

# **PHASE OUT Information and Alternatives**

Regarding High Pressure Mercury Vapour Lamps and Blended Lamps

# Radium HRL and MRL

#### The Situation as it is

Due to UN Minamata Convention, all high-pressure mercury vapour lamps (HPMV) for general lighting purposes will no longer be allowed to be manufactured, imported and exported after 2020. As there is a high-pressure mercury vapour burner inside any blended lamp, they are affected as well.

So, these lamps are not just banned in EU (as from April 13<sup>th</sup> 2015) but also almost worldwide, meaning that those already existing in or delivered to warehouses as of Dec 30<sup>th</sup> 2020 may still be sold and operated, but there will be no more fresh supply, however.

This will affect the following Radium products:

32208919	4008597089190	HRL 80W/230/E27 EX
32208921	4008597089213	HRL 125W/230/E27 EX
32208922	4008597089220	HRL 250W/230/E40 EX
32209001	4008597090011	HRL 400W/230/E40 EX

33122505	4008597225055	MRL 160W/235/E27 EX
33122615	4008597226151	MRL 250W/235/E40 EX
33122310	4050300216928	MRL 500W/235/E40 EX

They will be put to status phase-out immediately, but as there is no stock we will effectively not be able to fulfil any purchase orders any more.

# **Alternatives**

Of course, you have always got the opportunity to refurbish and modernise your lighting installation completely. If you do not want to do this, there are several other options:

### 1. Replacement with LED retrofit lamps

As the current generation of LED retrofit lamps for HRL lamps can operate either with the ballast still in the circuit or directly at 230V mains, you can just change lamps and that is that – only for HRL circuits remember to remove the capacitor.

Note: Please, check the fixture regarding dimensions and the product weight, LED retrofit lamps are much heavier than the original discharge lamps.

32208919	4008597089190	HRL 80W/230/E27 EX	⇧	43618302	4008597183027	RL-HRL80 840/E27	
32208921	4008597089213	HRL 125W/230/E27 EX	⇧	43618303	4008597183034	RL-HRL125 840/E27	
32208922	4008597089220	HRL 250W/230/E40 EX	仚	43618306	4008597183065	RL-HRL250 840/E40	
32209001	4008597090011	HRL 400W/230/E40 EX	⇧	Sorry, currently no LED replacement available			

33122505	4008597225055	MRL 160W/235/E27 EX	₽	43618302	4008597183027	RL-HRL80 840/E27
33122615	4008597226151	MRL 250W/235/E40 EX	⇧	43618304	4008597183041	RL-HRL125 840/E40
33122310	4050300216928	MRL 500W/235/E40 EX	⇧	43618306	4008597183065	RL-HRL250 840/E40

The lumen output is roughly comparable, but should be checked if sufficient before changing. As the colour temperature of the original lamps lies in the range of 3600 to 4100, replacement with 4000K seems absolutely fitting. Colour rendering will improve.



#### 2. Replacement with high-pressure sodium lamps RNP

As high-pressure sodium lamps need a ballast and an ignitor for operation, some changes have to be made in the luminaire and/ or the circuit for making the lamps work properly.

HRL: change ballast in circuit, add ignitor in luminaire (NOT for RNP lamps with internal ignitor)

MRL: add ballast in circuit and ignitor in luminaire (NOT for RNP lamps with internal ignitor)

Refer to line in table of individual lamp for more details.

32208919	4008597089190	HRL 80W/230/E27 EX	⇒	34418951 34418195	4008597189517 4008597189159	RNP-E/LR 50W/S/230/E27 RNP-E 50W/I/230/E27	1 2
32208921	4008597089213	HRL 125W/230/E27 EX	₽	34418952 34407813	4008597078132 4008597189524	RNP-E/LR 70W/S/230/E27 RNP-E 70W/I/230/E27	1 2
32208922	4008597089220	HRL 250W/230/E40 EX	₽	34418953	4008597189531	RNP-E/LR 150W/S/230/E40	1
32209001	4008597090011	HRL 400W/230/E40 EX	⇒	34418954	4008597189548	RNP-E/LR 250W/S/230/E40	1
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33122505	4008597225055	MRL 160W/235/E27 EX	₽	34418951 34418195	4008597189517 4008597189159	RNP-E/LR 50W/S/230/E27 RNP-E 50W/I/230/E27	3 4
33122615	4008597226151	MRL 250W/235/E40 EX	⇧	34410734	4008597107344	RNP-E/LR 100W/S/230/E40	3
33122310	4050300216928	MRL 500W/235/E40 EX	⇧	34418953	4008597189531	RNP-E/LR 150W/S/230/E40	3

- 1 change ballast, add ignitor (4 to 5 kV) and change capacitor
- 2 change ballast and capacitor
- 3 add ballast, ignitor and capacitor
- 4 add ballast and capacitor

The lumen output might be higher, so installation should be checked for glare before changing. As the colour temperature of the original lamps lies in the range of 3600 to 4100, replacement with light colour yellow (2000K) should be discussed with the user, as well as colour rendering (CRI about 20).

## 3. Replacement with metal halide lamps HRI

As high-pressure metal halide lamps need a ballast and an ignitor for operation, some changes have to be made in the luminaire and/ or the circuit for making the lamps work properly.

HRL: change ballast in circuit, add ignitor in luminaire

MRL: add ballast in circuit and ignitor in luminaire

Refer to line in table of individual lamp for more details.

32208919	4008597089190	HRL 80W/230/E27 EX	⇒	Sorry, no replacement available with even roughly the same luminous flux				
32208921	4008597089213	HRL 125W/230/E27 EX	⇧	Sorry, no repla	Sorry, no replacement available with even roughly the same luminous flux			
32208922	4008597089220	HRL 250W/230/E40 EX	⇧	32418885	4008597188855	HRI-E-250W/D/PRO/230/E40	1, 3	
32209001	4008597090011	HRL 400W/230/E40 EX	⇒	32418884	4008597188848	HRI-E-250W/D/PRO/230/E40	1, 3	

33122505	4008597225055	MRL 160W/235/E27 EX	⇒	Sorry, no repla	Sorry, no replacement available with even roughly the same luminous flux			
33122615	4008597226151	MRL 250W/235/E40 EX	⇧	Sorry, no repla	Sorry, no replacement available with even roughly the same luminous flux			
33122310	4050300216928	MRL 500W/235/E40 EX	⇧	32418884	4008597188848	HRI-E-250W/D/PRO/230/E40	2, 3	

- 1 change ballast, add ignitor (4 to 5 kV) and change capacitor
- 2 add ballast, ignitor and capacitor
- 3 light colour daylight (5200K)

The lumen output might be little higher, so installation should be checked before changing. As the colour temperature of the original lamps lies in the range of 3600 to 4100, replacement with light daylight (5200K) should be discussed with the user. Colour rendering will improve.