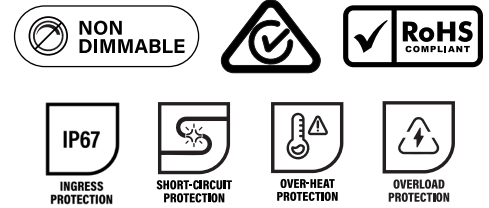


Non-dimmable IP67 Power Supplies



Features

- **Wide Input Voltage Range:** 85 – 265 VAC
- **Fully Isolated Design** for enhanced operational safety
- **IP67 Rated:** Suitable for indoor and outdoor applications
- **Flicker-Free Technology** for stable light output
- **Precision Voltage Regulation:** High-accuracy 24V CV performance with no voltage drop or fluctuation from no-load to full-rated capacity
- **All-Weather Durability:** IP67 rated for indoor and outdoor applications (Note: Do not cover when used indoors).
- **Comprehensive Protection:** Short circuit, over-current, and over-voltage (SCP/OCP/OVP)
- **Active Power Factor Correction (PFC)** for high energy efficiency
- **5-Year Warranty:** Long-term reliability guaranteed.

Part Numbers

Code	Wattage
AQD-24-030-B-N	30W
AQD-24-060-B-N	60W
AQD-24-100-B-N	100W
AQD-24-150-B-N	150W
AQD-24-200-B-N	200W
AQD-24-300-B-N	300W
AQD-24-400-B-N	400W

Technical Parameters

	Parameter	Unit	AQD-24-030-B-N	AQD-24-060-B-N	AQD-24-100-B-N	AQD-24-150-B-N
Output	Voltage	V	24	24	24	24
	Current	A	1.25 (Max)	2.5 (Max)	4.16 (Max)	6.25 (Max)
	Power	W	30	60	100	150
	Ripple & Noise (max)	mV	<400	<400	<400	<400
	Channel	-	1	1	1	1
	Voltage Tolerance	-	±5%	±5%	±5%	±5%
Input	Input Voltage	VAC	85-265	85-265	85-265	85-265
	Frequency	Hz	50/60	50/60	50/60	50/60
	Power Factor	-	>0.95	>0.95	>0.95	>0.95
	THD	-	<15%	<10%	<15%	<15%
	Standby Power	W	<0.5	<0.5	<1.5	<1.5
	Current	A	<0.35	<0.7	<1.1	<1.66
	Input Current (Full Output Load)	A	16.9	17.25	15.89	15.56
	Pulse Duration (T50)	S	487u	682u	960u	890u
	Efficiency Full Load 110VAC	-	83%	85%	89%	90%
	Efficiency Full Load 230VAC	-	86%	87%	91%	92%
	Start 230VAC (milliseconds)	ms	<700	<700	<500	<500
	Rise Time 230VAC (milliseconds)	ms	<700	<700	<500	<500
Hold Time 230VAC (milliseconds)	ms	>20	>20	>20	>20	
Dimming	Protocol	-	-	-	-	-
	Output Frequency	Hz	-	-	-	-
	Dimming Ratio	-	-	-	-	-
	Dimming Compatibility	-	-	-	-	-
	Minimum output current	-	-	-	-	-
	Maximum output current	A	-	-	-	-
Protection	Short Circuit	-	Yes	Yes	Yes	Yes
	Over Voltage	-	Yes	Yes	Yes	Yes
	Over Load	-	Yes	Yes	Yes	Yes
Safety & EMC	Lighting Strike	KV	1.5	4	4	4
	Withstand Voltage	VAC	3750	3750	3750	3750
	Safety Standards	-	EN IEC 55015	EN IEC 55015	EN IEC 55015	EN IEC 55015
	EMC Emission EMC	-	EN IEC 61000-3-2	EN IEC 61000-3-2	EN IEC 61000-3-2	EN IEC 61000-3-2
	EMC immunity EMC	-	EN IEC61547	EN IEC61547	EN IEC61547	EN IEC61547
	Safety Approval Mark	-	SAA RCM	SAA RCM	SAA RCM	SAA RCM
Environment	Working Temperature	°C	-20-40	-20-40	-20-40	-20-40
	Storage Temperature	°C	-20-80	-20-80	-20-80	-20-80
	TC	°C	75	75	75	75
	Housing Material	-	Aluminum shell	Aluminum shell	Aluminum shell	Aluminum shell
	IP Rating	IP	IP67	IP67	IP67	IP67
	Lifetime	Hrs	50000H	50000H	50000H	50000H
	Vibration	-	-	-	-	-
	Switch Cycle	-	100000	100000	100000	100000
Other	Warranty	Years	5	5	5	5

Technical Parameters

	Parameter	Unit	AQD-24-200-B-N	AQD-24-300-B-N	AQD-24-400-B-N
Output	Voltage	V	24	24	24
	Current	A	8.33 (Max)	12.5 (Max)	16.67 (Max)
	Power	W	200	300	1400
	Ripple & Noise (max)	mV	<400	<400	<400
	Channel	-	1	1	1
	Voltage Tolerance	-	±5%	±5%	±5%
Input	Input Voltage	VAC	85-265	85-265	85-265
	Frequency	Hz	50/60	50/60	50/60
	Power Factor	-	>0.95	>0.95	>0.95
	THD	-	<15%	<15%	<15%
	Standby Power	W	<1.5	<1.5	<2
	Current	A	<2.2	<3.4	<4.5
	Input Current (Full Output Load)	A	16.2	16.82	16.58
	Pulse Duration (T50)	S	816m	1.76m	2.11m
	Efficiency Full Load 110VAC	-	91%	91%	92%
	Efficiency Full Load 230VAC	-	93%	94%	94.5%
	Start 230VAC (milliseconds)	ms	<500	<200	<200
	Rise Time 230VAC (milliseconds)	ms	<500	<200	<200
	Hold Time 230VAC (milliseconds)	ms	>20	>20	>20
Dimming	Protocol	-	-	-	-
	Output Frequency	Hz	-	-	-
	Dimming Ratio	-	-	-	-
	Dimming Compatibility	-	-	-	-
	Minimum output current	-	-	-	-
	Maximum output current	A	-	-	-
Protection	Short Circuit	-	Yes	Yes	Yes
	Over Voltage	-	Yes	Yes	Yes
	Over Load	-	Yes	Yes	Yes
Safety & EMC	Lighting Strike	KV	4	4	4
	Withstand Voltage	VAC	3750	3750	3750
	Safety Standards	-	EN IEC 55015	EN IEC 55015	EN IEC 55015
	EMC Emission EMC	-	EN IEC 61000-3-2	EN IEC 61000-3-2	EN IEC 61000-3-2
	EMC immunity EMC	-	EN IEC61547	EN IEC61547	EN IEC61547
	Safety Approval Mark	-	SAA RCM	SAA RCM	SAA RCM
Environment	Working Temperature	°C	-20-40	-20-40	-20-40
	Storage Temperature	°C	-20-80	-20-80	-20-80
	TC	°C	75	75	75
	Housing Material	-	Aluminum shell	Aluminum shell	Aluminum shell
	IP Rating	IP	IP67	IP67	IP67
	Lifetime	Hrs	50000H	50000H	50000H
	Vibration	-	-	-	-
	Switch Cycle	-	100000	100000	100000
Other	Warranty	Years	5	5	5

Standards and Compliance

Category	Reference / Standard
Electrical Safety (AU/NZ)	AS 61347.2.13:2018 & AS/NZS 61347.1:2016 (inc. Amd 1:2018, Amd 2:2025)
Electrical Safety (International)	IEC 61347-2-13:2014+AMD1:2016 used in conjunction with IEC 61347-1:2015+AMD1:2017
Certification Body	Global-Mark Electrical Product Safety Certification Scheme
Certificate Number	GMA-523921-EA
Test Report Number	GTS2025070108S01R2
Testing Laboratory	Global United Technology Services Co., Ltd.
Date of Issue	2025-12-12
Equipment Class	LED Control Gear (Electronic) - System 1 Approval

Recommended Output Quantity Combination

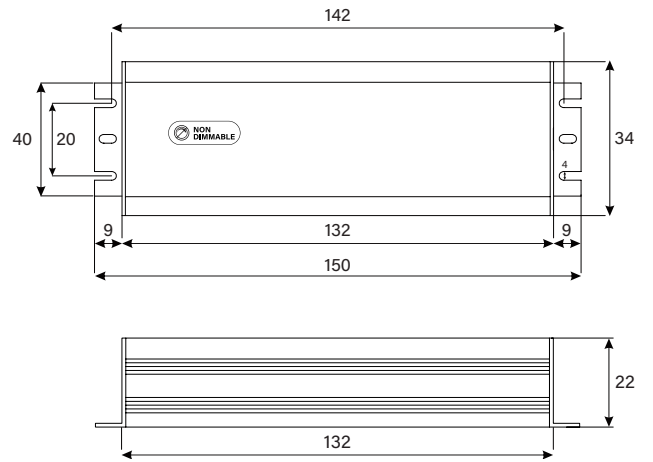
	AQD-24-030-B-N	AQD-24-060-B-N	AQD-24-100-B-N	AQD-24-150-B-N	AQD-24-200-B-N
AGL-560 AC/DC Version (Non-Dimmable)	4	8	13	17	23
AGL-560 E- Version (Dimmable)	5	10	17	25	33

Product Notes

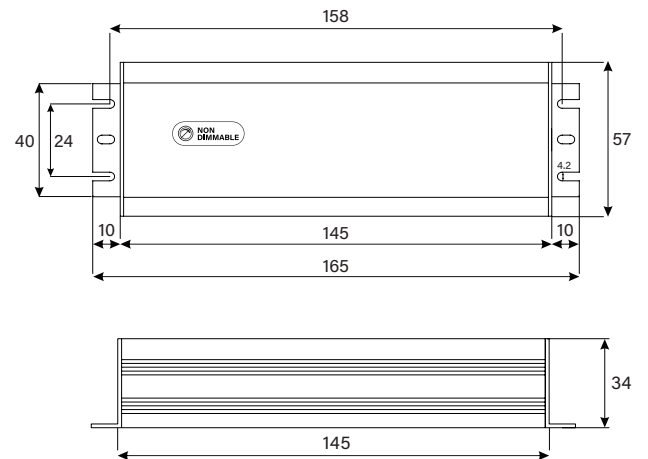
- Measurement Conditions:** Unless otherwise specified, all parameters are measured at an input of **230 VAC**, rated load, and an ambient temperature of **25°C**.
- Startup Time:** Startup time is measured from a **cold start**. Frequent power cycling (switching on and off) may increase the total startup time.
- EMC Compliance:** The driver is considered a component for installation into end-user equipment. Because Electromagnetic Compatibility (EMC) is affected by the entire assembly, the final equipment manufacturer must re-verify and confirm the EMC compliance of the complete system.
- Strict Compliance:** Installation and operation must strictly adhere to provided specifications to ensure safety and performance.
- Maintenance & Service:** This unit contains no user-serviceable parts. Do not attempt repairs. Faulty units should be replaced and disposed of in accordance with local e-waste recycling regulations.
- Operating Environment:** Not suitable for use in hazardous, explosive, or highly corrosive environments.
- Surge Mitigation:** Equipped with transient over-voltage protection. Please note: This unit is not intended to protect against extreme surges, such as direct or indirect lightning strikes.
- Performance Optimization (80% Rule):** To maximize the lifespan and reliability of the unit, it is recommended to maintain a continuous load at or below 80% of the maximum rated power.

Product Dimensions

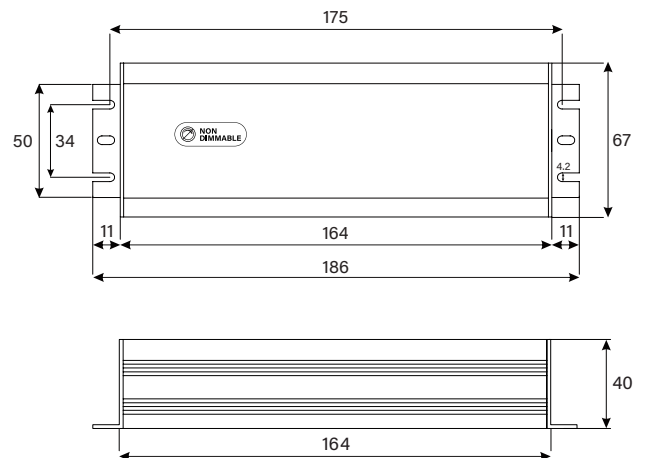
AQD-24-030-B-N



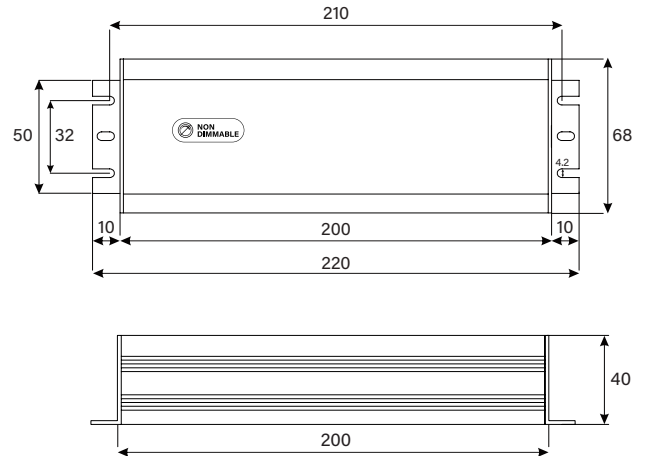
AQD-24-060-B-N



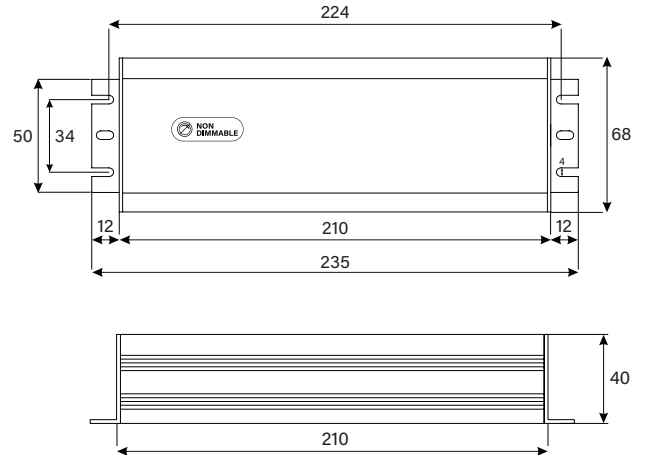
AQD-24-100-B-N



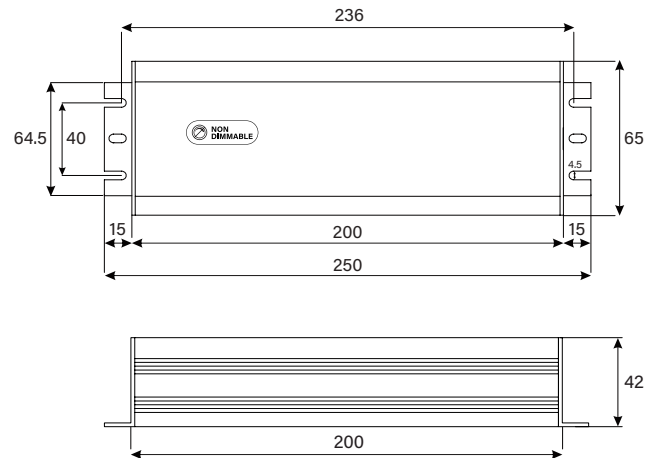
AQD-24-150-B-N



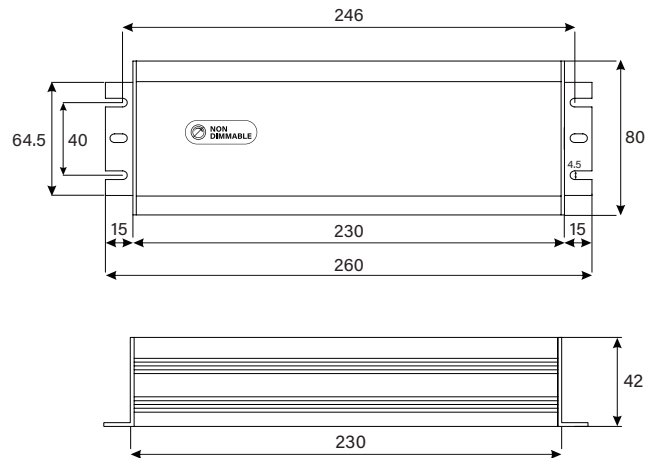
AQD-24-200-B-N



AQD-24-300-B-N



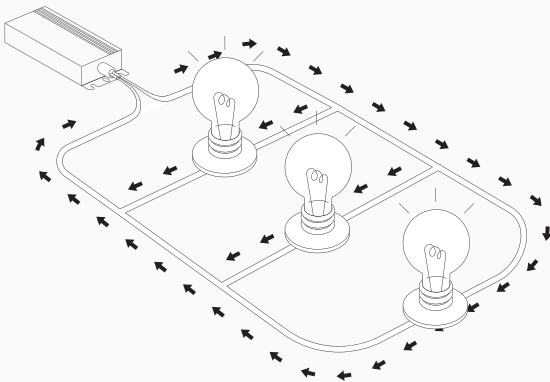
AQD-24-400-B-N



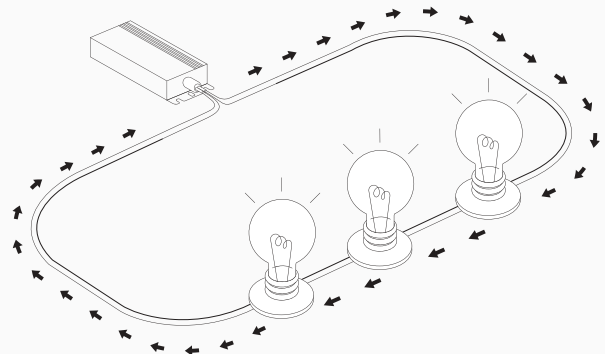
Wiring Diagram

Wiring Requirement: This is a 24 VDC constant voltage driver. Ensure all connected devices are wired in a **parallel configuration** to maintain consistent voltage across the load.

✓ Correct Parralel Wiring



✗ Wrong Series Wiring



Installation Guidelines

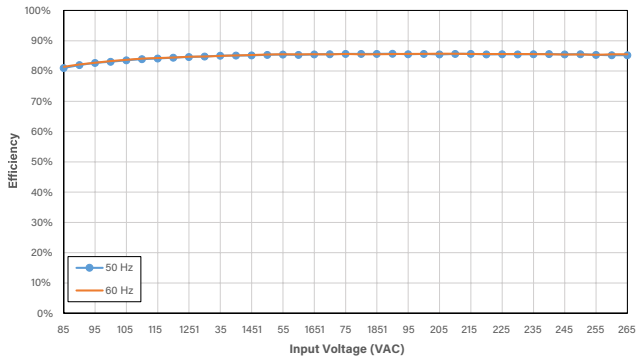
- **Inspection:** Do not operate the unit if the housing, input cables, or terminals are damaged.
- **Cables:** Do not modify, cut, or extend factory-installed input/output (I/O) cables.
- **Polarity:** Strictly observe DC polarity when connecting the load. Reverse polarity will cause immediate and permanent damage.
- **Safety:** Ensure the AC input is fully de-energized before connecting the lighting load.
- **Ventilation:** Do not cover the power supply with insulation or building materials, and do not stack equipment on the unit. Maintain adequate clearance and airflow to prevent overheating, thermal shutdown, or permanent failure.

AQD-24-030-B-N

Electrical performance across whole input range.

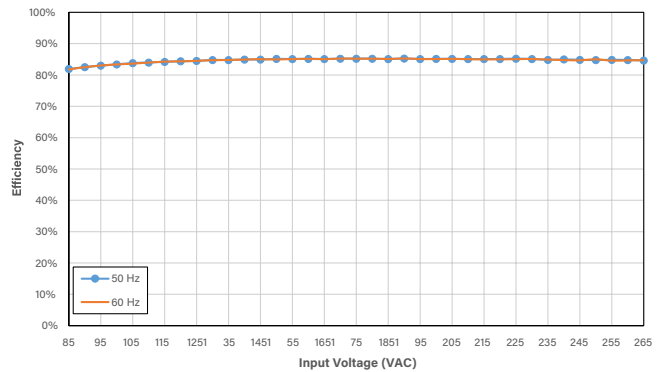
AGL test setup consisted of 5 units of 6W Dimmable AGL-560. Meanwhile AQS test consisted of various AQS Strips totalling 30W output.

AGL Efficiency



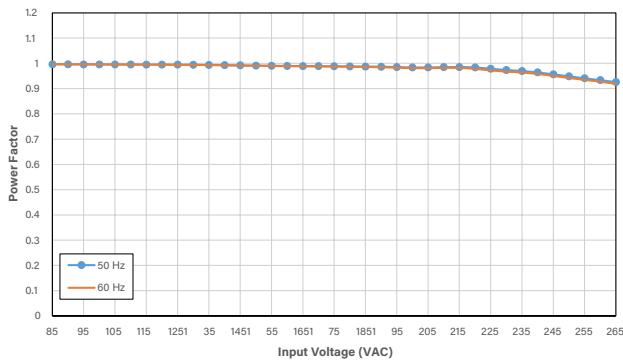
Power supply had >80% efficiency across whole input range.

AQS Efficiency



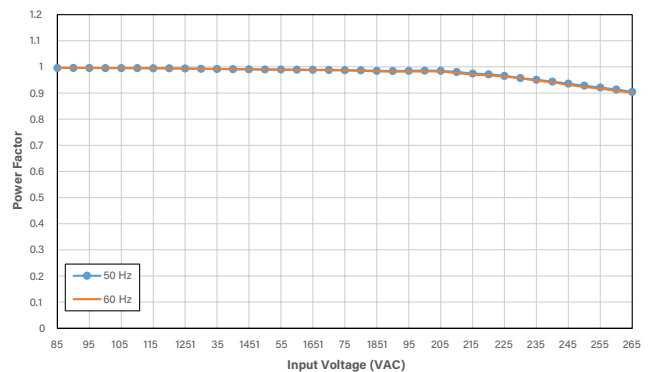
Power supply had >80% efficiency across whole input range.

AGL Power Factor



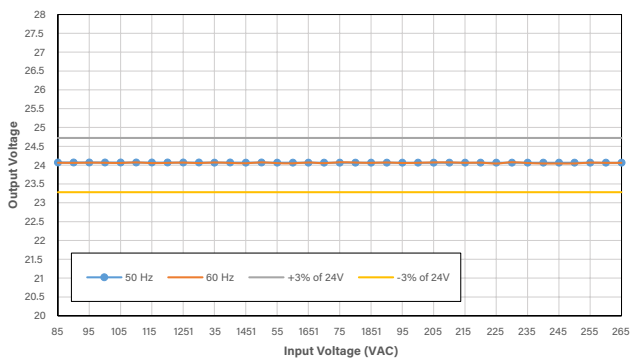
Power supply had >90 PF in full load across whole input range.

AQS Power Factor



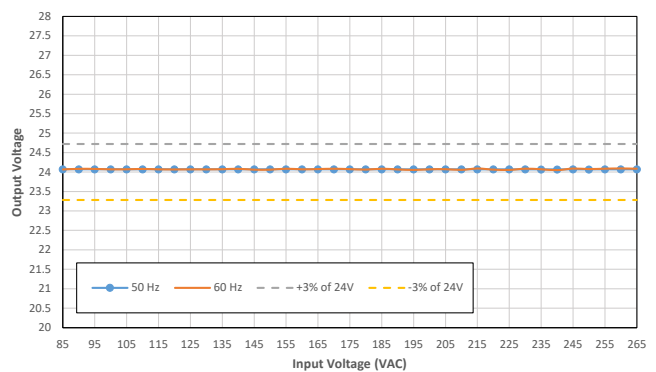
Power supply had >90 PF in full load across whole input range.

AGL Output Voltage



Power supply had maintained an output voltage of within +/- 3% of nominal 24V.

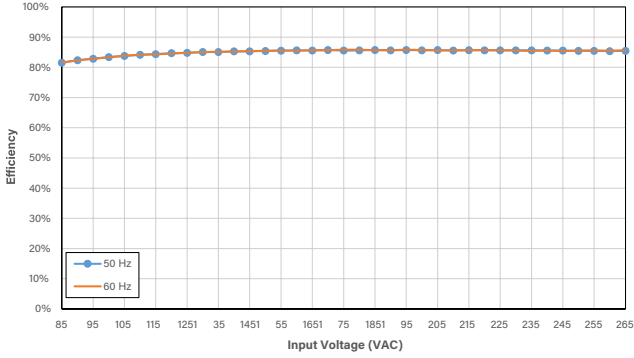
AQS Output Voltage



Power supply had maintained an output voltage of within +/- 3% of nominal 24V.

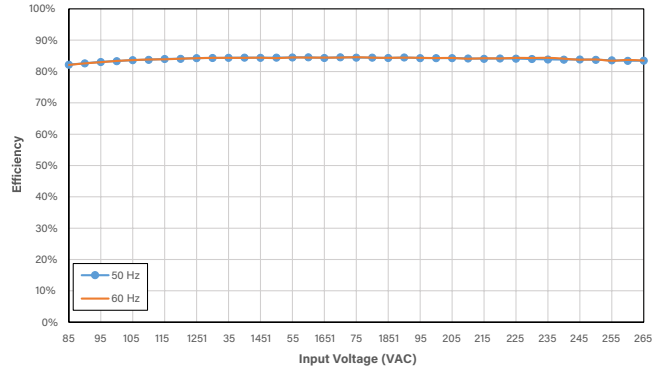
Electronic Load test setup was done using a Maynuo M9812 under a constant current profile and set to 1.25A. Meanwhile Non-Dimmable AGL test consisted of 4 x 6W AGL-560 12-24V AC/DC Non-Dimmable version.

E-load Efficiency



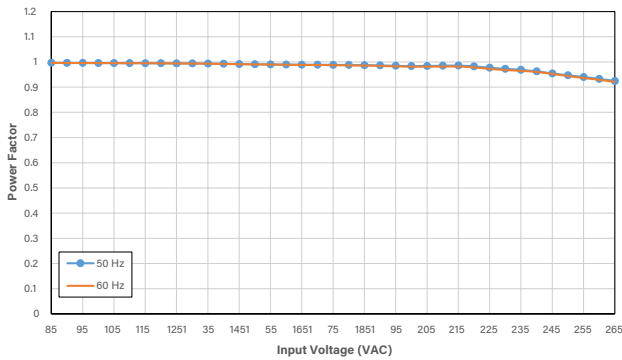
Power supply had >80% efficiency across whole input range.

Non-Dimmable AGL Efficiency



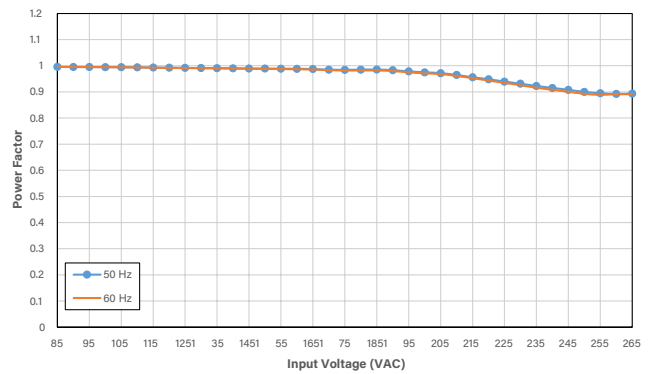
Power supply had >80% efficiency across whole input range.

E-Load Power Factor



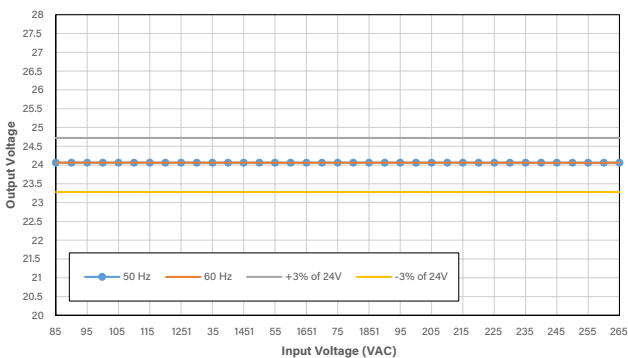
Power supply had >90 PF in full load across whole input range.

Non-Dimmable AGL Power Factor



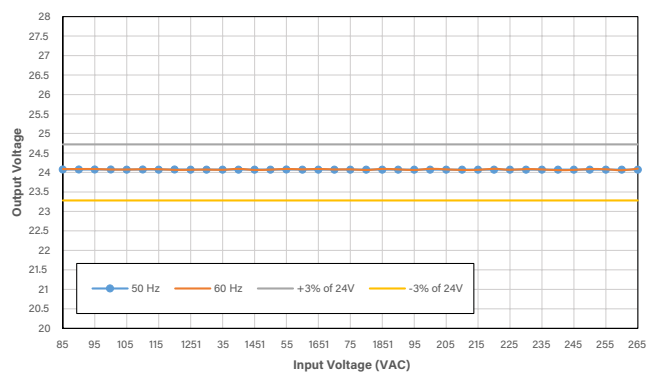
Power supply had >90 PF in 80% load across whole input range

E-Load Output Voltage



Power supply had maintained an output voltage of within +/- 3% of nominal 24V.

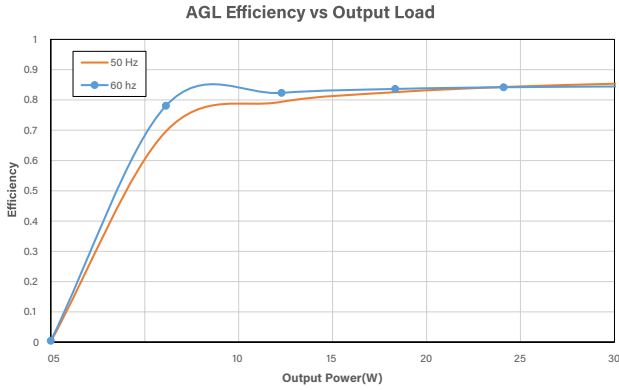
Non-Dimmable AGL Output Voltage



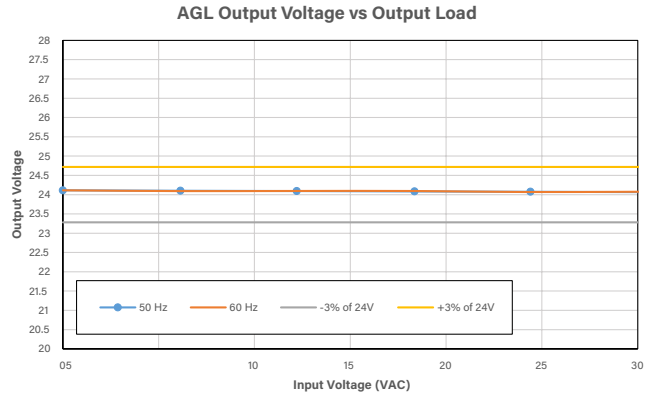
Power supply had maintained an output voltage of within +/- 3% of nominal 24V.

Electrical performance across different loads

AGL test setup consisted of 5 units of 6W Dimmable AGL-560. AQD-24-030-B-N can provide output current from 0A to the maximum 1.25A. 50 Hz data is with 230VAC and 60 Hz data is with 120 VAC.



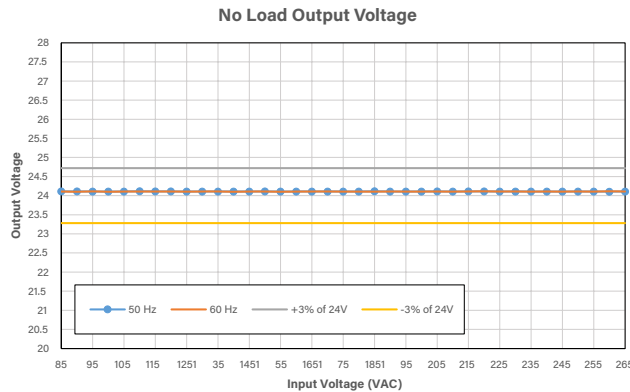
Power supply had >80% efficiency across whole input range.



Power supply had >80% efficiency across whole input range.

Output voltage at no load

Test confirmed that even at no load, AQD-24-030-B-N has maintained voltage regulation, +/-3% of 24V from 85VAC to 265VAC.

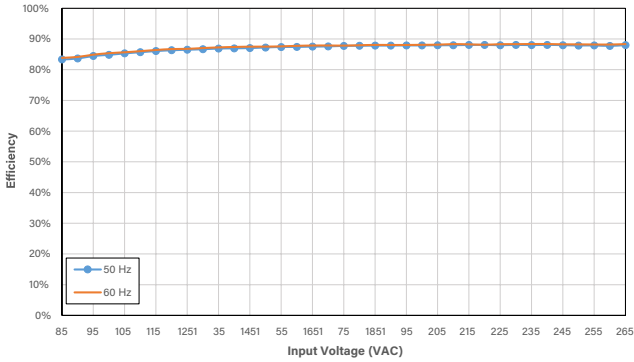


AQD-24-060-B-N

Electrical performance across whole input range.

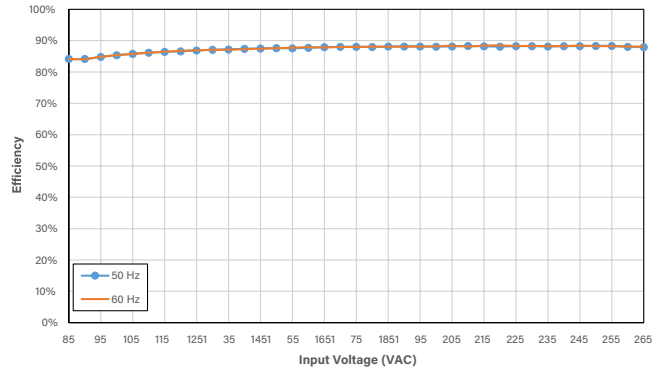
AGL test setup consisted of 10 units of 6W Dimmable AGL-560. Meanwhile AQS test consisted of various AQS Strips totalling 60W output.

AGL Efficiency



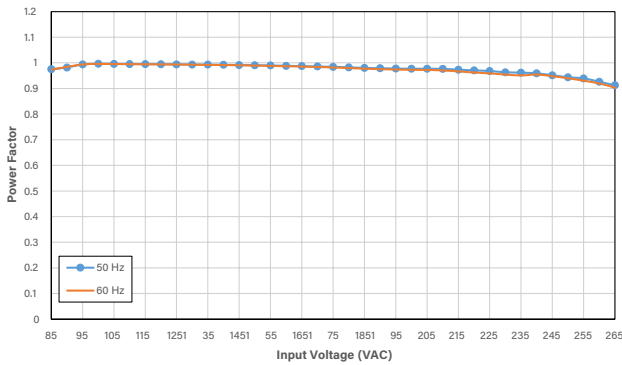
Power supply had >80% efficiency across whole input range.

AQS Efficiency



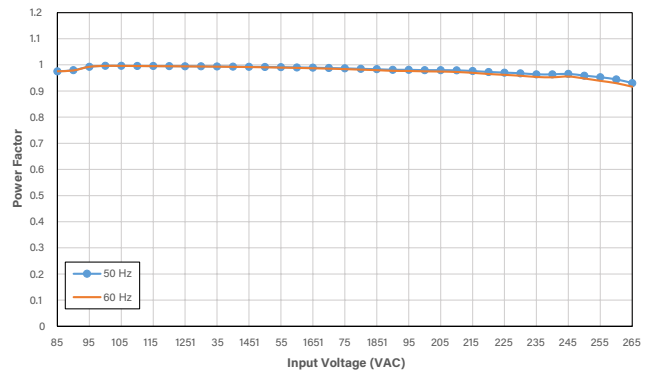
Power supply had >80% efficiency across whole input range.

AGL Power Factor



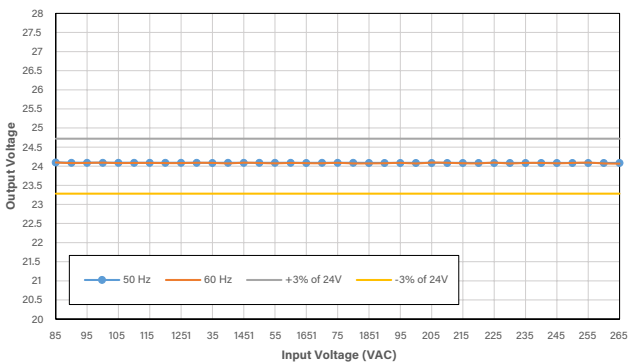
Power supply had >90 PF in full load across whole input range.

AQS Power Factor



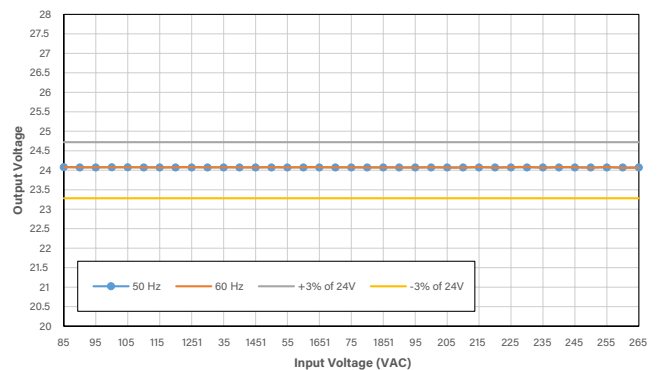
Power supply had >90 PF in full load across whole input range.

AGL Output Voltage



Power supply had maintained an output voltage of within +/- 3% of nominal 24V.

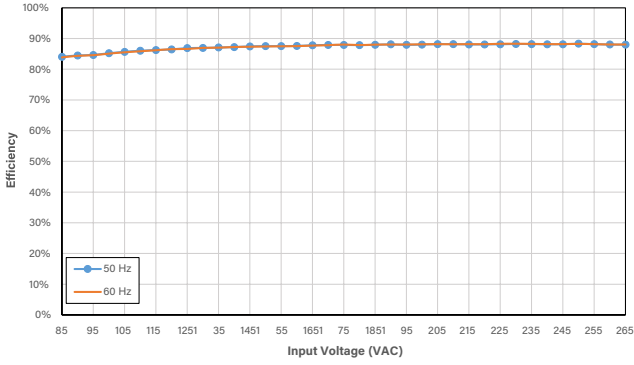
AQS Output Voltage



Power supply had maintained an output voltage of within +/- 3% of nominal 24V.

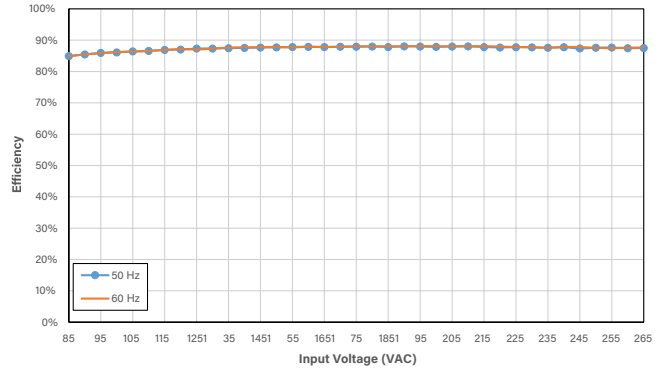
Electronic Load test setup was done using a Maynuo M9812 under a constant current profile and set to 2.5A. Meanwhile Non-Dimmable AGL test consisted of 8 x 6W AGL-560 12-24V AC/DC Non-Dimmable version.

E-load Efficiency



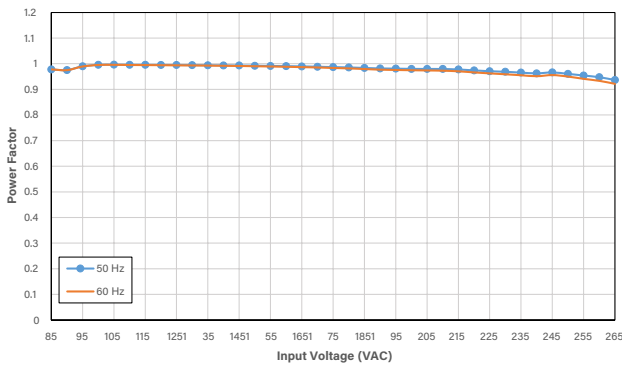
Power supply had >80% efficiency across whole input range.

Non-Dimmable AGL Efficiency



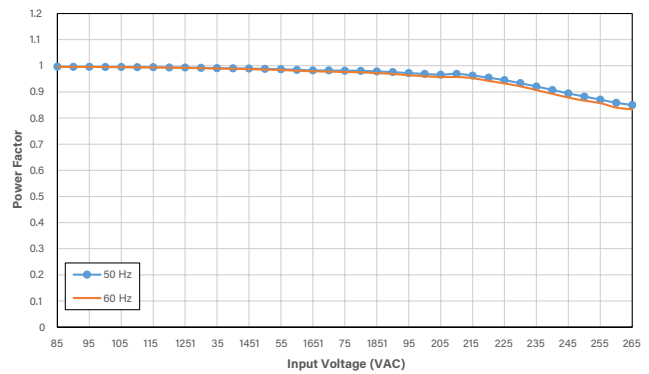
Power supply had >80% efficiency across whole input range.

E-Load Power Factor



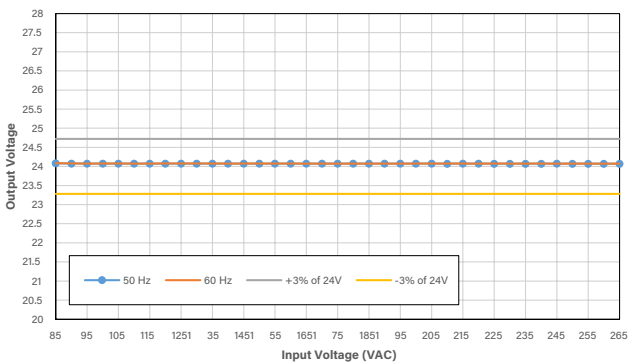
Power supply had >90 PF in full load across whole input range.

Non-Dimmable AGL Power Factor



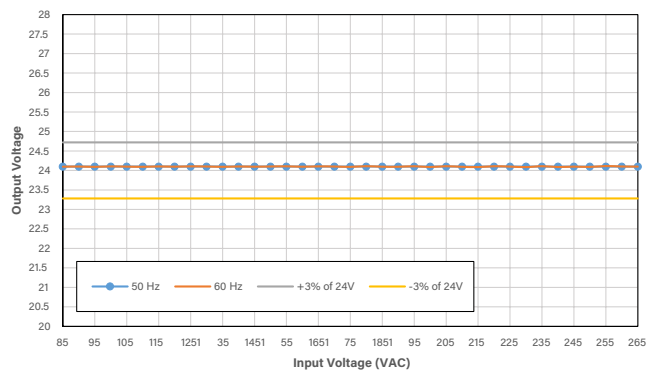
Power supply had >90 PF in 80% load in 230VAC 50 Hz for Australian use.

E-Load Output Voltage



Power supply had maintained an output voltage of within +/- 3% of nominal 24V.

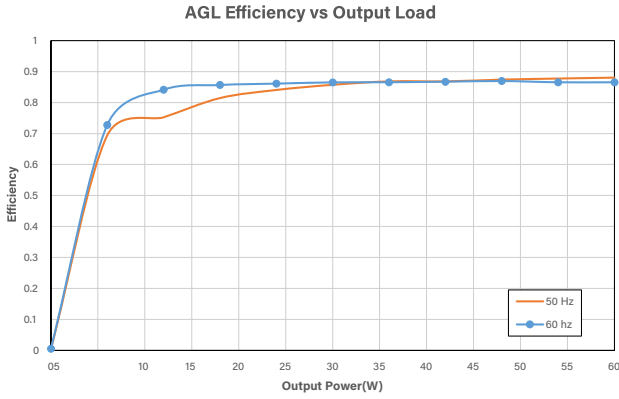
Non-Dimmable AGL Output Voltage



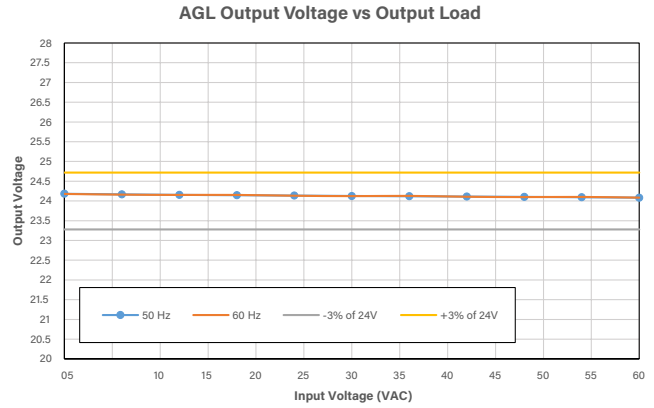
Power supply had maintained an output voltage of within +/- 3% of nominal 24V.

Electrical performance across different loads

AGL test setup consisted of 10 units of 6W AGL-560, AQD-24-060-B-N can provide output current from 0A to the maximum 2.5A. 50 Hz data is with 230VAC and 60 Hz data is with 120 VAC.



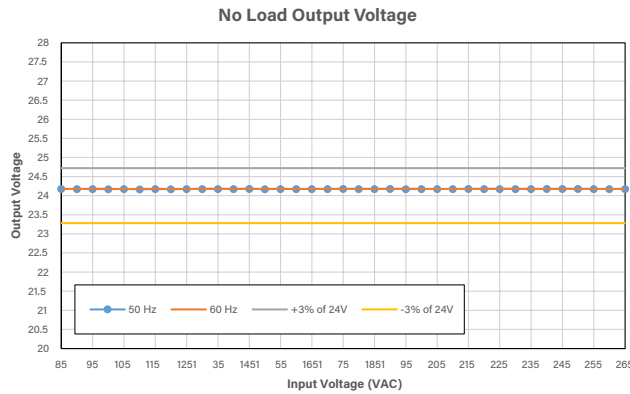
Power supply had achieved >70% efficiency for as low as 12W output load.



Power supply maintained within +/-3% of the nominal output even at no load.

Output voltage at no load

Test confirmed that even at no load, AQD-24-060-B-N has maintained voltage regulation, +/-3% of 24V from 85VAC to 265VAC.

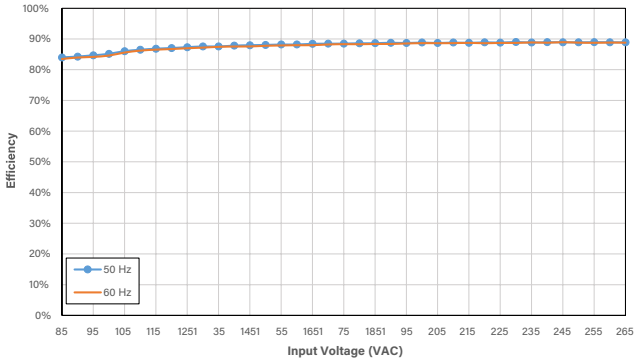


AQD-24-100-B-N

Electrical performance across whole input range.

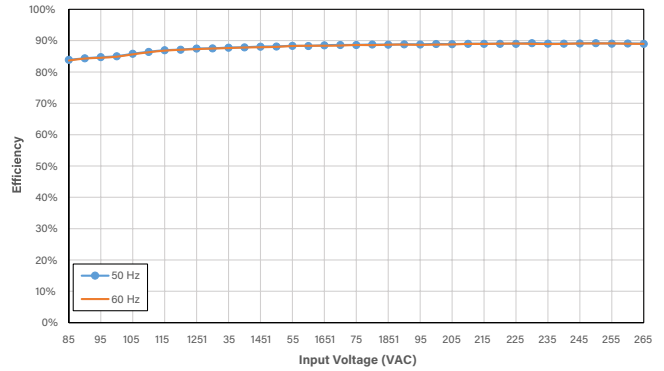
AGL test setup consisted of 17 units of 6W Dimmable AGL-560. Meanwhile AQS test consisted of various AQS Strips totalling 100W output.

AGL Efficiency



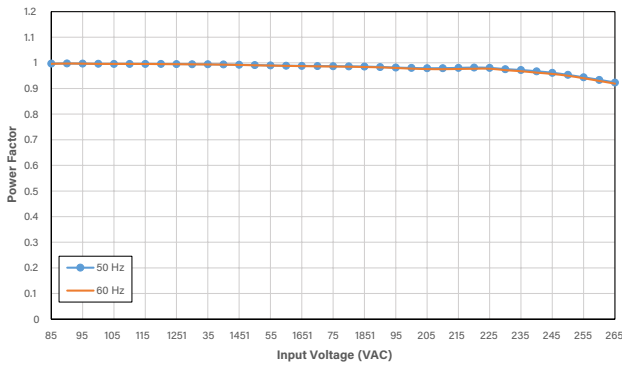
Power supply had >80% efficiency across whole input range.

AQS Efficiency



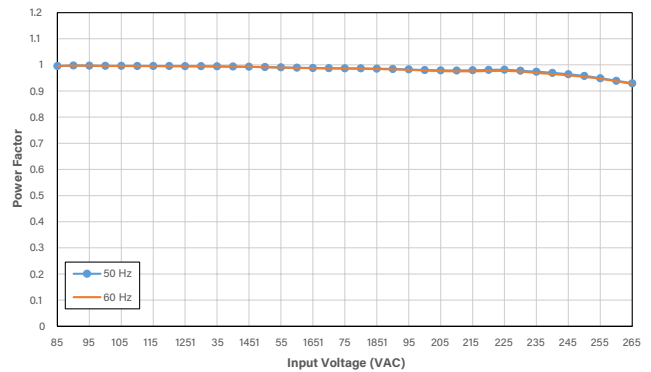
Power supply had >80% efficiency across whole input range.

AGL Power Factor



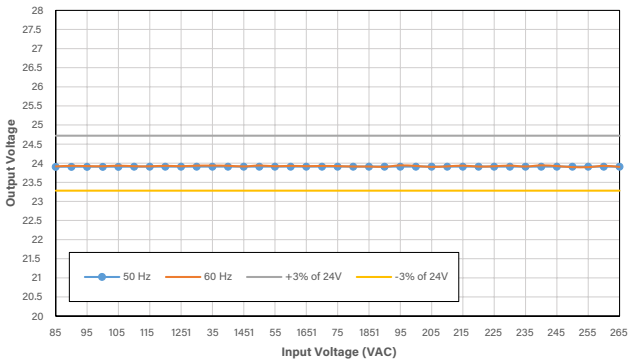
Power supply had >90 PF in full load across whole input range.

AQS Power Factor



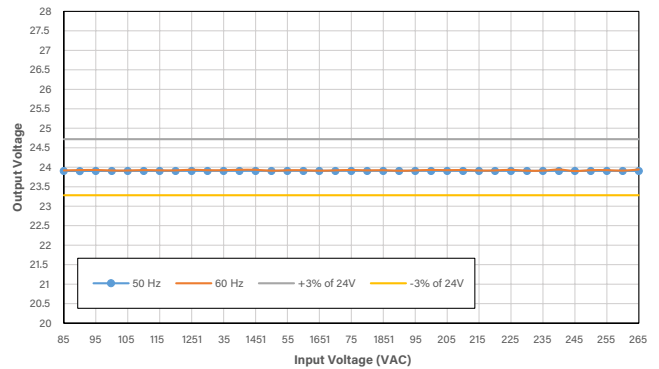
Power supply had >90 PF in full load across whole input range.

AGL Output Voltage



Power supply had maintained an output voltage of within +/- 3% of nominal 24V.

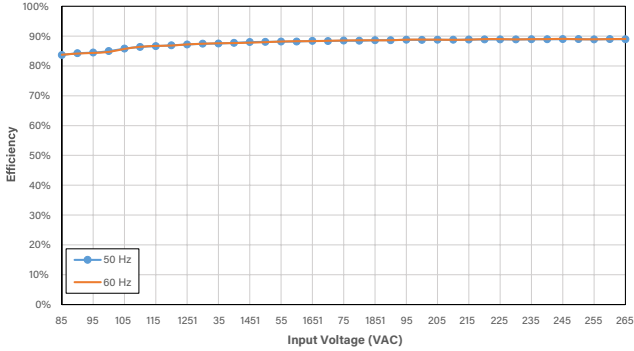
AQS Output Voltage



Power supply had maintained an output voltage of within +/- 3% of nominal 24V.

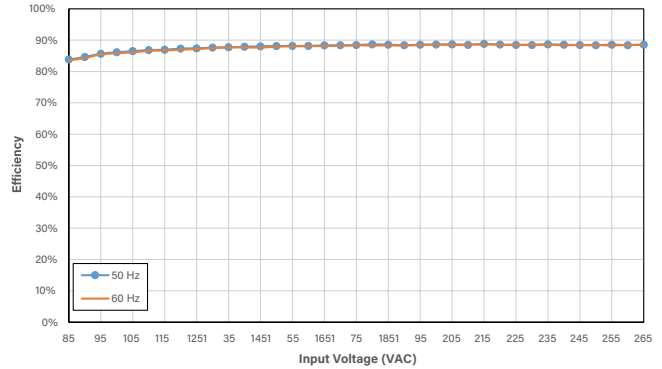
Electronic Load test setup was done using a Maynuo M9812 under a constant current profile and set to 2.5A. Meanwhile Non-Dimmable AGL test consisted of 8 x 6W AGL-560 12-24V AC/DC Non-Dimmable version.

E-load Efficiency



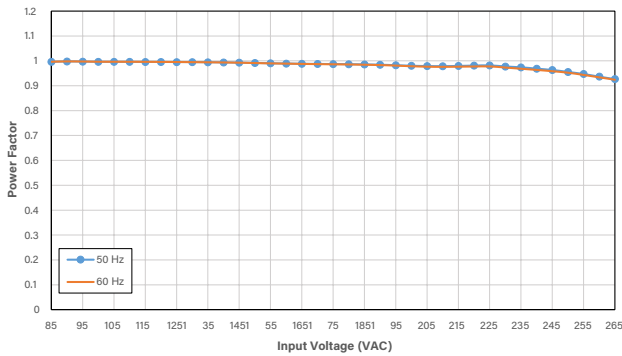
Power supply had >80% efficiency across whole input range.

Non-Dimmable AGL Efficiency



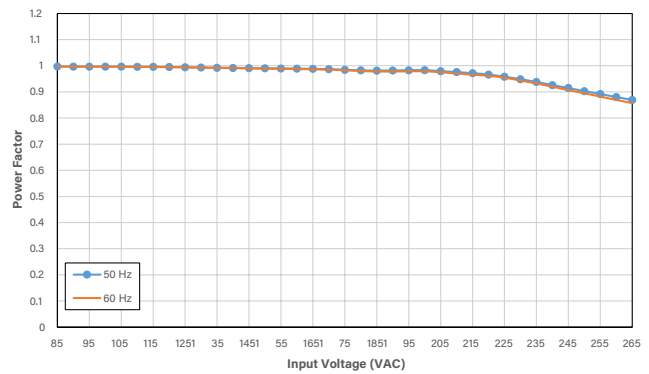
Power supply had >80% efficiency across whole input range.

E-Load Power Factor



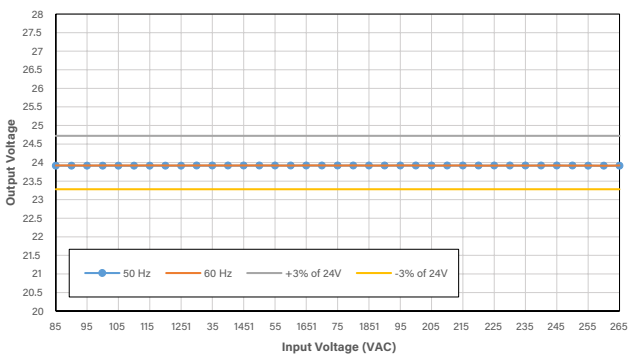
Power supply had >90 PF in full load across whole input range.

Non-Dimmable AGL Power Factor



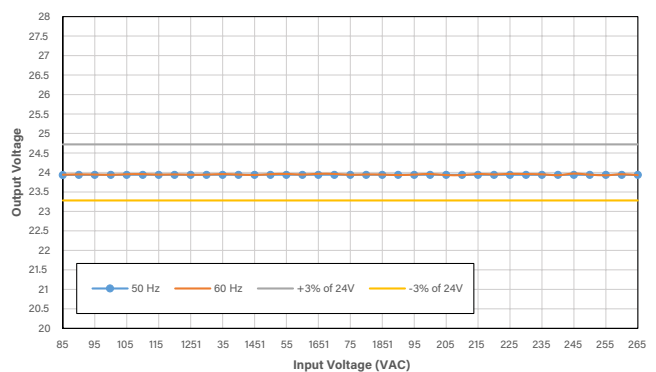
Power supply had >90 PF in full load across whole input range.

E-Load Output Voltage



Power supply had maintained an output voltage of within +/- 3% of nominal 24V.

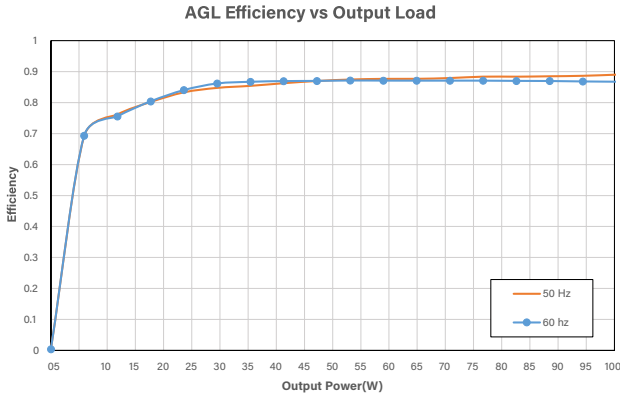
Non-Dimmable AGL Output Voltage



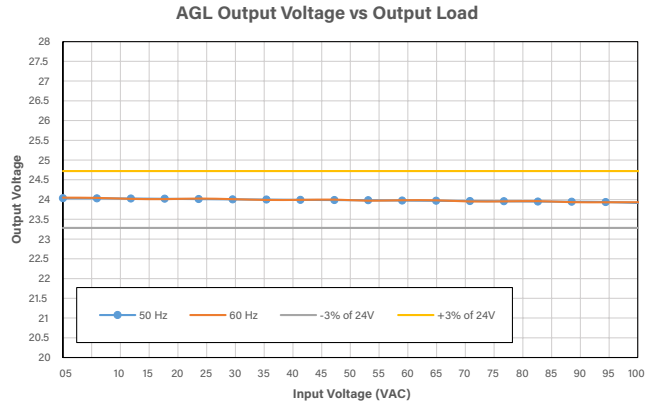
Power supply had maintained an output voltage of within +/- 3% of nominal 24V.

Electrical performance across different loads

AGL test setup consisted of 17 units of 6W Dimmable AGL-560. AQD-24-100-B-N can provide output current from 0A to the maximum 4.17A. 50 Hz data is with 230VAC and 60 Hz data is with 120 VAC.



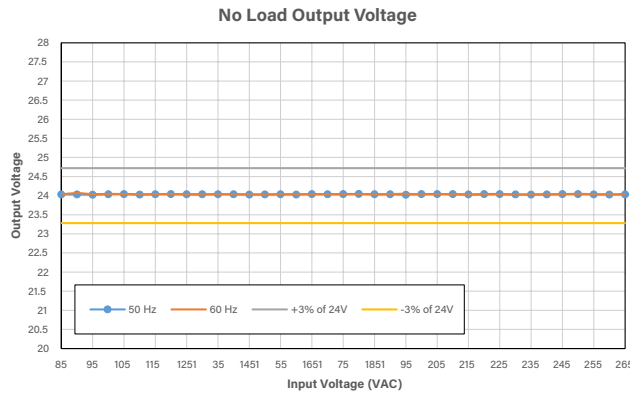
Power supply had achieved >80% efficiency for as low as 12W output load.



Power supply maintained within +/-3% of the nominal output even at no load.

Output voltage at no load

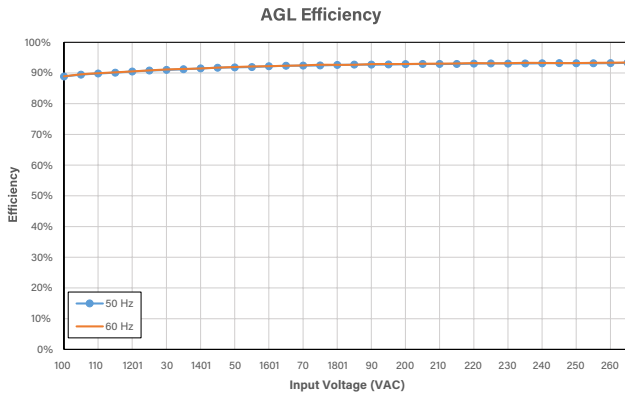
Test confirmed that even at no load, AQD-24-100-B-N has maintained voltage regulation, +/-3% of 24V from 85VAC to 265VAC.



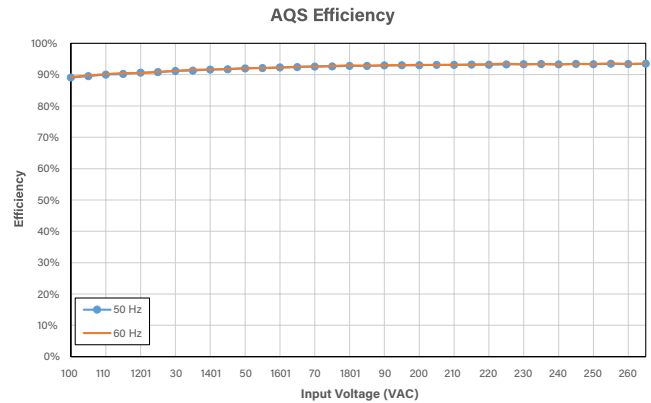
AQD-24-150-B-N

Electrical performance across whole input range.

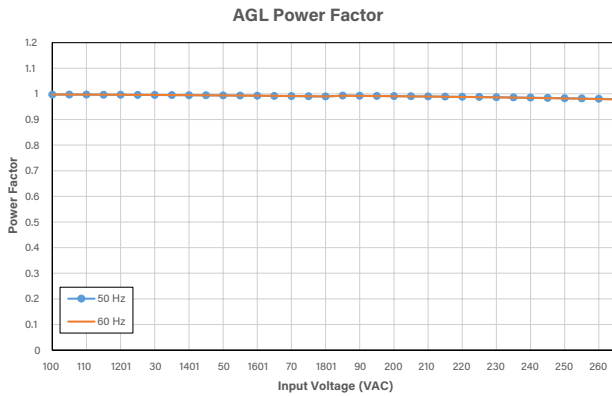
AGL test setup consisted of 25 units of 6W Dimmable AGL-560. Meanwhile AQS test consisted of various AQS Strips totalling 150W output.



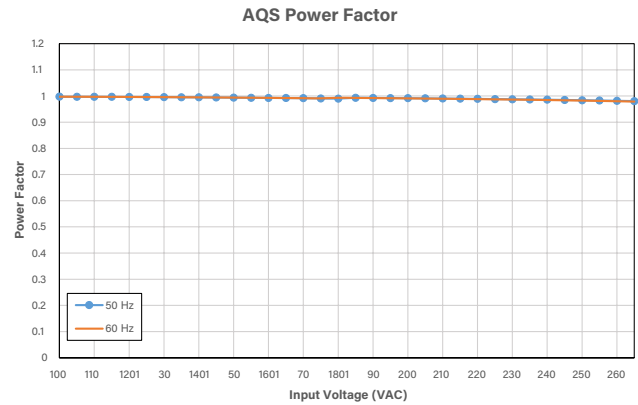
Power supply had >88% efficiency across whole input range.



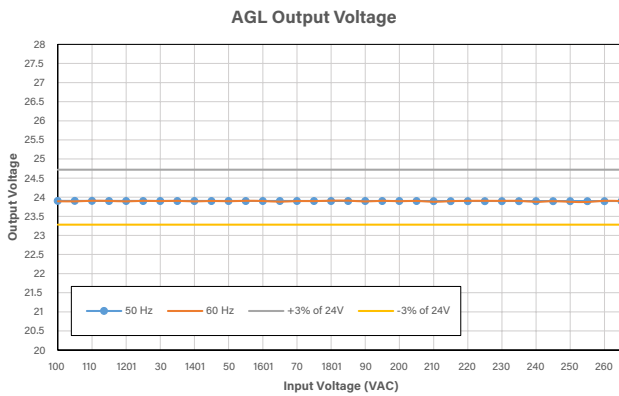
Power supply had >88% efficiency across whole input range.



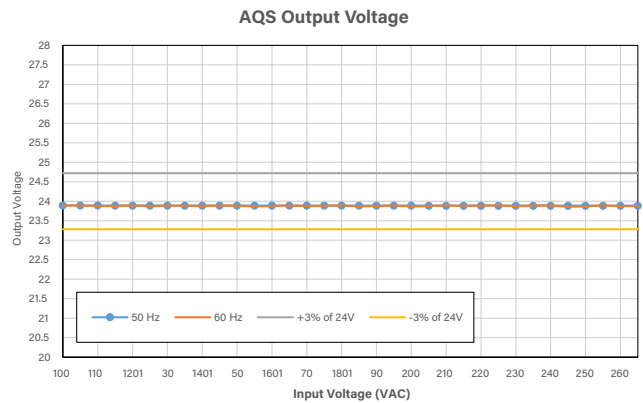
Power supply had >97 PF in full load across whole input range.



Power supply had >97 PF in full load across whole input range.



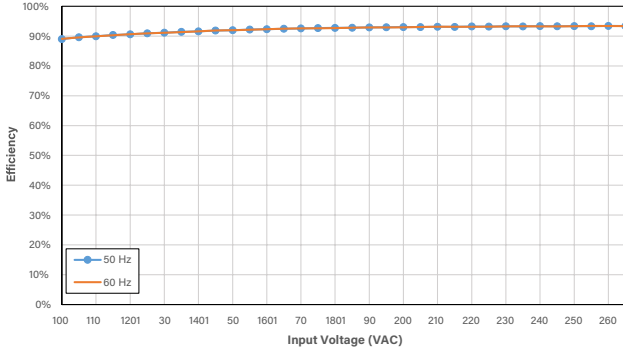
Power supply had maintained an output voltage of within +/- 3% of nominal 24V.



Power supply had maintained an output voltage of within +/- 3% of nominal 24V.

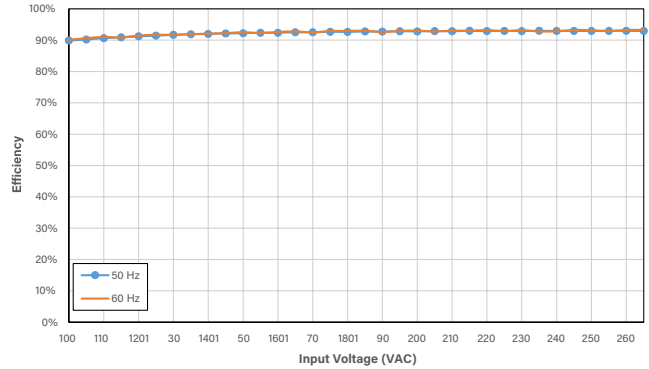
Electronic Load test setup was done using a Maynuo M9812 under a constant current profile and set to 6.25A. Meanwhile Non-Dimmable AGL test consisted of 17 x 6W AGL-560 12-24V AC/DC Non-Dimmable version.

E-load Efficiency



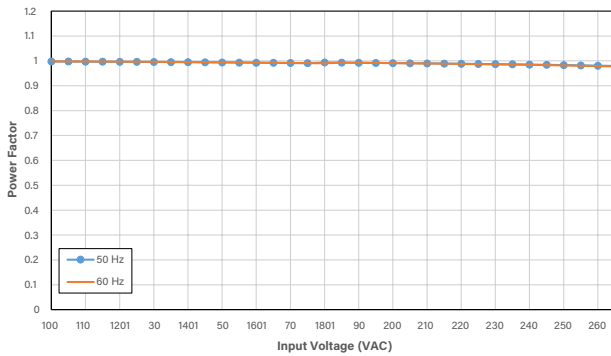
Power supply had >88% efficiency across whole input range.

Non-Dimmable AGL Efficiency



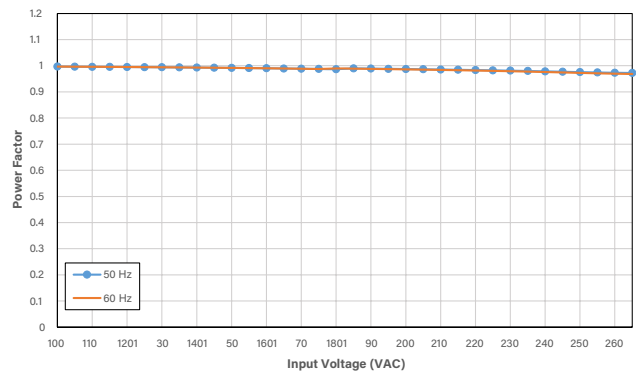
Power supply had >89% efficiency across whole input range.

E-Load Power Factor



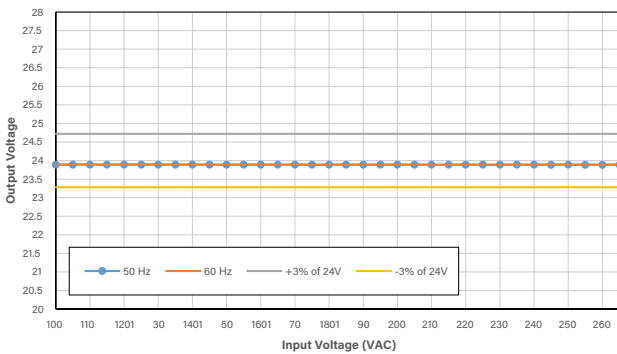
Power supply had >97 PF in full load across whole input range.

Non-Dimmable AGL Power Factor



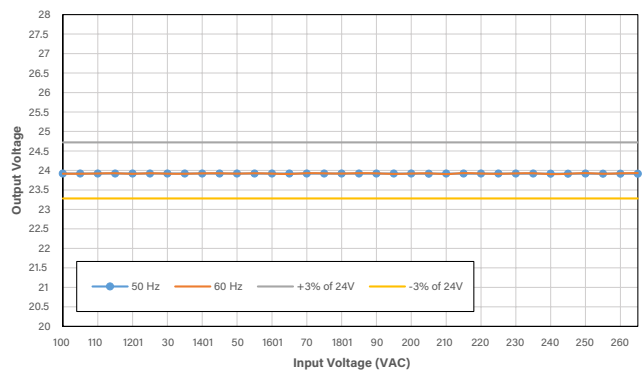
Power supply had >97 PF in full load across whole input range.

E-Load Output Voltage



Power supply had maintained an output voltage of within +/- 3% of nominal 24V.

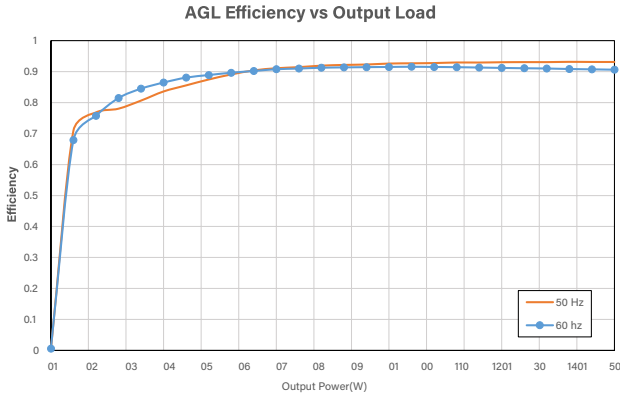
Non-Dimmable AGL Output Voltage



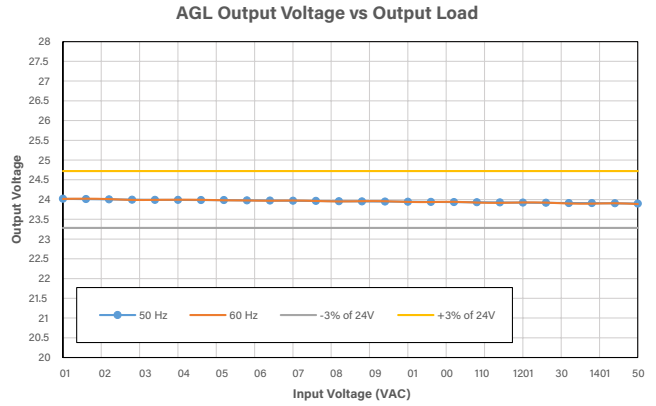
Power supply had maintained an output voltage of within +/- 3% of nominal 24V.

Electrical performance across different loads

AGL test setup consisted of 25 units of 6W Dimmable AGL-560. AQD-24-150-B-N can provide output current from 0A to the maximum 6.25A. 50 Hz data is with 230VAC and 60 Hz data is with 120 VAC.



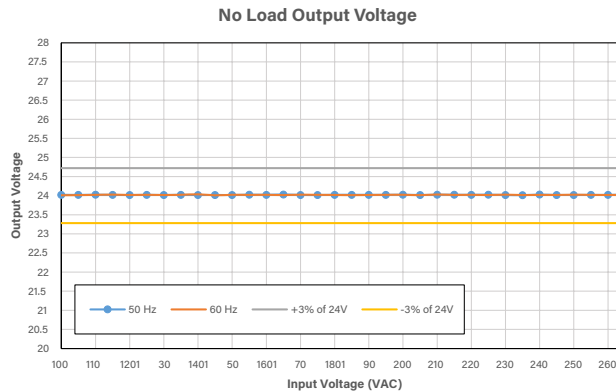
Power supply had achieved >75% efficiency for as low as 12W output load.



Power supply maintained within +/-3% of the nominal output even at no load.

Output voltage at no load

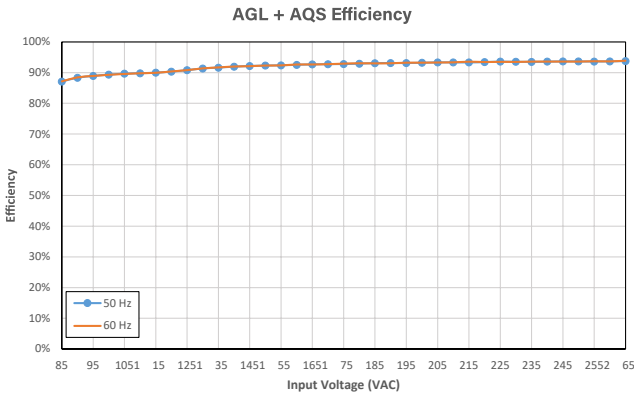
Test confirmed that even at no load, AQD-24-150-B-N has maintained voltage regulation, +/-3% of 24V from 100VAC to 265VAC.



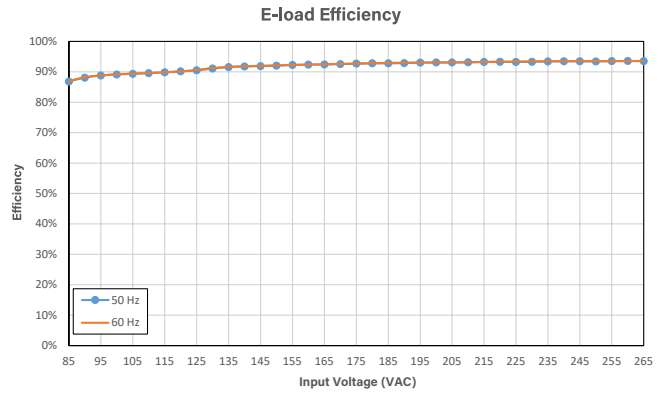
AQD-24-200-B-N

Electrical performance across whole input range.

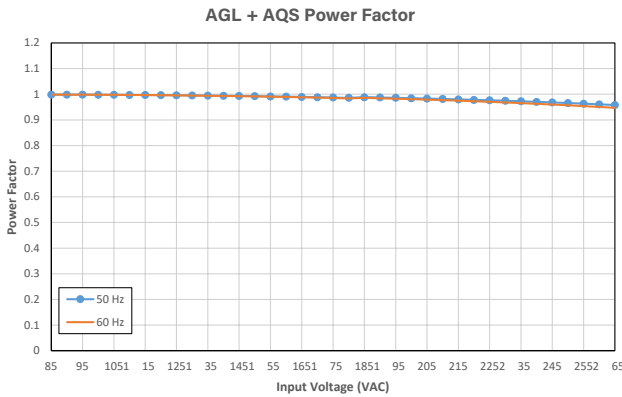
AGL and AQS test setup consisted of dimmable AGL globes and AQS strips totalling an output load of 200W. Electronic Load test setup was done using a Maynuo M9812 under a constant current profile and set to 8.33A.



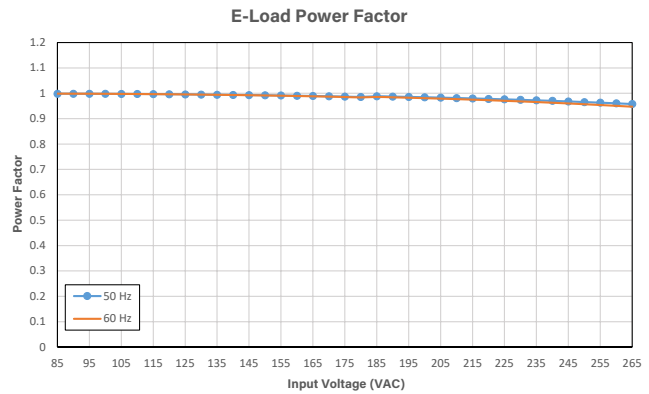
Power supply had >87% efficiency across whole input range



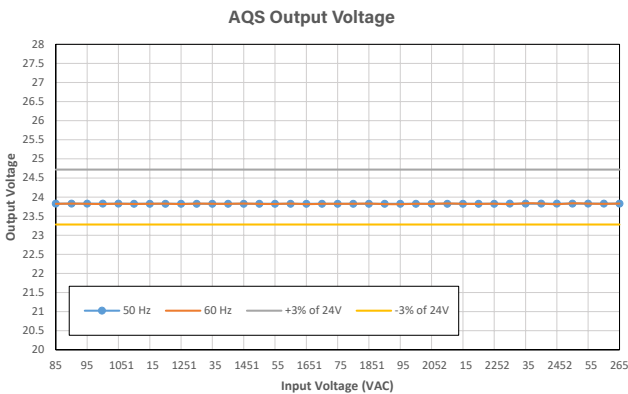
Power supply had >86% efficiency across whole input range.



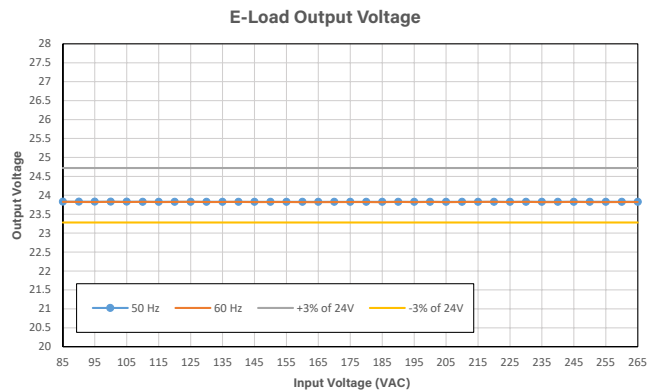
Power supply had >94 PF in full load across whole input range.



Power supply had >94 PF in full load across whole input range.

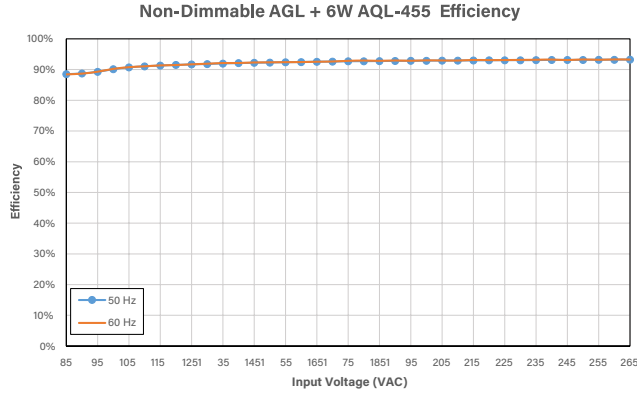


Power supply had maintained an output voltage of within +/- 3% of nominal 24V.

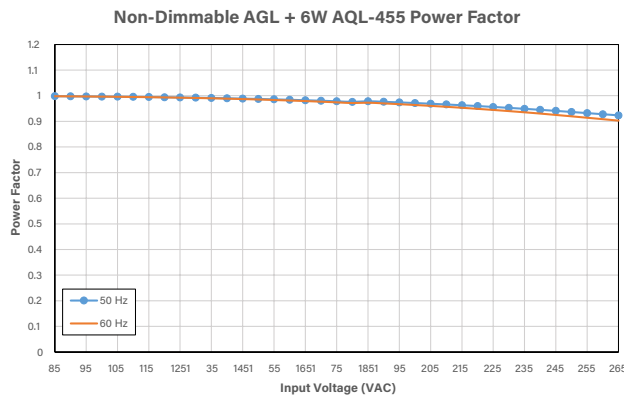


Power supply had maintained an output voltage of within +/- 3% of nominal 24V.

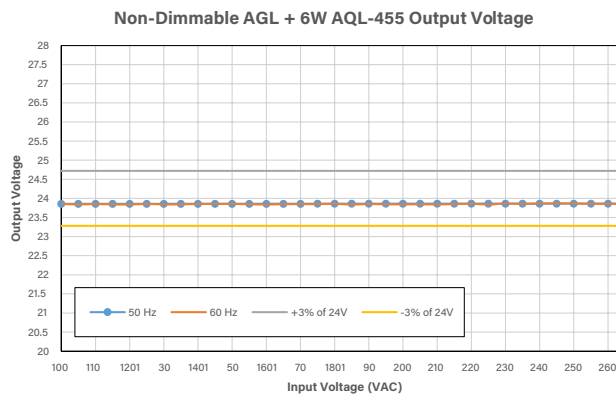
Internal driver load test consisted of non-dimmable 6W AGL-560 12-24V AC/DC Non-Dimmable version and AQL-455 6W spikes totalling an output of 140W.



Power supply had >88% efficiency across whole input range.



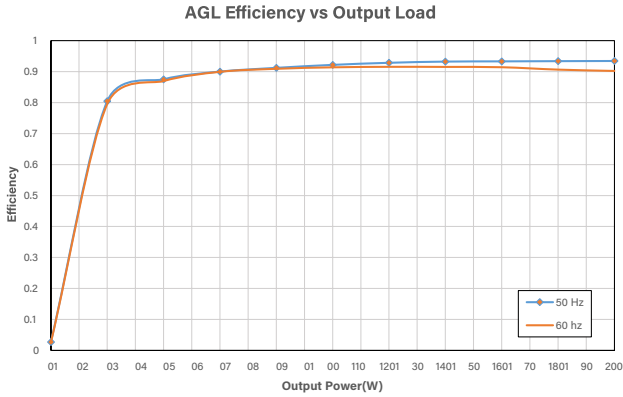
Power supply had >90 PF in full load across whole input range.



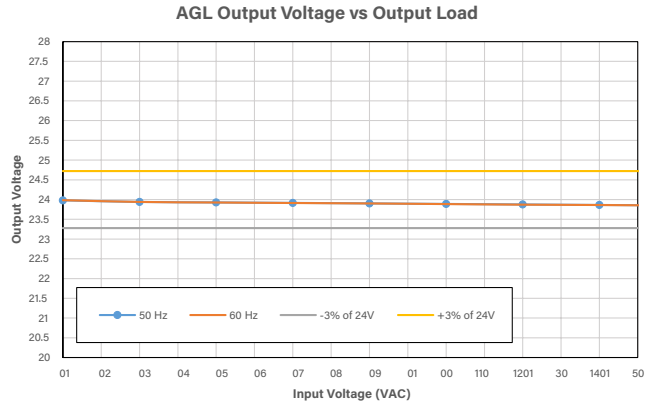
Power supply had maintained an output voltage of within +/- 3% of nominal 24V.

Electrical performance across different loads

Test was done using a Maynuo M9812 under a constant current profile and set from 0A to 8.33A. 50 Hz data is with 230VAC and 60 Hz data is with 120 VAC.



Power supply had achieved >80% efficiency for as low as 12W output load.



Power supply maintained within +/-3% of the nominal output even at no load.

Output voltage at no load

Test confirmed that even at no load, AQD-24-150-B-N has maintained voltage regulation, +/-3% of 24V from 100VAC to 265VAC.

