

## Product Datasheet:

### **ELEMENT 40/220-240/1A0 CS T S Black (Korea version)**

900mA-1050mA

#### **Product Description**

- Compact size for miniaturized track light luminaire design
- Suitable for 1 circuit system
- Easy current selection via dip switches
- 30.000h lifetime
- Black color available
- Low ripple



#### **Product Benefits**

- High light of quality with low ripple current
- High flexibility from 2 different output currents
- Small housing compatible to popular track systems in black

#### **Applications**

- Shop
- Retail
- Public building

#### **Approval Marks**

**CB**

#### **Product Features**

- Output currents: 900/1050mA
- 30'000 h lifetime at  $t_{cmax} = 75 \text{ }^{\circ}\text{C}$
- Output voltage:  $30\text{V}_{\text{DC}} - 42\text{V}_{\text{DC}}$
- Fixed Output (i.e. no dimming)
- Output power:  $27\text{W} - 44.1\text{W}$
- Typ. Efficiency: 88%
- Input voltage :  $220 - 240 \text{ V}_{\text{AC}}$
- SELV
- Suitable for class II luminaires
- Ambient temp range,  $ta: -20\text{ }^{\circ}\text{C} \text{ to } +35\text{ }^{\circ}\text{C}$

#### **Electrical Specifications**

	<b>Item</b>	<b>Value</b>	<b>Unit</b>	<b>Remarks</b>
<b>Input</b>	Nominal voltage	220-240	VAC	
	Nominal frequency	50 / 60	Hz	
	AC voltage	198 – 264	VAC	Safety voltage range
	Max voltage	300	VA	2 hrs
	Nominal current	276	mA	230V
	THD	<20	%	Full load, 230V, 50 Hz
	Power factor	0.95		Full load, 230V, 50 Hz
	Efficiency	88	%	Full load, 230V, 50 Hz, typical
	No-load power	n/a		Load switching on output side is not permitted
	Power loss	6	W	at 230V, Input power 50,1 W max.
	Protection class	NA		Suitable for class II luminaires
	Inrush current	14.88	A	twidht = 200 $\mu$ s typical (measured at 50% Ipeak)
<b>Output</b>	Max units per circuit breaker	B10: 30; B16: 48 C10: 50; C16: 80; B25: 75; C25: 126;		
	Leakage current	<0.7	mA	Output floating
	Nominal voltage range	30-42	VDC	Refer to Table 1 for details
	Max voltage	60	VDC	Open circuit
	Nominal current	900/1050	mA	
	Current accuracy	+/- 7.5	%	
	Current ripple	<=3	%	(Imax-Imin) / (Imax+Imin) @ 100 Hz
	Pst LM	$\leq$ 1		
	SVM	$\leq$ 0.4		
<b>Dimming</b>	Nominal power range	27-44.1	W	Partial Load.
	Max power	44.1	W	Ta $\leq$ 35°C
	Galvanic isolation	SELV		Output to mains - Touch current < 0.7 mA
	Dimming control	n/a		Not dimmable
	Dimming range	n/a	%	
<b>Environment</b>	Dimming technique	n/a		
	Frequency	n/a	Hz	
	Galvanic isolation	n/a		
	Ambient temperature range ta	-20...+35	°C	Refer to Table 1 for details
	Maximum case temperature tc	75	°C	Measured on tc point indicated of the 2D drawing
	Max. case temp. in fault condition	110	°C	
	Storage temperature range	-20...+80	°C	Cool down before operating
	Relative humidity	5...85	%	Not condensing
	Surge transient protection	1 / 2	kV	L/N; LN/PE acc. IEC 61547
	Environmental rating	Indoor		
<b>Protections</b>	IP rating	IP20		
	Mains switching cycles	> 100.000		
	Expected lifetime	30.000	hours	Tc max = 75°C, 10% failure rate
	Over temperature	Yes		Automatic, reversible
	Over load	Yes		Automatic, reversible
	No load	Yes		Limitation of Output voltage < 60V
	Short-circuit	Yes		Automatic, reversible
	Output overvoltage	Yes		Limitation of Output voltage < 60V

### Wiring Diagram

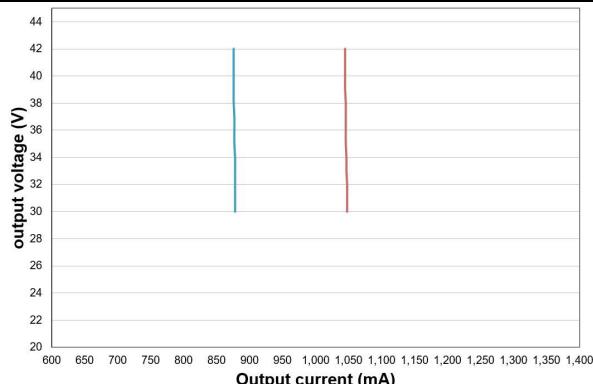
Terminal: Push in terminals

Weight: 110g

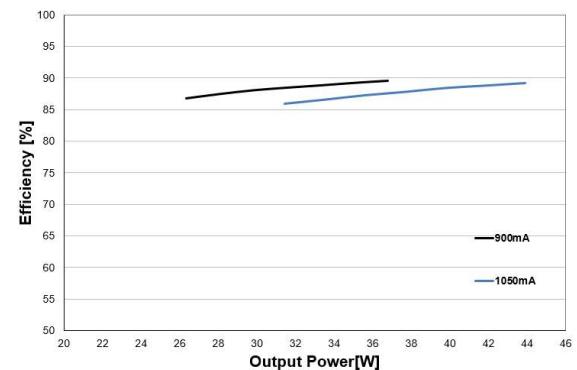
### Wire preparation:

Push in  
s:0.5-1.5  
f:0.75-1.5  
7-8 mm

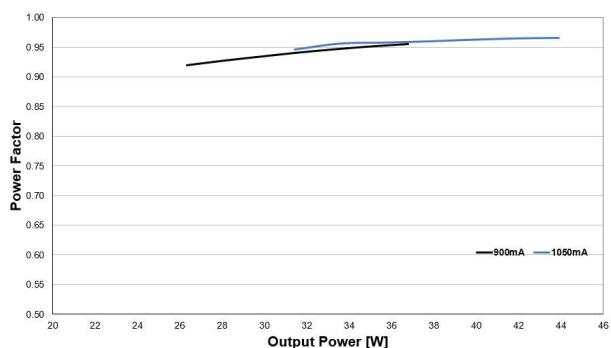
### Typical Operating window



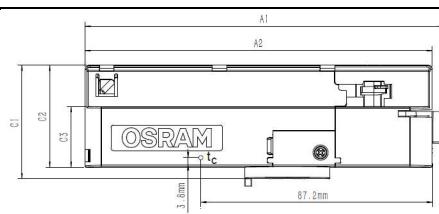
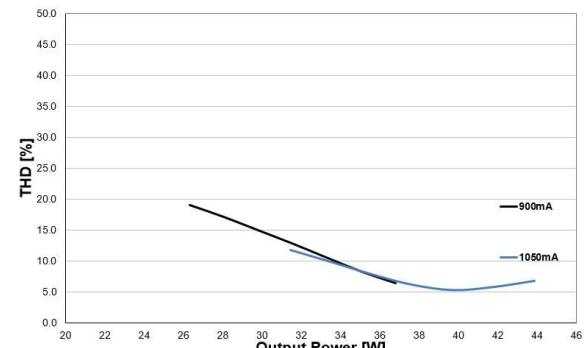
### Typical Efficiency VS load



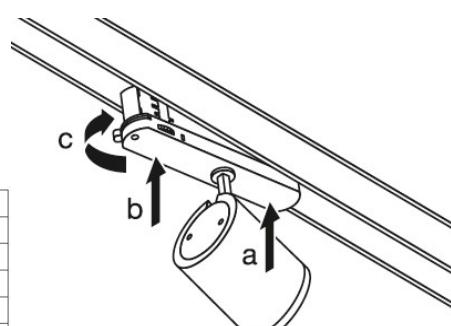
### Typical Power factor VS load



### Typical THD VS load



Data Sheet	
Item	Dimension
A1	135.2±1.5mm
A2	130.6±1mm
B1	34±1mm
C1	42.6±0.5mm
C2	38.5±0.5mm
C3	22.8±0.5mm
D1	10.8±0.5mm
D2	12.2±0.5mm
D3	15.5±0.5mm



Minimum distance between two drivers in the track system is 25cm

**Table 1:**

<b>Iout (mA)</b>	<b>900</b>	<b>1050</b>
<b>U min [V]</b>	30	30
<b>U max [V]</b>	42	42
<b>P min [W]</b>	27	31.5
<b>P max [W]</b>	37.8	44.1
<b>Ta [°C ]</b>	35	35
<b>Tc [°C ]</b>	75	75
<b>Line Current, nominal @230V [mA]</b>	236	276
<b>Max Power Loss @230V [W]</b>	5.16	6
<b>Input Power @230V [W]</b>	42.96	50.11

<b>SW</b>	<b>Irated(mA)</b>
ON	1050
OFF	900

Current selection by DIP-switch

- Hot plug-in or secondary switching of LEDs is not permitted and may cause a very high current to the LEDs.
- Indication that the lamp controlgear relies upon the luminaire enclosure for protection against accidental contact with live parts.
- The max. mechanical loading Fmax for the track driver mounted on the ceiling is 50N, which should be intended as the whole system inclusive of the weight of luminaires and accessories.
- The max. mechanical loading Fmax for the track driver mounted on the wall is 25N, which should be intended as the whole system inclusive of the weight of luminaires and accessories.

### Standards

Safety: IEC 61347-1, IEC 61347-2-13

Performance: IEC 62384

Radio interference: CISPR 15

Harmonic content: IEC 61000-3-2

Immunity: IEC 61000-3-3

<b>Product name</b>	<b>EAN10</b>	<b>EAN40</b>	<b>Pieces / box</b>
ELEMENT 40/220-240/1A0 CS T S B			

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