





Batteries, Battery chargers and Accessories

We are a Company specialized in the distribution and processing of exclusive products in the field of batteries.

A single partner saves time and money.



The central warehouse

is equipped with an integrated logistics system to 2500 pallet spaces, to deliver shipments within 24 hours of receiving your order.



Not only a quality battery but also a correct battery charger along with the best accessories to ensure energy over time.



All products on the catalogue are managed in stock. Distributors have access to our availabilities in real time.



The REGENERATION of the batteries with WARRANTY is an absolute innovation in the field.



98% of our customers are satisfied with our service and products.



Union Battery Service has a certified strength index among the highest in the sector:

we are not interested in the hit and run, but in following our customers over time.

ENERGY, EVERYWHERE, ALWAYS, SOON











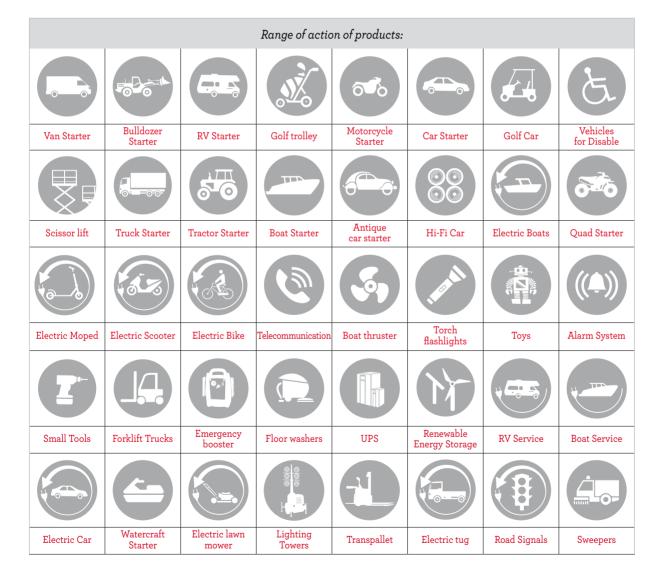


Commercial Assistance

The sales department is at complete disposal to ensure customers timely and complete responses, make quotations and place prompt orders.

ON LINE

The new website contains any technical information necessary for the purchase. A search engine will guide you to choose the right battery; detailed data sheets on each product can be downloaded immediately.

















AGM MAINTENANCE FREE BATTERIES

Zenith ZGL

APPLICATIONS

- UPS
- Toys
- Marine/RV
- Alarm System
- Telecommunication

This series of batteries is not suitable for cyclic applications.

If used in boating / RV applications, the battery pack capacity must be sized so that the discharge current does not exceed 0.2C/20h (i.e. Max. 20A discharge of 100Ah / 20h of battery). This allows the battery to gain a reasonable autonomy and more acceptable battery life.

- Never discharge more than 80%. Deeper discharges void any warranty
- For starter batteries we suggest our ZPC series (page 9)





















CAPACITY

Battery 12V to 22Ah



WEIGHT PALLET



CODE		Ah/20h	Ah/5h	L	W	Н	TOTAL H	TERMINAL	(KG)	QUANT.
Battery 6V										
ZGL060016	6	5,00	4,25	70,0	47,0	100,0	107,0	F1	0,75	420
ZGL060020	6	7,00	5,95	151,0	34,0	94,0	100,0	F1	1,10	420
ZGL060026	6	12,00	10,20	151,0	50,0	93,0	98,0	F1	1,86	264

DIMENSIONS (mm)



	ZGL120005	12	1,20	1,02	97,0	43,0	52,0	58,0	F1	0,60	420
	ZGL120010	12	2,00	1,70	178,0	35,0	60,0	66,0	F1	0,87	420
	ZGL120014	12	2,40	1,94	178,0	35,0	61,0	67,0	F1	0,97	420
	ZGL120020	12	3,20	2,45	134,0	67,0	59,5	66,0	F1	1,30	420
	ZGL120024	12	5,00	4,45	90,0	70,0	101,0	107,0	F1	1,54	420
	ZGL120026	12	7,20	6,12	151,0	65,0	93,5	100,0	F1	2,10	360
	ZGL120027	12	7,20	6,12	151,0	65,0	93,5	100,0	F2	2,10	360
	ZGL120028	12	8,50	6,95	151,0	65,0	94,0	100,0	F2	2,30	360
	ZGL120032	12	12,00	10,70	151,0	99,0	95,0	101,0	F2	3,40	200
	ZGL120034	12	18,00	16,00	181,0	77,0	167,0	167,0	M5	5,60	128
	ZGL120035	12	18,00	15,30	180,0	75,0	167,0	167,0	F3	5,50	128
	ZGL120036	12	22,00	18,70	181,0	77,0	167,0	167,0	M5	6,35	128



Battery 12V froi	n 26A	h to 100A	h							
ZGL120042	12	26,00	24,00	165,0	176,0	125,0	125,0	M6	8,20	80
ZGL120048	12	35,00	29,80	193,5	130,0	166,5	166,5	M6	10,50	75
ZGL120054	12	45,00	38,30	198,0	166,0	171,0	171,0	M6	13,50	60
ZGL120058	12	55,00	48,00	230.0	138,0	210,0	215,0	M6	17,30	60
ZGL120062	12	65,00	57,00	349,5	166,0	174,0	174,0	M6	23,00	48
ZGL120070	12	80,00	68,00	260,0	169,0	211,0	215,0	M6	24,50	36
ZGL120073	12	90,00	75,00	349,5	166,0	174,0	174,0	M6	24,00	48
ZGL120077	12	100,00	83,00	306,0	169,0	210,0	215,0	M6	29,00	36
ZGL120078	12	100,00	85,00	328,0	172,0	215,0	219,0	M8	31,00	36



ZGL120085	12	120,00	102,00	327,0	172,0	217,0	222,0	M8	31,20	36
ZGL120086	12	135,00	118,00	341,0	173,0	283,0	287,0	M8	40,00	24
ZGL120088	12	160,00	136,00	483,0	170,0	240,0	240,0	M8	46,00	24
ZGL120092	12	200,00	170,00	530,0	209,0	215,0	219,0	M8	52,00	18

ZGL120094 210,00 178,50 522,0 238,0 218,0 220,0 М8 61,00 ZGL120096 12 240,00 204,00 522,0 238,0 218,0 220,0 М8 64,50 12 221,00 ZGL120098 12 260,00 520,0 269,0 220,0 223,0 М8 73,20 12

Battery 12V from 120Ah to 260Ah

To consult the terminals, go to page 27

[•] for details refer to the data sheets on our website

AGM MAINTENANCE FREE PAROMER

Zenith ZL **DEEP-CYCLE**

APPLICATIONS

- Scrubbers
- Sweepers
- · Golf cars
- Electric Boats
- Electric Scooters
- Renewable Energy
- **Vehicles for Disables**
- · All electric vehicles
- Marine
- RV Service
- Lighting towers

- See battery data sheets for proper charge cycle and charger set-up
- Never discharge more than 80%. Deeper discharges void any warranty













































CODE	MODEL	.,	CAPA	CITY	D	IMENSI	ONS (m	m)	TEDAMNAL	WEIGHT	PALLET
CODE	MODEL	V	Ah/20h	Ah/5h	L	w	Н	Total H	TERMINAL	(Kg)	QUANTITY
Battery 6V-8	V										
ZL060100	-	6	200	170	306,0	169,0	220,0	226,0	M8	27,0	36
ZL060110	GC105	6	225	182	260,0	180,0	269,0	275,0	M8	30,5	36
ZL060113	GC125	6	240	192	260,0	180,0	270,0	275,0	M8	32,0	36
ZL060115	DIN	6	245	200	245,0	187,0	275,0	275,0	M8	32,0	36
ZL060116	DIN	6	245	200	245,0	187,0	275,0	275,0	AP	32,0	36
ZL060125	305	6	335	275	295,0	178,0	345,0	368,0	DT	45,0	22
ZL060130	L16	6	410	320	295,0	180,0	405,0	425,0	DT	55,0	22
ZL080110	GC875	8	180	150	261,0	182,0	270,0	275,0	M8	34,0	24



Battery 12V to 45Ah

ZL120110	-	12	13	11	151,0	99,0	95,0	101,0	F2	4,2	200
ZL120120	-	12	24	18	181,0	77,0	167,0	167,0	M5	5,8	128
ZL120130	-	12	26	22	165,0	174,0	125,0	125,0	M6	8,4	80
ZL120135	-	12	36	28	196,0	131,0	145,0	165,0	M6	10,8	75
ZL120150	-	12	45	35	198,0	166,0	174,0	174,0	M6	14,5	60



Battery 12V from 55Ah to 130Ah

ZL120155	-	12	55	47	230,0	138,0	210,0	215,0	M6	18,3	60
ZL120165	-	12	75	65	349,5	166,0	174,0	174,0	M6	23,0	48
ZL120175	24	12	86	76	260,0	169,0	215,0	219,0	M6	26,0	48
ZL120185	27	12	110	90	306,0	170,0	210,0	215,0	M8	30,5	36
ZL120190	31	12	130	105	331,0	175,0	217,0	223,0	M8	33,0	36

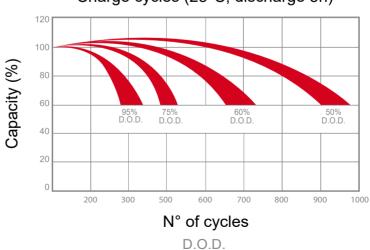


Battery 12V from 140Ah to 260Ah

ZL1201105	DIN	12	140	115	340,0	172,0	280,0	285,0	M8	39,5	24
ZL1201106	DIN	12	140	115	340,0	172,0	280,0	300,0	AP	39,5	24
ZL1201115	-	12	160	125	484,0	171,0	241,0	241,0	M8	46,0	24
ZL1201120	4D	12	200	160	532,0	206,0	216,0	221,0	M8	59,6	18
ZL1201135	8D	12	220	180	522,0	240,0	219,0	224,0	M8	65,8	18
ZL1201145	8D	12	260	215	521,0	269,0	220,0	228,0	M8	77,8	12

• for details refer to the data sheets on our website

Charge cycles (25°C, discharge 5h)





AGM MAINTENANCE FREE BATTERIES

Qcisme marine

Zenith ZLM

SPECIFIC AGM BATTERIES FOR LEISURE MARINE



APPLICATIONS

- · Boat cranking
- · Boat thruster
- · Boat service

Complete Triplepurpose batteries for leisure marine

- See battery data sheets for proper charge cycle and charger set-up
- Never discharge more than 80% D.O.D. Deeper discharges void any warranty











Triple purpose battery:



Lights and Services



Cranking



Thrusters

CODE	V	CAPACITY	CRANKING "EN"		DIMENSI	ONS (m	ım)	TERMINAL	POL.	WEIGHT	PALLET
CODE	V	Ah/20h	CCA (-18°C)	L	W	н	Total H	TERMINAL	PUL.	(Kg)	QUANTITY
ZLM120075	12	100	920	331,5	174	220,5	242	DT	DX	30	36

• for details refer to the data sheets on our website



AGM MAINTENANCE FREE BATTERIES

PROFESSIONAL.

Zenith ZPC

HIGH CRANKING CURRENT PROFESSIONAL USE

APPLICATIONS

- · Booster/starter
- · Starter:
- Start/Stop Car; Antique Car; Boats; RV; Farm machinery; Military vehicles; Trucks
- · Boat thruster
- · Hi-Fi car

WHY CHOOSING A ZPC BATTERY?

- 30% cranking power more than normal starter batteries
- AGM technology for increased resistance to vibration
- Hybrid: in some cases, they can also be used for deep-cycle use



















CODE	V	CAPACITY	CRANKIN	IG "EN"		DIMENS	ONS (m	ım)	TERMINAL	POL.	WEIGHT	PALLET
CODE	V	Ah/20h	CCA (-18°C)	CA (0°C)	L	w	н	Total H	TERMINAL	PUL.	(Kg)	QUANTITY
ZPC120013	12	15	180	230	176	86	130.7	130.7	M6	DX	5,0	160
ZPC120020	12	20	230	310	181	77	167	167	M6	DX	7,0	144
ZPC120025	12	28	410	530	165	176	125	125	M8	DX	10,7	84
ZPC120030	12	30	450	550	250	97	142	156	M6	DX	10,0	75
ZPC120032	12	35	438	525	196	131	167	167	M6	DX	12,1	75
ZPC120040	12	44	560	725	198	166	170	170	M8	DX	15,1	66
ZPC120051	12	65	825	1000	260	171	185	207	AP	SX	20,9	42
ZPC120065	12	100	965	1170	307	169	214	237	DT	SX	32,2	36
ZPC120075	12	110	1100	1360	330	173	215	236	M10	DX	34,5	36
ZPC120100	12	200	1050	1300	530	206	213	230	AP	SX	57,0	18
ZPC120110	12	260	1200	1500	510	267	228	245	AP	SX	72,0	12

• for details refer to the data sheets on our website



GEL SEALED BATTERIES

Eternity ETG

APPLICATIONS

- Scrubbers
- Sweepers
- Electric Boats
- Electric Scooters
- Vehicles for Disables
- · All electric vehicles
- Electric scissor lift

- · Excellent performance at high discharge current
- 700 cycles (80% D.O.D.)
- Gel maintenance free bloc batteries
- See battery data sheets for proper charge cycle and charger set-up
- Never discharge more than 80% D.O.D. Deeper discharges void any warranty

























CODE	USA	W	CAPA	CITY	DIMEN	ISIONS	(mm)	TERMINAL	WEIGHT	PALLET
CODE	MODEL	V	Ah/20h	Ah/5h	L	w	Н	TERMINAL	(Kg)	QUANTITY
ETG06180	DIN	6	220	180	243,0	187,0	274,0	M8	31,0	36
ETG06240	305	6	270	240	298,0	178,0	349,0	M8	48,0	22
ETG1252	BCI34	12	60	52	254,0	168,0	177,0	M6	21,0	48
ETG1266	BCI24	12	80	66	254,0	168,0	204,5	M6	25,0	48
ETG1276	BCI31	12	96	76	329,0	170,0	207,0	M8	31,0	36
ETG12105	BCI21	12	130	105	329,0	170,0	260,0	M8	41,0	36

▶ for details refer to the data sheets on our website

To consult the terminals, go to page 27

AGM MAINTENANCE FREE BATTERIES



Zenith ZLS LONGLIFE/ DEEP-CYCLE

APPLICATIONS

- Scrubbers
- Sweepers
- Electric Boats
- Electric Scooters
- · Electric bike
- Vehicles for Disables
- · Renewable Energy
- · Road signals

WHY CHOOSING A ZLS BATTERY?

- 20% lifetime cycle more than ZL series
- Innovative solution to reduce the negative effects of stratification
- Specific design increasing performance for the discharge in 2 hrs

























Charge cycles (25°C, discharge 5h)



120					
100					
80					
60	95% D.O.D	75%	60%		50%
40	D.O.D	D.O.D.	D.O.D.		D.O.D.
20					
0					
	200 300	500	600 700	800	900 1

N° of cycles D.O.D.

CODE	V		CAPACITY			DIMENSI	ONS (mm)		TERMINIAL	WEIGHT	PALLET
CODE	V	Ah/20h	Ah/5h	Ah/2h	L	w	Н	Total H	TERMINAL	(Kg)	QUANTITY
ZLS120110	12	16,5	13,5	12	151	99	97	101	F2	4,3	200
ZLS120120	12	28	23	20	181	77	165	165	M5	6,2	128
ZLS120135	12	36	29	27	193,5	130	145	165	M6	10,8	75
ZLS120150	12	45	35	32	197	166	170,5	170,5	M6	14,3	60

• for details refer to the data sheets on our website

To consult the terminals, go to page 27



BATTERIES







APPLICATIONS

- Floor washers
- Sweepers
- Golf cars
- Scissor lift

- · Vibration resistant
- · Longer cycle-life time
- Low maintenance
- Deep-cycle
- See battery data sheets for proper charge cycle and charger set-up
- Never discharge more than 80% D.O.D. Deeper discharges void any warranty





LESS WATER CONSUMPTION











CODE	RESERVE OF	CAPACITY (min)	CAPACITY		TERMINAL	D	IMENSIO	NS (m	m)	WEIGHT	PALLET		
CODE	25 Amps	75 Amps	Ah/20h	Ah/5h	TERMINAL	L	W	Н	Total H	(Kg)	QUANTITY		
					6 volt								
DCB105-6	447	115	225	185	ET	259	179	245	276	28,6	36		
DCB125-6	488	132	240	195	ET	259	179	245	276	30,7	36		
DCB145-6	530	145	260	215	ET	259	179	264	295	33,0	36		
					8 volt								
DCB875-8	295	75	170	145	ET	262	181	245	276	29,0	36		
	12 volt												
DCB1275-12	290	70	150	125	ET	329	181	245	276	37,5	24		

• for details refer to the data sheets on our website

LITHIUM LiFeP04 BATTERIES



Zenith Lithium

LITHIUM BATTERIES ASSEMBLED IN TRAY **COMPLETE WITH BALLAST**





APPLICATIONS

- Transpallet
- Forklift

MAINTENANCE FREE: maintenance is not required.

SUPERIOR LIFETIME: the number of charge-discharge cycles is considerably higher than lead-acid batteries, so "cost per cycles" is lower.

FAST CHARGE: they can be fully charged in 2hr (always use the proper battery charger). Vehicles, where they will be installed, will increase their productivity/autonomy.









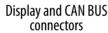
BATTERIES WITHOUT ANY GAS EMISSION

ON/OFF

BATTERIES COMPLETE WITH BALLAST

Safety valve

S.o.C. Display







LITHIUM BATTERY PACKS "LIFEPO4", COMPLETE WITH ELECTRONIC CONTROL BMS

				СНА	RCE		DISCH	ARGE		DIMEN	NSIONS	(mm)			
CODE	v	Ah	KWh				Disci	AITOL					Weight	CAN	Certification
CODE	CODE V	All		Max V	Max A	Min V	Max A	Max A for 15"	Max A for 3"	L	W	Н	(Kg)	BUS	UN 38.3
ZLI024065.1	25.6	100	2,56	29,2	50	20	100	200	400	617	208	627	214	SI	SI
ZLI024070.1	25,6	100	2,56	29,2	50	20	100	200	400	660	145	685	165	SI	SI
ZLI024100.1	25,6	200	5,12	29,2	100	20	200	250	400	622	282	627	285	SI	SI

- for details refer to the data sheets on our website
- for numer of cycles go to the page 15



LITHIUM LiFePO4 BATTERY PACKS

Zenith LITHIUM



APPLICATIONS

- Electric Vehicles
- Golf Cars
- · Vehicles for Disables
- · Cleaning Machines
- Transpallets
- Electric Boats
- RV
- Electric Tools
- · Renewable Energy

MAINTENANCE FREE: maintenance is not required.

SUPERIOR LIFETIME: the number of charge-discharge cycles is considerably higher than lead-acid batteries, so "cost per cycles" is lower.

LIGHT: they are up to 70% lighter than lead-acid batteries. Only a minimum amount of the whole battery energy is employed to move the battery itself so the vehicle autonomy is greater.

FAST CHARGE: they can be fully charged in 2hr (**always** use the proper battery charger). Vehicles, where they will be installed, will increase their productivity/autonomy.

 Always ask the UNION BATTERY SERVICE authorization if you want to use them in series or parallel



















CONNECTABLE IN PARALLEL

BATTERIES WITHOUT ANY GAS EMISSION



S.o.C. Display

MORE ROBUS





4 female threaded inserts, M6, per side





ON/OFF



Carryng handles



Safety valve



Display and CAN BUS connectors

16, per side







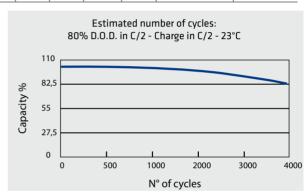
▶LITHIUM BATTERY PACKS "LIFePO4", COMPLETE WITH ELECTRONIC CONTROL BMS

				СНА	DCE		DISCL	IARGE		DIME	NSIONS	(mm)				
CODE	v	Ah	KWh	CITA	KUL		DIJCI	IARUL					Weight	CAN	Certification	PALLET
CODE	V	AII	KVVII	Max V	Max A	Min V	Max A	Max A for 15"	Max A for 3"	L	W	Н	(Kg)	BUS	UN 38.3	QUANTITY
ZLI012035*	12,8	50	0,64	14,6	35	10	50	100	200	195	165	175	8,5	NO	NO	15
ZLI012051*	12,8	100	1,28	14,6	70	10	100	200	400	165	330	170	14,0	NO	NO	10
ZL1012100	12,8	200	2,56	14,6	140	10	200	250	400	340	170	275	25,0	NO	SI	5
ZL1024036*	25,6	50	1,28	29,2	35	20	50	100	200	165	330	170	14,0	NO	NO	10
ZL1024065	25,6	100	2,56	29,2	50	20	100	200	400	170	340	280	27,5	SI	SI	5
ZL1024070	25,6	100	2,56	29,2	50	20	100	200	400	135	554	275	27,5	SI	SI	5
ZL1024100	25,6	200	5,12	29,2	100	20	200	250	400	200	554	280	50,5	SI	SI	3
ZL1036065	38,4	100	3,84	43,8	50	30	100	200	400	200	420	280	38,0	SI	SI	5
ZL1048060	51,2	100	5,12	58,4	50	40	100	200	400	305	344	280	48,0	SI	SI	3

^{*}not parallelable

• for details refer to the data sheets on our website

Diagram to manage to use	Max	-20°C / +55°C
Discarge temperature	Working	-10°C/+45°C
Tamanauatuwa fau ahawaina	Max	0°C / +55°C
Temperature for charging	Working	+5°C / +40°C
Ctowner towners weturn	Yearly	0°C / 35°C
Storage temperature	Monthly	-20°C / 45°C



The capacity is constant in lithium battery: it does not change at different discharge current rates (see the table)

Comparative Table AGM-LITIUM

In order to facilitate the correct dimensioning

NOM	INAL CAPACITY = REAL CAPA	ACITY
	Estimate :	autonomy
Constant current discharge	ZL1201120 (12V 200Ah/20h)	ZLI12100 (12V/200Ah)
10Amp	20h	20h
20Amp	9h	10h
30Amp	5h	6h 30min
40Amp	3h 40min	5h
50Amp	3h	4h
60Amp	2h 30min	3h 30min
70Amp	2h	2h 50min
80Amp	N.C.	2h 30min
100Amp	N.C.	2h
150Amp	N.C.	1h 20min
200Amp	N.C.	1h
	N C*: Discharge curi	rent not compatible with the battery

SUITABLE BATTERY CHARGERS

BATTERY	"FAST" (CHARGE	"NORMAL	" CHARGE	"SLOW"	CHARGE
CODE	Model	Time	Model	Time	Model	Time
ZLI012035			ZHF1225.LH	2h 10min.		
ZLI012051			ZHF1225.LH	2h 10min.		
ZLI012100					ZHF1225.LH	8h 20min.
ZLI024036	ZHF2430.LH	1h 50min.	ZHF2420.LH	2h 40min.		
ZLI024065	ZHF2460.LH	1h 50min.	ZHF2430.LH	3h 10min.	ZHF2420.LH	5h 15min.
ZLI024070	ZHF2460.LH	1h 50min.	ZHF2430.LH	3h 10min.	ZHF2420.LH	5h 15min.
ZLI024100	ZHF2490PFC.LH	2h 15min.	ZHF2460.LH	3h 40min.	ZHF2430.LH	6h 50min.
ZL1036065	ZHF3670.PFC.LH	2h 15min.	ZHF3640.LH	2h 45min.	ZHF3620.LH	5h 15min.
ZLI048060	ZHF4855PFC.LH	2h	ZHF4830.LH	3h 40min.		

recharge times considered with 100% discharged batteries



BATTERY CHARGERS FOR LITHIUM BATTERIES

Zenith High Frequency AUTOMATIC HIGH FREQUENCY BATTERY CHARGERS SPECIFIC FOR LITHIUM BATTERIES RECHARGING



- The nominal output current is CONSTANT CURRENT.
- All devices are endowed with power cable (SHUKO 16A mains plug included where possible).
- All devices are supplied with output cables of 2,5MT, but WITHOUT the connector to the battery.
- The battery connectors are supplied on request.
- Mains supply: single-phase 185V/265V three-phase 340V/460V.
- Frequency: 47/62 Hz
- Efficiency: single-phase >85% three-phase >90%
- Reccommended temperature at work: -10°C / +50°C





COMPLETE WITH BUTTON FOR REACTIVATION 'BMS' BATTERY

	OUT	PUT		MAINS	DIME	NSIONS	(mm)	WEIGHT
CODE	V	Α	Kw	VOLTAGE	Dil-iL	1510115	(,	Kg
	•	_ A		[A] - 230V	L	W	Н	5
ZHF1225.LH	12	25	0,45	3,2	233	120	64	1,3
ZHF2420.LH		20	0,67	4,6	233	120	64	1,5
ZHF2430.LH	24	30	1,00	7,0	259	145	79	2,3
ZHF2460.LH		60	2,00	12,0	329	174	96	3,9
ZHF3620.LH	26	20	1,00	6,9	259	145	79	2,3
ZHF3640.LH	36	40	2,00	12,0	329	174	96	3,9
ZHF4830.LH	48	30	2,00	12,0	329	174	96	3,9
		Sing	gle-pl	nase with P.F.	C.			
ZHF2490.PFC.LH	24	90	3,1	13A 240V	420	303	100	7,2
ZHF3670.PFC.LH	36	70	3,6	16A 230V	420	303	100	7,2
ZHF4855.PFC.LH	48	55	3,7	16A 230V	420	303	100	7,2
			Thr	ee-phase				
ZHF48120T.LH	48	120	8,1	15,6	540	340	130	11,5

It is possible to realize models on demand

BATTERY CHARGERS HIGH FREQUENCY ZBCO





HIGH FREQUENCY. ONLY FOR ON-BOARD CLEANING MACHINE USES



- Universal power supply (100V 260V)
- 24V models endowed with PFC
- Endowed with electricity presence block
- Cooling fan

- Endowed with data memory
- Supplied with the universal cables kit (power cable not included)
- Endowed with specific charge cycle for ZENITH batteries
- 3 LEDs display



CODE	ОИТ	PUT	RECHARGABLE CAPACITY			INPUT			IP	WEIGHT	DIME	NSIONS	(mm)
CODE	v	Α	CAPACITY	V A (240)	w	Hz	PFC	IP	Kg				
		,,	Ah/20H	_	/ (2 10)	••	2				L	W	Н
ZBC01208	12	8	50/85	100-260	1,0	140	50/60	no	IP30	0,65	133	125	60
ZBC02405	24	5	30/60	100-260	1,1	150	50/60	no	IP30	0,65	133	125	60
ZBC02411	24	11	70/120	100-260	1,5	350	50/60	si	IP30	1,20	133	164	64
ZBC02415	24	15	100/120	100-260	2,0	480	50/60	si	IP30	1,45	133	240	60

▶WARNING!!! Battery chargers without power cable



BATTERY CHARGERS HIGH FREQUENCY

Zenith High Frequency

AUTOMATIC HIGH-FREQUENCY BATTERY CHARGERS

STABILIZED: the charge is always optimal even in case of wide mains voltage variations.

The use of very long extension cables does not compromise the correct battery charge.

The minimum mains voltage is 185V and the maximum is 265V.

LIGHT AND COMPACT: the high frequency technology allows to minimize the weight and size.

VERSATILE: all devices allow an easy on board installation (electricity presence block and minimum battery voltage

EASY: the charge cycle automatically starts by inserting the mains plug.

The microprocessor checks the battery charge level and the following charge cycle duration.

RELIABLE: the protecting resin enveloping the card protects the circuits from oxidation. It is endowed with a protective rooftop (NO PFC).

DATA MEMORY: the main information related to charge cycles are stored in the battery charger memory. Therefore, the user's behavior during charge / discharge phases can be easily retraced and warranty costs can be substantially reduced.

FLEXIBLE: with the MP TOP II programmer you can set the battery charger for the charge of lead-acid or sealed batteries (GEL, AGM). Moreover, you can select the capacity of the battery to be charged (within the limits set for every model).





- The nominal output current is CONSTANT CURRENT.
- The manufacturer provides the recharge of the indicated capacities, within recommended times, with 80% of batteries discharge.
- Lower discharges involve lower charging times.
- The programming of these devices allows them to be adapted for the charge of any battery brand.
- All devices are endowed with power cable (SHUKO 16A mains plug included where possible).
- All devices are supplied with output cables of 2,5MT, but WITHOUT the connector to the battery.
- The battery connectors are supplied on request.
- Mains supply: single-phase 185V/265V three-phase 340V/460V.
- Frequency: 47/62 Hz.
- Efficiency: single-phase > 85% three-phase >90%
- Recommended temperature at work: -10°C / +50°C.
- Batteries minimum voltage to allow the charge to start: 1,00 V/cell.

SINGLE-PHASE

	OUT	PUT			RECH	ARGEA	BLE BA	TTERIE	S				DIME	NSIONS	(mm)	
					LEAD	-ACID			SE	ALED		MAINS	DIME	14210142	(11111)	WEIGHT
CODE	V	Α	8	h	1	lh	13	3h	1	l2h	Kw	VOLTAGE				(Kg)
	V	A	Ah/C	5 min	Ah/C	5 min	Ah/C	5 min	Ah/	C5 min		(A) – 230V	L	w	Н	(115)
			min	max	min	max	min	max	min	max						
ZHF1212		12	30	80	30	120	30	140	30	120	0,23	1,8	233	120	64	1,3
ZHF1212.C	12	12			cic	lo "IUoL	J" - 2,43	/2,25			0,23	1,8	234	120	64	1,3
ZHF1225	12	25	100	160	100	240	100	300	100	240	0,45	3,2	233	120	64	1,3
ZHF1225.C		25			cic	lo "IUoL	J" - 2,43	/2,25			0,45	3,2	234	120	64	1,3
ZHF2412		12	30	80	30	120	30	140	30	120	0,41	3,0	233	120	64	1,3
ZHF2420	24	20	80	120	80	200	80	240	80	200	0,67	4,6	233	120	64	1,5
ZHF2430		30	120	180	120	300	120	360	120	300	1,00	7,0	259	145	79	2,3
ZHF2460		60	180	360	180	600	180	720	180	600	2,00	12,0	329	174	96	3,9
ZHF3620	36	20	80	120	80	200	80	240	80	200	1,00	6,9	259	145	79	2,3
ZHF3640		40	160	240	160	420	160	480	160	420	2,00	12,0	329	174	96	3,9
ZHF4815	48	15	60	100	60	160	60	180	60	160	1,00	6,8	259	145	79	2,3
ZHF4830	70	30	120	180	120	300	120	360	120	300	2,00	12,0	329	174	96	3,9
ZHF6020	60	20	80	120	80	200	80	240	80	200	1,70	12,0	329	174	96	3,9
ZHF7220	72	20	80	120	80	200	80	240	80	200	2,00	12,0	329	174	96	3,9
ZHF8020	80	20	80	120	80	200	80	240	80	200	2,10	14,0	329	174	96	3,9
ZHF8420	84	20	80	120	80	200	80	240	80	200	2,10	14,5	329	174	96	3,9
						SIN	IGLE-F	PHASE	with I	P.F.C.						
ZHF2490.PFC	24	90	270	540	270	900	270	1080	270	900	3,1	13A 240V	420	303	100	7,2
ZHF3660.PFC	36	60	180	360	180	600	180	720	180	600	3,1	13A 240V	420	303	100	7,2
ZHF3670.PFC	96	70	180	420	180	720	180	840	180	720	3,6	16A 230V	420	303	100	7,2
ZHF4845.PFC		45	180	270	180	480	180	540	180	480	3,1	13A 240V	420	303	100	7,2
ZHF4855.PFC	48	55	180	330	180	540	180	660	180	540	3,7	16A 230V	420	303	100	7,2
ZHF4865.PFC		65	180	420	180	660	180	780	180	660	4,4	20A 230V	420	303	100	7,2
ZHF7230.PFC	72	30	120	180	120	300	120	360	120	300	3,1	13A 240V	420	303	100	7,2
ZHF7240.PFC	/2	40	120	240	120	420	120	480	120	420	4,1	20A 240V	420	303	100	7,2
ZHF8030.PFC	80	30	120	180	120	300	120	360	120	300	3,4	20A 240V	420	303	100	7,2
ZHF8040.PFC	80	40	120	240	120	420	120	480	120	420	4,5	20A 240V	420	303	100	7,2

THREE-PHASE

	OU	TPUT			RECH	ARGEA	BLE BA	TTERIE	S				DIME	NCIONC	/\	
					LEAD	-ACID			SE	ALED		MAINS	DIME	NSIONS	(mm)	WEIGHT
CODE	v	Δ.	8	h	11	lh	13	3h	1	2h	Kw	VOLTAGE				(Kg)
	V	Α	Ah/C	5 min	Ah/C	5 min	Ah/C	5 min	Ah/0	5 min		(A) – 400V	L	W	Н	(145)
			min	max	min	max	min	max	min	max						
ZHF24120T	24	120	360	720	360	1200	360	1400	360	1200	4,0	7,8	540	340	130	10,9
ZHF24240T	24	240	720	1400	720	2400	720	2800	720	2400	8,0	15,6	540	435	265	21,5
ZHF3680T		80	300	480	300	840	300	960	300	780	4,0	7,8	540	340	130	11,3
ZHF36120T	36	120	360	720	360	1200	360	1400	360	1200	6,0	11,5	540	340	130	11,5
ZHF36160T	36	160 240	600	960	600	1600	600	2000	600	1600	8,0	15,6	540	340	130	15,8
ZHF36240T		240	720	1400	720	2400	720	2800	720	2400	12,0	23,0	591	435	265	23,0
ZHF4865T		65	180	420	180	660	180	780	180	660	4,3	8,5	540	340	130	10,9
ZHF4880T]	80	300	480	300	840	300	960	300	780	5,3	10,5	540	340	130	11,3
ZHF48120T	48	120	360	720	360	1200	360	1400	360	1200	8,1	15,6	540	340	130	11,5
ZHF48160T]	160	600	960	600	1600	600	2000	600	1600	10,6	21,0	540	340	130	15,8
ZHF48240T]	240	720	1400	720	2400	720	2800	720	2400	16,2	31,2	591	435	265	23,0
ZHF7280T		80	300	480	300	840	300	960	300	780	8,0	15,6	540	340	130	12,3
ZHF72120T	72	120	360	720	360	1200	360	1400	360	1200	12,0	23,4	540	340	130	15,8
ZHF72160T]	160	600	960	600	1600	600	1900	600	1600	16,0	31,2	591	435	265	24,7
ZHF8080T		80	300	480	300	840	300	960	300	780	8,5	16,0	340	340	130	12,3
ZHF80120T	80	120	360	720	360	1200	360	1400	360	1200	12,8	24,0	540	340	130	15,8
ZHF80160T		160	600	960	600	1600	600	2000	600	1600	17,6	32,0	591	435	265	24,7



BATTERY CHARGERS CONVENTIONAL MGX-MORI

MGX Memory Charger

SINGLE-PHASE AUTOMATIC TRADITIONAL CHARGER





STABILIZED: optimal charge even in presence of wide fluctuations in the mains voltage (min. 185V - max. 265V).

TRADITIONAL: these devices are of a traditional type (not high frequency).

EASY: the charge cycle takes place automatically, by simply connection the battery. The microprocessor checks the level of batteries discharge and the charge times.

DATA MEMORY: the main information related to charge cycles is stored in the battery charger memory. Then, the user's behavior during charge/discharge phases can be easily reconstructed and warranty costs are dramatically reduced.

FLEXIBLE: with the MP TOP II programmer it is possible to set the battery charger for the charge of both lead-acid and sealed batteries (GEL, AGM).

RELIABLE: 2 years warranty

Dimensions: 305 x 160 x h 127 mm *385 x 200 x h 147 mm

- The nominal output current is CONSTANT CURRENT.
- The manufacturer guarantees the charge of recommended capacities, within 10-13 hours, with 80% of batteries discharge.
- Lower discharges involve lower charging time.
- The programming of these devices allows them to be adapted for the charge of any battery brand.
- All devices are endowed with SHUKO power cable.
- All devices are supplied with output cables, but WITHOUT the connector to the battery
- The battery connectors are supplied on request

		INPUT			0	UTPUT	RECHA	ARGEAB	LE BAT1	ERIES						
CODE	PHASE	V	Hz	v	A	CYCLE	LEAD	-ACID	SEA (AGM	LED /GEL)	Kw	MAINS VOLTAGE	DIME	NSIONS	(mm)	WEIGHT Kg
	PHASE	V	пг	V	4	CYCLE	Ah/C5 min	Ah/C5 max	Ah/C5 min	Ah/C5 max		[A] - 230V	L	w	Н	
MGX1210	1	185/265	50/60	12	10	IWoU/IUoU	100	120	80	100	0,18	1,3	305	160	127	5,6
MGX1215	1	185/265	50/60	12	15	IWoU/IUoU	130	180	110	150	0,29	1,9	305	160	127	6,2
MGX2410	1	185/265	50/60		10	IWoU/IUoU	100	120	80	100	0,36	2,5	305	160	127	7,4
MGX2415	1	185/265	50/60		15	IWoU/IUoU	130	180	110	150	0,54	3,7	305	160	127	9,1
MGX2420	1	185/265	50/60	24	20	IWoU/IUoU	190	240	160	200	0,72	5,0	305	160	127	12,0
MGX2425	1	185/265	50/60]	25	IWoU/IUoU	250	300	210	250	0,90	6,0	385	200	147	13,8
MGX2430	1	185/265	50/60		30	IWoU/IUoU	310	360	260	300	1,10	7,4	385	200	147	18,5
MGX3620	1	185/265	50/60	36	20	IWoU/IUoU	190	240	160	200	1,10	7,4	385	200	147	15,8
MGX3625	1	185/265	50/60	36	25	IWoU/IUoU	250	300	210	250	1,40	9,3	385	200	147	18,4

BATTERIES REGENERATOR



Battery Regenerator

Your battery

will no longer be a mystery!

How many batteries did you replace without knowing if they could be still used? How many batteries did you replace under commercial warranty? How many batteries did you have to throw because they were old?

The BATTERY REGENERATOR allows you to work independently and to eliminate these costs. It pays itself in 6 months of actual work!*

The innovative device for the **treatment of lead-acid batteries**, **modular**, is now available to **everyone**!

The integrated solution of the discharge + multi-voltage charger allows to realize a variety of activities in a simple and automatic way.

The device is **portable** and it is possible to perform tests directly at the customer or at the installation.

The data collected will be easly transferred to a PC in order to elaborate and print.

What kind of batteries can you deal with Battery Regenerator?

- Lead acid starter batteries (MF and SMF) at 12 Volt.
- AGM starter batteries at 12 Volt.
- AGM stand-by batteries at 6 Volt or at 12 Volt.
- Lead acid batteries (both tubolar and flat), for cycle use, 6/8/12 Volt.
- AGM batteries for cycle use, 6/8/12 Volt.

How does the Battery Regenerator work?

Three simple actions are needed and the rest happens automatically:

- Choose the activity from the 5 options.
- Set the data of the battery to deal.
- START



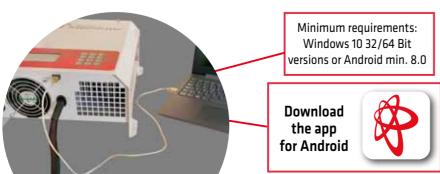
What can you do with the Battery Regenerator?

- Equalize/balance new batteries before the installation.
- Refresh the batteries in stock.
- Regenerate batteries used incorrectly.
- Check the batteries and status: discharge in 20h, 5h and 2h.
- **Cycle new batteries** to check their performance over time: 20h, 5h and 2h.

Who needs the Battery Regenerator?

To all the companies that work with modular batteries:

- Dealers/renters of cleaning machines.
- Resellers/renters of scissor lift.
- Resellers/renters of golf cars and/or electric vehicles for touristic village and resorts.
- Resellers/renters of camper.
- Resellers of lead batteries in general.
- Maintainers/ installers of batteries for continuty groups, UPS and telephone switchboards.
- Installers/maintainers of boat.
- Resellers/maintainers of vehicles for the elderly and disabled.

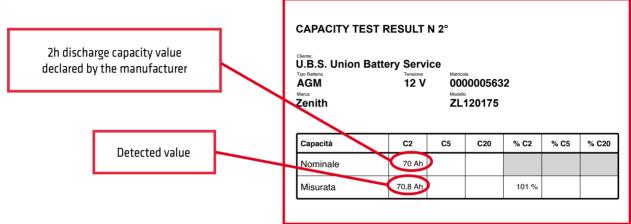




BATTERIES REGENERATOR

1. Check the batteries and status

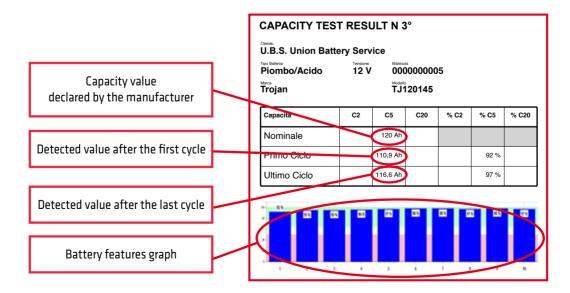
- It can be done on a new battery, check the correctness of the declared data, and also on an used battery to check its status/conditions.
- It consist of a fully automatic charge/discharge/charge cycle.
- The discharge current is constant.
- The discharge cycle involves 100% battery discharge.
- Depending on the type of battery and the application, the discharge capacity can be checked in 20 hours, 5 hours and 2 hours.
- The report with the result can be saved in PDF and printed.
- Duration varies by test, between 12 hours and 48 hours ca.



2. Charging and discharging cycle sequence ("cycling" battery) *

- It is generally made on a new battery and for cyclic use (DEEP-CYCLE) in order to check its behaviour over time.
- It is possible to set up to 10 charge/discharge.
- The discharge current is constant.
- The discharge cycle involves discharging the battery 100%.
- * do not do this activity on lead acid starter batteries.

- Depending on the type of battery and the application, the discharge capacity can be checked.
- The report with the result can be saved in PDF and printed.
- Duration varies according to the number of cycles set, keeping in mind that each cycle can be about 15-35 hours.



BATTERIES REGENERATOR



3. Equalize/balance new batteries

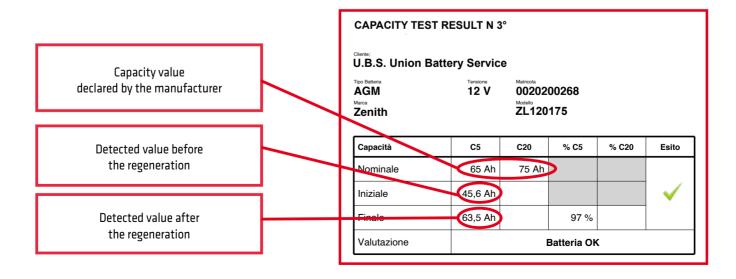
- The activity is absolutely indispensable to guarantee a longer life of the batteries, especially when installing multiple units connected together in series or in parallel.
- The aim is to make the batteries "homogeneous" with each other, especially if they are produced at different times and stored in different ways.
- It remains essential that the batteries must still be of the same brand and model.
- The cycle lasts about 7 20 hours.
- No report is expected.

4. Refresh the batteries in stock

- This is a charger/micro discharge/charge sequence specially developed to try to restore the original characteristics, on batteries that have been in stock for a certain time.
- The cycle lasts about 5 10 hours.
- No report is expected.

5. Regenerate batteries used incorrectly

- Warning: regeneration treatment is absolutely recommendable even on batteries in use, still working, in order to prevent deterioration: "Regenerates time and time savings". The earlier it is done, the greater % success rate will be.
- It can be applied on any type of used lead battery.
- NOT all batteries subjected to treatment will give a positive result.
- It is preferable for AGM batteries to carry out a capacity test after a faw days from the end of the regeneration process, which has a positive result.
- It uses a specific algorithm that manages the sequence of charges/discharges.
- The algorithm adapts to the behaviour of the battery during the process.
- Duration varies form 24 hours to 120 hours.
- The result report can be saved in PDF and printed.





BATTERY CHARGER MULTIFUNCTION

Power-Switch Multisystem

HIGH FREQUENCY SINGLE-PHASE MULTI-VOLTAGE BATTERY CHARGER, IDEAL FOR "REFRESH" CHARGES

MULTISYSTEM, it is a battery charger suitable for any type of batteries (both traction and starter, sealed or lead acid).

It is easy to program through the keyboard and the display.

The operator sets three charging cycle parameters ("IU" cycle):

- maximum battery voltage during the charging phase
- constant current
- time (max. 50 hours)

It offers great flexibility advantages:

- it is possible "refresh" full pallets, connecting them in series or in parallel, according to customer preferences
- it is possible to recharge 6V, 8V, 12V, 24V, 36V, 40V, 48V batteries and any intermediate voltage value
- it is possible to use it as a replacement for other battery chargers (KEYBOARD BLOCK function)
- it can be easly carreid to the customer in order to try to recover "sulphated" batteries

Single-phase supply:

 correct cherge level even when supply voltage fluctuates from 185V to 265V frequency 50/60Hz

Two models are available:

- code: PSW.MS.1
 - programmable voltage: from 6V to 32V
 - programmable constant current: from 3A to 40A
- code: PSW.MS.2
 - programmable voltage: from 12V to 64V
 - programmable constant current: from 3A to 30A



It is supplied with battery connection clamps and instruction manual with hints on how to use it.

CODE	Voc PROGRAMI STEF	MABLE OUTPUT 0.1V	CTED 44		MINUMUM VOLTA-	WEIGHT	DIMENSIONS (mm)			
CODE	Min.	Max.	Min.	Max.	ldc out programmable	GE FOR CHARGE	Kg	L	W	Н
PSW.MS.1	6V	32V	3A	from 40A to 29V	35A over 29V	3,5V	4,5	295	220	110
PSW.MS.2	12V	64V	3A	from 30A to 58V	25A over 58V	7,0V	4,5	295	220	110

ACCESSORIES

► DC CONNECTORS (battery connection)

CODE		Model	
	00200001	SB50 50A BATTERY GREY PLUG	
	00200002	SB50 50A BATTERY RED PLUG	
1.47	00200030	SBE160 160A BATTERY RED PLUG	
	00200033	SBE160 160A BATTERY GREY PLUG	
	00200039	SB120 120A BATTERY RED PLUG	

CC	DE	Model		
1	00200040	SB175 175A BATTERY GREY PLUG		
	00200042	SB175 175A BATTERY RED PLUG		
	00200043	SB175 175A BATTERY BLUE PLUG		
4	00200082	DIN 80A male BATTERY PLUG		
T	00200083	DIN 160A male BATTERY PLUG		

CODE		Model	
T	00200084	DIN 320A male BATTERY PLUG	
1	00200200	Schaltbau male LV80 BATTERY PLUG	
F	00200201	Schaltbau male LV160 BATTERY PLUG	
00200202		Schaltbau male LV320 BATTERY PLUG	
F	00200150	FT80 EURO 80V male BATTERY PLUG	

DISTILLED WATER 10LT. TANK



CODE	Description	
ACDEMR	10 lt Tank with tap	
ACDEMR25	25 lt Tank with tap	

ACCESSORIES

► POLE PROTECTION



CODE	KIT QUANTITY	
СРМ6	10 pairs	
CPM8	10 pairs	
CPMORS	10 pairs	

AUTOMATIC REFILLING CAPS





00300005



00300120

CODE REFILLING CAPS		
00300000 Cap automatic refilling "SCREW"		
00300005	Cap automatic refilling "BAYONET"	
CODE	CAPS ACCESSORIES	

Floating

ADAPTORS







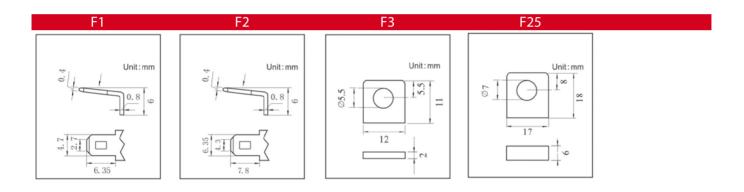
KIT.AP.M6 - KIT.AP.M8

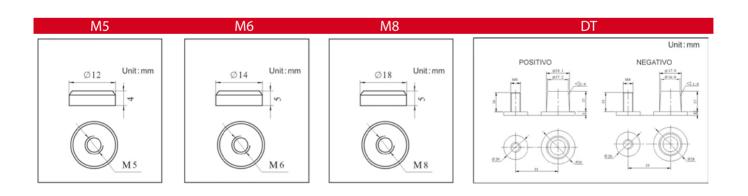
KIT.AP.STUD

CODE	Suitable for	KIT QUANTITY
KIT.AP.M6	terminal M6	10 pieces
KIT.AP.M8	terminal M8	10 pieces
KIT.AP.STUD	1 piece	
Adaptor TROJAN "A	1 piece	
Adaptor TROJAN "A	1 piece	

ACCESSORIES

▶ TERMINALS FOR ZENITH BATTERIES





PRACTICAL ADVICE ON LEAD-ACID BATTERIES

- 1. To assess whether the charger is suitable for charging a battery, we will have to consider three
 - The voltage of the charger must be the same as the voltage of the battery pack.
 - The current charge of the charger must be compatible with the capacity.
 - · Cycle of charge.
- 2. ALWAYS choose the batteries series suitable for the application and setting the model depending
 - · Better battery life over time.
 - Any problems are covered by the quarantee.
- 3. ALWAYS use the batteries in adequately ventilated places.
- 4. AVOID any short circuit between the battery poles
- 5. CONNECTION OF TWO BATTERIES IN PARALLEL

You get a battery with the same voltage, but with double the capacity.

- Use batteries in parallel can be dangerous for two principal reasons:
- If the connection with the batteries don't allow a correct suddivision of the current delivered between the batteries, in a short time the batteries will become irremediably unbalanced.
- · Any short cut on a battery will damage even the other batteries with eventually damage also on the ambient where the batteries are installed.
- 6. CONNECTION OF TWO BATTERIES IN SERIES

You get a battery with the same capacity, but with double voltage.

With the connection in series DON'T use batteries of different brands or ages

- In series connections check periodically (3-4 times a year) the status of the individual batteries. Any problems on a single battery can have an impact on the other batteries.
- In series connections alternate the position of the batteries 2-3 times a year.
- 7. In ALL lead acid batteries, the electrolyte level must be checked monthly.
- 8. Periodically discharge the batteries (better once a month) completely (up to 80%).
- 9. For long periods of disuse, recharge the batteries periodically (at least once a month).
- 10. ALWAYS recharge the batteries immediately after discharge.
- 11. The temperature conditions the battery performance. All technical data are related to 25°C (internal battery)
 - Lower temperatures reduce the capacity: from 0 °C it will be about 60%

THE R. P. LEWIS CO., LANSING, MICH.

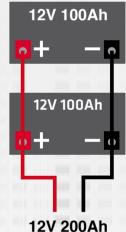
- Higher temperatures reduce DRASTICALLY the battery life
- 12. Prevent and remove eventual oxidation on the poles. It is recommended the use of rubber end
- 13. On our website www.unionbatteryservice.it are available all the general warranty conditions

· CONNECTION IN PARALLEL· Balanced plant
12V 100Ah
□ + - •
12V 100Ah
+ - 0
12V 200Ah

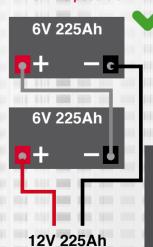


Not balanced plant High risk of damaging the batteries





CONNECTION IN SERIES Always recommendable when it is possible



REFRESH CHARGES FOR BATTERIES AT STOCK

	(ZL, ZGL, ZPC, ZLS)	(YUASA)
Storage temperature: between 10°C and 20°C	Every 9 months	Every 3 months
Storage temperature: between 20°C and 30°C	Every 6 months	Every 2 months
Storage temperature: between 30°C and 40°C	Every 3 months	Every month



U.B.S. UNION BATTERY SERVICE s.r.l. unipersonale

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