

### CC-410-2500

Converter for driving permanent-magnet synchronous motors (PMSM) and brushless DC motors (BLDC).

- Sensorless speed control from 7,000 rpm up to 300,000 rpm
- Input voltage 360 410 VDC
- Maximum output power of 2.5 kW
- No output filter required
- User definable setup for different motor parameters
- Torque- or speed-control
- Internal brake chopper
- User-friendly PC control software (CelerotonPilot)



| Specifications converter                |  |
|---|--|
| Input voltage U <sub>in</sub>           | 360 – 410 VDC  |
| Maximum output power                    | 2,500 W  |
| Output voltage (ph-ph)                  | $0 - 196 V_{rms} / 0 - 340 V_{peak}$                       |
| Maximum phase current (PAM-operation)   | 10.1 A <sub>rms</sub> /14.3 A <sub>peak</sub> <sup>1</sup> |
| Maximum frequency/speed (PAM-operation) | 5.0 kHz/300 krpm   |
| Operating range                         | 4-Quadrant, (without recuperation)                         |
| Brake chopper (pulse/continuous)        | 60 W/30 W  |
| Communication interface                 | USB, PROFINET  |
| PC control software                     | CelerotonPilot   |
| Weight (preliminary)                    | 3.5 kg   |
| Dimensions (preliminary)                | 270 (320) x 208 x 75 mm                                    |
| Operating temperature                   | 040 °C (condensation is not permissible)                   |
| Casing                                  | Open frame, IP00   |

Converter interfaces (X1, X3, X4, X5, X9, X11, X13, X15, Xint)

# Connector X1 –USB

1 x USB interface

### Connector X3 - RJ45 100BASE-TX

1 x PROFINET Interface

#### Connector X4 - RJ45 100BASE-TX

1 x PROFINET Interface

<sup>&</sup>lt;sup>1</sup> Fundamental of the PAM block current

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| Connector X5 – Digital inputs & outputs |                                  |
|---|----------------------------------|
| 2 x digital inputs                      | 0 – 24 VDC (L < 4.8V, H > 17.6V) |
| 2 x digital outputs                     | 0 – 24 VDC (max load: 1A each)   |

| Connector X9 – Auxiliary supply |             |
|---------------------------------|-------------|
|                                 |             |
| 1 x auxiliary voltage supply    | 24 VDC ±10% |

| Connector X11 – Temperature sensor input |                                     |
|--|-------------------------------------|
| 1x temperature measurement input         | PT100 motor temperature measurement |
| Connector X13 – Motor interface          |                                     |

|  |  | 1 x compressor motor interface | U, V, W & PE |
|--|--|--------------------------------|--------------|
|--|--|--------------------------------|--------------|

| 1 x power supply                        | 360 – 410 VDC |
|---|---------------|
| - · · · · · · · · · · · · · · · · · · · |               |

| Connector Xint – Fan supply (option | nal forced air cooling)     |
|-------------------------------------|-----------------------------|
| 1 x fan supply                      | 24 VDC                      |
|                                     | (not used, no fans mounted) |

Order codes: CC-410-2500

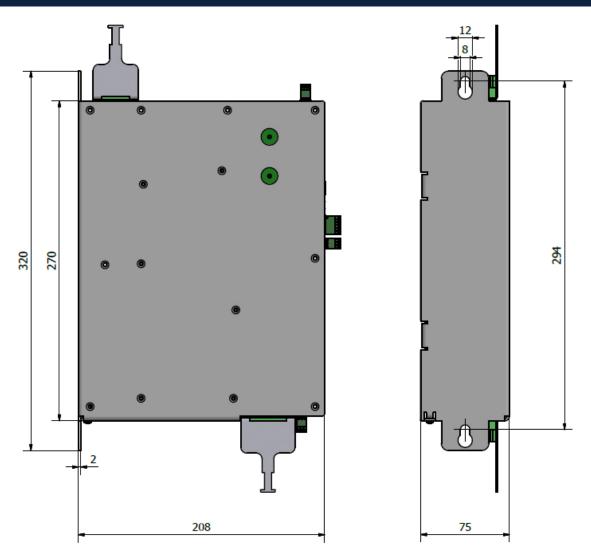
Connector X15 – DC supply

| Ordering information | Article number    |
|----------------------|-------------------|
| CC-410-2500          | Contact Celeroton |

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## Drawing in mm (inch)



Celeroton AG | Industriestrasse 22 | 8604 Volketswil | Switzerland T: +41 44 250 52 20 | F: +41 44 250 52 29 | info@celeroton.com

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