

DCV/CV Range

Single Phase Input Charger



Built for Demanding Industrial Applications

BATTERY FLEXIBILITY

Supports VRLA, vented lead-acid, or NiCad battery technologies, enabling flexible system configuration to suit site requirements.

INTELLIGENT CONTROL

Includes a monitoring and control interface with touchscreen option, and configurable alarms for effective remote supervision.

HIGH EFFICIENCY

Delivers up to 93% efficiency at full load, helping to reduce energy losses and operating costs.



Custom Engineering

Available in a wide range of output configurations, with adjustable current limits to meet specific load demands. Supported by in-house engineering expertise, enabling tailored system design, integration support, and adaptation to complex or non-standard requirements.

Standard Specifications - AC Input

Supply Phase & Voltage	Single Phase 230V - special voltages also available on request
Supply Voltage Variation	± 10%
Supply Frequency	50 / 60Hz
Supply Frequency Variation	± 6% to meet output specification, ± 10% transient
Protection & Isolation	MCCB or MCB 'D' characteristic
Power Factor	0.8 lagging at full load & float voltage setting

Standard Specifications - DC Output

Standard Voltages Available	24VDC, 48/50VDC, 110VDC - special voltages also available on request
Voltage Setting Ranges	Float 100 - 125%, Equalise 110 - 135%, Commission 120 - 145%
Static Voltage Regulation	± 1% voltage, for output voltages up to 120% of nominal
Current Limit Setting Range	10 - 100% of rated current for float, equalise and commission settings
Static Current Regulation	± 2%
Regulation Characteristic	IU according to DIN41773
Ripple Voltage	<1% of nominal DC voltage rating regulation characteristic when connected to a battery of Ah capacity 4 x charger output rating
Efficiency	75% to 93% depending on rating & any options fitted

Mechanical Specifications

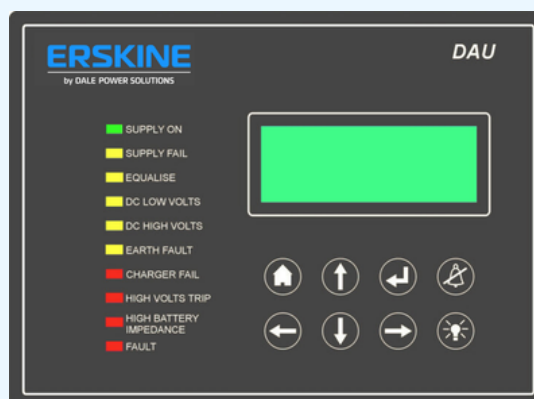
Protection Rating	IP20-IP44 available
Enclosure Finish	Light grey RAL7035 textured
Cooling	Natural convection
Audible Noise Level	55 - 65dBA depending on rating and load
Cable Entry	Top, bottom or custom arrangements available

General	
Operating Temperature Range	-10°C to +40°C
Operating Temperature De-Rate	Up to 55°C de-rate output current by 1% per 1°C
Storage Temperature Range	-20°C to +70°C
Operating Altitude	0 to 1000m
Operating Altitude De-Rate	Up to 3000m de-rate output current by 1.9% per 500m
Operating Humidity	10% to 90% RH—non condensing
Safety	BS EN 62040-1
EMC	BS EN 62040-2

Standard Alarm & Monitoring DAU - LCD & LED Display Option	
Standard Systems	Equipped with the Erskine DAU (DC Alarm Unit) module with 8 push buttons for display
Controls	Page navigation, configuration and charger mode control. LCD display with 4 line x 20 characters
Display	Providing charger output voltage, current and status information
Alarm & Status Indications	10 dedicated LED's providing 'Supply On', 'Supply Fail', 'Equalise', 'DC Low Volts', 'DC High Volts', 'Earth Fault', 'Charger Fail', 'High Voltage Trip', 'Fault' indications, and 'High Battery Impedance' (as an additional option)
Remote Alarm	Configurable SPCO volt free relay contact
Automatic Equalise Charge	Provides automatic timed equalise charge following a charge failure
Flexible Configuration	Configurable alarm trip, reset and timers. Individual alarms selectable to be auto reset or latched. 5 spare auxiliary alarm inputs. Selectable mapping of alarms to remote relay
Remote Alarm Relay Option	Optional remote alarm relay for up to 8 individual relay contacts

Standard Alarm & Monitoring DAU - LCD & LED Display Option

Display Example



Alarm & Monitoring DAUS2 - Colour TFT Touch Screen Display Options

Display

Colour high resolution (800 x 480 dpi) touch screen graphics display in 7 inch size format. Display also available in an optional 10 inch format.

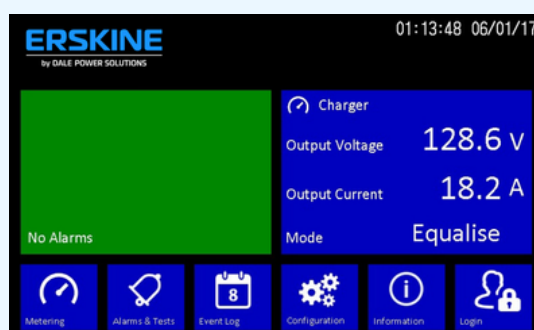
Functionality

Provides the same capability as the LCD/LED DAU display in terms of alarms, controls and configurability with the added benefits of a modern touch screen interactive colour TFT display and intuitive navigation.

Additional Functionality

Event Log Alarm history log, audible alarm, event & alarm log transferable via SD card.

Display Example



Standard Range 24VDC & 48/50VDC

Current Rating (Amps)	24VDC		48/50VDC	
	Dimensions (mmH x mmW x mmD)	Weight (Kg)	Dimensions (mmH x mmW x mmD)	Weight (Kg)
6	600 x 600 x 350	53	600 x 600 x 350	58
10	600 x 600 x 350	56	600 x 600 x 350	64
16	600 x 600 x 350	60	600 x 600 x 350	72
20	600 x 600 x 350	63	600 x 600 x 350	78
25	600 x 600 x 350	67	600 x 600 x 350	86
32	600 x 600 x 350	72	800 x 600 x 350	99
40	600 x 600 x 350	77	800 x 600 x 350	111
50	800 x 600 x 350	88	800 x 600 x 350	125
63	1000 x 600 x 350	100	2065 x 600 x 600	223
80	2065 x 600 x 600	158	2065 x 600 x 600	248
100	2065 x 600 x 600	172	2065 x 600 x 600	277
125	2065 x 600 x 600	189	2065 x 600 x 600	313
160	2065 x 600 x 600	214	2065 x 600 x 600	364
200	2065 x 600 x 600	242	2065 x 600 x 600	423
250	2065 x 600 x 600	277	2065 x 600 x 600	496

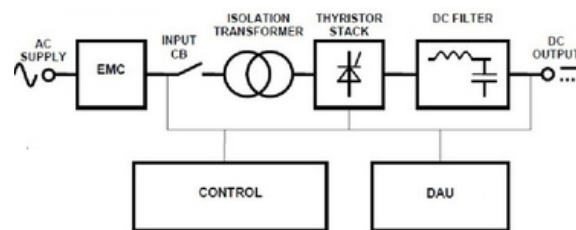
Standard Range 110VDC		
Current Rating (Amps)	110VDC	
	Dimensions (mmH x mmW x mmD)	Weight (Kg)
6	600 x 600 x 350	68
10	600 x 600 x 350	81
16	600 x 600 x 350	101
20	800 x 600 x 350	117
25	800 x 600 x 350	133
32	2065 x 600 x 600	205
40	2065 x 600 x 600	230
50	2065 x 600 x 600	626
63	2065 x 600 x 600	304
80	2065 x 600 x 600	322
100	2065 x 600 x 600	355
125	2065 x 600 x 600	404

OPTIONS

All DCV/CV range products can be custom designed to customer requirements.

- Additional analogue metering
- Extra configurable remote alarm relay contacts
- Special DC output voltages available, optional 12VDC, 30VDC, 60VDC, 125VDC, 220VDC, 240VDC
- Special AC input voltage available, optional 380VAC, 415VAC, 440VAC, 480VAC, 690VAC
- Customer specific distribution isolators, circuit breakers, & fuses
- Charger and/or battery isolation
- Anti-condensation heaters
- 2mV CCITT smoothing for 24, or 48/50VDC
- Output blocking diodes for parallel operation
- Counter EMF diode systems for loads sensitive to high charge voltages
- Battery charge voltage temperature compensation (NTC)
- Different battery technologies i.e. VRLA, NiCad or Lithium Ion
- Low DC voltage battery/load disconnect facility
- Battery autonomies to suit customer requirements
- Battery fuse boxes, enclosures and stands
- Increased panel protection (IP) ratings available
- Battery reverse polarity protection
- Top and/or bottom cable entry
- Custom cubicle sizes for more complex solutions
- Custom enclosure paint colours to meet specifications
- Remote monitoring and control via MODBUS
- Panel lighting
- Battery string impedance
- Network Rail PADS approved
- National Grid Type Registered

Single Line Diagram





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