

# VDI 4707 Calculator V11 – © 2018 .EI Design

## Funktionsafprøvningsrapport

Dato:	1 januar 2108
Kunde:	Balslev Rådgivende Ingeniører A/S
Opstillingsadresse:	Produktionsvej 2, 2600 Glostrup
Elevatortype:	Otis – xxx test data
Elevator unit nr.:	121212
Forudsætninger / aktuelle forhold:	Færdig monteret elevator.
Målepunkt:	Hovedtavle for elevator
Måling udført af:	Martin Lohse
Måleudstyr:	HIOKI 3166

Weight factor (0,7 v. 40-50% BL) (1,2 v. 0-30% BL)	0,70	0,70	0,70	0,70	0,70
Nominal load: [kg]	1.350	1.350	1.350	1.350	1.350
Nominal speed: [meter/seconds]	1,75	1,75	1,75	1,75	1,75
Travel height: [meter]	31,16	31,2	31,2	31,2	31,2
Usage Cat. [hours]	0,2	0,5	1,5	3,0	6,0

Standby measured: [kW]	0,1120	0,1120	0,1120	0,1120	0,1120
Energy measured (one cycle trip): [kW/hours]	0,0241	0,0241	0,0241	0,0241	0,0241

Travel: (1 kg/meter) [mW/hours]	0,201	0,201	0,201	0,201	0,201
Standby: (1 kg/meter) [mW/hours]	1,567	0,619	0,198	0,092	0,040
<b>Total: (1 kg/meter) [mW/hours]</b>	<b>1,768</b>	<b>0,819</b>	<b>0,398</b>	<b>0,293</b>	<b>0,240</b>

Usage Category according to VDI 4707:	1	2	3	4	5
Average travel time /day: [hours]	0,2	0,5	1,5	3,0	6,0
Average travel distance /day: [meter]	1.260	3.150	9.450	18.900	37.800
Travel /day: [W/hours]	341	853	2.558	5.116	10.232
Standby /day: [W/hours]	2.666	2.632	2.520	2.352	2.016
Total /day: [W/hours]	3.007	3.485	5.078	7.468	12.248
Total /year: (year 365) [kW/hours]	1.097	1.272	1.854	2.726	4.471
CO2 [kg CO2 / year]	555	644	938	1.379	2.262
<b>Energy efficiency Class (VDI 4707):</b>	<b>B</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>
<b>Energy efficiency Class Standby demand</b>	<b>C</b>	<b>C</b>	<b>C</b>	<b>C</b>	<b>C</b>
<b>Energy efficiency Class Travel demand</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>

Light power measured: [Watt]	100	100	100	100	100
Power on type: (1=100% or 0=travel time)	0	0	0	0	0
Light power /year: [kW/year]	7,2	18	54	108	216

Travel distance /year: [km/year]	460	1.150	3.449	6.899	13.797
<b>Travel distance /lifetime: [km/50 years]</b>	<b>22.995</b>	<b>57.488</b>	<b>172.463</b>	<b>344.925</b>	<b>689.850</b>

Minimum expected trips /day: [starts/day]	40	101	303	607	1.213
Minimum expected trips /year: [starts/year]	14.759	36.898	110.695	221.390	442.779

<b>Statutory inspection of the CE mark</b>					
<b>Elevators: (DK Denmark) [inspection/year]</b>	<b>3</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>

### Note field:

Elevator, TR 31,16 m, speed 1,75 m/s, 1350 kg/ 14 persons.  
Regenerative konverter (PCNV)