

your cooling solutions



# KryosROOF TSF/TSV



## New design, more flexibility

**KryosRoof** roof mounted fans are the ideal industrial ventilation solution for extracting warm air from the roof. Their **compact dimensions** allow them to be installed on various types of electrical panels, while the layout and fans ensure **high flow rates** and **operating efficiency**.

The **KryosRoof** feature a new design, compact dimensions and the flexibility properties typical of **cosmotec** products.





### Striving for energy efficiency

Energy efficiency eliminates energy waste and generates savings that last over time. Rational energy use and investments in low-energy-impact technological solutions increase the profitability of activities and make them more competitive, modern, and efficient. Improving the energy efficiency of production processes contributes to reducing fixed production costs, increasing the market value of the product, and mitigating environmental impact. Modern technologies require more precise temperature control and operation with low energy consumption.

These two characteristics are now both available in the KryosROOF high-efficiency extraction tower. KryosROOF extraction towers optimize airflow for every operating condition and thermal load. The tower is equipped with an EC fan and an active probe to read the temperature value inside the panel and adjust the fan speed accordingly. This can result in drastic reductions in electrical consumption, by over 50% in some cases.



## Easy and safe installation

#### INSTALLATION

Easy to install without the use of tools or screws, thanks to the clips on the base, which, together with the gasket already installed, provide an adequate seal between the roof fan and the cabinet. The roof mounted fans can be installed on various types of enclosure with thicknesses between 0.8 and 3 mm; for greater thicknesses, fixing with screws is possible.



#### **ELECTRICAL CONNECTION**

The electrical connection is quick and easy, thanks to the connection via a spring-loaded terminal block.



The galvanized sheet metal roof ensures high durability of the product, and the ABS BLEND plastic materials used in the product base provide mechanical resistance, fire resistance (with class V0), and resistance to deterioration caused by UV sunlight, thus extending the product's lifespan.



#### Application examples

#### Ventilation of the MV electrical enclosure

On the electrical cabinet or cabinet MV is needed eliminate a lot of heat load produced by internal components and can be necessary a forced ventilation. Moreover, in some applications the ventilation by filter fans can be not allowed or possible for installation.

cosmotec with the KryosROOF offer a roof-mounted fans range with high air flow, thanks to high efficiency radial fans. The KryosROOF ensure a suitable protection degree (IP43/54, Type1/12) allowing protection of the internal components against dust and splashing of water.



The roof-mounted fans KryosROOF got several certifications that make them suitable for the world market, decreasing the installation cost for the manufacturers of the electrical enclosures and accelerating market access for the end users.

The integrated foam seal and the fixing clips guarantee a suitable seal between mounted-roof fan and the electrical enclosure, allowing protection against dust and splashing of water, with an IP43 (Type1) or IP54 (Type12) protection degree. The tests are certified by an external agency, who has so approved the protection degree.









## **Technical Features**

#### **Main Features**

- Air Flow: 500 m3/h ÷ 1870 m3/h
- Fastening system allows for tool-free installation
- High Efficiency
- Fans MTBF: 40.000 hours
- Protection Degree IP43/54 Type1/12 (certified by an external agency)
- Fast Electrical Connection
- Integrated foam seal
- Top cover made by galvanized sheet metal to ensure robustness
- Resistance against UV sunshine rays
- · Certifications: CE, EAC, UL Listed

#### **Options**

- Special Color(top cover)
- Stainless Steel 316 (top cover)

CODE	M.U.	TSF19	TSF25		
Protection Degree	IP/Type	43/Type1 o 54/Type12	43/Type1 o 54/Type12		
Height	mm	108	188		
Width	mm	395	490		
Depth	mm	395	490		

CODE	M.U.	TSV19		TSV22			TSV25			TSV35	
Nominal Voltage	V,~	230 , 1 115 , 1		230,1 115,1		230 , 1 115 , 1		115,1	230 , 1		
Nominale Frequency	Hz	50	60	60	50	60	60	50	60	60	50,60
Air Flow IP43/Type1		540	575	555	800	810	785	1425	1520	1470	1870
Air Flow IP54/Type12		500	535	515	715	725	710	1365	1480	1420	1700
Sound Pressure ENISO 3744, 1mt	dB(A)	≤53		≤54		≤63		≤57			
Height	mm	112		112		191			191		
Width	mm	395		395		490		490			
Depth	mm	395		395		490			490		

CODE Version with EC fan + Active Probe (without UL certification)	M.U.	TSV22	TSV35
Nominal Voltage	V,~	200240 , 1	200240 , 1
Nominale Frequency	Hz	5060	5060
Air Flow IP43/Type1		925	1870
Air Flow IP54/Type12		840	1700
Sound Pressure ENISO 3744, 1mt	dB(A)	≤56	≤57
Height	mm	112	191
Width	mm	395	490
Depth	mm	395	490

## **COSMOTEC**

**Industrial Cooling** 

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