## $M \sqrt{M}$ series

## - Features

Constant voltage+constant current modes

- 180~528VAC wide input range
- High efficiency up to 91.5\%
- Class 2 power unit / Pass LPS (HVG-65/100)
- Type HL LED Driver for use in Class I, Division 2 hazardous location luminaires (HVG-100/150)
- Suitable for dry, damp, and wet location
- Suitable for LED lighting and street lighting applications
- Protections: Short circuit / Over current / Over voltage / Over temperature


AC input voltage range
AC inrush current (max.) DC adjustment range Current adjustment range Over current protection Over voltage protection Setup, rise, hold up time
Withstand voltage Working temperature Safety standards

EMC standards

| Connection | Input |  |
| :--- | :--- | :--- |
|  | Output | A\&D- <br> Type |
|  |  | B- <br> Type |

180~528VAC (single phase); 254~747VDC
Cold start, 25A at 480VAC $\quad$ Cold start, 25A at 480VAC $\quad$ Cold start, 35A at 480VAC $\pm 10 \%$ rated output voltage (A-Type only)
$60 \% \sim 100 \%$ via potentiometer (A-Type only) $55 \% \sim 100 \%$ via potentiometer (A-Type only)
95\%~108\% constant current limiting, auto-recovery
$110 \% \sim 140 \%$ rated output voltage
$400 \mathrm{~ms}, 80 \mathrm{~ms}, 16 \mathrm{~ms}$ at full load and $\quad 500 \mathrm{~ms}, 80 \mathrm{~ms}, 30 \mathrm{~ms}$ at full $400 \mathrm{~ms}, 80 \mathrm{~ms}, 18 \mathrm{~ms}$ at full 347VAC/480VAC load and $347 \mathrm{VAC} / 480 \mathrm{VAC}$ load and $347 \mathrm{VAC} / 480 \mathrm{VAC}$
I/P-O/P: $3.75 \mathrm{kVAC}, \mathrm{I} / \mathrm{P}-\mathrm{FG}: 2 \mathrm{kVAC}, \mathrm{O} / \mathrm{P}-\mathrm{FG}: 1.5 \mathrm{kVAC}$
$-40 \sim+70^{\circ} \mathrm{C}$ (refer to output derating curve)
UL8750 approved
EN55015, EN61000-3-2 class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547,
FCC part 15 subpart B


## HVG-65 Series



| Model No. | Output | Tol. | R\&N | Effi. |
| :---: | :--- | :---: | :---: | :---: |
| HVG-65-12® | $12 \mathrm{~V}, 0 \sim 5 \mathrm{~A}$ | $\pm 2.0 \%$ | 120 mV | $86.5 \%$ |
| HVG-65-15® | $15 \mathrm{~V}, 0 \sim 4.3 \mathrm{~A}$ | $\pm 2.0 \%$ | 150 mV | $87.5 \%$ |
| HVG-65-20® | 20V, $0 \sim 3.25 \mathrm{~A}$ | $\pm 1.0 \%$ | 150 mV | $88.5 \%$ |
| HVG-65-24® | $24 \mathrm{~V}, 0 \sim 2.71 \mathrm{~A}$ | $\pm 1.0 \%$ | 150 mV | $89.0 \%$ |
| HVG-65-30® | $30 \mathrm{~V}, 0 \sim 2.17 \mathrm{~A}$ | $\pm 1.0 \%$ | 200 mV | $89.0 \%$ |
| HVG-65-36® | $36 \mathrm{~V}, 0 \sim 1.81 \mathrm{~A}$ | $\pm 1.0 \%$ | 200 mV | $89.5 \%$ |
| HVG-65-42® | $42 \mathrm{~V}, 0 \sim 1.55 \mathrm{~A}$ | $\pm 1.0 \%$ | 300 mV | $89.5 \%$ |
| HVG-65-48® | $48 \mathrm{~V}, 0 \sim 1.36 \mathrm{~A}$ | $\pm 1.0 \%$ | 300 mV | $90.0 \%$ |
| HVG-65-54® | $54 \mathrm{~V}, 0 \sim 1.21 \mathrm{~A}$ | $\pm 1.0 \%$ | 300 mV | $90.0 \%$ |

## $=A, B$ or $D$

## HVG-100 Series



| Model No. | Output | Tol. | R\&N | Effi. |
| :---: | :--- | :---: | :---: | :---: |
| HVG-100-15®A | $15 \mathrm{~V}, 0 \sim 5 \mathrm{~A}$ | $\pm 2.0 \%$ | 150 mV | $89.0 \%$ |
| HVG-100-20 A | $20 \mathrm{~V}, 0 \sim 4.8 \mathrm{~A}$ | $\pm 1.0 \%$ | 150 mV | $90.0 \%$ |
| HVG-100-24(A | $24 \mathrm{~V}, 0 \sim 4 \mathrm{~A}$ | $\pm 1.0 \%$ | 150 mV | $91.0 \%$ |
| HVG-100-30 A | $30 \mathrm{~V}, 0 \sim 3.2 \mathrm{~A}$ | $\pm 1.0 \%$ | 200 mV | $91.0 \%$ |


| Model No. | Output | Tol. | R\&N | Effi. |
| :---: | :--- | :---: | :---: | :---: |
| HVG-100-36A | $36 \mathrm{~V}, 0 \sim 2.65 \mathrm{~A}$ | $\pm 1.0 \%$ | 200 mV | $90.5 \%$ |
| HVG-100-42(A) | $42 \mathrm{~V}, 0 \sim 2.28 \mathrm{~A}$ | $\pm 1.0 \%$ | 200 mV | $90.5 \%$ |
| HVG-100-48®A | $48 \mathrm{~V}, 0 \sim 2 \mathrm{~A}$ | $\pm 1.0 \%$ | 200 mV | $91.0 \%$ |
| HVG-100-54(A) | $54 \mathrm{~V}, 0 \sim 1.77 \mathrm{~A}$ | $\pm 1.0 \%$ | 200 mV | $91.0 \%$ |

$=A, B$ or $D$

## HVG-150 Series

| Model No. | Output | Tol. | R\&N | Effi. |
| :---: | :---: | :---: | :---: | :---: |
| HVG-150-12(A) | 12V, 0~10A | $\pm 2.5 \%$ | 150 mV | 87.0\% |
| HVG-150-15 (A) | 15V, 0~10A | $\pm 2.0 \%$ | 150 mV | 89.0\% |
| HVG-150-20 (A) | 20V, 0~7.5A | $\pm 1.0 \%$ | 150 mV | 90.5\% |
| HVG-150-24 (A) | 24V, 0~6.25A | $\pm 1.0 \%$ | 150 mV | 91.0\% |
| HVG-150-30 (A) | $30 \mathrm{~V}, 0 \sim 5 \mathrm{~A}$ | $\pm 1.0 \%$ | 200 mV | 91.0\% |
| HVG-150-36 (A) | $36 \mathrm{~V}, 0 \sim 4.17 \mathrm{~A}$ | $\pm 1.0 \%$ | 200 mV | 91.0\% |
| HVG-150-42 (A) | $42 \mathrm{~V}, 0 \sim 3.58 \mathrm{~A}$ | $\pm 1.0 \%$ | 200 mV | 91.0\% |
| HVG-150-48 (A) | $48 \mathrm{~V}, 0 \sim 3.13 \mathrm{~A}$ | $\pm 1.0 \%$ | 200 mV | 91.5\% |
| HVG-150-54 (A) | $54 \mathrm{~V}, 0 \sim 2.78 \mathrm{~A}$ | $\pm 1.0 \%$ | 200 mV | 91.5\% |

## HVGe

## - Features

- Constant voltage+constant current modes
- 180~528VAC wide input range
- High efficiency up to $94 \%$
- Type HL LED Driver for use in Class I, Division 2 hazardous location luminaires
- Suitable for dry, damp, and wet location
- Suitable for LED lighting and street lighting applications
- Protections: Short circuit / Over current / Over voltage / Over temperature

Multiple models for choice:
A-Type: IP65 rated. Output voltage and constant current level can be adjusted through internal potentiometer
B-Type: IP67 rated and built-in 3 in 1 dimming function (0~1 0VDC, PWM signal, or resistance)
D2-Type (option): IP67 rated. Smart timer dimming function*, contact MEAN WELL for details
5 years warranty


| AC input voltage range |  |  | 180~528VAC ; 254~747VDC |  |
| :---: | :---: | :---: | :---: | :---: |
| AC inrush current (max.) |  |  | Cold start 50A at 480VAC |  |
| DC adjustment range |  |  | $\pm 7 \%$ rated output voltage (A-Type only) | $-10 \% \sim+8 \%$ rated output voltage (A-Type only) |
| Current adjustment range |  |  | 50\%~100\% via potentiometer (A-Type only) |  |
| Over current protection |  |  | 95\%~108\% constant current limiting, auto-recovery |  |
| Over voltage protection |  |  | $110 \% \sim 140 \%$ shut down o/p voltage, re-power on to recover |  |
| Over temperature protection |  |  | Shut down and latch off o/p voltage, re-power on to recover |  |
| Setup, rise, hold up time |  |  | $500 \mathrm{~ms}, 150 \mathrm{~ms}, 12 \mathrm{~ms}$ at full load and $347 \mathrm{VAC} / 480 \mathrm{VAC}$ | $500 \mathrm{~ms}, 80 \mathrm{~ms}, 15 \mathrm{~ms}$ at full load and $347 \mathrm{VAC} / 480 \mathrm{VAC}$ |
| Withstand voltage |  |  | I/P-O/P: 3.75KVAC, I/P-FG:2KVAC, O/P-FG:1.5KVAC |  |
| Working temperature |  |  | $-40 \sim+70^{\circ} \mathrm{C}$ (refer to output derating curve) |  |
| Safety standards |  |  | UL8750 approved |  |
| EMC standards |  |  | FCC Part 15 subpart B, EN61000-4-2,3,4,5,6,8,11, EN61547 |  |
| Connection | Input |  | UL rated, STW 18 AWGx3C ( 30 cm ) |  |
|  | Output | A-Type | SJTW 14AWGx2C ( 30 cm ) |  |
|  |  | B\&D2-Type | SJTW 14AWGx2C (30cm) + UL251722AWGx2C (30cm) |  |
| Dimension (LxWxH)(mm) |  |  | $254.2 \times 68 \times 38.8$ | 262x 90x 43.8 |


| HVG-240 Series |  |  | (PC) | FC |
| :---: | :---: | :---: | :---: | :---: |
| Model No. | Output | Tol. | R\&N | Effi. |
| HVG-240-24 (A) | 24V, 0~10A | $\pm 1 \%$ | 150 mV | 92.5\% |
| HVG-240-30(A) | $30 \mathrm{~V}, 0 \sim 8 \mathrm{~A}$ | $\pm 1 \%$ | 200 mV | 92.5\% |
| HVG-240-36 (A) | 36V, 0~6.7A | $\pm 1 \%$ | 250 mV | 93\% |
| HVG-240-42 (A) | 42V, 0~5.7A | $\pm 1 \%$ | 250 mV | 93\% |
| HVG-240-48(A) | $48 \mathrm{~V}, 0 \sim 5 \mathrm{~A}$ | $\pm 1 \%$ | 250 mV | 92.5\% |
| HVG-240-54 (A) | $54 \mathrm{~V}, 0 \sim 4.5 \mathrm{~A}$ | $\pm 1 \%$ | 350 mV | 93\% |

$=A, B$ or D2

| HVG-320 Series |  | \% | (PC) c $\sim_{\text {us }} \mathrm{FC}$ |  |
| :---: | :---: | :---: | :---: | :---: |
| Model No. | Output | Tol. | R\&N | Effi. |
| HVG-320-24 (A) | 24V, 0~13.4A | $\pm 1 \%$ | 150 mV | 92.5\% |
| HVG-320-30 A | 30V, 0~10.7A | $\pm 1 \%$ | 200 mV | 93\% |
| HVG-320-36 (A) | $36 \mathrm{~V}, 0 \sim 8.9 \mathrm{~A}$ | $\pm 1 \%$ | 250 mV | 93.5\% |
| HVG-320-42 (A) | 42V, 0~7.6A | $\pm 1 \%$ | 250 mV | 93.5\% |
| HVG-320-48® | 48V, 0~6.7A | $\pm 1 \%$ | 250 mV | 94\% |
| HVG-320-54® | 54V, 0~6A | $\pm 1 \%$ | 350 mV | 94\% |

$O=A, B$ or D2
*MEAN WELL Smart timer dimming primarily provides the adaptive proportion dimming profile for the output constant current level.

## - Features

- Constant current mode
- 180~528VAC wide input range
- High efficiency up to $91 \%$
- Type HL LED Driver for use in Class I, Division 2 hazardous location luminaires (HVGC-150)
- Suitable for dry, damp, and wet location
- Suitable for LED lighting and street lighting applications
- Protections: Short circuit / Over voltage / Over temperature
- Multiple models for choice:

A-Type: IP65 rated. Constant current level can be adjusted through internal potentiometer
B-Type: IP67 rated and built-in 3 in 1 dimming function (0~10VDC, PWM signal, or resistance)
D-Type (option): IP67 rated. Timer dimming function, contact MEAN WELL for details
5 years warranty

|  |  |  | HVGC-65 | HVGC-100 | HVGC-150 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| AC input voltage range |  |  | 180~528VAC (single phase); 254~747VDC |  |  |
| AC inrush current (max.) |  |  | Cold start, 25A at 480VAC |  | Cold start, 35A at 480VAC |
| Current adjustment range |  |  | 60\% $100 \%$ via potentiometer (A-Type only) |  |  |
| Over voltage protection |  |  | 105\%~115\% rated output voltage |  |  |
| Setup time |  |  | 400 ms at $347 \mathrm{VAC} / 480 \mathrm{VAC}$ | 500ms at 347VAC/480VAC | 400 ms at $347 \mathrm{VAC} / 480 \mathrm{VAC}$ |
| Withstand voltage |  |  | I/P-O/P: $3.75 \mathrm{kVAC}, \mathrm{I}$ /P-FG: $2 \mathrm{kVAC}, \mathrm{O} / \mathrm{P}-\mathrm{FG}: 1.5 \mathrm{kVAC}$ |  |  |
| Working temperature |  |  | $-40 \sim+70^{\circ} \mathrm{C}$ (refer to output derating curve) |  |  |
| Safety standards |  |  | HVGC-65: UL8750, ENEC EN61347-1, EN61347-2-13, EN62384 approved HVGC-100/150: UL8750, TUV EN61347-1, EN61347-2-13 approved |  |  |
| EMC standards |  |  | EN55015, EN61000-3-2 class C, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547, FCC part 15 subpart B |  |  |
| Connection | Input |  | UL rated, STW 18AWGx3C ( $30 \mathrm{~cm} \mathrm{)}$ |  |  |
|  |  | A\&D Type | SJTW 18AWGx2C ( 30 cm ) |  | STW 18AWGx2C (30cm) |
|  |  | BType | SJTW 18AWGx2C ( 30 cm )+UL251718AWGx2C ( 30 cm ) |  | STW 18AWGx2C ( 30 cm )+ UL2517 18AWGx2C (30cm) |
| Dimension (LxWxH)(mm) |  |  | $189 \times 61.5 \times 36.8$ | $236 \times 68 \times 38.8$ | $245 \times 68 \times 38.8$ |


| HVGC-65 Series |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Model No. | Output | Io Tol. | R\&N | Effi. |
| HVGC-65-350 A | 18~186V, 350mA | $\pm 5 \%$ | 1.0V | 90.0\% |
| HVGC-65-500 A | $13 \sim 130 \mathrm{~V}, 500 \mathrm{~mA}$ | $\pm 5 \%$ | 0.7 V | 90.5\% |
| HVGC-65-700 (A) | 9~93V, 700 mA | $\pm 5 \%$ | 0.5 V | 90.5\% |
| HVGC-65-1050(A) | $6 \sim 62 \mathrm{~V}, 1050 \mathrm{~mA}$ | $\pm 5 \%$ | 0.3V | 90.0\% |

$D=A, B$ or $D$
HVGC-100 Series


| Model No. | Output | Io Tol. | R\&N | Effi. |
| :---: | :---: | :---: | :---: | :---: |
| HVGC-100-350®A | $29 \sim 285 \mathrm{~V}, 350 \mathrm{~mA}$ | $\pm 5 \%$ | 1 V | $91 \%$ |
| HVGC-100-700®A | $15 \sim 142 \mathrm{~V}, 700 \mathrm{~mA}$ | $\pm 5 \%$ | 0.5 V | $91 \%$ |

HVGC-1 50 Series

| Model No. | Output | Io Tol. | R\&N | Effi. |
| :---: | :---: | :---: | :---: | :---: |
| HVGC-150-350®A | $42 \sim 428 \mathrm{~V}, 350 \mathrm{~mA}$ | $\pm 5 \%$ | 2.0 V | $91 \%$ |
| HVGC-150-500®A | $30 \sim 300 \mathrm{~V}, 500 \mathrm{~mA}$ | $\pm 5 \%$ | 1.5 V | $91 \%$ |
| HVGC-150-700®A | $21 \sim 215 \mathrm{~V}, 700 \mathrm{~mA}$ | $\pm 5 \%$ | 1.0 V | $91 \%$ |
| HVGC-150-1050®A | $15 \sim 143 \mathrm{~V}, 1050 \mathrm{~mA}$ | $\pm 5 \%$ | 0.7 V | $90 \%$ |
| HVGC-150-1400®A | $12 \sim 107 \mathrm{~V}, 1400 \mathrm{~mA}$ | $\pm 5 \%$ | 0.5 V | $90 \%$ |

[^0]
## HVGC

## - Features

- Constant current mode
- 180~528VAC wide input range
- High efficiency up to $93.5 \%$
- Type HL LED Driver for use in Class I, Division 2 hazardous location luminaires
- Suitable for dry, damp, and wet location
- Suitable for LED lighting and street lighting applications
- Protections: Short circuit / Over voltage / Over temperature

Multiple models for choice:
A-Type: IP65 rated. Constant current level can be adjusted through internal potentiometer
B-Type: IP67 rated and built-in 3 in 1 dimming function (0~1 0VDC, PWM signal, or resistance)
D2-Type (option): IP67 rated. Smart timer dimming function*, contact MEAN WELL for details
5 years warranty


| AC input voltage range |  |  | 180~528VAC ; 254~747VDC |  |
| :---: | :---: | :---: | :---: | :---: |
| AC inrush current (max.) |  |  | Cold start, 50A at 480VAC |  |
| Current adjustment range |  |  | 50\%~100\% via potentiometer (A-Type only) |  |
| Over voltage protection |  |  | 105\%~110\% shut down o/p voltage, re-power on to recover |  |
| Setup time |  |  | 500 ms at $347 \mathrm{VAC} / 480 \mathrm{VAC}$ |  |
| Withstand voltage |  |  | I/P-O/P:3.75KVAC, I/P-FG:2KVAC, O/P-FG:1.5KVAC |  |
| Working temperature |  |  | $-40 \sim+70^{\circ} \mathrm{C}$ (refer to output derating curve) |  |
| Safety standards |  |  | UL8750 approved |  |
| EMC standards |  |  | FCC Part 15 subpart B, EN61000-4-2,3,4,5,6,8,11, EN61547 |  |
| Connection | Input |  | UL rated, STW 18 AWGx3C (30cm) |  |
|  |  | AType | STW 18AWGx2C (30cm) |  |
|  |  | B\&D2- <br> Type | STW 18AWGx2C (30cm)+UL251722AWGx2C (30cm) |  |
| Dimension (LxWxH)(mm) |  |  | $254.2 \times 68 \times 38.8$ | 262 |


|  |  |  |  |  | HVGC-320 Series |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model No. | Output | Io Tol. | R\&N | Effi. | Model No. | Output | Io Tol. | R\&N | Effi. |
| HVGC-240-700(A) | $171.4 \sim 342.8 \mathrm{~V}, 700 \mathrm{~mA}$ | $\pm 5 \%$ | 2V | 93.5\% | HVGC-320-700®A | $214 \sim 428 \mathrm{~V}, 700 \mathrm{~mA}$ | $\pm 5 \%$ | 2V | 93.5\% |
| HVGC-240-1050® | $114.3 \sim 228.6 \mathrm{~V}, 1050 \mathrm{~mA}$ | $\pm 5 \%$ | 1.5 V | 93\% | HVGC-320-1050(A) | 152.4~304.8V,1050mA | $\pm 5 \%$ | 1.5V | 93.5\% |
| HVGC-240-1400® | 85.7~171.4V, 1400mA | $\pm 5 \%$ | IV | 93\% | HVGC-320-1400(A) | $114.3 \sim 228.6 \mathrm{~V}, 1400 \mathrm{~mA}$ | $\pm 5 \%$ | 1V | 93.5\% |
| HVGC-240-1750® | 68.5~137.1V, 1750 mA | $\pm 5 \%$ | 1V | 93\% | HVGC-320-1750(A) | $91.4 \sim 182.8 \mathrm{~V}, 1750 \mathrm{~mA}$ | $\pm 5 \%$ | IV | 93.5\% |
| HVGC-240-2100(A) | 57.2~114.3V, 2100 mA | $\pm 5 \%$ | IV | 92.5\% | HVGC-320-2100(A) | $76.2 \sim 152.4 \mathrm{~V}, 2100 \mathrm{~mA}$ | $\pm 5 \%$ | IV | 93.5\% |
| HVGC-240-2800(A) | 42.9~85.7V, 2800 mA | $\pm 5 \%$ | 1V | 92.5\% | HVGC-320-2800(A) | 57~114.3V,2800mA | $\pm 5 \%$ | IV | 93.5\% |
| HVGC-240-3500(A) | $34.3 \sim 68.6 \mathrm{~V}, 3500 \mathrm{~mA}$ | $\pm 5 \%$ | IV | 92.5\% | HVGC-320-3500 (A) | 45.7~91.4V, 3500 mA | $\pm 5 \%$ | IV | 93\% |

[^1]
[^0]:    $D=A, B$ or $D$

[^1]:    $O=A, B$ or D2
    $O=A, B$ or D2
    *MEAN WELL Smart timer dimming primarily provides the adaptive proportion dimming profile for the output constant current level.

