



Moving Energy

2016/2017





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

Energy Everywhere



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



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



*14 distributors in **Italy** and 15 in **Europe** to provide a comprehensive local and global presence.*





Always

GLOBAL SOLUTION

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

INNOVATION

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

STRENGTH certified

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.

Soon

CUSTOMER ALWAYS COMES FIRST

Customer's real need is our priority!

Our trained staff is able to help customer in choosing the correct product or an alternative optimal service to the sale.

98% Customer Satisfaction

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

ON-LINE

Web site U.B.S., regularly updated, is complete with product data sheets and a search engine to help you choose the correct battery depending on the application.



OFF LINE























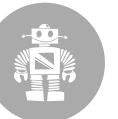












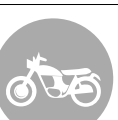




Commercial Assistance

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.

Range of action of products:

							
Van Starter	Bulldozer Starter	RV Starter	Golf trolley	Motorcycle Starter	Car Starter	Golf Car	Vehicles for Disable
							
Scissor lift	Truck Starter	Tractor Starter	Boat Starter	Antique car starter	Hi-Fi Car	Electric Boats	Quad Starter
							
Electric Moped	Electric Scooter	Electric Bike	Telecommunication	Bow thrusters	Torch flashlights	Toys	Alarm System
							
Small Tools	Forklift Trucks	Emergency booster	Floor washers	UPS	Renewable Energy Storage	RV Service	Boat Service
							
Electric Car	Watercraft Starter	Electric lawn mower	Antique Motorcycle	Transpallet	Electric tug	Road Signals	Sweepers

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Moving Energy

Made to last over time!



01. BATTERIES



ZENITH brand is under exclusive property of U.B.S. UNION BATTERY SERVICE.

Batteries under ZENITH brand are manufactured according to our specs, selected by international companies and to the fulfillment of top quality; then they undergo strict internal quality controls before being placed on the market.

Special warranty conditions validate the product quality.

They are distributed EXCLUSIVELY by our commercial network.

01.



AGM SEALED 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*





CODE	V	CAPACITY		DIMENSIONS (mm)				TERMINAL	WEIGHT (KG)	PALLET QUANT.
		Ah/20h	Ah/5h	L	W	H	TOTAL H			

Battery: 6V



ZGL060005	6	3,20	2,55	134,0	34,5	61,0	67,0	F1	0,65	600
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
ZGL060024	6	10,00	7,40	151,0	50,0	93,0	98,0	F1	1,67	420
ZGL060026	6	12,00	10,20	151,0	50,0	93,0	98,0	F1	1,86	264
ZGL060029	6	20,00	16,00	150,0	83,0	126,0	126,0	F3	3,50	264

Battery: 12V to 22Ah



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
ZGL120016	12	2,90	2,20	80,0	56,0	100,0	106,0	F1	1,00	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
ZGL120030	12	10,00	7,40	151,0	65,0	111,0	117,0	F1	3,00	240
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 from 26Ah to 100Ah



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
ZGL120052	12	40,00	34,00	198,0	166,0	170,0	170,0	M6	13,00	60
ZGL120054	12	45,00	38,30	198,0	166,0	171,0	171,0	M6	13,50	60
ZGL120058	12	55,00	48,00	239,0	132,0	205,0	210,0	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
ZGL120072	12	80,00	68,00	350,0	166,0	176,0	180,0	M6	22,00	36
ZGL120078	12	100,00	85,00	328,0	172,0	215,0	219,0	M8	31,00	36

Battery: 12V from 120Ah to 260Ah



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	55,50	18
ZGL120094	12	210,00	178,50	522,0	238,0	218,0	220,0	M8	61,00	18
ZGL120096	12	240,00	204,00	522,0	238,0	218,0	220,0	M8	64,50	12
ZGL120098	12	260,00	221,00	520,0	269,0	203,0	208,0	M8	73,20	12

► For details refer to the data sheets on our website

Zenith ZNC

SLOW DISCHARGE

APPLICATIONS

- Marine Services
- RV Services

This series of batteries **is not suitable for cyclic applications.**

Sized the capacity of the battery pack so that the discharge current rate does not exceed 0.2C/20h (i.e. Max 20A discharge on 100Ah/20h). This allows the battery to gain a reasonable autonomy and more acceptable battery life.

- Never discharge more than 80%. Deeper discharges void any warranty



WARRANTY*
24 MONTHS



CODE	V	CAPACITY		DIMENSIONS (mm)				TERMINAL	WEIGHT (Kg)	PALLET QUANTITY
		Ah/20h	Ah/5h	L	H	W	Total H			
ZNC120070	12	69	80	W	166,00	206,00	215,00	M6	23,5	48
ZNC120072	12	73	85	H	166,00	174,00	174,00	M6	24,0	48
ZNC120078	12	83	100	306,00	169,00	210,00	215,00	M6	29,0	36
ZNC120084	12	98	120	330,00	171,00	215,00	222,00	M8	32,5	36
ZNC120088	12	123	160	483,00	170,00	240,00	240,00	M8	46,0	24
ZNC120092	12	147	200	530,00	209,00	215,00	217,00	M8	55,5	18

► For details refer to the data sheets on our website



Zenith ZPC

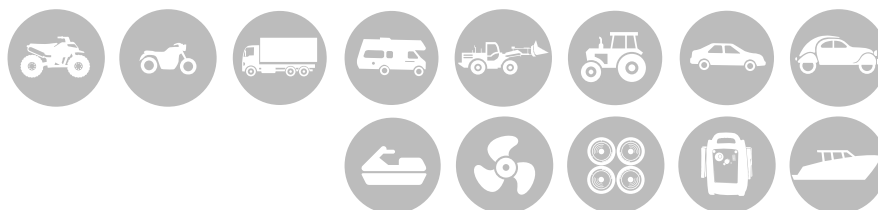
HIGH CRANKING STARTER

APPLICATIONS

- Boosters/Starter
- Starter: Start/Stop Car; Antique Car; Boats; RV; Farm machinery; Military vehicles; Trucks
- Bow thrusters
- Hi-Fi Cars

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



WARRANTY*
24 MONTHS



CODE	V	CAPACITY Ah/20h	CRANKING "EN"		PHCA 5 sec. AMP	DIMENSIONS (mm)				TERMINAL	POL.	WEIGHT (Kg)	PALLET QUANTITY
			CCA (-18°C)	CA (0°C)		L	W	H	Total H				
ZPC120013	12	15	180	230	525	176	86	132	132	M5	DX	5	144
ZPC120020	12	20	230	310	680	181	77	167	167	M6	DX	7,0	144
ZPC120025	12	28	410	530	925	165	176	125	125	M8	DX	10,7	75
ZPC120030	12	30	450	550	950	250	97	142	156	M6M	DX	10,0	75
ZPC120032	12	35	438	525	975	196	131	167	167	M6	DX	12,1	75
ZPC120040	12	44	560	725	1200	198	166	170	170	M8	DX	15,1	66
ZPC120047	12	60	700	840	1340	220	121	247	261	M6M	DX	20,5	45
ZPC120051	12	65	825	1000	1500	261	171,5	182,5	186,5	M8+TP28	SX	20,9	42
ZPC120065	12	100	965	1170	1950	307	169	214	237	DT	SX	32,2	36
ZPC120075	12	110	1100	1360	2200	330	173	214	237	M10M	DX	34,6	36

► For details refer to the data sheets on our website

To consult the terminals, go to page 58

01.



AGM SEALED BATTERIES

Zenith ZL SEALED BATTERIES

APPLICATIONS

- Scrubbers
- Sweepers
- Golf cars
- Electric Boats
- Electric Scooters
- Renewable Energy
- Vehicles for Disables
- All electric vehicles

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





CODE	USA MODEL	V	CAPACITY		DIMENSIONS (mm)				TERMINAL	WEIGHT (Kg)	PALLET QUANTITY
			Ah/5h	Ah/20h	L	W	H	Total H			

Battery: 6V-8V

ZL060100	-	6	165	200	306,0	169,0	220,0	226,0	M8	27,0	36
ZL060110	GC105	6	180	224	260,0	180,0	245,0	251,0	M8	29,8	36
ZL060115	DIN	6	190	225	244,0	190,0	275,0	275,0	M8	31,5	36
ZL060125	305	6	274	335	295,0	178,0	345,0	364,0	DT	45,0	22
ZL060130	L16	6	311	400	295,0	179,0	404,0	424,0	M8+AP	56,0	22
ZL080115	GC890	8	165	200	260,0	182,0	299,0	299,0	M8	40,0	24



Battery: 12V to 40Ah

ZL120110	-	12	-	12	151,0	99,0	95,0	101,0	F2	4,2	200
ZL120115	-	12	-	18	181,0	77,0	167,0	167,0	M5	5,7	128
ZL120120	-	12	17,8	22	181,0	77,0	167,0	167,0	M5	5,8	128
ZL120130	-	12	21,3	26	165,0	174,0	125,0	125,0	M6	8,4	80
ZL120135	-	12	28,5	35	196,0	131,0	155,0	167,0	M6	10,8	75
ZL120150	-	12	32	40	198,0	166,0	174,0	174,0	M6	14,5	60



Battery: 12V from 55Ah to 120Ah

ZL120155	-	12	45	55	229,0	138,0	208,0	212,0	M6	18,3	60
ZL120165	-	12	53,3	65	349,5	166,0	174,0	174,0	M6	23,0	48
ZL120175	24	12	70	85	260,0	169,0	211,0	215,0	M6	26,5	48
ZL120185	27	12	85	105	307,0	169,0	211,0	215,0	M8	30,5	36
ZL120190	31	12	90	115	331,0	175,0	214,0	218,0	M8	33,0	36
ZL1201100	-	12	98	120	409,0	177,0	225,0	225,0	M8	36,2	27



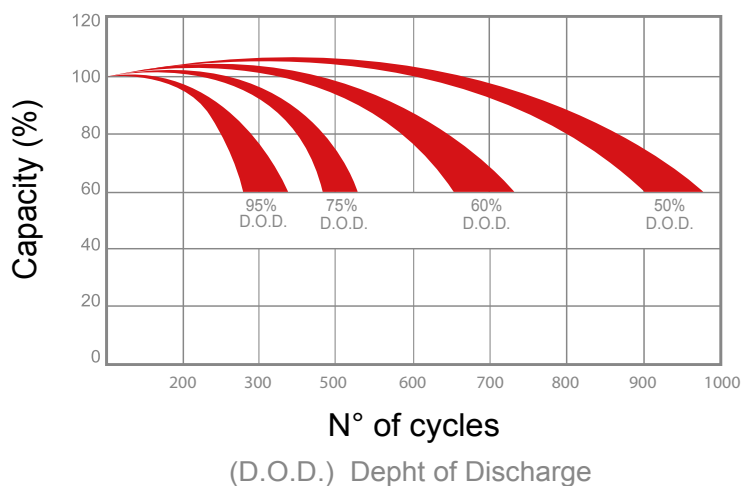
Battery: 12V from 130Ah to 260Ah

ZL1201105	DIN	12	110	130	345,0	172,0	280,0	285,0	M8	39,4	24
ZL1201115	-	12	123	160	484,0	171,0	241,0	241,0	M8	46,0	24
ZL1201120	4D	12	159	200	532,0	206,0	216,0	221,0	M8	59,6	18
ZL1201135	4D	12	172	220	522,0	240,0	219,0	224,0	M8	65,8	18
ZL1201145	8D	12	213	260	521,0	269,0	220,0	224,0	M8	77,8	12



► For details refer to the data sheets on our website

Charge cycles (25°C)



01.



AGM DEEP-CYCLE SEALED BATTERIES

Zenith ZLS SILICON

APPLICATIONS

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

WHY CHOOSING A ZLS BATTERY?

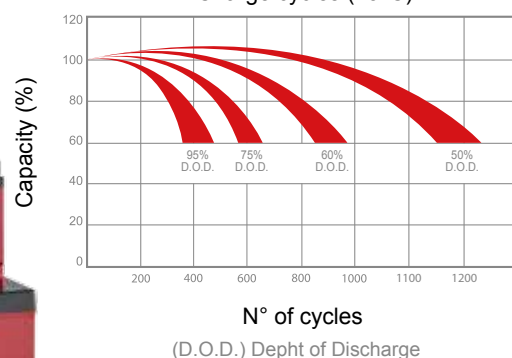
- 20% lifetime cycle more than ZL series
- Innovative solution to reduce the negative effects of stratification
- Specific design increasing performance for the discharge in 2 hrs



WARRANTY*
24 MONTHS



Charge cycles (25°C)



CODE	USA MODEL	V	CAPACITY			DIMENSIONS (mm)				TERMINAL	WEIGHT (Kg)	PALLET QUANTITY
			Ah/5h	Ah/20h	Ah/2h	L	W	H	Total H			
ZLS060110	GC105	6	220	240	180	260	180	270	273	M8	36	36
ZLS120110	-	12	13,5	16,5	12	151	99	97	101	F2	4,3	200
ZLS120120	-	12	23	28	20	181	77	170	172	M5	7,1	128
ZLS120130	-	12	27	33	24	166	175	126	126	M6	9,5	80
ZLS120135	-	12	29	36	27	193,5	130	166,5	166,5	M6	10,8	75
ZLS120150	-	12	35	45	32	197	165	170,5	170,5	M6	14,3	60
ZLS120160	DIN	12	49	60	43	265	166	188	188	AP	20,7	48
ZLS120175	24	12	70	85	60	260	169	211	215	M6	26,0	48
ZLS120185	27	12	85	105	71	307	169	211	215	M8	30,0	36
ZLS120190	31	12	110	120	88	332	176	214	218	M8	36,0	30
ZLS1201105	DIN	12	110	135	95	344	172	280	280	M8	43,0	24
ZLS1201115	-	12	165	190	133	485	170	241	241	M8	53,0	24
ZLS1201120	4D	12	160	200	141	532	206	216	221	M8	59,6	18
ZLS1201145	8D	12	213	260	183	521	269	220	224	M8	77,8	12

► For details refer to the data sheets on our website

FLOODED LEAD-ACID BATTERIES



BATTERIES

Zenith ZTB Traction Block

CYCLE USE / DEEP-CYCLE "AMERICAN" TYPE

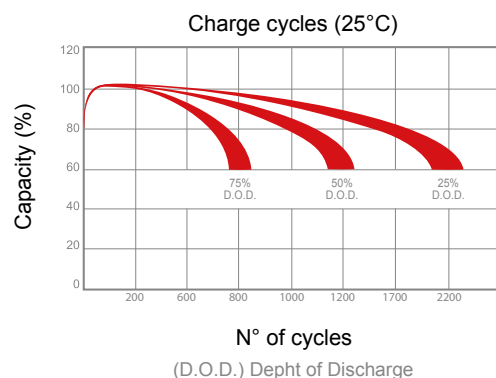
APPLICATIONS

- Scrubbers
- Sweepers
- Golf Cars
- Scissor lift

● Never discharge more than 80%. Deeper discharges void any warranty.



WARRANTY*
24 MONTHS



CODE	USA MODEL	CAPACITY		DIMENSIONS (mm)			TERMINAL	WEIGHT (Kg)	PALLET QUANTITY
		Ah/5h	Ah/20h	L	W	H			
Traction Block 6V									
ZTB060110*	GC105	185	225	260	178	289	DT	28,0	36
ZTB060115*	DIN	195	240	244	190	274	AP	29,5	36
ZTB060140*	305	271	330	298	181	373	AP**	43,5	18
Traction Block 8V									
ZTB080110*	GC875	145	170	260	178	289	DT	29,5	36
Traction Block 12V									
ZTB120080***	-	60	80	278	175	190	AP	18,0	57
ZTB120100*	24DC	70	85	260	171	248	DT	23,5	54
ZTB120110A*	27DC	85	105	305	171	250	DT	27,5	42
ZTB120110***	-	80	105	304	175	220	AP	24,0	56
ZTB120115***	-	90	115	345	175	235	AP	27,0	48
ZTB120120*	31DC	105	120	329	171	248	DT	29,0	36
ZTB120140***	1275	120	150	327	181	272	LPT	37,0	24

► For details refer to the data sheets on our website

To consult the terminals, go to page 58

* N° cycles as graphic

** KIT.AP.STUD is in the accessory page

*** Still completely black batteries

Zenith ZC

LEAD-ACID

Zenith⁺cells

APPLICATIONS

- Lift Trucks
- Transpallets
- Renewable Energy
- Cleaning Machines

WARRANTY*
48 MONTHS



► CELL MAINTENANCE KIT

CODE: KIT.MAN

The maintenance kit is included for assembled batteries.

Composed of:

- Densimeter
- Thermometer
- Syringe



► DIN CELLS

60Ah PLATE – 340 mm high, 198 mm width			
CODE	CAPACITY (Ah)	LARGE (mm)	Kg +/-5%
ZC2PzS120	120	47	8,5
ZC3PzS180	180	65	12,0
ZC4PzS240	240	83	15,4
ZC5PzS300	300	101	19,0
ZC6PzS360	360	119	22,5
ZC7PzS420	420	137	26,0
ZC8PzS480	480	155	29,5
ZC9PzS540	540	174	33,0
ZC10PzS600	600	192	36,5

90Ah PLATE – 463,5 mm high, 198 mm width			
CODE	CAPACITY (Ah)	LARGE (mm)	Kg +/-5%
ZC2PzS180	180	47	11,9
ZC3PzS270	270	65	17,0
ZC4PzS360	360	83	22,1
ZC5PzS450	450	101	27,1
ZC6PzS540	540	119	32,2
ZC7PzS630	630	137	37,2
ZC8PzS720	720	155	42,3
ZC9PzS810	810	174	47,4
ZC10PzS900	900	192	52,4

80Ah PLATE – 396,5 mm high, 198 mm width			
CODE	CAPACITY (Ah)	LARGE (mm)	Kg +/-5%
ZC2PzS160	160	47	10,0
ZC3PzS240	240	65	14,2
ZC4PzS320	320	83	18,4
ZC5PzS400	400	101	22,6
ZC6PzS480	480	119	26,7
ZC7PzS560	560	137	31,3
ZC8PzS640	640	155	35,1
ZC9PzS720	720	174	39,3
ZC10PzS800	800	192	43,4

105Ah PLATE – 511,5 mm high, 198 mm width			
CODE	CAPACITY (Ah)	LARGE (mm)	Kg +/-5%
ZC2PzS210	210	47	13,5
ZC3PzS315	315	65	19,1
ZC4PzS420	420	83	24,6
ZC5PzS525	525	101	30,5
ZC6PzS630	630	119	36,1
ZC7PzS735	735	137	41,8
ZC8PzS840	840	155	47,4
ZC9PzS945	945	174	53,1
ZC10PzS1050	1050	192	58,4

115Ah PLATE – 542,5 mm high, 198 mm width

CODE	CAPACITY (Ah)	LARGE (mm)	Kg +/-5%
ZC2PzS230	230	47	14,2
ZC3PzS345	345	65	20,3
ZC4PzS460	460	83	26,4
ZC5PzS575	575	101	32,4
ZC6PzS690	690	119	39,0
ZC7PzS805	805	137	44,7
ZC8PzS920	920	155	50,6
ZC9PzS1035	1035	174	56,6
ZC10PzS1150	1150	192	62,7

140Ah PLATE – 683,5 mm high, 198 mm width

CODE	CAPACITY (Ah)	LARGE (mm)	Kg +/-5%
ZC2PzS280	280	47	17,5
ZC3PzS420	420	65	24,7
ZC4PzS560	560	83	31,8
ZC5PzS700	700	101	39,3
ZC6PzS840	840	119	46,7
ZC7PzS980	980	137	53,9
ZC8PzS1120	1120	155	61,3
ZC9PzS1260	1260	174	68,2
ZC10PzS1400	1400	192	76,0

* For further details on the mode, see general warranty conditions on our website

► BRITISH CELLS

55Ah PLATE – 402 mm high, 158 mm width

CODE	CAPACITY (Ah)	LARGE (mm)	Kg +/-5%
ZC2PzB110	110	47	7,7

75Ah PLATE – 515 mm high, 158 mm width

CODE	CAPACITY (Ah)	LARGE (mm)	Kg +/-5%
ZC2PzB150	150	47	9,9

100Ah PLATE – 600,5 mm high, 158 mm width

CODE	CAPACITY (Ah)	LARGE (mm)	Kg +/-5%
ZC2PzB200	200	47	11,9

125Ah PLATE – 569 mm high, 198 mm width

CODE	CAPACITY (Ah)	LARGE (mm)	Kg +/-5%
ZC2PzS250	250	47	15,0
ZC3PzS375	375	65	21,2
ZC4PzS500	500	83	27,4
ZC5PzS625	625	101	33,9
ZC6PzS750	750	119	40,3
ZC7PzS875	875	137	46,5
ZC8PzS1000	1000	155	53,1
ZC9PzS1125	1125	174	59,4
ZC10PzS1250	1250	192	66,0

155Ah PLATE – 713,5 mm high, 198 mm width

CODE	CAPACITY (Ah)	LARGE (mm)	Kg +/-5%
ZC2PzS310	310	47	18,9
ZC3PzS465	465	65	26,7
ZC4PzS620	620	83	34,6
ZC5PzS775	775	101	42,6
ZC6PzS930	930	119	50,5
ZC7PzS1085	1085	137	58,5
ZC8PzS1240	1240	155	66,4
ZC9PzS1395	1395	174	74,4
ZC10PzS1550	1550	192	82,4

65Ah PLATE – 454 mm high, 158 mm width

CODE	CAPACITY (Ah)	LARGE (mm)	Kg +/-5%
ZC2PzB130	130	47	8,9

86Ah PLATE – 568 mm high, 158 mm width

CODE	CAPACITY (Ah)	LARGE (mm)	Kg +/-5%
ZC2PzB172	172	47	11,2

► The high is for the cell without cap and terminal

SPYBATT
www.spybatt.com



Four LEDs keep the user constantly updated of any anomalies. The data is downloaded via a mini USB port and the software interface is on three levels:

- 8 indicators, easy to understand, to detect immediately any anomalies (see photo)
- Detailed statistics on each parameter affecting the battery life
- Analysis of events with direct access to the calendar

It is installed on each assembled battery complete with the package "extended warranty 4 years" and on all regenerated traction batteries.

By using an electronic calendar, ANY events related to the battery are stored for 5 years according to the three possible conditions (in charge, in discharge and in pause) in which you can find the battery itself.

It is unique and multi-voltage (from 24V to 96V):

- The hall effect sensor allows to measure the discharge and the charge current (up to 800Amp) and then count the discharged and the charged capacity.
- The probe detects both the presence of the electrolyte that the temperature. These sensors are applied within a cell (central), via a patented technical solution.
- There are five sensors to measure the battery voltage, applied on the connections via a defined system "to insulation piercing".
 - One for the positive
 - One for the negative
 - Three intermediate to detect immediately any imbalance of cells inside the same battery



Zenith STARTER

APPLICATIONS

Starter:

- Car
- Van
- Lorry
- Truck
- Tractor
- Bulldozer

WARRANTY*
24 MONTHS



LOW MAINT. CODE MF	FREE MAINT. CODE SMF	CAPACITY Ah/20h	STARTER CCA - "EN" -18°C	GROUP	POLAR.	BHD	WEIGHT (Kg)	DIMENSIONS (mm)			PALLET QUANT.	LAYOUT	
								L	W	H			
Cars, Van													
-	2054034	40	330	L0	DX	B3	10,70	175	175	190	108	0	
-	2054466	45	360	L1	DX	B3	11,60	207	175	190	108	0	
-	2055559	55	480	L1	DX	B3	12,70	207	175	190	108	0	
-	2056221	62	540	L2	DX	B3	14,30	242	175	190	80	0	
-	2056222	62	540	L2B	DX	B3	13,80	242	175	175	80	0	
-	2057414	75	640	L3	DX	B3	16,75	278	175	190	70	0	
-	2057419	75	640	L3	SX	B3	16,80	278	175	190	70	0	
-	2057014	75	640	L3B	DX	B3	16,15	278	175	175	70	0	
-	2060002	80	720	L4	DX	B3	19,10	310	175	190	60	0	
-	2058046	80	720	L4B	DX	B3	18,30	310	175	175	60	0	
-	2060538	100	820	L5	DX	B3	21,80	353	175	190	48	0	
-	2060008	100	730	GR28	DX	B1	22,20	304	173	220	48	0	
-	2060009	100	730	GR28	SX	B1	22,20	304	173	220	48	1	
Japanese cars													
-	2053820	35	300	JIS	DX	B0	10,30	197	128	220	128	0	
-	2053821	35	300	JIS	DX	B1	10,30	197	128	220	128	6	
-	2053822	35	300	JIS	SX	B0	10,30	197	128	220	128	1	
-	2068045	60	450	JIS	DX	B0	14,80	230	170	220	63	0	
-	2029056	70	560	JIS	DX	B0	17,20	260	170	220	57	0	
Trucks													
-	2061028	120	800	COMPACT B	DX	B0	25,10	345	175	230	36	0	
-	2061029	120	800	COMPACT B	DX	B1	25,30	345	175	230	36	0	
1062087	-	135	900	MAC 120	DX	B3	32,00	514	175	210	24	4	
SHD*	1062086	-	135	TIPO A	SX	B0	33,00	513	189	220	24	3	
	1066514	-	160	TIPO B	SX	B0	41,50	513	223	223	27	3	
	1066589	-	160	TIPO B	DX	B3	41,30	514	218	210	27	4	
	1068032	-	180	TIPO B	SX	B0	45,10	513	223	223	27	3	
	1073011	-	235	1400	TIPO C	SX	B0	56,60	514	276	242	18	3
	1073088	-	235	1400	TIPO C	DX	B0	56,80	514	276	242	18	4

► For details refer to the data sheets on our website

*SHD: SUPER HEAVY DUTY



Zenith MOTORCYCLE STARTER

APPLICATIONS

Starter:

- Scooter
- Motorcycle
- Quad
- Watercraft

- Lead-acid batteries for motorcycle, scooter and quad starter.
- Flooded versions (low maintenance) and sealed AGM (free maintenance)
- All versions supplied with acid and complete of tightening screws



CODE	V	CAPACITY Ah/10h	STARTER AMP - "EN"	POLARITY	WEIGHT (Kg)	DIMENSIONS (mm)			PALLET QUANT.
						L	W	H	
Lead-acid – low maintenance									
ZSM10L-B	12	11	160	DX	3,30	135,00	90,00	145,00	120
ZSM12AL-A2	12	12	165	DX	3,80	134,00	80,00	160,00	120
ZSM12A-A	12	12	165	SX	3,80	134,00	80,00	160,00	120
ZSM14L-A2	12	14	190	DX	4,20	134,00	89,00	166,00	96
ZSM14-A2	12	14	190	SX	4,20	134,00	89,00	166,00	96
ZSM4L-B	12	4	50	DX	4,55	120,00	70,00	92,00	192
ZSM7L-B	12	8	90	DX	2,65	135,00	75,00	133,00	150
ZSM9-B	12	9	130	SX	3,10	135,00	75,00	139,00	150
ZSM60-N30-A	12	30	300	SX	8,30	183,00	128,00	170,00	48
ZSM60-N30L-A	12	30	280	DX	8,30	183,00	128,00	170,00	48
AGM									
ZSM12B-BS AGM	12	10	160	SX	3,60	150,00	70,00	130,00	144
ZSM12A-BS AGM	12	10	175	SX	3,20	150,00	87,00	106,00	180
ZSM7B-BS AGM	12	6	110	SX	2,50	150,00	65,00	93,00	192
ZSM9B-BS AGM	12	8	120	SX	3,00	150,00	70,00	105,00	180
ZSM12-BS AGM	12	10	180	SX	3,90	150,00	87,00	130,00	144
ZSM14-BS AGM	12	12	200	SX	4,50	150,00	87,00	146,00	120
ZSM20L-BS AGM	12	18	270	DX	5,90	175,00	87,00	155,00	120
ZSM4L-BS AGM	12	3	50	DX	1,40	113,00	71,00	85,00	336
ZSM5L-BS AGM	12	4	80	DX	1,80	113,00	70,00	105,00	288
ZSM7A-BS AGM	12	6	105	SX	2,60	150,00	87,00	95,00	180
ZSM7L-BS AGM	12	6	100	DX	2,30	113,00	70,00	130,00	240
ZSM9-BS AGM	12	8	135	SX	3,00	150,00	87,00	105,00	180
ZSM10S AGM	12	8,6	190	SX	2,90	150,00	87,00	93,00	144
ZSM14S-BS AGM	12	11,2	230	SX	3,60	150,00	87,00	110,00	120

► For details refer to the data sheets on our website

01.



FLOODED BATTERIES STARTER

Zenith CLASSIC

LEAD-ACID



APPLICATIONS

- Antique car starter

Lead-acid battery for antique car starter

- Available models both 6V and 12V
- Assembled in rubber containers
- Keep the specifications of the original batteries
- Flooded versions provided with dry-charge
- Made in Europe



CODE	DESCRIPTION	DIMENSIONS (mm)			
		L	W	H	Total H
Battery: 6V					
ZSC401	ZENITH STARTER CLASSIC 6V 60Ah	186	170	164	189
ZSC404	ZENITH STARTER CLASSIC 6V 71Ah	215	171	165	190
ZSC421	ZENITH STARTER CLASSIC 6V 58Ah	169	174	192	217
ZSC501	ZENITH STARTER CLASSIC 6V 88Ah	224	173	192	217
ZSC501/17	ZENITH STARTER CLASSIC 6V 117Ah	224	173	192	217
ZSC511	ZENITH STARTER CLASSIC 6V 103Ah	263	172	192	217
ZSC511/17TALL	ZENITH STARTER CLASSIC 6V 117Ah	263	176	210	235
Battery: 12V					
ZSC241	ZENITH STARTER CLASSIC 12V 73Ah	307	170	205	230
ZSC242	ZENITH STARTER CLASSIC 12V 73Ah	307	170	205	230
ZSC241/13	ZENITH STARTER CLASSIC 12V 88Ah	307	170	205	230
ZSC279	ZENITH STARTER CLASSIC 12V 73Ah	485	110	195	220
ZSC279/13	ZENITH STARTER CLASSIC 12V 88Ah	485	110	195	220
ZSC291	ZENITH STARTER CLASSIC 12V 58Ah	249	165	197	222
ZSC291/11	ZENITH STARTER CLASSIC 12V 73Ah	249	165	197	222

► For details refer to the data sheets on our website

HOUSEHOLD BATTERIES

BATTERIES

Zenith LIFE

Zenith Life

APPLICATIONS

- Toys
- Small Tools
- Remote Control



Household batteries on the display for sales point

- Complete range of batteries according to three groups: alkaline, rechargeable (NiMh) and lithium
- Batteries are set on a practical rotating display allowing an easy identification of both products and groups
- The first supply KIT ensures immediate saving and offers a full range of all models available

KIT DISPLAY
CODE 3050000



► ALKALINE



CODE	TYPE	V	BLISTER QUANTITY	MOQ BLISTER
3010000	AAA	1,5	4	50
3010010	AA	1,5	4	50
3010020	C	1,5	2	20
3010030	D	1,5	2	20
3010040	9V	1,5	1	30
3010050	LR1	1,5	1	50
3010060	11A	6	1	50
3010070	27A	12	1	50
3010080	23A	12	1	50

► Ni-Mh RECHARGEABLE



CODE	TYPE	V	mAh	BLISTER QUANTITY	MOQ BLISTER
3020000	AAA	1,2	900 LSD	4	20
3020010	AA	1,2	2300 LSD	4	20
3020500	battery charger			1	10

LSD: Low Self Discharge

► LITHIUM



CODE	TYPE	V	mAh	BLISTER QUANTITY	MOQ BLISTER
3030010	CR1216	3	25	2	50
3030020	CR1220	3	40	2	50
3030110	CR1616	3	50	2	50
3030120	CR1620	3	70	2	50
3030210	CR2016	3	75	2	50
3030220	CR2025	3	160	2	50
3030230	CR2032	3	220	2	50
3030310	CR2430	3	270	2	30
3030320	CR2477	3	1000	2	30

01.



LITHIUM LiFeP04 BATTERY PACKS

Zenith LITHIUM

LITHIUM BATTERIES

Zenith LITHIUM

APPLICATIONS

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

WARRANTY*
36 MONTHS

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 1hr (**always** use the proper battery charger). Vehicles, where they will be installed, will increase their productivity/autonomy.

- The capacity is constant in lithium battery; it does not change as the discharge current rate varies (see the table)
- Always ask the UNION BATTERY SERVICE authorization if you want to use them in series or parallel



► LITHIUM BATTERY PACKS "LiFeP04", COMPLETE WITH ELECTRONIC CONTROL PCM/BMS

CODE	V	Ah	DIMENSIONS (mm)			TERMINAL	DISCHARGE				CHARGER		WEIGHT
			L	W	H		min voltage	max constant current	max current spike	max spike duration	max voltage	max current	
							Volt	Amp	Amp	Seconds	Volt	Amp	
ZLI012005	12	9	150	65	95	T2	<10	15	35	2	14,6	9	0,9
ZLI012000	12	12	150	97	95	T2	<10	30	80	2	14,6	12	1,6
ZLI012018	12	16	166	175	126	M6	<10	30	65	2	14,6	12	2,4
ZLI012010	12	20	181	76	170	M6	<10	30	80	2	14,6	20	2,9
ZLI012025**	12	24	166	175	126	M6	<10	30	65	2	14,6	12	3,2
ZLI012030	12	40	196	165	170	M8	<10	50	170	2	14,6	40	6,4
ZLI012040	12	60	260	167	225	M8	<10	50	170	2	14,6	50	9,3
ZLI012050	12	100	306	165	215	M8	<10	100	350	2	14,6	100	13,1
ZLI024020	24	25	195	165	170	M8	<20	40	170	2	29,2	40	6,4
ZLI024035	24	50	306	165	220	M8	<20	50	300	2	29,2	50	12,8
ZLI024060	24	100	485	170	245	M8	<20	100	300	2	29,2	100	26,2
ZLI036060	36	80	522	235	225	M8	<32	100	300	2	43,8	80	31,4
ZLI048040*	48	60	522	238	224	M8	<42	60	300	2	58,4	30	31,4
ZLI072030*	72	40	522	238	224	M8	<65	50	170	2	87,6	30	31,4

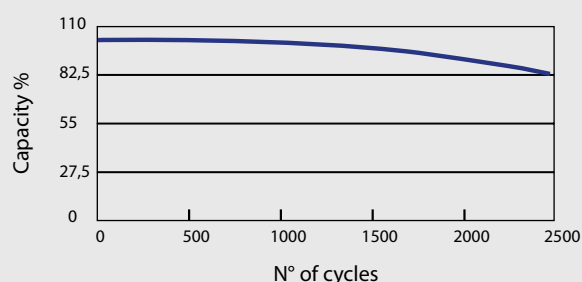
► For details refer to the data sheets on our website



SUITABLE BATTERY CHARGERS

CODE BATTERY	FAST CHARGE		STANDARD CHARGE	
	Battery charger	Time	Battery charger	Time
ZLI012005	ZHF1209.LI	70min	ZBC1205	2h
ZLI012000	ZHF1212.LI	70min	ZBC1205	2h 30min
ZLI012010	ZHF1220.LI	70min	ZBC1205	4h 15min
ZLI012018	ZHF1212.LI	80min	ZBC1205	3h 30min
ZLI012025	ZHF1212.LI	2h	ZBC1205	5h
ZLI012030	ZHF1225.LI	1h 50min	ZHF1209.LI	4h 40min
ZLI012040	ZHF1225.LI	2h 50min	ZHF1212.LI	5h 20min
ZLI012050	-	-	ZHF1225.LI	4h 20min
ZLI024020	ZHF2420.LI	1h 15min	ZBC2405	5h
ZLI024035	ZHF2450.LI	70min	ZHF2420.LI	2h 50min
ZLI024060	ZHF2490.LI	80min	ZHF2420.LI	5h 20min
ZLI036060	ZHF3670.LI	80min	ZHF3620.LI	4h 20min
ZLI048040	ZHF4830.LI	2h 15min	ZHF4815.LI	4h 20min
ZLI072030	ZHF7230.LI	1h 40min	ZHF7220.LI	2h 15min

N° of charge-discharge cycles using the discharging current equal to 1C - 25°C - 80% D.O.D.



Comparative Table AGM-LITHIUM

In order to facilitate the
correct dimensioning

NOMINAL CAPACITY = REAL CAPACITY			
Constant current discharge	Estimate autonomy		
	ZLI020185 (12V 105Ah/20h)	ZLI02050 (12V/100Ah)	ZLI02040 (12V 60Ah)
5Amp	20,0h	20,0h	12,0h
10Amp	9,4h	10,0h	6,0h
20Amp	4,0h	5,0h	3,0h
30Amp	2,1h	3,3h	2,0h
40Amp	1,5h	2,5h	1,5h
50Amp	50min	120min	70min
60Amp	40min	100min	N.C*
80Amp	25min	75min	N.C*
100Amp	20min	60min	N.C*

N.C*: Discharge current is not suitable with BMS/PCM

Zenith LITHIUM for electric bicycles

LITHIUM BATTERIES

- They are provided in the aluminium container, equipped of BMS
- It is recommended to use the original battery charger, otherwise the warranty expires
- They allow approximately 800/900 cycles of use
- They are provided with fixing clamp



WARRANTY*
24 MONTHS

CODE	V	CAPACITY Ah	DIMENSIONS (mm)			WEIGHT Kg	SUITABLE BATTERY CHARGER
			L	W	H		
ZLI024010	24	10	390	86	85	3,2	ZCLI024010
ZLI024015	24	10	410	150	66	2,6	ZCLI024015
ZLI036010	36	10	390	106	76	4,3	ZCLI036010
ZLI036015	36	10	410	150	66	3,1	ZCLI036015

01.



BATTERIES FOR ELECTRIC TOOLS

Zenith TOOLS

BATTERIES FOR ELECTRIC TOOLS, COMPATIBLE WITH THE ORIGINAL

Zenith **TOOLS**

▼ SUITABLE WITH DEWALT



ZT01102020



ZT01152020



ZT01202020



ZT01252020



ZT01252030



ZT01503030



ZT01552030



ZT01603030



ZT01652020

SUITABLE WITH DEWALT

ZT01102020	Battery is suitable with DEWALT; 7.2V 2.5Ah NiMH
ZT01152020	Battery is suitable with DEWALT; 9.6V 2.5Ah NiMH
ZT01202020	Battery is suitable with DEWALT; 12V 2.5Ah NiMH
ZT01252020	Battery is suitable with DEWALT; 14.4V 2.5Ah NiMH
ZT01252030	Battery is suitable with DEWALT; 14.4V 3Ah NiMH
ZT01503030	Battery is suitable with DEWALT; 14.4V 3Ah Li-ion
ZT01552030	Battery is suitable with DEWALT; 18V 3Ah NiMH
ZT01603030	Battery is suitable with DEWALT; 18V 3Ah Li-ion
ZT01652020	Battery is suitable with DEWALT; 24V 2.5Ah NiMH

▼ SUITABLE WITH MAKITA



ZT03051020



ZT03101020



ZT03402030



ZT03503000

SUITABLE WITH MAKITA

ZT03051020	Battery is suitable with MAKITA; 7.2V 1.3Ah NiCD
ZT03101020	Battery is suitable with MAKITA; 9.6V 1.3Ah NiCD
ZT03152030	Battery is suitable with MAKITA; 9.6V 3.0Ah NiMH
ZT03202030	Battery is suitable with MAKITA; 12V 3Ah NiMH
ZT03302030	Battery is suitable with MAKITA; 14.4V 3Ah NiMH
ZT03352030	Battery is suitable with MAKITA; 18V 3.0Ah NiMH
ZT03402030	Battery is suitable with MAKITA; 24V 3Ah NiMH
ZT03503000	Battery is suitable with MAKITA; 10.8V 1.5Ah Liion
ZT03553000	Battery is suitable with MAKITA; 14.4V 3Ah Liion
ZT03603000	Battery is suitable with MAKITA; 18V 3.0Ah Liion



ZT03202030



ZT03302030



ZT03352030



ZT03152030



ZT03553000



ZT03603000



▼ SUITABLE WITH BLACK&DECKER



ZT02102010



ZT02152010



ZT02202010

SUITABLE WITH BLACK&DECKER

ZT02102010	Battery is suitable with BLACK&DECKER; 9.6V 2.1Ah NiMH
ZT02152010	Battery is suitable with BLACK&DECKER; 12V 2.1Ah NiMH
ZT02202010	Battery is suitable with BLACK&DECKER; 14.4V 2.1Ah NiMH

▼ SUITABLE WITH HITACHI



ZT05101010



ZT05152030



ZT05202030



ZT05252030



ZT05302030



ZT05402030



ZT05453000



ZT05503000

SUITABLE WITH HITACHI

ZT05101010	Battery is suitable with HITACHI; 9.6V 2.1Ah NiMH
ZT05152030	Battery is suitable with HITACHI; 12V 3.0Ah NiMH
ZT05202030	Battery is suitable with HITACHI; 12V 3Ah NiMH
ZT05252030	Battery is suitable with HITACHI; 14.4V 3.0Ah NiMH
ZT05302030	Battery is suitable with HITACHI; 18V 3.0Ah NiMH
ZT05402030	Battery is suitable with HITACHI; 18V 3.0Ah NiMH
ZT05453000	Battery is suitable with HITACHI; 3.6V 1.5Ah LiIon
ZT05503000	Battery is suitable with HITACHI; 10.8V 1.5Ah LiIon
ZT05553000	Battery is suitable with HITACHI; 14.4V 3.0Ah LiIon
ZT05603000	Battery is suitable with HITACHI; 18V 3.0Ah LiIon
ZT05703000	Battery is suitable with HITACHI; 14.4V 3.0Ah LiIon
ZT05753000	Battery is suitable with HITACHI; 25.2V 3.0Ah LiIon
ZT05803000	Battery is suitable with HITACHI; 36V 3.0Ah LiIon



ZT05553000



ZT05603000



ZT05703000



ZT05753000



ZT05803000

▼ SUITABLE WITH PANASONIC



ZT06152010



ZT06202010



ZT06352030



ZT06452030

SUITABLE WITH PANASONIC

ZT06152010	Battery is suitable with PANASONIC; 7.2V 2.1Ah NiMH
ZT06202010	Battery is suitable with PANASONIC; 9.6V 2.1Ah NiMH
ZT06352030	Battery is suitable with PANASONIC; 12V 3Ah NiMH
ZT06452030	Battery is suitable with PANASONIC; 24V 3Ah NiMH

▼ SUITABLE WITH RYOBI



ZT07102010



ZT07202030

SUITABLE WITH RYOBI

ZT07102010	Battery is suitable with RYOBI; 12V 2.1Ah NiMH
ZT07202030	Battery is suitable with RYOBI; 18V 3Ah NiMH

▼ SUITABLE WITH METABO



ZT08102010

SUITABLE WITH METABO

ZT08102010	Battery is suitable with METABO; 12V 2.1Ah NiMH
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▼ SUITABLE WITH BOSCH



ZT04152010



ZT04202010



ZT04252030



ZT04302030



ZT04352030



ZT04402030



ZT04452030



ZT04502030



ZT04552030



ZT04703000



ZT04753030



ZT04803030

SUITABLE WITH BOSCH

ZT04152010	Battery is suitable with BOSCH; 7.2V 2.1Ah NiMH
ZT04202010	Battery is suitable with BOSCH; 9.6V 2.1Ah NiMH
ZT04252030	Battery is suitable with BOSCH; 9.6V 3.0Ah NiMH
ZT04302030	Battery is suitable with BOSCH; 12V 3Ah NiMH
ZT04352030	Battery is suitable with BOSCH; 14.4V 3Ah NiMH
ZT04402030	Battery is suitable with BOSCH; 18V 3Ah NiMH
ZT04452030	Battery is suitable with BOSCH; 24V 3Ah NiMH
ZT04502030	Battery is suitable with BOSCH; 12V 3Ah NiMH
ZT04552030	Battery is suitable with BOSCH; 12V 3Ah NiMH
ZT04703000	Battery is suitable with BOSCH; 10.8V 1.5Ah Li-ion
ZT04753030	Battery is suitable with BOSCH; 14.4V 3Ah Li-ion
ZT04803030	Battery is suitable with BOSCH; 14.4V 3Ah Li-ion

▼ SUITABLE WITH MILWAUKEE - AEG - ATLAS



ZT09202030



ZT09252030



ZT09402030



ZT09452030



ZT10302030



ZT09502030



ZT09552030



ZT09703000



ZT09563030



ZT10252030



ZT09813030

SUITABLE WITH MILWAUKEE - AEG - ATLAS

ZT09202030	Battery is suitable with MILW-AEG-ATLAS; 9.6V 3Ah NiMH
ZT09252030	Battery is suitable with MILWAUKEE; 12V 3Ah NiMH
ZT09402030	Battery is suitable with MILWAUKEE; 14.4V 3Ah NiMH
ZT09452030	Battery is suitable with MILW-AEG-ATLAS; 14.4V 3Ah NiMH
ZT10302030	Battery is suitable with AEG; 14.4V 3Ah NiMH
ZT09502030	Battery is suitable with MILW-AEG-ATLAS; 18V 3Ah NiMH
ZT09552030	Battery is suitable with MILWAUKEE; 18V 3Ah NiMH
ZT09703000	Battery is suitable with MILWAUKEE; 18V 2Ah Li-ion
ZT09563030	Battery is suitable with MILWAUKEE; 18V 3Ah NiMH
ZT10251030	Battery is suitable with AEG; 12V 2Ah NiCd
ZT10252030	Battery is suitable with AEG-MILW-ATLAS; 12V 3Ah NiMH
ZT09813030	Battery is suitable with MILWAUKEE; 28V 3Ah NiMH



▼ SUITABLE WITH HILTI



ZT11052030



ZT11102030



ZT11153010



ZT11303005



ZT11403000



ZT08102010

SUITABLE WITH HILTI

ZT11052030	Battery is suitable with HILTI; 9.6V 3Ah NiMH
ZT11102030	Battery is suitable with HILTI; 12V 3Ah NiMH
ZT11153010	Battery is suitable with HILTI; 14.4V 3Ah LiIon
ZT11303005	Battery is suitable with HILTI; 21.6V 3Ah LiIon
ZT11403000	Battery is suitable with HILTI; 36V 3 Ah LiIon

► ZTC - BATTERY CHARGER Zenith TOOLS



ZTC01000



ZTC09000



ZTC07000



ZTC03000



ZTC06000



ZTC05000



ZTC04000

CODICE

ZTC01000	Battery is suitable with DEWALT; 7.2V-18V NiCD NiMH
ZTC03000	Battery is suitable with MAKITA; 7.2V-24V NiCD NiMH LiIon
ZTC04000	Battery is suitable with BOSCH; 7.2V-24V NiCD NiMH
ZTC05000	Battery is suitable with HITACHI; 7.2V-18V NiCD NiMH LiIon
ZTC06000	Battery is suitable with PAN; 7.2V-24V NiCD NiMH
ZTC07000	Battery is suitable with RYO; 12V-18V NiCD NiMH LiIon
ZTC09000	Battery is suitable with MILWAUKEE; 7.2V-24V NiCD NiMH



Optimal charge, perfect start!

U.B.S relies on the technical support of MORI RADDRIZZATORI, a Company specialized in the design and in the manufacturing of automatic battery chargers, at a high and low frequency, for industrial use. The Company deals with the design of each system in all its components.

The joined aim of both Mori Raddrizzatori srl. and Union Battery Service srl. is to provide unique products of high quality and, where necessary, timely advice, fully qualified.



02. BATTERY CHARGERS



Our strategy is to offer GLOBAL SOLUTIONS. It is not only necessary a quality battery, but also a proper and reliable battery charger is indispensable to guarantee energy over time.

ZHF, EDM and MGX series are produced in Italy by the Company MORI RADDRIZZATORI, an integral part of our group.

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 block).

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 (page 52) 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).



Three-phase

- 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.

WARNINGS:

LITHIUM cycle battery chargers have been tested ONLY on our Zenith Lithium batteries. Therefore, we do not guarantee the proper functioning of other brands of LITHIUM batteries.

SINGLE-PHASE

CODE	OUTPUT		RECHARGEABLE BATTERIES								Kw	MAINS VOLTAGE (A) – 230V	DIMENSIONS (mm)			WEIGHT (Kg)
	V	A	LEAD-ACID						SEALED				L	W	H	
			8h		11h		13h		12h							
			Ah/C5 min	max	Ah/C5 min	max	Ah/C5 min	max	Ah/C5 min	max						
ZHF1209.LI	12	9	"IU" charge cycle for LITHIUM batteries								0,18	1,4	233	120	64	1,3
ZHF1212		12	30	80	30	120	30	140	30	120	0,23	1,8	233	120	64	1,3
ZHF1212.C		12	"IUoU" cycle - 2,43/2,25								0,23	1,8	234	120	64	1,3
ZHF1225		25	100	160	100	240	100	300	100	240	0,45	3,2	233	120	64	1,3
ZHF1225.C		25	"IUoU" cycle - 2,43/2,25								0,45	3,2	234	120	64	1,3
ZHF1225.LI		25	"IU" charge cycle for LITHIUM batteries								0,45	3,2	234	120	64	1,3
ZHF2412	24	12	30	80	30	120	30	140	30	120	0,41	3,0	233	120	64	1,3
ZHF2420		20	80	120	80	200	80	240	80	200	0,67	4,6	233	120	64	1,5
ZHF2420.LI		20	"IU" charge cycle for LITHIUM batteries								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
ZHF2450.LI		50	"IU" charge cycle for LITHIUM batteries								1,70	10,0	329	174	96	3,9
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
ZHF3620.LI		20	"IU" charge cycle for LITHIUM batteries								1,00	6,9	259	145	79	2,3
ZHF3640		40	160	240	160	240	160	480	160	420	2,00	12,0	329	174	96	3,9
ZHF4815	48	15	60	80	60	160	60	180	60	160	1,00	6,8	329	145	79	2,3
ZHF4815.LI		15	"IU" charge cycle for LITHIUM batteries								1,00	6,8	329	145	79	2,3
ZHF4830		30	120	180	120	300	120	360	120	300	2,00	12,0	329	174	96	3,9
ZHF4830.LI		30	"IU" charge cycle for LITHIUM batteries								2,00	12,0	329	174	96	3,9
ZHF6020	60	20	80	120	80	200	80	240	80	200	2,10	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
ZHF7220.LI		20	"IU" charge cycle for LITHIUM batteries								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

Single-phase with P.F.C

ZHF2490PFC	24	90	270	540	270	900	270	1080	270	900	3,1	13A 240V	420	303	100	7,2
ZHF2490.LI		90	"IU" charge cycle for LITHIUM batteries								3,1	13A 240V	420	303	100	7,2
ZHF3660PFC	36	60	180	360	180	600	180	720	180	600	3,1	13A 240V	420	303	100	7,2
ZHF3670PFC		70	180	420	180	720	180	840	180	720	3,6	16A 230V	420	303	100	7,2
ZHF3670.LI	36	70	"IU" charge cycle for LITHIUM batteries								3,6	16A 230V	420	303	100	7,2
ZHF4845PFC		45	180	270	180	480	180	540	180	480	3,1	13A 240V	420	303	100	7,2
ZHF4855PFC	48	55	180	330	180	540	180	660	180	540	3,7	16A 230V	420	303	100	7,2
ZHF4855.LI		55	"IU" charge cycle for LITHIUM batteries								3,7	16A 230V	420	303	100	7,2
ZHF4865PFC		65	180	420	180	660	180	780	180	660	4,4	20A 230V	420	303	100	7,2
ZHF7230PFC	72	30	120	180	120	300	120	360	120	300	3,1	13A 240V	420	303	100	7,2
ZHF7230.LI		30	"IU" charge cycle for LITHIUM batteries								3,1	13A 240V	420	303	100	7,2
ZHF7240PFC		40	120	240	120	420	120	480	120	400	4,1	20A 240V	420	303	100	7,2
ZHF8030PFC	80	30	120	180	120	300	120	360	120	300	3,4	13A 240V	420	303	100	7,2
ZHF8040PFC		40	120	240	120	420	120	480	120	400	4,5	20A 240V	420	303	100	7,2

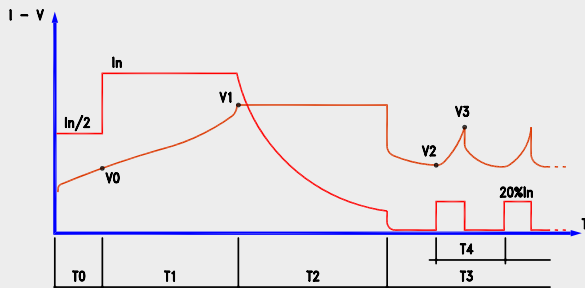
Battery chargers for LITHIUM do not have the DATA MEMORY and are not programmable

THREE-PHASE

CODE	OUTPUT		RECHARGEABLE BATTERIES								Kw	MAINS VOLTAGE (A) – 230V	DIMENSIONS (mm)			WEIGHT (Kg)
	V	A	LEAD-ACID						SEALED				L	W	H	
			8h		11h		13h		12h							
			Ah/C5 min	max	Ah/C5 min	max	Ah/C5 min	max	Ah/C5 min	max						
ZHF24120T	24	120	360	720	360	1200	360	1400	360	720	4,0	7,8	540	340	130	10,9
ZHF24240T		240	720	2800	720	2400	720	1400	720	2400	8,0	15,6	590	435	265	21,5
ZHF3680T	36	80	300	480	300	840	300	960	300	840	4,0	7,8	540	340	130	11,3
ZHF36120T		120	360	720	360	1200	360	1400	360	1200	6,0	11,5	540	340	130	11,5
ZHF36160T		160	600	960	600	1600	600	1900	600	1600	8,0	15,6	540	340	130	22,7
ZHF36240T		240	720	1400	720	2400	720	2800	720	2400	12,0	23,0	590	435	265	23,0
ZHF4880T	48	80	300	480	300	840	300	960	300	840	5,3	10,5	540	340	130	11,3
ZHF48120T		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	1900	600	1600	10,6	21,0	540	340	130	22,7
ZHF48240T		240	720	1400	720	2400	720	2800	720	2400	16,2	31,2	590	435	265	23,0
ZHF7280T	72	80	300	480	300	840	300	960	300	840	8,0	15,6	540	340	130	12,3
ZHF72120T		120	360	720	360	1200	360	1400	360	1200	12,0	23,4	540	340	130	23,2
ZHF72160T		160	600	960	600	1600	600	1900	600	1600	16,0	31,2	590	435	265	24,7
ZHF8080T	80	80	300	480	300	840	300	960	300	840	8,5	16,0	540	540	130	12,3
ZHF80120T		120	360	720	360	1200	360	1400	360	1200	12,8	24,0	540	340	130	23,2
ZHF80160T		160	600	960	600	1600	600	1900	600	1600	17,6	32,0	590	590	265	24,7

► PROGRAMMABLE CHARGING CYCLES

Charge cycles for sealed batteries (GEL/AGM): IU + holding


 I_n = PROGRAMMED CAPACITY/10

 V_0 = 1.90 V/el

 V_1 = PROGRAMMED VALUE

 V_2 = 2.10 V/el

 V_3 = 2.30 V/el

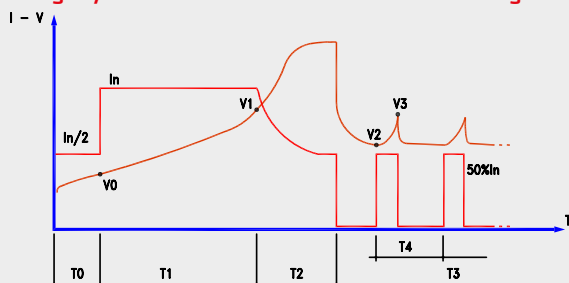
 T_0 = MAX. 1 HRS

 T_1 = MAX. 12 HRS

 T_2 = T_1 (MIN 2 --- MAX 5 HRS)

 T_3 = UNLIMITED

Charge cycles for FLOODED batteries: IWA + holding


 I_n = PROGRAMMED CAPACITY/12 (Pb 13hrs)
PROGRAMMED CAPACITY/10 (Pb 11h)

 V_0 = 1.9 V/el

 V_1 = PROGRAMMED VALUE

 V_2 = 2.10 V/el

 V_3 = 2.30 V/el

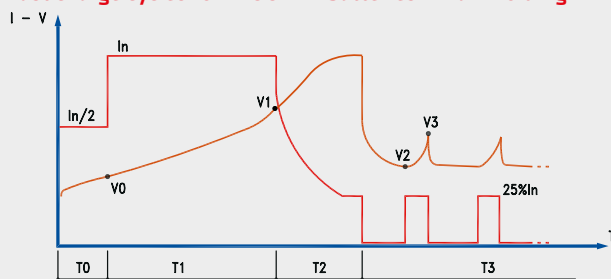
 T_0 = MAX. 1 HRS

 T_1 = MAX. 13 HRS

 T_2 = $0,6T_1$ (MIN 1 --- MAX 3.5 HRS)

 T_3 = UNLIMITED

Fast charge cycles for FLOODED batteries: IWA + holding


 I_n = PROGRAMMED CAPACITY/6

 V_0 = 1.9 V/EL

 V_1 = PROGRAMMED VALUE

 V_2 = 2.10 V/EL

 V_3 = 2.30 V/EL

 T_0 = MAX. 1 HRS

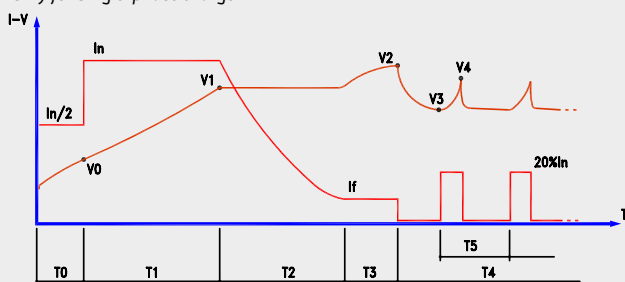
 T_1 = MAX. 8 HRS

 T_2 = $1,2T_1$ (MIN 1 --- MAX 3.5 HRS)

 T_3 = UNLIMITED

IUla charge cycles for SEALED BATTERIES (GEL/AGM)

Only for Single-phase charger


 I_n = PROGRAMMED CAPACITY (I CHARGE)

 I_f = PROGRAMMED CAPACITY (I FINAL)

 V_0 = 1.9 V/EL

 V_1 = PROGRAMMED VALUE (TRIS V)

 V_2 = PROGRAMMED VALUE (BLOCK V)

 V_3 = 2.10 V/EL

 V_4 = 2.30 V/EL

 T_0 = MAX. 1 HRS

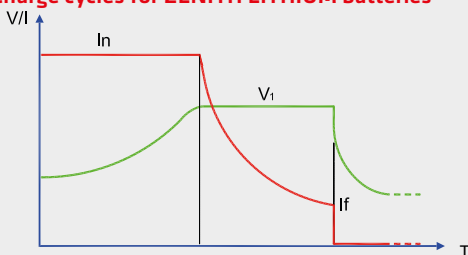
 T_1 = MAX. 12 HRS

 T_2 = MAX T_1+6 HRS OR $I = I_f$
 T_3 = MAX. 4 HRS

 T_4 = UNLIMITED

 T_5 = MAX. 6 HRS

Charge cycles for ZENITH LITHIUM batteries



BATTERY CHARGERS HIGH FREQUENCY



Zenith ZBC MAINTENANCES/BATTERY CHARGERS



- Electronic automatic battery chargers suitable to recharge any lead-acid batteries (flooded and sealed -AGM/GEL) and Zenith Lithium
- They are equipped with "maintenance" charge, so they are optimal in case of long periods of inactivity of the battery (I.E. in Winter) (ZBC1204; ZBC2402)
- They are provided with cable with ring terminal (it is always connected to the motorcycle battery) (ZBC1204; ZBC2402)
- Official U.B.S. UNION BATTERY SERVICE CE certification



CODE	OUTPUT		RECHARGEABLE CAPACITY Ah/20h	INPUT				IP	WEIGHT Kg	CURVE	PROTEC. CLASS	DC CONNECT.	DIMENSIONS (mm)		
	V	A		V	A (230)	W	Hz						L	W	H
ZBC0603*	6	3	15 - 35	100-240	0,6	30	50/60	IP65	0,4	IUoU	2	SB30	118	57	35
ZBC0610*	6	10	40 - 120	100-240	1,6	95	50/60	IP65	0,6	IUoU	2	SB30	170	70	40
ZBC1204	12	1-4	6 - 100	100-260	0,5	70	50/60	IP65	0,8	IUoU	2	-	150	68	47
ZBC1205*	12	5	15 - 60	100-240	1,5	95	50/60	IP65	0,8	IUoU	2	SB30	150	70	55
ZBC1208*	12	8	40 - 100	100-240	3	116	50/60	IP20	1,2	IUoU	1	SB30	165	95	55
ZBC2402	24	0,5-2	3 - 50	100-260	0,5	70	50/60	IP65	0,8	IUoU	2	-	150	68	47
ZBC2405*	24	5	15 - 60	100-240	3	145	50/60	IP20	1,2	IUoU	1	SB30	165	95	55
ZBC3603*	36	3	15 - 35	100-240	3	131	50/60	IP20	1,2	IUoU	1	SB30	165	95	55
ZBC4802*	48	2	10 - 24	100-240	3	116	50/60	IP20	1,2	IUoU	1	SB30	165	95	55

* They charge also our batteries ZLI and ZENITH LITHIUM

OPTIONAL ACCESSORIES

Only for models with "DC" connectors (like: SB30)



LOTUS CABLES

30cm: SB30 + "Lotus" Cables (electric bicycles 24/36 Volt, lithium)



MALE XLR CABLES

30cm: SB30 + male XLR (mobility and electric bicycles 24/36 Volt, lithium)



CABLES 2.1X5.5X12

30cm: SB30 + Cables 2.1x5.5x12



CABLES 2.5X5.5X12

30cm: SB30 + Cables 2.5x5.5x12



CLAMPS CABLES

30cm: SB30 + Cables with clamps

EDM (Efficient Data Memory)

AUTOMATIC CONVENTIONAL BATTERY CHARGERS

EFFICIENT DATA MEMORY

Represents the whole range of conventional battery chargers, (not high frequency ones) fully developed and manufactured in our labs, they are suitable to recharge flooded lead-acid industrial batteries.

The reference markets are mainly the ones for electric fork lift trucks and battery powered floor machines.



Single-phase

EDM series outlines 4 key points:

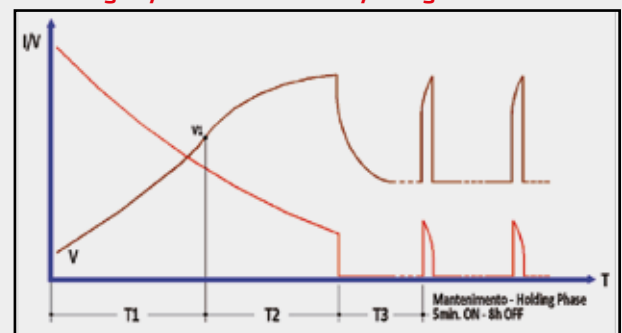
EFFICIENCY: nowadays energy saving is a priority. With our EDM series we have reached important results as to energetic consume, which prove to be not far from what you can obtain by using HF chargers (commonly regarded as the best solution available to save energy in this field). The key factors enabling us to achieve this goal are as follows:

- Transformers made entirely of COPPER, H class double insulation, and low losses magnetic lamination.
- Transformers calibration in order to always recharge with proper charge
- EFFICIENCY FACTOR programmability, in order to properly modulate the charge in relation with the battery type and battery brand.
- Diodes bridges are obtained through new construction solutions

QUALITY: EDM chargers are MADE IN ITALY and offer a 24 MONTHS warranty.



Wa charge cycle for EDM battery charge



V1: Programmable

T1: 12 hrs. max.

T2: Without pump = $0.8 T1$ (min. 30min - max 4h) * Fatt. Eff.
With pump = $0.4 T1$ (min. 30min. - max. 2h) * Fatt. Eff.

T3: 8 hrs.

FLEXIBILITY: in EDM chargers it is possible to program, through MP TOP II programmer, the following parameters:

- Efficiency Factor (FDE)
- Equalization cycles
- Pump management (only in case the pump is installed in the charger)
- Delayed starting
- Gassing point (2.35/2.45 V/cell)
- Manual charge

DATA MEMORY: all EDM chargers are equipped with Data Memory.

The Data Memory report can be displayed on MP TOP II programmers (page 52) screen or transferred to a PC. According to these details you can immediately get the following events:

- if the battery charger has been properly installed
- if the energy package (battery and battery charger) has been properly used
- if there is a problem in the battery charger.

SINGLE-PHASE

CODE	OUTPUT		RECHARGEABLE BATTERIES - LEAD-ACID				Kw	MAINS VOLTAGE (A) – 230V	DIMENSIONS (mm)			WEIGHT Kg
	V	A	10-11h Ah/C5 min		12-14h Ah/C5 min				L	W	H	
			min	max	min	max						
EDM1210	12	10	50	55	60	75	0,17	0,9	384	271	293	8,5
EDM1215		15	75	80	90	110	0,26	1,3	384	271	293	9,0
EDM1220		20	100	110	120	150	0,35	1,7	384	271	293	10,0
EDM1230		30	150	165	180	220	0,53	2,7	384	271	293	12,0
EDM1240		40	200	220	240	300	0,70	3,5	384	271	293	15,0
EDM1250		50	250	275	300	375	0,88	4,3	384	271	293	16,0
EDM1260	24	60	310	330	360	450	1,05	5,4	384	271	293	17,0
EDM2410		10	50	55	60	75	0,33	1,7	384	271	293	10,0
EDM2415		15	75	80	90	110	0,45	2,4	384	271	293	11,5
EDM2420		20	100	110	120	150	0,70	3,6	384	271	293	13,0
EDM2430		30	150	165	180	220	0,96	4,9	384	271	293	16,0
EDM2440		40	200	220	240	300	1,20	6,3	384	271	293	18,0
EDM2450		50	250	275	300	375	1,50	8,0	384	271	293	21,0
EDM2460		60	310	330	360	450	1,90	9,8	384	271	293	23,0
EDM2480M		80	400	440	480	600	2,46	13,6	590	367	480	41,4
EDM24100M		100	500	550	600	750	3,06	16,3	590	367	480	41,6
EDM3620	36	20	100	110	120	150	0,93	4,8	384	271	293	14,5
EDM3630		30	150	165	180	220	1,40	7,2	384	271	293	20,0
EDM3640		40	200	220	240	300	1,80	9,3	384	271	293	22,5
EDM3650		50	250	275	300	375	2,40	12,4	384	271	293	25,0
EDM3660M		60	310	330	360	450	2,68	14,7	590	367	480	40,0
EDM3680M		80	400	440	480	600	3,53	19,6	590	367	480	45,0
EDM36100M		100	500	550	600	750	4,30	24,3	590	367	480	48,2
EDM4820		48	20	100	110	120	150	1,20	6,3	384	271	293
EDM4830	30		150	165	180	220	1,80	9,3	384	271	293	22,0
EDM4840	40		200	220	240	300	2,35	12,8	384	271	293	38,0
EDM4850M	50		250	275	300	375	2,90	15,7	590	367	480	40,0
EDM4860M	60		310	330	360	450	3,40	18,6	590	367	480	44,3
EDM4880M	80		400	440	480	600	4,70	25,0	590	367	480	48,5
EDM48100M		100	500	550	600	750	5,90	31,5	590	367	480	49,5

THREE-PHASE

CODE	OUTPUT		RECHARGEABLE BATTERIES - LEAD-ACID				Kw	MAINS VOLTAGE [A] - 400V	DIMENSIONS (mm)			WEIGHT Kg
	V	A	10-11h Ah/C5 min		12-14h Ah/C5 min				L	W	H	
			min	max	min	max						
EDM2460T	24	60	310	360	360	450	1,7	3,1	590	367	480	39,0
EDM2480T		80	400	440	480	600	2,3	4,0	590	367	480	43,5
EDM24100T		100	500	550	600	750	2,8	4,9	590	367	480	45,0
EDM24120T		120	600	660	720	900	3,4	5,9	590	367	480	50,0
EDM24140T		140	720	770	840	1050	4,0	7,0	590	367	480	66,0
EDM24160T		160	840	880	960	1200	4,6	8,0	735	520	520	69,0
EDM24180T		180	960	1000	1080	1350	5,2	9,0	735	520	520	72,0
EDM24200T		200	1080	1150	1200	1500	5,7	10,0	735	520	520	76,0
EDM3660T	36	60	310	360	360	450	2,5	4,5	590	367	480	47,0
EDM3680T		80	400	440	480	600	3,3	6,0	590	367	480	49,0
EDM36100T		100	500	550	600	750	4,1	7,4	590	367	480	51,0
EDM36120T		120	600	660	720	900	4,7	8,7	590	367	480	59,0
EDM36140T		140	720	770	840	1050	5,9	10,7	590	367	480	61,0
EDM36160T		160	840	880	960	1200	6,7	12,3	735	520	520	73,0
EDM36180T		180	960	1000	1080	1350	7,7	13,8	735	520	520	82,0
EDM36200T		200	1080	1150	1200	1500	8,5	15,5	735	520	520	85,0
EDM4860T	48	60	310	360	360	450	3,3	6,1	590	367	480	45,5
EDM4880T		80	400	440	480	600	4,3	7,8	590	367	480	55,0
EDM48100T		100	500	550	600	750	5,6	10,1	590	367	480	57,0
EDM48120T		120	600	660	720	900	6,5	11,8	590	367	480	66,0
EDM48140T		140	720	770	840	1050	7,5	13,8	590	367	480	77,0
EDM48160T		160	840	880	960	1200	8,7	15,8	735	520	520	88,0
EDM48180T		180	960	1000	1080	1350	9,7	18,0	735	520	520	95,0
EDM48200T		200	1080	1150	1200	1500	11,0	20,0	735	520	520	105,0
EDM7260T	72	60	310	360	360	450	4,7	8,7	590	367	480	72,0
EDM7280T		80	400	440	480	600	6,3	11,5	590	367	480	76,0
EDM72100T		100	500	550	600	750	7,9	14,4	590	367	480	78,0
EDM72120T		120	600	660	720	900	9,5	17,3	590	367	480	88,0
EDM72140T		140	720	770	840	1050	11,0	20,2	590	367	480	90,0
EDM72160T		160	840	880	960	1200	12,6	23,0	735	520	520	95,0
EDM72180T		180	960	1000	1080	1350	14,2	26,0	735	520	520	102,0
EDM72200T		200	1080	1150	1200	1500	15,7	28,8	735	520	520	110,0
EDM8060T	80	60	310	360	360	450	5,3	9,8	590	367	480	75,0
EDM8080T		80	400	440	480	600	7,1	13,0	590	367	480	81,0
EDM80100T		100	500	550	600	750	8,9	16,5	590	367	480	79,0
EDM80120T		120	600	660	720	900	10,5	20,0	590	367	480	87,0
EDM80140T		140	720	770	840	1050	12,1	22,5	590	367	480	98,0
EDM80160T		160	840	880	960	1200	14,0	25,5	735	520	520	103,0
EDM80180T		180	960	1000	1080	1350	15,7	28,8	735	520	520	108,0
EDM80200T		200	1080	1150	1200	1500	17,4	32,0	735	520	520	112,0

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

CODE	INPUT			OUTPUT			RECHARGEABLE BATTERIES				Kw	MAINS VOLTAGE [A] - 230V	DIMENSIONS (mm)			WEIGHT Kg
	PHASE	V	Hz	V	A	CYCLE	LEAD-ACID		SEALED (AGM/GEL)				L	W	H	
							Ah/C5 min	Ah/C5 max	Ah/C5 min	Ah/C5 max						
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		15	IWoU/IUoU	130	180	110	150	0,29	1,9	305	160	127	6,2
MGX2410	1	185/265	50/60	24	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		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	36	30	IWoU/IUoU	310	360	260	300	1,10	7,4	385	200	147	18,5
MGX3620*	1	185/265	50/60		20	IWoU/IUoU	190	240	160	200	1,10	7,4	385	200	147	15,8
MGX3625*	1	185/265	50/60		25	IWoU/IUoU	250	300	210	250	1,40	9,3	385	200	147	18,4

* For further details on the mode, see general warranty conditions on our website

BATTERY CHARGERS HIGH FREQUENCY ZBCO



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



ZBCO.ADPT



CODE	OUTPUT		RECHARGEABLE CAPACITY	INPUT					IP	WEIGHT Kg	DIMENSIONS (mm)		
	V	A		V	A (240)	W	Hz	PFC			Lungh.	W	H
			Ah/20H										
ZBCO1208	12	8	50/85	100-260	1,0	140	50/60	no	IP30	0,65	133	125	60
ZBCO2405	24	5	30/60	100-260	1,1	150	50/60	no	IP30	0,65	133	125	60
ZBCO2411	24	11	70/120	100-260	1,5	350	50/60	si	IP30	1,20	133	164	64
ZBCO2415	24	15	100/160	100-260	2,0	480	50/60	si	IP30	1,45	133	240	60
ZBCO.ADAPT	USB ADAPTER DATA DOWNLOAD												

►WARNING!!! Battery chargers without power cable

Ready and Safe in any emergency



Moving Energy

03. BOOSTER



Three models to satisfy all the requirements relating to emergency starts.

The portable model, semiprofessional, 12V is dedicated to individuals or owners of small fleets of vehicles.

The professional models 12V/24V are addressed to companies with large fleets of vehicles, trucks, buses, construction equipment, agricultural machinery, boats.

ALL equipped with our lead-acid batteries with high cranking starter AGM, they shall be accompanied by extended warranty of 24 MONTHS.

Zenith BOOSTER

12V STARTERS

Booster is specific for **motorcycles, cars, vans, RV** and **boats** starter

- Emergency light, battery status meter and standard cigarette lighter socket
- Clamps and battery charger mains cable supplied
- The 1.5A battery charger allows a faster recharging and it is included in the booster
- The battery inside the booster is our ZPC120020 (12V 20Ah/20h, AGM power cranking)
- Official U.B.S. UNION BATTERY SERVICE CE conformity certification available

WARRANTY*
24 MONTHS



"ZPC" internal battery



CODE	V	CAPACITY	INTERNAL BATTERY	DIMENSIONS (mm)			WEIGHT (Kg)	PALLET QUANTITY
		Ah/20h		L	W	H		
ZB2000.12	12	20	ZPC120020	363	320	190	9,0	40

12V/24V BOOSTER



BOOSTER

Zenith PROFESSIONAL BOOSTER

12V/24V PORTABLE AND WHEELED STARTERS

They are specific for professional use

- Portable and wheeled version
- Useful for truck fleets, excavators, agricultural machinery, boats
- Complete with battery status meter
- Specific connecting clamps for professional use
- 12/24V models, settable
- Complete with external battery charger
- ZPC (ZENITH POWER CRANKING) internal batteries



ZBC1208 battery charger



CODE	V	CAPACITY	INTERNAL BATTERY	DIMENSIONS (mm)			WEIGHT (Kg)	BATTERY CHARGER included
		Ah/20h		L	W	H		
ZB6000.12/24 (PORTABLE)	12/24	35	ZPC120032	250	200	450	31	ZBC1208
ZB7000.12/24 (WHEELED)	12/24	44	ZPC120040	280	250	730	52	ZBC1208



Energy is at hand



Moving Energy

04. BATTERY KIT



A unique code to identify a solution.

Complete with everything you need for easy, convenient and reliable replacement of the battery pack.

They are dedicated to specific sectors.

Zenith E-PACKS

KIT OF LEAD-ACID BATTERIES FOR AERIAL PLATFORM AND GOLF CARS

Zenith
E-PACKS

INNOVATIVE - EASY - ECONOMIC: Allows to save up to 40% off the cost*

*Value calculated on a 36V battery pack on a golf car, considering that a correct maintenance presumes the water control/topping up twice a month, over the esteemed eight months' period of use of the vehicle, during the season for three years. Hourly labour cost 30€.



Lead acid batteries kit DEEP-CYCLE, wet and accessories.

Batteries are already equipped with an automatic topping up system. The kit includes the tank with distilled water and tap, tubes and connections, battery connection cables with rubber terminal covers.

- **Easy**, all components for a proper and easy battery replacement are included
- **Economic**: no more maintenance costs for users (up to 40% off the kit value) and re-packing costs for distributors
- **Exclusive**: solutions are available only through U.B.S. network, made of batteries experts
- **E-commerce**: optimal solution for electronic commerce, as shipments to any destination can be easily managed



WARRANTY*
24 MONTHS



KIT ACCESSORIES:

- Tank 10lt. distilled water
- Full set of cables
- 2 sets of tubes
- Full set of pole protection (CPM8)

CODE	TYPE	INTERNAL BATTERY	BATTERIES		KIT WEIGHT	PALLET QUANTITY
			MODEL	Qt		
ZEP36225G	Battery kit 36V 225/185Ah + accessories	GOLF	ZTB060110	6	189	6
ZEP48170G	Battery kit 48V 170/145Ah + accessories	GOLF	ZTB080100	6	191	6
ZEP24225AWP	Battery kit 24V 225/185Ah + accessories	AWP	ZTB060110	4	131	6
ZEP24330AWP	Battery kit 24V 330/271Ah + accessories	AWP	ZTB060140	4	187	6

GOLF KIT LITHIUM BATTERIES



BATTERY KIT

WARRANTY*
36 MONTHS

Zenith GOLF KIT 12V-16Ah

LITHIUM BATTERIES LiFePO4 FOR GOLF TROLLEY

Kit contains:

- 1 LITHIUM LiFePO4 12V 16Ah battery (dim. 166 x 175 x h125; weight 2,4 Kg)
- 1 charger 12V 5A, IP65
- 1 battery/charger connector
- 1 handle for the transport
- Adaptor POWAKADDY



Cod. ZLI012018



Cod. CAVI2X4AMG.1



Cod. ZBC1205



Special adapter included in the kit

Zenith GOLF KIT 12V-24Ah

LITHIUM BATTERIES LiFePO4 FOR GOLF TROLLEY

Kit contains:

- 1 LITHIUM LiFePO4 12V 24Ah battery (dim. 166 x 175 x h125; weight 3,2 Kg)
- 1 charger 12V 5A, IP65
- 1 battery/charger connector
- 1 handle for the transport
- Adaptor POWAKADDY



Cod. ZLI012025



Cod. CAVI2X4AMG.1



Cod. ZBC1205



Special adapter included in the kit

2017 NEW
+AUTONOMY

Zenith GOLF KIT 12V-20Ah

LITHIUM BATTERIES LiFePO4 FOR GOLF TROLLEY

Kit contains:

- 1 LITHIUM LiFePO4 12V 20Ah battery (dim. 180 x 76 x h170; weight 2,9 Kg)
- 1 charger 12V 5A, IP65
- 1 battery/charger connector
- 1 handle for the transport



Cod. ZLI012010



Cod. CAVI2X4AMG.1



Cod. ZBC1205

Complete the range...



Moving Energy

05.

ACCESSORIES/ EQUIPMENT



The right and quality accessory is required for the proper use of the energy package.

We have a complete range of accessories for immediate delivery and equipment dedicated to the control and maintenance of batteries.

► DC CONNECTORS (battery connection)

CODE	Model
 00200001	SB50 50A BATTERY GREY PLUG
 00200002	SB50 50A BATTERY RED PLUG
 00200030	SBE160 160A BATTERY RED PLUG
 00200033	SBE160 160A BATTERY GREY PLUG
 00200038	SB120 120A BATTERY GREY PLUG
 00200039	SB120 120A BATTERY RED PLUG
 00200040	SB175 175A BATTERY GREY PLUG
 00200042	SB175 175A BATTERY RED PLUG
 00200043	SB175 175A BATTERY BLUE PLUG
 00200044	SBE160 160A BATTERY BLUE PLUG

CODE	Model
 00200082	DIN 80A male BATTERY PLUG
 00200083	DIN 160A male BATTERY PLUG
 00200084	DIN 320A male BATTERY PLUG
 00200161	DIN 80A female BATTERY PLUG
 00200162	DIN 160A female BATTERY PLUG
 00200163	DIN 320A female BATTERY PLUG
 00200200	Schaltbau male LV80 BATTERY PLUG
 00200201	Schaltbau male LV160 BATTERY PLUG
 00200202	Schaltbau male LV320 BATTERY PLUG
 00200150	FT80 EURO 80V male BATTERY PLUG

CODE	Model
 00200090	DIN 80A male BATTERY PLUG
 00200036	DIN 160A male BATTERY PLUG
 00200103	DIN 320A male BATTERY PLUG
 00200105	DIN 80A female BATTERY PLUG
 00200120	DIN 160A female BATTERY PLUG
 00200141	DIN 320A female BATTERY PLUG
 00200142	Schaltbau male LV80 BATTERY PLUG
 00200143	Schaltbau male LV160 BATTERY PLUG
 00200101	Schaltbau male LV320 BATTERY PLUG

► AC PLUGS






 00200500	CE 2P+T 16A POWER SUPPLY PLUG
 00200501	CE 2P+T 32A POWER SUPPLY PLUG





 00200502	CE 3P+T 16A POWER SUPPLY PLUG
 00200503	CE 3P+T 32A POWER SUPPLY PLUG

 00200504	CE 3P+N+T 16A POWER SUPPLY PLUG
 00200505	CE 2P+N+T 32A POWER SUPPLY PLUG

ACCESSORIES

► HANDLES AND PINS FOR DC CONNECTORS

CODE	Model
 00200046	DIN 160/320 BLACK HANDLE
 00200029	SBE160 / SB175 GREY HANDLE
 00200031	SBE160 / SB175 RED HANDLE
 00200048	DIN 80 BLACK HANDLE
 00200049	SB120 RED HANDLE

CODE	Model
 00200050	SBE50 RED HANDLE
 00200199	Schaltbau LV80 RED HANDLE
 00200151	FT80 RED HANDLE
 00200051	SBE80 RED HANDLE

CODE	Model
 00200300	SBE80/160/320 YELLOW PIN
 00200301	Anderson DIN80 GREEN PIN (GEL)
 00200302	Anderson DIN 160/320 GREEN PIN (GEL)

► ZC CELLS CONNECTION (FLEX)



CODE	ZC CELLS CONNECTION
00201100	FLEX, 35mmq, 85mm
00201105	FLEX, 35mmq, 95mm
00201110	FLEX, 35mmq, 110mm
00201115	FLEX, 35mmq, 130mm
00201120	FLEX, 35mmq, 150mm
00201150	END, 35mmq, 1200mm
00201160	END, 35mmq, 2000mm
00201200	FLEX, 50mmq, 95mm
00201205	FLEX, 50mmq, 110mm
00201210	FLEX, 50mmq, 130mm
00201215	FLEX, 50mmq, 150mm
00201250	END, 50mmq, 1200mm
00201260	END, 50mmq, 2000mm
00201300	FLEX, 70mmq, 95mm
00201305	FLEX, 70mmq, 110mm
00201310	FLEX, 70mmq, 130mm
00201315	FLEX, 70mmq, 150mm
00201350	END, 70mmq, 1500mm
00201360	END, 70mmq, 3000mm
00201400	FLEX, 90mmq, 95mm
00201405	FLEX, 90mmq, 110mm
00201410	FLEX, 90mmq, 130mm
00201450	END, 90mmq, 1500mm
00201460	END, 90mmq, 2000mm
CODE	SCREW CONNECTION
00201900	ZC, FLEX e END 18mm
00201901	ZC, FLEX e END 22mm

► POLE PROTECTION



CPM6



CPM8



CPMORS

CODE	KIT QUANTITY
CPM6	10 pieces
CPM8	10 pieces
CPMORS	10 pieces

► AUTOMATIC REFILLING CAPS



00300000



00300005



00300015

CODE	REFILLING CAPS
00300000	Cap automatic refilling "SCREW"
00300005	Cap automatic refilling "BAYONET"
00300015	Cap automatic refilling "CONNECTION"



00300100



00300115



00300120



00300125

CODE	CAPS ACCESSORIES
00300100	Floating
00300115	Floating
00300120	Floating
00300125	Floating
00300200	Topping
00300300	"T" connection
00300305	"T" connection
00300310	"T" connection
00300350	Male rapid connection
00300360	Female rapid connection
00300400	Filter
00300450	Flow indicator
00300500	Tube
00300505	Tube



00300200



00300300



00300305



00300310



00300350



00300360



00300450



00300400



00300500



00300505

ACCESSORIES

► OUTPUT CABLES FOR ZBC



LOTUS CABLES

30cm: SB30 +
"lotus" Cables
(electric bicycles
24/36 Volt, lithium)



MALE XLR CABLES

30cm: SB30 + male
XLR (mobility and
electric bicycles 24/36
Volt, lithium)



CABLES 2.1X5.5X12

30cm: SB30 + Cables
2.1x5.5x12



CABLES 2.5X5.5X12

30cm: SB30 + Cables
2.5x5.5x12



CLAMPS CABLES

30cm: SB30 + Cables
2.5x5.5x12



CABLES 2X4AMG.1

30cm: SB30
+ 2 rings M8

► MAINTENANCE KIT FOR ZENITH CELLS

CODE: KIT.MAN

Maintenance kit supplied
in assembled batteries.

Contains:

- Densimeter
- Thermometer
- Syringe



► DISTILLED WATER 10LT. TANK

CODE: ACDEMR

Tank 10Lt. with tap



► 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	screw terminal m8	5 pieces

► SPACERS FOR TRACTION BATTERIES ASSEMBLED

CODE	Descrizione	MOQ
INT.ZC.0017	Spacers x ZC; 510x198, sp.3mm	10
INT.ZC.0019	Spacers x ZC; 670x198, sp.3mm	10
INT.ZC.0106	Spacers x ZC; 400x198, sp.5mm	10
INT.ZC.0107	Spacers x ZC; 545x198, sp.5mm	10
INT.ZC.0108	Spacers x ZC; 670x198, sp.5mm	10
INT.ZC.0109	Spacers x ZC; 720x198, sp.5mm	10
INT.ZC.0206	Spacers x ZC; 400x198, sp.10mm	10
INT.ZC.0207	Spacers x ZC; 545x198, sp.10mm	10
INT.ZC.0208	Spacers x ZC; 670x198, sp.10mm	10
INT.ZC.0209	Spacers x ZC; 720x198, sp.10mm	10

PROGRAMMER MP TOP II

BATTERY CHARGERS ZHF, EDM AND MGX

The high-tech device, recommended to distributors or after sales service centres, is needed for the programming and reading of data memory of ZENITH HIGH FREQUENCY, EFFICIENT DATA MEMORY and MGX battery chargers.

● **KIT contains:**, in addition to the programmer, even the cable for connecting to the battery charger, one for connection to PC and software to be installed on the PC.

● The lithium battery, internal to the controller, allows you to program and read data without external power. Then simply plug it into the USB port of the PC for charging

● The software installed on the device, can be updated via Internet and set in different languages: I, D, E, F, UK, NL. **Code: MPTOPII.**



1 General information about the situation data belongs to (data, customer, type of battery, capacity and so on). These fields need to be filled by the technician for the collection of data.

2 Information about parameters set up of the battery charger.

3 Serial number of the battery charger from which the data have been collected.

4 Counters refer to all recharges from the battery charger and representative of the following aspects:

Counter 1: total number of charge cycles performed (also they include those interrupted by the operator in advance)

Counter 2: meaningful only if the battery charger is on board. It indicates how often the batteries are discharged to the minimum possible level

Counter 3: how many times the battery has been discharged and charged simultaneously. This is a very important piece of information, as such methods of use will damage the battery. The battery charger must be on board.

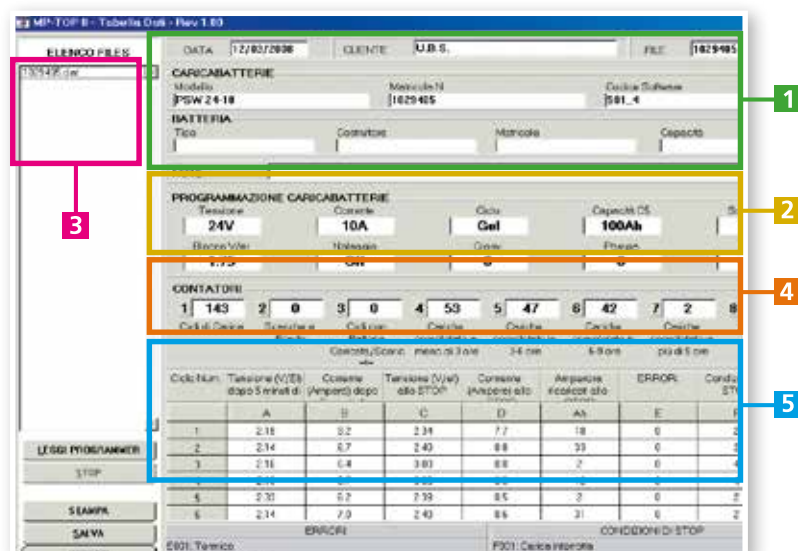
Counters 4-7: all automatically completed charges are grouped into four boxes, in relation to their duration (< 3hrs, between 3hrs - 6hrs, between 6hrs - 9hrs, >9hrs). Therefore, it derives, indirectly, the average depth of discharge (long charging periods identify deep discharges and vice versa).

Counter 8: how many times the operator has interrupted the charge cycle manually (i.e. he did not wait for the battery charger to complete automatically the cycle). Obviously, in these cases the battery will not be fully recharged.

5 Detailed information about charges in the last month.

For each charge cycle the following information will be displayed:

- Voltage values of the battery and the battery charger charge current, relative to the start of the charging cycle (after 5')
- Voltage values of the battery and output current of the battery charger, relative to the end of the charging cycle
- Capacity (in Ah) restored in the battery during the charging cycle
- Anomalies (errors) occurred during the charge cycle
- Mode Stop



Example of data memory displayed on PC

▶ 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 to "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 easily carried to the customer in order to try to recover "sulphated" batteries

Single-phase supply:

- correct charge 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

Dimensions: 295 x 220 x h 110 mm

Weight: 4,5 kg

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





We simplify your work.




Moving Energy

06. SERVICES



The strategy of GLOBAL SOLUTIONS imposes to support the full range of quality products, also an appropriate consulting service that can guide the customer towards the best choice.

The choice of alternative services for sale (REGENERATION) is an option that needs to be systematically evaluated in order to affirm that the real interest of the customer is our priority.



Battery Regeneration

New life to your battery

The logic of the **Global Solutions** that characterizes our Company also provides for the proposed innovative regeneration service, offered exclusively to U.B.S. UNION BATTERY SERVICE customers.

The regeneration process and the necessary equipment have been developed by our Engineering Department and are applicable to ALL lead acid batteries (starter, stationary, traction both lead-acid and AGM) with the exception of the GEL. The treatment is purely electronic; it does not provide the use of any chemical additive.

We take care of anything from battery collection, regeneration to final return. Details are available on our web site www.unionbatteryservice.it

PREVENTIVE REGENERATION



REGENERATION



The treated batteries are covered by a special warranty that provides for the full repayment of the cost of regeneration in case of problems within 6 months (for modular batteries) or 12 months (for traction batteries) from the date of regeneration.

Regenerated traction batteries will be equipped with the SPY-BATT (page 17).

DO NOT THROW AWAY, REGENERATE it is assumed that over 60% of the batteries, considered exhausted, can be regenerated successfully.

The advantage for the customer is tangible and consistent: with only about 30%* off the value of new battery you can have a valid alternative, but above all **GUARANTEED!**

Interested customers are not just end users, but also traders of electric vehicles (cleaning machines, forklifts, aerial platforms, golf carts, etc.), this way they can offer reconditioned vehicles, fully guaranteed, both on the vehicle itself and on the battery.

REGENERATION



**Indicative value. For economic details ask to commercial reference.*



Moving Energy

REGENERATED IN TIME AND SAVE OVER TIME responds to the logic of prevention.

The performance over time of the batteries are affected by many factors, some of which are not predictable to be checked every day. The consequence is the premature loss of performance. The early regeneration treatment, made roughly halfway through the expected life and then before the battery shows serious performance degradation, is targeted to restore the initial performance with three important advantages:

- Lengthening the expected life of the battery
- Maintaining constant the battery performance over time
- Preventing unexpected breakdowns

Recommended on all batteries, but certainly recommended as follows:

- **GOLF CLUBS/ CAMPING/ HOLIDAY VILLAGES:** treatment of the batteries during closing periods to make sure the battery life for the whole following season.
- **RENTERS OF AERIAL PLATFORMS:** treatment during downtime on big service areas, to reduce battery replacements and be more competitive on the market with top notch rental rates.
- **UPS:** treatment to assess the state of the batteries and restore optimal capacity to ensure the expected autonomy in case of emergencies, avoiding too sudden blackout surprises.
- **RENTAL TRUCKS:** treatment to enable you to complete the long-term rental contract without replacing the battery.
- **TRUCK FOR INTERNATIONAL TRANSPORT:** to avoid sudden and costly replacements of batteries abroad.



display details

► **TERMINAL TYPE / B.H.D.**

12V		0		
12V		1		
12V		3		
12V		4		
12V		8		
12V		9		

► TERMINALS FOR ZENITH BATTERIES

F1	F2	F3	F25
M5	M6	M8	DT

PRACTICAL ADVICE ON LEAD-ACID BATTERIES

It is NOT provided optimal battery for all applications, but on the contrary each series of batteries has optimal constructive solutions, specific for the market to which it addresses to.

In the catalog are clearly identified the areas of application of the various series of batteries, in cases of doubt, please contact us!

1. ALWAYS choose the range of suitable batteries to the application and size the model according to the most proper function:
 - Certainty of the duration of the battery over time
 - Any possible problem is covered by warranty

On the contrary, wrong choices are NOT covered by warranty and affect battery life

2. ALWAYS use the batteries in adequately ventilated places.
3. AVOID any short circuit between the battery poles.

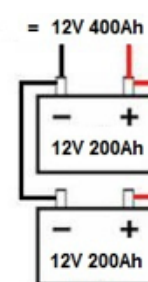
4. BATTERY CONNECTION IN PARALLEL

With the parallel connection of two batteries, you get a battery with the same voltage value, but with double capacity

IMPORTANT TO KNOW: using batteries in parallel can be dangerous for two reasons:

- If the connections between the batteries do not allow a proper subdivision of the current output between the batteries, the batteries will unbalance hopelessly within a short time.
- A possible short circuit of a battery also damages other batteries with eventual damages to the environment in which the batteries are installed

CONNECTION IN PARALLEL



5. CONNECTION OF BATTERIES IN SERIES

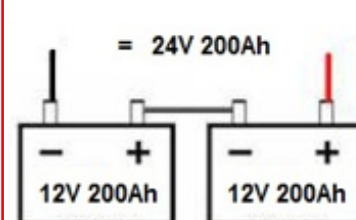
With the series connection of two batteries, you get a battery with the same capacity value, but with double voltage.

- Used in series do NOT mix batteries of different brands or of different ages.
- Used in series occur regularly (3-4 times a year) of the individual batteries.

Eventual problems on a battery may impact upon the other batteries.

- Used in series, alternating the position of the batteries at least 2-3 times a year.

CONNECTION IN SERIES



6. In ALL lead acid batteries (eg. Our ZTB series ZENITH CELLS) electrolyte level must be checked at least monthly, on the contrary in traction cells at least once a week. The plates must ALWAYS be completely immersed. If necessary, add ONLY distilled water AFTER charging.
7. Periodically discharge the batteries (better once a month) completely (up to 80%). Not for the starter ones.
8. For long periods of disuse, recharge the batteries periodically (at least once a month)
9. ALWAYS recharge the batteries immediately after discharge
10. 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%
 - Higher temperatures reduce DRASTICALLY the battery life
11. Prevent and remove eventual oxidation on the poles. It is recommended the use of rubber end covers
12. On our website www.unionbatteryservice.it are available all the general warranty conditions

FOR FURTHER AND MORE DETAILED TECHNICAL SUPPORT, PLEASE CONTACT US!!!

REFRESH CHARGES FOR BATTERIES AT STOCK

	(ZL, ZNC, ZGL, ZPC, ZLS, CL)	(ZTB, STARTER, CLASSIC, CELLS)
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

UBS NETWORK IN THE WORLD



U.B.S. UNION BATTERY SERVICE DEALER



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

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