TYPE GCH4

COPPER CENTER BREAK SWITCH





Product Information

GCH4 Copper Center Break

The GCH4 is a two insulator, side opening outdoor air disconnect switch constructed primarily of copper. Operation is accomplished by the rotation of two insulators making the center break switch the easiest operating of all group operated switches. Proven by years of field experience, this switch takes full advantage of unique construction methods to provide both simple operation and long-term dependability. The GCH4 is commonly used in three-phase line or substation applications such as transformer or line disconnecting, breaker isolating, bypassing or bus sectionalizing, Operation of the GCH4 may be accomplished by either manual control or by motor operator.

Features

- Testing. The GCH4 has been tested to meet or exceed current IEEE standards. A test brochure outlining electrical and mechanical design tests conducted on the GCH4 is available upon request.
- Jaw Contacts. The GCH4 is supplied with line high pressure silver-to-silver jaw contacts producing the highest
 conductivity initially and over time. The contact fingers, fabricated from hard drawn copper, are silver plated and
 then electro-tin plated. The male contact, also of hard drawn copper, has a brazed silver overlay and then is electrotin plated. The methods and materials used in the application of the silver provide surfaces of differing hardness
 with anti-galling properties, resulting in minimal wear over years of operation.
- Bearings. The GCH4 incorporates rugged switch bearings consisting of stainless-steel balls, stainless steel races,
 galvanized ductile iron bearing housing and rotors. Factory adjusted stops are provided with the bearing for ease of
 synchronization during installation.
- Bases. Hot dipped structural steel channel is used for the construction of the switch bases. Leveling studs are
 provided on the bearings for insulator alignment. Bases and base mounting dimensions can be customized to
 customer specifications and structure.
- Hinge Contacts. Transfer of the current at the hinge end of the blade is accomplished with a copper shunt that is formed and bolted in to place between the blades and terminal pad castings. The current transfer points of the shunt are silver plated before assembly.

Accessories

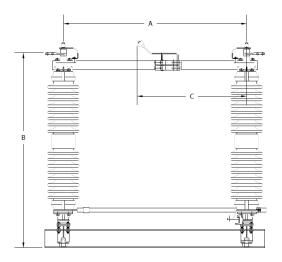
- Grounding switch: Up to 164kA peak current
- Auxiliary Switches: Up to 16 contact decks are standard
- Outriggers: Custom designed for customer application
- Connectors: Can be added to customer switch order upon request

Load Break Devices

- Arcing Horn: Minimum standard on all switches
- Quick Break Whips
- TECORupters
 - Loop Split
 - Full Load



Configurations



- DIMENSIONS SHOWN IN INCHES WEIGHT SHOWN IN POUNDS (INSULATORS INCLUDED)
- 8.3 72.5 kV 3" BOLT CIRCLE STATION POST INSULATORS
- 123 170 kV 5" BOLT CIRCLE STATION POST INSULATORS
- DIMENSIONS NOT FOR CONSTRUCTION PURPOSES
- CONTACT FACTORY FOR CERTIFIED PRINTS

CATALOG	DIMENSIONS			STD MTC
NO.	Α	В	С	STD MTG
GCH4-00812	24	20 9/16	19 5/8	8 1/4 X 24
GCH4-00820	24	21	25 1/2	8 1/4 X 24
GCH4-01512	24	23 1/16	19 5/8	8 1/4 X 24
GCH4-01520	24	23.5	28	8 1/4 X 24
GCH4-02712	24	27 1/16	19 5/8	8 1/4 X 24
GCH4-02720	24	27.5	32	8 1/4 X 24
GCH4-03812	24	31 13/16	19 5/8	8 1/4 X 24
GCH4-03820	24	31 1/2	36	8 1/4 X 24
GCH4-04812	30	35 7/16	21 3/8	8 1/4 X 30
GCH4-04820	30	35 7/8	40 3/8	8 1/4 X 30
GCH4-07212	42	43 1/2	29 6/8	8 1/4 X 42
GCH4-07220	42	43 15/16	31 1/4	8 1/4 X 42
GCH4-12312	60	61 15/16	35 3/8	8 1/4 X 60
GCH4-12320	60	64 1/16	*	8 1/4 X 60
GCH4-14512	72	67 7/16	43	8 1/4 X 72
GCH4-14520	72	74 1/16	*	8 1/4 X 72
GCH4-17012	84	77 1/2	47 3/4	8 1/4 X 84
GCH4-17020	84	82 1/16	*	8 1/4 X 84

^{*} Refer to factory.



Numbering Sequence

GCH4	V	Α	ı	Р	TR	LB	ОР
	008	12	SIP	3		AH	N
	015	20	SEP	5		QB	SH
	027		NA			LI	WG
	038		CS			N	MO
	048		INC		SEE	CS	Р
	072				CHART		SH-P
	123						
	145						
	170						
							WG-P

Variant Configuration Key

V - Voltage (kV)

A - Current (A)

I - Insulator Ship Method

P - Pivot Size (inches)

TR - Insulator TR

LB - Load Break Device

OP - Operator

Insulator Shipping Methods

SIP - SHIP IN PLACE

SEP - SHIPPED SEPARATE

NA - INSULATORS NOT INCLUDED

CS - CUSTOMER SUPPLIED

INC - WITH INSULATORS BULKED PACKED

Load Break Options

AH - ARCING HORN

QB - QUICK WHIPS

N - NONE

CS - CUSTOMER SUPPLIED

LI - TECORUPTERS

• **FL -** FULL LOAD

• LS - LOOP SPLIT

Operator Options

N - NONE SUPPLIED

SH - SWING HANDLE

WG - WORM GEAR

MO - MOTOR OPERATOR

P - MOTOR OP PROVISIONSSH-P - MOTOR OP PROVISIONS SH

WG-P - MOTOR OP PROVISIONS WG

Example: GCH4-14512- SIP5288QBWG

VOLTAG	INS TR		
NOM	BIL	INSTR	
8.3	95	202	
15.5	110	205	
27	150	208	
38	200	210	
48.3	250	214	
72.5	350	216	
123	550	286	
145	650	288	
170	750	291	

CURRENT (A)					
CONT	PEAK	мом	3 SEC		
1200	99,000	61,000	38,000		
2000	164,000	100,000	63,000		



Notes:		



Notes:			



