

### Description

DC to DC converters are used to convert from one voltage level to another. In our lineup we are offering models with 12V, 24V or 48V inputs and 12V or 24V outputs at different power levels. The utilized switch mode technology ensures high efficiency low loss operation. Careful design and over dimensioned components ensure trouble free operation for many years. Our DC to DC converter lineup consists of three different series, TDC, TDCi and TDCi-CH. Explained below are the specific differences between each series.

The TDC series are compact non isolated DC to DC converters and have an excellent price/performance ratio. These are available in Step Down and Step Up versions and can be used in applications where the DC input source share the same ground potential as the DC output load, like in most road vehicles.

The TDCi series are isolated DC to DC converters that are also available in Step Down and Step Up versions. These models are ideal when no electrical connection between the input source and the output load is desired.

The TDCi-CH series are based on the standard TDCi products, but are equipped with an automatic battery charging functionality. This enables the possibility to charge a battery connected to the output from another battery connected to the input. One of the benefits is that the charging voltage of the input battery does not need to be exactly the same as the charge voltage requirements of the output battery, allowing two different battery types to be connected together.



### Features

- Supply 12V consumers from a 24V system or vice versa
- Supply 12V or 24V consumers from a 48V system
- Charge one battery from another (TDCi-CH only)
- Compact and easy to install
- Robust industrial design
- High efficiency
- Protected against low battery voltage, high temperature and overload
- CE certified
- 24 month warranty

### Applications

- Marine applications
- Electric forklifts
- All types of road vehicles
- Machine building
- Process engineering
- Industrial systems
- Mobile entertainment systems
- Building automation

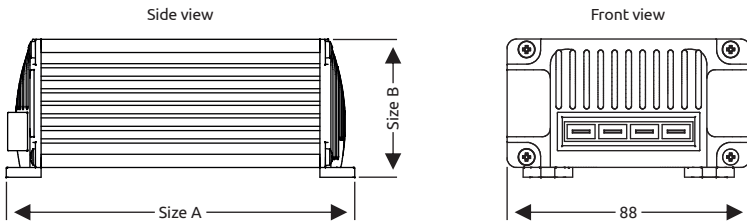


## Technical specifications

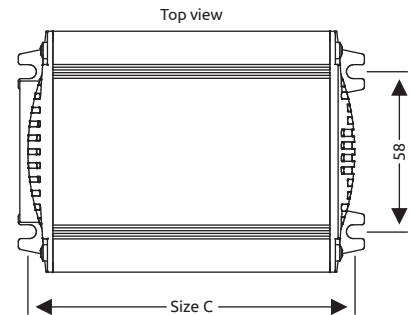
Model	In/out isolation (500V)	Charge functionality	Vin range (Vdc)	Vout (Vdc)	Iout (A)	Cooling	Dimensions (mm)	Weight (kg)
<b>TDC-12/24-10</b> art # 5020100	X	X	9..18	25.0	10	convection	127 x 88 x 49	0.36
<b>TDC-12/24-20</b> art # 5020110	X	X	9..18	25.0	20	convection	150 x 88 x 98	1.20
<b>TDC-24/12-12</b> art # 5020130	X	X	20..35	13.6	12	convection	98 x 88 x 49	0.30
<b>TDC-24/12-20</b> art # 5020140	X	X	20..35	13.6	20	convection	127 x 88 x 49	0.45
<b>TDC-24/12-30</b> art # 5020150	X	X	20..35	13.6	30	fan	150 x 88 x 49	0.53
<b>TDCi-12/12-16</b> art # 5020500	•	X	9..18	12.5	16	fan	175 x 88 x 49	0.62
<b>TDCi-24/12-16</b> art # 5020510	•	X	20..35	12.5	16	fan	175 x 88 x 49	0.62
<b>TDCi-48/12-16</b> art # 5020520	•	X	30..60	12.5	16	fan	175 x 88 x 49	0.62
<b>TDCi-12/24-8</b> art # 5020530	•	X	9..18	24.5	8	fan	175 x 88 x 49	0.62
<b>TDCi-24/24-8</b> art # 5020540	•	X	20..35	24.5	8	fan	175 x 88 x 49	0.62
<b>TDCi-48/24-8</b> art # 5020550	•	X	30..60	24.5	8	fan	175 x 88 x 49	0.62
<b>TDCi-12/12-30</b> art # 5020700	•	X	9..18	12.5	30	fan	190 x 132 x 83	1.36
<b>TDCi-24/12-30</b> art # 5020710	•	X	20..35	12.5	30	fan	190 x 132 x 83	1.36
<b>TDCi-48/12-30</b> art # 5020720	•	X	30..60	12.5	30	fan	190 x 132 x 83	1.36
<b>TDCi-12/24-15</b> art # 5020730	•	X	9..18	24.5	15	fan	190 x 132 x 83	1.36
<b>TDCi-24/24-15</b> art # 5020740	•	X	20..35	24.5	15	fan	190 x 132 x 83	1.36
<b>TDCi-48/24-15</b> art # 5020750	•	X	30..60	24.5	15	fan	190 x 132 x 83	1.36
<b>TDCi-12/12-20CH</b> art # 5022000	•	•	9..18	14.4	20	convection	190 x 132 x 83	1.31
<b>TDCi-12/24-10CH</b> art # 5022020	•	•	9..18	28.8	10	convection	190 x 132 x 83	1.31

*Note: the given specifications are subject to change without notice.*

## Dimensions (Models < 200W)

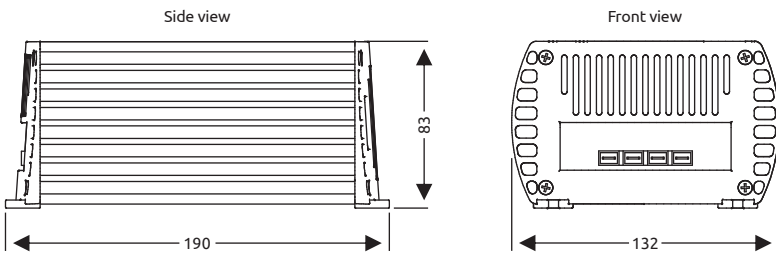


Size A	Size B	Size C	Models
98	49	91	TDC-24/12-12
127	49	118	TDC-12/24-10, TDC-24/12-20
150	49	143	TDC-24/12-30
150	98	143	TDC-12/24-20
175	49	168	TDCi-12/12-16, TDCi-24/12-16, TDCi-48/12-16, TDCi-12/24-8, TDCi-24/24-8, TDCi-48/24-8



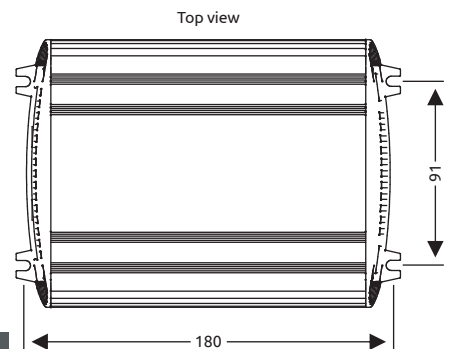
Measurement units: millimeters

## Dimensions (Models > 200W)



### Models

TDCi-12/12-30, TDCi-24/12-30, TDCi-48/12-30, TDCi-12/24-15, TDCi-24/24-15, TDCi-48/24-15,  
TDCi-12/12-20CH, TDCi-12/24-10CH



Measurement units: millimeters

## Basic application diagram

