

Tricom®

▶ **TriCOM select**



Energy. Endurance. Performance.

▶ TriCOM[®] select charging system



Cutting-edge technology

The new TriCOM select charging systems not only feature the most modern components and an attractive design, but also make an important contribution to climate protection due to the high level of energy efficiency.

Energy efficiency

The topic of energy efficiency must be considered from an ecological and economic point of view. Compared to conventional chargers, TriCOM select charging systems reduce the consumption of electrical energy during charge by 25%. This leads to decreased energy costs and lower CO₂ emission.

Charging characteristics

TriCOM select charging systems are suitable both for charging wet batteries and for maintenance-free batteries since all relevant charge profiles are stored in the memory of the electronic charging system.

The charging characteristics are controlled and thus independent of mains voltage fluctuations. Regarding charge characteristics intended for wet batteries, particular attention has been given in relation to the optimization of the charge factor. Fulling charging of a battery is achieved through effective acid mixing, reduced gassing and the least possible electrical energy consumption. The result is lower water loss and thus reduced lifetime costs. For opportunity charging or particularly short charging times, an electrolyte circulation option is available for wet batteries.

SYSTEM FEATURES

- ▶ **Extends the service life of the battery** - minimized temperature increase during charge.
- ▶ **Efficiency of up to 96 % and a cos of up to ~1** - reduce the required grid connection power and associated investment and installation costs.
- ▶ **Compact design** - reduces space requirements.
- ▶ **Lower CO₂ emissions** - consumption of electrical energy during charge reduced by 25%.
- ▶ **Optimally smoothed charging current** - reduces the in-service costs (watering intervals) for battery maintenance.
- ▶ **Electromagnetic compatibility (EMC) for living and industrial areas** - suitable for use in businesses, private living and commercial areas as it complies with the EMC requirements.
- ▶ **Multivoltage function** - charging of different batteries with only one charger.
- ▶ **Adapting to the environmental situation** - by using a Battery ID chip, charging parameters can be individually adapted to each battery and/or each environmental situation at any time.
- ▶ **Variable programmable characteristic** - effective pulse charging and future-proof adjustment of all charging parameters for new battery types.
- ▶ **Options: Bidirectional communication between charger, battery controller and PC, tablet or smartphone using Windows based software:**
 - Adaptation of the charging behaviour to the battery temperature
 - Transmission of battery data for setting the optional charging parameters
 - Optimization of the fleet deployment

Charger TriCOM select, WT 13



Graphic display



Tricom® select table of types

Device type	Charging times depending on capacity C5 in Ah*			Nominal device current A	Mains connection			Display	Weight kg	Housing type
	GiS. PzS		GiV. PzV		AC	Plug	Current A			
	7.5 h - 9 h**	11.0 h - 13.0 h**	11.0 h - 14.0 h							
E 230 G 24/16	100 - 133	145 - 200	80 - 122	16	E 230	Schuko	1.9	LED	2.4	WT7
E 230 G 24/20	125 - 167	180 - 250	100 - 150	20	E 230	Schuko	3.8	LED	2.4	WT7
E 230 G 24/25	156 - 208	220 - 310	125 - 190	25	E 230	Schuko	4.8	LED	2.4	WT7
E 230 G 24/30	187 - 250	270 - 375	150 - 230	30	E 230	Schuko	5.4	LED	2.4	WT7
E 230 G 24/35	218 - 291	315 - 430	175 - 270	35	E 230	Schuko	4.0	LED	3.5	WT13
E 230 G 24/50	300 - 416	450 - 625	250 - 385	50	E 230	Schuko	5.7	LED	3.5	WT13
E 230 G 24/65	406 - 541	590 - 810	325 - 500	65	E 230	Schuko	7.6	LED	9	WT20
E 230 G 24/80	500 - 666	720 - 1000	400 - 615	80	E 230	Schuko	9.4	LED	9	WT20
E 230 G 24/100	625 - 833	900 - 1250	500 - 770	100	E 230	Schuko	11.7	AMPEL	18	WT30
E 230 G 24/120	750 - 1000	1085 - 1500	600 - 920	120	E 230	Schuko	14.0	AMPEL	18	WT30
D 400 G 24/150	937 - 1250	1350 - 1875	750 - 1150	150	D 400	CEE 16	6.7	AMPEL	20	WT60
D 400 G 24/170	1062 - 1416	1550 - 2125	850 - 1300	170	D 400	CEE 16	7.1	AMPEL	31	WT120
D 400 G 24/200	1250 - 1665	-	1000 - 1540	200	D 400	CEE 16	8.3	AMPEL	31	WT120
D 400 G 24/240	1500 - 2000	-	1200 - 1850	240	D 400	CEE 16	10.0	AMPEL	31	WT120
E 230 G 48/12	75 - 100	110 - 150	60 - 93	12	E 230	Schuko	4.6	LED	2.4	WT7
E 230 G 48/16	100 - 133	145 - 200	80 - 122	16	E 230	Schuko	3.6	LED	3.5	WT13
E 230 G 48/20	125 - 167	180 - 250	100 - 150	20	E 230	Schuko	4.6	LED	3.5	WT13
E 230 G 48/25	156 - 208	220 - 310	125 - 190	25	E 230	Schuko	5.7	LED	3.5	WT13
E 230 G 48/35	218 - 291	315 - 430	175 - 270	35	E 230	Schuko	7.9	LED	9	WT20
E 230 G 48/50	300 - 416	450 - 625	250 - 385	50	E 230	Schuko	11.7	AMPEL	18	WT30
E 230 G 48/60	375 - 500	540 - 750	300 - 460	60	E 230	Schuko	14.0	AMPEL	18	WT30
D 400 G 48/85	516 - 708	774 - 1050	400 - 615	85	D 400	CEE 16	7.5	AMPEL	20	WT60
D 400 G 48/100	625 - 833	900 - 1250	500 - 770	100	D 400	CEE 16	8.9	AMPEL	20	WT60
D 400 G 48/120	750 - 1000	1085 - 1500	600 - 920	120	D 400	CEE 16	10.7	AMPEL	20	WT60
D 400 G 48/150	937 - 1250	1350 - 1875	750 - 1150	150	D 400	CEE 16	12.4	AMPEL	31	WT120
D 400 G 48/170	1062 - 1416	1550 - 2125	850 - 1300	170	D 400	CEE 32	14.0	AMPEL	31	WT120
D 400 G 48/200	1250 - 1665	-	1000 - 1540	200	D 400	CEE 32	16.5	AMPEL	31	WT120
E 230 G 80/20	125 - 167	180 - 250	100 - 150	20	E 230	Schuko	7.8	LED	9	WT20
E 230 G 80/25	156 - 208	220 - 310	125 - 190	25	E 230	Schuko	9.8	LED	9	WT20
D 400 G 80/35	218 - 291	315 - 430	175 - 270	35	E 230	Schuko	13.5	AMPEL	18	WT30
D 400 G 80/50	300 - 416	450 - 625	250 - 385	50	D 400	CEE 16	6.7	AMPEL	20	WT60
D 400 G 80/65	406 - 541	590 - 810	325 - 500	65	D 400	CEE 16	8.8	AMPEL	20	WT60
D 400 G 80/85	516 - 708	774 - 1050	400 - 615	85	D 400	CEE 16	11.5	AMPEL	20	WT60
D 400 G 80/100	625 - 833	900 - 1250	500 - 770	100	D 400	CEE 16	13.3	AMPEL	31	WT120
D 400 G 80/120	750 - 1000	1085 - 1500	600 - 920	120	D 400	CEE 32	16.0	AMPEL	31	WT120
D 400 G 80/150	937 - 1250	1350 - 1875	750 - 1150	150	D 400	CEE 32	20.3	AMPEL	31	WT120
D 400 G 80/170	1062 - 1416	1550 - 2125	850 - 1300	170	D 400	CEE 32	23.0	AMPEL	31	WT120

Extract from our product range.
Further types available on request.

Housing type	Width mm	Hight mm	Depth mm
WT7	173	218	110
WT7 On-Board	166	77	230
WT13	260	218	110
WT13 On-Board	200	77	280
WT13E	260	218	185
WT20	214	418	180
WT20E	214	418	220
WT30	391	444	258
WT60	312	603	201
WT120	312	603	305

* Observe guide values, regulations of the battery manufacturers

** Electrolyte circulation approx. 0.5 h shorter charging time.

Devices with EUW may be supplied in the lower housing variant „WT...E“

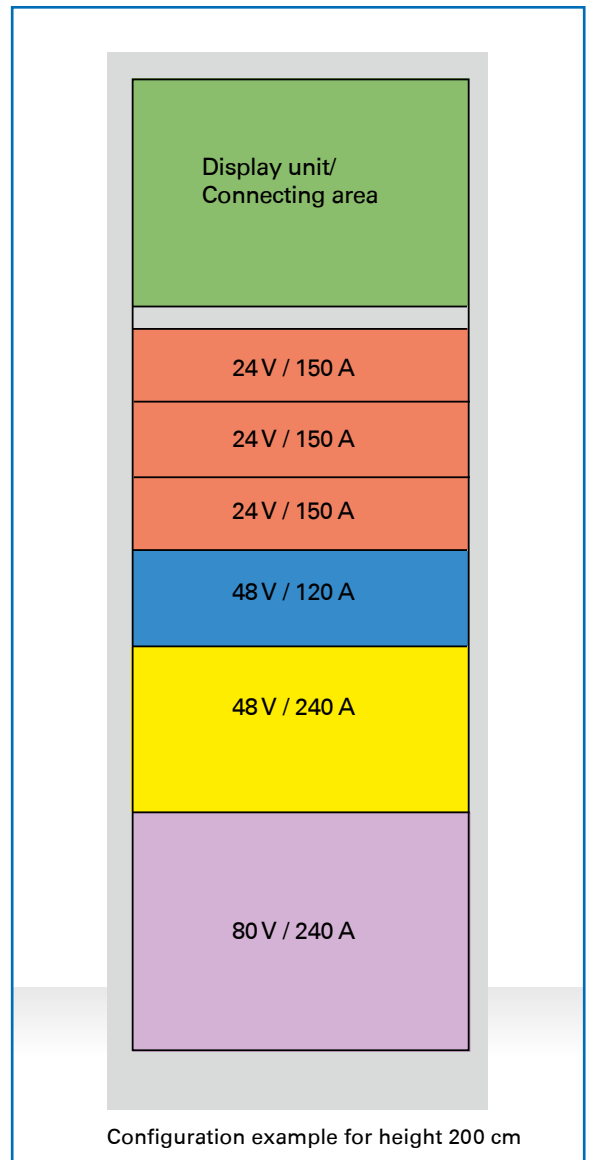
TriCOM[®] select charger



▶ TriCOM® select RACK



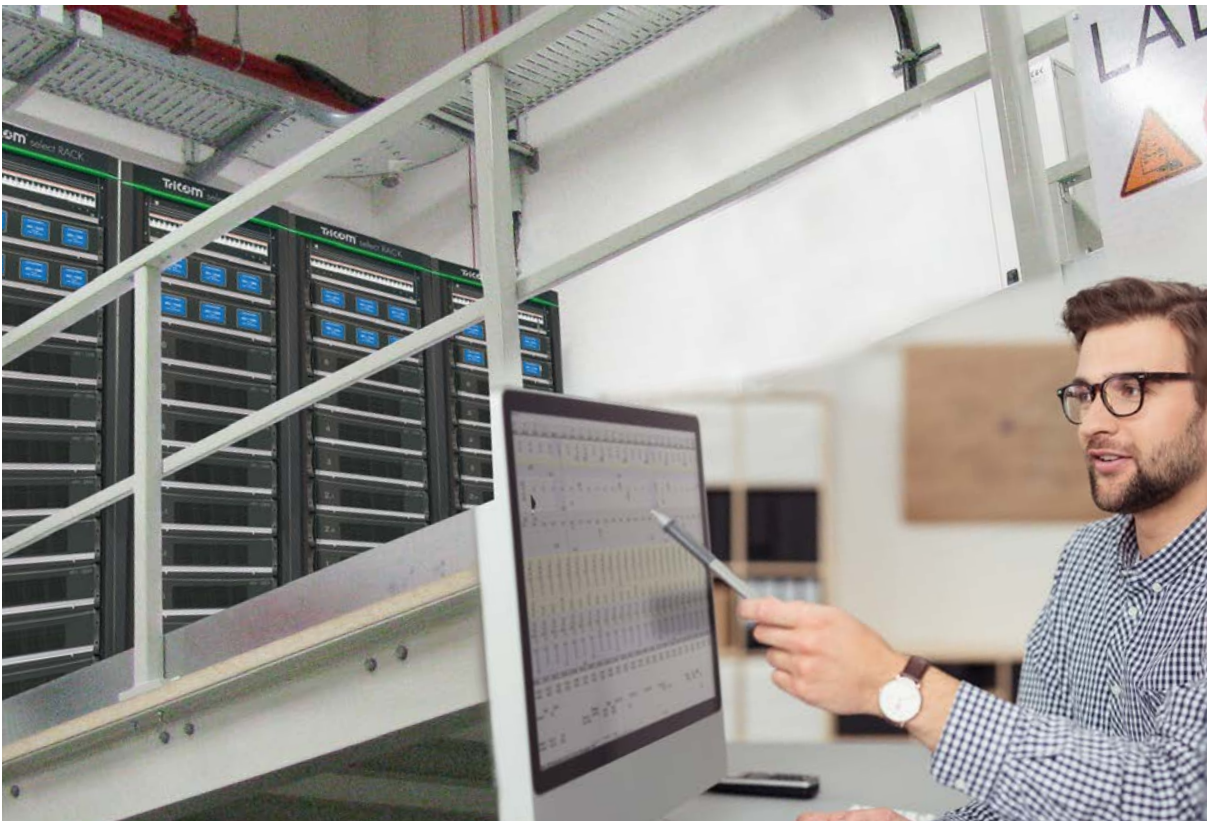
Charging system TriCOM select RACK



Configuration example for height 200 cm

SYSTEM FEATURES

- ▶ **Extremely high power density** - coupled with a minimized space requirement and footprint.
- ▶ **Different system combinations** - makes tight spaces possible.
- ▶ **Special ventilation concept** - to protect the power element against dust and grime.
- ▶ **High efficiency** - up to 96 %.
- ▶ **Sinusoidal current consumption** - reduction of the required connected load of the mains.
- ▶ **Remote monitoring possible** - overview of all charging events.
- ▶ **Smoothed charging current** - extends the service life of the traction battery.
- ▶ **Flexible positioning** - can be set up in the production area.
- ▶ **Robust housing**



The TriCOM select RACK consists of individual independent charging modules, which are installed in the provided industrial cabinets either next to each other or on top of each other (depending on the capacity). The charging modules are available with output voltages of 24 V, 48 V or 80 V.

The standard cabinet can store a maximum of 12 charging modules 24 V / 80 A or a maximum of 3 charging modules up to 80 V / 240 A. In applications where battery charging room space is limited, these configuration possibilities allow simultaneous charging of a larger number of batteries with one charger.

Using the monitoring software, comprehensive monitoring, control and remote maintenance of the charging system is possible both on site and from a remote control center. The connection can be made over internet, LAN / WLAN. The use of this software allows an efficient and sensible use of all charging stations optimized deployment of the maintenance and service staff.

As is the case with all electronics, the intense contact with conductive dust and/or acidic air may lead to increased corrosion of electronic components and thus early failures of the electronic charging system.

By coating the printed circuit boards and applying a special air flow concept, the contact of acidic air with electronic components is largely prevented with the TriCOM select RACK.





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