RATINGS AND SPECIFICATIONS (UPGRADED)

12kV/15kV High-voltage Vacuum Contactors

Type		CV			
From	Standard	10HA	10HAL	10HB	10HBL
	Vertical terminals	10HA-1	10HAL-1	10HB-1	10HBL-1
Operating Mechanism		Non-Latched	Latched	Non-Latched	Latched
Rated Voltage (*Ur*)		12/15kV		12kV	
Rated Operational Current (*Ie*)		400A		400A	
Thermal Current (*Ith*)		450A		450A	
Rated Frequency		50/60Hz			
Rated Short-time Withstand Current (*Ik*)		5000A - 1s		5000A - 1s	
Rated peak Withstand Current (*Ip*)		12.5kA		12.5kA	
Short-circuit Making and Breaking Current (Duty)		5000/4000A "O"-3min.-"CO"-3min.-"CO"		5000A "O"-3min.-"CO"-3min.-"CO"	
Making Current (100 times) AC4		4000A		4000A	
Breaking Current (25 times) AC4		3200A		3200A	
Withstand Overload Current 6 times of *Ie* - 30s		2400A-30s		2400A-30s	
Withstand Overload Current 15 times of *Ie* - 1s		8000A-1s		8000A-1s	
Coordination with Current-limiting Fuses		Prospective Short-circuit Current 50kA			
Cut-off Current (Peak)		36kA			
Rated Insulation Level	Power Frequency Withstand Voltage	28kV - 1 min.			
	Impulse Withstand voltage	75kV			

⚠ Safety Cautions

- Read the entire "Instruction Manual" carefully for important information about safety, handling, installation, operation, maintenance, and parts replacements.
- This equipment is designed and built in accordance with applicable safety standard in effect on the date of manufacture. Unauthorized modifications will void warranty and can result in severe injury, death and property damage. Do not make any modifications to the equipment.
- Only qualified persons are to install, operate or service this equipment according to all applicable codes and established safety practices.
- Use only genuine Toshiba replacement parts and accessories. Improper components could cause the equipment malfunction.
- Do not install this equipment in areas where unusual service conditions exist. Using this equipment in other than usual service conditions can result in equipment failure.
- Do not exceed the ratings specified on the equipment nameplate or system accessories. Underrated equipment can fail during operation causing fire, explosion, severe injury, death, and property damage.

TOSHIBA

TOSHIBA CORPORATION

TRANSMISSION DISTRIBUTION & INDUSTRIAL SYSTEMS COMPANY

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http:/www3.toshiba.co.jp/sic/english/swgr/products.htm

● The data given in this catalog are subject to change without notice.

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TOSHIBA

Leading Innovation >>>

NEW PRODUCT RELEASE

HIGH-VOLTAGE (12kV) VACUUM CONTACTORS AND COMBINATION UNITS

WITH IEC RATED FUSES

CV-10HA(L)/CV-10HB(L)
12kV 400A 5kA

UVA-10HAD
12kV 400A 50kA

VACUUM COMBINATION UNITS

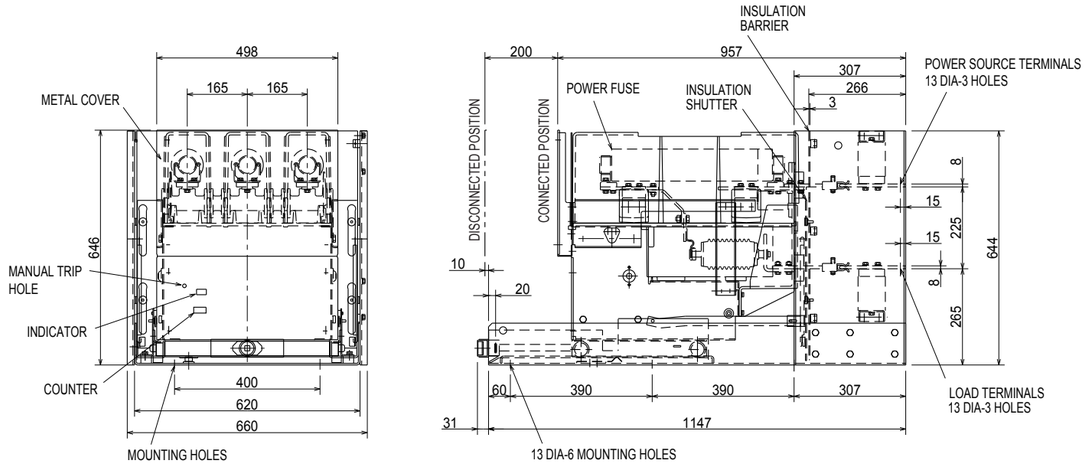
FEATURES

50kA Short-Circuit Making and Breaking Performance
Confirmed with IEC Rated, DIN Dimensions Fuses
(Fuses will not be installed.)
Preinstalled Fuse Blown Detector (Electrical Switch)
Low-surge, Long Life and Reliable Vacuum Contactor
Safety for Personnel with Mechanical Interlocks
Minimized Maintenance and Inspection
Bushing Type Unit available

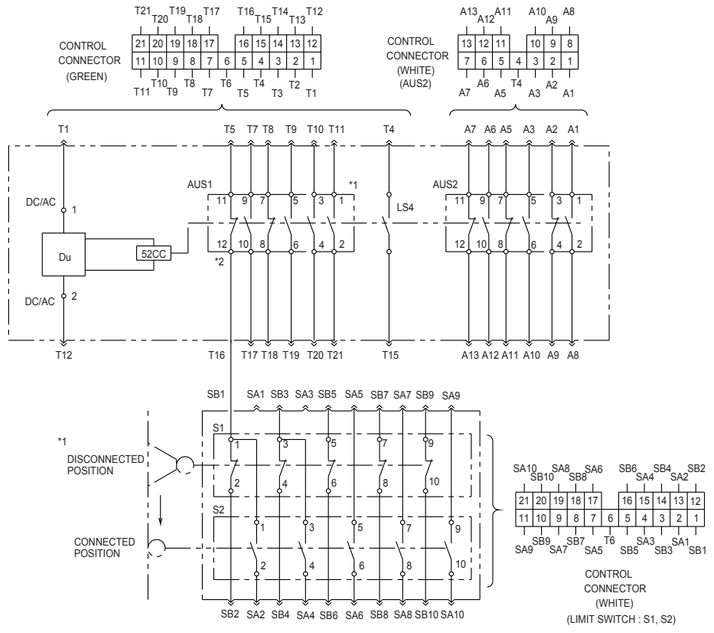
Rating and Specifications of Vacuum Combination Units

Type-Form	Non-Latched Type	UVA-10HAD	UVA-10HBD
	Latched Type	UVA-10HADL	UVA-10HBDL
Application		Motor/Transformer	Capacitor
Rated operational voltage (U_r)		12kV	12kV
Rated Operational Current (I_e)		400A	
Rated Frequency (f_r)		50/60Hz	
Rated Short-circuit Making Current (I_{ma})		50kA	
Rated Short-circuit Breaking Current (I_{sc})		50kA	
Coordination with Fuses, Cut-off Current		36kA	
Rated Short-time Withstand Current (I_k)		5.0kA	
Rated Peak Withstand Current (I_p)		12.5kA	
Rated Duration of Short-circuit (t_k)		1s	
Rated Insulation Level	Power Frequency Withstand Voltage	28kV	28kV
	Impulse Withstand Voltage	75kV	75kV
Rated Duties		Class 120	
Damage Classification		Type C	
Rated Control Voltage	Rated Closing Voltage	100, 110, 115, 200, 220, 230VAC 100,110, 125, 200, 220, 250VDC	
	Rated Tripping Voltage	100, 110, 125, 200, 220, 250VDC	
Closing Time		< 150ms	
Opening Time		< 100ms / < 50ms (Latched)	
Ratings of Auxiliary Contacts	Operational Voltage	480V max. - 48V min.	
	Thermal Current	10A	
	Capacity	AC - 700VA (PF. 0.35), DC - 60W (L/R 150ms)	
Connecting Method		Main & Earthing : Automatic, Control : Manual Plug	
Position		2 Positions ("Connected" & "Disconnected")	
Shutter Provision		Insulation Shutter Provided	
Control Wire (Color and Size)		Yellow, 1.25mm^2	
Approximate Weight		Total 130kg, Withdrawable Portion 90kg	
Standard		IEC 60470 (2000)	

OUTLINE

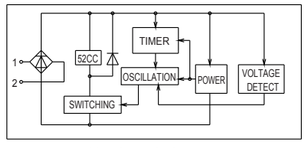


CONNECTION



MARK	DESCRIPTION
52CC	CLOSING COIL OF CONTACTOR
Du	DRIVE UNIT
AUS1	AUXILIARY SWITCH (4NO-2NC)
AUS2	AUXILIARY SWITCH (3NO-3NC)
1 - 2	CONTACTOR TERMINAL NUMBERS
LS4	FUSE BLOWN DETECTOR
S1	LIMIT SWITCH
S2	LIMIT SWITCH

NOTICE
*1: S1 operates only at the disconnected position. (NC)
S2 operates only at the connected position. (NO)



INTERNAL CONFIGURATION OF DRIVE UNIT (Du)