



## Rittal LCP Calculation for energy-efficient IT climatisation



### Rittal TopTherm LCP Inline, 3311.530

|           |                |                |            |
|-----------|----------------|----------------|------------|
| customer: | SPNT           | creation date: | 2013-03-13 |
| project:  | SPNT Pomerania | created by:    | Kwo        |
| location: | Szczecin       |                |            |

#### unit data

|                           |                            |                                   |                        |
|---------------------------|----------------------------|-----------------------------------|------------------------|
| type:                     | Rittal TopTherm LCP Inline | air volume:                       | 4100 m <sup>3</sup> /h |
| width:                    | 300 mm                     | server air out temperature:       | 37 °C                  |
| depth:                    | 1200 mm                    | rel. server air out humidity:     | 18 %                   |
| height above floor:       | 2000 mm                    | medium inlet temperature:         | 17 °C                  |
| weight:                   | 200 kg                     | medium outlet temperature:        | 23 °C                  |
| voltage:                  | 230/50 V/Hz                | medium:                           | Glycol (~33%)          |
| nominal cooling capacity: | 30 kW                      | gross cooling capacity:           | 16,4 kW                |
|                           |                            | net cooling cap., loss fan power: | <b>16 kW</b>           |

#### cooler data

|                              |                 |
|------------------------------|-----------------|
| quantity:                    | 1               |
| medium volumetric flow:      | 55 l/min        |
| server air in temperature:   | 24 °C           |
| rel. server air in humidity: | 42 %            |
| total pressure drop:         | 0,46 bar        |
| connection:                  | 1 1/2 inch (OT) |
| number of used fans:         | 6               |

#### fan data

|                                   |            |                         |        |
|-----------------------------------|------------|-------------------------|--------|
| electric power of the whole LCP:  | 0,45 kW    | fan power, max. 6 fans: | 2800 W |
| max. sound power free field (1m): | 58,5 dB(A) |                         |        |