



General data

Compatible slave modules	TruConvert AC 3025 / TruConvert DC 1008
Number of connectable slave modules	1 – 16
Slave module addressing	Individual / broadcast

Interface

User interface	Ethernet (Modbus TCP / UDP, Web Server), 2 x RJ-45 (switched)
System interface (module connection, backplane)	RS-485 (RJ-45)
Aux supply	24 V ± 10 %, 250 mA

Environment

Operation temperature	-5 °C – 65 °C (23 °F – 150 °F)
Storage, transportation temperature	-20 °C – 80 °C (-5 °F – 175 °F)
Humidity	5 % – 90 %
Cooling	natural
Maximum installation altitude (above sea level)	2000 m

Dimensions, protection class, weight

Dimensions w x h x d	435 mm x 44.5 mm x 253mm (17.1" x 1.8" x 10")
Weight	< 500 g
Protection Degree	IP 20

Standards

EU directives (CE)	
Low voltage directive	2014/35/EU
Electromagnetic compatibility directive	2014/30/EU
EN 62040-2	2006/AC: 2006 class 1
EN 62109-1	2010
Safety (C, US)	
CSA C22.2	No. 107.1 – 16
UL 1741 / 62109-1	Second Edition / National Differences
IEC 62109-1	First Edition



Electrical data - DC link connection	
DC link voltage	850 V \pm 10 % (balanced to earth)
Isolation	max. 500 V against earth

Electrical data – Battery Connection	DC 1008	DC 1010
Rated voltage	48 V	
Voltage range charge/discharge	0 V – 75 V	
Nominal charge / discharge current	167 A (30 – 48 V)	208 A (30 – 48 V)
Nominal power	8 kW (48 – 70 V)	10 kW (48 – 70 V)
Overload charge/discharge for 10 min	10 kW (48 – 70 V, max. 209 A)	-
Overload charge/discharge for 1 min	12 kW (48 – 70 V, max. 250 A)	-

General data	
Max. efficiency	97.4 %
CEC efficiency (48 V, 800 V)	96.7 %
Response time (step load 0 – 100 %)	< 10 ms

Interface	
Power connection DC link	Plugable
Power connections battery	M8 / M10 bolts
Aux supply	24 V \pm 10 %, 2 A
Communication interface	RS-485 (RJ-45)

Environment	
Operation temperature	-5 °C – 65 °C (23 °F – 150 °F)*
Storage, transportation temperature	-20 °C – 80 °C (-5 °F – 175 °F)
Humidity	5 % – 90 % (no condensation)
Cooling	Forced air, controlled
Noise emission	< 70 dB (max)
Altitude	Up to 2000 m (6562 ft) above sea level

*Derating above 40 °C (105 °F) ambient temperature

Dimensions, protection class, weight	
Dimensions w x h x d (with connectors)	216 mm x 132 mm x 515 mm (8,5" x 5,2" x 20,3")
Degree of protection	IP 20
Weight	12 kg (26.5 lbs)

Standards	
EU directives (CE)	
Low voltage directive	2014/35/EU
Electromagnetic compatibility directive	2014/30/EU
EN 62040-2	2006/AC: 2006 class 3
EN 62109-1	2010
EN 62109-2	2011
Safety (C, US)	
CSA C22.2	No. 107.1 – 16
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Technical Data of TruConvert DC 1030



Electrical data - DC link connection	
DC link voltage	850 V \pm 10 % (balanced to earth)
Maximum input power charge/discharge*	30 kW (max. 70 A)

* At 40 °C (105 °F) ambient temperature

Electrical data – Battery Connection	
Nominal DC voltage U_B	400 V
Nominal charge/discharge current	70 A
DC voltage range I_B , U_B , I_B or U_B charge/discharge	0 - 700 V
Initial charge/discharge (I_B settable)	0 V (max. 10 A)
Current I_B charge/discharge (I_B settable)	200 – 700 V (max. 70 A)
Voltage U_B float charge (U_B settable)	700 V

General data	
Max. efficiency	99.5 %
Response time (step load 0 – 100 %)	< 5 ms

Interface	
Power connection DC link	Phoenix Connectors
Power connections battery	Phoenix Connectors
Aux supply	24 V \pm 10 %, 2 A
Communication interface	RS-485 (RJ-45)

Environment	
Operation temperature	-5 °C – 65 °C (23 °F – 150 °F)*
Storage, transportation temperature	-20 °C – 80 °C (-5 °F – 175 °F)
Humidity	5 % – 90 % (no condensation)
Cooling	Forced air, controlled
Noise emission	< 70 dB (max)
Altitude	Up to 2000 m (6562 ft) above sea level

*Derating above 50 °C (115 °F) ambient temperature

Dimensions, protection class, weight	
Dimensions w x h x d (with connectors)	1/2 19" x 2 HE* x 471,1 mm (1/2 19" x 2 RU* x 18,55")
Degree of protection	IP 20
Weight	7 kg (15.43 lbs)

*HE = RU = 44,45mm

Entire Device	AC 3025
Max. efficiency	98 %
Voltage supply	24 VDC \pm 10% / 8 A
Reaction time	< 10 ms

Mains Connection Data	
Mains voltage range	380 / 480 V \pm 10 %
Maximum permitted mains voltage	528 V
Mains frequency range	45 – 65 Hz
Nominal mains frequency	50 / 60 Hz
Charging / discharging nominal apparent power	25 kVA
Asymmetrical load	Up to 8.3 kVA / phase
Charging/Discharging power factor	-1 – 1
Nominal current for listed voltage	380 V: 38 A
	400 V: 37 A
	415 V: 35 A
	440 V: 33 A
	460 V: 32 A
480 V: 31 A	
Overload capacity 125 % (10 min)	32 kVA
Overload capacity 150 % (1 min)	38 kVA
Excess current capacity 300%	114 A
Distortion due to harmonics in nominal power	< 5 %
Max. switch-on current	< nominal current

DC- link	
Nominal power	25 kW
DC- link nominal current at	750 V: 36 A
	800 V: 33 A
	850 V: 31 A
	900 V: 30 A
	950 V: 28 A
Maximum output voltage	950 VDC, balanced to earth (deviations possible)

Interfaces	
DC link	PCB plug connector, 3-pin
24 V supply voltage (DC)	PCB plug connector, 2-pin
Mains power connection	L1, L2, L3, N, PE PCB plug connector, 5-pin
Communication interfaces	2 x RS-485 (RJ-45)
Aux supply	24 V \pm 10 %, 8 A

Environment	
Rated operation	-5 °C – 40°C (23 °F – 104 °F)
Limited power operation	40 °C – 65 °C (104 °F – 149 °F)
Storage / Transport	-20 °C – 80 °C (-4 °F – 176 °F)

Dimensions, protection class, weight	
Dimensions w x h x d	437 mm x 129 mm x 500 mm (17.2" x 5.1" x 19.7")
Dimensions of front panel W x H	482 mm x 132 mm
Degree of protection	IP 20
Weight	27 kg (60 lbs)
Certification	UL1741SA 2nd Edition, IEEE 1547.1, VDE-AR-N 4105:2018-11, VDE-AR-N 4110:2018-11, Tor Typ A: 2019-12, EN 50549-1:2019-02, UNE 217002:2020, K62477-1 (2011-12)