

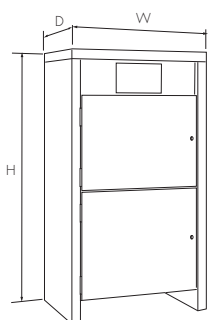
# SWITCH TRIPPING UNITS

- Proven and reliable units
- Digital display to clearly indicate system status
- Comprehensive alarm and indication package
- Choice of vented nickel cadmium or valve regulated lead acid batteries
- Systems available to meet exact project requirements

Cooper Lighting and Safety battery chargers for switchgear tripping and closing have been developed from the experience gained from many years of designing and manufacturing sophisticated battery charging and control equipment. Designed to provide a continuous DC supply for operating switchgear and protection equipment, these latest units are supplied with a comprehensive alarm, metering and indication package as standard. The informative and clear display panel is fixed to the fascia of both wall and floor standing units, with a remote alarm unit as an option. Extremely reliable and easy to install, these units provide a competitively priced solution.



## DIMENSIONS



Cubicle Ref	H (mm)	W (mm)	D (mm)
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Wall (S type)	450	745	270
931	1200	715	680
932	1800	715	680

Dimensions are for guidance only and may be subject to change, depending on precise specification required

### METERING & DISPLAY PANEL

- Simple and easy to read status display
- LCD meter indicating battery voltage and the option of battery current or battery compartment temperature. Voltage is default, others displayed using push buttons (if options specified). Display mode indicated by LED:
  - Volts
  - Amps (optional)
  - Temperature (lead acid battery systems only)
- Charger indication LED's
  - Power On
  - Float Mode
  - Current Limit
  - Full Charge
  - Boost mode (nickel cadmium battery systems only)
- Alarm indication LED's
  - Mains Fail
  - Charge Fail
  - Battery High Volts
  - Battery Low Volts
  - DC Earth Fault

Audible alarm fitted internally, with mute button on display. Common set of volts free changeover contacts for remote signalling and output for remote alarm unit

## SPECIFICATION

General	
<b>Cubicle (30V systems)</b>	Wall mounted 1.2mm zinc coated steel panels with powder coat RAL7032 Light German Grey finish. Removable cover retained by screws. Steel divider separates control gear and battery compartments
<b>Cubicle (110V systems)</b>	1.6mm zinc coated steel panels with powder coat RAL7032 Light German Grey finish. 2 lockable doors and segregated control gear/battery compartments. Cable entries via removable top gland plate
<b>Batteries</b>	Vented nickel cadmium, 25 year design life Valve regulated lead acid, 10 year design life
Charger and controls	
<b>Mains supply</b>	230V ± 10% AC single phase supply, 50 Hz. Other input voltages available
<b>Input control</b>	MCB to BS3871 Pt 1, Type D
<b>Input terminals</b>	DIN rail mounted near to cable entry
<b>Transformer</b>	Double wound with earth screen to BS171
<b>Rectifier</b>	Full wave controlled thyristor/diode bridge
<b>Charger</b>	Constant voltage, current limited type with electronic solid state controller. Voltage controlled to within 1% of setting at ±10% mains supply variations. Full recharge within 24 hours.
<b>Cables</b>	Compliant with BS6231
<b>Output terminals</b>	DIN rail mounted
<b>Temperature compensation</b>	Fitted as standard to lead acid battery units. Charger voltage is automatically adjusted with reference to ambient temperature to optimise charging and battery life. Pre-set for optimum performance at 20°C
<b>Display panel</b>	Composite fascia with LCD display and LED indicators
<b>Alarm warning</b>	Audible alarm fitted internally plus common volt free contacts for use in conjunction with integral on-board power supply to operate the remote alarm unit option

## INSTALLATION NOTES

- A full set of Installation, Operating and Maintenance Instructions is supplied with each system to assist the installer carry out the work efficiently and safely
- Adequate ventilation has been provided in the cubicle to allow a safe dispersal of gases but it is important to remember that when choosing where to locate systems, particularly those with large batteries, attention must be paid to ensuring a build-up of potentially explosive gases is avoided
- Refer to System Design section for ventilation calculations
- Warning notices should be displayed on battery room doors: BATTERY ROOM. EXTINGUISH ALL NAKED LIGHTS BEFORE ENTERING. NO SMOKING

## OPTIONS

- Remote Alarm Unit
- Integral HRC fused distribution board (110V systems only)
- Integral MCB distribution board (110V systems only)

## CATALOGUE NUMBERS

Reference	Nominal Battery Ah Capacity	Nominal System Voltage	Output Voltage Float	Output Voltage Max	No of Cells	Approximate Weight (kg)	Cubicle Type
<b>Systems with Nickel Cadmium Batteries</b>							
ST30/10/*	10	30	36	41.25	25	65	Wall(S)
ST30/18/*	18	30	36	41.25	25	77	Wall(S)
ST30/24/*	24	30	36	41.25	25	79	Wall(S)
ST30/30/*	30	30	36	41.25	25	84	Wall(S)
FST110/10/*	10	110	132.5	151.8	92	230	932
FST110/18/*	18	110	132.5	151.8	92	270	932
FST110/24/*	24	110	132.5	151.8	92	280	932
FST110/30/*	30	110	132.5	151.8	92	294	932
<b>Systems with Valve Regulated Lead Acid Batteries</b>							
FSLRT110/19/*	19	108	122.5	122.5	54	220	931
FSLRT110/29/*	29	108	122.5	122.5	54	250	931
FSLRT110/38/*	38	108	122.5	122.5	54	345	932

- Notes: 1. \* = Specify charger size. Contact us for guidance  
2. Diode regulators can be fitted to control the output terminal voltage to pre-determined limits. Contact Central Systems Technical Sales for details  
3. Other size batteries and chargers are available on request