

Electronics

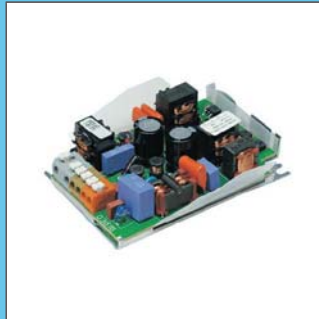
New



HID-PV C 035/S CDM or HID-PV C 070/S CDM



HID-PV C 035/I CDM
HID-PV C 070/I CDM



HID-PV C 035/P CDM
HID-PV C 070/P CDM



HID-PV C 035/F CDM
HID-PV C 070/F CDM



HID-PV C 150/S CDM

Product Description

- Compact, lightweight, one-piece electronic ballasts (Standard, Independent or Compact PCB version)

Features and Benefits

- Elimination of all visible lamp flicker
- Reduction in colour differences from lamp and initial lumen spread
- No hum
- Independent of mains-voltage 206-254V
- Increase life of CDM lamps up to 30%
- Simple installation and cabling, cage clamp terminals

Applications

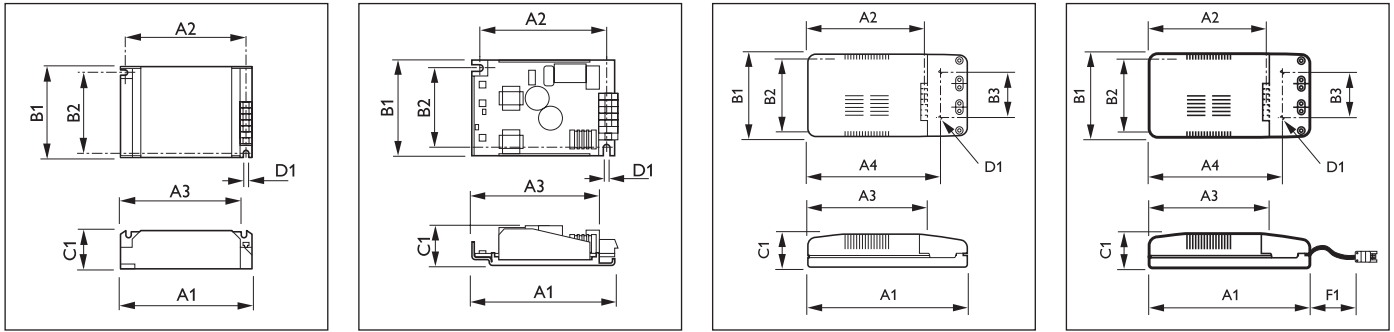
- Accent and decorative, shops and retail, indoor public places, lobbies and offices, high ceilings, indoor theatre/stage
- Climatic suitability: restricted to built-in situations where relative humidity is limited.
- For outdoor applications, please consult Philips office.

Compliances and approvals

HID-electronics

- | | |
|------------------------------|---------------------|
| • Safety | EN61347-2-1/2-3/2-9 |
| • Performance | EN60927 / EN60929 |
| • RFI | EN55015 / EN55022 |
| • Harmonic current emissions | EN61000-3-2 |
| • EMC immunity | EN61547 |
| • Approval marking | KEMA/VDE |
| • CE-marking | |
| • Environmental standard | ISO 14001 |

Dimensions in mm



Product ID	Overall length									
	A1 max.	A2 max.	A3 max.	A4 max.	B1 max.	B2 max.	B3 max.	B4 max.	C1 max.	F1 max.
HID-PV C 035/S and 070/S CDM	110	98.5	98.5	-	75	63.5	4.5	-	32	-
HID-PV C 035/P and 070/P CDM	109	98.5	95	-	72.5	63.5	4.5	-	28	-
HID-PV C 035/I and 070/I CDM	150	98.5	113.5	126.5	79.5	63.5	4.5	49	32	-
HID-PV C 035/F and 070/F CDM	150	98.5	113.5	126.5	79.5	63.5	4.5	49	32	1500
EH-S 235/S CDM	135	123.5	123.5	-	75	63.5	4.5	-	32	-
EH-S 235/P CDM	134	123.5	120	-	72.5	63.5	4.5	-	28	-
EH-S 235/I CDM	175	123.5	138.5	151.5	79.5	63.5	4.5	49	32	-
HID-PV C150/S CDM	175	123.5	123.5	-	75	63.5	4.5	-	32	-
HID-PV 150/S CDM (with strain relief)	185	134	136	-	90	70	4.5	-	40	-

Technical data in relation to energy saving

Ballast type	For lamps	System power W	Lamp power W	T _{case} life °C	T _{case} max. °C	T _{ambient} range* °C
HID-PV C 035/S or /P or /I CDM	CDM 35W	42	38	70	80	-20...65
HID-PV C 235/S or /P or /I CDM	2x CDM 35W	85	38	75	85	-20...45
HID-PV C 070/S or /P or /I CDM	CDM 70W	78.5	73	70	80	-20...55
HID-PV 150/S or /I MH/CDM	CDM 150W	157	147	90	100	-20...50

* More information on thermal behaviour can be found on www.hid-primavision.philips.com

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Technical data for installation

Mains operation

Rated mains voltage	220 – 240 V
With tolerances for performance: +6% -8%	206 – 254 V
With tolerances for safety:	180 – 264 V
Mains frequency	50/60 Hz
Operation frequency (typical)	130 Hz
Power factor	> 0.95
Ignition voltage	3-5 kV

Air and creepage distance from any (metal) part that may become live, to earthed environment (class I) or test finger (class II) > 5 mm

Earth leakage current < 0.5 mA per ballast

Cable capacity

HID-PV C 035/S or P or I CDM	Max. 120 pF
HID-PV C 070/S or P or I CDM	Max. 120 pF
HID-PV C 150/S CDM	Max. 200 pF
EH-S 235/S or P or I CDM	Max. 120 pF / per lamp

Notes:

With three-phase mains supply, neutral should never be disconnected; otherwise circuitry could be damaged.

For proper EMC, wiring inside luminaire should be as straight and as short as possible; mains wires should not run parallel to lamp wires.

Thermo-protected circuit incorporates self-resetting facility; ignition attempts stop after 18 min.; mains supply must be switched off and on to reset ballast.

Overvoltage protection	48 hrs at 320 Vac
	2 hrs at 350 Vac
	5 min. at 380 Vac

Automatic restart after lamp replacement or voltage dip, lamp may take up to 18 min. to restart.

Insulation resistance test:	500 Vdc from Line/Neutral to Earth (not between Line and Neutral)
	Note: Ensure that the Neutral is reconnected again after abovementioned test is carried out and before the installation is put into operation.

Mains current at 230V*

Ballast	Nominal current
HID-PV C 035/S or /P or /I CDM	0.19
EH-S 235/S or /P or /I CDM	0.38
HID-PV C 070/S or /P or /I CDM	0.34
HID-PV C 150/S or /I CDM	0.73

* For electronic HID gear run-up current < nominal current

Inrush current

Ballast	Max. quantity of ballast per Miniature Circuit Breaker Type B 16 A	Inrush current 1/2 value time at typical mains impedance
HID-PV C 035/S or /P or /I CDM	24	t.b.d.
EH-S 235/S or /P or /I CDM	14	t.b.d.
HID-PV C 070/S or /P or /I CDM	14	t.b.d.
HID-PV C 150/S or /I CDM	6	50 A / 450 μ s

Conversion table for max. quantities of ballasts on other types of Miniature Circuit Breaker

MCB type		Relative number of ballasts
B	16 A	100% (see table above)
B	10 A	63%
C	16 A	170%
C	10 A	104%
L, I	16 A	108%
L, I	10 A	65%
G, U, II	16 A	212%
G, U, II	10 A	127%
K, III	16 A	254%
K, III	10 A	154%

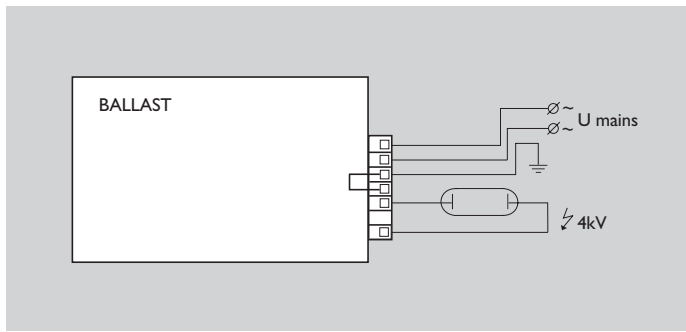
Notes:

- Data is based on a mains supply with an impedance of 400 m Ω (equal to 15 m cable of 2.5 m² and other 20 m to the middle of the power distribution), under worst case conditions. With an impedance of 800 m Ω the number of ballasts can be increased by 10%.
- Measurements will be verified in real installations; therefore data are subject to change.
- In some cases the maximum number of ballasts is not determined by the MCB but by the maximum electrical load of the installation.
- Note that the maximum number of ballasts is given when these are all switched on at the same moment, i.e. by a wall switch.
- Measurements were carried out on single-pole MCB's. For multi-pole MCB's it is advisable to reduce the number of ballasts by 20%.
- The maximum number of ballasts which can be connected to one Residual Current Detector of 30 mA is 30.

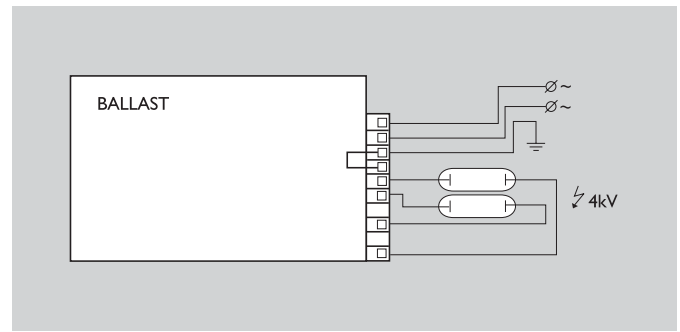
HID-PrimaVision CDM

Wiring diagram

HID-PV C 35/70/150



EH-S 2X35



Connection wiring is greatly simplified by the use of cage-clamp contacts with push buttons.

Wire cross-section:

On the mains side: 0.75...2.5 mm²

On the lamp side: 0.75...2.5 mm²

Strip length: 8 - 10 mm

Ordering and packing data

Ballast	Single unit	Bulk packing		
	Weight net kg	Qty. pcs	Dimensions l x w x h cm	Weight gross kg
HID-PV C 035/S CDM	0.21	12	26 x 21.5 x 10	2.8
HID-PV C 035/P CDM	0.21	12	26 x 21.5 x 10	2.8
HID-PV C 035/I CDM	0.23	12	30.3 x 16.3 x 12.3	2.9
HID-PV C 035/F CDM	0.41	12	36 x 39.6 x 17.6	5.3
HID-PV C 070/S CDM	0.21	12	26 x 21.5 x 10	2.8
HID-PV C 070/P CDM	0.21	12	26 x 21.5 x 10	2.8
HID-PV C 070/I CDM	0.23	12	30.3 x 16.3 x 12.3	2.9
HID-PV C 070/F CDM	0.41	12	36 x 39.6 x 17.6	5.3
HID-PV C 150/S CDM	0.31	12	31 x 21.9 x 10.6	4.0
EH-S 2X035/S CDM	0.29	12	31 x 21.9 x 10.6	3.7
EH-S 2X035/P CDM	0.29	12	31 x 21.9 x 10.6	3.7
EH-S 2X035/I CDM	0.31	12	35.5 x 16.3 x 12.3	3.8
EH-S 2X035/F CDM	0.49	12	44 x 39.6 x 17.6	6.1

HID-PV

