



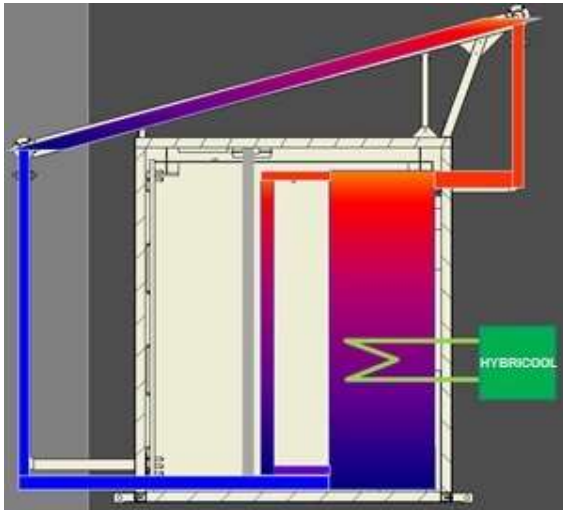
HYBRICOOOL

1 Application

HYBRICOOOL is an outdoor compact cooler suitable for industrial harsh climatic conditions.

2 Description

Very efficient and reliable active cooling unit. Designed for direct heat transfer to the buffer of a passive cooling system.



The HYBRICOOOL is usually mounted on the outside wall of the protective cabinet or shelter. The housing is a corrosion-resistant INTERTEC MULTIBOX GRP enclosure.

Fully designed, developed und assembled by INTERTEC HYBRICOOOL is suitable for application in desert with sand condition and water spraying...

3 Principle

The unit operates on the basis of compressed refrigeration consisting of the four main components, compressor, condenser, expansion valve and evaporator (heat exchanger).

The interior and exterior components are completely isolated to maintain the cabinet/shelter IP class and ensured that no harmful and corrosive substances can enter.

Filter-free operation: The air intake is equipped with a centrifugal sediment separator to remove dust and sand. The condenser within the external circuit is coated with a corrosion protection system against aggressive media.

The air outlet is equipped with flaps so no dust can enter if the cooler is not in operation.

The HYBRICOOOL is designed for low maintenance and constant power, no power drop due to blocked filter mats. There is no condensate and no possible icing due to the direct heat transfer to the water buffer.

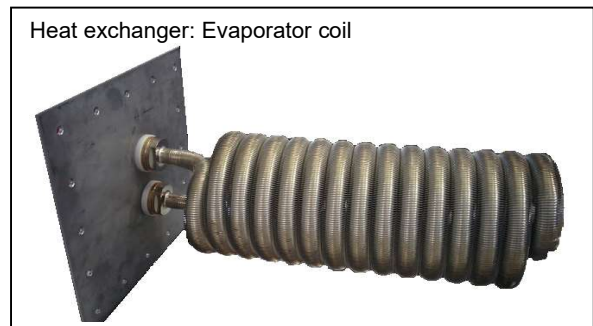
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4 Technical Data

General	
Ingress Protection between outside and inside	IP65
Nominal Voltage	24V DC / 48V DC 230V AC 1Ph 400V AC 3Ph
Refrigerant	R-134a
Operating temperature range	-20°C ... +55°C
Heat exchanger	stainless steel coil
Housing Material	Glass fibre reinforced polyester GRP (RAL7032)

Heat exchanger: Evaporator coil





HYBRICOOL

HYBRICOOL DC

	HYBRICOOL 24V	HYBRICOOL 48V
Compressor	Masterflux Sierra Brushless	
Cooling power @ 35°C/ 35°C*	3000 W	5400 W
COP maximal*	3,12	3,27
Cooling power @ 35°C/ 50°C*	2400 W	4800 W
COP maximal*	2,18	2

* Values based on manufacturer data (subject to change)



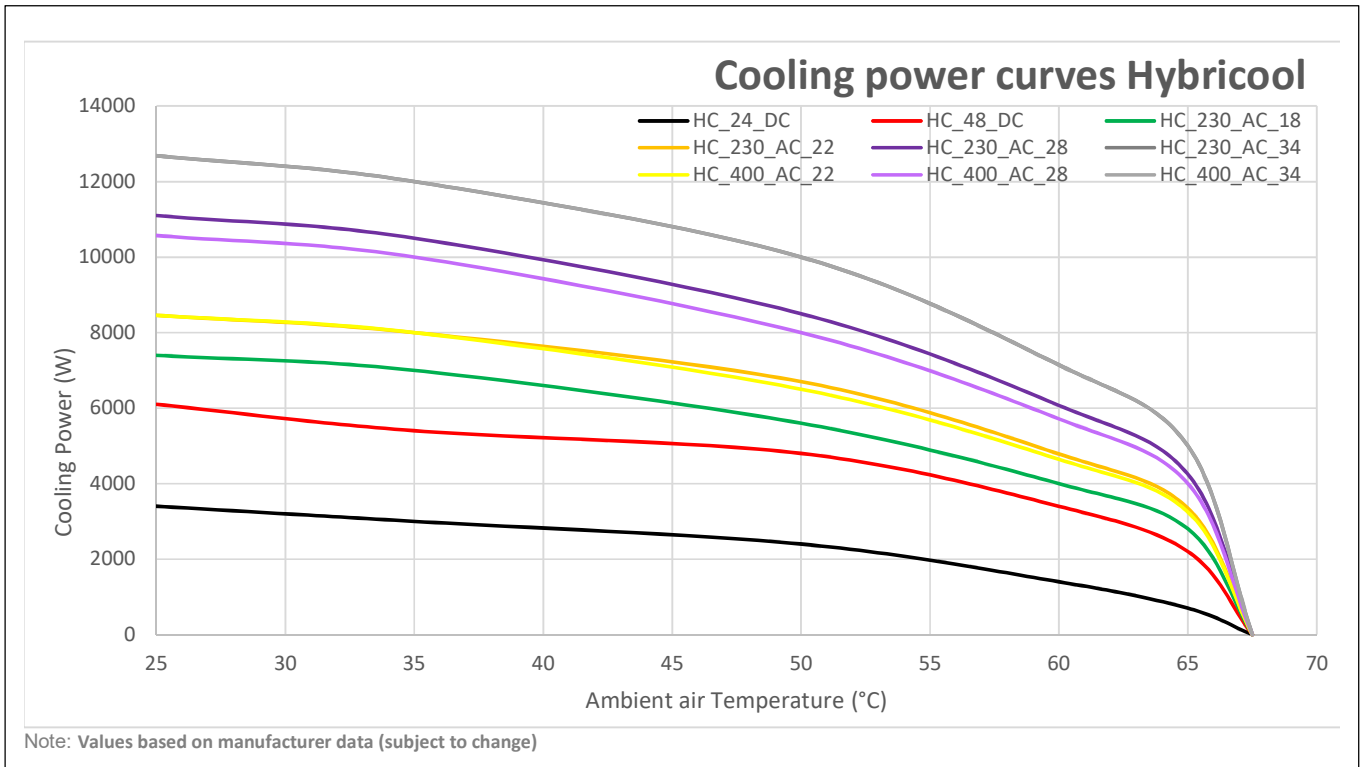
HYBRICOOL AC

	AC						
	HYBRICOOL 230V				HYBRICOOL 400V		
	Copeland ZR18	Copeland ZR22	Copeland ZR28	Copeland ZR34	Copeland ZR22	Copeland ZR28	Copeland ZR34
Compressor	Scroll						
Cooling power @ 35°C/ 35°C*	7000 W	8000 W	10500 W	12000 W	8000 W	10000 W	12000 W
COP maximal*	5,61	5,73	6,45	6,57	5,77	6,11	6,57
Cooling power @ 35°C/ 50°C*	5600 W	6700 W	8500 W	10000 W	6500 W	8000 W	10000 W
COP maximal*	3,2	3,33	3,55	3,64	3,32	3,36	3,69

* Values based on manufacturer data (subject to change)



HYBRICOOL



5 Options

- Available for hazardous area EX (only for **HYBRICOOL AC**)
- Global coating of refrigerant's circuit
- Redundant installation with operating time management unit, automatic switching in case of failure
- Possibility to adapt a ventilated evaporator to use the HYBRICOOL as an air cooler (split system principle)
- All other specific requests can be considered.

