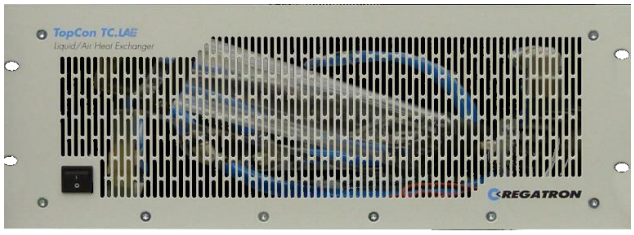
Datasheet

REGATRON programmable power supplies

TC.LAE.5.400 / TC.LAE.5.230

ACS



Front view. TC.LAE


Rear view. TC.LAE

Features

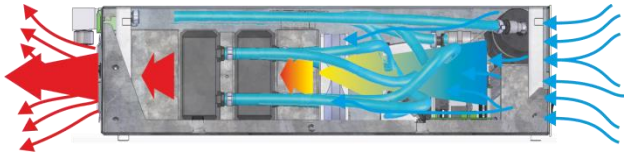
TopCon Liquid to air heat exchanger

- For systems with significant cooling demands and without liquid cooling system in the lab.
- With modular concept for easy installation in a switch cabinet.
- In a compact design with 2 integrated liquid to air heat exchangers and temperature controlled fans for noise reduced operation.
- For a closed cooling circuit with minimal maintenance work.
- With optional connection variants of the cooling interfaces G1/2″ to complete the product line.
  E.g. Quick release non-drip coupling.
- CE conformity declaration
- Swiss made: Development, manufacturing and testing
- Graduated product line:
  - 230 VAC
  - 400 VAC

Function

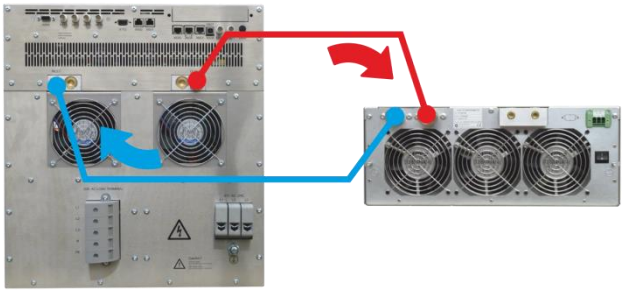
TC.LAE

The TC.LAE is a liquid cooling device that transfers the generated heat energy from the attached device to the surrounding air. An internal pump circulates the cooling liquid between the device to be cooled and the TC.LAE. The heated liquid flows through the radiators to be cooled down by the surrounding air, which is forced through the radiators by six powerful temperature controlled fans. The temperature reduced coolant returns via tube outlet to the attached device.



Example

Closed cooling circuit



Regatron AG
Feldmühlestrasse 50
9400 Rorschach
Switzerland
E-Mail: tc.info@regatron.ch
Phone: +41 71 846 67 67

Datasheet

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Technical Data

AC line

400 V_{AC}

Line voltage	380 – 480 VAC ± 10 %
Line frequency	48 – 62 Hz
Mains connection type	2L + PE (no neutral)
Input current (at 400 VAC)	0.5 A
Leakage current L to PE	< 10 mA
Input power	200 VA
Powerfactor	≥ 0.98

230 V_{AC}

Line voltage	100 – 240 VAC ± 10 %
Line frequency	48 – 62 Hz
Mains connection type	L + N + PE
Input current (at 230 VAC)	0.87 A
Leakage current L to PE	< 10 mA
Input power	200 VA
Powerfactor	≥ 0.98

Cooling

Internal liquid to air heat-exchange system using temperature-controlled fans

Heat exchanger

Material	Brass

Cooling power

Cooling power at 40°C ambient temperature	5kW

Recommended coolant characteristics

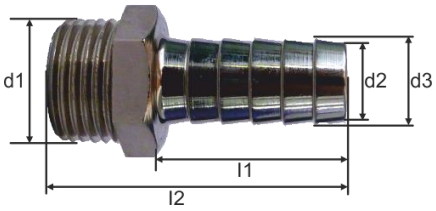
Coolant

Substance	Antifrogen N Clariant® (30%)

For further information see manufacturer's datasheet

Connection

The TC.LAE device is delivered with a hose fitting.



Thread diameter d1	G1/2
Hose connector diameter d2	13 mm
Hose connector diameter d3	14.2 mm
Hose connector lenght l1	30 mm
Total lenght l2	47 mm

Protection

Type of protection (according EN 60529)

Basic construction	IP 20
Mounted in cabinet	Up to IP 53 [1)]

Conformity CE-Marking

EMC Directive

EMC emission	EN 61000-6-4
EMC immunity	EN 61000-6-2

Low Voltage Directive

Electronic equipment for use in power install.	EN 50178

Ambient conditions

Operating temperature	5 – 40°C
Storage temperature (with orig. coolant)	-18 – 70 °C
Relative air humidity (non-condensing)	0 – 95 %
Operating orientation	upside
Storage, transport orientation	upside

Weight & Dimension

Weight	~ 25 kg
Width front panel	483 mm
Width housing	(19″) 443 mm
Height front panel	176.1 mm
Height housing	(4U) 173.2 mm
Depth with output terminals	649 mm
Depth housing	601 mm
Connections: Inlet/ Outlet	G1/2″

Ordering code

Line voltage 400 V_{AC}	TC.LAE.5.400
Line voltage 230 V_{AC}	TC.LAE.5.230

[1)] Cooling power depends on ambient temperature inside cabinet

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Document ID:
2210_TC.LAE.5.xxx_datasheet_EN_20190401

www.regatron.com

Regatron AG
Feldmühlestrasse 50
9400 Rorschach
Switzerland
E-Mail: tc.info@regatron.ch
Phone: +41 71 846 67 67