



## Sealed Nickel–cadmium (NiCd) Battery Switch Tripping Units

FAST Technologies battery chargers for switchgear tripping and closing have been developed in partnership with industry leaders.

Designed to provide a continuous DC supply for operating switchgear and protection equipment, FSTU series units are supplied with status indicators, test points and alarms. The robust, reliable units, with remote monitoring as an option are very simple to install and competitively priced.

One of the most critical components of a switch tripping unit is the battery technology used. FAST Technologies have integrated Nickel Cadmium cells due to their inherent reliability up to 10+ years of service life, the chemistry also eliminates the fear of the unpredictable “sudden death” failure sometimes encountered with Lead-Acid batteries, as well as enabling the user to benefit from savings over regular replacement, maintenance and down-time costs.

Compared with VRLA batteries, NiCd batteries are also more tolerant of electrical abuse such as overcharging, deep or even complete discharge, and offer superior performance at extremes of temperature, with an operating range of – 20 to +50C. NiCd batteries can be discharged and recharged more times than lead-acid batteries before battery cell failure occurs.



### The advantage of NiCd Batteries:

- Fast and simple charge — even after prolonged storage.
- High number of charge/discharge cycles
- Good load performance — the NiCd allows recharging at low temperatures.
- Long shelf life – in any state-of-charge.
- Simple storage and transportation — most airfreight companies accept NiCd without special conditions.
- Good low temperature performance.
- Forgiving if abused — the NiCd is one of the most rugged rechargeable batteries.

### Advantages of a FAST Technologies Battery Tripping units:

- Vented NiCd or VRLA / SLA battery options
- 24V, 30V, 50V and 110V models available
- Standing and non-standing load versions
- High Ambient Temperature versions available up to 70DegC
- Standard range IP42 - Various IP ratings available
- We can build Back plate only or into your own Enclosures
- Small compact design
- Competitive pricing
- Redundancy options for Dual systems
- Proven reliable design
- Design change flexibility
- CE Marked
- All units undergo extensive testing including Thermographic surveys before leaving the factory.
- FAST lead times
- Standard 1 year Warranty
- FAST Customer Support

DC SYSTEMS

# Sealed Nickel–cadmium (NiCd) Battery Switch Tripping Units

## Standard Specification

### Input Voltage

230 volts, 50Hz, single phase (other voltages on request)

### Output Voltage

Standard nominal system voltages of 24,30,50 or 110 (other voltages on request).

### Charger

Fully automated, maintenance free. Solid state constant current type with current limit. Inherently protected against low battery voltage, reversed battery connection and short circuit conditions.

### Charger Output Regulation (Ripple)

Float voltage controlled to within +/- 1% irrespective of AC mains supply variations of +/- 6% and charger output current variation from 0 to 100%. Ripple voltage is limited to a maximum of 2%rms of the system DC nominal voltage.

### Recharge Time

Chargers rated to provide 80% recharge within 8 hours and full charge in under 14 hours following a full rated discharge. Faster customised charging schemes available on request.

### Instrumentation

Voltmeter, Load and Charger Ammeters available - 72mm DIN types to BS89 class 1.5.

Model Reference	DC Voltage	Tripping Current	Standing Load	Battery Capacity
FSTU/24.2	24V	30A	-	2.5Ah
FSTU/SL224.2	24V	30A	2A	2.5Ah
FSTU/24.4	24V	50A	-	4.5Ah
FSTU/SL224.4	24V	50A	2A	4.5Ah
FSTU/24.7	24V	65A	-	8Ah
FSTU/SL224.8	24V	65A	2A	8Ah
FSTU/30.2	30V	30A	-	2.5Ah
FSTU/SL230.2	30V	30A	2A	2.5Ah
FSTU/30.4	30V	50A	-	4.5Ah
FSTU/SL230.4	30V	50A	2A	4.5Ah
FSTU/30.7	30V	65A	-	8Ah
FSTU/SL230.8	30V	65A	2A	8Ah
FSTU/50.2	50V	30A	-	2.5Ah
FSTU/SL150.2	50V	30A	1A	2.5Ah
FSTU/SL150.2	50V	30A	2A	2.3Ah
FSTU/50.5	50V	50A	-	4.5Ah
FSTU/SL150.4	50V	50A	1A	4.5Ah
FSTU/50.8	50V	65A	-	8Ah
FSTU/SL150.8	50V	65A	1A	8Ah
FSTU/110.2	110V	30A	-	2.5Ah
FSTU/SL5110.2	110V	30A	0.5A	2.5Ah
FSTU/SL1110.2	110V	30A	1A	2.5Ah
FSTU/SL2110.2	110V	30A	2A	2.5Ah
FSTU/110.4	110V	50A	-	4.5Ah
FSTU/SL5110.4	110V	50A	0.5A	4.5Ah
SL1110.4	110V	50A	1A	4.5Ah
FSTU/110.8	110V	65A	-	8Ah
FSTU/SL5110.8	110V	65A	0.5A	8Ah

## Monitoring, Control & Displays Options

- Mains On
- Charger Healthy
- Mains Fail
- Charger Fail
- Low Volts
- High Volts
- Earth Fault +/-
- Circuit Breaker Fault
- Remote Alarm Facility
- MCB or Fuse Protection
- Temperatures
- Compensation Controls
- Other Battery Types Available (SLA, VRLA, VENTED-NiCd)
- Battery Boost (Manual/Automatic)
- Integrated Control & Alarms PCB's
- Surge Protection
- RFI Filter

DC SYSTEMS



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