

Features

- 24V, 48/50V or 110V nominal
- Up to 63 Amps per charger
- Constant voltage/current limited output
- Standard alarm module
- LCD metering
- LED indications
- Use with lead acid or nickel cadmium batteries
- Parallel operation capability
- Input and output voltage options
- Custom alarm configuration options
- Control & distribution options
- Enclosure & paint colour options



Product Range

Standard Range & Base Enclosures

Current Rating	24VDC	48/50VDC	110VDC
6A	WM3	WM3	WM3
10A	WM3	WM3	WM3
16A	WM3	WM3	WM3
20A	WM3	WM3	WM4
25A	WM3	WM3	WM4
32A	WM3	WM4	FSA66
40A	WM3	WM4	FSA66
50A	WM4	WM4	FSA66
63A	FSA66	FSA66	FSA66

Enclosure Type	Style	Height	Width	Depth
WM3	Wall Mounting	600mm	600mm	350mm
WM4	Wall Mounting	800mm	600mm	350mm
FSA66	Floor Standing	2050mm	600mm	623mm

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Registration No 941798 England

Standard Specifications

AC Input

Supply phase & voltage:	Single phase 230V
Supply voltage variation:	+/- 10% to meet output specification
Supply frequency:	50 / 60Hz
Supply frequency variation:	+/-6% to meet output specification, +/- 10% transient
Protection and isolation:	MCB, D characteristic
Power factor:	0.8 lagging at full load and float voltage setting

DC Output

Nominal voltages available:	24VDC, 48/50VDC, 110VDC
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% rms of nominal dc voltage rating when connected to a battery of Ah capacity
Efficiency:	75% to 93% depending on rating and any options fitted

Mechanical

Protection rating:	IP40
Enclosure finish:	Pale grey RAL7035 textured
Cooling:	Natural convection
Audible noise level:	55—65dBA depending on rating and load
Cable entry:	Bottom for floor standing enclosures Top wall mounted enclosures

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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– 1-2
EMC:	BS EN 62040-2

Alarm & Monitoring DAU

Standard systems:	Equipped with the Erskine DAU (DC Alarm Unit) module.
Controls:	Equipped with 8 pushbuttons for display page navigation, configuration and charger mode control.
Display:	LCD display with 4 line x 20 characters 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', 'High Battery Impedance', and 'Fault' indications.
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 e 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

DCV Charger—Typical Internal Layout



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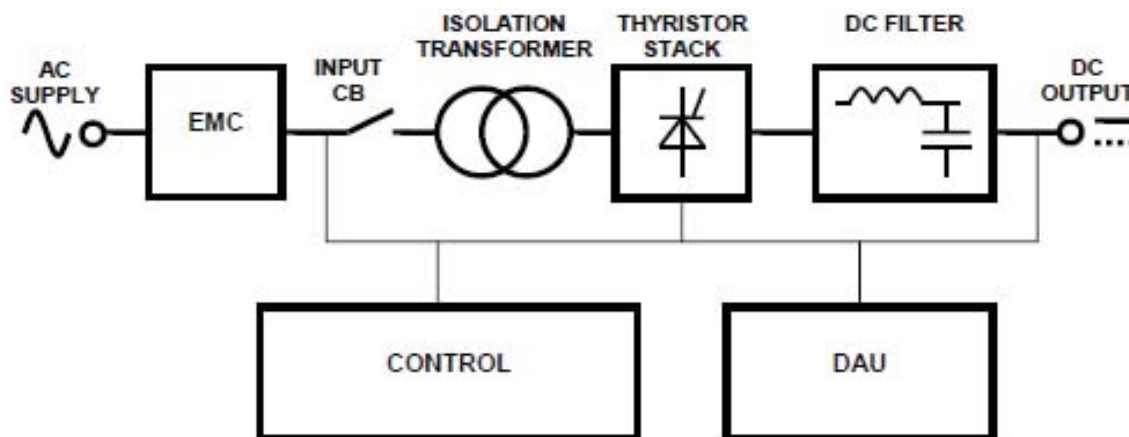
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Options

- Additional analogue metering
- Extra configurable remote alarm relay contacts
- Special DC output voltages, optional nominal 12VDC, 30VDC, 60VDC, 120VDC
- Special AC input voltages, optional nominal 220—250VAC, 380—440VAC, 480VAC, 660VAC
- Customer specific distribution isolators, circuit breakers or fuses
- Charger and/or battery isolation
- Anti condensation heaters
- 2mV CCITT smoothing for 12, 24, 40 or 48/50VDC output systems
- Output blocking diodes for parallel operation
- Counter EMF 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, vented lead acid or wet NiCd
- Low DC voltage load disconnect facility
- Battery autonomies to suit customer requirements
- Battery fuse boxes, enclosures and stands
- Battery reverse polarity protection increased panel protection ratings up to a maximum of IP54
- Top or bottom cable entry
- Custom cubicle sizes for more complex solutions and special enclosure paint colours
- Larger cubicle sizes for more complex solutions

DCV Charger—Single Line Diagram



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DC THYRISTOR SYSTEMS DATASHEET

Erskine Single Phase Input CV Range

Features

- 24V Charger ratings available from 80A up to 250Amps output
- 48/50V Charger ratings available from 80A up to 125Amps output
- 220V Charger ratings available from 10 to 25Amps output
- Constant voltage/current limited output
- Standard alarm module
- LCD metering
- LED indications
- Use with lead acid or nickel cadmium batteries
- Parallel operation capability
- Input and output voltage options
- Custom alarm configuration options
- Control & distribution options
- Enclosure & paint colour options



Product Range

Standard Range & Base Enclosures

Current rating	24VDC	48/50VDC	220VDC
10 to 25A	10 to 63Amps available in the DCV product range		FSA66
32 to 63A			
80A	FSA66	FSA66	
100A	FSA66	FSA66	
125A	FSA66	FSA66	
160A	FSA66		
200A	FSA66		
250A	FSA66		

Enclosure Type	Style	Height	Width	Depth
FSA66	Floor Standing	2050mm	600mm	623mm

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Regulation characteristic:	IU according to DIN41773
Ripple voltage:	<1% rms of nominal dc voltage rating when connected to a battery of Ah capacity 4 x charger output rating
Efficiency:	75% to 93% depending on rating and any options fitted

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CV Charger—Typical Internal View



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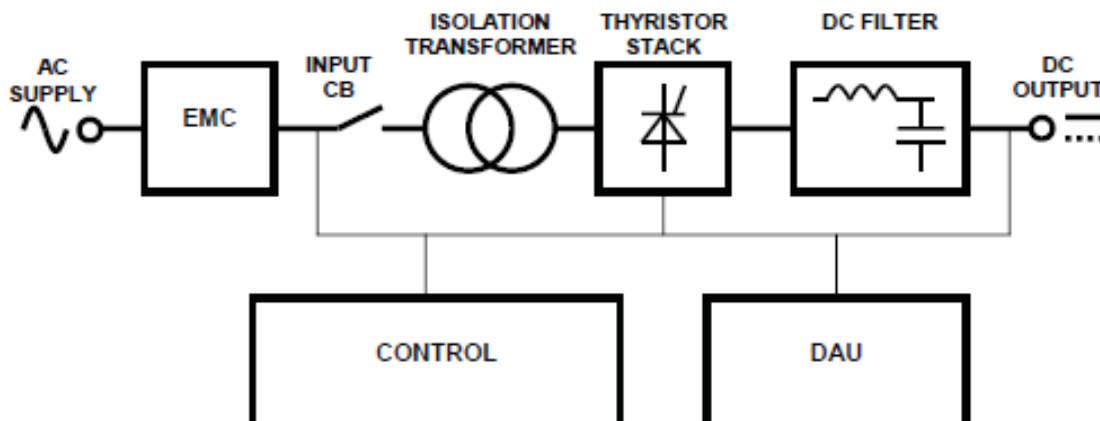
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