

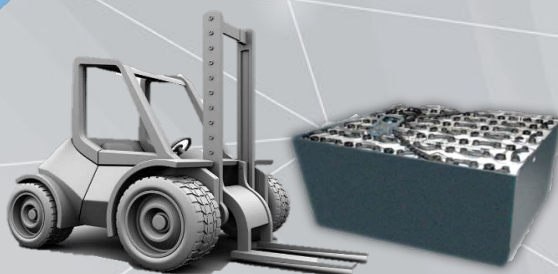


ECO SERIES: GEN II

TRACTION BATTERY CHARGER

SP-ECO & TP-ECO is a motive battery charger designed for industrial applications of any type and complexity. It combines the **Intelligence** of the **Newest Microprocessor Technology** with the **Reliability** of taper charging system. The well-established Wa-curve is used as the standard charging characteristic, but other curves are available.

Based on a solid and well tested design, the **SP-ECO & TP-ECO** ensures many years of **Trouble-Free Operation**.



Moving Forward

BAS
BATTERY ASIA (S) PTE LTD

Main Features

- ❖ **Fully automatic operation**
- ❖ **Robust and reliable** construction, standard cabinet rating **IP21** (indoor)
- ❖ User interface with **RGB** indication:
 - AC Contactor Failure
 - Time Out – Low Gassing voltage
 - Control Board Failure
 - High Battery Voltage
 - AC Input Failure – High Current
 - High Temperature
 - Battery Type Mismatch
- ❖ Control Board Automatically Adjusts for 50Hz or 60Hz Power Cycle
- ❖ Programmable Finishing Charge time
- ❖ **Manual & Automatic Equalize Options**
- ❖ **Worldwide input voltage configurations**
- ❖ Safety Cut-off feature

Functions

- ❖ Emergency stop:
 - ❖ Over Voltage
 - ❖ High Current
 - ❖ High Temperature
 - ❖ Maximum Time
- ❖ Digital Amperemeter, Manual and Automatic Equalization
- ❖ Auto-start, with the ability to set up delayed start
- ❖ Automatic restart after blackout, recovery form breakpoint
- ❖ Standard models: Single-Phrase AC, Three-Phrase
- ❖ Battery Voltage from 12V to 96V
- ❖ Charging current from 20 to 200Amps

Experience

A complete range, designed for all kind of indoor applications, absolute **Robustness and Reliability**.

Fully **Automatic, Safe and Quiet** operation.

Simple and Intuitive user interface,.

New Generation microcontroller with Innovative Light management.

High Brightness colour signals, visible at a distance of more than 30 meters, with viewing angle >175.

Zero Watts Standby power consumption's.

Password-Protected profile parameterization to adapt charging modes to vehicle work cycle.

THE **NEW** GENERATION



SDC ECO GEN II

Safety Features

Wrong Battery Voltage	Standby Mode and signal error
Electronic Overload Protection	Complete protection in case of output short circuit or overload
Power-On Self Test	Each time the unit is powered, an automatic self test of the power electronics and the control boards are executed less than 10 seconds. In case of any fault, the unit will remain in the safe stand-by mode and give fault messages.
Black-Out of the AC Input	The charger features an intelligent management of the AC input occurs. When a blackout of the AC input occurs, all the data related to the charge cycle that was in progress are saved in the internal memory. When the AC input is restored, the charger restarts from the exact point of interruption, and it completes the charge cycle normally.
Automatic Shutdown on Battery Disconnection	If the battery is disconnected while the charge is in progress, the charger turns-off automatically within 3 seconds.
Safety Timer	An independent safety timer turns the charger off in case of malfunction of the main control unit.
Standard Quality Marking	ISO 9001:2008
EMC	CE
Safety	IEC EN 61000-6-2, IEC EN 610006-4
Test and Performance	IEC EN 50178, IEC EN 62040-1 IEC EN 62040-3

Operating Environment

- ❖ Enclosure Type: Steel Enclosure. Powder Painted
- ❖ Cooling: **Natural Ventilation**
- ❖ **Audible Noise:** <65dBA at 1 meter
- ❖ Environmental Protection : IP21
- ❖ Ambient Temperature Operation: -5 / + 45°C

Troubleshooting

- ❖ **Auto Refresh** for Long Weekends
- ❖ Control Board fits **all models**



Voltage (V)	Current (Ampere)	10 to MAX 12HRS charging time (80%CN) Battery Capacity range (Ah)	Phrase Current (A) (+/-10%)	Input Power (KVA)	Cabinet A: 242 (L) x 218 (W) x 225 (H) (mm) Cabinet B: 475 (L) x 282 (W) x 263 (H) (mm)	Weight (KG)
24	30	200-235	5.0	1.1	A	16
24	40	235-310	6.6	1.4	A	19
24	50	310-380	8.3	1.9	B	21
24	60	380-450	9.9	2.2	B	23
48	40	235-310	13.0	2.8	B	26
48	50	310-380	16.3	3.5	B	28
48	60	380-450	19.6	4.3	B	31
48	80	450-600	26.1	5.7	B	38

TP-ECO Three Phase 3x380 – 400 – 420 – 440 VAC 50-60Hz 3x220 – 230 – 240 – 250 VAC 50-60Hz

Voltage (V)	Current (Ampere)	10 to MAX 12HRS charging time (80%CN) Battery Capacity range (Ah)	Pharse Current (A) @230 Vac(+/- 10%)	Input Power (kVA)	Cabinet A: 496 (L) x 304 (W) x 783 (H) (mm) Cabinet B: 558 (L) x 606 (W) x 549 (H) (mm)	Weight (KG)
24	80	450-600	7.3	2,7	A	40
24	100	600-750	9.1	3,4	A	46
24	120	750-900	10.9	4,0	A	51
24	140	900-1050	12.7	4,7	A	54
24	160	1050-1200	14.6	5,4	A	58
24	180	1200-1350	16.4	6,1	A	62
24	200	1350-1500	18.2	6,7	A	65
36	80	450-600	10.9	4,0	A	52
36	100	600-750	13.7	5,0	A	54
36	120	750-900	16.4	6,0	A	58
36	140	900-1050	19.1	7,0	A	62
36	160	1050-1200	21.9	8,0	A	65
48	60	310-450	10.9	3,9	A	52
48	80	450-600	14.6	5,3	A	53
48	100	600-750	18.2	6,6	A	54
48	120	750-900	21.9	7,9	A	65
48	140	900-1050	25.5	9,2	A	72
48	160	1050-1200	29.1	10,5	A	88
48	180	1200-1350	NA	11,8	A	92
72	40	235-310	10.7	4,8	A	64
72	60	310-450	16.0	5,8	A	64
72	80	450-600	21.3	7,7	A	70
72	100	600-750	26.7	9,7	A	96
72	120	750-900	32.0	11,6	A	98
80	60	310-450	17.8	6,9	A	76
80	80	450-600	23.7	8,5	A	95
80	100	600-750	29.6	10,6	A	98
80	120	750-900	NA	12,7	A	113
80	140	900-1050	NA	14,8	A	124
80	160	1050-1200	NA	17,0	C	129
80	180	1200-1350	NA	19,1	C	140
80	200	1350-1500	NA	21,2	C	150
96	100	600-750	NA	14,0	A	118
96	120	750-900	NA	16,8	B	123
96	140	900-1050	NA	19,6	B	140
96	160	1050-1200	NA	22,4	B	148

About Us

Battery Asia specializes in the distribution and manufacturing of traction and lithium-ion batteries. As the exclusive distributor of several global brands, the company provides one of the region's most comprehensive range of traction batteries and chargers for electrical lifting equipment.

With a focus on quality and innovation, Battery Asia takes pride in serving its list of local and regional clients in the warehousing and logistics sectors. The home-grown firm also goes above and beyond as a one-stop centre for their customers, providing customized solutions and robust after-sales service.



Moving Forward



**The ONE leading Energy Solutions Provider
for logistic / warehousing industry.**

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