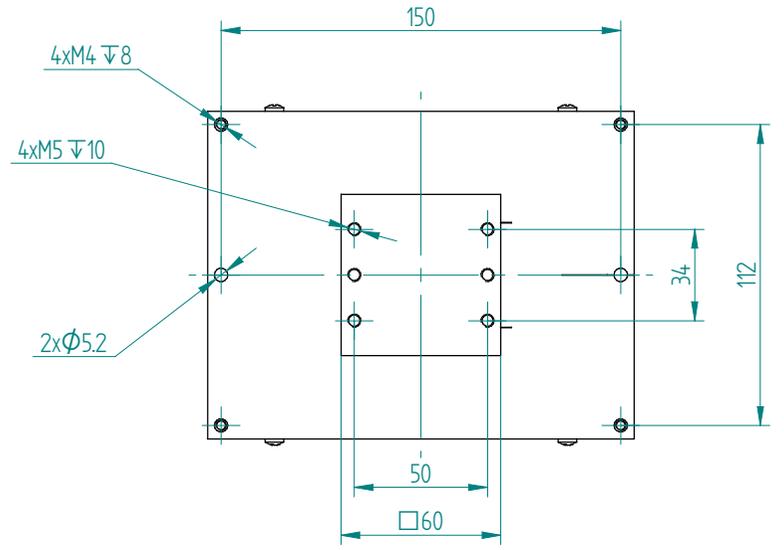
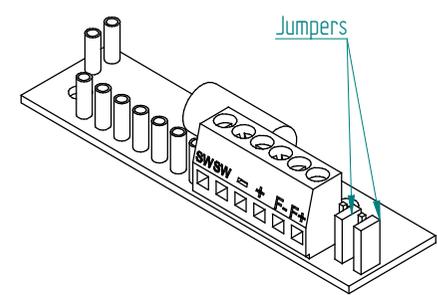
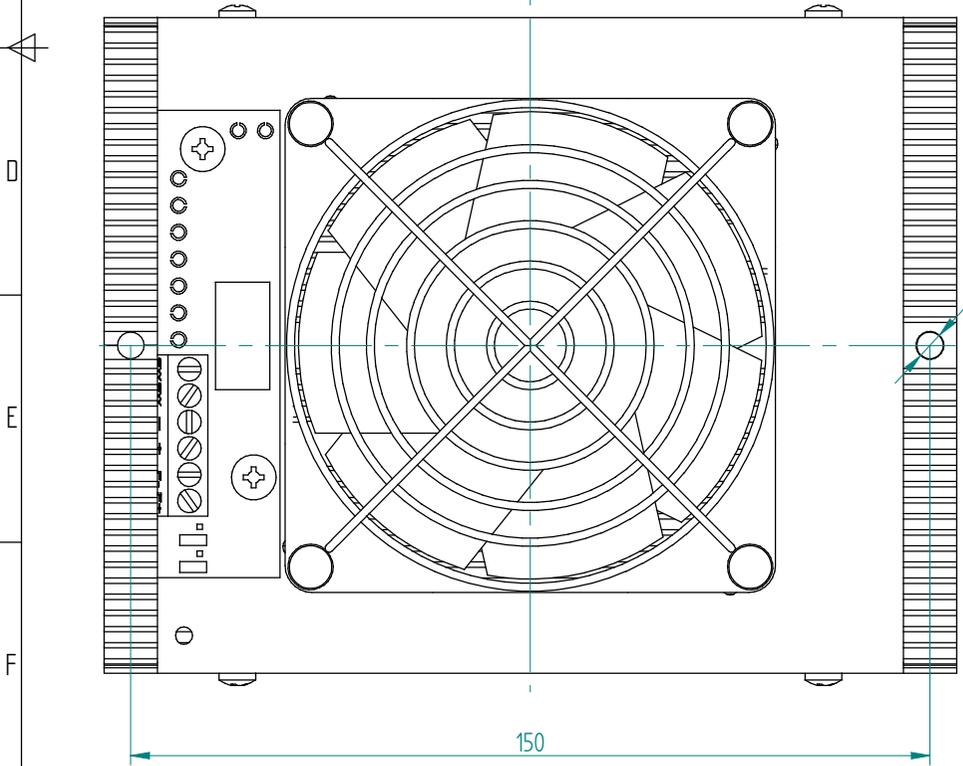
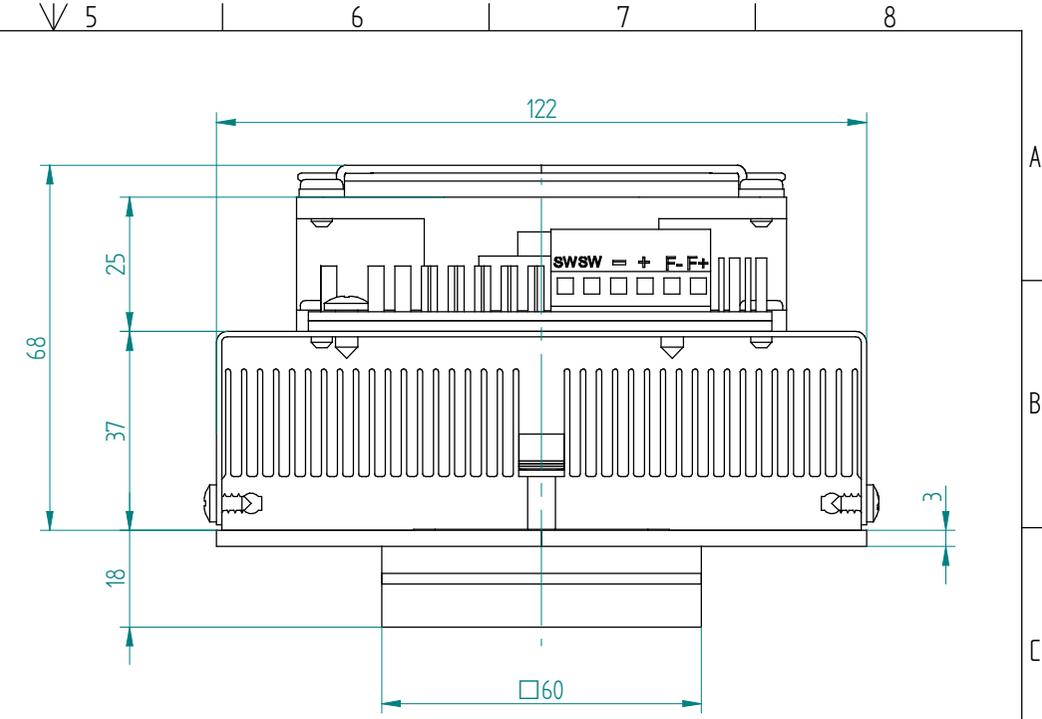
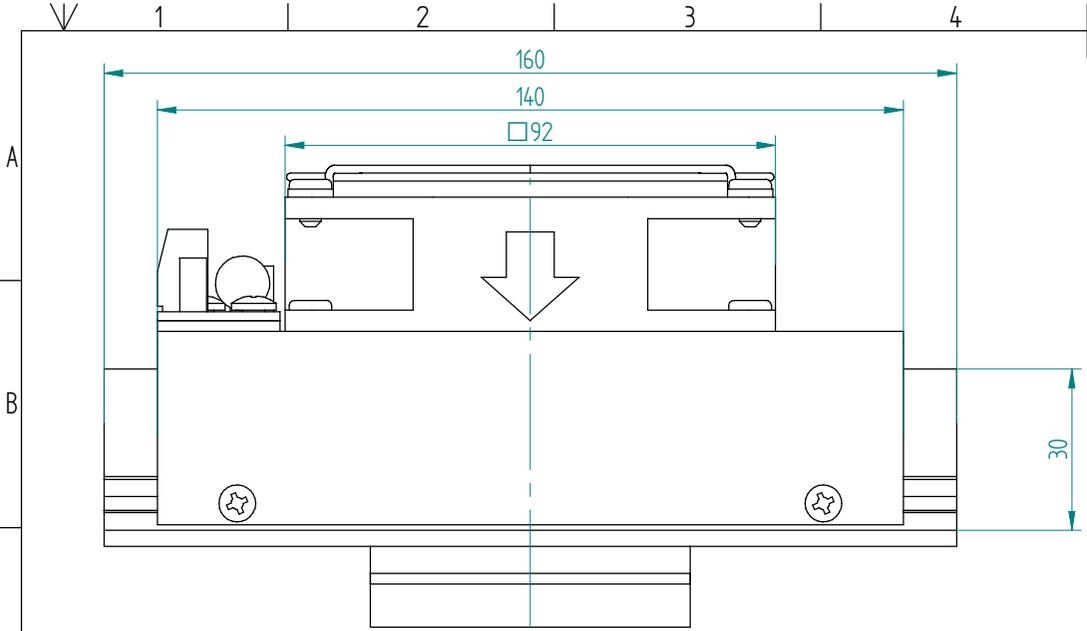


Specification: (Ta=32°C)	Code:	Description:
Heat transfer, cold side:	0	Direct
Heat transfer, warm side:	A	Air
Cascade:	-	
Cooling power: [W]	045	48 W at dT=0°C. Tolerance: ±10%.
Voltage, nominal: [VDC]	12	12 VDC.
TEM Voltage: [VDC]		Nominal: 12 VDC, Max: 15 VDC.
TEM Current: [A]		Nominal: 6.1 A, Initial: 7.0 A. All at dT=0°C. Tolerance: ±10%.
Fan(s), cold side:	0	None.
Fan(s), warm side:	2	L10: 50,000 hrs. at 25°C. Nominal current: 0.39 A. Voltage: 12 VDC ±10%.
Temperature controller, sensor:	0	None.
Temperature control settings, trim options:	0	-
Additional controller information:		
Temperature control position:	0	-
Options:	0	-
Overheating thermostat:		75°C ±5°C on hot side heat sink surface.
Operating temperature:		-10°C to +46°C at nominal voltage.
TE-Module(s) temperature specification:		Max. surface temperature: 80°C.
Enclosed:		-
Packing:		Individual cardboard box.



General tolerances: SS-ISO 2768-1 v	First angle projection:	Dimension units: Metric: [mm]
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Comment / Deviations: Heat sinks and, if applicable, D-plates and shrouds in anodised aluminium. Hi-Pot tested 750VDC					
Designed by: A. Kim	Checked by: C. Johansson	Approved by: C. Johansson	Release date: 2011-04-11	Project: Standard	Customer:
Laird Technologies S-43153 Molndal, Sweden tfn +46 31 420530, fax: +46 31 247909 e-mail: info@lairdtech.com Web: www.lairdtech.com			Title: TE ASSEMBLY 12 VDC DIRECT - AIR		
Part nr: DA-045-12-02-00-00			Rev: 05	Version:	Scale: Size, sheet 1:1 A3, 1/4)



Electrical connections:

"+" : + TEM
 "-" : - TEM
 "F+" : + Fan(s)
 "F-" : - Fan(s)

To use single supply:
 Lift the jumpers and rotate 90° to short-cut the pin pairs.
 Connect the unit to "+" & "-".

Warning: Single supply not applicable in heating mode or with PWM-regulation.

D-Plate tolerances:

Flatness: $\square 0.1/100$

Roughness: $\sqrt{3.2}$

General tolerances: SS-ISO 2768-1 v
 First angle projection: \triangle
 Dimension units: Metric: [mm]

Comment / Deviations: Heat sinks and, if applicable, D-plates and shrouds in anodised aluminium. Hi-Pot tested 750VDC					
Designed by: A. Kim	Checked by: C. Johansson	Approved by: C. Johansson	Release date: 2011-04-11	Project: Standard	Customer:
Laird Technologies S-43153 Molndal, Sweden tfn +46 31 420530, fax +46 31 247909 e-mail: info@lairdtech.com Web: www.lairdtech.com			Title: TE ASSEMBLY 12 VDC DIRECT - AIR		
Part nr: DA-045-12-02-00-00			Rev: 05	Version:	Scale: Size, sheet 1:1 A3, 2(4)