



■ Features :

- Constant current design
- Wide input range 180~528VAC
- Built-in active PFC function
- High efficiency up to 90.5%
- Protections: Short circuit / Over voltage / Over temperature
- Cooling by free air convection
- OCP point adjustable through output cable or internal potentiometer
- IP67 / IP65 design for indoor or outdoor installations
- Three in one dimming function (0~10Vdc or 10V PWM signal or resistance)
- Suitable for LED lighting and street lighting applications
- Compliance to worldwide safety regulations for lighting
- Suitable for dry / damp / wet locations
- 5 years warranty (Note.7)



HVGC-65-350 **A** A : IP65 rated. Constant current level can be adjusted through internal potentiometer.
 B : IP67 rated. Constant current level adjustable through output cable with 0~10Vdc or 10V PWM signal or resistance.
 D (option) : IP67 rated. Timer dimming function, contact MEAN WELL for details.

SPECIFICATION

MODEL	HVGC-65-350	HVGC-65-500	HVGC-65-700	HVGC-65-1050
OUTPUT	RATED CURRENT	350mA	500mA	700mA
	CURRENT ACCURACY	± 5.0%		
	OUTPUT VOLTAGE RANGE Note.4	18 ~ 186V	13 ~ 130V	9 ~ 93V
	RATED POWER	65.1W	65W	65.1W
	RIPPLE & NOISE (max.) Note.2	1Vp-p	0.7Vp-p	0.5Vp-p
	CURRENT ADJ. RANGE	Can be adjusted by internal potentiometer A type only		
		210 ~ 350mA	300 ~ 500mA	420 ~ 700mA
INPUT	SETUP, RISE TIME	500ms, 80ms / 230VAC 400ms, 80ms / 347VAC / 480VAC at full load		
		B type 500ms, 80ms / 230VAC 500ms, 80ms / 347VAC / 480VAC at 95% load		
	HOLD UP TIME (Typ.)	16ms / 347VAC	30ms / 480VAC at full load	
	VOLTAGE RANGE Note.3	180 ~ 528VAC	254VDC ~ 747VDC	
	FREQUENCY RANGE	47 ~ 63Hz		
	POWER FACTOR (Typ.)	PF ≥ 0.98/230VAC, PF ≥ 0.97/277VAC, PF ≥ 0.95/347VAC, PF ≥ 0.93/480VAC at full load (Please refer to "Power Factor Characteristic" curve)		
	TOTAL HARMONIC DISTORTION	Total harmonic distortion will be lower than 20% when output loading is 60% or higher at 230VAC / 277VAC / 347VAC		
PROTECTION		Total harmonic distortion will be lower than 20% when output loading is 75% or higher at 480VAC		
	EFFICIENCY (Typ.)	90%	90.5%	90.5%
	AC CURRENT (Typ.)	0.22A / 347VAC	0.18A / 480VAC	
	INRUSH CURRENT (Typ.)	COLD START 25A(t _{width} =420μs measured at 50% I _{peak}) at 480VAC		
	LEAKAGE CURRENT	<0.75mA / 480VAC		
	SHORT CIRCUIT	Constant current limiting, recovers automatically after fault condition is removed		
	OVER VOLTAGE	195 ~ 210V	137 ~ 150V	98 ~ 107V
ENVIRONMENT		Protection type : Shut down o/p voltage with auto-recovery or re-power on to recovery		
	OVER TEMPERATURE	Shut down o/p voltage, recovers automatically after temperature goes down		
	WORKING TEMP.	-40 ~ +70°C (Refer to "Derating Curve")		
	WORKING HUMIDITY	20 ~ 95% RH non-condensing		
	STORAGE TEMP., HUMIDITY	-40 ~ +80°C, 10 ~ 95% RH		
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 60°C)		
	VIBRATION	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes		
SAFETY & EMC	SAFETY STANDARDS Note.5	UL8750, CSA C22.2 No. 250.0-13, ENEC EN61347-1, EN61347-2-13, EN62384, independent, IP65 or IP67 approved		
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC		
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH		
	EMC EMISSION	Compliance to EN55015, EN61000-3-2 Class C (≥60% load) ; EN61000-3-3, FCC part 15 class B		
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN61547, light industry level (surge 4KV), criteria A		
OTHERS	MTBF	202.7K hrs min. MIL-HDBK-217F (25°C)		
	DIMENSION	189*61.5*36.8mm (L*W*H)		
	PACKING	0.77Kg; 18pcs/14.9Kg/0.89CUFT		

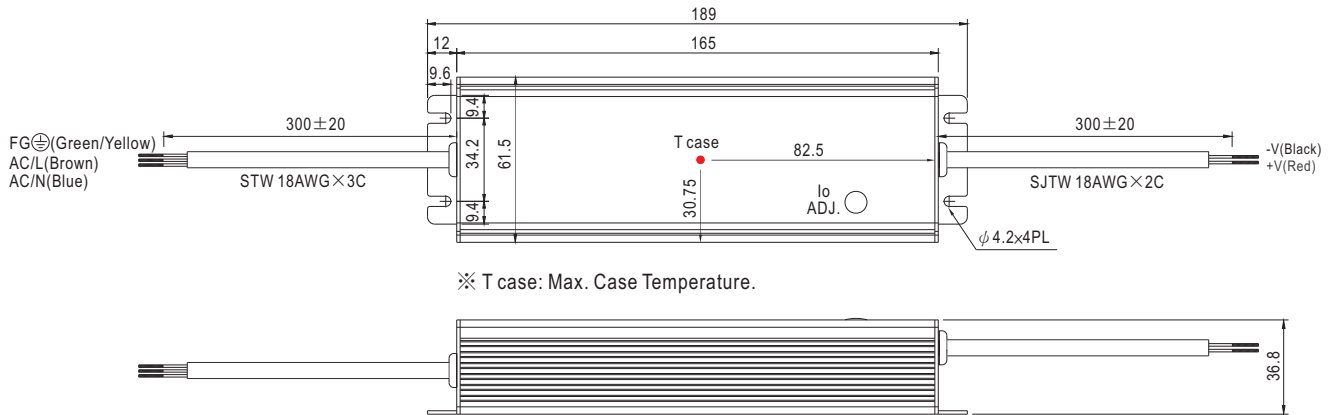
NOTE

1. All parameters NOT specially mentioned are measured at 347VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 2.2uF parallel capacitor.
3. Derating may be needed under low input voltages. Please check the static characteristics for more details.
4. Please refer to "DRIVING METHODS OF LED MODULE".
5. Safety and EMC design refer to EN60598-1, CNS15233, GB7000.1.
6. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on <http://www.meanwell.com>)
7. Refer to warranty statement.
8. To fulfill requirements of the latest ErP regulation for lighting fixtures, this LED power supply can only be used behind a switch without permanently connected to the mains.

Case No.957 Unit:mm

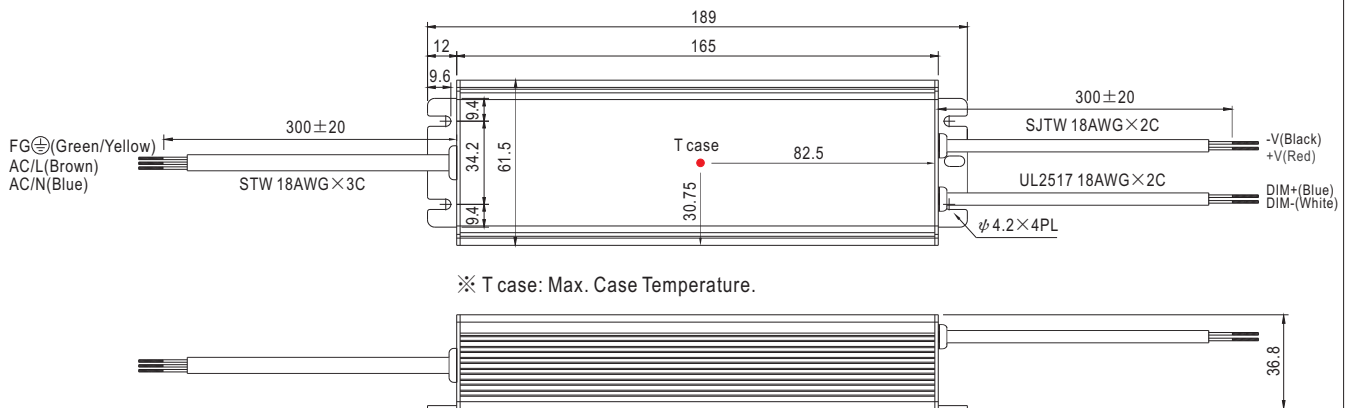
Mechanical Specification

A Type:(HVGC-65-_A)

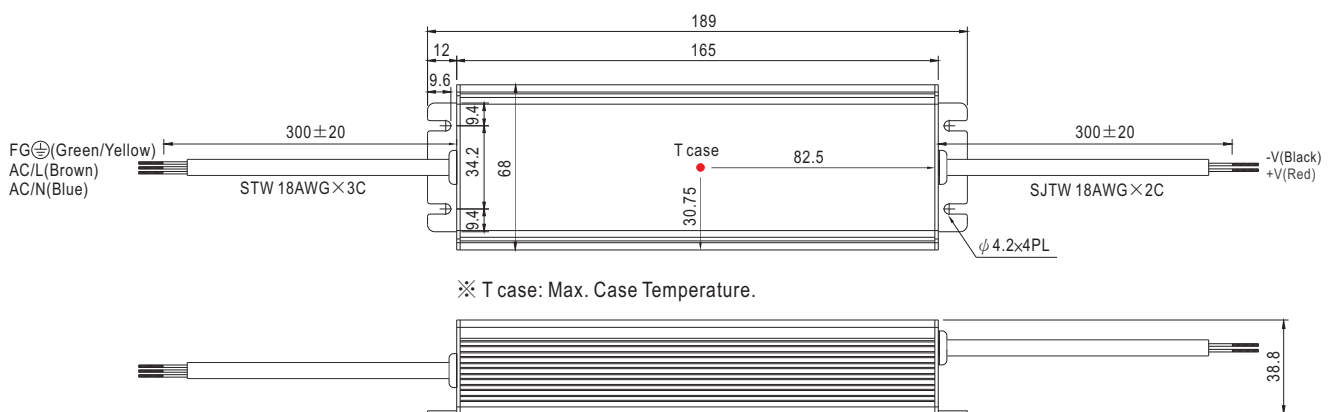


※ IP65 rated. Output voltage and constant current level can be adjusted through internal potentiometer.
(Can access by removing the rubber stopper on the case.)

B Type:(HVGC-65-_B)

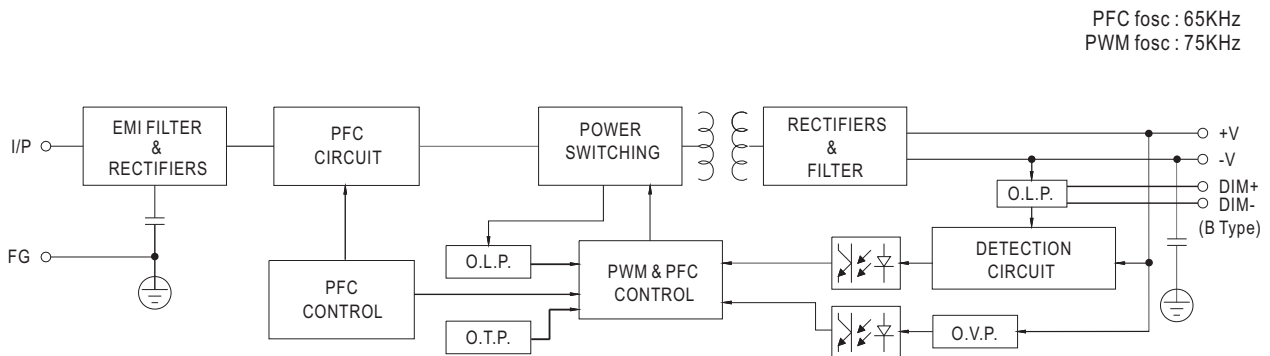


D Type(option):(HVGC-65-_D)

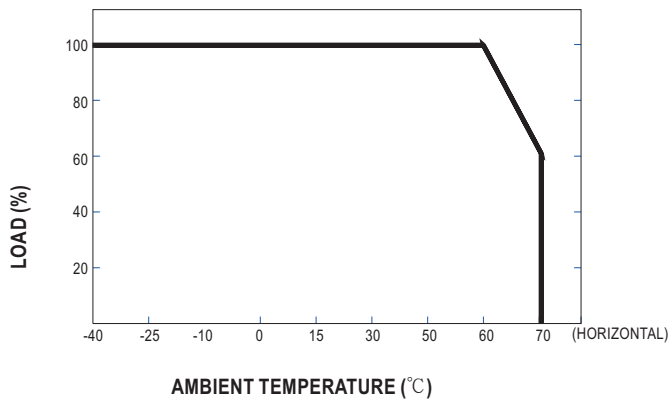


※ IP67 rated. Timer dimming function, contact MEAN WELL for details.

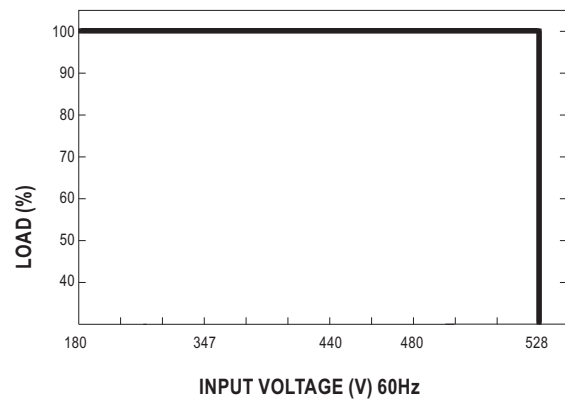
Block Diagram



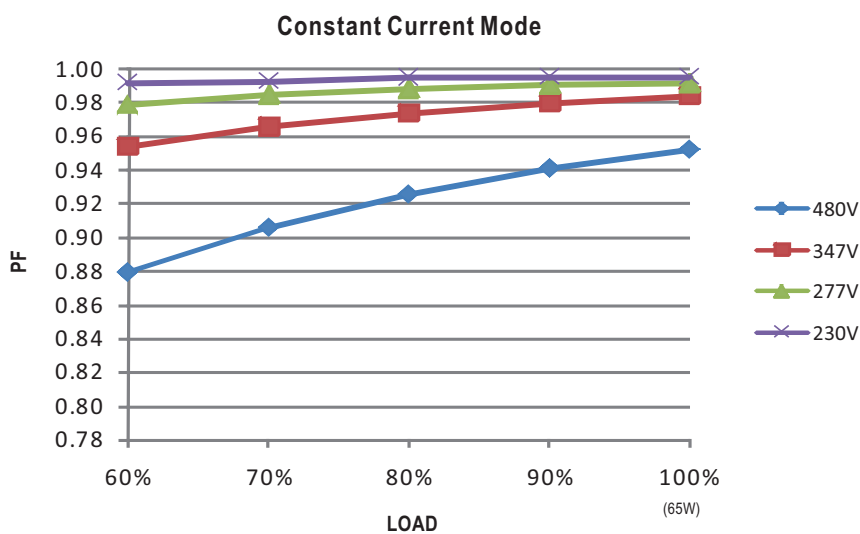
Derating Curve



Static Characteristics

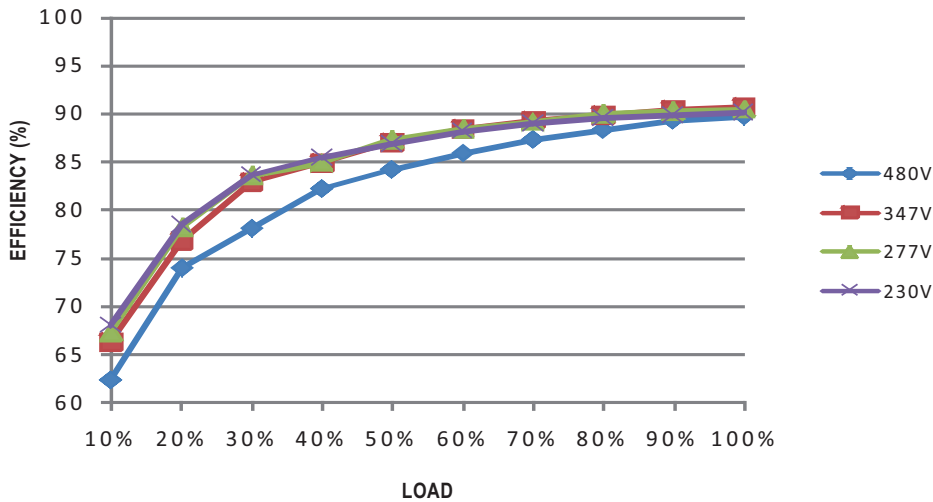


Power Factor Characteristic



■ EFFICIENCY vs LOAD (HVGC-65-700 Model)

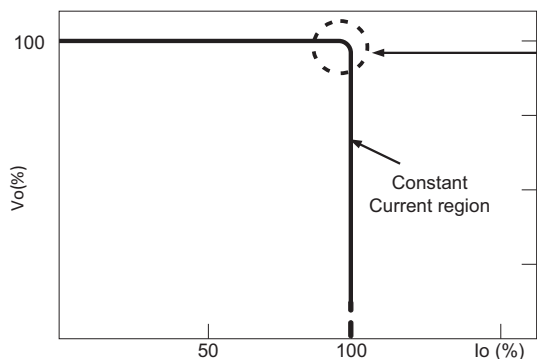
HVGC-65 series possess superior working efficiency that up to 90.5% can be reached in field applications.



■ DRIVING METHODS OF LED MODULE

A typical LED power supply may work in "constant current mode (CC)" to drive the LEDs.

Mean Well's LED power supply with CC characteristic can be operated at CC mode (direct drive, at area).



Typical LED power supply I-V curve

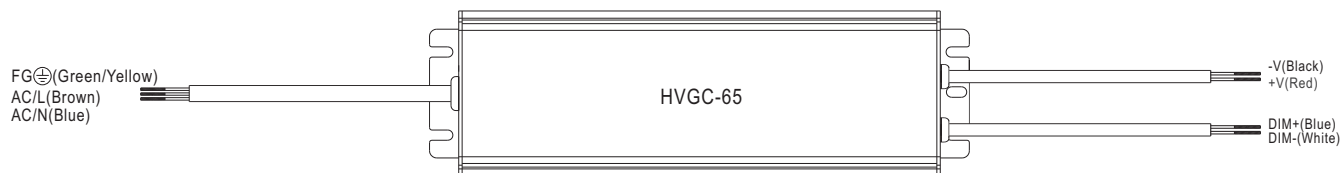
In the constant current region, the highest voltage at the output of the driver depends on the configuration of the end systems.

Should there be any compatibility issues, please contact MEAN WELL.

Original :Constant Current area

Original :Solid line

DIMMING OPERATION (for B-type only)



※ Built-in 3 in 1 dimming function, IP67 rated. Output constant current level can be adjusted through output cable by connecting a resistance or 0 ~ 10Vdc or 10V PWM signal between DIM+ and DIM-.

※ Please DO NOT connect "DIM-" to "-V".

※ Reference resistance value for output current adjustment (Typical)

Resistance value	Single driver	Short	10K Ω	20K Ω	30K Ω	40K Ω	50K Ω	60K Ω	70K Ω	80K Ω	90K Ω	100K Ω	OPEN
	Multiple drivers (N=driver quantity for synchronized dimming operation)	Short	10K Ω /N	20K Ω /N	30K Ω /N	40K Ω /N	50K Ω /N	60K Ω /N	70K Ω /N	80K Ω /N	90K Ω /N	100K Ω /N	-----
Percentage of rated current		0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95%~108%

※ 0 ~ 10V dimming function for output current adjustment (Typical)

Dimming value	0V	1V	2V	3V	4V	5V	6V	7V	8V	9V	10V	OPEN
Percentage of rated current	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95%~108%

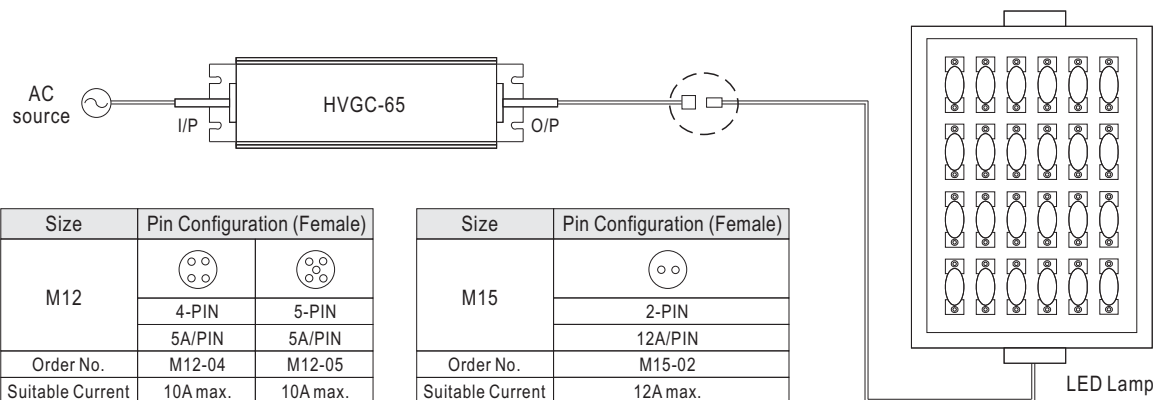
※ 10V PWM signal for output current adjustment (Typical): Frequency range :100Hz ~ 3KHz

Duty value	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	OPEN
Percentage of rated current	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95%~108%

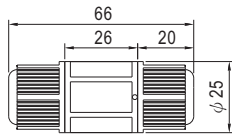
WATERPROOF CONNECTION

◎ Waterproof connector

Waterproof connector can be assembled on the output cable of HVGC-65 to operate in dry/wet/damp or outdoor environment.

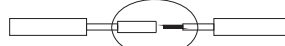


◎ Cable Joiner

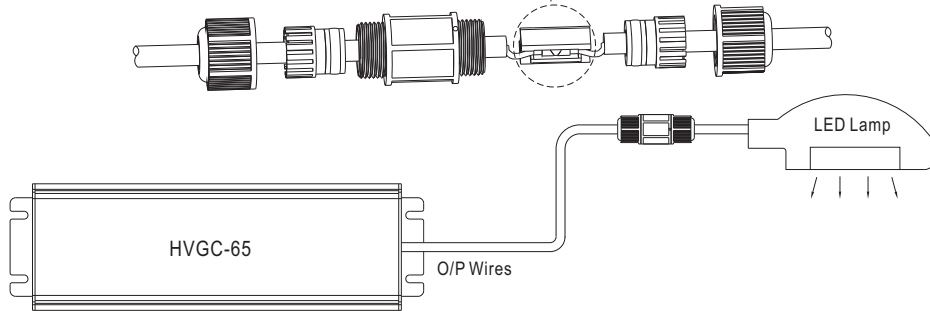


CJ04-1 suitable for 14AWG~16AWG

CJ04-2 suitable for 18AWG~22AWG



Up to four wires can be connected through this cable joiner by soldering or clamping by tools.



※CJ04 cable joiner can be purchased independently for user's own assembly.
MEAN WELL order No. : CJ04-1, CJ04-2.