

HIGH FREQUENCY CHARGERS

High Frequency Chargers

- Mountable on board, wall mounted or on stand



Advantages :

- Reduced cost-price
- Adaptable for all types of batteries
- Reduced heating
- Less water consumption
- Longer battery life-time
- Reduced battery maintenance
- Charging is independant of mains Voltage variations
- Simple error indication
- Short charging times
- Optimized charging curves
- Energy savings > 85% > batterie
- Reduced weight and size
- Mountable on board, wall mounted or on stand
- Superior safeties and self protection
- Automatic ON/OFF safety fonction

Options :

- thermal device : thermal compensation of the battery Voltage in comparison with the exterior battery temperature.

HIGH FREQUENCY CHARGERS

High Frequency Charger BC 1

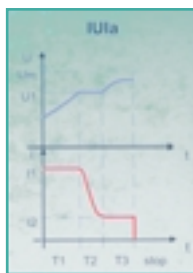


CE EN 60335-1 • EN60335-2-29
EN 55014 • IEC 1000-4-2 • IEC 1000-4-4

Technical features

- 1) input voltage: 230 ± 10 % VAC
- 2) input frequency: 50-60 Hz
- 3) Efficiency: > 85 %
- 4) Absorbed minimum power: < 0.5 mA
- 5) Operating temperature: from -20 à + 50°C
- 6) Output short-circuit protection
- 7) Inverse polarity protection (fuse)
- 8) Charging curve: programmable
- 9) Accuracy of output voltage: ± 0.5 %
- 10) External LED indicator
- 11) Audible alarm
- 12) Cooling: forced
- 13) Case : Base in Aluminium, Cover in ABS
- 14) Size: 285x105x75 mm
- 15) Weight: 1.5 kg
- 16) Enclosure class: IP20

Charging curves BC 1



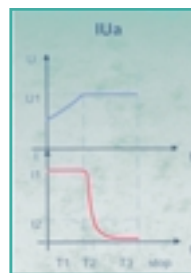
Curve type:

- O1: Pb Acid Low Capacity
- O2: Pb Acid High Capacity
- O9: Pb Gel Low Capacity
- O10: Pb Gel Low Capacity



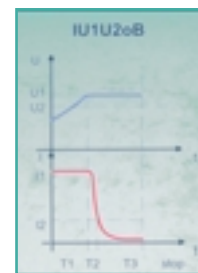
Curve type:

- O3: Pb Acid Low Capacity
- O4: Pb Acid High Capacity
- O11: Pb Gel Low Capacity
- O12: Pb Gel Low Capacity



Curve type:

- O5: Pb Acid Low Capacity
- O6: Pb Acid High Capacity
- O13: Pb Gel Low Capacity
- O14: Pb Gel Low Capacity



Curve type:

- O7: Pb Acid Low Capacity
- O8: Pb Acid High Capacity
- O15: Pb Gel Low Capacity
- O16: Pb Gel Low Capacity

code	type	Nominal battery voltage	Output Current	Recommended battery capacity
F2AM..	BC1 12-15	12 V	15 A	100-160 Ah
	BC1 12-30	12 V	30 A	160-240 Ah
	BC1 12-35	12 V	35 A	180-300 Ah
F2BL..	BC1 24-20	24 V	20 A	80-160 Ah
	BC1 24-25	24 V	25 A	150-200 Ah
	BC1 24-30	24 V	30 A	200-250 Ah

.. = curve type / Other models are available on request

HIGH FREQUENCY CHARGERS

High Frequency Charger NG1

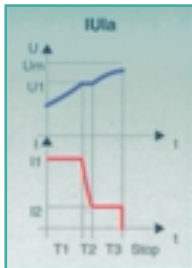


CE EN 60335-1 • EN60335-2-29
EN 55014 • IEC 1000-4-2 • IEC 1000-4-4

Technical features

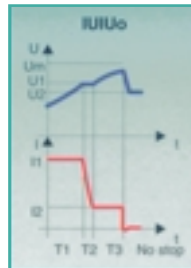
- 1) input voltage: 230 ± 10 % VAC
- 2) input frequency: 50-60 Hz
- 3) Efficiency: > 85 %
- 4) Absorbed minimum power: < 2W
- 5) Current absorbed from battery: < 0.2 mA
- 6) Operating temperature: from -20 à + 50°C
- 7) Output short-circuit protection
- 8) Inverse polarity protection (fuse)
- 9) Charging curve: programmable
- 10) Accuracy of output voltage: ± 0.5 %
- 11) Thermal compensation of battery voltage with temperature sensor (optional)
- 12) External LED indicator
- 13) Audible alarm
- 14) Auxiliary contacts of mains presence and end of charge
- 15) Cooling: forced
- 16) Case : Base in Aluminium, Cover in ABS
- 17) Size: 300x160x80 mm
- 18) Weight: 2.2 kg
- 19) Enclosure class: IP20

Charging curves NG 1



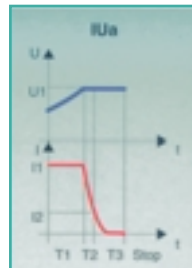
Curve type:

O1: Pb Acid Low Capacity
O2: Pb Acid High Capacity
O9: Pb Gel Low Capacity
10: Pb Gel Low Capacity



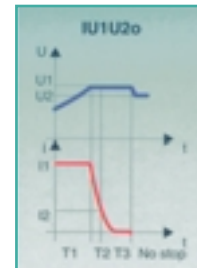
Curve type:

O3: Pb Acid Low Capacity
O4: Pb Acid High Capacity
11: Pb Gel Low Capacity
12: Pb Gel Low Capacity



Curve type:

O5: Pb Acid Low Capacity
O6: Pb Acid High Capacity
13: Pb Gel Low Capacity
14: Pb Gel Low Capacity



Curve type:

O7: Pb Acid Low Capacity
O8: Pb Acid High Capacity
15: Pb Gel Low Capacity
16: Pb Gel Low Capacity

code	type	Nominal battery voltage	Output Current	Maximum absorbed capacity	Recommended battery capacity
F6AQ..	NG1 12-50	12 V	50 A	850 W	260-500 Ah
F6BM..	NG1 24-30	24 V	30 A	1000 W	160-300 Ah
F6CH..	NG1 36-20	36 V	20 A	1000 W	100-200 Ah
F6EG..	NG1 48-15	48 V	15 A	1000 W	80-150 Ah

.. = curve type / Other models are available on request

HIGH FREQUENCY CHARGERS

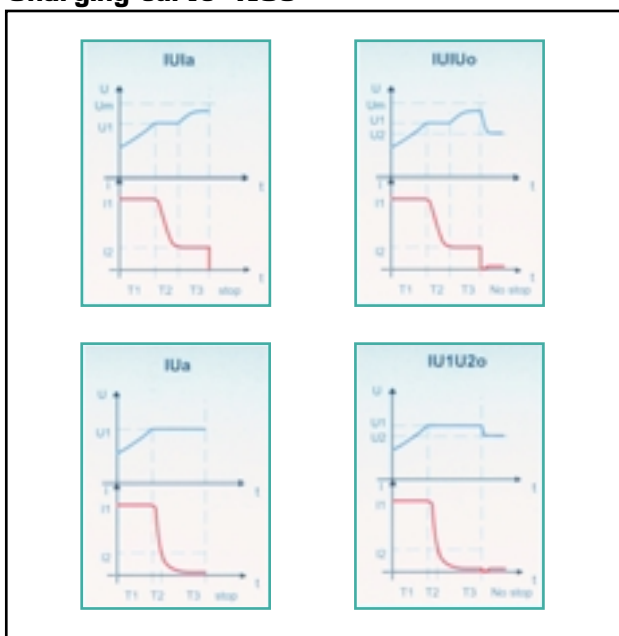
High Frequency Charger NG3



Technical features

- 1) input voltage: 230 ± 10 % VAC
- 2) input frequency: 50-60 Hz
- 3) Efficiency: > 85 %
- 4) Current absorbed from battery: < 0.5 mA
- 5) Operating temperature: from -20 à + 50°C
- 6) Output short-circuit protection
- 7) Inverse polarity protection (fuse)
- 8) Charging curve: programmable
- 9) Accuracy of output voltage: ± 0.5 %
- 10) Thermal compensation of battery voltage with temperature sensor (optional)
- 11) External LED indicator
- 12) Audible alarm
- 13) Auxiliary contacts of mains presence and end of charge
- 14) Cooling: forced
- 15) Case : Base in Aluminium, Cover in ABS
- 16) Size: 425x215x90 mm
- 17) Weight: 5.5 kg
- 18) Enclosure class: IP20

Charging curve NG3



CE EN 60335-1 • EN60335-2-29
EN 55014 • IEC 1000-4-2 • IEC 1000-4-4

code	type	Nominal battery voltage	Output Current	Recommended battery capacity
F7AV..	NG3 12-100	12 V	100 A	500-1000 Ah
F7BQ	NG3 24-50	24 V	50 A	250-500 Ah
F7BT..	NG3 24-80	24 V	80 A	400-800 Ah
F7CR..	NG3 36-60	36 V	60 A	300-600 Ah
F7EQ..	NG3 48-50	48 V	50 A	250-500 Ah
F7GN..	NG3 60-35	60 V	35 A	175-350 Ah
F7HM..	NG3 72-30	72 V	30 A	150-300 Ah
F7IL..	NG3 80-27	80 V	27 A	135-270 Ah
F7LL..	NG3 84-25	84 V	25 A	125-250 Ah
F7MI..	NG3 96-22	96 V	22 A	110-220 Ah
F7NH..	NG3 108-20	108 V	20 A	100-200 Ah
F7PH..	NG3 120-18	120 V	18 A	90-180 Ah
F7QG..	NG3 132-16	132 V	16 A	80-160 Ah
F7RG..	NG3 144-15	144 V	15 A	75-150 Ah
F7WG..	NG3 156-14	156 V	14 A	70-140 Ah
F7SF..	NG3 168-13	168 V	13 A	65-130 Ah
F7TF..	NG3 180-12	180 V	12 A	60-120 Ah
F7UE..	NG3 192-11	192 V	11 A	55-110 Ah
F7VE..	NG3 216-10	216 V	10 A	50-100 Ah

..= curve type / Other models are available on request

HIGH FREQUENCY CHARGERS

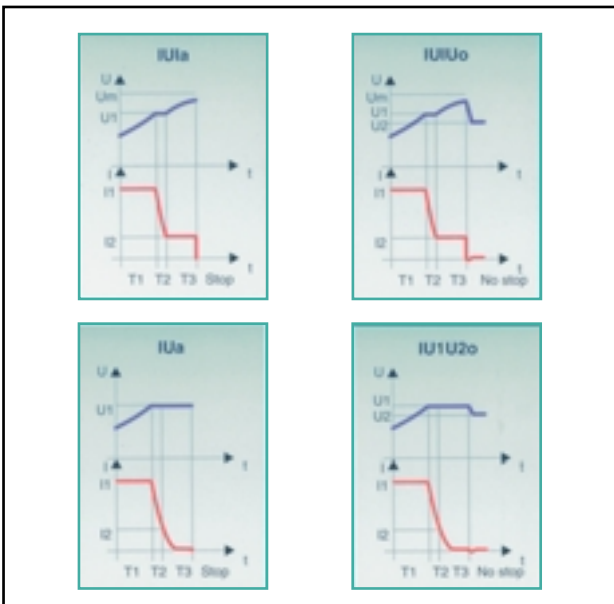
High Frequency Charger three-phase NG5 - NG7 - NG9



Technical features

- 1) input voltage: 400 ± 15 % VAC
- 2) input frequency: 50-60 Hz
- 3) Efficiency: > 85 %
- 4) Absorbed minimum power: < 10W
- 5) Current absorbed from battery: < 0.5 mA
- 6) Operating temperature: from -20 à + 50°C
- 7) Output short-circuit protection
- 8) Inverse polarity protection (fuse)
- 9) Charging curve: programmable
- 10) Accuracy of output voltage: ± 0.5 %
- 11) Thermal compensation of battery voltage with temperature sensor (optional)
- 12) External LED indicator
- 13) Audible alarm
- 14) Auxiliary contacts of mains presence and end of charge
- 15) Cooling: forced
- 16) Case : Base in Aluminium, Cover in ABS
- 17) Size: 520x260x100 mm
- 18) Weight: 9 kg
- 19) Enclosure class: IP20

Charging curve NG5 - NG7 - NG9



CE EN 60335-1 • EN60335-2-29
EN 55014 • IEC 1000-4-2 • IEC 1000-4-4

code	type	Nominal battery voltage	Output Current	Maximum absorbed capacity	Recommended battery capacity
F8BV..	NG5 24-100	24 V	100 A		500-1000 Ah
F8CV..	NG5 36-100	36 V	100 A		500-1000 Ah
F8ET..	NG5 48-80	48 V	80 A	95 A	400-800 Ah
F8EV..	NG7 48-100	48 V	100 A		400-1000 Ah
F8HR	NG5 72-55	72 V	55 A	65 A	275-550 Ah
F8HS	NG7 72-70	72 V	70 A	85 A	280-700 Ah
F8HV	NG9 72-100	72 V	100 A		400-960 Ah
F8IQ	NG5 80-50	80 V	50 A	60 A	250-500 Ah
F8IS	NG7 80-65	80 V	65 A	75 A	325-650 Ah
F8IT	NG9 80-80	80 V	80 A	95 A	320-780 Ah
F8LP	NG5 84-45	84 V	45 A	55 A	225-450 Ah
F8MO	NG5 96-40	96 V	40 A	50 A	200-400 Ah
F8PM	NG5 120-30	120 V	30 A	35 A	150-300 Ah

.. = curve type / Other models are available on request

HIGH FREQUENCY CHARGERS

Multi-Tension Charger



CE EN 60335-1 • EN60335-2-29
EN 55014 • IEC 1000-4-2 • IEC 1000-4-4

Technical features

- Display : Voltage & Amp.
- Auxiliary contacts of mains presence and end of charge
- Cooling: forced
- Case : Base in Aluminium, Cover in ABS
- Size: 425x215x90 mm
- Weight: 5.5 kg
- Input voltage: 3 x 400V