

80W Long Lifetime LED Driver



■Features

- Constant voltage and current output
- Universal AC input 100~305VAC
- Built-in active PFC function
- High efficiency
- Output protections: Short circuit/Over voltage/Over load
- Fixed derating-cutoff type temperature protection
- Digital, analog or DALI control dimming function
- Suitable for inside of the outdoor LED luminaries
- IP65 with Vo/Io adjusting screws, IP67 without Vo/Io adjusting screws
- Class 2 power unit
- Compliance to worldwide safety regulations for lighting
- Suitable for dry/damp/wet locations
- Eight years warranty











FC 1P65/67 8







General functions

Output Power	80W	Input Frequency	50/60Hz
Input Voltage Range	100~305Vac	Operating Temperature	-40 ℃ ~+60 ℃
Storage Temperature	ature -45 ℃ ~+85 ℃ Safety & EMC		UL8750, UL1310 Class 2, IEC61347, EN55015
Turn-on Delay Time	3.0S max.	Inrush Current	40A at 230Vac, Cold start
Over Temp Protection	Fixed derating-cutoff type temperature protection	Waterproof	IP65/IP67



80W Long Lifetime LED Driver

■ Detailed Specification

TABLE 1:

	Model DH080-0575140X-YY DH080-048S160X-YY DH080-036S220X-YY DH080-024S330X-YY DH080-020S400X-Y							
	DC Voltage 54Vdc 48Vdc 36Vdc 24Vdc 20Vdc							
	Constant Current Operation Voltage note.5	33~54Vdc	29~48Vdc	22~36Vdc	15~24Vdc	12~20Vdc		
	Rated DC Current	1400mA	1600mA	2200mA	3300mA	4000mA		
	Current Range	0~1400mA	0~1600mA	0~2200mA	0~3300mA	0~4000mA		
	Dimming Current Range	10~100% rated output current (≥50% rated output voltage)						
Output	Ripple and Noise	200mVp-p	200mVp-p	200mVp-p	200mVp-p	150mVp-p		
	Voltage ADJ. Range note.3	49~57Vdc	43~50Vdc	32~38Vdc	22~25Vdc	18~21Vdc		
	Current ADJ. Range note.3	900~1400mA	960~1600mA	1320~2200mA	1980~3300mA	2400~4000mA		
	Voltage Tolerance	±1%	±1%	±1%	±1%	±1.5%		
	Voltage Line Regulation	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%		
	Voltage Load Regulation	±0.5%	±0.5%	±0.5%	±0.5%	±1%		
	Efficiency	91%	91%	91%	90.5%	90%		
	Power Factor	0.97/230Vac	0.97/230Vac	0.97/230Vac	0.97/230Vac	0.97/230Vac		
Input	AC Current	1.0A/100Vac, 0.5A/230Vac						
	Leakage Current	<0.75mA/230Vac; <0.5	mA/120Vac					
	Over Current	Constant current limiti	ng					
Output	Short Circuit	Non-dimmer type: recover automatically at hiccup; Dimmer type: Short-circuit power ≤10W.						
Protection	Over Voltage	Shut down at 140% Vo and latch off o/p voltage, re-power on to recover						
	Operating Humidity	20~95% RH, non-condensing						
	Storage Humidity	10~95% RH						
Environmental	Temperature Coefficient	±0.03%/ C (0~50 C)						
	Vibration	10~300Hz, 1G, Period for 60min, each along X、Y、Z axes.						
	Withstand Voltage	I/P-OP: 3.75KVac; IP-FG: 1.56KVac/2.00KVac (remove discharge tube); O/P-FG: 2.00KVac						
	Isolation Resistance	IP-OP, IP-FG, O/P-FG: 100M Ohms/500Vdc/25 °C /70% RH						
Safety & EMC	EMC Interference	Compliance to EN55015, EN55022 (CISPR22) Class B						
	EMC Emission	Compliance to EN61000-3-2 Class C (≥50%load); EN61000-3-3						
	EMC Immunity	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; ENV50204, EN61547, EN55024						
	Authentication	UL class 2/TUV/CE/FCC	:/RoHS/CQC					
	MTBF	374k Hrs at full load and 30 C ambient conditions per MIL-HDBK-217F						
	Input Over-voltage	Can survive input over-voltage stress of 320Vac for 48 hours						
Others	Dimensions (mm)	185×68×40						
	Max. Case Temp.	Tc max=80 ℃						
	Net Weight	0.89Kg/pcs						
	1. All parameters NOT specially mentioned are measured at 230Vac 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 0.1µf & 47µf parallel capacitor.							
Note	Output voltage and current can be adjusted by internal potentiometer ("A" type only).							
	4. Tolerance: includes set up tolerance, voltage line regulation and voltage load regulation.							
	5. Constant current operation region is within 60% ~100% rated output voltage. This is the suitable operation region for LED related applications, but please reconfirm special electrical requirements for some specific system design.							
	6. Derating may be needed under low input voltages. Please check the Static Characteristics for more details.							
	7. Safety and EMC design refer to EN60598-1, subject 8750 (UL), CNS15233, GB7000.1, FCC part18.							
	8. Length of set up time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time.							
	9. The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again.							
	10. Canada (output voltage: 42-60V) : suitable for class 2 wiring method.							



80W Long Lifetime LED Driver

TABLE 2:

	Model DH080-0165500X-YY DH080-0125500X-YY DH080-229S035X-YY DH080-114S070X-YY DH080-076S10							
	DC Voltage 16Vdc 12Vdc 229Vdc 114Vdc 76Vdc							
	Constant Current Operation Voltage note.5	10~16Vdc	8~12Vdc	138~229Vdc	69~114Vdc	46~76Vdc		
	Rated DC Current	5000mA	5000mA	350mA	700mA	1050mA		
	Current Range	0~5000mA	0~5000mA	0~350mA	0~700mA	0~1050mA		
	Dimming Current Range	10~100% rated output current (≥50% rated output voltage)						
Output	Ripple and Noise	150mVp-p	150mVp-p	2%Vo	2%Vo	2%Vo		
	Voltage ADJ. Range note.3	14~17Vdc	11~13Vdc	20~23Vdc	103~120Vdc	68~80Vdc		
	Current ADJ. Range note.3	3000~5000mA	3000~5000mA	210~350mA	420~700mA	630~1050mA		
	Voltage Tolerance	±1.5%	±1.5%	±1%	±1%	±1%		
	Voltage Line Regulation	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%		
	Voltage Load Regulation	±1%	±1%	±0.5%	±0.5%	±0.5%		
	Efficiency	90%	90%	93%	92%	92%		
	Power Factor	0.97/230Vac	0.97/230Vac	0.97/230Vac	0.97/230Vac	0.97/230Vac		
Input	AC Current	1.0A/100Vac, 0.5A/230	IVac					
	Leakage Current	<0.75mA/230Vac; <0.5	mA/120Vac					
	Over Current	Constant current limiti						
Output	Short Circuit Non-dimmer type: recover automatically at hiccup; Dimmer type: Short-circuit power ≤10W.							
Protection	Over Voltage							
	Over Voltage Shut down at 140% Vo and latch off o/p voltage, re-power on to recover Operating Humidity 20~95% RH, non-condensing							
	Storage Humidity 10~95% RH							
Environmental	Temperature Coefficient $\pm 0.03\%/\mathcal{C}$ (0~50 \mathcal{C})							
	Vibration 10~300Hz, 1G, Period for 60min, each along X、Y、Z axes.							
	Withstand Voltage	I/P-OP: 3.75KVac; IP-FG: 1.56KVac/2.00KVac (remove discharge tube); O/P-FG: 2.00KVac						
	Isolation Resistance							
Safety & EMC	EMC Interference	Compliance to EN55015, EN55022 (CISPR22) Class B						
	EMC Emission	Compliance to EN61000-3-2 Class C (≥50%load); EN61000-3-3						
	EMC Immunity							
	Authentication	UL class 2/TUV/CE/FCC/RoHS/CQC TUV/CE/RoHS						
	MTBF	374k Hrs at full load and 30 c ambient conditions per MIL-HDBK-217F						
	Input Over-voltage Can survive input over-voltage stress of 320Vac for 48 hours							
Others	Dimensions (mm)	185×68×40						
	Max. Case Temp.							
	Net Weight 0.89Kg/pcs							
	1. All parameters NOT specially mentioned are measured at 230Vac input, rated load and 25 °C of ambient temperature.							
Note	2. Ripple & noise are measured: at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1µf & 47µf parallel capacitor.							
	3. Output voltage and current can be adjusted by internal potentiometer ("A" type only).							
	4. Tolerance: includes set up tolerance, voltage line regulation and voltage load regulation.							
	5. Constant current operation region is within 60% ~100% rated output voltage. This is the suitable operation region for LED related applications, but please reconfirm special electrical requirements for some specific system design.							
	6. Derating may be needed under low input voltages. Please check the Static Characteristics for more details.							
	7. Safety and EMC design refer to EN60598-1, subject 8750 (UL), CNS15233, GB7000.1, FCC part18.							
	8. Length of set up time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time.							
	9. The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again.							
	10. Canada (output voltage: 42-60V) : suitable for class 2 wiring method.							



80W Long Lifetime LED Driver

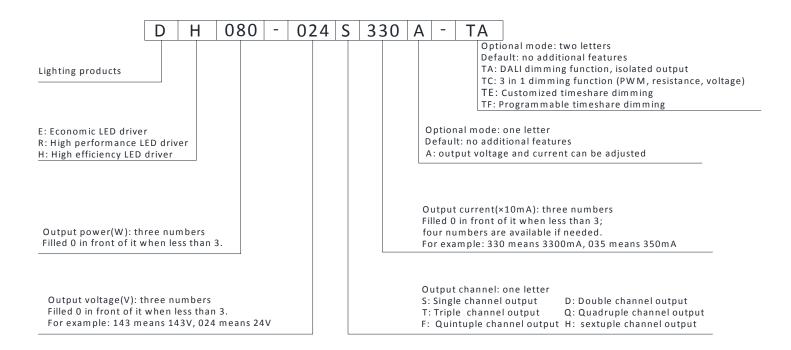
TABLE3:

Dc Voltage Constant Current Operation Voltage rises Rated Dc Current 1900mA 26-92 Vide Rated Dc Current 1900mA 26-00mA Current Range Dimming Current Range Dimming Current Range Rpple and Noise 200mVp-p 200mVp-p 10°-100% rated output current (250% rated output voltage) Rpple and Noise Voltage ADI, Range exes. 3 38-44 Vid. 277-32 Vid. Current ADI, Range exes. 3 38-44 Vid. 277-32 Vid. Current ADI, Range exes. 3 38-44 Vid. 277-32 Vid. Current ADI, Range exes. 3 38-44 Vid. 277-32 Vid. Current ADI, Range exes. 3 140°-1900mA 1560°-2600mA Voltage Load Regulation 10.5% 10.5% 10.5% Voltage Load Regulation 10.5% 10.5% 10.5% 10.5% 10.5% 10.5% 10.0% 10.		Model DH080-042S190X-YY DH080-030S260X-YY							
Constant Current Operation Voltage axxis Attacl DC Current Ange Output English and Nose Accurrent Assignment Output Accurrent Assignment Output English and Nose Accurrent Accurrent Assignment Accurrent Assignment Accurrent Assignment Accurrent Accurr		DC Voltage 42Vdc 30Vdc							
Rated DC Current 1900mA 2600mA		Constant Current Operation							
Output Protection Output Output Output Output Over Current Agnage Output Over Current Over Constant Current Limiting Short Circuit Non-dimmer type: recover automatically at hiccup; Dimmer type: Short-circuit power < 10W. Over Current Over Voltage Over		_	1900mA	2600mA					
Dimming Current Range 10°100% rated output current (≥50% rated output voltage)									
Rippice and Noise									
Voltage ADI. Range votes 3 38*44Vdc 27*32Vdc	Output		200mVp-p						
Current ADJ. Range rote:3 1140*1900mA 1560*2600mA		· · ·							
Voltage Line Regulation ±1% ±1% ±1%									
Voltage Line Regulation ±0.5% ±									
Moltage Load Regulation 10.5% 10		_							
Efficiency 91% 9									
Power Factor 0.97/230Vac		, ,							
AC Current 1.0A/100Vac, 0.5A/230Vac Leakage Current <0.75mA/230Vac; <0.5mA/120Vac Over Current Constant current limiting Short Circuit Non-dimmer type: recover automatically at hiccup; Dimmer type: Short-circuit power \$10W. Protection Operating Humidity 20°95% RH, non-condensing Storage Humidity 10°95% RH Temperature Coefficient ±0.038½ / 2 (0°50 °C) Vibration 10°300Hz, 1G, Period for 60min, each along X, Y, Z axes. Withstand Voltage 1/P-OP; 3.75KVac; IP-FG: 1.56KVac/2.00KVac (remove discharge tube); O/P-FG: 2.00KVac lisolation Resistance IP-OP, IP-FG, 0/P-FG: 1.00M Ohms/500Vdc/25 °C /70% RH EMC Emission Compliance to ENS5015, ENS5022 (CISPR22) Class B EMC Emission Compliance to EN61000-3-2 Class C (250%load); EN61000-3-3 EMC Immunity Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; ENV50204, EN61547, EN55024 Authentication TUV/CE/RoHS MTSF 374k Hrs at full load and 30 °C ambient conditions per MIL-HDBK-217F Input Over-voltage Can survive input over-voltage stress of 320Vac for 48 hours Dimensions (mm) 185×68×40 Max. Case Temp. Tc max=80 °C Net Weight 0.88Kg/pcs Net Weight 0.88Kg/pcs 1. All parameters NOT specially mentioned are measured at 230Vac 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 0.1µf & 47µf parallel capacitor. 3. Output voltage and current can be adjusted by internal potentiometer ("A" type only). 4. Tolerance: includes set up tolerance, voltage line regulation and voltage load regulation. 5. Constant current operation region is within 60% "100% rated output voltage. This is the suitable operation region for LED related application period pease reconfirm special electrical requirements for some specific system design.									
Leakage Current < <0.75mA/230Vac; <0.5mA/120Vac Output Protection	Input		<u>-</u>	· · · · · · · · · · · · · · · · · · ·					
Output Protection Over Current Short Circuit Non-dimmer type: recover automatically at hiccup; Dimmer type: Short-circuit power ≤10W. Over Voltage Shut down at 140% Vo and latch off o/p voltage, re-power on to recover Operating Humidity 20°95% RH, non-condensing Storage Humidity 10°95% RH Temperature Coefficient 10°300Hz, 1G, Period for 60min, each along X, Y, Z axes. Vibration 10°300Hz, 1G, Period for 60min, each along X, Y, Z axes. Vibration 10°300Hz, 1G, Period for 60min, each along X, Y, Z axes. Vibration 10°300Hz, 1G, Period for 60min, each along X, Y, Z axes. Vibration 10°300Hz, 1G, Period for 60min, each along X, Y, Z axes. Vibration 10°300Hz, 1G, Period for 60min, each along X, Y, Z axes. Vibration 10°300Hz, 1G, Period for 60min, each along X, Y, Z axes. Vibration 10°300Hz, 1G, Period for 60min, each along X, Y, Z axes. Vibration 10°300Hz, 1G, Period for 60min, each along X, Y, Z axes. Vibration 10°300Hz, 1G, Period for 60min, each along X, Y, Z axes. Vibration 10°300Hz, 1G, Period for 60min, each along X, Y, Z axes. Vibration 10°300Hz, 1G, Period for 60min, each along X, Y, Z axes. Vibration 10°300Hz, 1G, Period for 60min, each along X, Y, Z axes. Vibration 10°300Hz, 1G, Period for 60min, each along X, Y, Z axes. Vibration 10°300Hz, 1G, Period for 60min, each along X, Y, Z axes. Vibration 10°300Hz, 1G, Period for 60min, each along X, Y, Z axes. Vibration 10°300Hz, 1G, Period for 60min, each along X, Y, Z axes. Vibration 10°300Hz, 1G, Period for 60min, each along X, Y, Z axes. Vibration 10°300Hz, 1G, Period for 60min, each along X, Y, Z axes. Vibration 10°300Hz, 1G, Period for 60min, each along X, Y, Z axes. Vibration 10°300Hz, 1G, Period for 60min, each along X, Y, Z axes. Vibration 10°300Hz, 1G, Period for 60min, each along X, Y, Z axes. Vibration 10°300Hz, 1G, Period for 60min, each along X, Y, Z axes. Vibration 10°30Hz, 1G, Period for 60min, each along X, Y, Z axes. Vibration 10°30Hz, 1G, Period for 60min, each along X, Y, Z axes. Vibration									
Output Protection Short Circuit Non-dimmer type: recover automatically at hiccup; Dimmer type: Short-circuit power ≤10W. Over Voltage Shut down at 140% Vo and latch off o/p voltage, re-power on to recover Authority 20°95% RH, non-condensing Storage Humidity 10°95% RH Temperature Coefficient 40.03%/ ℂ (0°50 ℂ) Vibration 10°300Hz, 1G, Period for 60min, each along X. Y. Z axes. Withstand Voltage I/P-OP: 3.75KVac; IP-FG: 1.56KVac/Z.00KVac (remove discharge tube); O/P-FG: 2.00KVac Safety & EMC EMC Interference Compliance to EN55015, EN55022 (CISPR22) Class B EMC Interference Compliance to EN61000-3-2 Class C (≥50%load); EN61000-3-3 EMC Interference EMC Emission Compliance to EN61000-3-2, 3, 4, 5, 6, 8, 11; ENV50204, EN61547, EN55024 Tuber Safe Safe Safe Safe Safe Safe Safe Safe									
Protection Over Voltage Shut down at 140% Vo and latch off o/p voltage, re-power on to recover	Output								
Operating Humidity 20°95% RH, non-condensing Storage Humidity 10°95% RH Temperature Coefficient ±0.03%/ \$\frac{C}\$ (0°50 \$\frac{C}\$) Vibration 10°300Hz, 1G, Period for 60min, each along X. Y. Z axes. Withstand Voltage 1/P-OP: 3.75KVac; IP-FG: 1.56KVac/Z.00KVac (remove discharge tube); O/P-FG: 2.00KVac Isolation Resistance IP-OP, IP-FG, O/P-FG: 100M Ohms/500Vdc/25 \$\frac{C}\$/0% RH EMC Interference Compliance to EN55015, EN55022 (CISPR22) Class B EMC Emission Compliance to EN61000-3-2 Class C (250%load); EN61000-3-3 EMC Immunity Compliance to EN61000-4-Z, 3, 4, 5, 6, 8, 11; ENV50204, EN61547, EN55024 Authentication TUV/CE/RoHS MTBF 374k Hrs at full load and 30 \$\frac{C}{C}\$ ambient conditions per MIL-HDBK-217F Input Over-voltage Can survive input over-voltage stress of 320Vac for 48 hours Dimensions (mm) 185×68×40 Max. Case Temp. Tc max=80 \$\frac{C}{C}\$ Net Weight 0.88/kg/pcs 1. All parameters NOT specially mentioned are measured at 230Vac input, rated load and 25 \$\frac{C}{C}\$ of ambient temperature. 2. Ripple & noise are measured: at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1µf & 47µf parallel capacitor. 3. Output voltage and current can be adjusted by internal potentiometer ("A" type only). 4. Tolerance: includes set up tolerance, voltage line regulation and voltage load regulation. 5. Constant current operation region is within 60% ~100% rated output voltage. This is the suitable operation region for LED related application please reconfirm special electrical requirements for some specific system design.	Protection								
Storage Humidity 10°95% RH Temperature Coefficient ±0.03%/ C (0°50 C) Vibration 10°300Hz, 1G, Period for 60min, each along X. Y. Z axes. Withstand Voltage 1/P-OP: 3.75KVac; IP-FG: 1.56KVac/2.00KVac (remove discharge tube); O/P-FG: 2.00KVac Isolation Resistance IP-OP, IP-FG, 0/P-FG: 100M Ohms/500Vdc/25 °C /70% RH EMC Interference Compliance to EN55015, EN55022 (CISPR22) Class B EMC Emission Compliance to EN61000-3-2 Class C (250%load); EN61000-3-3 EMC Immunity Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; ENV50204, EN61547, EN55024 Authentication TUV/CE/RoHS MTBF 374k Hrs at full load and 30 °C ambient conditions per MIL-HDBK-217F Input Over-voltage Can survive input over-voltage stress of 320Vac for 48 hours Dimensions (mm) 185×68×40 Max. Case Temp. Tc max=80 °C Net Weight 0.89Kg/pcs 1. All parameters NOT specially mentioned are measured at 230Vac 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 0.1µf & 47µf parallel capacitor. 3. Output voltage and current can be adjusted by internal potentiometer ("A" type only). 4. Tolerance: includes set up tolerance, voltage line regulation and voltage load regulation. 5. Constant current operation region is within 60% ~100% rated output voltage. This is the suitable operation region for LED related application please reconfirm special electrical requirements for some specific system design.									
Environmental Temperature Coefficient ±0.03%/ C (0°50 C) Vibration 10°300Hz, 1G, Period for 60min, each along X. Y. Z axes. Withstand Voltage I/P-OP: 3.75KVac; IP-FG: 1.56KVac/Z.00KVac (remove discharge tube); O/P-FG: 2.00KVac Isolation Resistance IP-OP, IP-FG, O/P-FG: 100M Ohms/500Vdc/Z5 C /70% RH EMC Interference Compliance to ENS5015, ENS5022 (CISPR22) Class B EMC Emission Compliance to EN61000-3-2 Class C (250%load); EN61000-3-3 EMC Immunity Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; ENV50204, EN61547, EN55024 Authentication TUV/CE/RoHS MTBF 374k Hrs at full load and 30 C ambient conditions per MIL-HDBK-217F Input Over-voltage Can survive input over-voltage stress of 320Vac for 48 hours Dimensions (mm) 185×68×40 Max. Case Temp. Tc max=80 C Net Weight 0.89Kg/pcs 1. All parameters NOT specially mentioned are measured at 230Vac 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 0.1µf & 47µf parallel capacitor. 3. Output voltage and current can be adjusted by internal potentiometer ("A" type only). 4. Tolerance: includes set up tolerance, voltage line regulation and voltage load regulation. 5. Constant current operation region is within 60% ~100% rated output voltage. This is the suitable operation region for LED related application please reconfirm special electrical requirements for some specific system design.									
Vibration 10~300Hz, 1G, Period for 60min, each along X. Y. Z axes.	Environmental	-							
Withstand Voltage I/P-OP: 3.75KVac; IP-FG: 1.56KVac/2.00KVac (remove discharge tube); O/P-FG: 2.00KVac Isolation Resistance IP-OP, IP-FG, O/P-FG: 100M Ohms/500Vdc/25 °C /70% RH EMC Interference Compliance to EN55015, EN55022 (CISPR22) Class B EMC Emission Compliance to EN61000-3-2 Class C (>50%load); EN61000-3-3 EMC Immunity Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; ENV50204, EN61547, EN55024 Authentication TUV/CE/ROHS MTBF 374k Hrs at full load and 30 °C ambient conditions per MIL-HDBK-217F Input Over-voltage Can survive input over-voltage stress of 320Vac for 48 hours Dimensions (mm) 185×68×40 Max. Case Temp. Tc max=80 °C Net Weight 0.89Kg/pcs 1. All parameters NOT specially mentioned are measured at 230Vac 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 0.1µf & 47µf parallel capacitor. 3. Output voltage and current can be adjusted by internal potentiometer ("A" type only). 4. Tolerance: includes set up tolerance, voltage line regulation and voltage load regulation. 5. Constant current operation region is within 60% "100% rated output voltage. This is the suitable operation region for LED related application please reconfirm special electrical requirements for some specific system design.									
Isolation Resistance IP-OP, IP-FG, O/P-FG: 100M Ohms/500Vdc/25 °C /70% RH EMC Interference Compliance to EN55015, EN55022 (CISPR22) Class B EMC Emission Compliance to EN61000-3-2 Class C (≥50%load); EN61000-3-3 EMC Immunity Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; ENV50204, EN61547, EN55024 Authentication TUV/CE/RoHS MTBF 374k Hrs at full load and 30 °C ambient conditions per MIL-HDBK-217F Input Over-voltage Can survive input over-voltage stress of 320Vac for 48 hours Dimensions (mm) 185×68×40 Max. Case Temp. Tc max=80 °C Net Weight 0.89Kg/pcs 1. All parameters NOT specially mentioned are measured at 230Vac 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 0.1µf & 47µf parallel capacitor. 3. Output voltage and current can be adjusted by internal potentiometer ("A" type only). 4. Tolerance: includes set up tolerance, voltage line regulation and voltage load regulation. 5. Constant current operation region is within 60% ~100% rated output voltage. This is the suitable operation region for LED related application please reconfirm special electrical requirements for some specific system design.									
Safety & EMC Interference Compliance to EN55015, EN55022 (CISPR22) Class B EMC Emission Compliance to EN61000-3-2 Class C (≥50%load); EN61000-3-3 EMC Immunity Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; ENV50204, EN61547, EN55024 Authentication TUV/CE/RoHS MTBF 374k Hrs at full load and 30 € ambient conditions per MIL-HDBK-217F Input Over-voltage Can survive input over-voltage stress of 320Vac for 48 hours Dimensions (mm) 185×68×40 Max. Case Temp. Tc max=80 € Net Weight 0.89Kg/pcs 1. All parameters NOT specially mentioned are measured at 230Vac input, rated load and 25 € of ambient temperature. 2. Ripple & noise are measured: at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1µf & 47µf parallel capacitor. 3. Output voltage and current can be adjusted by internal potentiometer ("A" type only). 4. Tolerance: includes set up tolerance, voltage line regulation and voltage load regulation. 5. Constant current operation region is within 60% ~100% rated output voltage. This is the suitable operation region for LED related application please reconfirm special electrical requirements for some specific system design.									
EMC Emission Compliance to EN61000-3-2 Class C (≥50%load); EN61000-3-3 EMC Immunity Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; ENV50204, EN61547, EN55024 Authentication TUV/CE/RoHS MTBF 374k Hrs at full load and 30 ℃ ambient conditions per MIL-HDBK-217F Input Over-voltage Can survive input over-voltage stress of 320Vac for 48 hours Dimensions (mm) 185×68×40 Max. Case Temp. Tc max=80 ℃ Net Weight 0.89Kg/pcs 1. All parameters NOT specially mentioned are measured at 230Vac input, rated load and 25 ℃ of ambient temperature. 2. Ripple & noise are measured: at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1µf & 47µf parallel capacitor. 3. Output voltage and current can be adjusted by internal potentiometer ("A" type only). 4. Tolerance: includes set up tolerance, voltage line regulation and voltage load regulation. 5. Constant current operation region is within 60% ~100% rated output voltage. This is the suitable operation region for LED related application please reconfirm special electrical requirements for some specific system design.	Safety & EMC								
EMC Immunity Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; ENV50204, EN61547, EN55024 Authentication TUV/CE/RoHS MTBF 374k Hrs at full load and 30 ε ambient conditions per MIL-HDBK-217F Input Over-voltage Can survive input over-voltage stress of 320Vac for 48 hours Dimensions (mm) 185×68×40 Max. Case Temp. Tc max=80 ε Net Weight 0.89Kg/pcs 1. All parameters NOT specially mentioned are measured at 230Vac input, rated load and 25 ε of ambient temperature. 2. Ripple & noise are measured: at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1μf & 47μf parallel capacitor. 3. Output voltage and current can be adjusted by internal potentiometer ("A" type only). 4. Tolerance: includes set up tolerance, voltage line regulation and voltage load regulation. 5. Constant current operation region is within 60% ~100% rated output voltage. This is the suitable operation region for LED related application please reconfirm special electrical requirements for some specific system design.	,								
Authentication TUV/CE/RoHS MTBF 374k Hrs at full load and 30 °C ambient conditions per MIL-HDBK-217F Input Over-voltage Can survive input over-voltage stress of 320Vac for 48 hours Dimensions (mm) 185×68×40 Max. Case Temp. Tc max=80 °C Net Weight 0.89Kg/pcs 1. All parameters NOT specially mentioned are measured at 230Vac 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 0.1µf & 47µf parallel capacitor. 3. Output voltage and current can be adjusted by internal potentiometer ("A" type only). 4. Tolerance: includes set up tolerance, voltage line regulation and voltage load regulation. 5. Constant current operation region is within 60% ~100% rated output voltage. This is the suitable operation region for LED related application please reconfirm special electrical requirements for some specific system design.									
MTBF 374k Hrs at full load and 30 °C ambient conditions per MIL-HDBK-217F Input Over-voltage Can survive input over-voltage stress of 320Vac for 48 hours Dimensions (mm) 185×68×40 Max. Case Temp. Tc max=80 °C Net Weight 0.89Kg/pcs 1. All parameters NOT specially mentioned are measured at 230Vac 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 0.1µf & 47µf parallel capacitor. 3. Output voltage and current can be adjusted by internal potentiometer ("A" type only). 4. Tolerance: includes set up tolerance, voltage line regulation and voltage load regulation. 5. Constant current operation region is within 60% ~100% rated output voltage. This is the suitable operation region for LED related application please reconfirm special electrical requirements for some specific system design.		,							
Others Input Over-voltage									
Dimensions (mm) 185×68×40 Max. Case Temp. Tc max=80 c Net Weight 0.89Kg/pcs 1. All parameters NOT specially mentioned are measured at 230Vac 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 0.1μf & 47μf parallel capacitor. 3. Output voltage and current can be adjusted by internal potentiometer ("A" type only). 4. Tolerance: includes set up tolerance, voltage line regulation and voltage load regulation. 5. Constant current operation region is within 60% ~100% rated output voltage. This is the suitable operation region for LED related application please reconfirm special electrical requirements for some specific system design.		Input Over-voltage	·						
Net Weight 0.89Kg/pcs 1. All parameters NOT specially mentioned are measured at 230Vac 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 0.1μf & 47μf parallel capacitor. 3. Output voltage and current can be adjusted by internal potentiometer ("A" type only). 4. Tolerance: includes set up tolerance, voltage line regulation and voltage load regulation. 5. Constant current operation region is within 60% ~100% rated output voltage. This is the suitable operation region for LED related application please reconfirm special electrical requirements for some specific system design.	Others								
 All parameters NOT specially mentioned are measured at 230Vac input, rated load and 25 °C of ambient temperature. Ripple & noise are measured: at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1μf & 47μf parallel capacitor. Output voltage and current can be adjusted by internal potentiometer ("A" type only). Tolerance: includes set up tolerance, voltage line regulation and voltage load regulation. Constant current operation region is within 60% ~100% rated output voltage. This is the suitable operation region for LED related application please reconfirm special electrical requirements for some specific system design. 		Max. Case Temp.							
 All parameters NOT specially mentioned are measured at 230Vac input, rated load and 25 °C of ambient temperature. Ripple & noise are measured: at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1μf & 47μf parallel capacitor. Output voltage and current can be adjusted by internal potentiometer ("A" type only). Tolerance: includes set up tolerance, voltage line regulation and voltage load regulation. Constant current operation region is within 60% ~100% rated output voltage. This is the suitable operation region for LED related application please reconfirm special electrical requirements for some specific system design. 		·							
 Ripple & noise are measured: at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1μf & 47μf parallel capacitor. Output voltage and current can be adjusted by internal potentiometer ("A" type only). Tolerance: includes set up tolerance, voltage line regulation and voltage load regulation. Constant current operation region is within 60% ~100% rated output voltage. This is the suitable operation region for LED related application please reconfirm special electrical requirements for some specific system design. 									
4. Tolerance: includes set up tolerance, voltage line regulation and voltage load regulation. 5. Constant current operation region is within 60% ~100% rated output voltage. This is the suitable operation region for LED related application please reconfirm special electrical requirements for some specific system design.	Note								
4. Tolerance: includes set up tolerance, voltage line regulation and voltage load regulation. 5. Constant current operation region is within 60% ~100% rated output voltage. This is the suitable operation region for LED related application please reconfirm special electrical requirements for some specific system design.									
5. Constant current operation region is within 60% ~100% rated output voltage. This is the suitable operation region for LED related application please reconfirm special electrical requirements for some specific system design.									
Note		5. Constant current operation region is within 60% ~100% rated output voltage. This is the suitable operation region for LED related applications, but							
7. Safety and EMC design refer to EN60598-1, subject 8750 (UL), CNS15233, GB7000.1, FCC part18.									
8. Length of set up time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time.									
		9. The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected							
10. Canada (output voltage: 42-60V) : suitable for class 2 wiring method.									



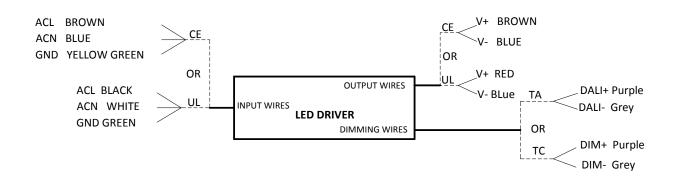
80W Long Lifetime LED Driver

■Part number code



For example: DH080-024S330A-TA means: high efficiency LED driver; output power 80W; output voltage 24Vdc; output current 3300mA; single output; output voltage and current can be adjusted; with DALI dimming function and isolated output.

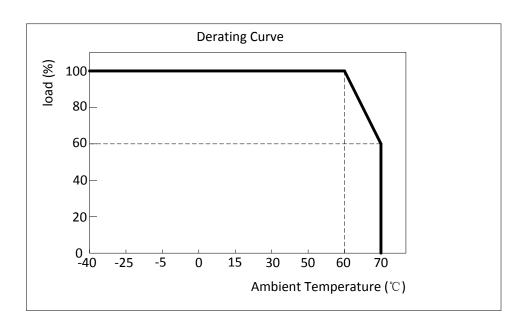
wiring diagram



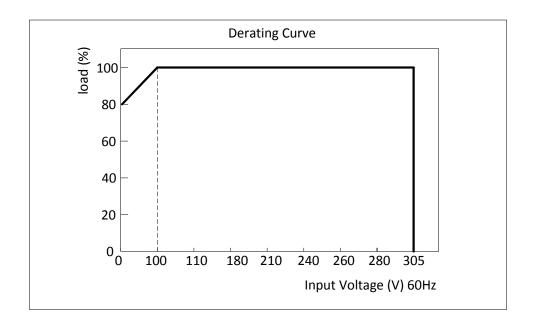


80W Long Lifetime LED Driver

■ Derating Curve



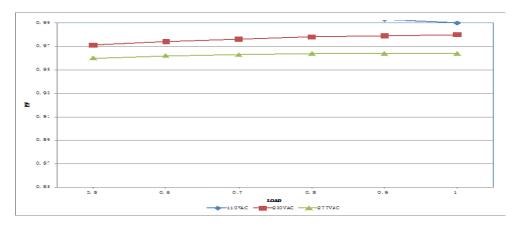
■Static Characteristics



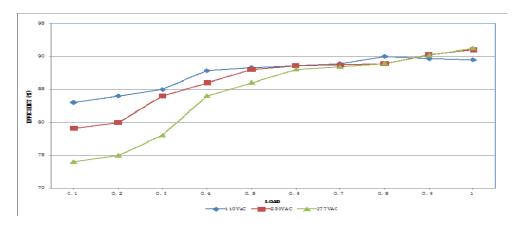


80W Long Lifetime LED Driver

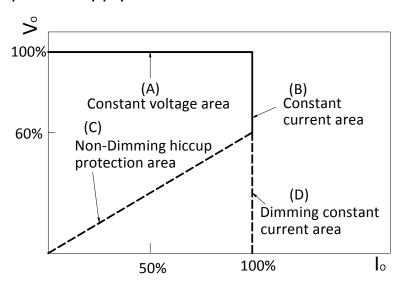
Power Factor Characteristic (DH080-036S220)



■EFFICIENCY vs LOAD (DH080-036S220)



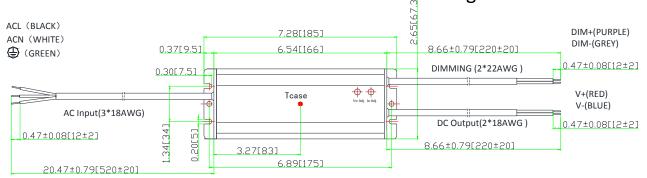
■Typical LED power supply I-V curve



■ Mechanical Outline



80W Long Lifetinhe เยชาตาเงคา





XTcase: Max. Case Temperature

 $\frak{\#}$ Power's internal temperature is 10 $\frak{\%}$ warmer than case temperature.

*No dimming control wire if without dimming function.

■"A" option

- a. Output voltage and current can be adjusted by internal potentiometer.
- b. IP65
- c. These products shall be enclosed in the end product, when the unit provided with voltage and current adjustable holes.

■"-TA" option: DALI dimming

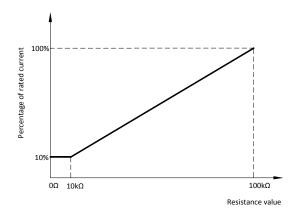
- a. DALI Testing Software: Please refer to www.brightway-tech.com for downloading.
- b. Percentage of rated current: 10%~100%.
- c. "TA" version LED driver shall work with a DALI Master and DALI Master control software.



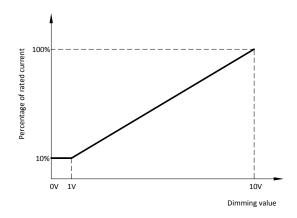


■"-TC" option: 0-10V, resistance & PWM dimming Lifetime LED Driver

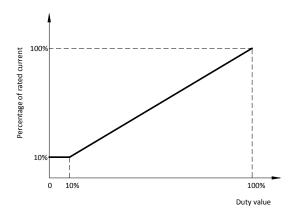
a. Reference resistance value for output current adjustment (Typical)



b. 0-10V dimming function for output current adjustment (Typical)



c. 10V PWM signal for output current adjustment (Typical): Frequency range: 200Hz~1.5KHz





Dimming control details:		80W Long Lifetime LED Driver			
Parameters		Minimum	Typical	Maximum	
Resistance		0kΩ	0-100kΩ	∞	
Dimming Type	Voltage	-2V	0-10V	15V	
	PWM(10%~100% f=200Hz~1.5KHz)	-2V	0-10V	15V	
Dimming Current		-0.5mA	-	0.5mA	

"-TE" option: Customized timeshare dimming.

- a. Different output current (10% 100% rate output current) can be set for different time periods.
- b. Maximum 4 sections is available. The minimum length is 0 to maximum 12 hours for each section.
- c. The parameter can't be changed after shipping.

"-TF" option: Programmable timeshare dimming.

- a. Output current is programmable with the range of 10%~100% of rated output current.
- b. Maximum 4 sections timeshare dimming is available. The minimum length is 0 to maximum 12 hours for each section.

For example:

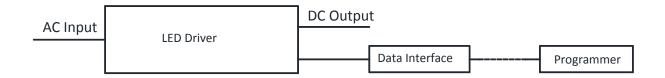
The first section: the time period is $0^{\sim}1h$, the output current is 40% of rated output current.

The second section: the time period is $\underline{1h^{\sim}4h}$, the output current is $\underline{100\%}$ of rated output current.

The third section: the time period is $4h^8h$, the output current is 40% of rated output current.

The fourth section: the time period is 8h~12h, output current is 60% of rated output current.

- c. The parameters are set by a programmer.
- d. The data interface is waterproof.

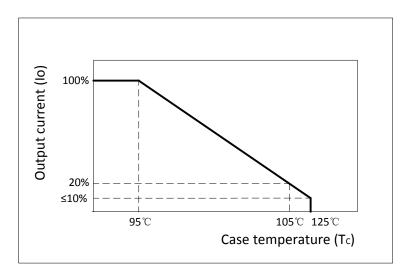


■Input and output Dielectric strength

Isolation	Input Wires	Output Wires	Isolated Dimming Control Wires	Chassis
Input Wires	NA	3750	2000	1560/2000(remove discharge tube)
Output Wires	3750	NA	2000	2000
Isolated Dimming Control Wires	2000	2000	NA	2000
Chassis	1560/2000(remove discharge tube)	2000	2000	NA



■Fixed derating-cutoff type temperature protection Lifetime LED Driver



This datasheet is for reference only. Brightway reserves all rights for final explanation of the technical materials.