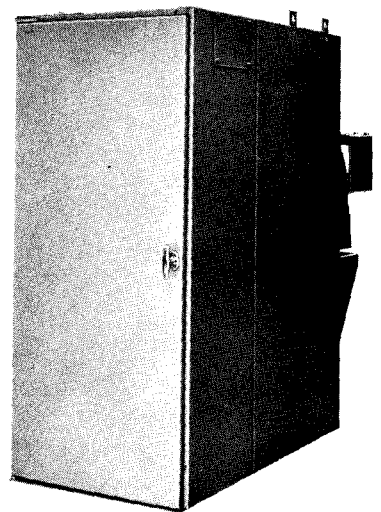
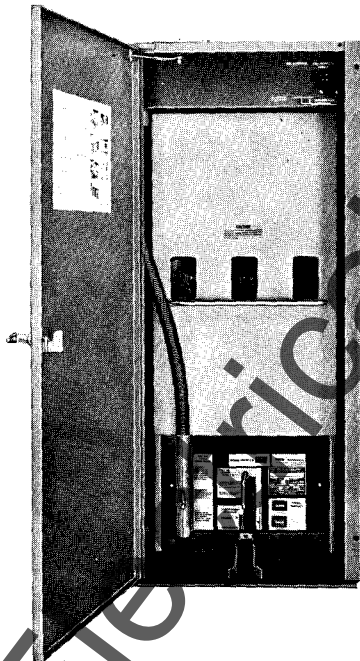
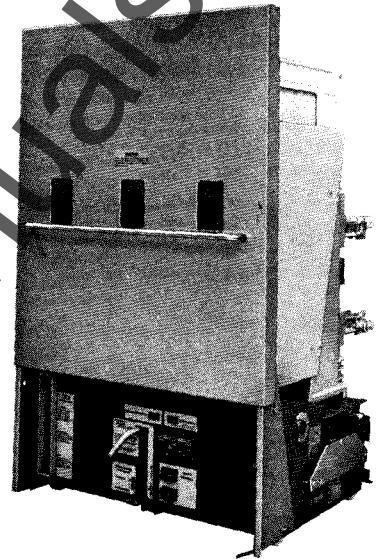




SQUARE D COMPANY

MIDDLETOWN MARKETING HEADQUARTERS

SOLENARC® Type DSE Circuit Breaker Modules and Accessories for Switchgear OEM's



Solenarc Type DSE Switchgear modules are designed for use by switchgear assemblers in a variety of medium voltage applications. Solenarc modules provide maximum versatility in design and are available in 1200 thru 3000 amp frame sizes for 5, 7.5, and 15 kV, with interrupting capacities from 150 thru 1000 MVA.

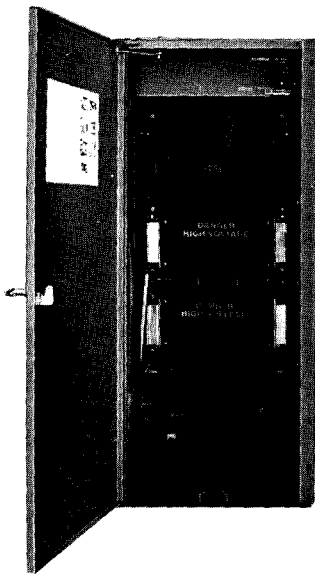
SOLENARC® OEM Switchgear Modules

The Ultimate in System and Circuit Protection

Consider These Standard Features:

Breaker Includes

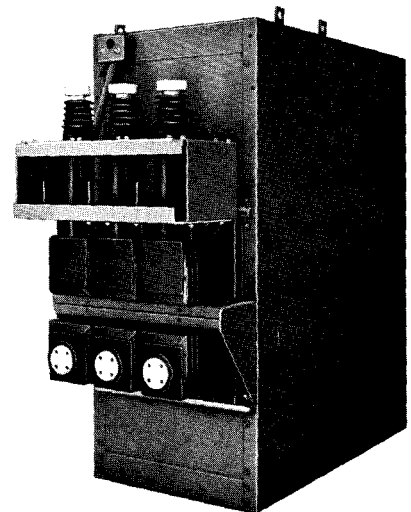
- Visible blades (inspection window)
- Plug-in secondary control connection
- Up to 12 'a' or 'b' contacts available
- Extremely light weight
- Arc chutes can be changed by one person
- Blade and jaw power contacts
- Blow-on construction for higher fault closing ratings
- Operation counter (standard)
- Key Interlock provisions



Enclosure Includes

- Guide rails welded to base for proper breaker positioning
- Breaker positioning interlocks
- Grounded steel shutters
- Breaker ground bus
- Full hinged front door
- Key Interlock provisions

- Bushing and bell assembly (standard)
- Provisions for mounting (3) Square D model #110 (600 volt) current transformers per phase on cable termination bushings
- Silver plated copper terminals for customer bus connections



Solenarc is a registered trademark of Merlin Gerin.

SQUARE D COMPANY

OEM Circuit Breaker Module Ratings

Type of Breaker	Nominal Rating		Rated Continuous Current 60 Hertz Amps—RMS	Rated Voltages			Insulation Level Rated With Stand		Interrupted Ratings† Amps - Symmetrical			Asymmetrical Rating Factor *	Short Time Rating 3 Sec. Amps—RMS	Close & Latch Rating Amps—RMS	Interrupting Time Cycles
	Three Phase MVA	Voltage KV—RMS		Maximum Voltage KV—RMS	K—Factor Max. KV / Min. KV	Minimum Voltage KV—RMS	Low Frequency KV—RMS	▲ Impulse 1.2x50MS KV-CREST	Maximum KV Amps—RMS	Nominal KV Amps—RMS	Minimum KV Amps—RMS				
DSE—23	150	4.16	1200	4.76	1.36	3.50	19	60	18,000	20,600	24,000	1.1	24,000	39,000	5
DSE—23B	250	4.16	1200	4.76	1.24	3.85	19	60	29,000	33,200	36,000	1.1	36,000	58,000	5
DSE—23BH	250	4.16	1200	4.76	1.24	3.85	19	60	29,000	33,200	36,000	1.1	36,000	78,000	5
DSE—23B	250	4.16	2000	4.76	1.24	3.85	19	60	29,000	33,200	36,000	1.1	36,000	58,000	5
DSE—23BH	250	4.16	2000	4.76	1.24	3.85	19	60	29,000	33,200	36,000	1.1	36,000	78,000	5
DSE—25C	350	4.16	1200	4.76	1.19	4.0	19	60	41,000	46,900	49,000	1.1	49,000	78,000	5
DSE—25C	350	4.16	2000	4.76	1.19	4.0	19	60	41,000	46,900	49,000	1.1	49,000	78,000	5
DSE—25C	350	4.16	3000	4.76	1.19	4.0	19	60	41,000	46,900	49,000	1.1	49,000	78,000	5
DSE—23BU	250	7.20	1200	8.25	1.79	4.6	36	95	17,000	19,500	30,000	1.1	30,000	49,000	5
DSE—25CU	500	7.20	1200	8.25	1.25	6.6	36	95	33,000	37,800	41,000	1.1	41,000	66,000	5
DSE—25CU	500	7.20	2000	8.25	1.25	6.6	36	95	33,000	37,800	41,000	1.1	41,000	66,000	5
DSE—62	250	13.8	1200	15.0	2.27	6.6	36	95	9,300	10,100	21,000	1.1	21,000	34,000	5
DSE—65	500	13.8	1200	15.0	1.30	11.5	36	95	18,000	19,500	23,000	1.1	23,000	37,000	5
DSE—65H	500	13.8	1200	15.0	1.30	11.5	36	95	18,000	19,500	23,000	1.1	23,000	58,000	5
DSE—65	500	13.8	2000	15.0	1.30	11.5	36	95	18,000	19,500	23,000	1.1	23,000	37,000	5
DSE—65H	500	13.8	2000	15.0	1.30	11.5	36	95	18,000	19,500	23,000	1.1	23,000	58,000	5
DSE—57	750	13.8	1200	15.0	1.30	11.5	36	95	28,000	30,400	36,000	1.1	36,000	58,000	5
DSE—57H	750	13.8	1200	15.0	1.30	11.5	36	95	28,000	30,400	36,000	1.1	36,000	78,000	5
DSE—57	750	13.8	2000	15.0	1.30	11.5	36	95	28,000	30,400	36,000	1.1	36,000	58,000	5
DSE—57H	750	13.8	2000	15.0	1.30	11.5	36	95	28,000	30,400	36,000	1.1	36,000	78,000	5
DSE—68	1000	13.8	1200	15.0	1.30	11.5	36	95	37,000	40,200	48,000	1.1	48,000	77,000	5
DSE—68	1000	13.8	2000	15.0	1.30	11.5	36	95	37,000	40,200	48,000	1.1	48,000	77,000	5
DSE—68	1000	13.8	3000	15.0	1.30	11.5	36	95	37,000	40,200	48,000	1.1	48,000	77,000	5

NOTES:

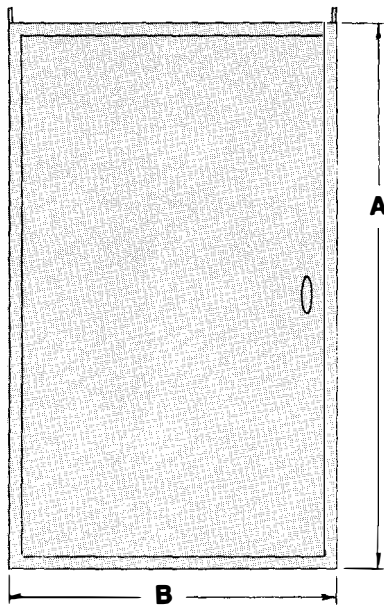
- † — For converting voltages other than those listed the interrupting current = Amps at Max. KV $\frac{\text{max. KV}}{\text{operating KV}}$ but in no case can this current exceed the interrupting current at minimum KV.
- * — Rating factor is based on breaker speed from initiation to contact parting with 1/2 cycle relay time. Multiply factor X symmetrical current to obtain asymmetrical current interrupting capability of breaker.
- ▲ — These values apply with circuit breaker in or out of enclosure.

Optional Accessories Now Available

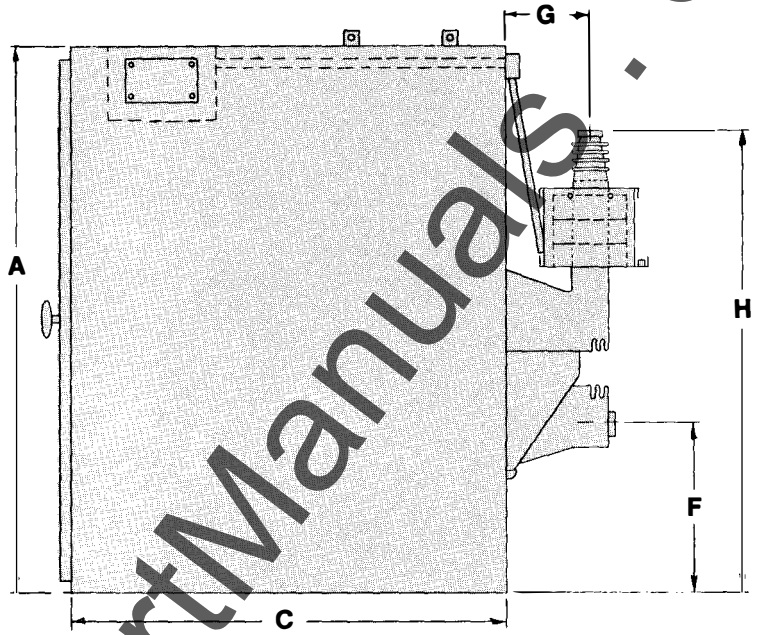
- | | |
|---|---|
| 1) Capacitor trip device | 8) Transfer truck for circuit breaker |
| 2) Bus supports and bells for staggered cross over bus arrangements (factory modification only) | 9) Circuit breaker tool kit |
| 3) Truck operated cell switch | 10) Bus side CTs |
| 4) Set of three (3) Square D model #110 600 volt current transformers, one per phase on cable termination bushing with breaker (mounting provisions for up to 3 sets) | 11) Insulated horizontal cross bus (standard lengths) |
| 5) Test cabinet | 12) Bus joint cover boots—riser, tee, elbow, etc. |
| 6) Test jumper (6 ft. multi-conductor) | 13) Bus run-backs for cable termination |
| 7) Fifth wheel | 14) PT compartments—5 & 15 kv |
| | 15) Instrument and relay compartments (housing only) |
| | 16) Additional auxiliary contacts |
| | 17) Reclosing circuit breaker |

SOLENARC® OEM Switchgear Modules

Dimensional Information

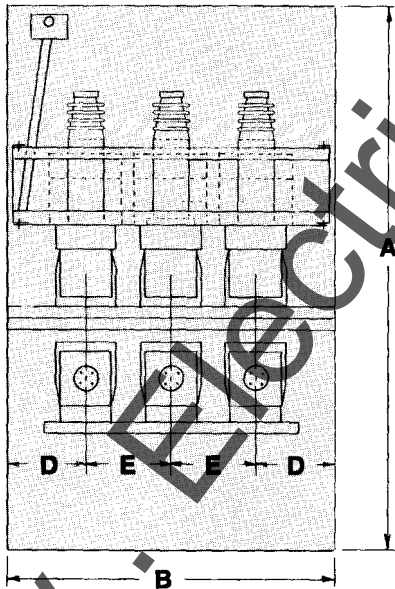


(Front)



(Side)

NOTE: DIMENSIONS SUBJECT TO CHANGE
 :NOT FOR CONSTRUCTION
 :ALL DIMENSIONS IN INCHES
 :ALL DIMENSIONS ARE APPROXIMATE



(Rear)

DIMENSIONS (inches)		
	5kV	15kV
	150 thru 350 MVA 1200 & 2000 amp	250 thru 750 MVA 1200 & 2000 amp
A	59.88	59.88
B	26.00	36.00
C	48.00	48.00
D	5.92	8.56
E	7.08	9.44
F	18.69	18.69
G	9.50	9.50
H	51.50	51.50

NOTE: For information on 3000 ampere or 1000 MVA breakers, consult factory.

For further information,
 consult your local Square D field office,
 or write to Square D Co. P.O. Box 558,
 Middletown, Ohio 45042.

