



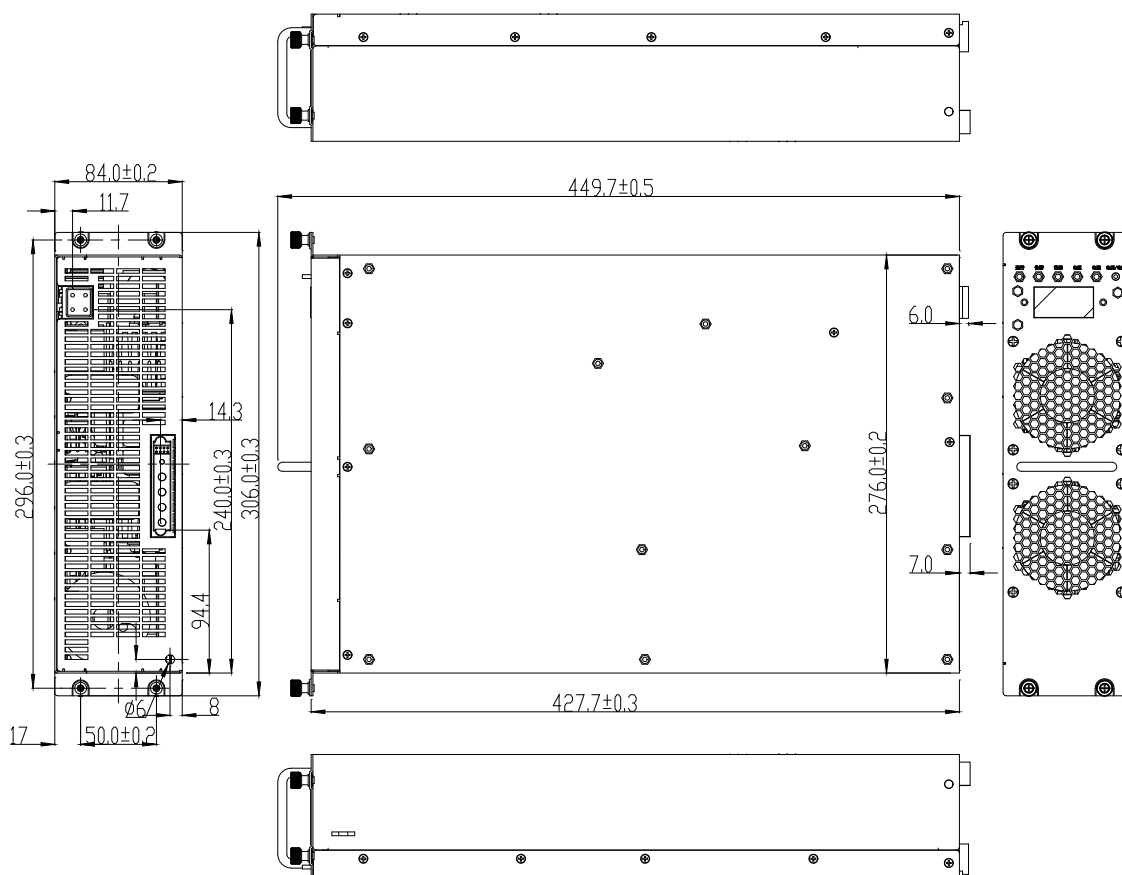
### ■ Main Features

- ┘ Wide AC input range 3 phases 156...502Vac
- ┘ Wide DC output range 200...750Vdc
- ┘ Active PFC
- ┘ 15kW Power rated
- ┘ Multiple IO protections
- ┘ CAN bus communication interface
- ┘ Usable for broad range of batteries
- ┘ Parallelable for power increase
- ┘ Forced air cooling
- ┘ Ultracompact

## TECHNICAL DATA

Model type		EVCT 15-750	
<b>OUTPUT DATA</b>			<b>REMARKS</b>
Rated voltage		750Vdc	At rated input
Adj. output voltage range		200...750Vdc	
Output rated power		15kW	Power depending on output voltage and input voltage
Continuous current		25A	
Efficiency		≥ 95%	Rated input, half load output
Line regulation		≤ ±0.1%	
Load regulation		≤ ±0.5%	
Current sharing imbalance		≤ ±5%	Rated AC input range, 50...100% load
Ripple and noise		≤ ±0.5%Vout mVp-p	Width 20MHz bandwidth. Parallel with 10uF+10nF Capacitor
Starting up output delay		3...18s	Rated input voltage starting up till output voltage rise to setting point
Dynamic response	Overshoot range	ΔV ≤ ±5%	Load change at 25% - 50% - 25% or 50% - 75% - 50%, jumping rate is 0.1A/us; jumping period is 4ms
	Recovery time	Δt ≤ 200μs	
Voltage temperature coefficient		≤ ±0.02%/°C	
<b>INPUT DATA</b>			<b>REMARKS</b>
Rated input voltage		200...450Vac (typical value 380Vac)	▪ When input voltage is from 156...323Vac, the total output power will be derated from 100% to 40% linearly.
AC input voltage range		156...502Vac	▪ When input voltage is in range of 440Vac...502Vac, output power is 90% of the rated power
AC input grid frequency range		45...65Hz	
Power factor		≥ 0.99	Rated input, rated load
Max. input current		30A	
Inrush current		< 45A	
Input current harmonic		≤ 5%	Rated input, rated load
<b>PROTECTION CHARACTERISTICS</b>			<b>REMARKS</b>
Protections		<ul style="list-style-type: none"> <li>▪ Input under voltage protection</li> <li>▪ Input over voltage protection</li> <li>▪ Output over current protection</li> <li>▪ Output overvoltage</li> <li>▪ Short circuit protection</li> <li>▪ Over temperature protection</li> </ul>	Auto recovery
Internal protection fuse		None, external fuse must be provided	
Recommended external protection		Fuse 3x 30AT or 3x MCB 32A C curve It is strongly recommended to provide external surge arresters (SPD) according to local regulations.	
Output over voltage protection point		Vout + 50Vdc	
<b>USER INTERFACE</b>			
Status LEDs		<ul style="list-style-type: none"> <li>▪ LED for AC OK and unit ON</li> <li>▪ LED for general alarm (e.g. temperature, overload, short-circuit)</li> <li>▪ LED for unrecoverable internal failure</li> <li>▪ LEDs for U/I function on the 7 segment display, function switched by front key</li> <li>▪ 3 digits/7 segment display for U/I out values</li> </ul>	
<b>SAFETY &amp; EMC</b>			<b>REMARKS</b>
Dielectric strength	Input-output	3535Vdc/10mA/ 1min	No flashover, no breakdown.
	Input-ground	3535Vac/10mA/ 1min	
	Output-ground	2121Vdc/10mA/ 1min	
Touch (leakage) current		≤ 3.5mA	502Vac/60Hz
EMC	Conducted Emission	CLASS A	
	Radiated Emission	CLASS A	
	Current harmonic	<ul style="list-style-type: none"> <li>▪ IEC61000-3-2</li> </ul> CLASS A	
	Immunity	<ul style="list-style-type: none"> <li>▪ IEC61000-4-2</li> </ul> LEVEL 3	ESD Radiated immunity Burst Surge Conducted immunity DIP
		<ul style="list-style-type: none"> <li>▪ IEC61000-4-3</li> </ul> LEVEL 3 criteria A	
		<ul style="list-style-type: none"> <li>▪ IEC61000-4-4</li> </ul> LEVEL 3	
		<ul style="list-style-type: none"> <li>▪ IEC61000-4-5</li> </ul> LEVEL 4 Diff. mode ±2KV, Common mode ±4KV	
Safety		EN61851-1	
<b>ENVIRONMENTAL CONDITIONS</b>			<b>REMARKS</b>
Operating Temperature		- 40...+ 60°C	
Derating		- 300W/°C over 50°C	
Storage Temperature		- 40...+ 70°C	
Relative Humidity	Operation	≤ 90%	
	Storage	≤ 95%	
Altitude		≤ 4000m	
Cooling		Forced air cooling, front to back with regulated fans	
<b>GENERAL DATA</b>			<b>REMARKS</b>
Acoustics noise		≤ 55dB(A)	A-weighted, test distance is 1 meter
Hot swap capability		Yes	
Environmental requirement		Meets 2002/95/EC	
Placement		Vertical	
Connection to ground		Through Mechanical case, front plane, fixing screw and rack.	
Weight		About 11kg	

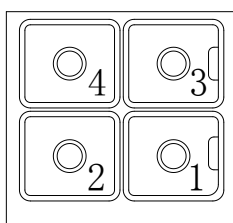
## DIMENSIONS



## OUTLINE DIMENSION

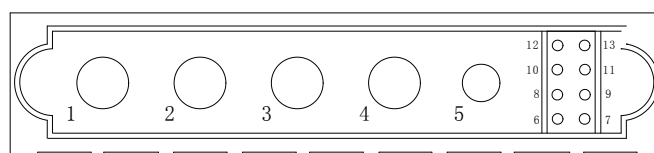
LxWxH: 427.7±0.5mm x 276±0.5mm x 84±0.5mm Max (Not including connector depth)

## CONNECTION



## Input Connection:

- 1 = Phase 1
- 2 = Earth ground
- 3 = Phase 2
- 4 = Phase 3



## Output Connection:

- 1 = Negative Output
- 2 = NC
- 3 = Positive Output
- 4 = NC
- 5 = NC
- 6 = address GND (AGND)
- 7 = address wire 2 (D2)
- 8 = NC
- 9 = address wire 1 (D1)
- 10 = NC
- 11 = communication wire (CANL)
- 12 = communication ground (CANGND)
- 13 = Communication wire (CANH)