

Outdoor Video Surveillance systems

NSBox Cooling

COMPACT THERMOELECTRIC COOLERS

Climate controlled enclosures

- ✓ Compact Design
- ✓ Installation in any position
- ✓ 24/48VDC or 220VAC Power supply
- ✓ High reliability
- ✓ Long service life
- ✓ Ecological cleanliness



Thermoelectric Cooling Systems (TCS) are designed to divert an excess heat from the electronic equipment installed inside a closed enclosure with IP66 protection. TCS is a thermoelectric module (thermoelectric air conditioner), working on the basis of the Peltier effect. The essence of the effect consists in the allocation of heat on the junctions of two different conductors when an electric current passes.

There are many advantages of TCS over conventional compressor:

- TCS can be controlled electronically.
- TCS are easily reversible by reversing the polarity of Power supply.
- TCS can work in the most adverse environmental conditions:
 - in high ambient temperatures or heavily polluted ambient air;
 - in application with vibrations or strong accelerations.

TCS "NSBox Cooling" allows to maintain the set temperature in a closed volume of NSBox in high ambient temperatures. It must be necessary in regions with a hot climates, for a long batteries life of UPS, when installing of conventional client equipment.

Technical Data

Operating voltage:	24/ 48VDC; 220VAC	Protection type:	IP67
Cooling Capacity:	50-900W	Fitting position:	Variable
Operating Temp.:	-40 to +70°C	Connection:	Terminal
Dimensions:	depends on the model	Axial Fan:	Ball bearing
Weight:	depends on the model	Fan Air flow:	110 CFM



Ordering Information

NSBon-37	Thermoelectric Coolers. Series Standard_DC, 24/48VDC. NSBox Cooling
NSBon-38	Thermoelectric Coolers. Series Standard_AC, 220VAC. NSBox Cooling
NSBon-39	Thermoelectric Coolers. Series Cover_DC, 24/48VDC. NSBox Cooling
NSBon-40	Thermoelectric Coolers. Series Cover_AC, 220VAC. NSBox Cooling

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Thermoelectric Coolers, Standard_DC Series, NSBon-37

- Power supply 24/48 VDC, Cooling/Heating Function;
- IP67 type protection, Operating Temp. -40 ... +70°C;
- Three sizes with three power grades each



Model	Part No./ vendor code	Size	Weight	Nominal Power	Supply voltage	Height H mm	Width W mm	Depth D mm
NSBon-37	FL-104-C	1	2,5 kg	50 W	24(48) VDC	195	132	155
	FN-104-C	1	2,5 kg	70 W	24(48) VDC	195	132	155
	FR-104-C	1	2,5 kg	100 W	24(48) VDC	195	132	155
	FL-208-C	2	5 kg	100 W	24(48) VDC	268	195	155
	FN-208-C	2	5 kg	140 W	24(48) VDC	268	195	155
	FR-208-C	2	5 kg	200 W	24(48) VDC	268	195	155
	FL-316-C	3	10 kg	200 W	24(48) VDC	390	269	155
	FN-316-C	3	10 kg	280 W	24(48) VDC	390	269	155
	FR-316-C	3	10 kg	400 W	24(48) VDC	390	269	155

Thermoelectric Coolers, Standard_AC Series, NSBon-38

- Power supply 90... 305 VAC, Cooling/Heating Function;
- IP67 type protection, Operating Temp. -40 ... +70°C;
- Three sizes with two power grades each

For Standard_AC Series, no additional power supply located inside the cabinet is required.

This is one of the main advantages of this series, since the power supply takes up a lot of space and emits heat, which must eventually be compensated by the thermoelectric cooler itself.



Model	Part No./ vendor code	Size	Weight	Nominal Power	Supply voltage	Height H mm	Width W mm	Depth D mm
NSBon-38	FL-208-AC	2	6 kg	100W	90...305 VAC	268	195	155
	FR-208-AC	2	6 kg	200W	90...305 VAC	268	195	155
	FL-416-AC	4	12,5 kg	200W	90...305 VAC	480	264	159
	FR-416-AC	4	14,5 kg	400W	90...305 VAC	480	264	159

Thermoelectric Coolers, Series Cover, NSBon-39 / NSBon-40

Model	Part No./ vendor code	Size	Weight	Nominal Power	Supply voltage	Height H mm	Width W mm	Depth D mm
NSBon-39	TC-100-DC	0	2,5 kg	100W	24(48) VDC	210	125	142
NSBon-40	TC-100-AC	0	3,5 kg	100W	90...305 VAC	210	135	142