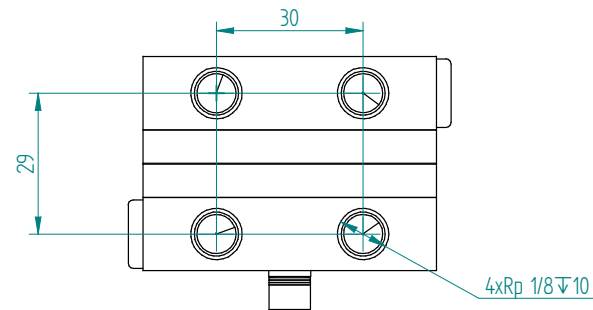



Specification (Ta=32°C)	Code:	Description:
Heat transfer, cold side:	L	Liquid
Heat transfer, warm side:	L	Liquid
Cascade:	-	
Cooling power: [W]	060	Calculated 66 W at dT=0°C. Tolerance: ±10%.
Voltage, nominal: [VDC]	12	12 VDC
TEM Voltage: [VDC]		Nominal: 12 VDC, Max: 15 VDC
TEM Current: [A]		Nominal: 39 A at dT=0°C. Tolerance: ±10%.
Fan(s), cold side:	0	None
Fan(s), warm side:	0	None
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. Not wired in series with TEMs. Use it to control a relay.
Operating temperature:		63°C at nominal voltage.
TE-Module(s) temperature specification:		Max. surface temperature: 80°C.
Enclosed:		Turbulators fitted in heat sink liquid channels. 4xL-PNIPP-6-1/8
Packing:		Individual cardboard box.

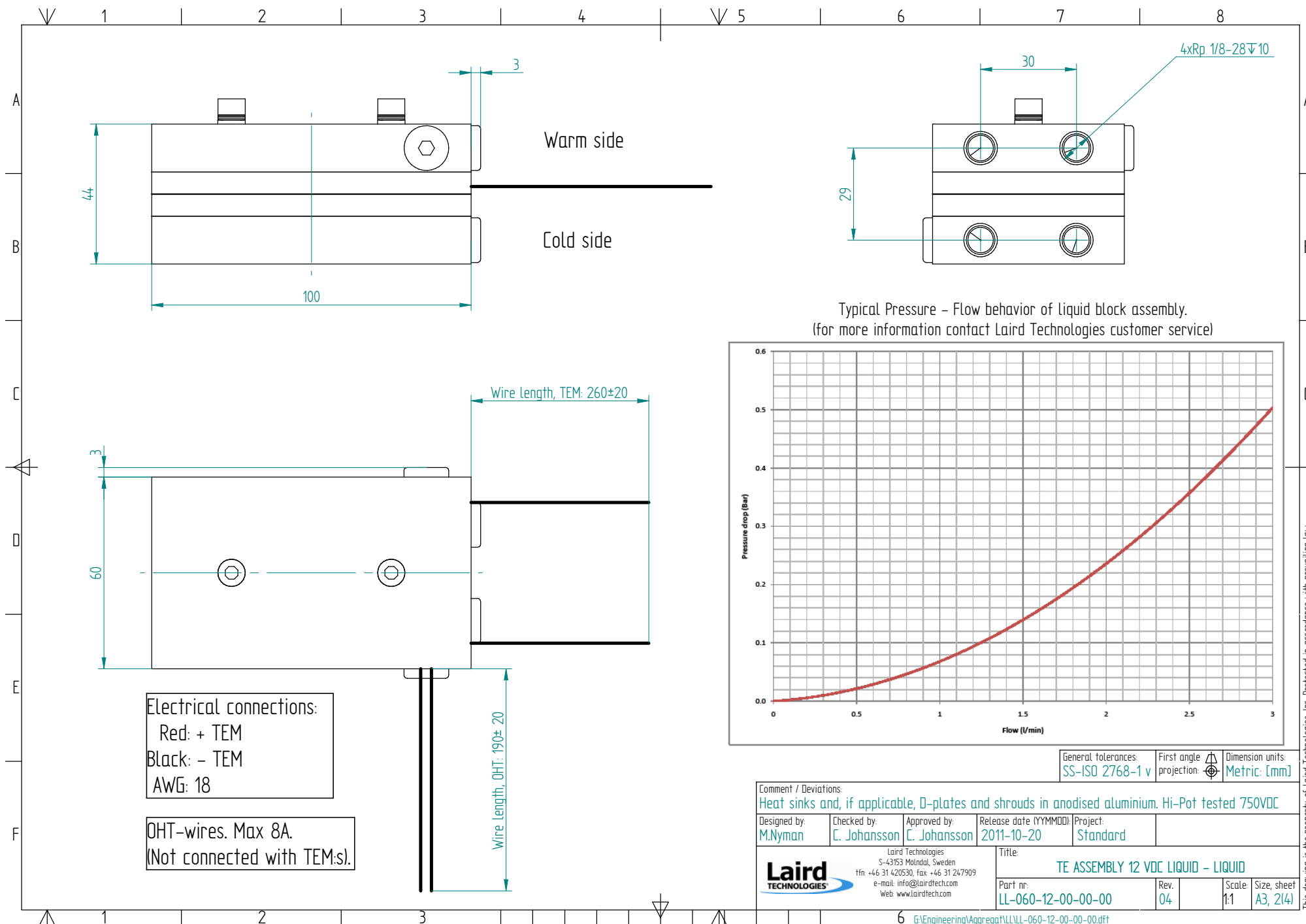


For overheating protection the cooler is equipped with a bimetal thermostat. The maximum rating for the thermostat is 8 A DC. For systems with 8 A or less the thermostat can be connected directly in series with the ThermoElectric Modules (TEMs). Otherwise connect the TEMs to the power source through a relay of suitable rating which state is controlled with the bimetal thermostat.

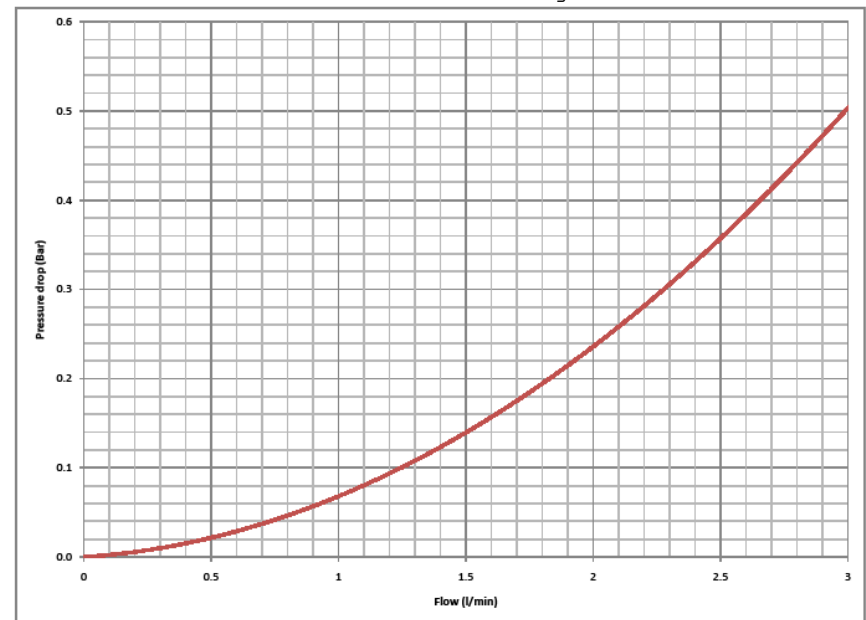
General tolerances: SS-ISO 2768-1 v	First angle projection: A	Dimension units: Metric: [mm]
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Comment / Deviations: Heat sinks and, if applicable, D-plates and shrouds in anodized aluminium. Hi-Pot tested 750VDC					
Designed by: M.Nyman	Checked by: C. Johansson	Approved by: C. Johansson	Release date (YYMMDD): 2011-10-20	Project: Standard	
 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 LIQUID - LIQUID Part nr: LL-060-12-00-00-00		
Rev. 04		Scale: 1:1		Size, sheet: A3, 1(4)	

Note:
Cooled liquid block needs to be isolated from air humidity to minimize risk for condensation and thermally insulated for best performance.



Typical Pressure - Flow behavior of liquid block assembly.
 (for more information contact Laird Technologies customer service)



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

Comment / Deviations: Heat sinks and, if applicable, D-plates and shrouds in anodized aluminium. Hi-Pot tested 750VDC				
Designed by: M.Nyman	Checked by: C. Johansson	Approved by: C. Johansson	Release date (YYMMDD): 2011-10-20	Project: Standard
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 LIQUID - LIQUID		
Part nr: LL-060-12-00-00-00		Rev: 04	Scale: 1:1	Size, sheet: A3, 2/4

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