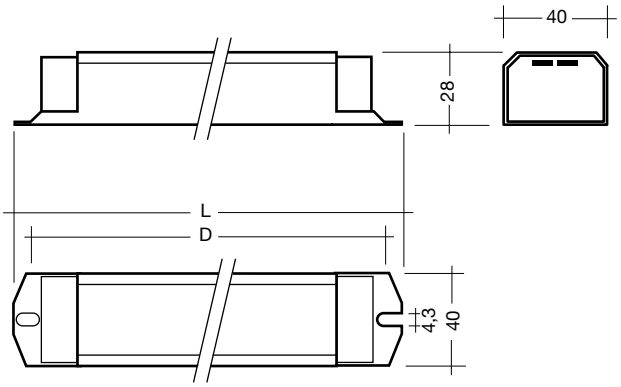
Electronic ballasts
2D compact lamps

PC DD PRO 28-55 W 220-240 V 50/60/0 Hz, non dimmable



- Defined warm start within 1.5 s
- Constant light output from 198 V – 254 V supply voltage
- AC operation 198 V – 254 V
- DC operation 154 V – 250 V (lamp start 200 V – 250 V)
- Power factor > 0,96
- Overvoltage protection 320 V AC for 1 hour
- Operating frequency ≥ 42 kHz
- Wide temperature range from -25 °C to +60 °C
- Energy classification EEI = A3
- ENEC approved, CE marked
- Use in emergency lighting according to VDE 0108 possible
- Safe switch off of defective lamps
- Automatic end of lamp life shut off
- Automatic re-start after lamp change
- For luminaires with F or M and MM marks according to EN 60598, VDE 0710 and VDE 0711
- Temperature protection tm acc. to EN 61347-1-C.5e

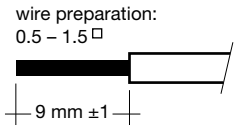
Approvals:
- EN 61347-2-3 (EN 60928)
- EN 60929
- EN 61347-2-7 (EN 60924)
- EN 60925
- EN 61000-3-2
- EN 61547
- EN 55015
- acc. VDE 0108

Lamp		Ballast										
watt-age W	length mm	type	article number	length L mm	fixing centres D mm	weight kg	circuit power W	lamp power W	current at 230V/50Hz A	λ at 230V/50Hz	tc point °C	temperature range °C
28	202	**PC 1x28 DD PRO**	89895964	154	140	0,175	28,7	25,4	0,130	0,96	85	-25 → +60
38	202	**PC 1x38 DD PRO**	89895965	154	140	0,177	39,7	34,6	0,180	0,96	85	-25 → +60
55	202	**PC 1x55 DD PRO**	89895967	154	140	0,180	60,0	53,0	0,265	0,98	80	-25 → +60

Installation instructions

Wiring type and cross section

The wiring can be in flexible cable with ferules or solid with a cross section of 0.5 – 1.5 mm².
Strip 9 mm of insulation from the cables to ensure perfect operation of the screw terminals.



RFI

Tridonic ballasts are RFI protected in accordance with EN 55015. To operate the luminaire correctly and to minimise RFI we recommend the following instructions:

- Connection to the lamps of the hot leads must be kept as short as possible
- Mains leads should be kept apart from lamp leads (ideally 5 – 10 cm distance)
- Do not lead mains leads too closely along the electronic ballast
- Twist the lamp leads
- Keep the distance of lamp leads from the metal work as large as possible
- Mount electronic ballast on earthed metal surface
- Mains wiring to be twisted when through wiring
- Keep the mains leads inside the luminaire as short as possible

AC operation

Mains voltage:
220 – 240V 50/60Hz (+6%/-10%)

DC operation

200 – 240V 0Hz
200 – 250V 0Hz certain lamp start
154 – 250V 0Hz operating range

Emergency lighting

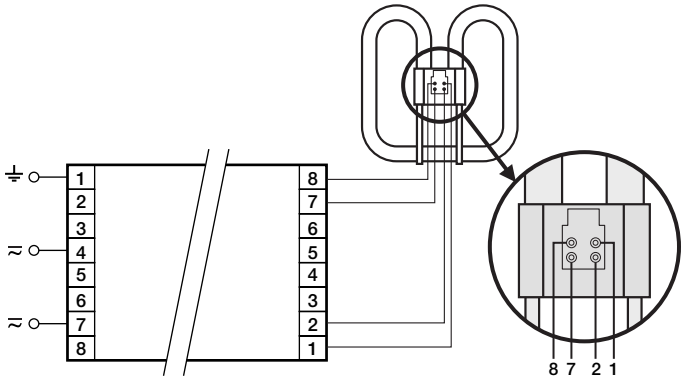
Use in emergency lighting installations according to VDE 0108 or for emergency luminaires according to EN 61347-2-3 appendix J.
BLF > 0.95

Wiring advice

The lead length is dependent on the capacitance of the cable.

Ballast Type	Terminal		Maximum capacitance allowed	
	Cold	Hot	Cold	Hot
PC 1x28 DD PRO	7, 8	1, 2	200 pF	100 pF
PC 1x38 DD PRO	7, 8	1, 2	200 pF	100 pF
PC 1x55 DD PRO	7, 8	1, 2	200 pF	100 pF

With standard solid wire 0.5/0.75 mm² the capacitance of the lead is 30 – 80 pF/m.
This value is influenced by the way the wiring is made.
Lamp connection should be made with symmetrical wiring.
Hot leads (1, 2) and cold leads (7, 8) should be separated as much as possible.



Circuit diagram PC DD PRO

Harmonic distortion in the mains supply

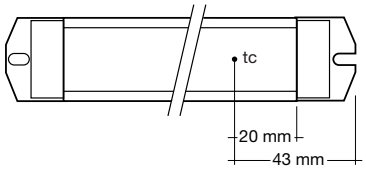
Ballasts

Type	THD	3	5	7	9
PC 1x28 DD PRO	14 %	13 %	4 %	1 %	3 %
PC 1x38 DD PRO	15 %	15 %	4 %	1 %	3 %
PC 1x55 DD PRO	11 %	10 %	4 %	1 %	3 %

Typical value expressed as a percentage at 230 V 50 Hz

Temperature range

from -25 °C to +60 °C



Packing quantities:

20 pieces/carton
50 cartons/pallet
1000 pieces/pallet

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