

# PRODUCT FAMILY DATASHEET

## POWERBALL HCI-TC

Metal halide lamps with ceramic technology for enclosed luminaires



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### AREAS OF APPLICATION

- Shop interiors, shop windows
- Shopping arcades
- Foyers, reception areas
- Museums, exhibitions
- Accent lighting
- Decorative lighting
- Approved only for use in enclosed luminaires
- Outdoor applications only in suitable luminaires

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### PRODUCT BENEFITS

- Very high efficiency
- Good to excellent color rendering
- Very good color stability
- UV values significantly below the maximum permitted thresholds to IEC 61167 thanks to UV filter

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### PRODUCT FEATURES

- POWERBALL ceramic technology
- Light colors: warm white (830 WDL), neutral white (942 NDL)
- Average lifetime: 15,000 h (operation with ECG with 70...400 Hz square-wave current)
- Average lifetime: 12,000 h (with magnetic control gear)
- HCI-TC 20 W, HCI-TC 50 W only for operation with ECG with 70...400 Hz square-wave current



TECHNICAL DATA

Product description	Electrical data					Photometrical data						
	Rated wattage	Lamp current	Nominal wattage	Ignition voltage	PFC capacitor at 50 Hz	Luminous flux	Luminous efficacy	Color rendering index Ra	Color temperature	Light color	Rated LLMF at 2,000 h	Rated LLMF at 4,000 h
HCI-TC 20 W/830 WDL PB <sup>1)</sup>	20.00 W	0.23 A	20.00 W	3.6 / 5.0 kVp <sup>2)</sup>		1700 lm	85 lm/W	83	3000 K	830	0.80	0.75
HCI-TC 35 W/830 WDL PB	39.00 W	0.52 A	35.00 W	3.6 / 5.0 kVp <sup>2)</sup>	6 µF <sup>5)</sup>	3700 lm <sup>6)</sup>	97 lm/W <sup>7)</sup>	85	3000 K	829	0.85	0.80
HCI-TC 35 W/942 NDL PB	39.00 W	0.53 A	35.00 W	3.6 / 5.0 kVp <sup>2)</sup>	6 µF <sup>5)</sup>	3500 lm <sup>6)</sup>	90 lm/W <sup>7)</sup>	90	4200 K	936		
HCI-TC 70 W/830 WDL PB	73.00 W	0.95 A	70.00 W	3.6 / 5.0 kVp <sup>2)</sup>	12 µF <sup>5)</sup>	7200 lm <sup>6)</sup>	99 lm/W <sup>7)</sup>	89	3000 K	829	0.85	0.79
HCI-TC 70 W/942 NDL PB	73.00 W	1.0 A	70.00 W	3.6 / 5.0 kVp <sup>2)</sup>	12 µF <sup>5)</sup>	6800 lm <sup>6)</sup>	93.0 lm/W <sup>7)</sup>	96	4200 K	937		

Product description						Dimensions & weight				Temperatures & operating conditions		Lifespan
	Rated LLMF at 6,000 h	Rated LLMF at 8,000 h	Rated LLMF at 12,000 h	UV protection	Color temperature	Diameter	Length	Light center length (LCL)	Product weight	Max. permitted outer bulb temperature	Max. permitted pinch temp.	Rated lamp survival factor at 2,000 h
HCI-TC 20 W/830 WDL PB <sup>1)</sup>	0.71	0.69	0.65	Yes	3030 K	15.0 mm	81.0 mm	52.0 mm	8.00 g	400 °C	330 °C	0.99
HCI-TC 35 W/830 WDL PB	0.76	0.71	0.67	Yes	2920 K	15.0 mm	81.0 mm	52.0 mm	9.00 g	500 °C	330 °C	0.99
HCI-TC 35 W/942 NDL PB				Yes	3580 K	15.0 mm	81.0 mm	52.0 mm	9.00 g	500 °C	330 °C	
HCI-TC 70 W/830 WDL PB	0.74	0.69	0.61	Yes	2910 K	15.0 mm	81.0 mm	52.0 mm	9.00 g	550 °C	350 °C	0.99
HCI-TC 70 W/942 NDL PB				Yes	3730 K	15.0 mm	81.0 mm	52.0 mm	9.00 g	550 °C	350 °C	

Product description							Additional product data			Capabilities	
	Rated lamp survival factor at 4,000 h	Rated lamp survival factor at 6,000 h	Rated lamp survival factor at 8,000 h	Rated lamp survival factor at 12,000 h	Lifespan B50	Operation mode LLMF/LSF	Base (standard designation)	System guarantee level	Mercury content	Dimmable	Burning position
HCI-TC 20 W/830 WDL PB <sup>1)</sup>	0.98	0.97	0.96	0.80	15000 h <sup>3)</sup>	ECG	G8.5	3 (2/5)	3.0 mg <sup>4)</sup>	No	Any
HCI-TC 35 W/830 WDL PB	0.98	0.97	0.96	0.80	15000 h <sup>3)</sup>	ECG	G8.5	3 (2/5)	4.3 mg	No	Any
HCI-TC 35 W/942 NDL PB					15000 h <sup>3)</sup>		G8.5	3 (2/5)	3.3 mg <sup>4)</sup>	No	Any
HCI-TC 70 W/830 WDL PB	0.98	0.97	0.96	0.80	15000 h <sup>3)</sup>	ECG	G8.5	3 (2/5)	7.6 mg <sup>4)</sup>	Yes <sup>8)</sup>	Any

Product description	Rated lamp survival factor at 4,000 h	Rated lamp survival factor at 6,000 h	Rated lamp survival factor at 8,000 h	Rated lamp survival factor at 12,000 h	Lifespan B50	Operation mode LLMF/LSF	Additional product data			Capabilities	
							Base (standard designation)	System guarantee level	Mercury content	Dimmable	Burning position
HCI-TC 70 W/942 NDL PB					15000 h <sup>3)</sup>		G8.5	3 (2/5)	6.7 mg <sup>4)</sup>	Yes <sup>8)</sup>	Any

Product description	Enclosed luminaire required	Certificates & standards Energy consumption	Country-specific categorizations ILCOS
HCI-TC 35 W/830 WDL PB	Yes	43 kWh/1000h	MT/UB-35/830-H/SL-G8.5-17/85
HCI-TC 35 W/942 NDL PB	Yes		MT/UB-35/942-H/SL-G8.5-17/85
HCI-TC 70 W/830 WDL PB	Yes	81 kWh/1000h	MT/UB-70/830-H/SL-G8.5-17/85
HCI-TC 70 W/942 NDL PB	Yes		MT/UB-70/942-H/SL-G8.5-17/85

<sup>1)</sup> Only for operation with electronic control gear with 70...400 Hz square-wave current

<sup>2)</sup> Minimum; for superimposed ignition with square wave electronic ballast 3.0 kVp are sufficient

<sup>3)</sup> At ECG

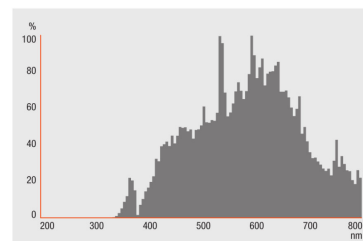
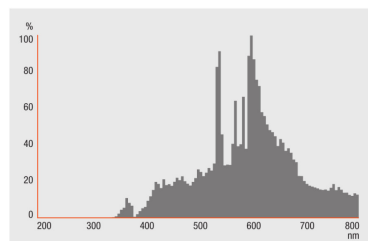
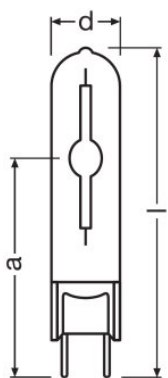
<sup>4)</sup> Maximum

<sup>5)</sup> At rated voltage and  $\cos \varphi \geq 0.9$

<sup>6)</sup> In operation with electronic control gear with 70...400 Hz square-wave current. Operation with magnetic ballast can be less efficient

<sup>7)</sup> In operation with low frequency square wave electronic ballast, 70...400 Hz. Operation with electromagnetic ballast may be less efficient.

<sup>8)</sup> In combination with POWERTRONIC PTo



HCI-TC 20 W/830 WDL PB, HCI-TC 35 W/830 WDL PB, HCI-TC 35 W/942 NDL PB, HCI-TC 70 W/830 WDL PB, HCI-TC 70 W/942 NDL PB

HCI-TC 20 W/830 WDL PB, HCI-TC 35 W/830 WDL PB, HCI-TC 70 W/830 WDL PB

HCI-TC 35 W/942 NDL PB, HCI-TC 70 W/942 NDL PB

### SYSTEM GUARANTEE

When operated with OSRAM POWERTRONIC control gear, an extended system guarantee is granted for these lamps

### APPLICATION ADVICE

For more detailed application information and graphics please see product datasheet.

### LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4008321683014	Shipping carton box 12	180 mm x 127 mm x 140 mm	351.00 g	3.20 dm <sup>3</sup>
4008321682000	Shipping carton box 12	180 mm x 127 mm x 140 mm	357.00 g	3.20 dm <sup>3</sup>

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4008321682048	Shipping carton box 12	180 mm x 127 mm x 140 mm	320.00 g	3.20 dm <sup>3</sup>
4008321681805	Shipping carton box 12	180 mm x 127 mm x 140 mm	363.00 g	3.20 dm <sup>3</sup>
4008321681843	Shipping carton box 12	180 mm x 127 mm x 140 mm	363.00 g	3.20 dm <sup>3</sup>

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit.

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#### REFERENCES / LINKS

For more information on the system guarantee and the terms and conditions of the guarantee visit

▶ [www.ledvance.com/system-guarantee](http://www.ledvance.com/system-guarantee)

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Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.