

Chardon Polymer Insulated Loadbreak Switch



APPLICATION & FEATURES

The Chardon Load Break Switch (LBS) allows for safe making and breaking of load currents within a powered system. With manual and remote operation capabilities, the LBS provides strategic disconnection for maintenance or alteration of the network's configuration. They are especially useful to visibly isolate sections of a network without the need to power off the entire system, ensuring flexibility and uninterrupted service.

KEY FEATURES:

- / Solid insulation - environmentally friendly product
- / Spring Throttle Mechanism & Vacuum Interrupter
- / Maintenance Free during its entire lifetime
- / Compact Design
- / Six voltage sensors (capacitive) & Three Current Transformers
- / USB port plus RS232 ports for communication and SCADA system
- / Sectionalizing Option

RATINGS

Model		CKEL-A
Maximum System Voltage	kV	27
Rated Current	A	630
Rated Frequency	Hz	50/60
Mechanical Operation	C-O	5,000
Breaking Capacity		
Short Time Withstand Current (1sec)	kA	12.5
Making Current (peak)	kA	32.5
Cable Charging Current	A	25
Line Charging Current	A	1.5
Impulse Basic Insulation Level (1.2 x 50us)		
Phase to Earth	kV BIL	150
Across Interrupter	kV BIL	150
Power Frequency Insulation Level		
Phase to Earth	kV	60
Across Interrupter	kV	60
Operation Control Cabinet	V	AC 220V or AC 120 (Option)
Model : CKEL	V	DC 24
Ambient Temperature	°C	-30 ~ +70

SOLID INSULATED LOAD BREAK SWITCH

Insulation Material

- / Hydrophobic cycloaliphatic Epoxy resin.
- / Light weight & compact design for easy handling and installation.
- / Improved performance in heavily polluted areas.
- / Increased weather durability and improved aging.

Integrated sensors

- / 3 Imbedded Current Transformers.
- / 6 Imbedded Capacitive Voltage Dividers.

Mechanism

- / Spring Toggled Mechanism.
- / Simple design with quick Close & Open actions.

Vacuum Interrupter

- / High interrupting capacity.
- / Very compact design.

FTU-P200T

FUNCTIONS

- / Fault Current Indication
- / Negative Phase Sequence (NPS) Detection
- / Direction Detection
- / 2nd Harmonic Detection
- / Open Line Detection (Loss of Phase)
- / Phase Sync Check
- / Under/Over Voltage
- / Under/Over Frequency
- / Sectionalizing Function
- / Analog Alarm
- / Multiple Settings Groups

MEASUREMENT

- / Voltage, current, active power, reactive power, power factor, frequency, energy, harmonic, demand current and power.

COMMUNICATION

- / Telecommunication Port: RS232C, RS232/RS485, Ethernet(TCP/IP) options

RECORDING

- / Event Recording: I/O events, Function, System, Fault, PQM, Demand I, P, Q, Max. I,P,Q Event
- / Waveform event recording

CONTROL CABINET

MEASUREMENT

- / Voltage, Current, Active power, Reactive power, Power factor, Frequency, Energy, Harmonic, Demand Current and Power.

COMMUNICATION PORT

- / RS232C, RS485, Ethernet/Fiber Optic, GSM(SMS)
- / -USB port or RS232 port for maintenance.

RECORDING

- / Event recording.
 - I/O(1023 events), Function(1023), System(255), Fault(255), PQM(255), Demand I, P, Q Events(1023), Max. I,P,Q Event(1023).
- / Waveform event recording.
 - 128 samples, 20 cycles (64 samples/40 cycles, 32 samples/80cycles, 16 samples/160cycles)
- / COMTRADE file format rule

COUNTER

- / FTU restarting time.
- / Switch trip, Fault detection, PQM, THD.



FTU-P200T



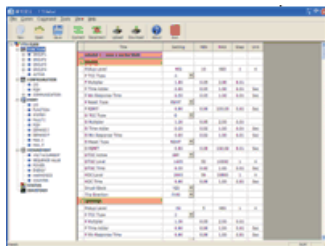
SOFTWARE FTUMan

- / New interface presentation for configuration & settings.
- / Event & Waveform load.
- / Measurement & Status display.
- / Waveform File upload and convert.
- / SCADA monitors protocol data frame between devices.



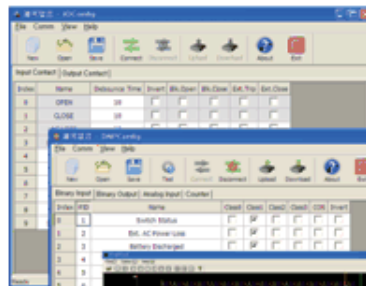
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Read/Write

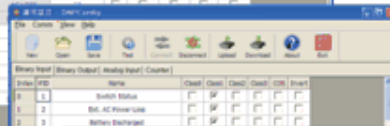


FTUMan - Setting / Configuration

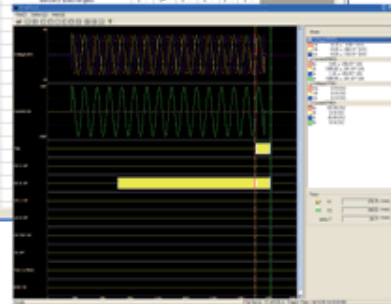
Launch



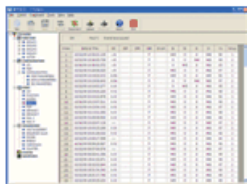
IOConfig



DNPCfg



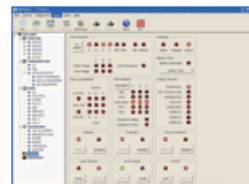
EvalTool



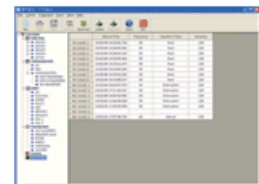
Event



Measurements

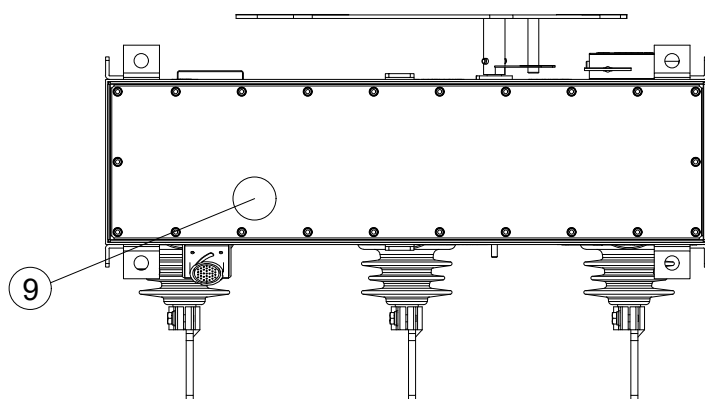
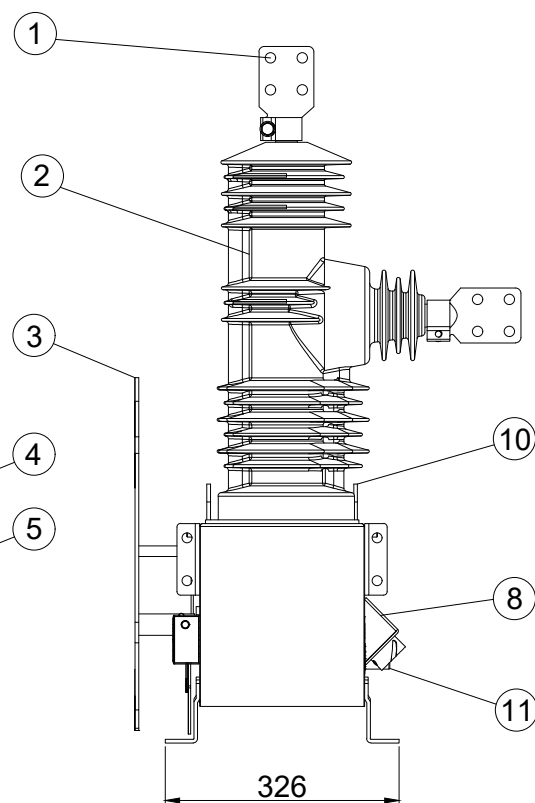
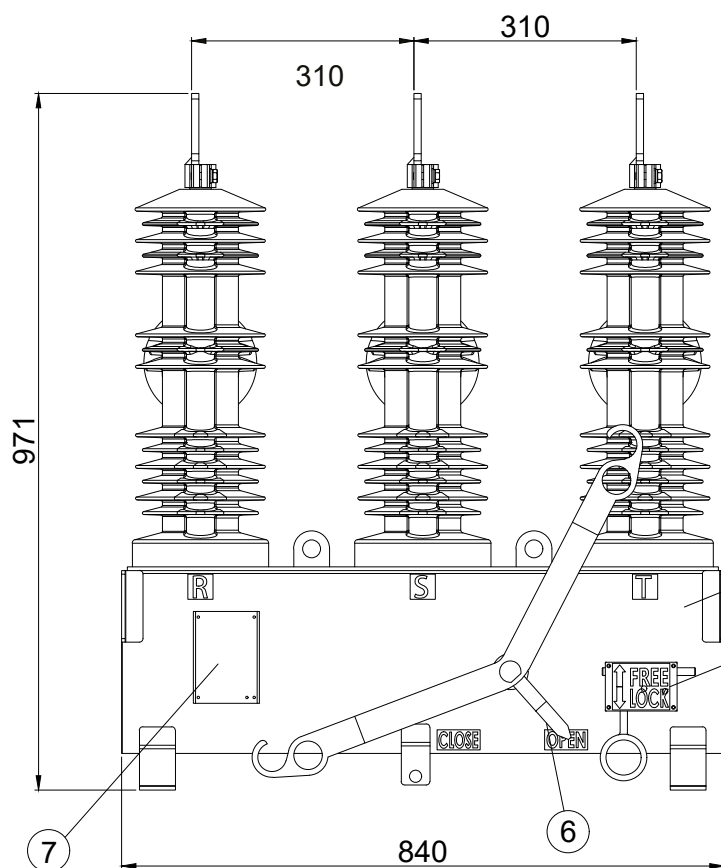


Status



Waveform

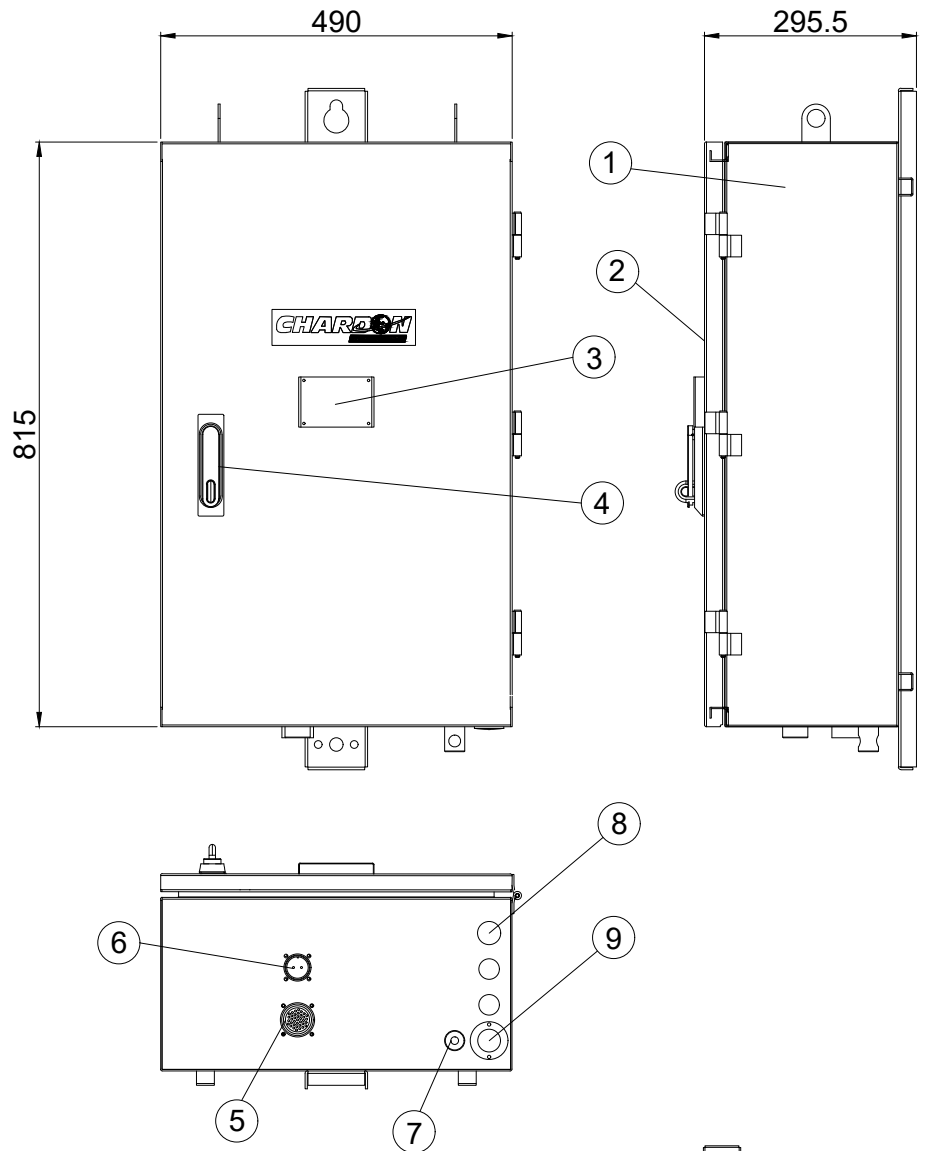
/ BODY



DESCRIPTION	
1	Terminal connector(NEMA 4 Holes)
2	Vacuum interrupter housing(Epoxy resin)
3	Manual operating close and open handle
4	Mechanism box part
5	Manual operating handle locking device
6	Indicator
7	Name plate
8	Control connector
9	Counter
10	Lift ring
11	Ground terminal connector

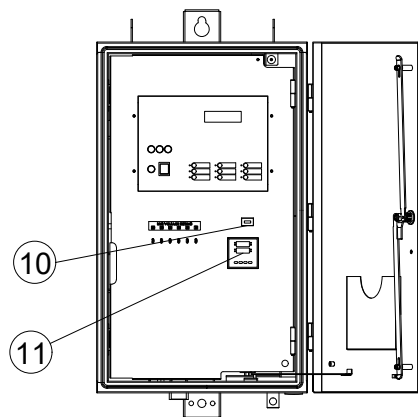
unit:mm

/ CONTROL BOX



DESCRIPTION	
1	Control cabinet (Stainless Steel 304)
2	Door
3	Name plate
4	Pad-lock
5	Control connector
6	Power connector
7	Ground terminal connector
8	Communication Cable Entry Ports
9	Air vent
10	USB connector(Maintenance)
11	Temperature and humidity controller

unit:mm





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