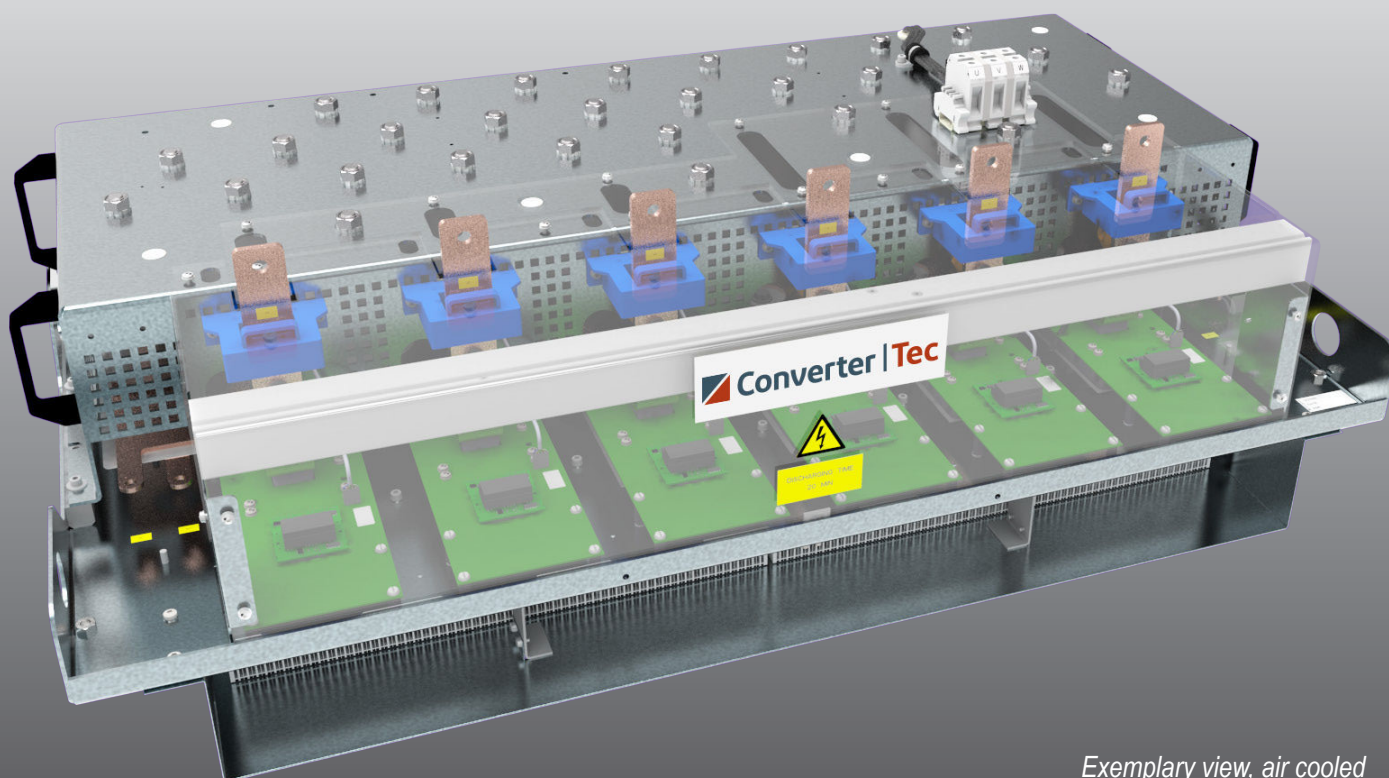




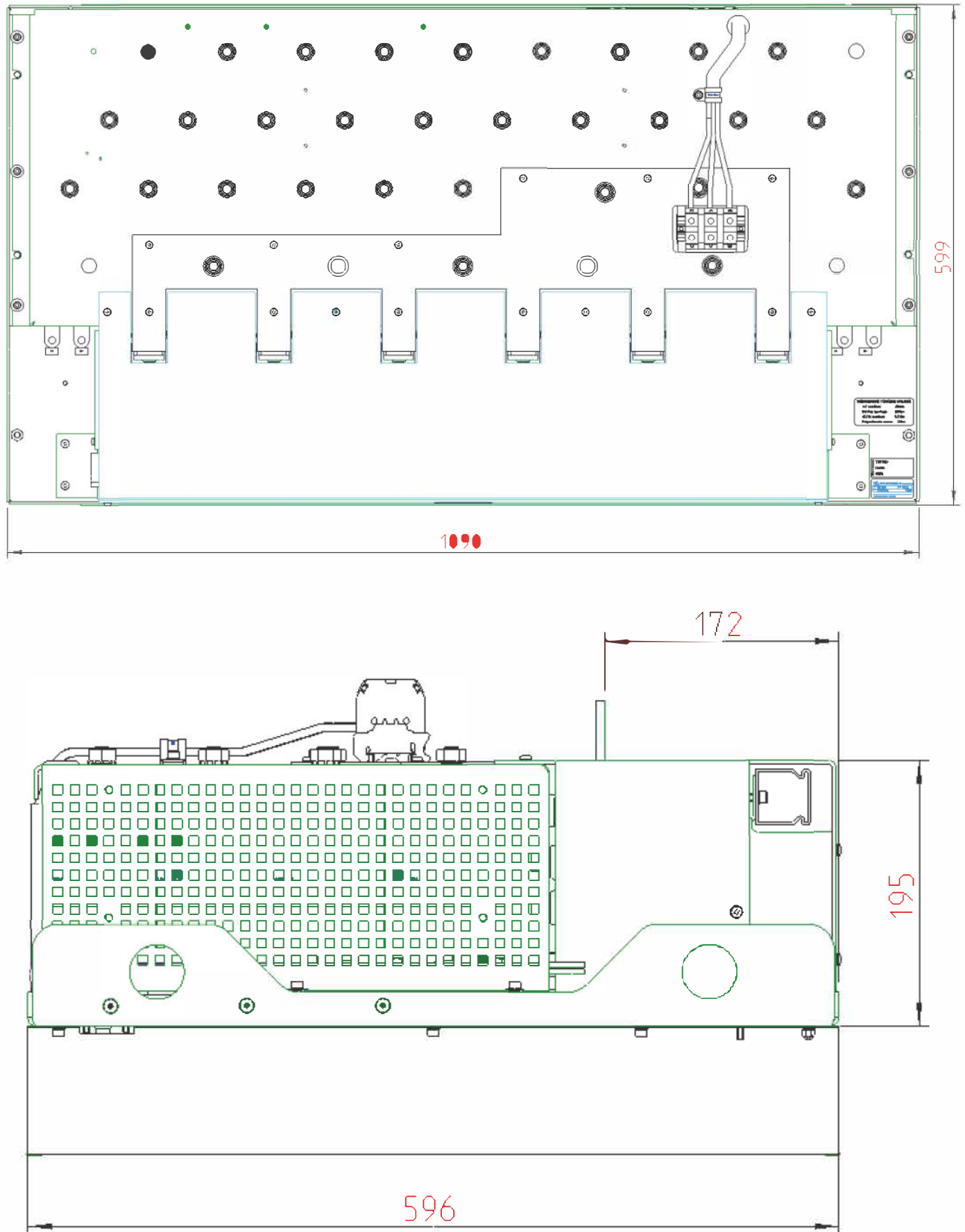
*Exemplary view, air cooled*

# SERVICE STACK

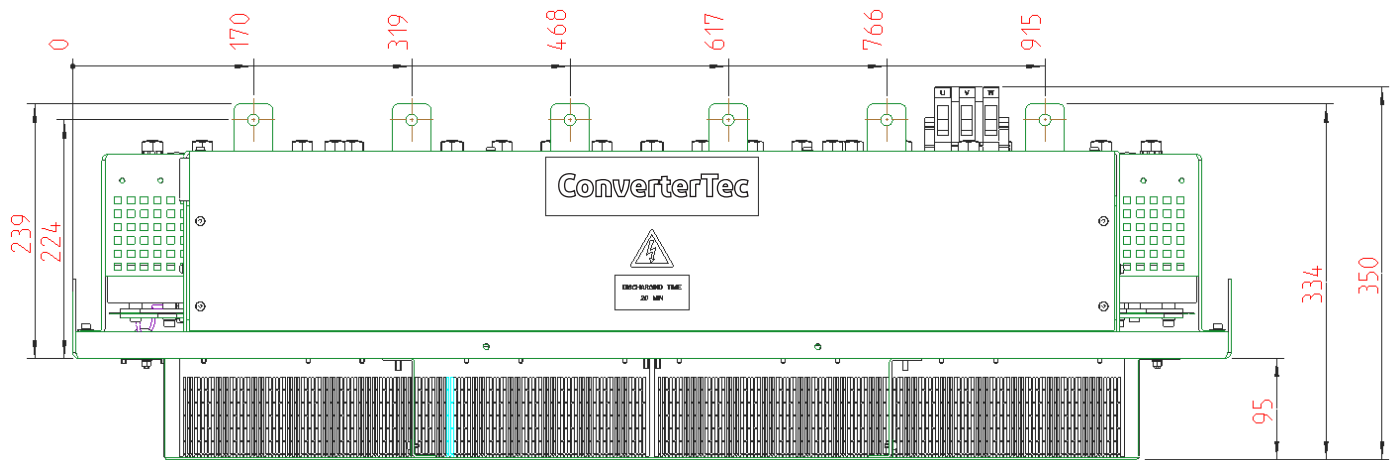
AIR/WATER COOLED

# DATASHEET

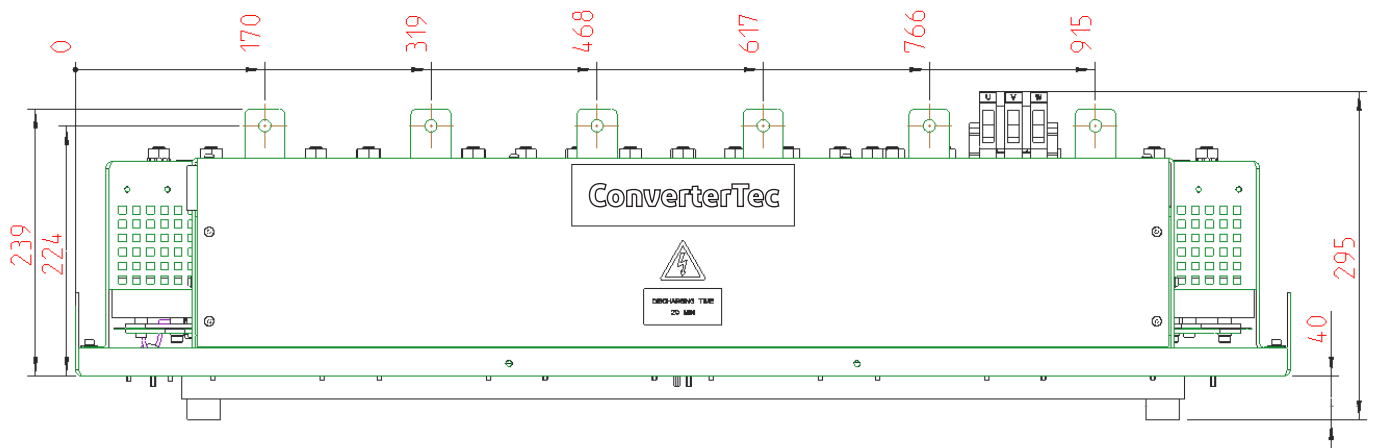
## Dimensions



## Air Cooled



## Water Cooled



### Labelling



CAGE: \$CAGE\_xx

|           |         |
|-----------|---------|
| \$ ITEM   | \$ ECL  |
| \$ SERIAL | \$ DATE |

MANUFACTURED IN \$MFG\_LOC

\$ ITEM – Item number

\$ ECL – Revision (ECL)

\$ SERIAL – Serial number

\$ DATE – Date code

\$ MFG\_LOC – Manufacturing location

| General Data                                                                        | water cooled                                                       | air cooled       |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------|------------------|
| Converter typology                                                                  | 2-level back to back, 3 phase AC/AC                                |                  |
| Dimensions in mm (h x d x w)                                                        | 295 x 599 x 1090                                                   | 350 x 599 x 1090 |
| Weight                                                                              | ~100 kg                                                            | ~120 kg          |
| Enclosure                                                                           | IP 00                                                              |                  |
| Semiconductor Type                                                                  | IGBT                                                               |                  |
| PWM frequency                                                                       | typ. 2,25 kHz, max 4,5 kHz                                         |                  |
| Min. ambient temperature                                                            | 5 °C                                                               |                  |
| Max. ambient temperature                                                            | 60 °C                                                              |                  |
| Grid side                                                                           | water cooled                                                       | air cooled       |
| Grid voltage                                                                        | 690 V +/-10 %                                                      |                  |
| Power Factor                                                                        | -1 to 1                                                            |                  |
| Operation frequency range                                                           | 45 to 65 Hz                                                        |                  |
| Rated output current<br>(f=50 Hz, f=2250 Hz, U <sub>DC</sub> =1100 V, cos(φ)=1)     | 350 A                                                              | 200 A            |
| Overload current, 10 s                                                              | 375 A                                                              | 250 A            |
| Overload current, 20 s                                                              | 350 A                                                              | 225 A            |
| Generator side                                                                      | water cooled                                                       | air cooled       |
| Grid voltage                                                                        | 0 ... 760 V                                                        |                  |
| Operation frequency range                                                           | 0 ... 30 Hz                                                        |                  |
| Rated output current<br>(f=10 Hz, f=2250 Hz, U <sub>DC</sub> =1100 V, cos(φ)=-0,64) | 400 A @ 60 °C water inlet temp.<br>425 A @ 45 °C water inlet temp. | 300 A            |
| Overload current, 10 s (f=10 Hz)                                                    | 450 A                                                              | 375 A            |
| Overload current, 20 s (f=10 Hz)                                                    | 425 A                                                              | 350 A            |
| dU/dt filter                                                                        | LCR filter recommended                                             |                  |
| dU/dt-resistor                                                                      | 22 Ω                                                               |                  |
| Cooling system                                                                      | water cooled                                                       | air cooled       |
| Max. inlet temperature                                                              | 60 °C                                                              | 45 °C            |
| Flow                                                                                | 20 l/min                                                           | 2500 m³/h        |
| DC-link                                                                             |                                                                    |                  |
| DC nominal voltage                                                                  | 1100 VDC                                                           |                  |
| Max. DC voltage                                                                     | 1250 VDC (trip level)                                              |                  |
| DC-link capacitance                                                                 | 12,6±10% mF                                                        |                  |
| Capacitor dielectric                                                                | Metallized polypropylene film                                      |                  |
| Discharge time: 1100 V to 60 V                                                      | 20 min                                                             |                  |