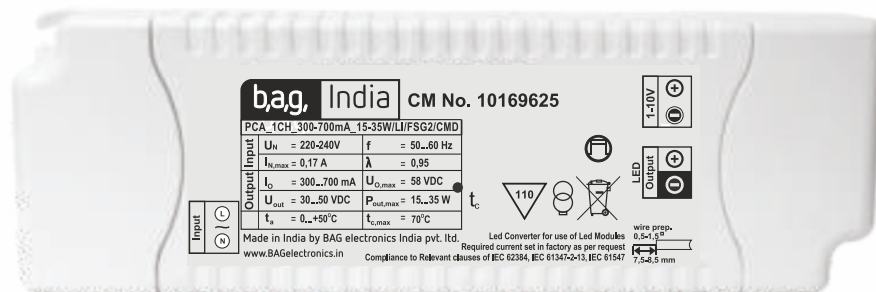


PCA LI- Analogue dimmable 1-10V

Constant current control gear, 1-channel, dimmable 1-10V



ECG versions

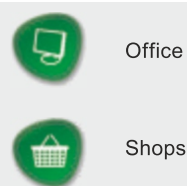
*Photograph is for viewing purpose. Technical data not to be drawn from this picture

Order no.	Model Description	Variant no.
10177833	PCA170-100_35-50LI/FSG3/CMD	50W - 1000mA
10169625	PCA130-70_15-35LI/FSG3/CMD	35W - 700 mA
		25W - 500 mA
		15W - 300 mA

Performance characteristics

- Dimmable 1 -channel ECG for constant current operation of LED
- Modules Analogue Dimming Control
- Dimming from conventional 1-10V Dimmer
- Can also be programmed with a fixed or Variable resistor(Max Resistor = 200K)Dimming Range : 15...100%
- Dimming Range : 15...100%
- High efficiency >88% (100 % load)
- Input voltage 180 – 280V, sustains 440V, <10%THD
- For use in combination with luminaires of protection class I
- ECG extensively protected against abnormal operating conditions at the output e.g. short-circuit, open circuit or overload
- Conformance with international regulations, regarding safety and operation.
- Nominal service life: 30,000 h with failure rate $\leq 10\%$ and operation at $t_c = t_{c,max}$
- Independent housing.

Applications



Markings



PCA LI- Analogue dimmable 1-10V

Constant current control gear, 1-channel, dimmable 1-10V

General Technical data

Mains voltage supply	
Rated voltage range	220 - 240 V
Rated frequency	50...60 Hz
Max. admissible input voltage range (AC)	180 - 280 V
Total harmonic distortion (THD)	< 10%
Output data	
Constant current	
Output current tolerance	+/- 10 %
Max. ripple output current (With LED load)	+/- 30 %
Galvanic Separation to Mains Input - Output side	Basic Insultion(1.5KV)
Galvanic Separation to Mains Input - Dimming Interface terminal	Basic Insultion(1.5KV)
Max. starting time	< 1s
Interfaces and dimming operation	
Dimming Interfaces	1-10V
Control current for 1-10V Version	2mA Max.
Over voltage Protection of Interface	upto 20VDC
Dimming Range	15...100%
Dimming Technology	Amplitude Dimming
Starting time	
Time to 100% luminous flux	< 1 sec
Power factor	
230 V (at full load)	> 0.95
Efficiency (Typ.)	
Full load	> 88%
Protection functions	
Output side Short circuit operation	Yes
Open circuit operation	Yes, Output Voltage Max. 60 VDC
Overload Operation	Yes, limitation of output voltage & reduction of output current
Connection Terminals	
For solid or stranded wire	
Type	Push terminal
Wire cross section	0.5 mm ² – 1.5 mm ²
Wire stripping length	8.5 mm – 9.5 mm
Wire lengths	
Max. wire length to LED module	< 2 m
Thermal protected device	
Max. surface temperature acc. EN 61347-2-13/C5C	+110° C
Degree of protection	
Degree of protection	IP 20
Surge Level	4KV

Temperatures (operation)

Order No.	Model Description	Ambient (t _a)	Case (t _c)
10177833	PCA170-100_35-50LI/FSG3/CMD	0 °C ... + 50°C	max. + 80°C
10169625	PCA130-70_15-35LI/FSG3/CMD	0 °C ... + 50°C	max. + 80°C

PCA LI- Analogue dimmable 1-10V

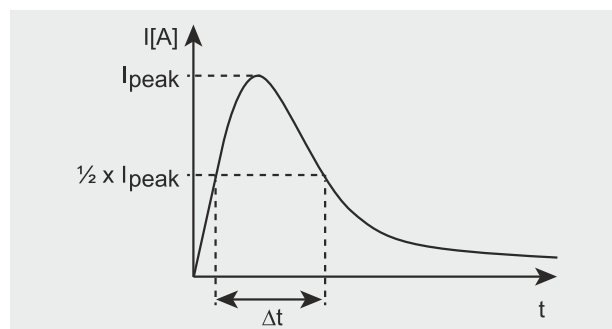
Constant current control gear, 1-channel, dimmable 1-10V

Circuit breaker / Inrush current

Model Description	typ. $I_{peak} / \Delta t$	No. of ECG at single-pole circuit breakers				
		LS-Type	10 A	16 A	20 A	25 A
PCA...	36 A / 49.5 us	B	47	75	94	118
PCA...		C	47	75	94	118

- Data for $U_{supply} = 230$ VAC, mains impedance = 1Ω
- In case of multi-polar CB the maximum number is reduced by 20 %
- The max. number may differ depending on CB manufacturer. Please consider the specifications of the manufacturer.
- Basically, CB with C-characteristics are recommended to be used in lighting groups.

Typical current - time profile when switching on

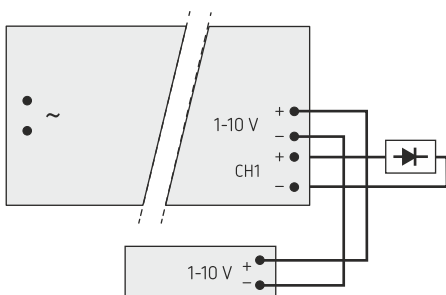


Operating data

Order No.	Varriant	loading vtg.	Input current A	Input Power W	Power Factor %	ECG Efficiency %	Output current mA	Output Voltage VDC	Output Power W	Athd %
10177833	50W - 1000mA	100%	0.24	54	0.99	92	1000	50	50	10
		50%	0.13	29	0.99	85	1000	25	25	10
10169625	35W - 700mA	100%	0.18	40	0.95	88	700	50	35	10
		50%	0.09	20	0.95	88	700	25	17.5	10
	25W - 500mA	100%	0.13	29	0.95	85	500	50	25	10
		50%	0.07	15	0.95	85	500	25	12.5	10
	15W - 300mA	100%	0.08	18	0.95	85	300	50	15	10
		50%	0.04	09	0.95	85	300	25	7.5	10

* All specifications with 230 VAC nominal operation and 100% load

Wiring diagrams



Logistic data

Model	Order no.	Weight ECG kg
PCA170-100_35-50LI/FSG3/CMD	10177833	0.120
PCA130-70_15-35LI/FSG3/CMD	10169625	0.120

PCA LI- Analogue dimmable 1-10V

Constant current control gear, 1-channel, dimmable 1-10V

Case drawing

Model Description	X mm	X _M mm	Y mm	Y _M mm	Z mm
PCA170-100_35-50LI	140	133	45	37	26
PCA130-70_15-35LI					

PCD1...35LI

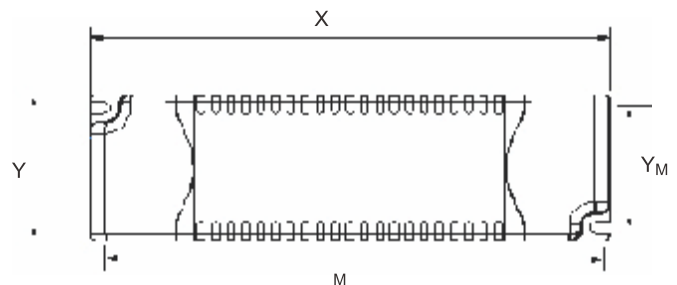
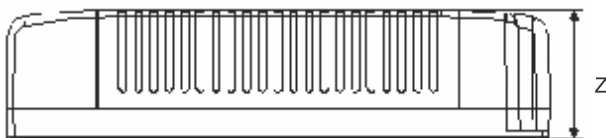
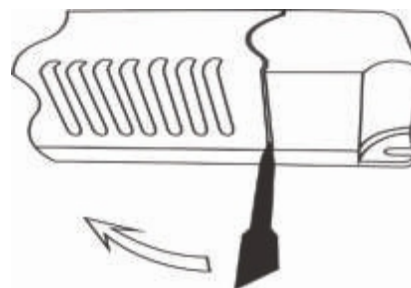


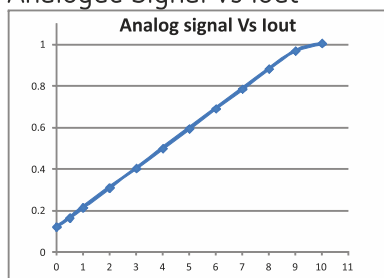
Illustration of opening terminal cover



Dimensions/Weights

Model Description	Order no.	Weight ECG kg	ECG / packaging unit pcs.	Dimensions packaging unit mm	Weight packaging unit kg
PCA170-100_35-50LI/FSG3/CMD	10177833	0.128	25	240 x 145 x 147	3.42
PCA130-70_15-35LI/FSG3/CMD	10169625	0.128	25	240 x 145 x 147	3.42

Analogue Signal Vs Iout



The information in this document is subject to change without notice.

Conformance with regulations (Compliance to relevant clauses)

Compliance with BIS Standard IS 15885 (Sec 2 Part 13) 2012

EN 61347-1 General and safety requirements

EN 61347-2-13 Particular requirement for DC or AC supplied electronic control gear for LED modules

EN 62 384 Performance characteristics: DC or AC supplied electronic control gear for LED modules Module

EN 61 547 Equipment for general lighting purposes EMC immunity requirements

Environmental tests for mechanical capacity:

IEC 60068-2-6 Test F_c: vibrations (sinusoidal)

IEC 60068-2-27 Test E_a: shock and bump

IEC 60068-2-29 Test E_b: shock and bump

Quality management certified according to ISO 9001

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