

## LED Driver Linear non-SELV Fixed DIP Switch 36W & 56W

### Product description

- Constant current LED driver
- Fixed current output, adjustable by DIP Switch
- Built-in type, for class I luminaire
- Safety according to EN 61347-1, 61347-2-13
- Performance according to EN 62384
- Harmonic current emission according to EN 61000-3-2
- Immunity according to EN 61547
- Non-isolated (non-SELV) versions
- Low output ripple current - high quality of light
- Long lifetime - 100 000 hours
- Metal housing
- Optimized for indoor MST LED modules
- Made in Poland



### Electrical data

Specification item	Unit	LED Driver 36W 60-150V 0.2-0.35A DS-L210	LED Driver 56W 80-220V 0.2-0.35A DS-L210
Rated input voltage range	[V]	220...240	220...240
Rated input current <sup>1</sup>	[A]	0.18	0.26
Rated input power <sup>1</sup>	[W]	39	59
Rated input frequency	[Hz]	50/60	50/60
Power factor <sup>1</sup>	[-]	0.98	0.98
Total harmonic distortion <sup>1</sup>	[%]	≤10	≤10
Efficiency <sup>1</sup>	[%]	92	93
Output voltage range <sup>2</sup>	[V]	60...150	80...220
Maximum output voltage U-OUT	[V]	350	350
Output current range <sup>2</sup>	[A]	0.2/0.25/0.3/0.35	0.2/0.25/0.3/0.35
Output current tolerance	[%]	±7.5	±7.5
Output power range	[W]	12...36	28...56
Current ripple (LF) <sup>3</sup>	[%]	≤2	≤2
PstLM	[-]	≤1	≤1
SVM	[-]	≤0.4	≤0.4
Dimmable	[-]	no	no
Control method	[-]	DIP Switch	DIP Switch

<sup>1</sup> at 230V, 50Hz, full load

<sup>2</sup> see operating window

<sup>3</sup> ripple = peak / average; ≤120 Hz

### Lifetime

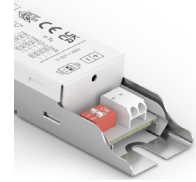
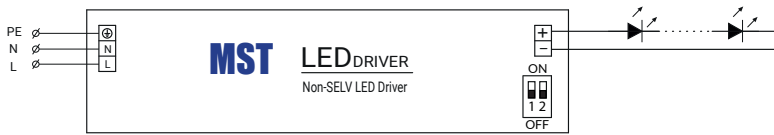
Specification item	Unit	LED Driver 36W 60-150V 0.2-0.35A DS-L210	LED Driver 56W 80-220V 0.2-0.35A DS-L210
Lifetime at Tp (max 10% failures)	[h]	100 000	100 000
Tp - temperature measured at Tc point	[°C]	70	65

### Wiring (solid wire only)

Specification item	Unit	Value
Wire cross section	[mm <sup>2</sup> ]	0.5...1.5
Strip length	[mm]	8...9

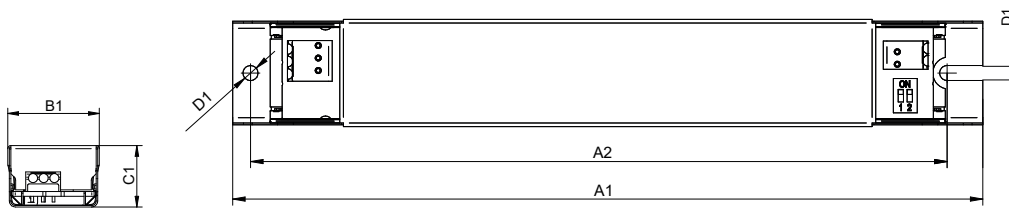
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### Wiring



### Mechanical

Specification item	Unit	LED Driver 36W 60-150V 0.2-0.35A DS-L210	LED Driver 56W 80-220V 0.2-0.35A DS-L210
Length (A1)	[mm]	210	210
Width (B1)	[mm]	30	30
Height (C1)	[mm]	21	21
Fixing hole diameter (D1)	[mm]	4.2	4.2
Fixing hole distance (A2)	[mm]	195	195
Weight	[g]	120	132
Ingress protection	[-]	IP20	IP20



### Temperature & humidity

Specification item	Unit	LED Driver 36W 60-150V 0.2-0.35A DS-L210	LED Driver 56W 80-220V 0.2-0.35A DS-L210
Ambient temperature	[°C]	-20...+55	-20...+50
Tcase	[°C]	75	80
Relative humidity (non-condensing)	[%]	10...90	10...90
Storage ambient temperature	[°C]	-25...+85	-25...+85
Storage relative humidity (non-condensing)	[%]	10...90	10...90

### Surge immunity

Specification item	Unit	LED Driver 36W 60-150V 0.2-0.35A DS-L210	LED Driver 56W 80-220V 0.2-0.35A DS-L210
Mains surge immunity - differential mode	[kV]	1	1
Mains surge immunity - common mode	[kV]	2	2
Surge voltage at output side (against PE)*	[kV]	<3	<3

\* common mode

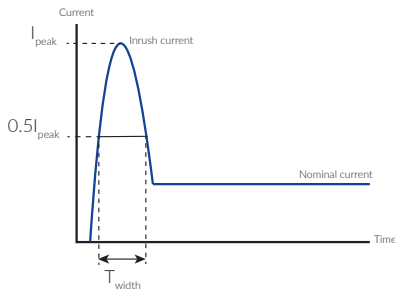
### Output current setting

I LED [mA]	DIP Switch		Remark
	PIN1	PIN2	
200	ON	ON	
250	ON	OFF	
300	OFF	ON	
350	OFF	OFF	Default setup

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### Inrush current

Specification item	Unit	LED Driver 36W 60-150V 0.2-0.35A DS-L210	LED Driver 56W 80-220V 0.2-0.35A DS-L210
Inrush current $I_{peak}$	[A]	14	28
Inrush current $T_{width}$	[ $\mu$ s]	230	270



### Maximum number of drivers

Type of circuit breaker	Unit	LED Driver 36W 60-150V 0.2-0.35A DS-L210	LED Driver 56W 80-220V 0.2-0.35A DS-L210
B10	[pcs]	19	8
B13	[pcs]	24	10
B16	[pcs]	30	13
B20	[pcs]	37	16
B25	[pcs]	46	20
C10	[pcs]	31	13
C13	[pcs]	40	17
C16	[pcs]	50	21
C20	[pcs]	62	26
C25	[pcs]	77	33

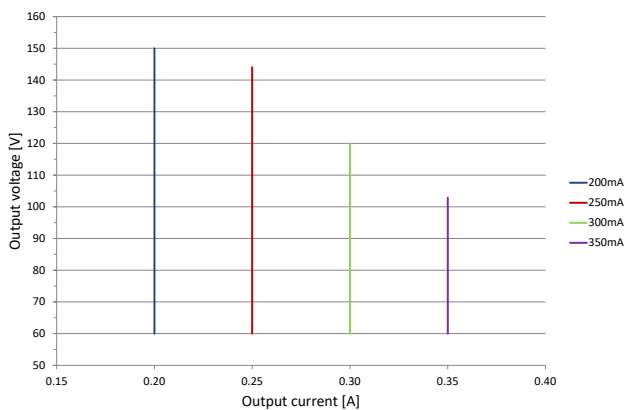
Measurements of inrush and continuous current were taken at rated input voltage. Calculations are based on ABB series S200 circuit breakers as reference. The values shown in the table above are for guidance purpose only. Actual values may differ due to installation environment and used MCBs.

### Protections / Approvals

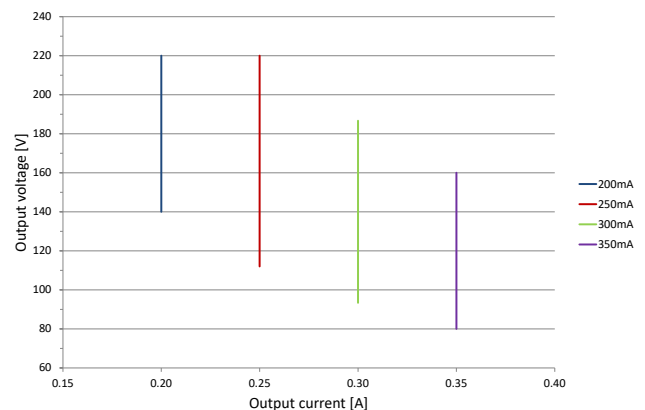
Specification item	Value
Open load protection	yes
Short circuit protection	yes
Over temperature protection	yes
Approval marks	CE / ENEC / UKCA

LED Driver 36W 60-150V 0.2-0.35A DS-L210

### Operating window



LED Driver 56W 80-220V 0.2-0.35A DS-L210

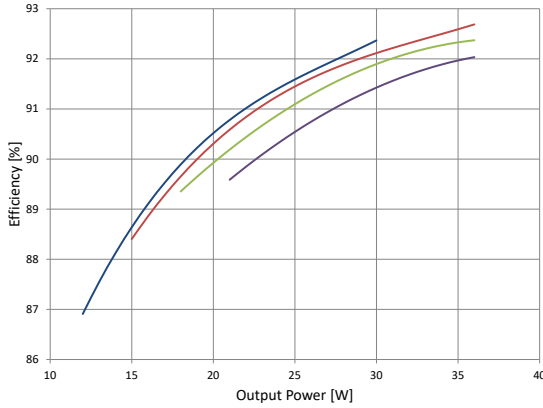


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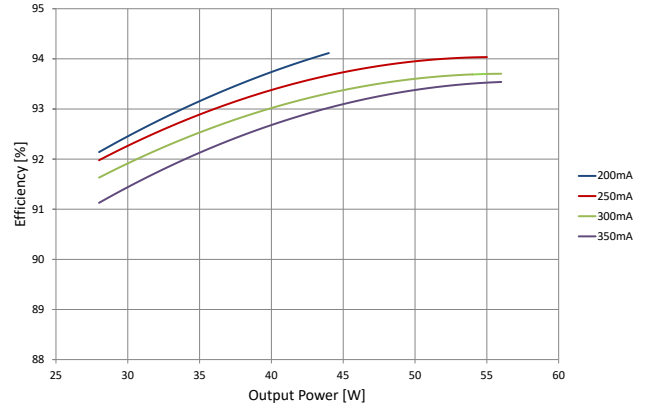
### Efficiency vs output power

Typical values



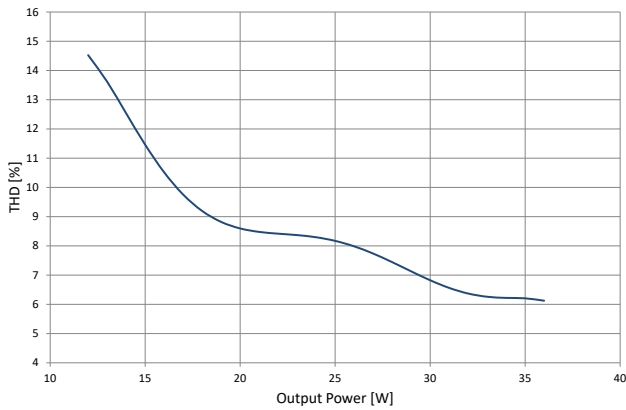
LED Driver 56W 80-220V 0.2-0.35A DS-L210

Typical values

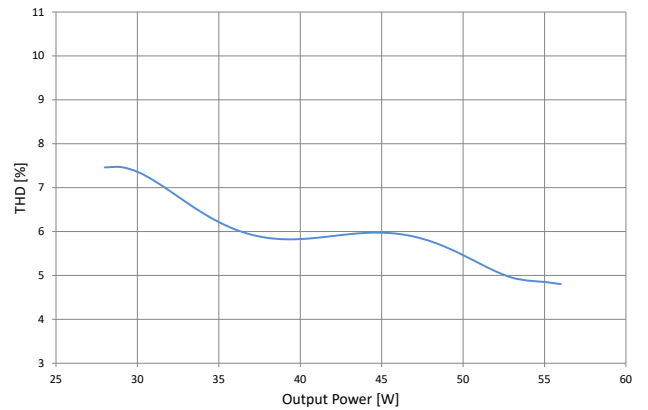


### THD vs output power

Typical values

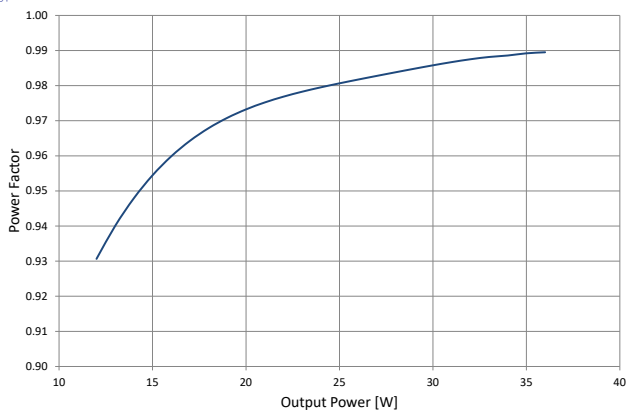


Typical values

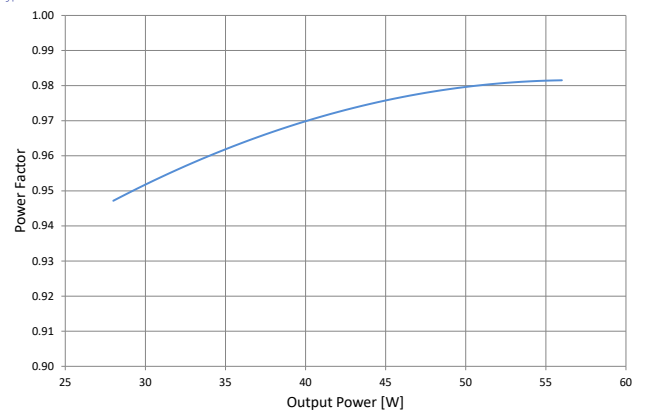


### Power factor vs output power

Typical values



Typical values



## Ordering codes

Specification item	Unit	LED Driver 36W 60-150V 0.2-0.35A DS-L210	LED Driver 56W 80-220V 0.2-0.35A DS-L210
Ordering code	[-]	1010 120 13046	1010 120 13146
Pieces per box	[pcs]	24	24
Pieces per pallet	[pcs]	3600	3600
Box dimensions	[mm]	223 x 133 x 154	223 x 133 x 154
Product weight	[g]	120	132
Pallet gross weight	[kg]	480	522