

# Champ NVMV Ex-protected HID luminaires for IEC and ATEX applications

70-400W

Ex nR II T...Gc  
Ex t IIIC T...°C Db IP66  
LCIE 09 ATEX 1002  
LCIE 09 ATEX 3008

3L

The Champ® NVMV design is optimized for Zone 2 gas applications (with standard restricted breathing Ex nR protection) as well as Zone 21 dust applications.

## Applications:

NVMV Ex-protected luminaires are suitable for applications in Zone 2/Zone 21/Zone 22:

- In manufacturing plants, refineries, chemical, petrochemical and other industrial process facilities, waste or sewage treatment facilities, dockside and other heavy industrial applications
- In areas where combustible dusts or fibers may be present
- In areas where ignitable concentrations of flammable gases or vapors will be present
- In installations where moisture, dirt, dust, vibration, corrosion and rough usage are problematic

## Features:

- One product offering for global applications; the Champ family has the required IEC and ATEX certifications to provide solutions for specification requirements around the world
- Restricted breathing (Ex nR) protection is standard; this provides better T-ratings, as gases will not enter the lamp chamber and control gear housing
- Provides an integrated ballast with thermal cut-off functionality incorporated into the control gear; in the event of abnormal temperatures or when the lamp approaches end of life, the cut-off functionality protects the ballast from overheating or burning out
- Identical mounting cover for IEC and NEC applications, regardless of wattage, options and accessories; reduces inventory costs and provides greater flexibility for engineering designers, customers and distributors
- HPS lamps restrike in 10-30 seconds with the instant restrike option (IR) should lamp extinguish due to system voltage drop or momentary loss; optional built-in cut-off feature will shut off the instant restrike to avoid continuous high energy pulsing when lamp is inoperative or nearing end of life
- Available with the Champ Quick-Clip, which secures the housing to the cover, providing faster, easier and safer luminaire installation

## Certifications and compliances:

### Application in Zone 2 area acc. IEC 60079-15:

- Marking to 94/9/EC: Ex II 3 G Ex nR II T\*...Gc
- EC – Type Examination: LCIE 09 ATEX 1002

### Application in Zone 21 and 22 areas acc. IEC 61241-1:

- Marking to 94/9/EC: Ex II 2 D Ex t IIIC T...°C(\*) Db IP66
- EC – Type Examination: LCIE 09 ATEX 3008

### General per both application Zone 2 and 21:

- Temperature ambient of use: -45°C to +55°C
- Electromagnetic compatibility: EN 61000-6-4
- Degree of protection: acc. EN 60529 IP66

## Standard materials and finishes:

- Ballast housing and mountings – copper-free aluminum
- Exterior hardware – Type 304 stainless steel
- Reflectors (dome and angle) – Krydon fiberglass-reinforced polyester
- Globes – heat- and impact-resistant glass
- Guards – copper-free aluminum and stainless steel (large housing – stainless steel only)

## Photometrics:

- Complete photometrics can be found at [www.crouse-hinds.com/photometrics](http://www.crouse-hinds.com/photometrics)

## Technical specifications:

Entry	Up to 4 x M20, M25, M32, 1/2" NPT, 3/4" NPT and 1" NPT cable entries (1 1/2" NPT for stanchion mount only)
Termination	3 core 6mm <sup>2</sup> max. (standard); 6 x 6mm <sup>2</sup> for looping (available upon request)
Installation	Ceiling mount, wall mount, stanchion mount, pendant mount
Lamp holder	E27 or E40
Lamp type	HSE/HST (high pressure sodium lamp) and HIE (metal halide lamp)
Lamp power	70W, 100W, 150W, 250W, 400W
Control gear	Integrated ballast, thermal cut-off functionality incorporated into control gear
Re-lamping	Access via restricted breathing lamp chamber
Burning position	Base up; up to 25° off vertical
Ingress protection	IP66 to EN 60529
Electrical supply	220, 230, 240V, 50 Hz and 220, 230V, 60 Hz



NVMV 70-250W (small housing)



NVMV 250-400W (large housing)

# Champ NVMV Ex-protected HID luminaires for IEC and ATEX applications

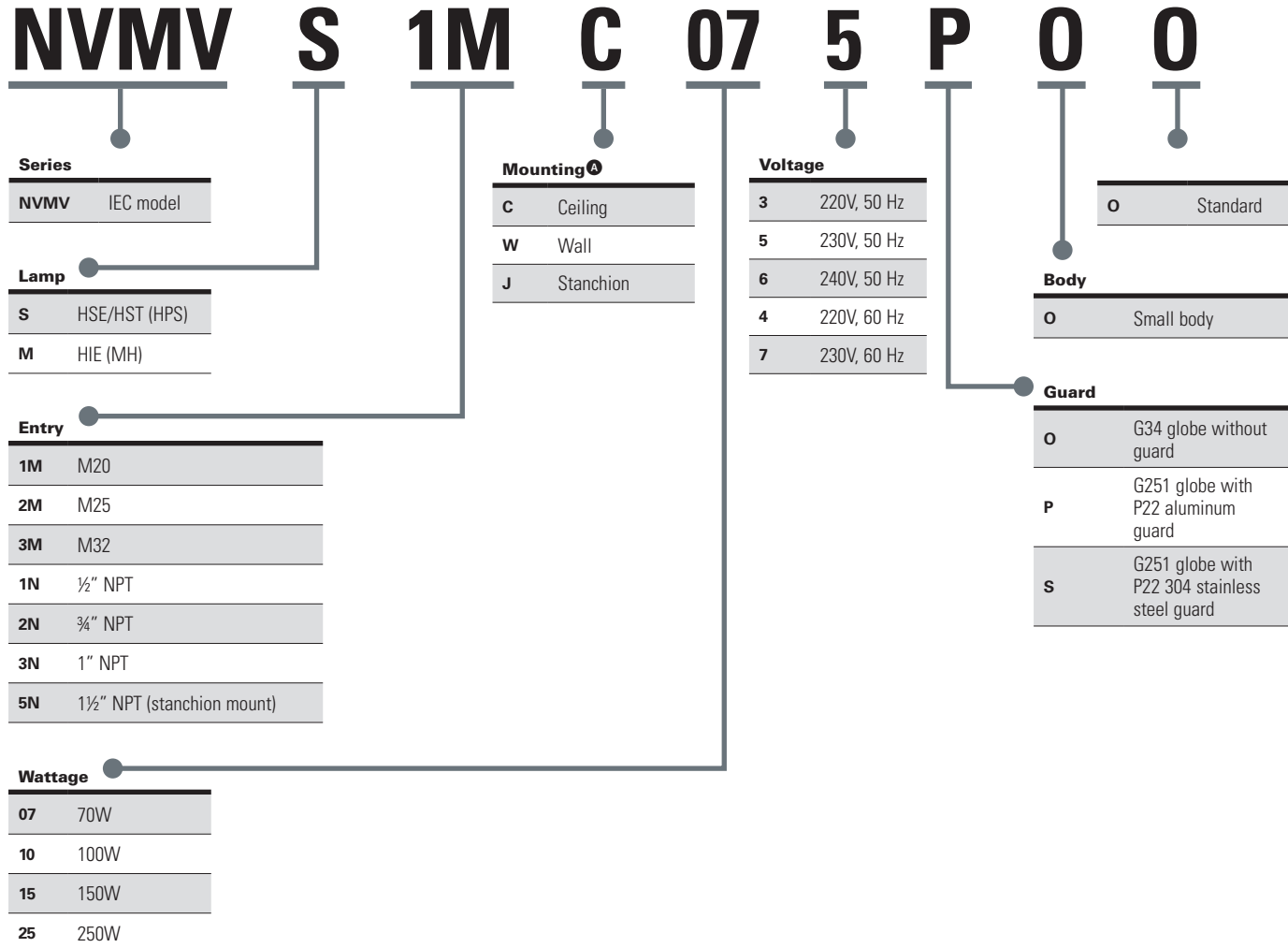
70-400W

Ex nR II T...Gc  
Ex t IIIC T...°C Db IP66  
LCIE 09 ATEX 1002  
LCIE 09 ATEX 3008

3L

## Ordering information – small housing:

Part number example  
**NVMVS1MC075P00**



<sup>A</sup>For pendant mounting, order ceiling mount with pendant bracket accessory; please consult factory.

# Champ NVMV Ex-protected HID luminaires for IEC and ATEX applications

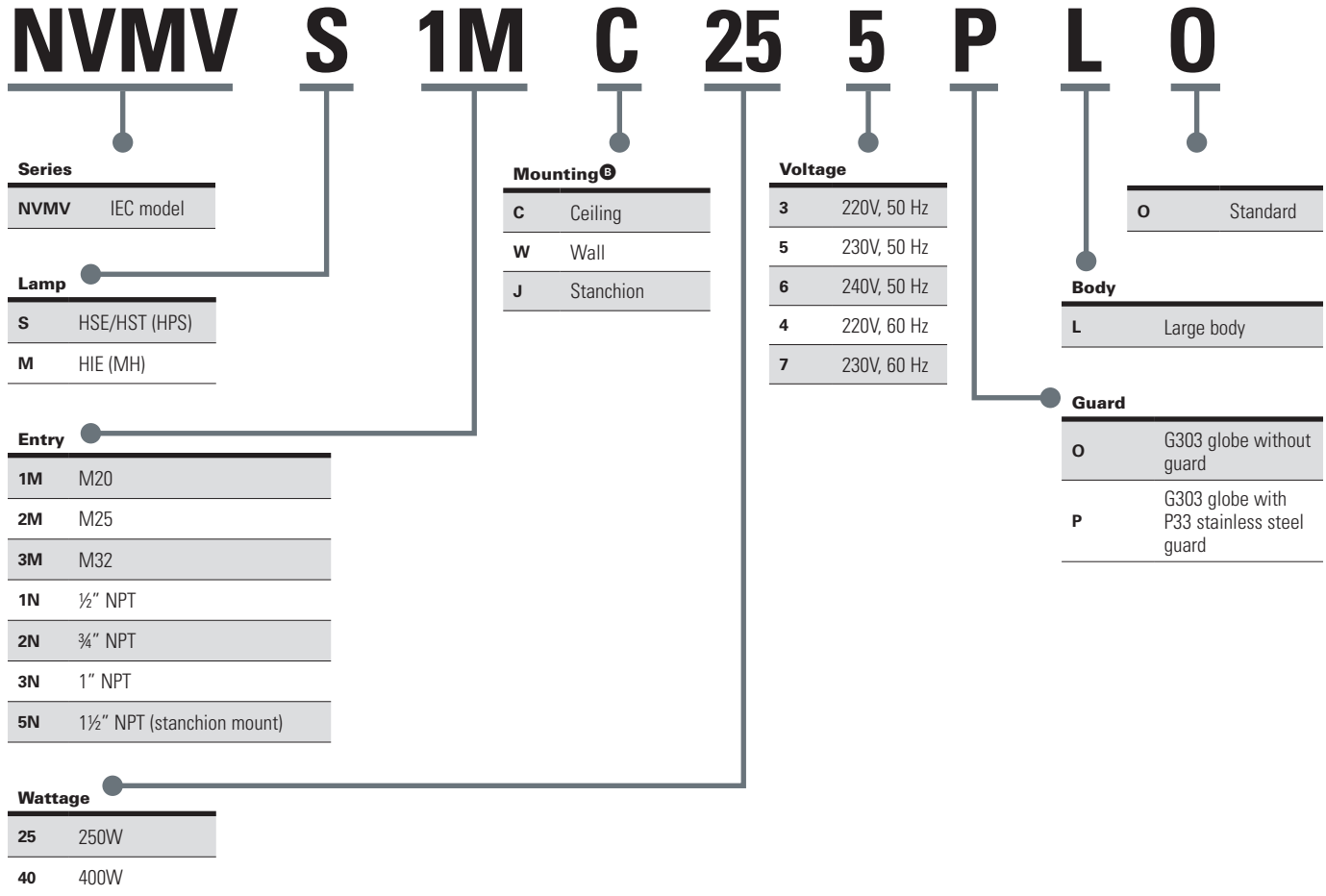
70-400W

Ex nR II T...Gc  
Ex t IIIC T...°C Db IP66  
LCIE 09 ATEX 1002  
LCIE 09 ATEX 3008

3L

## Ordering information – large housing:

Part number example  
**NVMVS1MC255PL0**



## Options:

Description	Suffix
• Instant restrike (100W and 150W HPS) (alternative to dual arc lamps) .....	<b>IR</b>
• Quick-Clip.....	<b>S890</b>

## Accessories (ordered separately):

Description	Cat. #
• Dome reflector – small housing .....	<b>RD70</b>
• 30° angle reflector – small housing .....	<b>RA70</b>
• Dome reflector – large housing .....	<b>RD739</b>
• 30° angle reflector – large housing.....	<b>RA739</b>

<sup>ⓑ</sup>For pendant mounting, order ceiling mount with pendant bracket accessory; please consult factory.

# Champ NVMV Ex-protected HID luminaires for IEC and ATEX applications

70-400W

Ex nR II T...Gc  
Ex t IIIC T...°C Db IP66  
LCIE 09 ATEX 1002  
LCIE 09 ATEX 3008

3L

## Temperature performance data:

Refer to temperature performance data tables below to select luminaire that is suitable for your area specifications. These numbers are the maximum surface temperature of the luminaire.

**NOTE:** T3 – maximum surface temperature 200°C  
T4 – maximum surface temperature 135°C

**Example:** Atmospheres that contain gasoline and have an ignition temperature of 536°C, any fixture with the T-rating in this table can be used.

Atmospheres that contain diethyl ether and have an ignition temperature of 160°C require a luminaire with T4 ratings.

## Small housing

Catalog number example <sup>Ⓢ</sup>	Watts	Lamp type	Rated ambient °C	Lamp holder	Gas (Class I, Zone 2), Ex nR II T...Gc				Dust (Class II, Zone 21), Ex t IIIC T...Db			
					With G34 globe only	With G251 globe only	With G34 globe and reflector	With G251 globe and reflector	With G34 globe only	With G251 globe only	With G34 globe and reflector	With G251 globe and reflector
NVMVS1MC075*00	70		40	E27	T4	T4	T4	T4	99°C	109°C	104°C	109°C
			50		T4	T4	T4	T4	109°C	119°C	114°C	119°C
			55		T4	T4	T4	T4	114°C	124°C	119°C	124°C
NVMVS1MC105*00	100	HSE/HST (HPS)	40	E40	T4	T4	T4	T4	99°C	117°C	104°C	128°C
			50		T4	T4	T4	T3	109°C	127°C	114°C	138°C
			55		T4	T3	T4	T3	114°C	132°C	119°C	143°C
NVMVS1MC155*00	150		40	E40	T4	T3	T3	T3	122°C	140°C	140°C	140°C
			50		T3	T3	T3	T3	132°C	150°C	150°C	150°C
			55		T3	T3	T3	T3	137°C	155°C	155°C	155°C
NVMVS1MC255*00	250		40	E40	T3	T3	T3	T2	168°C	174°C	189°C	218°C
			50		T3	T3	T2	T2	178°C	184°C	199°C	228°C
			55		T3	T3	T2	T2	183°C	189°C	204°C	233°C
NVMVM1MC075*00	70		40	E27	T4	T4	T4	T4	99°C	109°C	104°C	109°C
			50		T4	T4	T4	T4	109°C	119°C	114°C	119°C
			55		T4	T4	T4	T4	114°C	124°C	119°C	124°C
NVMVM1MC105*00	100	HIE (MH)	40	E27	T4	T4	T4	T4	99°C	117°C	104°C	128°C
			50		T4	T4	T4	T3	109°C	127°C	114°C	138°C
			55		T4	T3	T4	T3	114°C	132°C	119°C	143°C
NVMVM1MC155*00	150		40	E27	T4	T3	T3	T3	122°C	140°C	140°C	140°C
			50		T3	T3	T3	T3	132°C	150°C	150°C	150°C
			55		T3	T3	T3	T3	137°C	155°C	155°C	155°C
NVMVM1MC255*00	250		40	E40	T3	T3	T3	T2	168°C	194°C	189°C	218°C
			50		T3	T2	T2	T2	178°C	204°C	199°C	228°C
			55		T3	T2	T2	T2	183°C	209°C	204°C	233°C

## Large housing

Catalog number example	Watts	Lamp type	Rated ambient °C	Lamp holder	Gas (Class I, Zone 2), Ex nR II T...Gc		Dust (Class II, Zone 21), Ex t IIIC T...Db	
					With G303 globe only	With G303 globe and reflector	With G303 globe only	With G303 globe and reflector
NVMVS1MC255*LO	250	HSE/HST (HPS)	40	E40	T3	T3	137°C	137°C
			50		T3	T3	147°C	147°C
			55		T3	T3	152°C	152°C
NVMVS1MC405*LO	400		40	E40	T3	T3	159°C	175°C
			50		T3	T3	169°C	185°C
			55		T3	T3	174°C	190°C
NVMVM1MC255*LO	250	HIE (MH)	40	E40	T3	T3	137°C	137°C
			50		T3	T3	147°C	147°C
			55		T3	T3	152°C	152°C
NVMVM1MC405*LO	400		40	E40	T3	T3	159°C	193°C
			50		T3	T2	169°C	203°C
			55		T3	T2	174°C	208°C

<sup>Ⓢ</sup>Catalog number shown with M20 ceiling mount, 230V, 50 Hz.

# Champ NVMV Ex-protected HID luminaires for IEC and ATEX applications

70-400W

Ex nR II T...Gc  
Ex t IIIC T...°C Db IP66  
LCIE 09 ATEX 1002  
LCIE 09 ATEX 3008

3L

## Dimensions and weights:

NVMV 70W - 250W			
Pendant (7.7kg)	Ceiling (7.6kg)	Wall (8.0kg)	Stanchion (8.0kg)

NVMV 250W - 400W			
Pendant (21.1kg)	Ceiling (21.0kg)	Wall (21.4kg)	Stanchion (21.4kg)

REFLECTOR DIMENSIONS		
RD70 (for 70W - 250W)	RD739 (for 250W - 400W)	RA70 and RA739 (Small & Large Housing)
<p>(0.60kg)</p>	<p>(0.56kg)</p>	<p>(RA70 - 0.60kg; RA739 - 0.79kg)</p>