CHARDON GROUP

CKEL

Chardon Polymer Insulated Loadbreak Switch

www.chardongroup.com

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 **Model : CKEL**	V V	AC 220V or AC 120 (Option) DC 24
Ambient Temperature	℃	-30 ~ +70

Revision Date: 01.08.2025

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.

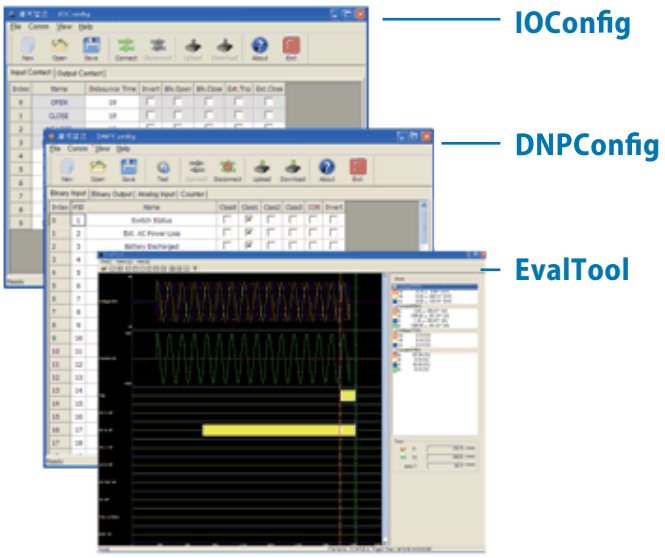
FTU-P200T

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.

FTU-P200T

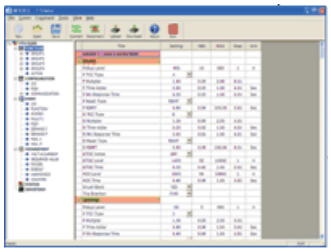
Read/Write



IOConfig

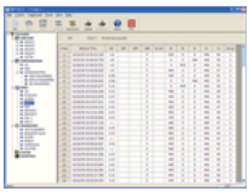
DNPConfig

EvalTool

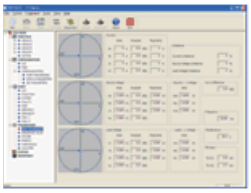


Launch

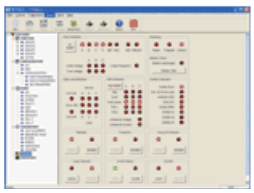
FTUMan - Setting / Configuration



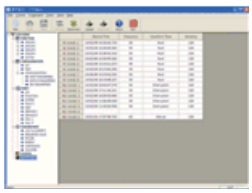
Event



Measurements



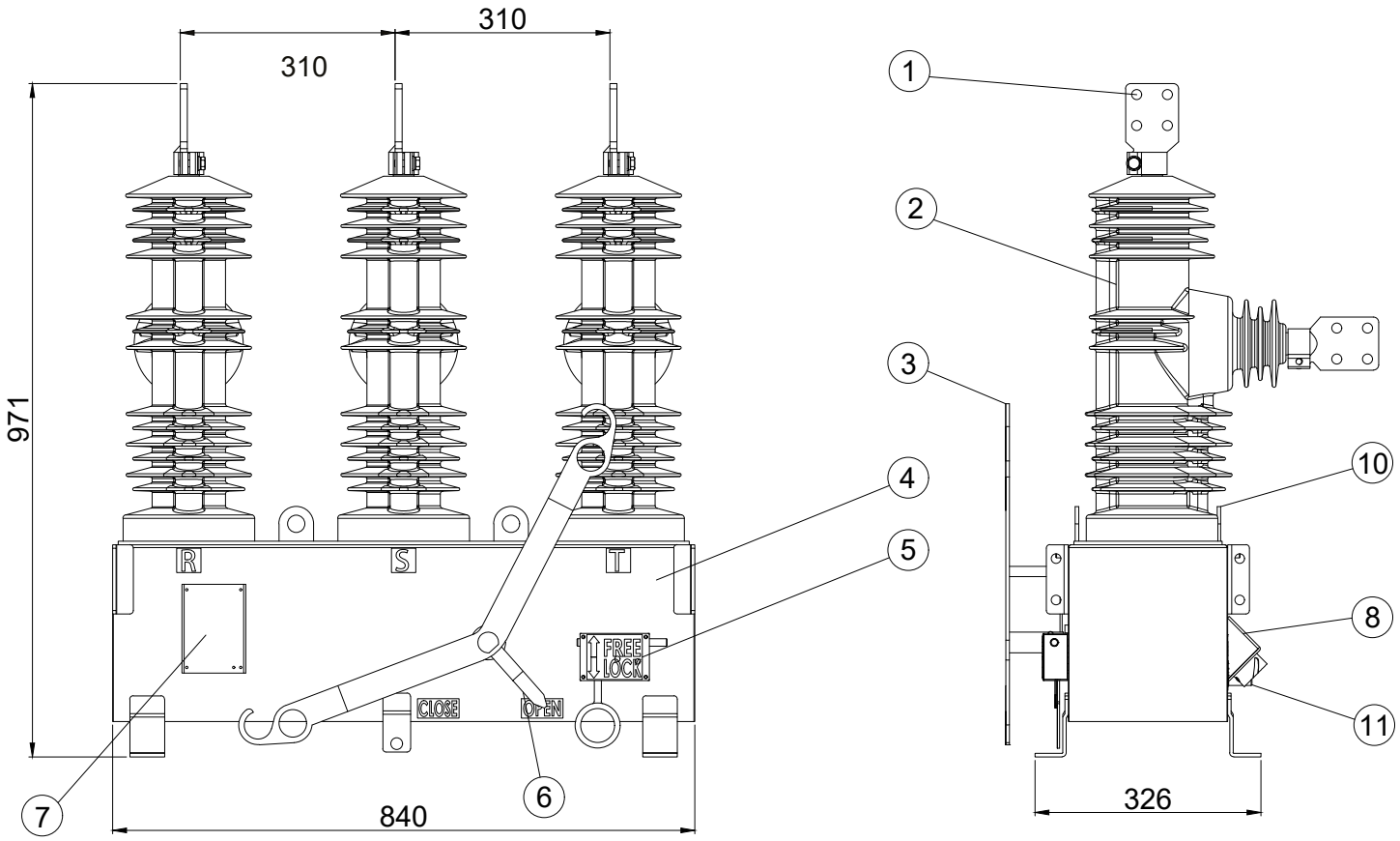
Status

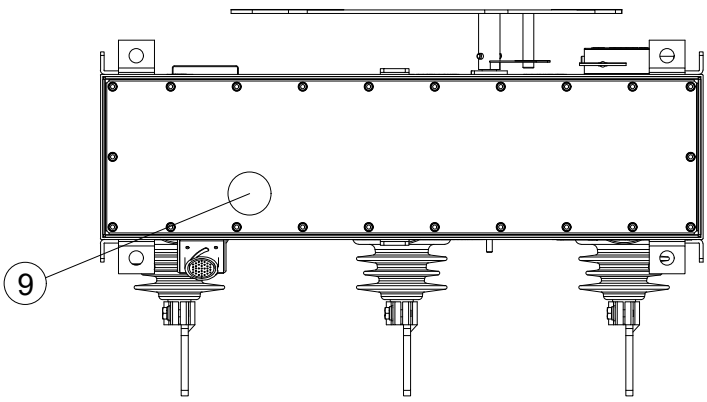


Waveform

DRAWINGS

BODY

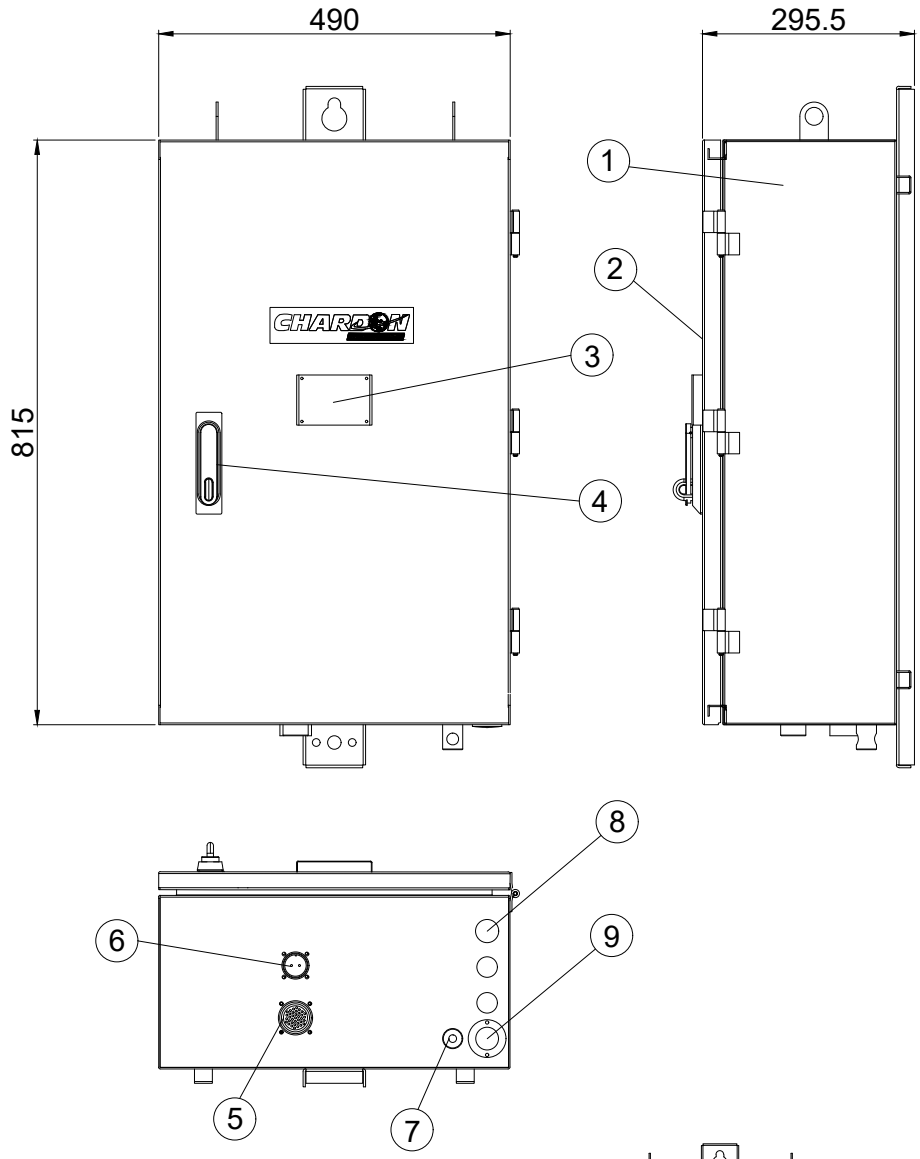




	DESCRIPTION
1	Terminal connector(NEMA 4 Holes)
2	Vacuum interrupter housing(Epoxy resin)
3	Manual operating close and open handle
4	Mechanism box part
5	Manual operating handle locking device
6	Indicator
7	Name plate
8	Control connector
9	Counter
10	Lift ring
11	Ground terminal connector

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

CHARDON GROUP

CHARDON KOREA CORPORATION

191-28, Gajang-ro, Jeongnam-myeon,Hwaseong-si,
Gyunggi-do, 445-962, SOUTH KOREA

www.chardongroup.com • info@chardongroup.com