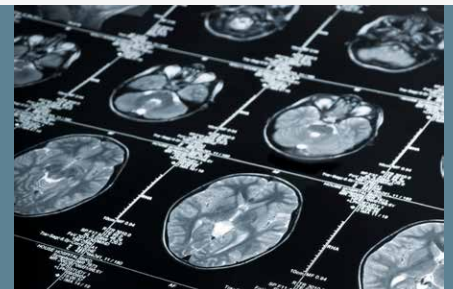




*The emergency cooling equipment to save your helium*  
**CIP – CHILLER INTERFACE PANEL**



## EMERGENCY COOLING

The CIP is mainly designed as an emergency cooling system for the helium compressor. It is connected between chiller, heat exchanger cabinets and city water and can be directly installed in the installation room.



Picture 1 – top view of CIP panel

In case of an emergency, simply close the ball valves **2** and **4** and open **1** and **5**. Then CIP emergency cooling is being activated.

Fluid connections	CIP	CIP 2
<b>1</b> Emergency cooling inlet	¾" NPT	¾" NPT
<b>2</b> from chiller	1½" NPT	2" NPT
<b>3</b> to application	1½" BSP	2" BSP
<b>4</b> to chiller	1½" NPT	2" NPT
<b>5</b> Emergency cooling outlet	¾" NPT	¾" NPT
<b>6</b> from application	1½" BSP	2" BSP

## OPTIONS

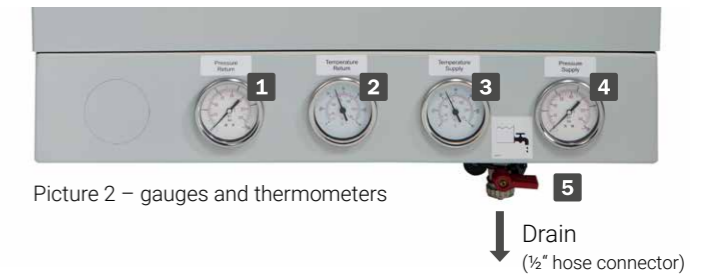
For **3** + **6**: When connections as 1 ½" BSP flat sealing are required please order concerning kits:

- + for CIP: 909000.0137
- + for CIP 2: 909000.0138

## INDICATORS

The four gauges on front of the CIP show the current status of pressure and temperature (return and supply). Even when the chiller is installed on the roof of the hospital the CIP provides the possibility of monitoring the current status in the installation room.

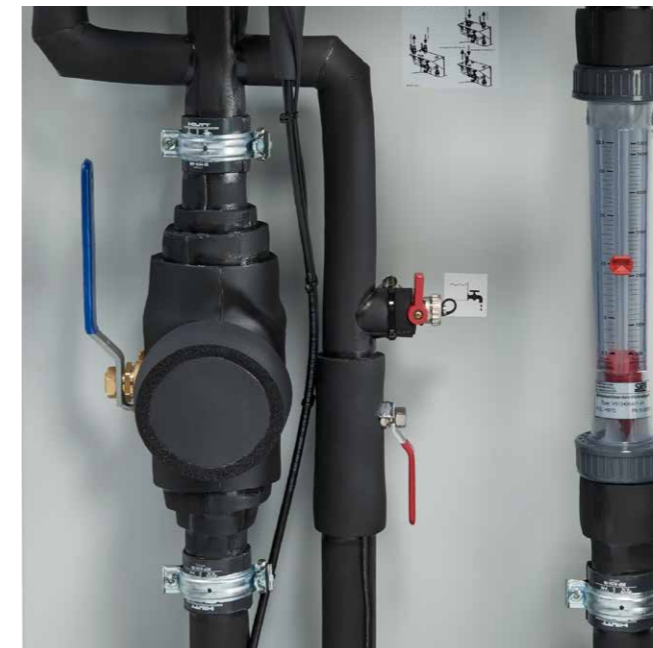
- 1** Pressure return
- 2** Temperature return
- 3** Temperature supply
- 4** Pressure supply
- 5** Drainage



Picture 2 – gauges and thermometers

## FLOW RATE

Each CIP already contains a filter ball valve, meaning no additional filter is needed to protect your system against dirt and sedimentations. The float-type flow meter shows the current status of the flow rate.



Picture 3 – filter ball valve and float-type flow meter

### TECHNICAL DATA

Product	CIP	CIP 2
Weight (net, empty)	approx. 123,5 lbs (56 kg)	approx. 154,4 lbs (70 kg)
Weight (transport)	approx. 244,8 lbs (111 kg)	approx. 275,6 lbs (125 kg)
Dimensions (D x W x H)	approx. 14 x 24 x 43 inch (346 x 610 x 1.100 mm)	
Dimensions (W, incl. mounting screws)	approx. 25 inch (644 mm)	
Dimensions (H, open valves)	approx. 53 inch (1.352 mm)	
Dimensions (D x W x H, transport)	approx. 22 x 29 x 58 inch (570 x 740 x 1.480 mm)	
Pressure difference (min/max)	4 - 6 bar	
Temperature tap water *	6° C - 20° C	
* tap water quality in accordance to specification of application		

Table 1

### DISTANCE BETWEEN CHILLER AND APPLICATION – CIP

CIP	OCLC MED 25	cBoxX 60	cBoxX 60	cBoxX 70/80	cBoxX 70/80
Max. allowed elevation above sea level	2000 m				
Connections at chiller (metric)	1 ½" RP				
Max. allowed one way piping		≤ 50 m (164') @ 1 ½" pipe	≤ 100 m (328') @ 2" pipe	≤ 50 m (164') @ 1 ½" pipe	≤ 100 m (328') @ 2" pipe
Max. long radius 90 degree elbows	10 long radius elbows one way (or 20 round trip)				
Glycol	35 % to 50 %				

Table 2

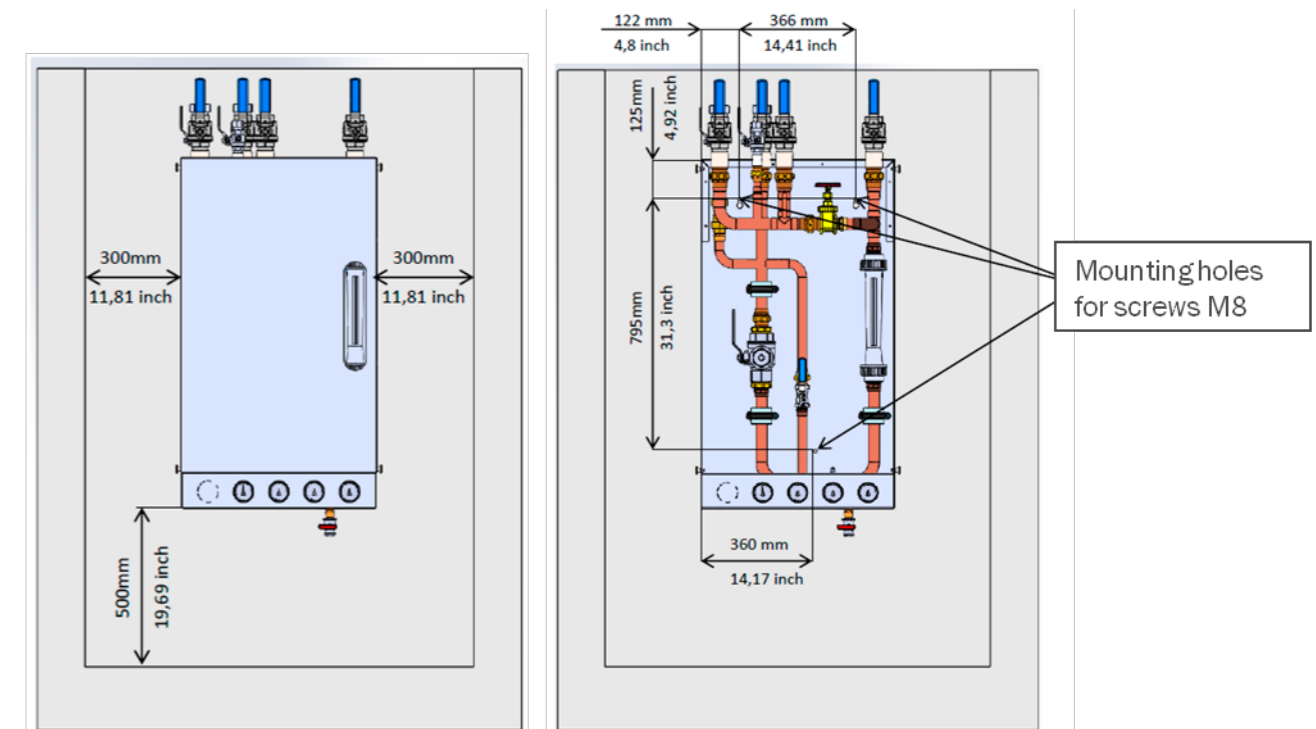
### DISTANCE BETWEEN CHILLER AND APPLICATION – CIP 2

CIP 2	cBoxX 100/120	cBoxX 100/120
Max. allowed elevation above sea level	2000 m	
Connections at chiller (metric)	2" RP	
Max. allowed one way piping	≤ 50 m (164') @ 1 ½" pipe	≤ 100 m (328') @ 2" pipe
Max. long radius 90 degree elbows	10 long radius elbows one way (or 20 round trip)	
Glycol	35 % to 50 %	

Table 2

### CLEARANCE

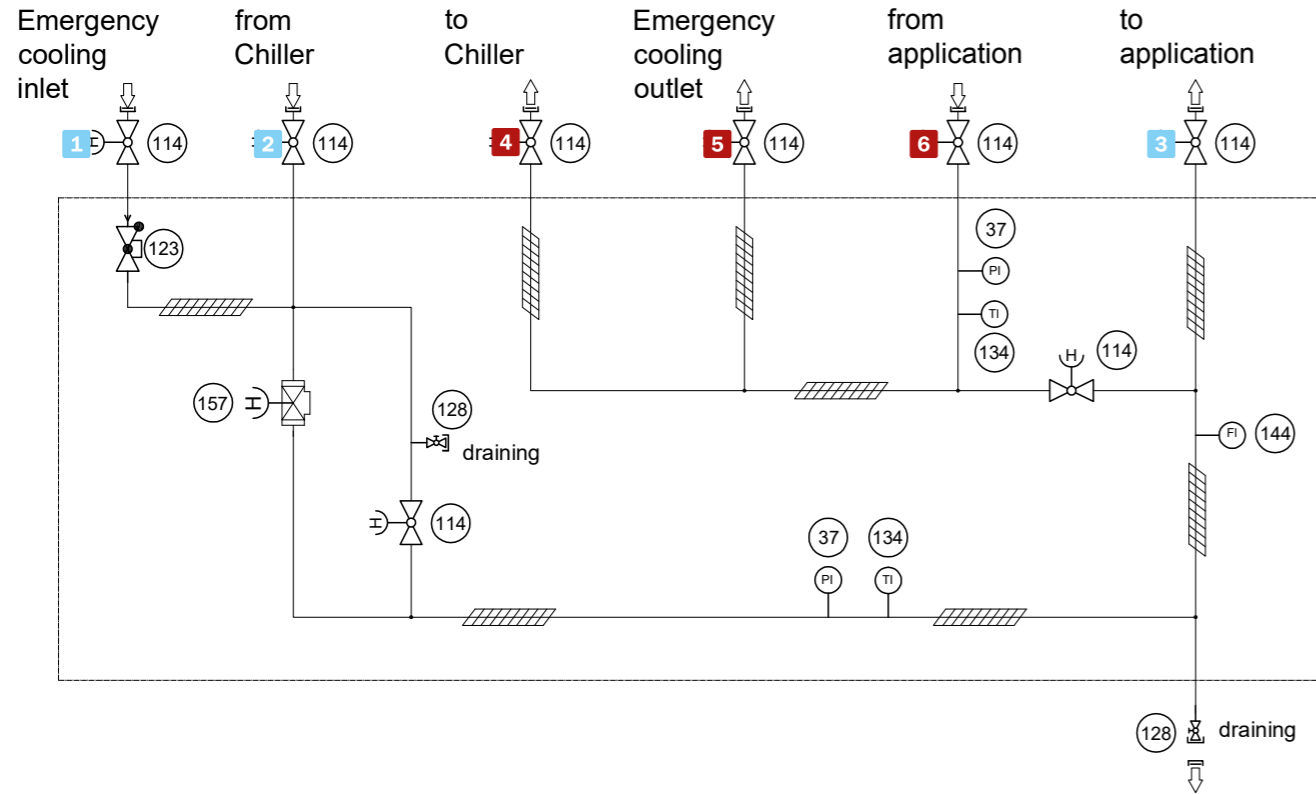
- + Maintain at least 20 inch (500 mm) from the top and bottom of the CIP.
- + Maintain at least 12 inch (300 mm) from the left and right side of the CIP.
- + Maintain at least 40 inch (1,000mm) from the front of the CIP for servicing.



Picture 4

Picture 5

### FLOW DIAGRAM



#### EXPLANATION

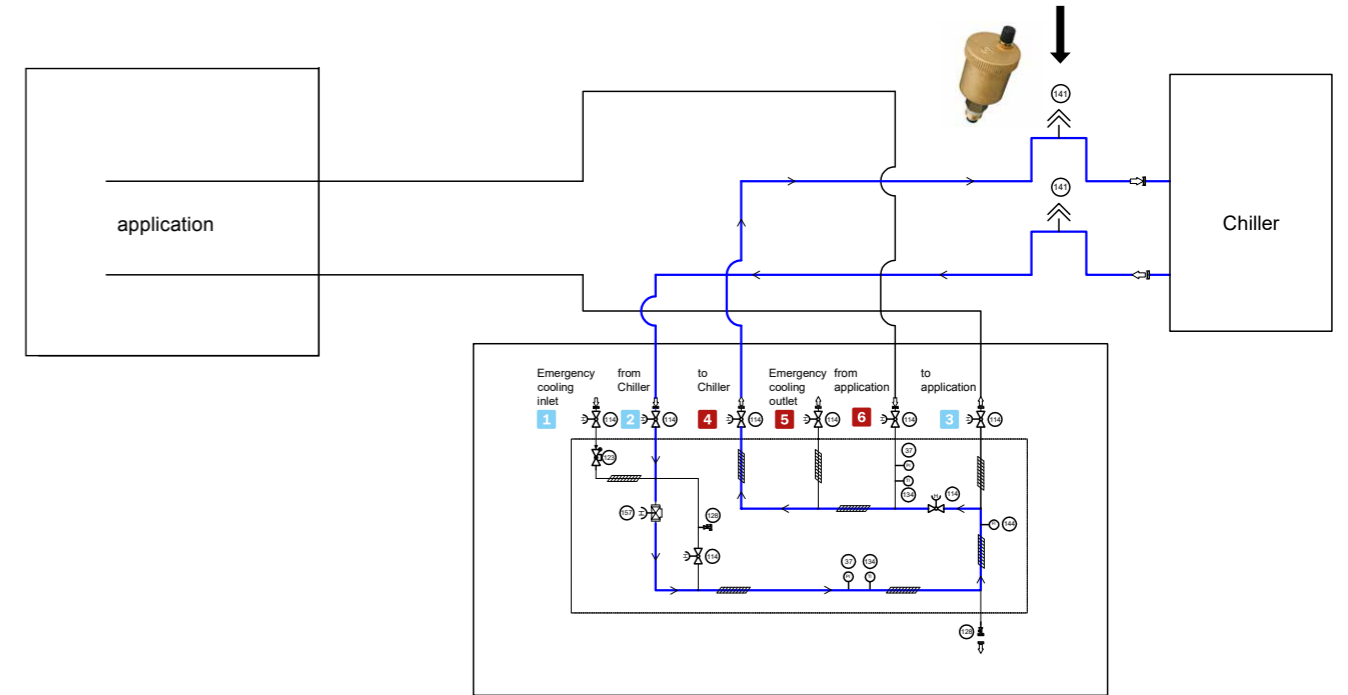
- (37) Pressure gauge
- (114) Shut-off valve (manual)
- (123) Non-return valve
- (128) Filling and emptying cock
- (134) Thermometer
- (144) float-type flow meter
- (157) filter-ball valve

### COMMISSIONING CASE

Pre commissioning: Chiller runs in bypass, application not finally ready

### AIR BLEEDER

KKT chillers recommends installing an air bleeder on the highest position of the piping to and from the application.

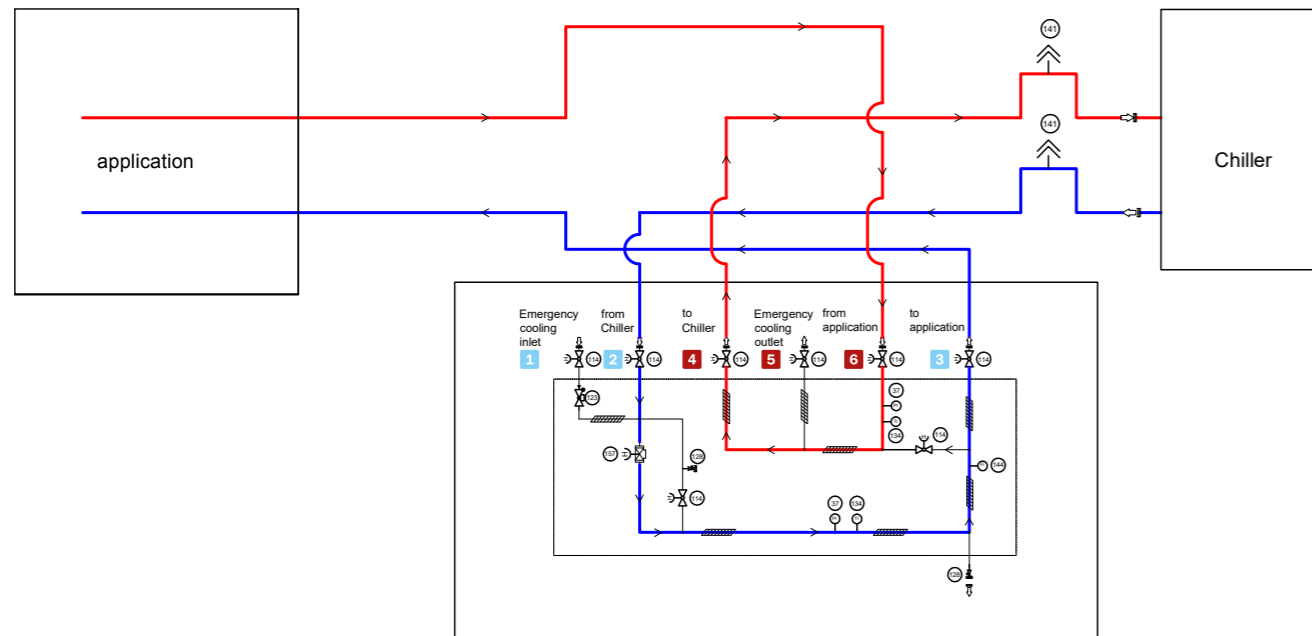


#### VALVE SETTINGS

(please refer to picture 1)

- 1 closed
- 2 open
- 3 closed
- 4 open
- 5 closed
- 6 closed

## NORMAL OPERATION



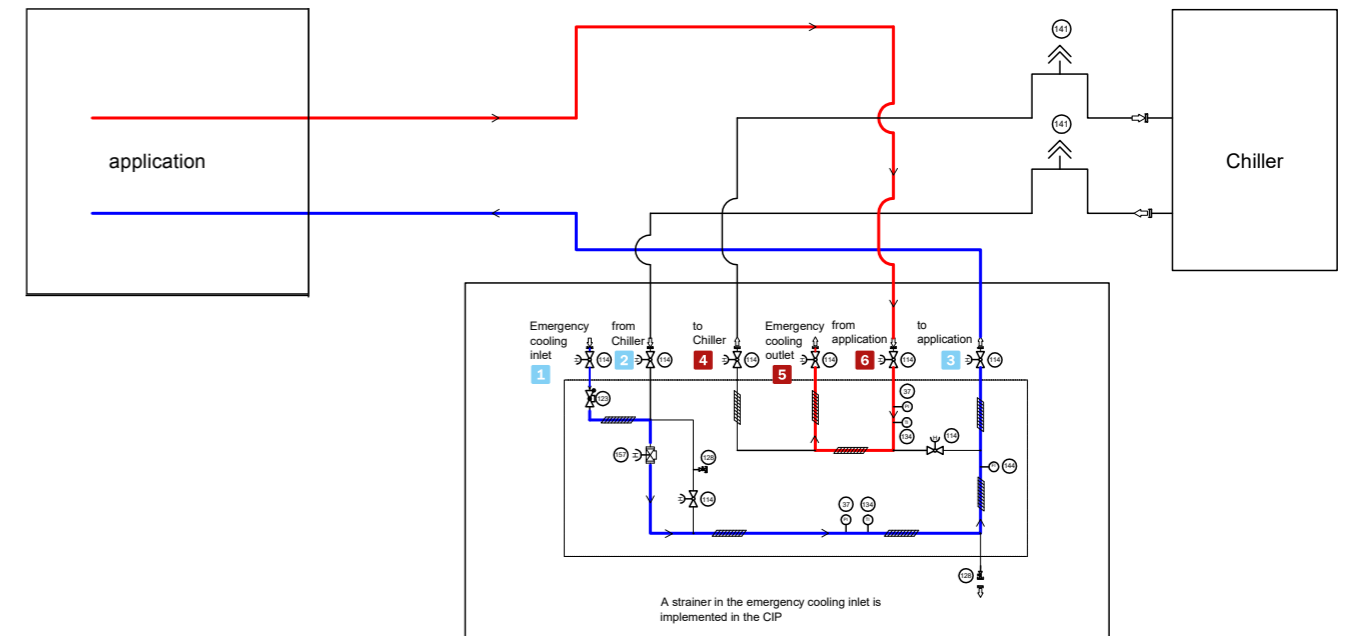
### VALVE SETTINGS

(please refer to picture 1)

- 1** closed
- 2** open
- 3** open
- 4** open
- 5** closed
- 6** open

## EMERGENCY COOLING

Cooling for helium compressor with city water bypass



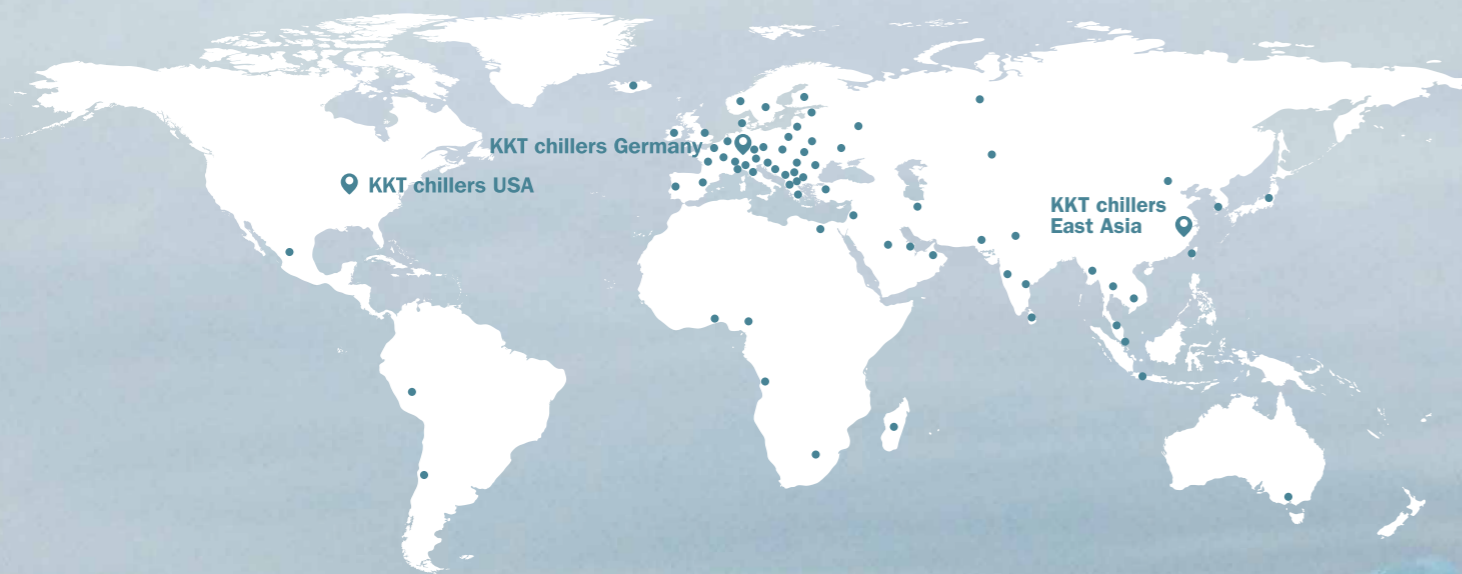
### VALVE SETTINGS

(please refer to picture 1)

- 1** open
- 2** closed
- 3** open
- 4** closed
- 5** open
- 6** open

After Sales Service

# QUALIFIED SERVICE TECHNICIANS IN OPERATION



After Sales Service

## SERVICE NETWORK WORLDWIDE



For frequently updated contact information of the individual service locations, please see:

[kkt-chillers-service.de/en/service-locations](http://kkt-chillers-service.de/en/service-locations)

24/7  
Customer Support

After Sales Service

## SERVICE – AROUND THE CLOCK

System malfunctions cannot be foreseen. But thanks to KKT chillers' many years of experience and well-structured service organization, we can guarantee fast response and repair.

Should you require help with one of your chillers, you can reach KKT chillers **365 days a year, 7 days a week, 24 hours a day.**

## SERVICE – AROUND THE WORLD

To ensure quick and reliable maintenance and repair services, KKT chillers runs a close-knit global service network, which is continuously optimized and expanded. KKT chillers constantly adapts its service network to your requirements and plant locations.

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