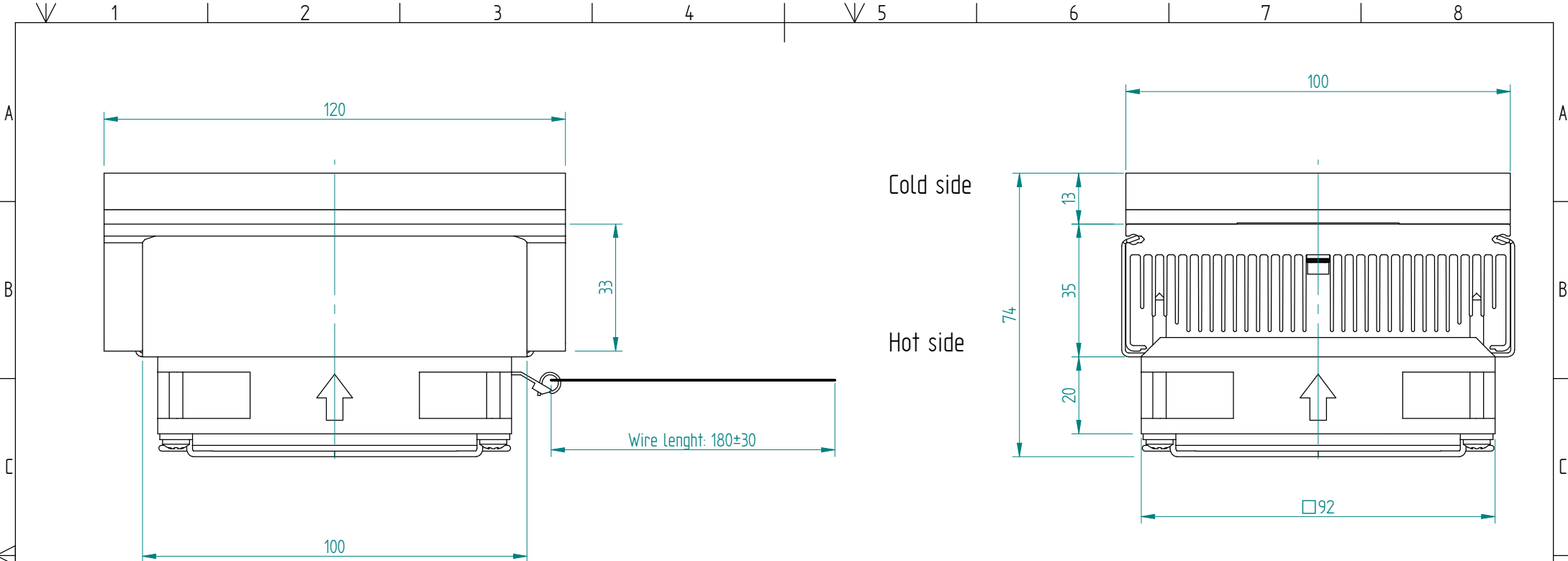


Description:		Code:	Specification: (Ta=35°C, dT=0°C / L35L35)
Heat transfer, cold side:	0	Direct	
Heat transfer, warm side:	A	Air	
Cascade:	-		
Cooling power: [W]	044	42 W (Calculated, Tolerance: ±10%)	
TEA Voltage, nominal: [VDC]	12	12 VDC	
TEM Voltage: [VDC]		Nominal: 12 VDC, Max: 15 VDC	
TEM Current: [A]		Nominal: 35 A, Initial: 4.4 A (Calculated, Tolerance: ±10%)	
Fans, cold side:	0	None	
Fans, warm side:	2	Nominal current: 0.25 A. Voltage: 12 VDC ±10%. L10: 50,000 hrs. at 25°C.	
Temperature controller, sensor:	0	None	
Temperature control settings, trim options:	0	-	
Temperature control position:	0	-	
Additional controller information:	0	-	
Overheating thermostat:		None	
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/Treating:				
Designed by: A. Kim	Checked by: D. Isic	Approved by: H. Höjer	Release date: 2013-09-30	Project: Standard
		Title: TE ASSEMBLY DIRECT - AIR,044, 12 VDC		
Laird Technologies S-43153 Molndal, Sweden tfn: +46 31 420530, fax: +46 31 247909 e-mail: info@lairdtech.com Web: www.lairdtech.com		Part nr: DA-044-12-02-00-00	Rev: 08	Scale: Size, sheet - A3, 1/4

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Electrical connection		
Item	Item's wire Color	Crimp Ferrule Color
TEM +	RED	WHITE
TEM -	BLACK	WHITE
FAN +	RED	BLUE
FAN -	BLACK	BLUE

D-Plate tolerances:

Flatness: $\square 0.1/100$

Roughness: $3.2/\sqrt{\quad}$

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

Comment/Treating:				
Designed by: A. Kim	Checked by: D. Isic	Approved by: H. Höjer	Release date: 2013-09-30	Project: Standard
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		Scale:	Size, sheet	
		-	A3, 2(4)	

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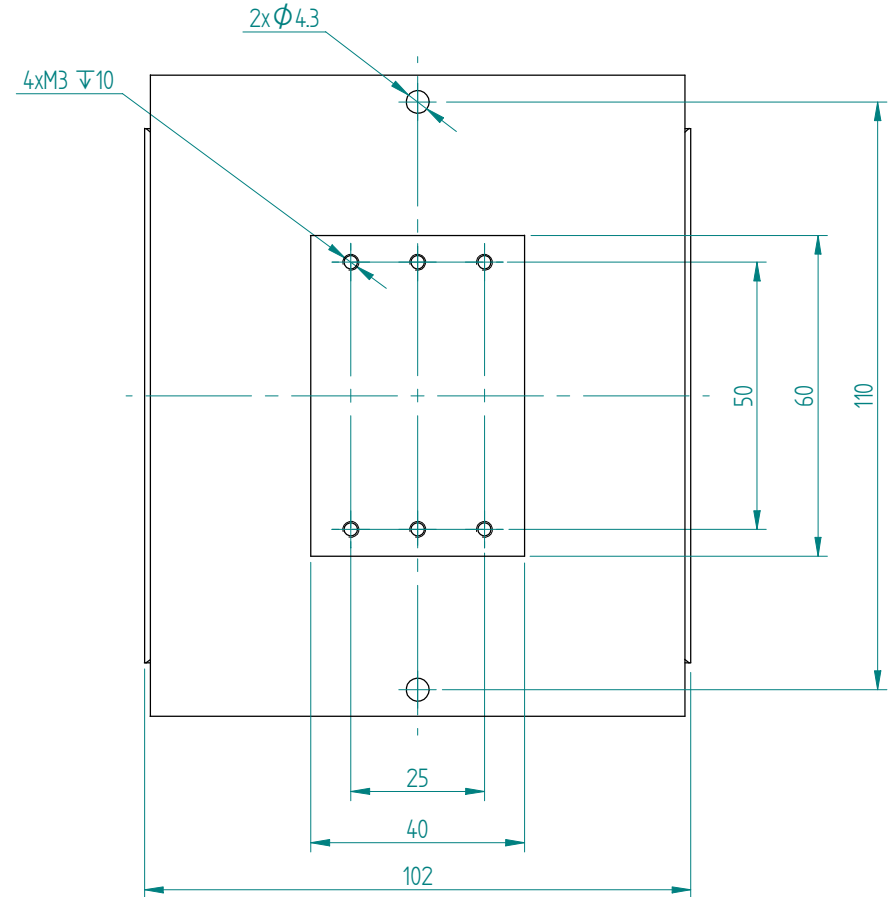
Installation and Service manual

Installation:

1. The TE assembly must be protected from external force or violence.
2. The power line to the assembly needs to be protected by a fuse. The fuse rating should be of at least the nominal current of the assembly. It must withstand 150% of rated current for at least 60 seconds.
This is valid at $T_a=35^\circ\text{C}$. Fuse ratings for other ambient temperatures ($x^\circ\text{C}$) can be calculated with the formula $I[x^\circ\text{C}]=I[35^\circ\text{C}]/(1+0.005*(x-35))$.
This is valid when regulating with an ON/OFF regulation. At rapid temperature cycling where this is applicable, there can be need for even higher fuse ratings.
3. Cooled parts needs to be isolated from air humidity to minimize risk for condensation and thermally insulated for best performance.
8. Max ripple on supplied power =5%.
9. Switching power to TEM:s at frequencies between 0.01 Hz to 5 kHz will render premature failure of modules and must be avoided.

Service:

Fan impellers and heat sinks must be cleaned on regular intervals to reduce risk for overheating and reduction of cooling function. The interval may vary depending on environment.



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

Comment/Treating:				
Designed by: A. Kim	Checked by: D. Isic	Approved by: H. Höjer	Release date: 2013-09-30	Project: Standard
<p>Laird Technologies S-43153 Molndal, Sweden tfn +46 31 420530, fax +46 31 247909 e-mail: info@lairdtech.com Web: www.lairdtech.com</p>		Title: TE ASSEMBLY DIRECT - AIR,044, 12 VDC		
		Part nr: DA-044-12-02-00-00	Rev: 08	Scale: -