

# *Industrial Process Cooling Solutions*



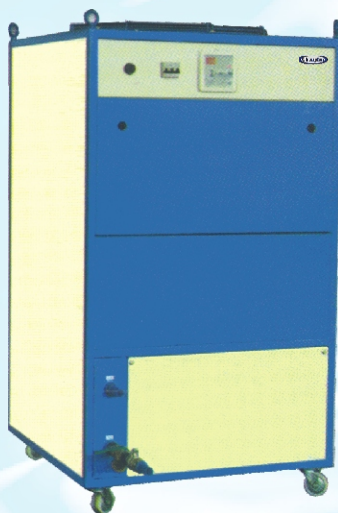


## CHILLERS

**CHAMPION PROCESS CHILLERS** are designed to meet a variety of requirements spread over a wide range of industries where cooling is critical and poor delivery of process liquids can be disastrous.

**NO TWO INDUSTRIES HAVE THE SAME REQUIREMENT** and virtually every critical duty process application is an opportunity to showcase our engineering excellence, innovation & adaptability of our product.

**MODULAR DESIGN** available in air-cooled and water-cooled options and a wide range of capacities allows you to choose a unit which suits your immediate requirement and add on units based on your increased capacity requirements at a later date.



CHILLER MODEL OPTION		
MODELS	EVAPORATOR TYPE	CONDENSOR TYPE
CXCO	IMMERSED COIL	FIN & TUBE (AIR-COOLED)
CCO	IMMERSED FIN & TUBE	FIN & TUBE (AIR-COOLED)
CCAP	BRAZED HEAT EXCHANGER	FIN & TUBE (AIR-COOLED)
CCAC	SHELL & TUBE	FIN & TUBE (AIR-COOLED)
CCWP	BRAZED HEAT EXCHANGER	SHELL & TUBE (WATER-COOLED)
CCWC	SHELL & TUBE	SHELL & TUBE (WATER-COOLED)

**COMPACT SYSTEMS** allow you the flexibility of installing the units indoor or outdoor, with the option of in-built tanks or remote tanks & sumps. They can be deployed as primary circulation cooling systems or secondary circulation cooling systems, depending on the process requirement, the fluid to be cooled, filtration systems, the temperature requirement, etc.

**NOTHING WE DO IS STANDARD EXCEPT THE QUALITY OF OUR PRODUCT**  
**CONTINUOUS PRODUCT DEVELOPMENT** in a new generation of CHAMPION modular systems. Space saving, compact designs are available in air-cooled & water-cooled units with options of Immersed, CBHE or Shell & Tube evaporators.

**COMPRESSOR SELECTION** is based on the precise load conditions and duty matching and covers a wide range of hermetic, semi-hermetic & scroll models; selected to minimize the power requirement.

**CONSTRUCTED ON** sturdy square pipe frames with easy access through easily removable & lockable epoxy painted sheet metal panels, an isolated Wiring Box with ferruled and number coded wiring, low noise fans, built-in matching pumps to suit a wide range of fluids ranging across water, glycol, brine, coolants, cutting oils, hydraulic oils & even food products & certain acids.

**AN UNPARALLELED COMMITMENT TO SERVICE** Ultimately our reputation depends on our operational success. By employing only the highest quality component selection, assembled and tested by highly skilled technicians and supported by advanced microprocessor control there is no better choice than the CHAMPION CHILLER.

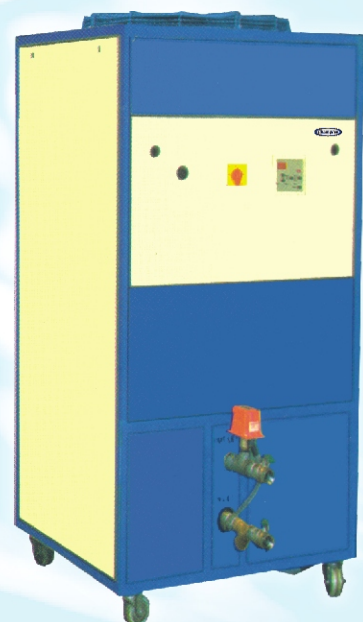


MICROPROCESSOR CONTROL systems, which control and monitor the performance of the entire unit and provide diagnostic indications & fault alarms can be programmed to suit the individual process operation and simplify the operators job to the single touch of a button.the performance of the entire unit and provide diagnostic indications & fault alarms can be programmed to suit the individual process operation and simplify the operators job to the single touch of a button.

MICRO PROCESSOR OPTIONS LED INDICATION	
MKI	MK II
HP	COMP 1
LP	COMP 2
PF	CHW Pump
PUMP ON	Condencer Fan/Pump
COMP ON	HG Hor gas bypass valve
AF	PD Pump down valve
RT	Set Temperature
OT	QT
Set Liquid Temperature	RT
Alarm ON	HP 1
LW	HP 2
	AF Antifreeze
	SPP
	Condensor Error
	Chw Pump Error
SWITCHES	
ONN/OFF	
Temperature UP	
Temperature DN	
DISPLAY - To reset the system when tripped on LP/HP/AF/PF	
MUTE - To reset the alarm	

## TYPICAL APPLICATIONS FOR CHAMPION CHILLERS

- |                                     |                         |
|-------------------------------------|-------------------------|
| ■ DIFFUSION PUMPS                   | ■ LASERS                |
| ■ VAPOR RECOVERY                    | ■ JACKETED VESSLES      |
| ■ ELECTRONICS EQUIPMENT             | ■ PLASTIC PROCESSING    |
| ■ HEAT EXCHANGERS                   | ■ PRINTING EQUIPMENT    |
| ■ HEAT TREATMENT EQUIPMENT          | ■ RUBBER MACHINERY      |
| ■ HYDRAULIC EQUIPMENTS              | ■ SPOT WELDERS          |
| ■ FOOD PROCESSING EQUIPMENT         | ■ SPINDLES              |
| ■ GRINDING                          | ■ HINING                |
| ■ DEEP HOLE DRILLING                | ■ TURNING               |
| ■ MILLING                           | ■ BROACHING             |
| ■ CUTTING OILS                      | ■ HYDRAULIC OILS        |
| ■ COOLANTS                          | ■ PRESSES               |
| ■ BIO-GAS POWER PLANTS              | ■ ANODISING & PLATING   |
| ■ X-RAY MACHINES                    | ■ LAMINATION PROCESS    |
| ■ POUCH SEALING MACHINES (FFS)      | ■ GAS CRACKING CHAMBERS |
| ■ CENTRALISED DRINKING WATER COOLER |                         |







**CHAMPION PANEL COOLERS** Electronic Control Systems installed in CNC machines and other special purpose machines generate heat during operation. Apart from heat, moisture-laden air and dust, also adversely affects electronic controls.

**CHAMPION** Panel Coolers maintain a clean environment required in Electronic Control Panel Cabinets using a closed loop design. This ensures locking out of excessive heat caused by high ambient temperatures, moisture and dust.

The clean air, within the Control Panel cabinet, is continuously cooled by the refrigeration system and re-circulated and the required operating temperature can be maintained within the cabinet; thus maintaining a cool, clean, moisture free, environment at all times.

## TECHNICAL DATA FOR CHAMPION PANEL COOLERS

MODEL	CPC mini	CPC500	CPC1200	CPC1500	CPC2700
OPERATING VOLTAGE	230v/50Hz	230v/50Hz	230v/50Hz	230v/50Hz	230v/50Hz
RATED CURRENT	2.9AMPS	2.9AMPS	3.8AMPS	5.5AMPS	5.7AMPS
STARTING CURRENT	15AMPS	15AMPS	17AMPS	28AMPS	25AMPS
MCB	YES	YES	YES	YES	YES
DUTY CYCLE	100%	100%	100%	100%	100%
COMPRESSURE	KCE419HAG	KCE419HAG	KCE444HAG	KCJ467HAG	KCJ511HAE
POWER CONSUMPTION	460W	460W	670W	877W	1240W
REFRIGERANT	R134A	R134A	R134A	R134A	R22
PERMISSABLE PRESSURE	24bar	24bar	24bar	24bar	24bar
TEMPERATURE CONTROLLER	DIGITAL	DIGITAL	DIGITAL	DIGITAL	DIGITAL
SIDE MOUNTING MODEL	YES	YES	YES	YES	YES
TOP MOUNTING MODEL	YES	YES	YES	YES	YES
WEIGHT in Kgs	20	38	40.5	50	55
COOLING OUTPUT	480W	480W	1200W	1500W	2700W
COLOUR		SEIMENS GRAY-POWDER COATING			

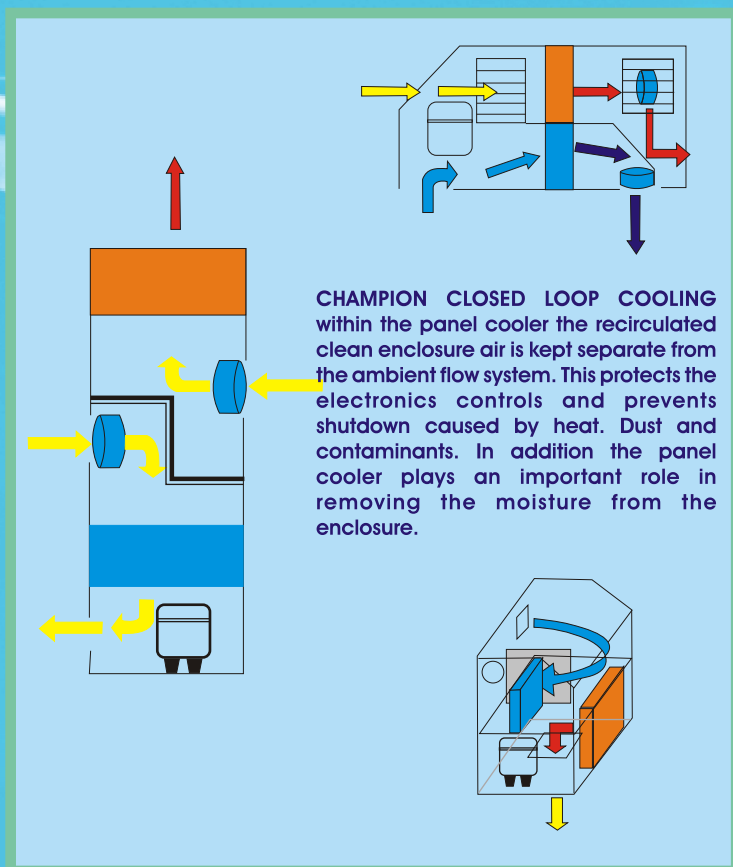
SPECIFICATION ARE SUBJECT TO CHANGE WITHOUT NOTIFICATION

### FEATURES

SLEEK MODULAR DESIGN COMPITABLE WITH ANY CONTROL PANEL  
 IMPORTED (GERMAN) MAKE BACKWARD CURVE BLOWERS & FANS  
 DIGITAL TEMPERATURE CONTROLLER / INDICATOR  
 EASY TO INSTALL AND MAINTAIN  
 POWDER COATED CABINET  
 PROVEN COMPONENTS  
 WIDE RANGE OF MODELS

### TYPICAL APPLICATIONS FOR PANEL COOLER

CNC MACHINES  
 ELECTRONICS CABINETS  
 INSTRUMENTATION CABINET  
 AUTOMATION SYSTEM  
 MAINFRAME COMPUTERS  
 AUTOMATED PROCESS INDUSTRIES



Capacities based on 7°C evaporating and 55°C condensing temperatures.



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