

AAH20-C350

Constant current LED driver(Non-isolated)



Product family features

- -Flexible with 1 driver offers 4 output currents;
- -Simple current selection via dip switch
- Input Voltage: 220 to 240VAC (maximum: 198-264 VAC)
- Output Frequency: 50-60Hz
 Output Power: 20Watt Max
 Output Voltage: 25Vdc to 100Vdc
 Output Voltage: 200mA to 350mA
- Efficiency: Up to 88%Warranty: 5years
- A rated lifetime of 50,000 hours @ Tc = 85 °C

CE

Technical data

Electrical Parameter

Product Modle	output Power (W)	Output Voltage (Vdc)	Output Constant Current (mA)	Current Accuracy (typ.)	Max Eff	Certification	
AAH20-C350	20	25-100	200-350	±5%	88%	CE	
Note: Maximum efficiency measured at 230VAC input, Current set at 350mA full load							

Parts list

Part Number		AAH20W	AAH20W		
Output Current	200mA	250mA	300mA	350mA	
Vf min	25V	25V	25V	25V	
Vf max	100V	80V	66.7V	57V	
Pomin	5W	6.25W	7.5W	8.75W	
Pomax	20W	20W	20.01W	19.95W	

Product datasheet

Technical data

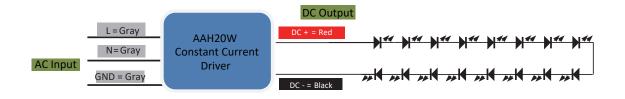
Electrical Specifications

Efficiency 88% Full load, 220 – 240 V, 50 Hz / see graphs Power loss 3.4W At 230V, Refer to Table 1 for details Protection class I Suitable for class I/II luminaire 200mA Pin1-OFF, Pin2-OFF 250mA Pin1-ON, Pin2-OFF 300mA Pin1-OFF, Pin2-ON 350mA Pin1-ON, Pin2-ON 450mA Pin1-ON 450mA Pin1-ON 450mA Pin1-ON 450mA Pin1-ON 450mA Pin1-ON 450mA Pin1		Item	Value	Remarks			
AC voltage range 198-264V Nominal current 110mA 230V, Refer to Table 1 for details THD 15% @ full load Power Factor (PF) 0.9 Full load, 220 – 240 V, 50 Hz / see graphs Maximum voltage 320V 2 h maximum, unit might not operate in this abr condition Efficiency 88% Full load, 220 – 240 V, 50 Hz / see graphs Power loss 3,4W At 230V, Refer to Table 1 for details Protection class I Suitable for class I/II luminaire Current Selection 250mA Pin1-OFF, Pin2-OFF 250mA Pin1-OFF, Pin2-OFF 300mA Pin1-OFF, Pin2-ON 350mA Pin1-ON, Pin2-ON Maximum voltage < 250 w/ Open Circuit Nominal current range 200/250/300/350mA Current accuracy ±5% Current ripple 100Hz < 10% Nominal power range 5-20W Partial Load. Refer to Table 1 for details Maximum power 20W Galvanic isolation Non-isolated Output PSTLM ≤1 Output SVM ≤0.4 Ambient temperature range 4060°C Maximum case temperature tc 85°C Measured on tc point indicated of the product Is Max. case temp. in fault condition 110°C Storage temperature range -4085°C Relative humidity 5%-95% Not condensing Surge transient protection 1 1 2KV L/N LN/PE acc to .EN 61547 Clause 5.7		Nominal voltage	220-240V				
Mominal current 110mA 230V, Refer to Table 1 for details THD 15% @ full load Power Factor (PF) 0.9 Full load, 220 – 240 V, 50 Hz / see graphs Maximum voltage 320V 2 h maximum, unit might not operate in this abrondition Efficiency 88% Full load, 220 – 240 V, 50 Hz / see graphs Power loss 3.4W At 230V, Refer to Table 1 for details Protection class I Suitable for class I/II luminaire Current Selection 250mA Pin1-OFF, Pin2-OFF 300mA Pin1-OFF, Pin2-OFF 300mA Pin1-OFF, Pin2-ON 350mA Pin1-ON, Pin2-ON Maximum voltage < 250 w/ Open Circuit Nominal current range 200/250/300/350mA Current accuracy ±5% Current ripple 100Hz < 10% Nominal power range 5-20W Partial Load. Refer to Table 1 for details Maximum power 20W Galvanic isolation Non-isolated Output PSTLM ≤1 Output SVM ≤0.4 Ambient temperature range ta -4060°C Maximum case temperature tc 85°C Measured on tc point indicated of the product is Maximum case temperature to 85°C Relative humidity 5%-95% Not condensing Surge transient protection 1 2KV L/N LN/PE acc to. EN 61547 Clause 5.7		Nominal frequency	50/60HZ				
THD 15% @ full load Power Factor (PF) 0.9 Full load, 220 – 240 V, 50 Hz / see graphs Maximum voltage 320V 2 h maximum, unit might not operate in this abr condition Efficiency 88% Full load, 220 – 240 V, 50 Hz / see graphs Power loss 3.4W At 230V, Refer to Table 1 for details Protection class I Suitable for class I/II luminaire Current Selection 250mA Pin1-OFF, Pin2-OFF 300mA Pin1-OFF, Pin2-OFF 300mA Pin1-OFF, Pin2-OFF 300mA Pin1-OFF, Pin2-ON 350mA Pin1-OFF, Pin2-ON 350mA Pin1-OFF, Pin2-ON Maximum voltage < 250 w/ Open Circuit Nominal current range 200/250/300/350mA Current accuracy ±5% Current ripple 100Hz < 10% Nominal power range 5-20W Partial Load. Refer to Table 1 for details Maximum power 20W Galvanic isolation Non-isolated Output PSTLM 51 Output SVM \$0.4 Ambient temperature range ta -4060°C Maximum case temperature tc 85°C Measured on tc point indicated of the product la Maximum case temperature trange -4065°C Relative humidity 5%-95% Not condensing Surge transient protection 1 2KV L/N LN/PE acc to. EN 61547 Clause 5.7		AC voltage range	198-264V				
Power Factor (PF) 0.9 Full load, 220 – 240 V, 50 Hz / see graphs Maximum voltage 320V 2 h maximum, unit might not operate in this abr condition Efficiency 88% Full load, 220 – 240 V, 50 Hz / see graphs Power loss 3.4W At 230V, Refer to Table 1 for details Protection class I Suitable for class I/I luminaire 200mA Pin1-OFF, Pin2-OFF 300mA Pin1-OFF, Pin2-OFF 300mA Pin1-OFF, Pin2-ON 350mA Pin1-ON, Pin2-ON Maximum voltage < 250 W/ Open Circuit Nominal current range 200/250/300/350mA Current accuracy ±5% Current ripple 100Hz < 10% Nominal power range 5-20W Partial Load. Refer to Table 1 for details Maximum power 20W Galvanic isolation Non-isolated Output PSTLM 51 Output SVM Ambient temperature range ta -4060°C Maximum case temperature tc 85°C Measured on tc point indicated of the product le Max. case temp. in fault condition 110°C Storage temperature range 4085°C Relative humidity 5%-95% Not condensing Surge transient protection 1 2KV L/N LN/PE acc to. EN 61547 Clause 5.7		Nominal current	110mA	230V, Refer to Table 1 for details			
Maximum voltage 320V 2 h maximum, unit might not operate in this abrocondition Efficiency 88% Full load, 220 – 240 V, 50 Hz / see graphs Power loss 3.4W At 230V, Refer to Table 1 for details Protection class I Suitable for class I/II luminaire 200mA Pin1-OFF, Pin2-OFF 250mA Pin1-ON, Pin2-OFF 300mA Pin1-OFF, Pin2-ON 350mA Pin1-ON, Pin2-ON Maximum voltage < 250 W/ Open Circuit Nominal current range 200/250/300/350mA Current ripple 100Hz < 10% Nominal power range 5-20W Partial Load. Refer to Table 1 for details Maximum power 20W Galvanic isolation Non-isolated Output PSTLM 51 Output SVM Ambient temperature range ta -4060°C Maximum case temperature tc 85°C Measured on tc point indicated of the product is Max. case temp. in fault condition 110°C Storage temperature range -4085°C Relative humidity 5%-95% Not condensing Surge transient protection 1 2KV L/N LN/PE acc to. EN 61547 Clause 5.7	Input	THD	15%	@ full load			
Efficiency 88% Full load, 220 – 240 V, 50 Hz / see graphs Power loss 3.4W At 230V, Refer to Table 1 for details Protection class I Suitable for class I/II luminaire 200mA Pin1-OFF, Pin2-OFF 250mA Pin1-OFF, Pin2-OFF 300mA Pin1-OFF, Pin2-OFF 300mA Pin1-OFF, Pin2-ON 350mA Pin1-ON, Pin2-ON Maximum voltage < 250 w/ Open Circuit Nominal current range 200/250/300/350mA Current accuracy ±5% Current ripple 100Hz < 10% Nominal power range 5-20W Partial Load. Refer to Table 1 for details Maximum power 20W Galvanic isolation Non-isolated Output PSTLM ≤1 Output SVM ≤0.4 Ambient temperature range ta -4060°C Max. case temp. in fault condition 110°C Storage temperature range -4085°C Relative humidity 5%-95% Not condensing Surge transient protection 1 2KV L/N LN/PE acc to. EN 61547 Clause 5.7		Power Factor (PF)	0.9	Full load, 220 – 240 V, 50 Hz / see graphs			
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Protection class I Suitable for class I/II luminaire 200mA Pin1-OFF, Pin2-OFF 250mA Pin1-OFF, Pin2-OFF 300mA Pin1-OFF, Pin2-OFF 300mA Pin1-OFF, Pin2-OFF 300mA Pin1-OFF, Pin2-ON 350mA Pin1-OFF, Pin2-ON Maximum voltage < 250 w/ Open Circuit Nominal current range 200/250/300/350mA Current accuracy ±5% Current ripple 100Hz < 10% Nominal power range 5-20W Partial Load. Refer to Table 1 for details Maximum power 20W Galvanic isolation Non-isolated Output PSTLM ≤1 Output SVM ≤0.4 Ambient temperature range ta -4060°C Maximum case temperature tc 85°C Measured on tc point indicated of the product la Max. case temp. in fault condition 110°C Storage temperature range -4085°C Relative humidity 5%-95% Not condensing Surge transient protection 1 2KV L/N LN/PE acc to. EN 61547 Clause 5.7		Efficiency	88%	Full load, 220 – 240 V, 50 Hz / see graphs			
Current Selection 250mA Pin1-OFF, Pin2-OFF 300mA Pin1-OFF, Pin2-OFF 300mA Pin1-OFF, Pin2-OFF 300mA Pin1-OFF, Pin2-ON 350mA Pin1-ON, Pin2-ON Maximum voltage		Power loss	3.4W	At 230V, Refer to Table 1 for details			
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Current Selection 300mA 350mA Pin1-OFF, Pin2-ON Maximum voltage < 250 W/ Open Circuit Nominal current range 200/250/300/350mA Current accuracy ±5% Current ripple 100Hz Nominal power range 5-20W Partial Load. Refer to Table 1 for details Maximum power Galvanic isolation Non-isolated Output PSTLM Output SVM 40.4 Ambient temperature range ta -4060°C Maximum case temperature tc 85°C Measured on tc point indicated of the product law Max. case temp. in fault condition 110°C Storage temperature range -4085°C Relative humidity 5%-95% Not condensing Surge transient protection 1 2KV L/N LN/PE acc to. EN 61547 Clause 5.7			200mA	Pin1-OFF, Pin2-OFF			
### The content of the product of th		Commont Coloration	250mA	Pin1-ON, Pin2-OFF			
Maximum voltage < 250 w/ Open Circuit Nominal current range 200/250/300/350mA		Current Selection	300mA	Pin1-OFF, Pin2-ON			
Nominal current range 200/250/300/350mA Current accuracy ±5% Current ripple 100Hz < 10% Nominal power range 5-20W Partial Load. Refer to Table 1 for details Maximum power 20W Galvanic isolation Non-isolated Output PSTLM ≤1 Output SVM ≤0.4 Ambient temperature range ta -4060°C Maximum case temperature tc 85°C Measured on tc point indicated of the product la Max. case temp. in fault condition 110°C Storage temperature range -4085°C Relative humidity 5%-95% Not condensing Surge transient protection 1 2KV L/N LN/PE acc to. EN 61547 Clause 5.7			350mA	Pin1-ON, Pin2-ON			
Current accuracy ±5% Current ripple 100Hz < 10% Nominal power range 5-20W Partial Load. Refer to Table 1 for details Maximum power 20W Galvanic isolation Non-isolated Output PSTLM ≤1 Output SVM ≤0.4 Ambient temperature range ta -4060°C Maximum case temperature tc 85°C Measured on tc point indicated of the product la Max. case temp. in fault condition 110°C Storage temperature range -4085°C Relative humidity 5%-95% Not condensing Surge transient protection 1 2KV L/N LN/PE acc to. EN 61547 Clause 5.7		Maximum voltage	< 250	w/ Open Circuit			
Current ripple 100Hz < 10% Nominal power range 5-20W Partial Load. Refer to Table 1 for details Maximum power 20W Galvanic isolation Non-isolated Output PSTLM ≤1 Output SVM ≤0.4 Ambient temperature range ta -4060°C Maximum case temperature tc 85°C Measured on tc point indicated of the product la Max. case temp. in fault condition 110°C Storage temperature range -4085°C Relative humidity 5%-95% Not condensing Surge transient protection 1 2KV L/N LN/PE acc to. EN 61547 Clause 5.7	4	Nominal current range	200/250/300/350mA				
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Maximum power 20W Galvanic isolation Non-isolated Output PSTLM ≤1 Output SVM ≤0.4 Ambient temperature range ta -4060°C Maximum case temperature tc 85°C Measured on tc point indicated of the product la Max. case temp. in fault condition 110°C Storage temperature range -4085°C Relative humidity 5%-95% Not condensing Surge transient protection 1 2KV L/N LN/PE acc to. EN 61547 Clause 5.7	ō	Current ripple 100Hz	< 10%				
Galvanic isolation Non-isolated Output PSTLM ≤1 Output SVM ≤0.4 Ambient temperature range ta -4060°C Maximum case temperature tc 85°C Measured on tc point indicated of the product la Max. case temp. in fault condition 110°C Storage temperature range -4085°C Relative humidity 5%-95% Not condensing Surge transient protection 1 2KV L/N LN/PE acc to. EN 61547 Clause 5.7		Nominal power range	5-20W	Partial Load. Refer to Table 1 for details			
Output SVM ≤0.4 Ambient temperature range ta -4060°C Maximum case temperature tc 85°C Measured on tc point indicated of the product la Max. case temp. in fault condition 110°C Storage temperature range -4085°C Relative humidity 5%-95% Not condensing Surge transient protection 1 2KV L/N LN/PE acc to. EN 61547 Clause 5.7		Maximum power	20W				
Output SVM ≤0.4 Ambient temperature range ta -4060°C Maximum case temperature tc 85°C Measured on tc point indicated of the product la Max. case temp. in fault condition 110°C Storage temperature range -4085°C Relative humidity 5%-95% Not condensing Surge transient protection 1 2KV L/N LN/PE acc to. EN 61547 Clause 5.7		Galvanic isolation	Non-isolated				
Ambient temperature range ta -4060°C Maximum case temperature tc 85°C Measured on tc point indicated of the product la Max. case temp. in fault condition 110°C Storage temperature range -4085°C Relative humidity 5%-95% Not condensing Surge transient protection 1 2KV L/N LN/PE acc to. EN 61547 Clause 5.7		Output PSTLM	≤1				
Maximum case temperature to 85°C Measured on to point indicated of the product la Max. case temp. in fault condition 110°C Storage temperature range -4085°C Relative humidity 5%-95% Not condensing Surge transient protection 1 2KV L/N LN/PE acc to. EN 61547 Clause 5.7		Output SVM	≤0.4				
Max. case temp. in fault condition 110°C Storage temperature range -4085°C Relative humidity 5%-95% Not condensing Surge transient protection 1 2KV L/N LN/PE acc to. EN 61547 Clause 5.7	environmen	Ambient temperature range ta	-4060°C				
Storage temperature range -4085°C Relative humidity 5%-95% Not condensing Surge transient protection 1 2KV L/N LN/PE acc to. EN 61547 Clause 5.7		Maximum case temperature to	85°C	Measured on tc point indicated of the product label			
Relative humidity 5%-95% Not condensing Surge transient protection 1 2KV L/N LN/PE acc to. EN 61547 Clause 5.7		Max. case temp. in fault condition 110°C					
Relative humidity 5%-95% Not condensing Surge transient protection 1 2KV L/N LN/PE acc to. EN 61547 Clause 5.7 Environmental rating Indoo		Storage temperature range	-4085°C				
Surge transient protection 1 2KV L/N LN/PE acc to. EN 61547 Clause 5.7 Environmental rating Indoo		Relative humidity	5%-95%	Not condensing			
Environmental rating Indoo		Surge transient protection	1 2KV	L/N LN/PE acc to. EN 61547 Clause 5.7			
		Environmental rating	Indoo				
IP rating IP20		IP rating	IP20				
Mains switching cycles >50000		Mains switching cycles	>50000				
Expected lifetime 50000 tcmax = 85°C, 10% failure rate tcmax = 65°C, 10% failure rate		Expected lifetime					

Product datasheet

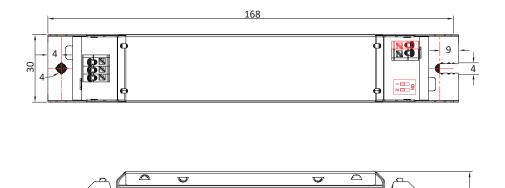
Typical Applications

Constant Current Driver



Appearance information

Product Size



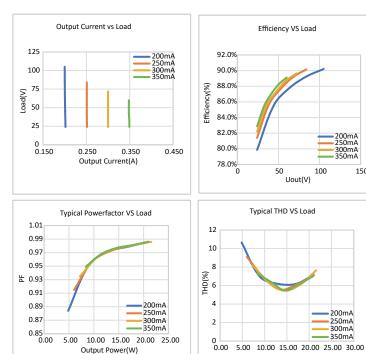
Note:

The independent LED drive conforms to the EMC standard. But it is not guaranteed to be qualified when the drive is mounted in the LED fixture

Please forgive us for any discrepancy due to the update of the specifications or the upgrade of the product. If you need the latest information, please contact our marketing department

Product datasheet

Characteristic Curve



Output Power(W)

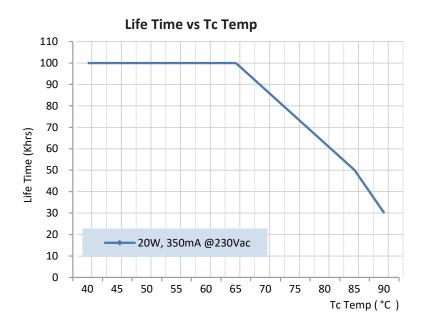
100

150

200mA 250mA 300mA

Output Power(W)

Lifetime Curve



Installation

AC input wires cross section: 0.5~1.5mm² DC output wires cross section: 0.75~1.5mm²

This product for indoor use only, it can be installed and fixed in the luminaires, connected with the wire. The length of output line should be less than 2m