	12
Typical Cat. No.	:	V	3	D	6	1	A	3	3	Y	O	O	O

- | | |
|---|---|
| <p>1 - <u>Device Family</u>
V - Vacuum</p> <p>2 - <u>Breaker Series</u>
3- Series 3</p> <p>3 - <u>Mounting</u>
D - Drawout</p> <p>4 - <u>KV/KA/(MVA)</u>
3 - 4.76/36/(250)
4 - 4.76/49/(350)
5 - 8.25/41/(500)
6 - 15.0/23/(500)
7 - 15.0/36/(750)
8 - 15.0/48/(1000)</p> | <p>7 - <u>Close/Charge Voltage</u>
0 - Special
2 - 48VDC
3 - 125VDC
4 - 250VDC
5 - 120VAC
6 - 240VAC</p> <p>8 - <u>Trip Voltage</u>
0 - Special
1 - 24VDC
2 - 48VDC
3 - 125VDC
4 - 250VDC
5 - 120VAC
6 - 240VAC</p> |
|---|---|

NOTE:
KA = MAX SYM INTERRUPTING CAPABILITY

- | | |
|---|--|
| <p>5 - <u>Continuous Current</u>
1 - 1200A
2 - 2000A</p> <p>6 - <u>Control Plug</u>
A - Harting (standard)
(-) - AMP (dash (-) in digit 6)
(-) - Mexico (dash (-) in digit 6 and "Y" in digit 10)</p> | <p>9 - <u>MOC</u>
N - NO
Y - YES</p> <p>10, 11, 12 - <u>Special Features</u>
0 - None
H - 125VDC separate charge
J - 120VAC separate charge
K - 240VAC separate charge
T - Charged Spring Indicator
X - Special Control Wiring
Y - Mexico Control Plug
Z - Undefined special</p> |
|---|--|

A	5/91	JWM	C	8/92	WRB	E	8/93	JWM	PREPARED		APPROVED
B	1/92	JWM	D	3/93	JWM				BY	DATE	
									JWM	3/31/90	JWM

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3.2. STANDARD PART NUMBERS

3.2.1 BREAKER

PART NUMBER	RATING	CATALOG NO. (MARKETING)	CAT. (INT)
44068-300-51	4.76KV, 1200A, 36KA (250MVA)	VAD-3-15050-12	V3D31
44068-301-51	4.76KV, 2000A, 36KA (250MVA)	VAD-3-15025-20	V3D32
44068-600-50	4.76KV, 1200A, 49KA (350MVA)	VAD-3-15035-12	V3D41
44068-600-51	4.76KV, 2000A, 49KA (350MVA)	VAD-3-15035-20	V3D42
44068-600-50	8.25KV, 1200A, 41KA (500MVA)	VAD-3-08050-12	V3D51
44068-600-51	8.25KV, 2000A, 41KA (500MVA)	VAD-3-08050-20	V3D51
44068-300-50	15.0KV, 1200A, 23KA (500MVA)	VAD-3-15050-12	V3D61
44068-301-50	15.0KV, 2000A, 23KA (500MVA)	VAD-3-15050-20	V3D62
44068-300-51	15.0KV, 1200A, 36KA (750MVA)	VAD-3-15075-12	V3D71
44068-301-51	15.0KV, 2000A, 36KA (750MVA)	VAD-3-15075-20	V3D72
44068-600-50	15.0KV, 1200A, 43KA (1000MVA)	VAD-3-15100-12	V3D81
44068-600-51	15.0KV, 2000A, 48KA (1000MVA)	VAD-3-15000-20	V3D82

3.2.2 BREAKER PLUGS

PART NO.	DESCRIPTION
44068-363-50	HARTING (STD, 19 PINS)
44068-363-51	HARTING (24 PINS)
44068-061-50	AMP
44068-360-50	MEXICO

3.2.3 BREAKER CODE PLATE ASSEMBLY

44068-445-53	BKR, V3D31--,	4.76KV, 36KA, (250MVA)	
44068-445-54	BKR, V3D32--,	4.76KV, 36KA, (250MVA)	
44068-445-56	BKR, V3D41--,	4.76KV, 49KA, (350MVA)	
44068-445-57	BKR, V3D42--,	4.76KV, 49KV, (350MVA)	E
44068-445-59	BKR, V3D51--,	8.25KV, 41KA, (500MVA)	
44068-445-60	BKR, V3D52--,	8.25KV, 41KA, (500MVA)	
44068-445-62	BKR, V3D61--,	15.0KV, 23KA, (500MVA)	
44068-445-63	BKR, V3D62--,	15.0KV, 23KA, (500MVA)	
44068-445-65	BKR, V3D71--,	15.0KV, 36KA, (750MVA)	
44068-445-66	BKR, V3D72--,	15.0KV, 36KA, (750MVA)	
44068-445-68	BKR, V3D81--,	15.0KV, 48KA, (1000MVA)	
44068-445-69	BKR, V3D82--,	15.0KV, 48KV, (1000MVA)	E

A	5/91	JWM	C	8/92	WRB	E	8/93	JWM	PREPARED		
B	1/92	JWM	D	3/93	JWM				BY	DATE	APPROVED
									JWM	3/31/90	JWM

3.2. STANDARD PART NUMBERS (CONTINUED)

E

3.2.4 CONTROL COMPONENTS

PART NO.	DESCRIPTION
44068-196-02	CHARGE MOTOR, 48VDC
44068-196-01	CHARGE MOTOR, 125VDC
44068-196-03	CHARGE MOTOR, 250VDC
44068-196-01	CHARGE MOTOR, 120VAC
44068-196-03	CHARGE MOTOR, 240VAC
44068-069-07	MOTOR RELAY, 48VDC
44068-069-03	MOTOR RELAY, 125VDC
44068-069-05	MOTOR RELAY, 250VDC
44068-069-01	MOTOR RELAY, 120VAC
44068-069-02	MOTOR RELAY, 240VAC
44068-069-07	ANTI-PUMP RELAY, 48VDC
44068-069-04	ANTI-PUMP RELAY, 125VDC
44068-069-06	ANTI-PUMP RELAY, 250VDC
44068-069-01	ANTI-PUMP RELAY, 120VAC
44068-069-02	ANTI-PUMP RELAY, 240VAC
44068-105-03	CLOSING SOLENOID, 48VDC
44068-105-02	CLOSING SOLENOID, 125VDC
44068-105-04	CLOSING SOLENOID, 250VDC
44068-105-01	CLOSING SOLENOID, 120VAC
44068-105-02	CLOSING SOLENOID, 240VAC
44071-218-01	TRIP SOLENOID, 24VDC
44071-218-04	TRIP SOLENOID, 48VDC
44071-218-03	TRIP SOLENOID, 125VDC
44071-218-05	TRIP SOLENOID, 250VDC
44071-218-02	TRIP SOLENOID, 120VAC
44071-218-03	TRIP SOLENOID, 240VAC

A	5/91	JWM	C	8/92	WRB	E	8/93	JWM	PREPARED		
B	1/92	JWM	D	3/93	JWM				BY	DATE	APPROVED
									JWM	3/31/90	JWM

3.3. STANDARD DIAGRAMS

SCHEMATIC	WIRING	DESCRIPTION
1. <u>Harting Plug</u>		
44068-402	44068-403	Standard
44068-410	44068-411	Separate Charge Circuit
44068-412	44068-413	Spring Charge Indicator
2. <u>AMP Plug</u>		
44068-400	44068-401	Standard
44068-406	44068-407	Separate Charge Circuit
44068-408	44068-409	Spring Charge Indicator
3. <u>Mexico Plug</u>		
44068-404	44068-405	Standard

3.4. OPTIONAL ASSEMBLIES

PART NUMBER	DESCRIPTION
44058-108-50	MOC Provision
44068-517-50	Breaker Front Cover with Trip & Close Lever Covers
	Breaker must be ordered with Order Form (Credit Standard Cover 44068-086-50)

A	5/91	JWM	C	8/92	WRB	E	8/93	JWM	PREPARED		
B	1/92	JWM	D	3/93	JWM				BY	DATE	APPROVED
									JWM	3/31/90	JWM

3.5 COMMON STANDARD BREAKER CATALOG NUMBERS

4.76KV, 36KA (250 MVA) - HARTING PLUG - SCHEMATIC: 44068-402

CATALOG NO	DESCRIPTION	CLOSE/TRIP/MOC
V3D31A22N000	VAD3 BKR 1200A 250MVA	48VDC/48VDC
V3D31A22Y000	VAD3 BKR 1200A 250MVA	48VDC/48VDC MOC
V3D31A33N000	VAD3 BKR 1200A 250MVA	125VDC/125VDC
V3D31A33Y000	VAD3 BKR 1200A 250MVA	125VDC/125VDC MOC
V3D31A52N000	VAD3 BKR 1200A 250MVA	120VAC/48VDC
V3D31A52Y000	VAD3 BKR 1200A 250MVA	120VAC/48VDC MOC
V3D31A53N000	VAD3 BKR 1200A 250MVA	120VAC/125VDC
V3D31A53Y000	VAD3 BKR 1200A 250MVA	120VAC/125VDC MOC
V3D31A62N000	VAD3 BKR 1200A 250MVA	240VAC/48VDC
V3D31A62Y000	VAD3 BKR 1200A 250MVA	240VAC/48VDC MOC
V3D31A63N000	VAD3 BKR 1200A 250MVA	240VAC/125VDC
V3D31A63Y000	VAD3 BKR 1200A 250MVA	240VAC/125VDC MOC
V3D32A22N000	VAD3 BKR 2000A 250MVA	48VDC/48VDC
V3D32A22Y000	VAD3 BKR 2000A 250MVA	48VDC/48VDC MOC
V3D32A33N000	VAD3 BKR 2000A 250MVA	125VDC/125VDC
V3D32A33Y000	VAD3 BKR 2000A 250MVA	125VDC/125VDC MOC
V3D32A52N000	VAD3 BKR 2000A 250MVA	120VAC/48VDC
V3D32A52Y000	VAD3 BKR 2000A 250MVA	120VAC/48VDC MOC
V3D32A53N000	VAD3 BKR 2000A 250MVA	120VAC/125VDC
V3D32A53Y000	VAD3 BKR 2000A 250MVA	120VAC/125VDC MOC
V3D32A62N000	VAD3 BKR 2000A 250MVA	240VAC/48VDC
V3D32A62Y000	VAD3 BKR 2000A 250MVA	240VAC/48VDC MOC
V3D32A63N000	VAD3 BKR 2000A 250MVA	240VAC/125VDC
V3D32A63Y000	VAD3 BKR 2000A 250MVA	240VAC/125VDC MOC

A	5/91	JWM	C	8/92	WRB	E	8/93	JWM	PREPARED	
B	1/92	JWM	D	3/93	JWM				BY	DATE
									JWM	3/31/90
										APPROVED
										JWM

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3.5 COMMON STANDARD BREAKER CATALOG NUMBERS

[E] 4.76KV, 49KA (350 MVA) - HARTING PLUG - SCHEMATIC: 44068-402

CATALOG NO	DESCRIPTION	CLOSE/TRIP/MOC
V3D41A22N000	VAD3 BKR 1200A 350MVA	48VDC/48VDC
V3D41A22Y000	VAD3 BKR 1200A 350MVA	48VDC/48VDC MOC
V3D41A33N000	VAD3 BKR 1200A 350MVA	125VDC/125VDC
V3D41A33Y000	VAD3 BKR 1200A 350MVA	125VDC/125VDC MOC
V3D41A52N000	VAD3 BKR 1200A 350MVA	120VAC/48VDC
V3D41A52Y000	VAD3 BKR 1200A 350MVA	120VAC/48VDC MOC
V3D41A53N000	VAD3 BKR 1200A 350MVA	120VAC/125VDC
V3D41A53Y000	VAD3 BKR 1200A 350MVA	120VAC/125VDC MOC
V3D41A62N000	VAD3 BKR 1200A 350MVA	240VAC/48VDC
V3D41A62Y000	VAD3 BKR 1200A 350MVA	240VAC/48VDC MOC
V3D41A63N000	VAD3 BKR 1200A 350MVA	240VAC/125VDC
V3D41A63Y000	VAD3 BKR 1200A 350MVA	240VAC/125VDC MOC
V3D42A22N000	VAD3 BKR 2000A 350MVA	48VDC/48VDC
V3D42A22Y000	VAD3 BKR 2000A 350MVA	48VDC/48VDC MOC
V3D42A33N000	VAD3 BKR 2000A 350MVA	125VDC/125VDC
V3D42A33Y000	VAD3 BKR 2000A 350MVA	125VDC/125VDC MOC
V3D42A52N000	VAD3 BKR 2000A 350MVA	120VAC/48VDC
V3D42A52Y000	VAD3 BKR 2000A 350MVA	120VAC/48VDC MOC
V3D42A53N000	VAD3 BKR 2000A 350MVA	120VAC/125VDC
V3D42A53Y000	VAD3 BKR 2000A 350MVA	120VAC/125VDC MOC
V3D42A62N000	VAD3 BKR 2000A 350MVA	240VAC/48VDC
V3D42A62Y000	VAD3 BKR 2000A 350MVA	240VAC/48VDC MOC
V3D42A63N000	VAD3 BKR 2000A 350MVA	240VAC/125VDC
V3D42A63Y000	VAD3 BKR 2000A 350MVA	240VAC/125VDC MOC

A	5/91	JWM	C	8/92	WRB	E	8/93	JWM	PREPARED	
B	1/92	JWM	D	3/93	JWM				BY	DATE
									JWM	3/31/90
										APPROVED
										JWM

3.5 COMMON STANDARD BREAKER CATALOG NUMBERS

8.25KV, 41KA (500 MVA) - HARTING PLUG - SCHEMATIC: 44068-402

CATALOG NO	DESCRIPTION	CLOSE/TRIP/MOC
V3D51A22N000	VAD3 BKR 1200A 500MVA	48VDC/48VDC
V3D51A22Y000	VAD3 BKR 1200A 500MVA	48VDC/48VDC MOC
V3D51A33N000	VAD3 BKR 1200A 500MVA	125VDC/125VDC
V3D51A33Y000	VAD3 BKR 1200A 500MVA	125VDC/125VDC MOC
V3D51A52N000	VAD3 BKR 1200A 500MVA	120VAC/48VDC
V3D51A52Y000	VAD3 BKR 1200A 500MVA	120VAC/48VDC MOC
V3D51A53N000	VAD3 BKR 1200A 500MVA	120VAC/125VDC
V3D51A53Y000	VAD3 BKR 1200A 500MVA	120VAC/125VDC MOC
V3D51A62N000	VAD3 BKR 1200A 500MVA	240VAC/48VDC
V3D51A62Y000	VAD3 BKR 1200A 500MVA	240VAC/48VDC MOC
V3D51A63N000	VAD3 BKR 1200A 500MVA	240VAC/125VDC
V3D51A63Y000	VAD3 BKR 1200A 500MVA	240VAC/125VDC MOC
V3D52A22N000	VAD3 BKR 2000A 500MVA	48VDC/48VDC
V3D52A22Y000	VAD3 BKR 2000A 500MVA	48VDC/48VDC MOC
V3D52A33N000	VAD3 BKR 2000A 500MVA	125VDC/125VDC
V3D52A33Y000	VAD3 BKR 2000A 500MVA	125VDC/125VDC MOC
V3D52A52N000	VAD3 BKR 2000A 500MVA	120VAC/48VDC
V3D52A52Y000	VAD3 BKR 2000A 500MVA	120VAC/48VDC MOC
V3D52A53N000	VAD3 BKR 2000A 500MVA	120VAC/125VDC
V3D52A53Y000	VAD3 BKR 2000A 500MVA	120VAC/125VDC MOC
V3D52A62N000	VAD3 BKR 2000A 500MVA	240VAC/48VDC
V3D52A62Y000	VAD3 BKR 2000A 500MVA	240VAC/48VDC MOC
V3D52A63N000	VAD3 BKR 2000A 500MVA	240VAC/125VDC
V3D52A63Y000	VAD3 BKR 2000A 500MVA	240VAC/125VDC MOC

A	5/91	JWM	C	8/92	WRB	E	8/93	JWM	PREPARED	
B	1/92	JWM	D	3/93	JWM				BY	DATE
									JWM	3/31/90
										APPROVED
										JWM

3.5 COMMON STANDARD BREAKER CATALOG NUMBERS

15.0KV, 23KA (500 MVA) - HARTING PLUG - SCHEMATIC: 44068-402

CATALOG NO	DESCRIPTION	CLOSE/TRIP/MOC
V3D61A22N000	VAD3 BKR 1200A 500MVA	48VDC/48VDC
V3D61A22Y000	VAD3 BKR 1200A 500MVA	48VDC/48VDC MOC
V3D61A33N000	VAD3 BKR 1200A 500MVA	125VDC/125VDC
V3D61A33Y000	VAD3 BKR 1200A 500MVA	125VDC/125VDC MOC
V3D61A52N000	VAD3 BKR 1200A 500MVA	120VAC/48VDC
V3D61A52Y000	VAD3 BKR 1200A 500MVA	120VAC/48VDC MOC
V3D61A53N000	VAD3 BKR 1200A 500MVA	120VAC/125VDC
V3D61A53Y000	VAD3 BKR 1200A 500MVA	120VAC/125VDC MOC
V3D61A62N000	VAD3 BKR 1200A 500MVA	240VAC/48VDC
V3D61A62Y000	VAD3 BKR 1200A 500MVA	240VAC/48VDC MOC
V3D61A63N000	VAD3 BKR 1200A 500MVA	240VAC/125VDC
V3D61A63Y000	VAD3 BKR 1200A 500MVA	240VAC/125VDC MOC
V3D62A22N000	VAD3 BKR 2000A 500MVA	48VDC/48VDC
V3D62A22Y000	VAD3 BKR 2000A 500MVA	48VDC/48VDC MOC
V3D62A33N000	VAD3 BKR 2000A 500MVA	125VDC/125VDC
V3D62A33Y000	VAD3 BKR 2000A 500MVA	125VDC/125VDC MOC
V3D62A52N000	VAD3 BKR 2000A 500MVA	120VAC/48VDC
V3D62A52Y000	VAD3 BKR 2000A 500MVA	120VAC/48VDC MOC
V3D62A53N000	VAD3 BKR 2000A 500MVA	120VAC/125VDC
V3D62A53Y000	VAD3 BKR 2000A 500MVA	120VAC/125VDC MOC
V3D62A62N000	VAD3 BKR 2000A 500MVA	240VAC/48VDC
V3D62A62Y000	VAD3 BKR 2000A 500MVA	240VAC/48VDC MOC
V3D62A63N000	VAD3 BKR 2000A 500MVA	240VAC/125VDC
V3D62A63Y000	VAD3 BKR 2000A 500MVA	240VAC/125VDC MOC

A	5/91	JWM	C	8/92	WRB	E	8/93	JWM	PREPARED	APPROVED
B									BY	DATE

3.5 COMMON STANDARD BREAKER CATALOG NUMBERS

15.0KV, 36KA (750 MVA) - HARTING PLUG - SCHEMATIC: 44068-402

CATALOG NO	DESCRIPTION	CLOSE/TRIP/MOC
V3D71A22N000	VAD3 BKR 1200A 750MVA	48VDC/48VDC
V3D71A22Y000	VAD3 BKR 1200A 750MVA	48VDC/48VDC MOC
V3D71A33N000	VAD3 BKR 1200A 750MVA	125VDC/125VDC
V3D71A33Y000	VAD3 BKR 1200A 750MVA	125VDC/125VDC MOC
V3D71A52N000	VAD3 BKR 1200A 750MVA	120VAC/48VDC
V3D71A52Y000	VAD3 BKR 1200A 750MVA	120VAC/48VDC MOC
V3D71A53N000	VAD3 BKR 1200A 750MVA	120VAC/125VDC
V3D71A53Y000	VAD3 BKR 1200A 750MVA	120VAC/125VDC MOC
V3D71A62N000	VAD3 BKR 1200A 750MVA	240VAC/48VDC
V3D71A62Y000	VAD3 BKR 1200A 750MVA	240VAC/48VDC MOC
V3D71A63N000	VAD3 BKR 1200A 750MVA	240VAC/125VDC
V3D71A63Y000	VAD3 BKR 1200A 750MVA	240VAC/125VDC MOC
V3D72A22N000	VAD3 BKR 2000A 750MVA	48VDC/48VDC
V3D72A22Y000	VAD3 BKR 2000A 750MVA	48VDC/48VDC MOC
V3D72A33N000	VAD3 BKR 2000A 750MVA	125VDC/125VDC
V3D72A33Y000	VAD3 BKR 2000A 750MVA	125VDC/125VDC MOC
V3D72A52N000	VAD3 BKR 2000A 750MVA	120VAC/48VDC
V3D72A52Y000	VAD3 BKR 2000A 750MVA	120VAC/48VDC MOC
V3D72A53N000	VAD3 BKR 2000A 750MVA	120VAC/125VDC
V3D72A53Y000	VAD3 BKR 2000A 750MVA	120VAC/125VDC MOC
V3D72A62N000	VAD3 BKR 2000A 750MVA	240VAC/48VDC
V3D72A62Y000	VAD3 BKR 2000A 750MVA	240VAC/48VDC MOC
V3D72A63N000	VAD3 BKR 2000A 750MVA	240VAC/125VDC
V3D72A63Y000	VAD3 BKR 2000A 750MVA	240VAC/125VDC MOC

A	5/91	JWM	C	8/92	WRB	E	8/93	JWM	PREPARED	APPROVED
B	1/92	JWM	D	3/93	JWM				BY JWM DATE 3/31/90	JWM

3.5 COMMON STANDARD BREAKER CATALOG NUMBERS

15.0KV, 48KA (1000 MVA) - HARTING PLUG - SCHEMATIC: 44068-402

CATALOG NO	DESCRIPTION	CLOSE/TRIP/MOC
V3D81A22N000	VAD3 BKR 1200A 1000MVA	48VDC/48VDC
V3D81A22Y000	VAD3 BKR 1200A 1000MVA	48VDC/48VDC MOC
V3D81A33N000	VAD3 BKR 1200A 1000MVA	125VDC/125VDC
V3D81A33Y000	VAD3 BKR 1200A 1000MVA	125VDC/125VDC MOC
V3D81A52N000	VAD3 BKR 1200A 1000MVA	120VAC/48VDC
V3D81A52Y000	VAD3 BKR 1200A 1000MVA	120VAC/48VDC MOC
V3D81A53N000	VAD3 BKR 1200A 1000MVA	120VAC/125VDC
V3D81A53Y000	VAD3 BKR 1200A 1000MVA	120VAC/125VDC MOC
V3D81A62N000	VAD3 BKR 1200A 1000MVA	240VAC/48VDC
V3D81A62Y000	VAD3 BKR 1200A 1000MVA	240VAC/48VDC MOC
V3D81A63N000	VAD3 BKR 1200A 1000MVA	240VAC/125VDC
V3D81A63Y000	VAD3 BKR 1200A 1000MVA	240VAC/125VDC MOC
V3D82A22N000	VAD3 BKR 2000A 1000MVA	48VDC/48VDC
V3D82A22Y000	VAD3 BKR 2000A 1000MVA	48VDC/48VDC MOC
V3D82A33N000	VAD3 BKR 2000A 1000MVA	125VDC/125VDC
V3D82A33Y000	VAD3 BKR 2000A 1000MVA	125VDC/125VDC MOC
V3D82A52N000	VAD3 BKR 2000A 1000MVA	120VAC/48VDC
V3D82A52Y000	VAD3 BKR 2000A 1000MVA	120VAC/48VDC MOC
V3D82A53N000	VAD3 BKR 2000A 1000MVA	120VAC/125VDC
V3D82A53Y000	VAD3 BKR 2000A 1000MVA	120VAC/125VDC MOC
V3D82A62N000	VAD3 BKR 2000A 1000MVA	240VAC/48VDC
V3D82A62Y000	VAD3 BKR 2000A 1000MVA	240VAC/48VDC MOC
V3D82A63N000	VAD3 BKR 2000A 1000MVA	240VAC/125VDC
V3D82A63Y000	VAD3 BKR 2000A 1000MVA	240VAC/125VDC MOC

A	5/91	JWM	C	8/92	WRB	E	8/93	JWM	PREPARED	
B	1/92	JWM	D	3/93	JWM				BY	DATE
									JWM	3/31/90
										APPROVED
										JWM

BY: _____ APPROVED BY: _____ DATE: _____

CATALOG NO: V3D F.O.: _____

QTY THIS BKR	VOLTAGE	KA (MVA)	1200A BREAKER		2000A BREAKER	
				CODE*		CODE*
	4.76KV	36(250)	[] 44068-300-51	-53	[] 44068-301-51	-54
	4.76KV	49(350)	[] 44068-600-50	-56	[] 44068-600-51	-57
	8.25KV	41(500)	[] 44068-600-50	-59	[] 44068-600-51	-60
	15.0KV	23(500)	[] 44068-300-50	-62	[] 44068-301-50	-63
	15.0KV	36(750)	[] 44068-300-51	-65	[] 44068-301-51	-66
	15.0KV	48(1000)	[] 44068-600-50	-68	[] 44068-600-51	-69

*CODE ASSY 44068-445-XX

CONTROL DESCRIPT.	CONTROL VOLTAGE					
	24VDC	48VDC	125VDC	250VDC	120VAC	240VAC
CHARGING MOTOR	N/A	[]44068- 196-02	[]44068- 196-01	[]44068- 196-03	[]44068- 196-01	[]44068- 196-03
MOTOR RELAY	N/A	[]44068- 069-07	[]44068- 069-03	[]44068- 069-05	[]44068- 069-01	[]44068- 069-02
ANTI-PUMP RELAY	N/A	[]44068- 069-07	[]44068- 069-04	[]44068- 069-06	[]44068- 069-01	[]44068- 069-02
CLOSING SOLENOID	N/A	[]44068- 105-03	[]44068- 105-02	[]44068- 105-04	[]44068- 105-01	[]44068- 105-02
TRIP SOLENOID	[]44071- 218-01	[]44071- 218-04	[]44071- 218-03	[]44071- 218-05	[]44071- 218-02	[]44071- 218-03

SECONDARY PLUG ASSEMBLY

[] 44068-363-50 HARTING (STD 19 PINS)	[] 44068-061-50 AMP
[] 44068-363-51 HARTING (24 PINS)	[] 44068-360-50 MEXICO

OPTIONAL ASSEMBLIES:	WIRE BREAKER PER DRAWING:
[] 44068-108-50 MOC PROVISIONS	[] 44068-402 SCHEMATIC HARTING 44068-403 WIRING HARTING [] _____ SCHEMATIC _____ WIRING DIAGRAM

SPECIAL INSTRUCTIONS: