

The PowerCool generation
- high-performance
thermoelectric assemblies

NEW



Supercool®



PowerCool - The hottest new range in the world of thermoelectrics.

Thanks to advances in aluminium extrusion and improved air distribution, Supercool's innovative PowerCool range is set to create an industry benchmark. Combine this with outstanding Peltier material technology, and it's easy to see why our new TE-assemblies are taking thermoelectric cooling to a new level altogether.

These next generation products are specially designed for OEM users. You'll find our flexible, compact design not only allows for easy custom design, but also meets the demands of even the toughest applications.

Typical applications include:

- Air conditioning in electronic cabinets
- Scientific/medical instruments
- Transportable food containers
- Laser cooling

Air, Direct and Liquid assemblies

Our brand new series comprises assemblies for air, liquid and direct cooling. Cooling power ranges from 40 to 180 W. We also offer a variety of options, including 12 or 48 VDC, other Peltier arrangements, moisture protected fans, and integrated or remote temperature controllers.

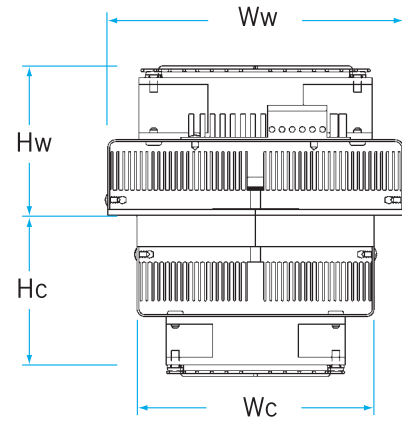
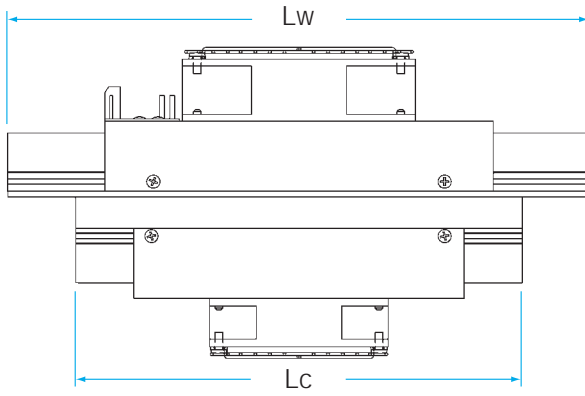
Product specifications

Type/Code # -V*-	Cooling Effect Pc max (W)	Pc Curve type	Current I (A)	Power in Pe (W)	Ambient max (°C)	Weight kg	Dimensions (mm)					
							Lw	Lc	Ww	Wc	Hw	Hc
① AA-040-12-22-	41	D	6.3	76	48	1.8	160	120	122	102	71	76
② AA-040-24-22-	39	C	2.5	60	52	1.8	160	120	122	102	71	76
③ AA-060-12-22-	58	B	6.2	74	51	2.5	230	180	122	102	71	81
④ AA-060-24-22-	58	B	3.1	74	51	2.5	230	180	122	102	71	81
⑤ AA-100-24-22-	102	C	5.6	134	49	4.0	300	230	152	122	78	83
⑥ AA-150-24-22-	143	A	7.9	190	48	4.1	300	250	180	152	84	83
⑦ AA-180-24-22-	180	C	11.3	271	46	7.0	400	350	180	152	89	89
⑧ DA-045-12-02-	43	C	4.1	49	52	1.2	160	60	122	60	71	15
⑨ DA-045-24-02-	45	C	2.5	60	50	1.2	160	60	122	60	71	15
⑩ DA-075-24-02-	71	C	3.7	89	49	1.7	230	120	122	60	71	15
⑪ DA-115-24-02-	113	C	5.8	139	47	2.9	300	220	152	60	78	16
⑫ DA-160-24-02-	160	B	7.4	178	46	3.5	300	180	152	130	84	16
⑬ LA-045-12-02-	43	C	4.1	49	52	1.3	160	100	122	60	71	20
⑭ LA-075-24-02-	71	C	3.7	89	49	1.8	230	140	122	60	71	20
⑮ LA-115-24-02-	113	C	5.8	139	47	3.0	300	240	152	60	78	20
⑯ LA-160-24-02-	160	B	7.4	178	46	3.5	300	200	152	136	84	20

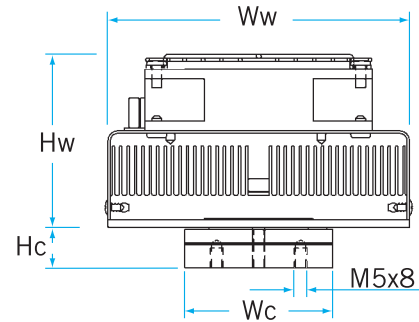
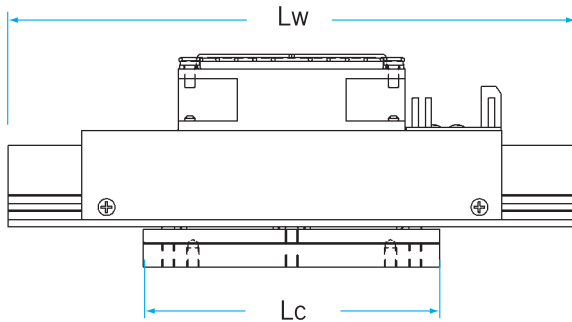
*= Nominal Voltage (V DC)

Specification apply to ambient/warm side Liquid temperature 32°C and nominal Voltage. Tolerances +/- 10%

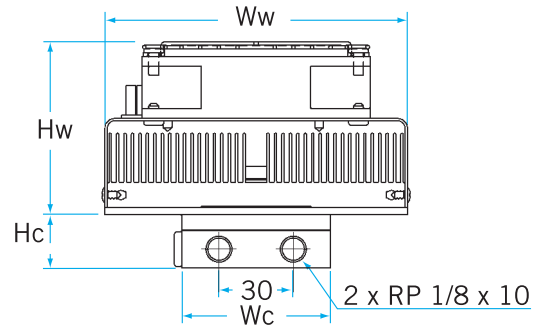
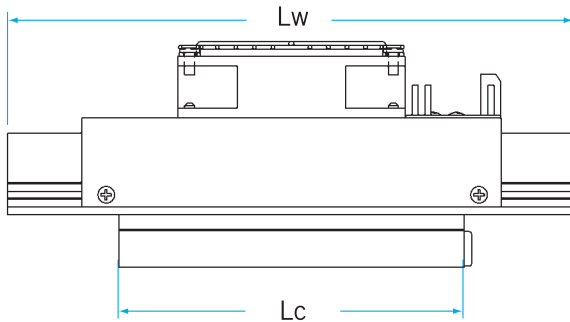
AA-drawing



DA-drawing

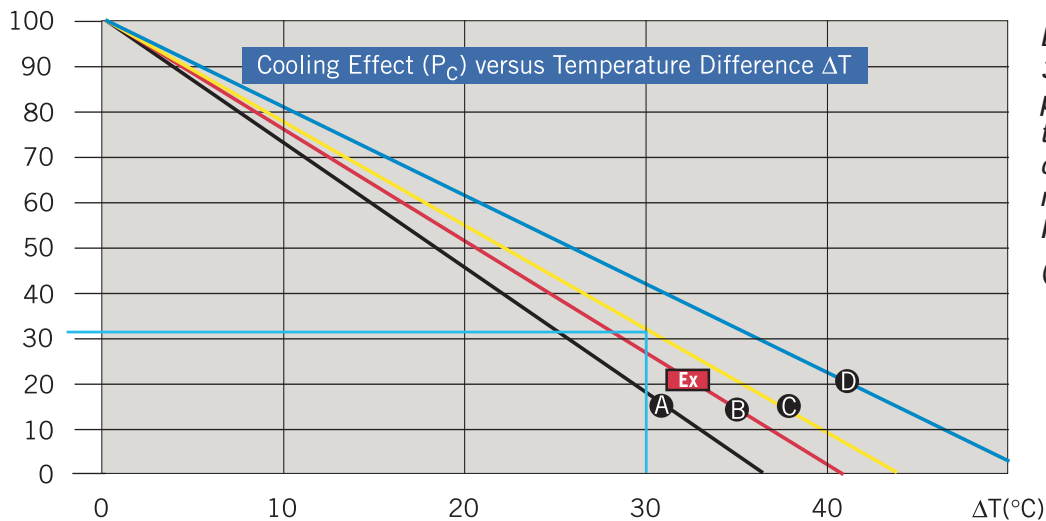


LA-drawing



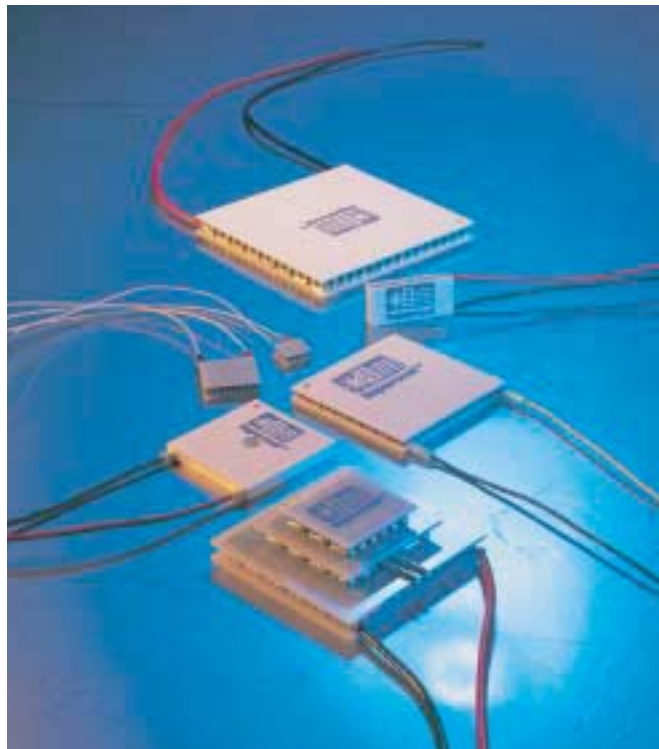
For detailed drawings, please contact your Supercool representative.

% of P_c max



Ex = Example: At ambient 32°C and cooled space temperature 2°C ($\Delta T = 30^\circ\text{C}$) the AA-100-24-22- (curve C) cools by 32% of its maximum effect, which gives $P_c = 102 \times 0,32 = 32,6 \text{ W}$ (+/-10%)

There's more to Supercool than our new product range



Today, we offer the world's most extensive selection of thermoelectric assemblies, including a full range of temperature controllers, power supplies and other accessories. Chances are we already have the right cooler for your application.

High performance thermoelectric modules

Thanks to superior material characteristics and special production processes, we provide a range of truly outstanding thermoelectric modules, comprising not only high-temperature and sealed modules, but also thermal cycling and multistage versions.

There are times when a standard solution just won't do.

Although we offer the widest range of standard thermoelectric products on the market, we recognize that a standard solution, however flexible, will not always meet your needs. This is where our lengthy application experience allows us to find the optimum custom solution - with a minimum of time wasted.

For more information, please contact your Supercool representative



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