



klimatechniek

T&S klimatechniek BV

**evoswitch**

NEXT GENERATION DATACENTERS

EVOSWITCH

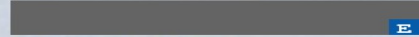
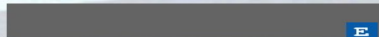
Projectnummer T&S Klimatechniek

: 15145

Letternummer

: 150435

donderdag 26 maart 2015



**Client**

EVOSWITCH Netherlands B.V.  
PO box 94500  
1090 GM AMSTERDAM

**Project information**

Projectnaam  
Projectnummer klant  
Projectnummer T&S Klimaattechniek  
Briefnummer

: EVOSWITCH  
:  
: 15145  
: 150435

**Stakeholders**

EVOSWITCH Netherlands B.V.  
EVOSWITCH Netherlands B.V.  
T&S Klimaattechniek calculatie  
T&S Klimaattechniek projectleider

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## 1. Request for Proposal EVOSWITCH Netherlands B.V.

EvoSwitch has asked us to provide an quotation for supplying and install 4 pieces hybrid dry coolers.

Important issues:

- A lump sum proposal.
- Weight of dry coolers can be up to 4500 kg are.
- Desired cooling power [REDACTED] C
- Water/glycol outlet temperature [REDACTED] M C sound level 85 d (B) A maximum.
- Coating on both the drycoolers (blygold) as on the new piping.
- Protect installation parts against fog system .
- Removal and disposal of the 4no. existing flatbed dry coolers.
- Connecting the new drycoolers on K21 and or K11 electrical panels

The work is carried out at the J.W. Lucasweg 35 in Haarlem.

## 2. General assumptions

- The activities, without interruption during normal workday hours from Monday to Friday between 07: 00 and 16: 00 pm, can be carried out.
- The spaces free and accessible without any kind of obstacles.
- The spaces free and accessible without any kind of obstacles.
- Part named prices are inextricably linked together.
- Additional work will only be carried out when written order of a competent person designated by the client is received and the price agreed in advance.
- The costs and unproductiveness blockages created by third-party will be charged.
- Our service technicians are in possession of at least a valid VCA basic qualifications , a basic set of approved PPE ( helmet , safety shoes, safety glasses and hearing protection) , calibrated measuring equipment and approved hand and power tools. If at project additional supplies are required, you as a client should arrange for a free supply of additional (borrowed) funds , PPE and any instructions or training.
- All activities are carried out in accordance with current laws and regulations: Regulation EC. No 842/2006 (F-gases), drip equipement directive (PED) 97-23-EC and according to the latest standards BS EN378-2008 and NEN-EN1010. T&S Climate engineering BV is the certified certificate number F-gases is f. GAS-4.10.1053-Eng-Rev. 00 '.

## 3. Project related assumptions

- Controllers may also be mounted on the drycoolers (factory wired)
- Roof construction can accommodate two extra dry coolers of 4500 kg or less.
- That residual materials in the refuse containers present on the building site can be deposited.
- Present valves are working properly and will be reused .
- Spray line can be depressurized for maximum one hour during adding new spray connection

#### 4. Selected equipment with Guentner



## 5. Description other deliveries and installation work

### *General:*

Replace two peaces in one session to prevent huge capacity loss at once.  
 Horizontal and vertical transport (including crane) of the offered dry coolers .  
 Preparing and applying the necessary foundation. (steel H beams supported with vibration damping or adjust and re use the old frame)  
 The dry-cooler on the roof is placed on the previous coupling construction.  
 The filling of the pipeline with water / glycol in volume ratio c [REDACTED] c  
 Commissioning of the offered equipment and the preparation of a report.

### *Connect on the drycoolers*

#### Session A

Close the butterfly as well as the adjustment valves. Disconnect two peaces of the old drycoolers. Place crane next to the building. Empty drycoolers and remove both dry coolers from the roof.  
 Check mounting construction and if necessary adjust it. Lift new drycoolers on their new destiny.  
 Connecting the first two pieces hybrid drycoolers with thick-walled steel pipe DN100.  
 The new hybride drycoolers will be connected to the existing valve and STAF valve. (2 x 2 x supply and return). The drycooler will be connected with Übel compensators DN100 PN16.  
 On every drycooler an automatic air remover will be installed.  
 The new piping and drycoolers will be filled with water / [REDACTED] c  
 New pipe will be coated with two components paint RAL 9010  
 Log working of system for a week.

#### Session B

Repeat session A, fill the system and adjust the waterflow.

### *Making 4 pieces of waterconnections on PE pipes for spraying..*

The making of two water connections to the water mains PE that is present on the roof. There will be a PE drilling saddle to be fitted. Hereinafter, with Mapress 28mm stainless steel can be connected to the new drycoolers . Both connections are equipped with valve and drain .  
 This offer **no tracing** or other form of frost protection is included . At the existing connections on the roof this is now not the case. We are assuming that the piping is closed during the period of frost and drained to prevent freezing.  
 To the PE saddle to be able to connect, we assume that the PE pipe 1 hour will be locked and can be depressurized to make this connection easily.

### *Painting of the new DN 100 pipes with 2 component paint.*

The new DN 100 pipe work which will be mounted on the roof to the two drycoolers will be sanded after assembly and painted twice with two component paint in white ( RAL 9010)



# Toelichting grondslagen

In dit document kunt u secties vinden die onleesbaar zijn gemaakt. Deze informatie is achterwege gelaten op basis van de Wet open overheid (Woo). De letter die hierbij is vermeld correspondeert met de bijbehorende grondslag in onderstaand overzicht.

## **C** Art. 5.1 lid 1 sub c

Deze informatie betreft bedrijfs- en fabricagegegevens die vertrouwelijk aan de overheid zijn meegedeeld

## **E** Art. 5.1 lid 1 sub e

Deze informatie betreft nummers die dienen ter identificatie van personen die bij wet of algemene maatregel van bestuur zijn voorgeschreven als bedoeld in artikel 46 van de UAVG

## **J** Art. 5.1 lid 2 sub e

Het belang van de openbaarmaking van deze informatie weegt niet op tegen het belang van de eerbiediging van de persoonlijke levenssfeer van betrokkenen

## **M** Art. 5.1 lid 2 sub h

Het belang van de openbaarmaking van deze informatie weegt niet op tegen het belang van de beveiliging van personen en bedrijven en het voorkomen van sabotage