



# TECHNICAL CHARACTERISTICS - ADIABATIC PRE COOLING PANELS “SMART COOLING” KIT - PRO 1

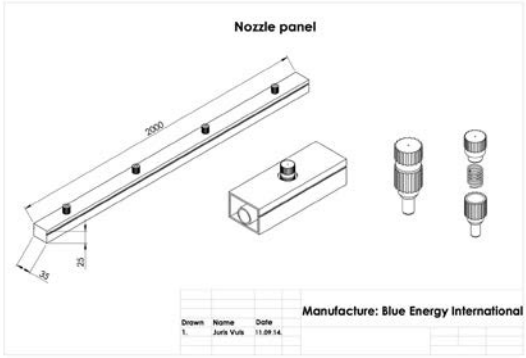
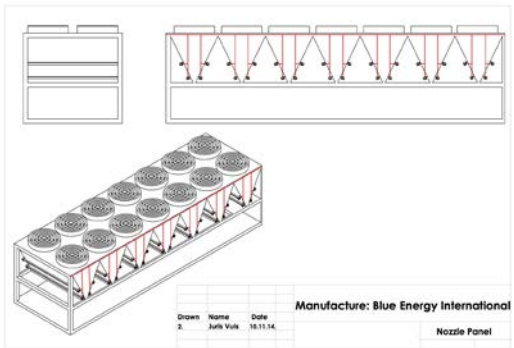
## EQUIPMENT APPLICATION

<p>Manufacturer: Model: Water flow rate: Electrical:</p>	<p>Blue energy international “Smart cooling” BY 70 1 l/m - Max 8 l/m, 7000 kPa, IP 65 230V 50Hz – 1,1 kw. 1,7 HP, 5,7 A</p>

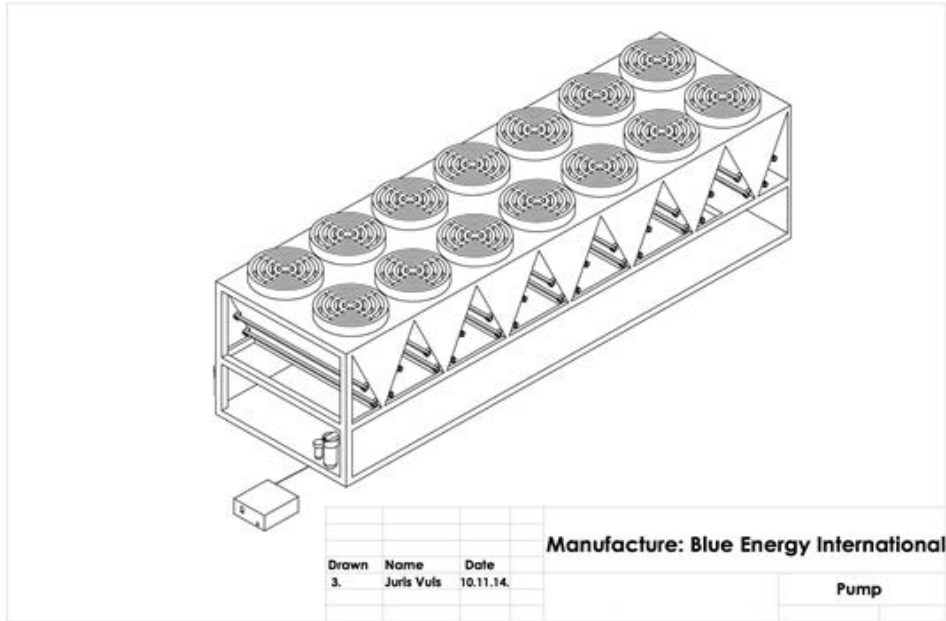
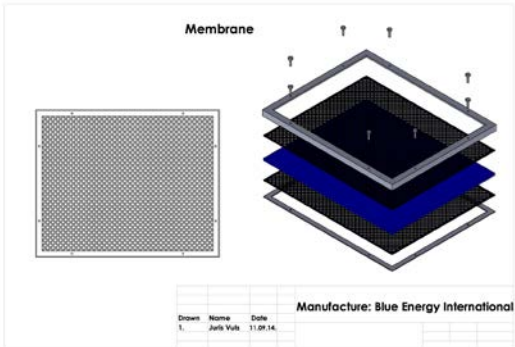
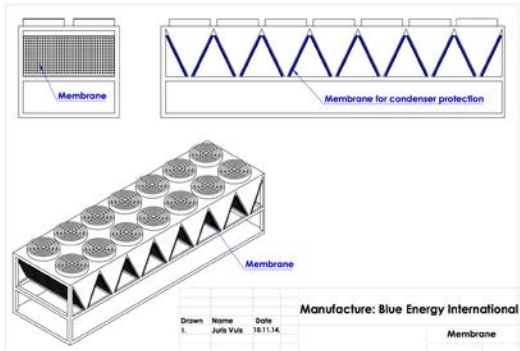
FEATURES	BENIFITS
Manufactured to ISO 9001	Hight standart quality controls
Constructed from heavy gauge stainless steel & aluminium	Long lifetime
Building Managements System connections	Remote control, alarms signals 24/7/365
Full factory run test	Hight standart quality controls
Programble Microprocessor control with visual display	Water saving and pump saving
Clas IP 55 – IP65	Long life durability and weather protection
Optional Electronic Expansion Valve	Long life, reliable pump which can be repaired on
Karbonn shell technology	Protect condensers
TUV Certificate	Certified
CE Certificate	Certified



**TECHNICAL DESCRIPTION MODULAR NOZZLES PANEL BY**



**TECHNICAL DESCRIPTION MODULAR MEMBRANES BY**



## DESCRIPTION OF PROPOSED PRO 1

The SMART COOLING™ adiabatic precooling panel modular system is delivered in kit form. Each system is custom designed for your refrigeration system and it includes:

1. **Preparation equipment BY 70 / UV Block.** High pressure pump stations which includes UV lamps block. Additional option.
2. **Nozzle panel BY - 70 HP - SS.** Micro-nozzle panel made from a top-quality alloy of stainless steel and aluminum. The stainless steel micro-nozzle line is placed in a high-resistance anodized aluminum casing, which ensures the longevity of the component. Panels come with high-pressure sprayers, pressure reducers, elbows and all connection components. High pressure adiabatic nozzle panel before the membrane spraying a fine mist of water, provide the main task of the entire process. When the fine mist is sprayed it contact with a hot air and evaporates, adiabatic process is happening and lowering incoming air temperature in condenser. This is a unique adiabatic panel technology. Water pressure mist is sprayed with 10-50 micron fine droplets, it is supported by a high-pressure pump from 50 to 150 bar
3. **Membrane BY 70 M2.** Membrane with filtering panel for condenser (coil) protection. Adiabatic membrane protects the condenser from direct contact with water mist, dirt, and direct sunlight - thereby protecting the condenser and improving the heat exchanging efficiency of the compressor. Capacitor protection is very important – that cooling device serve long.
4. **Filtration block with biochemical BY 100.** The BIO container with water treatment minerals for the protection of the metal components from scaling and corrosion.
5. **Fittings set BY SS-F,** for parts connection.
6. **Fasteners set BY – L,** for nozzle panels and membranes instalation.
7. **Water Drainage Kit..Control Panel BY - 70 Pro 1.** Automatic control system to manage switching on and off of the system. The system controls turn the system on when the following conditions occur: Outdoor temperature greater than 25 ° C, RH% relative humidity up to 75%, gas pressure control, fans of the condensers system are running. Check optimal gas pressure or fans signal – Pro 1 includes optimal algorithm to save water by 20%. Pro 1 provide MANDATORY A DATACONNECTION PORT INTO THE CONTROL FOR BMS. 4 parameters are analyzed - and then the controller performs pre cooling front of right condenser and in right mode
8. **Thermo switch BY- Switch.** Current sensors. . To monitor chiller phase.

