

# HF-Matchbox Red

HF-M RED 109 SH TL/PL-S 230-240V

HF-Matchbox Red is an affordable, reliable, compact, lightweight and high-frequency ballast for use with system wattages below 25 W in combination with TL mini, TL-D, TL5 and TL5c, PL-T/C, and PL-L/S lamps. The HF-M Red range has a robust design, meets all relevant international safety and performance standards and has an energy efficiency index (CELMA EEL ) of A2.

## Product data

### • General Characteristics

Rated Lamptype	TL/PL-S
Rated Number of Lamps	1 piece
Rated Ballast-Lamp Power	9
Line Voltage	230-240 V
Line Frequency	50/60 Hz
Housing	SH
Lifetime 90%	40000 hr
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### • Operating Characteristics

Automatic restart	Yes
Maximum ignition time	0.45 (max) s
Mains voltage safety (AC)	-10%/+10%
Mains voltage performance (AC)	-8%/+6%
Power losses gear	1.7 W
PowerFactor 100% output power	0.64 -
Battery voltage lamp ignition	194-254 V
Overvoltage protection 320Vac	0.03 hr
Max ballast on MCB(16A type B)	159 x

### • Wiring Characteristics

Color input terminals	Black
Color output terminals	Grey

Conn.type input terminals	Insert
Conn.type output terminals	Insert
Max. cable length Device/Lamp	1.50 m
Max. cable length Hot Wires	0.30 m
Striplength	8.0-9.0 mm
Wcs Input terminals	0.50-1.50 mm2
Wcs Output terminals	0.50-1.50 mm2

### • System Chars on driver level

System Power on PL-S	8.2
Rated Lamp Power on PL-S	9
Power Loss on PL-S	1.7
Lamp Power on PL-S	6.5
Lamp Power on TL	5.3
Power Loss on TL	1.7
Rated Lamp Power on TL	9
System Power on TL	7

### • Temperature Characteristics

F-marking	Yes
T-case maximum	75 (max) C
T-ambient	-10 (min), 40 (max) C

### • Product Dimensions

Length A1	80.0 mm
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**PHILIPS**

# HF-Matchbox Red

Fixing Hole Distance	70.0 mm
Length A2	
Width B1	40.0 mm
Height C1	22.0 mm
Fixing Hole Distance	10.0 mm
Height C2	
Fixing Hole Diameter	4.4 mm
D1	

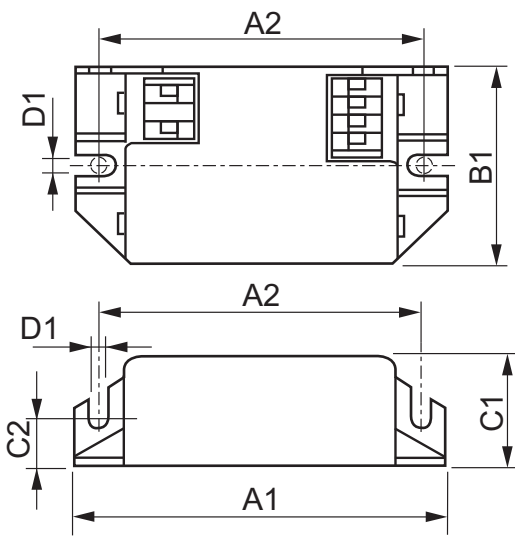
## • Approval & Application Chars

CE marking	Yes
ENEC certificate	Yes
VDE certificate	No
UL certificate	No
CB Certificate	Yes

## • Product Data

Order code	913700422866
Full product code	913700422866
Full product name	HF-M RED 109 SH TL/PL-S 230-240V
Order product name	HF-M RED 109 SH TL/PL-S 230-240V
Pieces per pack	1
Packing configuration	50
Packs per outerbox	50
Bar code on pack - EAN1	8711500931429
Bar code on outerbox - EAN3	8711500931436
Logistic code(s) - 12NC	913700422866
Net weight per piece	0.034 kg

## Dimensional drawing



## HF-M RED 109 SH TL/PL-S 230-240V

Product	A1 (Norm)	A2 (Norm)	B1 (Norm)	C1 (Norm)	C2 (Norm)	D1 (Norm)
HF-M RED 109 SH TL/PL-S 230-240V	80.0	70.0	40.0	22.0	10.0	4.4



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data subject to change