PRODUCT GUIDE

unios®
driver suite





End-to-end Compatibility



Created to best support Unios' wide range of products.

50,000h

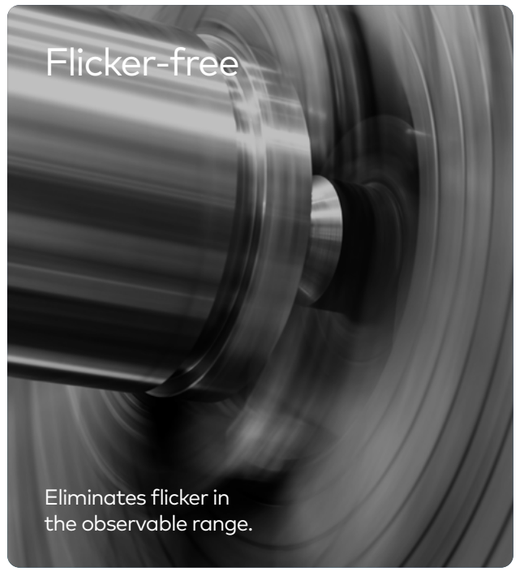
Lifetime for reliability

Reliable in high temperature environments.



45°C

Ambient Temperature



Flicker-free

Eliminates flicker in the observable range.

Discover

Product

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NEW

24V DC Driver Suite

Flicker-free

Our non-dim and phase-cut drivers delivers flicker-free output meeting the requirements for visible flicker (PstLM) and stroboscopic effect (SVM).

A range of options

From 4W to 240W with various controls and IP options for indoor and outdoor applications.



Built for efficiency

Efficiency that minimises energy losses, reducing wasted current on-site.

RANGE OVERVIEW

24VDC Driver Suite

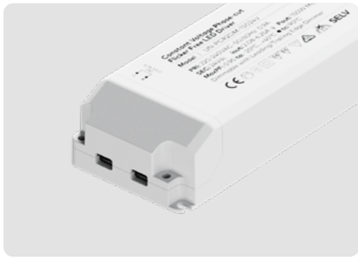
24VDC Suite are compatible with a wide range
of Unios linear and outdoor products.

Non-Dim



Dimming	Non-Dimmable						
IP rating	IP20			IP67			
Power	30W	50W	75W	40W	100W	150W	240W
Dimensions (mm)	155×50×19	175×58×19	175×58×19	130×45×28	165×45×32	191×58×32	250×58×32
Efficiency (%)	87	88	91	85	90	92	92
PstLM	≤1	≤1	≤1	≤1	≤1	≤1	≤1
SVM	≤0.4	≤0.4	≤0.4	≤0.4	≤0.4	≤0.4	≤0.4

Phase-cut



DALI



Dimming	Phase-Cut				Tridonic DALI			
IP rating	IP20		IP67		IP20			
Power	25W	50W	100W	200W	35W	60W	100W	150W
Dimensions (mm)	128×52×30	184×61×32	191×70×40	249×72×40	195×43×30	225×43×30	295×43×30	325×43×30
Efficiency (%)	84	85	88	92	-	-	-	-
PstLM	≤1	≤1	≤1	≤1	-	-	-	-
SVM	≤0.4	≤0.4	≤0.4	≤0.4	-	-	-	-

Constant Current Driver Suite

Our Phase-cut and DALI drivers are designed to deliver power, control and trust for installation and and reliable operation.

Power Factor (PF)

> 0.90



Reduces unnecessary loads on the electrical systems, reducing size and costs across the overall system.

1kV Surge Protection

Equipped with a 1kV surge protection which protects internal electronic components from sudden high voltage spikes.

Active power filter that reduces peak current and current distortion, resulting in a cleaner load to the overall supply.

10%

Total Harmonic Distortion (THD)

RANGE OVERVIEW

Constant Current Driver Suite

Phase-cut and DALI drivers are compatible with a wide range of Unios products, including the award-winning ION Collection.

Phase-cut



Dimming protocol	Phase-Cut		
Output voltage	25–40V*	25–40V	25–40V
Output current	200–700mA	400–500mA	600–1000mA
Power	8–14W	16–20W	24–40W
Dimensions (mm)	101×50.8×23	114.4×50.8×30	170×45×30
Min ambient temp ta	-20°C	-20°C	-20°C
Max ambient temp ta	50°C	50°C	50°C
THD full load	<10%	<10%	<10%
THD min load	<10%	<10%	<10%
Dimming range	1–100%	1–100%	1–100%
PstLM	≤1	≤1	≤1
SVM	≤0.4	≤0.4	≤0.4
IEEE 1789-2015	No Observable Effect	No Observable Effect	No Observable Effect

DALI



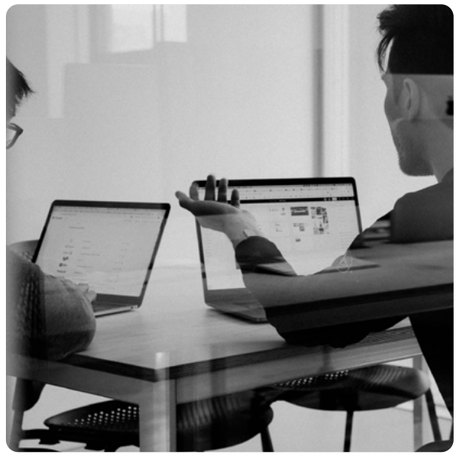
Dimming protocol	DALI			
Output voltage	9–40V	2.5–15V	9–40V	9–40V
Output current	150–300mA	400–1000mA	150–500mA	550–1050mA
Power	6–12W	6–12W	6–20W	22–42W
Dimensions (mm)	131×30×20 *	131×30×20 *	80×41×30	97×44×30
Min ambient temp ta	-20°C	-20°C	-20°C	-20°C
Max ambient temp ta	50°C	50°C	50°C	50°C
THD full load	<12%	<12%	<11%	<15%
THD min load	Not stated	Not stated	Not stated	Not stated
Dimming range	1–100%	1–100%	1–100%	1–100%
PstLM	≤1	≤1	≤1	≤1
SVM	≤0.4	≤0.4	≤0.4	≤0.4
IEEE 1789-2015	No Observable Effect	No Observable Effect	No Observable Effect	No Observable Effect

FLICKER PERFORMANCE

The effects of flicker

Flicker affects people in two ways, health and stroboscopic, both of which can be mitigated by flicker-free drivers.

1 Common health effects



Surveys have found that 25 to 50% of migraine sufferers identify flicker as a trigger, and that flicker in offices can double the average rate of headaches. For people with photosensitive epilepsy, visible flicker can also trigger seizures.

2 Stroboscopic



Flicker can make moving objects appear to jump, stutter or leave a trail of images. Spinning machinery, like fans, lathes or kitchen mixers, can appear slowed or stopped, which is a safety risk. On camera, flicker shows up as rolling bands in phone photos and video.



PHASE-CUT DRIVER

2-Stage Driver Topology

The Unios Phase-Cut drivers are flicker-free thanks to a process that reduces the input noise before reaching critical components

1. AC Input
2. Stage 1: High Voltage Rectified DC
3. Stage 2: Mid Voltage DC
4. Low Voltage LED DC

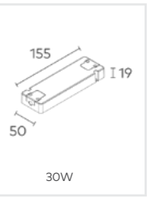
The first driver filters the AC input and produces a stable direct current, while the second takes that clean supply and delivers regulated current to the LED.

Unios 24V Driver

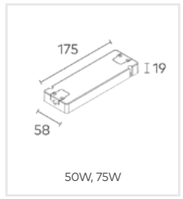
IP20 Non-Dim



1



30W



50W, 75W

	Product Code	Power	Current (A)	Voltage	Size L × W × H (mm)	Model
1	**30W IP20 24VDC CV Driver**	30W	0-1.25A	24VDC	155 × 50 × 19	UN-NDR2UT-03024V
	50W IP20 24VDC CV Driver	50W	0-2.08A	24VDC	175 × 58 × 19	UN-NDR2UT-05024V
	75W IP20 24VDC CV Driver	75W	0-3.12A	24VDC	175 × 58 × 19	UN-NDR2UT-07524V

Key Information	
Material	PC
IP Rating	IP20, indoor
Protection Class	Class II
Warranty	5 years
Working Temp.	-20ºC~45ºC
Storage Temp.	-20ºC~70ºC
Humidity	5-85% RH, non-condensing
Tcase	90ºC (110ºC in fault condition)
Lifetime	50,000h at tc 90ºC (0.2%/1,000h failure rate)
Switch Cycle Endurance	>100,000 cycles
Weight	110g / 153g / 255g
Mounting Holes	117 × 44mm (30W), 137 × 52mm (50W, 75W)
Control	Non-dim

Input	
Nominal Efficiency	87-91% Full Load (model dependent)
Voltage	220-240VAC
Voltage Range	198-264VAC, 176-280VDC
Frequency Range	50/60Hz (47-63Hz)
Power Factor	0.95
THD	10-20% Full Load (model dependent)
AC Current (max)	0.20-0.46A (model dependent)
No-load Power	≤0.5W (≤0.3W on 75W)
Inrush Current (peak)	Cold start, 35A@230VAC, 200μs (70A on 75W)

Output	
Channels	1
Output Voltage	24VDC
Voltage Accuracy	±5%
Ripple & Noise (<120Hz)	≤10% (30W), ≤15% (50W, 75W)
Flicker	Flicker-free, PstLM ≤1, SVM ≤0.4
Isolation	SELV equivalent, galvanic isolation

Protection	
Short Circuit	Auto-recovery once the fault is removed
Over Current	Auto-recovery once the fault is removed
Over Temperature	Auto-recovery once the fault is removed
Surge (L-N | L/N-PE)	2kV | 2kV

Features	
Output	24VDC constant voltage, 30-75W
Mounting	Independent driver, Class II, SELV equivalent
Terminals	Captured terminal screws
Protection	Open circuit, short circuit, overload, over temperature
Input	198-264VAC or 176-280VDC
Flicker-free	PstLM ≤1, SVM ≤0.4

Standards
EN 61347-1
EN 61347-2-13
EN 62493
EN 62384 (performance)
IEEE 1789-2015
EN 55015 · EN 61000-3-2 · EN 61000-3-3 · EN 61547 (EMC)
SAA approved · RCM

Installation	
Mains	L and N to the PRI terminals
LED Load	LED+ and LED– to the SEC terminals. Connect before power-on.
Hot Plugging	Not supported. Switch the mains off before connecting or disconnecting LED loads.
EMC	The driver is a component. Re-check EMC on the complete installation.

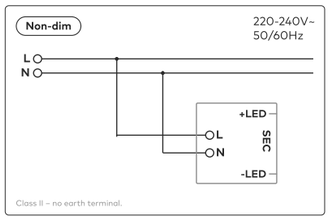
Max Capacity of Automatic Circuit Breakers (to Inrush Current)	C10	C13	C16	C20	B10	B13	B16	B20	Inrush peak	Time
UN-NDR2UT-03024V (30W)	15	20	25	31	7	9	11	14	35A	200μs
UN-NDR2UT-05024V (50W)	15	20	25	31	7	9	11	14	35A	200μs
UN-NDR2UT-07524V (75W)	8	10	13	16	4	5	6	7	70A	200μs

Calculated from inrush current (cold start, 230VAC) using ABB S200 series MCBs as a reference. Actual values can differ with circuit breaker type and installation. Do not exceed the continuous current rating of the circuit breaker.

Notes

Hot plug-in or secondary switching of LEDs is not permitted and may cause a very high current to the LEDs.

The driver is a component of the final installation. EMC performance depends on the complete installation.





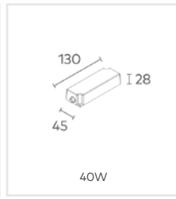
Connections	
Input Terminals	L, N · 0.75-1.5mm² · strip 6mm
Output Terminals	LED+, LED– · 0.5-1.5mm² · strip 6mm
Terminal Type	Screw terminals, captured screws
Remote Use	Independent driver, Class II, IP20

Unios 24V Driver

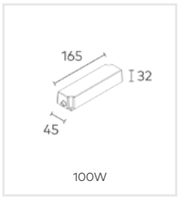
IP67 Non-Dim



1



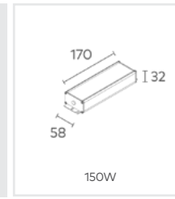
40W



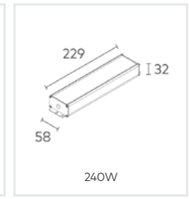
100W



2



150W



240W

	Product Code	Power	Current (A)	Voltage	Size L × W × H (mm)	Protection Class	Model
1	**40W IP67 24VDC CV Driver**	40W	0-1.67A	24VDC	130 × 45 × 28	Class II	UN-NDR2PW-04024V
	100W IP67 24VDC CV Driver	100W	0-4.17A	24VDC	165 × 45 × 32	Class II	UN-NDR2PW-10024V
2	**150W IP67 24VDC CV Driver**	150W	0-6.25A	24VDC	170 × 58 × 32	Class I	UN-NDR2AW-15024V
	240W IP67 24VDC CV Driver	240W	0-10A	24VDC	229 × 58 × 32	Class I	UN-NDR2AW-24024V

Key Information	
Material	Plastic / aluminium
IP Rating	IP67, outdoor
Warranty	5 years
Working Temp.	-40~45ºC / -40~50ºC
Storage Temp.	-40~70ºC / -40~80ºC
Humidity	5-85 / 5-95% RH, non-condensing
Tcase	90ºC (110ºC in fault)
Lifetime	50,000h at tc 90 / 75ºC
Switch Cycle Endurance	>100,000 cycles
Weight	310±15 / 450±20 / 620±30 / 820±30g
Mounting Holes	120×35 / 155×35 / 181×34 / 237×34mm
Control	Non-dim

Input	
Nominal Efficiency	85 / 90 / 92 / 92% Full Load
Voltage	220-240VAC
Voltage Range	198-264VAC, 176-280VDC / 90-264VAC, 140-280VDC
Frequency Range	50/60Hz
Power Factor	0.95
THD	15 / 10 / 10 / 10% Full Load
AC Current (max)	0.25 / 0.6 / 0.9 / 1.3A
No-load Power	≤0.5W
Inrush Current (peak)	Cold start, 230VAC, 30-110A (per model in the circuit breaker table)

Output	
Channels	1
Output Voltage	24VDC
Voltage Accuracy	±5%
Ripple & Noise (<120Hz)	≤5 / ≤3 / ≤1 / ≤2%
Flicker	Flicker-free, PstLM ≤1, SVM ≤0.4
Isolation	SELV, galvanic isolation

Protection	
Short Circuit	Auto-recovery once the fault is removed
Over Current	Auto-recovery / cycle mains to restart
Over Voltage	Auto-recovery / cycle mains to restart
Over Temperature	Auto-recovery / cycle mains to restart
Surge (L-N | L/N-PE)	2 | 4kV / 6 | 6kV
Withstand Voltage (I/P-O/P)	3.75kVAC, 60s

Features	
Output	24VDC constant voltage, 40-240W
Mounting	Independent driver, SELV
Outdoor	IP67, plastic (40W, 100W) or aluminium (150W, 240W)
Leads	Primary and secondary leads fitted, 300mm
Flicker-free	PstLM ≤1, SVM ≤0.4
Protection	Open circuit, short circuit, overload, over temperature

Standards
EN 61347-1
EN 61347-2-13
EN 62384 (performance)
IEEE 1789-2015
EN 55015 · EN 61000-3-2 · EN 61000-3-3 · EN 61547 (EMC)
SAA approved · RCM

Installation	
Mains	L and N leads. The 150W and 240W also have an earth lead, which must be connected.
LED Load	Output leads to the LED load. Connect before power-on.
Hot Plugging	Not permitted. No secondary switching of LEDs.
Location	Do not cover with flammable material or building insulation.

Max Capacity of Automatic Circuit Breakers (to Inrush Current)	C10	C13	C16	C20	B10	B13	B16	B20	Inrush peak	Time
UN-NDR2PW-04024V (40W)	18	23	29	36	8	11	13	17	30A	200μs
UN-NDR2PW-10024V (100W)	7	9	11	14	3	4	5	7	50A	300μs
UN-NDR2AW-15024V (150W)	4	6	7	9	2	3	3	4	60A	400μs
UN-NDR2AW-24024V (240W)	5	6	8	10	2	3	3	4	110A	200μs

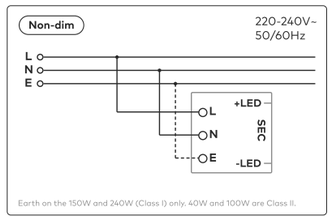
Calculated from inrush current (cold start, 230VAC) using ABB S200 series MCBs as a reference. Actual values can differ with circuit breaker type and installation.
Do not exceed the continuous current rating of the circuit breaker.

Notes

Where two values are given (a / b), a is the 40W and 100W, b is the 150W and 240W. Four values follow the model order.

Hot plug-in or secondary switching of LEDs is not permitted and may cause a very high current to the LEDs.

Do not abut or cover with normally flammable materials, or use where building insulation or debris is, or may be, present in normal use.





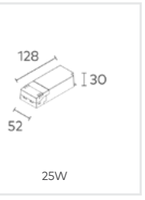
Connections	
Input Leads	40W, 100W: VDE H05RN-F 2 × 1.0mm² (L, N), 300 ±10mm. 150W, 240W: H05RN-F 3 × 1.0mm² (L, N, earth), 300 ±20mm
Output Leads	40W, 100W: UL SOJW 2 × 18AWG, 300 ±10mm. 150W: SJOW 2 × 18AWG, 240W: SJOW 2 × 16AWG, 300 ±20mm
Remote Use	Independent driver, IP67. Class II (40W, 100W), Class I (150W, 240W)

IP67

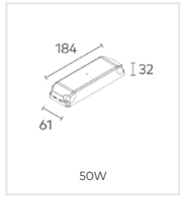
Unios 24V Driver

IP20 Phase-Cut





25W



50W

	Product Code	Power	Current (A)	Voltage	Size L × W × H (mm)	Model
1	**UN.PCRV24.025.02**	25W	0.1-1.04A	24VDC	128 × 52 × 30	UN-PCR2DM-02524V
	UN.PCRV24.050.02	50W	0.5-2.08A	24VDC	184 × 61 × 32	UN-PCR2DM-05024V

Key Information	
Material	Plastic, white
IP Rating	IP20, indoor
Protection Class	Class II
Warranty	5 years
Working Temp.	-20°C~50°C
Storage Temp.	-20°C~70°C
Humidity	5-85% RH, non-condensing
Tcase	80°C (25W), 75°C (50W)
Lifetime	50,000h (0.2%/1,000h failure rate)
Switch Cycle Endurance	>100,000 cycles
Weight	110±5g / 240±10g
Mounting Holes	96 × 20.8mm / 176.5 × 53mm
Control	Trailing edge phase-cut

Input	
Nominal Efficiency	84-85% Full Load (model dependent)
Voltage	220-240VAC
Voltage Range	198-264VAC, 176-250VDC
Frequency Range	50/60Hz
Power Factor	0.95
THD	≤25% (25W), ≤15% (50W) Full Load
AC Current (max)	0.16-0.31A (model dependent)
Turn-on Time	≤500ms
Inrush Current (peak)	Cold start, 10A, 100μs (20A on 50W)

Output	
Channels	1
Output Voltage	24VDC
Voltage Accuracy	±5%
Load Range	2.5-25W (25W), 12-50W (50W)
No Load Output Voltage	27VDC Max
Ripple (≤120Hz)	≤30%
Dimming Range	1%-100%
Dimming Method	Analogue
Flicker	Analogue flicker-free, PstLM ≤1, SVM ≤0.4
Isolation	SELV, galvanic isolation

Protection	
Short Circuit	Protected
Overload	Protected
No Load	Protected
Over Temperature	Protected
Output Over Voltage	Protected
Input Over Voltage	264VAC max
Surge (L-N | L/N-PE)	1kV | 2kV

Features	
Dimming	Trailing edge phase-cut, 1%-100%
Output	24VDC constant voltage, 25-50W
Mounting	Independent driver, Class II, SELV
Terminals	Push-wire (25W), captured screws (50W)
Flicker-free	Analogue dimming, PstLM ≤1, SVM ≤0.4
Protection	Open circuit, short circuit, overload, over temperature

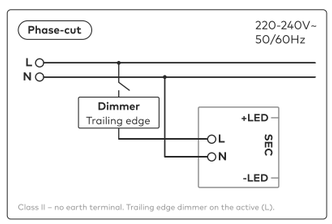
Standards
EN 61347-1
EN 61347-2-13
EN 60598-1
EN 62384 (performance)
IEEE 1789-2015
EN 55015 · EN 61000-3-2 · EN 61000-3-3 · EN 61547 (EMC)
SAA approved · RCM

Phase-Cut Dimming	
Dimmer Type	Trailing edge (C) phase-cut dimmers only
Dimming Range	1%-100%
Driver Minimum Load	2.5W (25W), 12W (50W)
Dimmer Minimum Load	Check the dimmer's minimum load rating. A load below it can flicker at low levels.
Smooth Dimming	Use a dimmer with continuous (stepless) control.
Tested Dimmers	TBC

Max Capacity of Automatic Circuit Breakers (to Inrush Current)	C10	C13	C16	C20	B10	B13	B16	B20	Inrush peak	Time
UN-PCR2DM-02524V (25W)	62	81	100	125	62	81	100	125	10A	100μs
UN-PCR2DM-05024V (50W)	32	41	51	64	32	41	51	64	20A	100μs

Calculated from inrush current (cold start, 230VAC) using ABB S200 series MCBs as a reference. Actual values can differ with circuit breaker type and installation.
Do not exceed the continuous current rating of the circuit breaker.

Notes
Hot plug-in or secondary switching of LEDs is not permitted and may cause a very high current to the LEDs.
Maximum cable length, system: 2m.



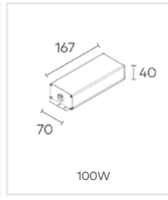


Connections	
Input Terminals	L, N · 0.75mm² (25W), 0.75-2.5mm² (50W) · strip 8mm (25W), 6mm (50W)
Output Terminals	LED+, LED– · 0.5-0.75mm² (25W), 0.75-2.5mm² (50W) · strip 8mm (25W), 6mm (50W)
Terminal Type	Push-wire (25W), captured screws (50W)
Max Output Cable	2m
Remote Use	Independent driver, Class II, IP20

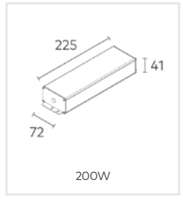
Unios 24V Driver

IP67 Phase-Cut





100W



200W

	Product Code	Power	Current (A)	Voltage	Size L × W × H (mm)	Model
1	**UN.PCRV24WP.100.02**	100W	1.4-4.2A	24VDC	167 × 70 × 40	UN-PCR2V2-10024V
	UN.PCRV24WP.200.02	200W	2.7-8.3A	24VDC	225 × 72 × 41	UN-PCR2V2-20024V

Key Information	
Material	Aluminium
IP Rating	IP67, outdoor
Protection Class	Class I
Warranty	5 years
Working Temp.	-20°C~50°C
Storage Temp.	-20°C~70°C
Humidity	5-85% RH, non-condensing
Tcase	80°C (110°C in fault condition)
Lifetime	50,000h (0.2%/1,000h failure rate)
Switch Cycle Endurance	>100,000 cycles
Weight	860±45g / 1,240±65g
Mounting Holes	176 × 36mm / 237 × 36mm
Control	Trailing edge phase-cut

Input	
Nominal Efficiency	88-92% Full Load (model dependent)
Voltage	220-240VAC
Voltage Range	198-264VAC (AC only)
Frequency Range	50/60Hz
Power Factor	0.95
THD	≤15% Full Load
AC Current (max)	0.6A (100W), 1.2A (200W)
Turn-on Time	≤500ms
Inrush Current (peak)	Cold start, 50A, 300μs (40A, 900μs on 200W)

Output	
Channels	1
Output Voltage	24VDC
Voltage Accuracy	±5%
Load Range	33-100W (100W), 66-200W (200W)
No Load Output Voltage	27VDC Max
Ripple (≤120Hz)	≤3%
Dimming Range	1%-100%
Dimming Method	PWM
Flicker	Flicker-free (PWM), PstLM ≤1, SVM ≤0.4
Isolation	SELV, galvanic isolation

Protection	
Short Circuit	Protected
Overload	Protected
No Load	Protected
Over Temperature	Protected
Output Over Voltage	Protected
Input Over Voltage	264VAC max
Surge (L-N | L/N-PE)	4kV | 6kV (100W), 2kV | 4kV (200W)

Features	
Dimming	Trailing edge phase-cut, 1%-100%, PWM
Output	24VDC constant voltage, 100-200W
Mounting	Independent driver, Class I, SELV
Outdoor	IP67 aluminium housing
Flicker-free	PWM dimming, PstLM ≤1, SVM ≤0.4
Protection	Open circuit, short circuit, overload, over temperature

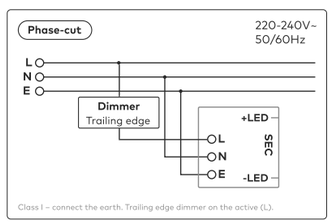
Standards
EN 61347-1
EN 61347-2-13
EN 60598-1
EN 62384 (performance)
EN 55015 · EN 61000-3-2 · EN 61000-3-3 · EN 61547 (EMC)
IEEE 1789-2015
SAA approved · RCM

Phase-Cut Dimming	
Dimmer Type	Trailing edge (C) phase-cut dimmers only
Dimming Range	1%-100%
Driver Minimum Load	33W (100W), 66W (200W)
Dimmer Minimum Load	Check the dimmer's minimum load rating. A load below it can flicker at low levels.
Smooth Dimming	Use a dimmer with continuous (stepless) control.
Tested Dimmers	TBC

Max Capacity of Automatic Circuit Breakers (to Inrush Current)	C10	C13	C16	C20	B10	B13	B16	B20	Inrush peak	Time
UN-PCR2V2-10024V (100W)	7	9	11	14	3	4	5	7	50A	300μs
UN-PCR2V2-20024V (200W)	4	5	6	8	2	3	3	4	40A	900μs

Calculated from inrush current (cold start, 230VAC) using ABB S200 series MCBs as a reference. Actual values can differ with circuit breaker type and installation.
Do not exceed the continuous current rating of the circuit breaker.

Notes
Hot plug-in or secondary switching of LEDs is not permitted and may cause a very high current to the LEDs.
Maximum cable length, system: 2m.





Connections	
Input Leads	VDE H05RN-F 3 × 1.0mm² (L, N, earth), 300 ±10mm
Output Leads	VDE H05RN-F 2 × 1.0mm², 300 ±10mm
Max Output Cable	2m
Remote Use	Independent driver, Class I, IP67

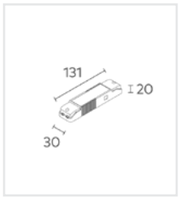
IP67



Unios 9W Phase-Cut Driver

506 Series





	Product Code	Power	Current (mA)	Voltage (VDC)	Model
1	**UN.PCR009.0400.01**	6W	400mA	3-15VDC	UN506-12-91000
	UN.PCR009.0600.01	9W	600mA	3-15VDC	UN506-12-91000
	UN.PCR009.0800.01	8W	800mA	3-10VDC	UN506-12-91000
	UN.PCR009.1000.01	6W	1000mA	3-6VDC	UN506-12-91000

Key Information	
Material	PC
IP Rating	IP20
Lifetime (Ta = 50°C)	50,000h (full load)
Warranty	5 years
Working Temp.	-20°C~40°C
Storage Temp.	-20°C~40°C
Tcase	90°C
Control	Trailing edge phase-cut

Input	
Nominal Efficiency	46-66% Full Load (setting dependent)
Voltage	200VAC-250VAC
Frequency Range	50/60Hz
Power Factor	0.5
AC Current (max)	0.15A
Max Input Power	14.45W
Inrush Current (peak)	17A, 200µs

Output	
Channels	1
Current Setting	DIP switch, 400 / 600 / 800 / 1000mA
Load Regulation	3-5% (setting dependent)
No Load Output Voltage	20VDC Max
Dimming Range	1%-100%
Flicker	PSTLM 0.65 SVM 0.008 (100% output)
IEEE1789-2015	No Observable Effect

Protection	
Over Voltage	21VDC
Surge (L-N)	2KV
Withstand Voltage (I/P-O/P)	3750VAC

Features	
Dimming	Trailing edge phase-cut, 1%-100%
Output Current	DIP selectable, 400-1000mA
Mounting	Independent remote driver, Class II, SELV
Installation	Do not cover (Global-Mark GMA-524347-EA)
Terminals	Screwless terminal blocks with cord anchorage covers
Drop Tested	Unios drop test passed

Standards
AS 61347.2.13:2018
AS/NZS 61347.1:2016 + A1:2018
AS CISPR 15:2017 (SDoC)
EN 61347-1 · EN 61347-2-13 (CE, LVD)
RCM · Global-Mark GMA-524347-EA

Compatible Dimmers (Australia)	
Clipsal	32ELEDM · 32E450TM
Legrand	Cat 400T
Diginet	LED SMART Phase Adaptive Dimmer · Rotary Diginet Dimmer

Compatibility tested by Unios. Results can vary with dimmer model, load and installation. Test other dimmers before specifying.

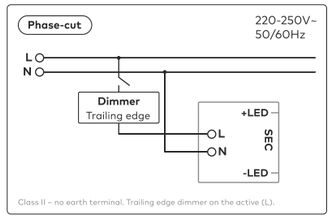
Max Capacity of Automatic Circuit Breakers (to Inrush Current)	C10	C16	C25	C32	Inrush peak	Time
UN506-12-91000 (400-1000mA)	30	49	77	99	17A	200µs

Calculated from inrush current (17A, 200µs, 240VAC full load) and the 0.15A rated input current, based on ABB S200 series MCBs with an 80% margin. Do not exceed the continuous current rating of the circuit breaker.

DIP Switch Settings

DIP	Switch 1	Switch 2	Irated	Uoutput	Prated
1 2	OFF	OFF	400mA	3-15VDC	6W
1 2	ON	OFF	600mA	3-15VDC	9W
1 2	OFF	ON	800mA	3-10VDC	8W
1 2	ON	ON	1000mA	3-6VDC	6W

Output current is set with the 2-way DIP switch on the driver, as shown on the product label. Slider up = ON, down = OFF. Switch off the mains before changing the DIP setting or the driver.



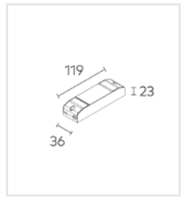


Connections	
Input Terminals	L, N · 0.75-1.5mm² · strip 8-9mm
Output Terminals	LED+, LED– · 0.5-1.0mm² · strip 8-9mm
Cord Type	At least H03VVH2-F / H05VV-F
Remote Use	Independent driver, Class II, IP20. Do not cover. Cord anchorage covers open with a tool.

Unios 10W Phase-Cut Driver

875 Series





		Power	Current (mA)	Voltage (VDC)	Model
1	UN.PCR008.0200.01	10W	250mA	27-40VDC	UN875-B-12250

Key Information	
Material	PC
IP Rating	IP20
Lifetime (Ta = 25°C)	50,000h (full load)
Warranty	3 years
Working Temp.	-25°C~50°C
Tcase	90°C
Control	Trailing edge phase-cut

Input	
Nominal Efficiency	81% Full Load
Voltage	200VAC-250VAC
Frequency Range	50/60Hz
Power Factor	0.9
THD	<20% Full Load
AC Current (max)	0.1A
Max Input Power	12.4W
Inrush Current (peak)	2.64A, 200µs

Output	
Channels	1
Load Regulation	3%
No Load Output Voltage	50VDC Max
Dimming Range	0%-100%

Protection	
Over Voltage	50VDC
Surge (L-N)	1.5KV
Withstand Voltage (I/P-O/P)	3750VAC

Features	
Dimming	Trailing edge phase-cut
Mounting	Independent remote driver, Class II, SELV
Output Current	Fixed 250mA, 27-40VDC
Insulation	IC classified (Global-Mark GMA-524365-EA)
Terminals	Screwless terminal blocks with screwed cord anchorage covers
Drop Tested	Unios drop test passed

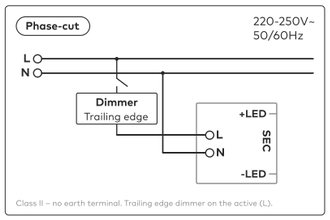
Standards
AS 61347.2.13:2018
AS/NZS 61347.1:2016 + A1:2018
EN 61347-1 · EN 61347-2-13 (CE, LVD)
RCM · Global-Mark GMA-524365-EA

Compatible Dimmers (Australia)	
Clipsal	32ELEDM · 32E450TM · 31E2PUDM
Legrand	Cat 400T · Cat 450P · Cat AR400 A2P
Diginet	LED SMART Phase Adaptive Dimmer · Rotary Diginet Dimmer

Compatibility tested by Unios. Results can vary with dimmer model, load and installation. Test other dimmers before specifying.

Max Capacity of Automatic Circuit Breakers (to Inrush Current)	C10	C16	C25	C32	Inrush peak	Time
UN875-B-12250 (250mA)	80	128	200	256	2.64A	200µs

Calculated from inrush current (2.64A, 200µs) and the 0.1A rated input current, based on ABB S200 series MCBs with an 80% margin. Do not exceed the continuous current rating of the circuit breaker.



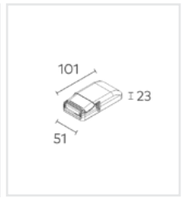


Connections	
Input Terminals	L, N · 0.75-1.5mm² · strip 8-9mm
Output Terminals	LED+, LED– · 0.5-1.0mm² · strip 8-9mm
Cord Type	At least H03VVH2-F / H05VV-F
Remote Use	Independent driver, Class II, IP20. Screwless terminal blocks; cord anchorage covers open with a tool.

Unios G2 14W Phase-Cut Driver

401 Series





	Product Code	Power	Current (mA)	Voltage (VDC)	Model
1	FP020001	8W	200mA	25-40VDC	UN401-B-13200
	FP025001	10W	250mA	25-40VDC	UN401-B-13250
	FP030001	12W	300mA	25-40VDC	UN401-B-13300
	FP035001	14W	350mA	25-40VDC	UN401-B-14350
	FP070002	11.2W	700mA	9-16VDC	UN401-B-12700

Key Information	
Material	PC, UL94 V-0 (fully potted)
IP Rating	IP20
Lifetime (Ta = 50°C)	50,000h (full load)
Warranty	5 years
Working Temp.	-20°C~50°C
Storage Temp., Humidity	-40°C~80°C
Tcase	85°C
Switch Cycle Endurance	>100,000 cycles
Control	Trailing edge phase-cut

Input	
Nominal Efficiency	76-80% Full Load (model dependent)
Voltage	200VAC-240VAC
Frequency Range	50/60Hz
Power Factor	>0.90 (typ. 0.95), Full Load
THD	<10% at full and minimum load
AC Current (max)	0.054-0.100A, Full Load (model dependent)
Inrush Current (peak)	Cold start, 6A@240VAC (8.5A on 700mA model), 220µs (50% Ipeak)

Output	
Ripple current	<20%
Channels	1
Load Regulation	±3%
No Load Output Voltage	49VDC Max (23VDC on 700mA model)
Dimming Range	1%-100%
Flicker	PSTLM ≤1 SVM ≤0.4
IEEE1789-2015	No Observable Effect

Protection	
Short Circuit	Output disabled immediately; automatically restarts once short circuit is removed.
Over Load	Automatically recovers after load conditions are within specifications.
Over Voltage	Automatically recovers after voltage conditions are within specifications. Input withstands 320VAC for 1h.
Surge (L-N)	1KV
Withstand Voltage (I/P-O/P)	3750VAC

Features	
Dimming	Trailing edge phase-cut, 1%-100%
Mounting	Independent remote driver, Class II
Output Current	Fixed per model, 200-700mA
Flicker-free	IEEE 1789-2015 No Observable Effect
Protection	Open/short circuit, overload, over voltage (320VAC for 1h)
Topology	2-stage with active power filter, THD <10%

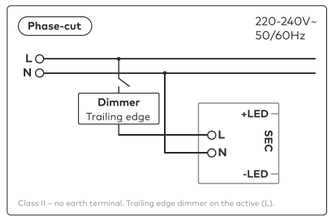
Compatible Dimmers (Australia)	
Clipsal	32ELEDM · 32E450TM · 31E2PUDM
Legrand	Cat 400T · Cat 450P · Cat AR400 A2P
Diginet	LED SMART Phase Adaptive Dimmer · Rotary Diginet Dimmer

Compatibility tested by Unios. Results can vary with dimmer model, load and installation. Test other dimmers before specifying.

Max Capacity of Automatic Circuit Breakers (to Inrush Current)	C10	C16	C25	C32	Inrush peak	Time
UN401-B-13200 (200mA)	80	128	201	258	6A	220µs
UN401-B-13250 (250mA)	80	128	201	258	6A	220µs
UN401-B-13300 (300mA)	80	128	201	258	6A	220µs
UN401-B-14350 (350mA)	80	128	201	258	6A	220µs
UN401-B-12700 (700mA)	56	91	142	182	8.5A	220µs

Maximum values calculated from inrush current, based on ABB S200 series MCBs with an 80% margin. Inrush time measured at 50% of peak, cold start at 240VAC. Do not exceed the continuous current rating of the circuit breaker. Actual values may differ with breaker type and installation.

Notes
Hot plug-in or secondary switching of LEDs is not permitted and may cause a very high current to the LEDs.



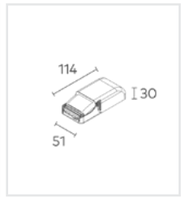


Connections	
Input Terminals	L, N · 0.75mm² solid or stranded with ferrules (1.5mm² max) · strip 6-8mm
Output Terminals	LED+, LED– · 0.5-0.75mm² solid or stranded with ferrules (1.5mm² max) · strip 6-8mm
Max Output Cable	0.8m
Remote Use	Independent driver, Class II, IP20
Hot Plugging	Not permitted. No secondary switching of LEDs.

Unios G2 20W Phase-Cut Driver

402 Series





	Product Code	Power	Current (mA)	Voltage (VDC)	Model
1	**FP040001**	16W	400mA	25-40VDC	UN402-B-14400
	FP050001	20W	500mA	25-40VDC	UN402-B-18500

Key Information	
Material	PC, UL94 V-0 (fully potted)
IP Rating	IP20
Lifetime (Ta = 50ºC)	50,000h (full load)
Warranty	5 years
Working Temp.	-20ºC~50ºC
Storage Temp., Humidity	-40ºC~80ºC
Tcase	80ºC
Switch Cycle Endurance	>100,000 cycles
Control	Trailing edge phase-cut

Input	
Nominal Efficiency	83% Full Load
Voltage	200VAC-240VAC
Frequency Range	50/60Hz
Power Factor	>0.90 (typ. 0.95), Full Load
THD	<10% at full and minimum load
AC Current (max)	0.100-0.105A, Full Load (model dependent)
Inrush Current (peak)	Cold start, 8A@240VAC, 240µs (50% Ipeak)

Output	
Ripple current	<20%
Channels	1
Load Regulation	±3%
No Load Output Voltage	49VDC Max
Dimming Range	1%-100%
Flicker	PSTLM ≤1 SVM ≤0.4
IEEE1789-2015	No Observable Effect

Protection	
Short Circuit	Output disabled immediately; automatically restarts once short circuit is removed.
Over Load	Automatically recovers after load conditions are within specifications.
Over Voltage	Automatically recovers after voltage conditions are within specifications. Input withstands 320VAC for 1h.
Surge (L-N)	1KV
Withstand Voltage (I/P-O/P)	3750VAC

Features	
Dimming	Trailing edge phase-cut, 1%-100%
Mounting	Independent remote driver, Class II
Output Current	Fixed per model, 400-500mA
Flicker-free	IEEE 1789-2015 No Observable Effect
Protection	Open/short circuit, overload, over voltage (320VAC for 1h)
Topology	2-stage with active power filter, THD <10%

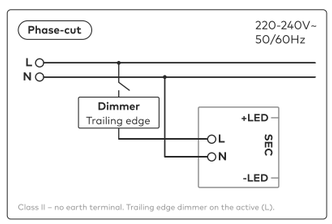
Compatible Dimmers (Australia)	
Clipsal	32ELEDM · 32E450TM · 31E2PUDM
Legrand	Cat 400T · Cat 450P · Cat AR400 A2P
Diginet	LED SMART Phase Adaptive Dimmer · Rotary Diginet Dimmer

Compatibility tested by Unios. Results can vary with dimmer model, load and installation. Test other dimmers before specifying.

Max Capacity of Automatic Circuit Breakers (to Inrush Current)	C10	C16	C25	C32	Inrush peak	Time
UN402-B-14400 (400mA)	55	88	138	176	8A	240µs
UN402-B-18500 (500mA)	55	88	138	176	8A	240µs

Maximum values calculated from inrush current, based on ABB S200 series MCBs with an 80% margin. Inrush time measured at 50% of peak, cold start at 240VAC. Do not exceed the continuous current rating of the circuit breaker. Actual values may differ with breaker type and installation.

Notes
Hot plug-in or secondary switching of LEDs is not permitted and may cause a very high current to the LEDs.



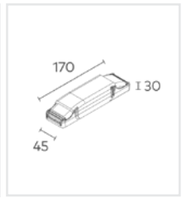


Connections	
Input Terminals	L, N · 0.75mm² solid or stranded with ferrules (1.5mm² max) · strip 6-8mm
Output Terminals	LED+, LED– · 0.5-0.75mm² solid or stranded with ferrules (1.5mm² max) · strip 6-8mm
Max Output Cable	0.8m
Remote Use	Independent driver, Class II, IP20
Hot Plugging	Not permitted. No secondary switching of LEDs.

Unios G2 40W Phase-Cut Driver

403 Series





	Product Code	Power	Current (mA)	Voltage (VDC)	Model
1	**FP060001**	24W	600mA	25-40VDC	UN403-B-29600
	FP070001	28W	700mA	25-40VDC	UN403-B-29700
	FP075001	30W	750mA	25-40VDC	UN403-B-40750
	FP080001	32W	800mA	25-40VDC	UN403-B-40800
	FP090001	36W	900mA	25-40VDC	UN403-B-40900
	FP100001	40W	1000mA	25-40VDC	UN403-B-401000

Key Information	
Material	PC, UL94 V-0 (fully potted)
IP Rating	IP20
Lifetime (Ta = 50ºC)	50,000h (full load)
Warranty	5 years
Working Temp.	-20ºC~50ºC
Storage Temp., Humidity	-40ºC~80ºC
Tcase	85ºC
Switch Cycle Endurance	>100,000 cycles
Control	Trailing edge phase-cut

Input	
Nominal Efficiency	86% Full Load
Voltage	200VAC-240VAC
Frequency Range	50/60Hz
Power Factor	>0.90 (typ. 0.95), Full Load
THD	<10% at full and minimum load
AC Current (max)	0.150-0.210A, Full Load (model dependent)
Inrush Current (peak)	Cold start, 8.5A@240VAC, 250µs (50% Ipeak)

Output	
Ripple current	<20%
Channels	1
Load Regulation	±3%
No Load Output Voltage	48-49VDC Max (model dependent)
Dimming Range	1%-100%
Flicker	PSTLM ≤1 SVM ≤0.4
IEEE1789-2015	No Observable Effect

Protection	
Short Circuit	Output disabled immediately; automatically restarts once short circuit is removed.
Over Load	Automatically recovers after load conditions are within specifications.
Over Voltage	Automatically recovers after voltage conditions are within specifications. Input withstands 320VAC for 1h.
Surge (L-N)	2KV
Withstand Voltage (I/P-O/P)	3750VAC

Features	
Dimming	Trailing edge phase-cut, 1%-100%
Mounting	Independent remote driver, Class II
Output Current	Fixed per model, 600-1000mA
Flicker-free	IEEE 1789-2015 No Observable Effect
Protection	Open/short circuit, overload, over voltage (320VAC for 1h)
Topology	2-stage with active power filter, THD <10%

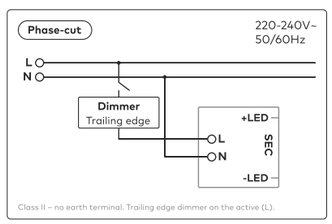
Compatible Dimmers (Australia)	
Clipsal	32ELEDM · 32E450TM · 31E2PUDM
Legrand	Cat 400T · Cat 450P · Cat AR400 A2P
Diginet	LED SMART Phase Adaptive Dimmer · Rotary Diginet Dimmer

Compatibility tested by Unios. Results can vary with dimmer model, load and installation. Test other dimmers before specifying.

Max Capacity of Automatic Circuit Breakers (to Inrush Current)	C10	C16	C25	C32	Inrush peak	Time
UN403-B-29600 (600mA)	49	79	124	159	8.5A	250µs
UN403-B-29700 (700mA)	49	79	124	159	8.5A	250µs
UN403-B-40750 (750mA)	46	75	117	150	8.5A	250µs
UN403-B-40800 (800mA)	45	72	113	145	8.5A	250µs
UN403-B-40900 (900mA)	41	67	104	134	8.5A	250µs
UN403-B-401000 (1000mA)	37	60	95	121	8.5A	250µs

Maximum values calculated from inrush current, based on ABB S200 series MCBs with an 80% margin. Inrush time measured at 50% of peak, cold start at 240VAC. Do not exceed the continuous current rating of the circuit breaker. Actual values may differ with breaker type and installation.

Notes
Hot plug-in or secondary switching of LEDs is not permitted and may cause a very high current to the LEDs.





Connections	
Input Terminals	L, N · 0.75mm² solid or stranded with ferrules (1.5mm² max) · strip 6-8mm
Output Terminals	LED+, LED– · 0.5-0.75mm² solid or stranded with ferrules (1.5mm² max) · strip 6-8mm
Max Output Cable	0.8m
Remote Use	Independent driver, Class II, IP20
Hot Plugging	Not permitted. No secondary switching of LEDs.

Unios 12W DALI Driver



	Product Code	Power	Current (mA)	Voltage (VDC)	Model
1	**UN.DAR012.0150.02**	6W	150mA	9-40VDC	UN-DAR922-12300
	UN.DAR012.0200.02	8W	200mA	9-40VDC	UN-DAR922-12300
	UN.DAR012.0250.02	10W	250mA	9-40VDC	UN-DAR922-12300
	UN.DAR012.0300.02	12W	300mA	9-40VDC	UN-DAR922-12300
2	**UN.DAR012.0400.02**	6W	400mA	2.5-15VDC	UN-DAR922-121000
	UN.DAR012.0600.02	9W	600mA	2.5-15VDC	UN-DAR922-121000
	UN.DAR012.0800.02	12W	800mA	2.5-15VDC	UN-DAR922-121000
	UN.DAR012.1000.02	12W	1000mA	2.5-12VDC	UN-DAR922-121000

Key Information	
Material	PC - Polycarbonate
IP Rating	IP20
Lifetime (Ta = 50°C)	50,000h
Lifetime (Ta = 25°C)	>100,000h
Warranty	5 years
Working Temp.	-20°C~50°C
Storage Temp., Humidity	-20°C~50°C, 20-90%RH
Tcase	90°C
Switch Cycle Endurance	>100,000 cycles
Control	DALI-2 (DT6), PushDIM

Input	
Nominal Efficiency	78%@230VAC, Full Load
Voltage	200VAC-250VAC
Frequency Range	50/60Hz
Power Factor	≥0.9@230VAC, Full Load
THD	<12%@230VAC, Full Load
AC Current (max)	0.12A (300mA) / 0.15A (1000mA) @230VAC, Full Load
Inrush Current (peak)	Cold start, 2.4A@240VAC, 200µs

Output	
Ripple current	<10%
Channels	1 (DT6)
Current tolerance	±5%
Standby Power	<0.5W
No Load Output Voltage	50VDC Max (300mA) / 30VDC Max (1000mA)
Dimming Range	1%-100% (all current settings)
Dimming Resolution	12-bit
Flicker	PSTLM <1 SVM <0.4 No Observable Effect

Protection	
Short Circuit	Automatically recovers after short circuit removed.
Over Load	Automatically recovers after load conditions are within specifications.
Over Voltage	Automatically recovers after voltage conditions are within specifications.
Over Temperature	Shuts down above 105°C. Recovers automatically below 95°C.
Surge (L-N)	1KV
Withstand Voltage (I/P-O/P)	3750VAC/1min/5mA

Standards		
AS/NZS 61347.1	AS/NZS 61000.3.2	IEC 62386-101, 102, 207 (DALI-2)
AS/NZS 61347.2.13	AS/NZS 61000.3.3	IEC 62386-251, 252, 253
AS/NZS CISPR 15	EN 61547	IEEE1789-2015

DALI Interface	
Protocol	DALI-2, Device Type 6 (DT6); IEC 62386-101, 102, 207
Certification	Tested to DiiA sequence 2.6.0.0 (UN-DAR922-12300, UN-DAR922-121000); Product ID TBC
Data Parts	251 Luminaire data · 252 Energy reporting · 253 Diagnostics & maintenance
Firmware	2.0 and above
Dimming Range	1%-100% (all current settings)
Dimming Resolution	12-bit
Dimming Curve	Logarithmic (DALI standard)
Groups / Scenes	16 groups, 16 scenes
Programmable	Min / max level, power-on level, system failure level, fade time and rate
Bus Current	1.7mA (registered)
Control Terminals	DA1, DA2. Mains rated – install DALI cabling as mains wiring
DALI Cable	Up to 300m at 1.5mm²
NFC Compatibility	No

DALI-2 Data: Energy & Diagnostics	**DALI-2 Part**	Data Items	Benefit
Energy Data	Part 252	Active power (W); Active energy (kWh)	Per-driver energy reporting for dashboards and BMS.
Diagnostics Data	Part 253	Operating hours and start count; Driver temperature; LED voltage and failure status; LED current and power factor (calculated)	Predictive maintenance and faster fault-finding.
Luminaire Data	Part 251	GTIN, rated power and product information stored in the driver	Faster commissioning and asset tracking.

Data is read by a DALI-2 controller or building management system that supports Parts 251/252/253. Available on firmware 2.0 and above.

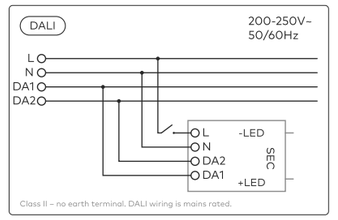
Max Capacity of Automatic Circuit Breakers (to Inrush Current)	**C10**	**C16**	**C25**	**C32**	**Inrush peak**	**Time**
UN922 300mA (UN-DAR922-12300)	66	106	166	213	2.4A	200µs
UN922 1000mA (UN-DAR922-121000)	53	85	133	170	2.4A	200µs

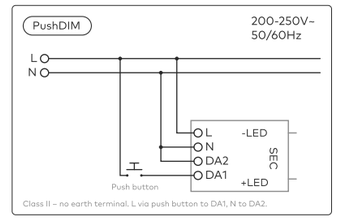
Maximum values calculated from inrush current, based on ABB S200 series MCBs with an 80% margin. Do not exceed the continuous current rating of the circuit breaker. Actual values may differ with breaker type and installation.

PushDIM Operation	
Wiring	Momentary push button: L via button to DA1, N to DA2
Short press	On / off
Long press	Dim up or down (direction alternates)
Double-click when on	Save current level as default
Double-click when off	Clear saved default (returns to 100%)
Press 10s	Synchronise all drivers to 100%
Press 120s	Corridor mode on: dims to 10% when no signal
5 presses within 3s	Corridor mode off
Power on	Restores last level or saved default

Functions	**DALI-2**	**PushDIM**	**DIP switch**
Output current (4 settings per model)			●
Dimming 1%-100%	●	●	
Groups and scenes	●		
Power-on level / memory after power loss	●	●	
System failure level	●		
Fade time and fade rate	●		
Synchronisation		●	
Corridor mode		●	
Energy data (Part 252)	●		
Diagnostics data (Part 253)	●		
Luminaire data (Part 251)	●		

Connections	
Input Terminals	L, N · 0.75-1.5mm² · strip 8mm
Control Terminals	DA1, DA2 · 0.75-1.5mm² · strip 8mm
Output Terminals	LED–, LED+ · 0.5-1.0mm²
Max Output Cable	0.8m
Remote Use	Independent driver with cord anchorage (131mm overall)
Hot Plugging	Not permitted. If the LED load is disconnected, output stays off until the mains is cycled or a DALI dimming command is sent.





DIP Switch Settings

DIP	Switch 1	Switch 2	Irated	Uoutput	Prated	Model 1
1 2	OFF	OFF	150mA	9-40V	6W	UN-DAR922-12300
1 2	ON	OFF	200mA	9-40V	8W	UN-DAR922-12300
1 2	OFF	ON	250mA	9-40V	10W	UN-DAR922-12300
1 2	ON	ON	300mA	9-40V	12W	UN-DAR922-12300

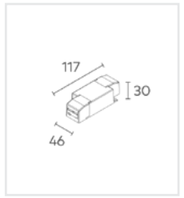
Output current is set with the 2-way DIP switch on the driver, as shown on the product label. Slider up = ON, down = OFF.

DIP	Switch 1	Switch 2	Irated	Uoutput	Prated	Model 2
1 2	OFF	OFF	150mA	9-40V	6W	UN-DAR922-121000
1 2	ON	OFF	200mA	9-40V	8W	UN-DAR922-121000
1 2	OFF	ON	250mA	9-40V	10W	UN-DAR922-121000
1 2	ON	ON	300mA	9-40V	12W	UN-DAR922-121000

Output current is set with the 2-way DIP switch on the driver, as shown on the product label. Slider up = ON, down = OFF.

Unios 20W DALI Driver





	Product Code	Power	Current (mA)	Voltage (VDC)	Model
❶	**UN.DAR020.0150.02**	6W	150mA	9-40VDC	UN-DAB946-20500
	UN.DAR020.0200.02	8W	200mA	9-40VDC	UN-DAB946-20500
	UN.DAR020.0250.02	10W	250mA	9-40VDC	UN-DAB946-20500
	UN.DAR020.0300.02	12W	300mA	9-40VDC	UN-DAB946-20500
	UN.DAR020.0350.02	14W	350mA	9-40VDC	UN-DAB946-20500
	UN.DAR020.0400.02	16W	400mA	9-40VDC	UN-DAB946-20500
	UN.DAR020.0450.02	18W	450mA	9-40VDC	UN-DAB946-20500
	UN.DAR020.0500.02	20W	500mA	9-40VDC	UN-DAB946-20500

Key Information	
Material	PC - Polycarbonate
IP Rating	IP20
Lifetime (Ta = 50°C)	50,000h
Lifetime (Ta = 25°C)	>100,000h
Warranty	5 years
Working Temp.	-20°C~50°C
Storage Temp., Humidity	-20°C~50°C, 20-90%RH
Tcase	90°C
Switch Cycle Endurance	>100,000 cycles
Control	DALI-2 (DT6), PushDIM

Input	
Nominal Efficiency	86%@230VAC, Full Load
Voltage	200VAC-250VAC
Frequency Range	50/60Hz
Power Factor	≥0.9@230VAC, Full Load
THD	<11%@230VAC, Full Load
AC Current (max)	0.12A@230VAC, Full Load
Inrush Current (peak)	Cold start, 48A@240VAC, 200µs

Output	
Ripple current	<10%
Channels	1 (DT6)
Current tolerance	±5%
Standby Power	<0.5W
No Load Output Voltage	50VDC Max
Dimming Range	1%-100% (all current settings)
Dimming Resolution	12-bit PWM
Flicker	PSTLM <1 SVM <0.4 No Observable Effect

Protection	
Short Circuit	Automatically recovers after short circuit removed.
Over Load	Automatically recovers after load conditions are within specifications.
Over Voltage	Automatically recovers after voltage conditions are within specifications.
Over Temperature	Shuts down above 105°C. Recovers automatically below 95°C.
Surge (L-N)	1KV
Withstand Voltage (I/P-O/P)	3750VAC/1min/5mA

Standards		
AS/NZS 61347.1	AS/NZS 61000.3.2	IEC 62386-101, 102, 207 (DALI-2)
AS/NZS 61347.2.13	AS/NZS 61000.3.3	IEC 62386-251, 252, 253
AS/NZS CISPR 15	EN 61547	IEEE1789-2015

DALI Interface	
Protocol	DALI-2, Device Type 6 (DT6); IEC 62386-101, 102, 207
Certification	DiiA registered, Product ID 6965; tested to DiiA sequence 2.6.0.0
Data Parts	251 Luminaire data · 252 Energy reporting · 253 Diagnostics & maintenance
Firmware	2.0 and above (.02 generation)
Dimming Range	1%-100% (all current settings)
Dimming Resolution	12-bit
Dimming Curve	Logarithmic (DALI standard)
Groups / Scenes	16 groups, 16 scenes
Programmable	Min / max level, power-on level, system failure level, fade time and rate
Bus Current	<2mA (1.7mA registered)
Control Terminals	DA1, DA2. Mains rated – install DALI cabling as mains wiring
DALI Cable	Up to 300m at 1.5mm²
Energy Reporting	±10% max accuracy; lower at light load
NFC Compatibility	No

DALI-2 Data: Energy & Diagnostics	**DALI-2 Part**	Data Items	Benefit
Energy Data	Part 252	Active power (W); Active energy (kWh); Accuracy ±10% max (lower at light load)	Per-driver energy reporting for dashboards and BMS.
Diagnostics Data	Part 253	Operating hours and start count; Driver temperature; LED voltage and failure status; LED current and power factor (calculated)	Predictive maintenance and faster fault-finding.
Luminaire Data	Part 251	GTIN, rated power and product information stored in the driver	Faster commissioning and asset tracking.

Data is read by a DALI-2 controller or building management system that supports Parts 251/252/253. Available on firmware 2.0 and above (.02 generation).

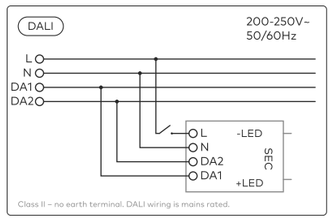
Max Capacity of Automatic Circuit Breakers (to Inrush Current)	**C10**	**C16**	**C25**	**C32**	**Inrush peak**	**Time**
UN946 (all current settings)	10	17	27	35	48A	200µs

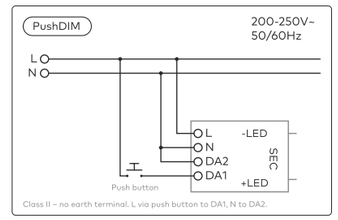
Maximum values calculated from inrush current, based on ABB S200 series MCBs with an 80% margin. Do not exceed the continuous current rating of the circuit breaker. Actual values may differ with breaker type and installation.

PushDIM Operation	
Wiring	Momentary push button: L via button to DA1, N to DA2
Short press	On / off
Long press	Dim up or down (direction alternates)
Double-click when on	Save current level as default
Double-click when off	Clear saved default (returns to 100%)
Press 10s	Synchronise all drivers to 100%
Press 120s	Corridor mode on: dims to 10% when no signal
5 presses within 3s	Corridor mode off
Power on	Restores last level or saved default

Functions	**DALI-2**	**PushDIM**	**DIP switch**
Output current (150-500mA, 8 settings)			●
Dimming 1%-100%	●	●	
Groups and scenes	●		
Power-on level / memory after power loss	●	●	
System failure level	●		
Fade time and fade rate	●		
Synchronisation		●	
Corridor mode		●	
Energy data (Part 252)	●		
Diagnostics data (Part 253)	●		
Luminaire data (Part 251)	●		

Connections	
Input Terminals	L, N · 0.75-1.5mm² · strip 8mm
Control Terminals	DA1, DA2 · 0.75-1.5mm² · strip 8mm
Output Terminals	LED+, LED– · 0.75-1.5mm² · strip 8mm
Max Output Cable	0.8m (remote), 0.6m (built-in)
Remote Use	Fit strain-relief cap (117mm overall)
Hot Plugging	Not permitted. If the LED load is disconnected, output stays off until the mains is cycled or a DALI dimming command is sent.





DIP Switch Settings

DIP	Switch 1	Switch 2	Switch 3	Irated	Uoutput
1 2 3	OFF	OFF	OFF	150mA	9-40V
1 2 3	ON	OFF	OFF	200mA	9-40V
1 2 3	OFF	ON	OFF	250mA	9-40V
1 2 3	ON	ON	OFF	300mA	9-40V

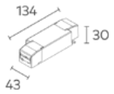
Output current is set with the 3-way DIP switch on the driver, as shown on the product label. Slider up = ON, down = OFF.

DIP	Switch 1	Switch 2	Irated	Uoutput	Prated
1 2 3	OFF	OFF	ON	350mA	9-40V
1 2 3	ON	OFF	ON	400mA	9-40V
1 2 3	OFF	ON	ON	450mA	9-40V
1 2 3	ON	ON	ON	500mA	9-40V

Output current is set with the 3-way DIP switch on the driver, as shown on the product label. Slider up = ON, down = OFF.

Unios 42W DALI Driver





	Product Code	Power	Current (mA)	Voltage (VDC)	Model
❶	**UN.DAR042.0550.02**	22W	550mA	9-40VDC	UN-DAB956-421050
	UN.DAB042.0600.02	24W	600mA	9-40VDC	UN-DAB956-421050
	UN.DAB042.0700.02	28W	700mA	9-40VDC	UN-DAB956-421050
	UN.DAB042.0750.02	30W	750mA	9-40VDC	UN-DAB956-421050
	UN.DAB042.0800.02	32W	800mA	9-40VDC	UN-DAB956-421050
	UN.DAB042.0900.02	36W	900mA	9-40VDC	UN-DAB956-421050
	UN.DAB042.1000.02	40W	1000mA	9-40VDC	UN-DAB956-421050
	UN.DAB042.1050.02	42W	1050mA	9-40VDC	UN-DAB956-421050

Key Information	
Material	PC - Polycarbonate
IP Rating	IP20
Lifetime (Ta = 50°C)	50,000h
Lifetime (Ta = 25°C)	>100,000h
Warranty	5 years
Working Temp.	-20°C~50°C
Storage Temp., Humidity	-20°C~50°C, 20-90%RH
Tcase	90°C
Switch Cycle Endurance	>100,000 cycles
Control	DALI-2 (DT6), PushDIM

Input	
Nominal Efficiency	88%@230VAC, Full Load
Voltage	200VAC-250VAC
Frequency Range	50/60Hz
Power Factor	≥0.9@230VAC, Full Load
THD	<15%@230VAC, Full Load
AC Current (max)	0.25A@230VAC, Full Load
Inrush Current (peak)	Cold start, 56A@240VAC, 200µs

Output	
Ripple current	<10%
Channels	1 (DT6)
Current tolerance	±5%
Standby Power	<0.5W
No Load Output Voltage	50VDC Max
Dimming Range	1%-100% (all current settings)
Dimming Resolution	12-bit
Flicker	PSTLM <1 SVM <0.4 No Observable Effect

Protection	
Short Circuit	Automatically recovers after short circuit removed.
Over Load	Automatically recovers after load conditions are within specifications.
Over Voltage	Automatically recovers after voltage conditions are within specifications.
Over Temperature	Shuts down above 105°C. Recovers automatically below 95°C.
Surge (L-N)	1KV
Withstand Voltage (I/P-O/P)	3750VAC/1min/5mA

Standards		
AS/NZS 61347.1	AS/NZS 61000.3.2	IEC 62386-101, 102, 207 (DALI-2)
AS/NZS 61347.2.13	AS/NZS 61000.3.3	IEC 62386-251, 252, 253
AS/NZS CISPR 15	EN 61547	IEEE1789-2015

DALI Interface	
Protocol	DALI-2, Device Type 6 (DT6); IEC 62386-101, 102, 207
Certification	DiiA registered, Product ID 6968; tested to DiiA sequence 2.6.0.0
Data Parts	251 Luminaire data · 252 Energy reporting · 253 Diagnostics & maintenance
Firmware	2.0 and above (.02 generation)
Dimming Range	1%-100% (all current settings)
Dimming Resolution	12-bit
Dimming Curve	Logarithmic (DALI standard)
Groups / Scenes	16 groups, 16 scenes
Programmable	Min / max level, power-on level, system failure level, fade time and rate
Bus Current	<2mA (1.7mA registered)
Control Terminals	DA1, DA2. Mains rated – install DALI cabling as mains wiring
DALI Cable	Up to 300m at 1.5mm²
NFC Compatibility	No

DALI-2 Data: Energy & Diagnostics	**DALI-2 Part**	Data Items	Benefit
Energy Data	Part 252	Active power (W); Active energy (kWh)	Per-driver energy reporting for dashboards and BMS.
Diagnostics Data	Part 253	Operating hours and start count; Driver temperature; LED voltage and failure status; LED current and power factor (calculated)	Predictive maintenance and faster fault-finding.
Luminaire Data	Part 251	GTIN, rated power and product information stored in the driver	Faster commissioning and asset tracking.

Data is read by a DALI-2 controller or building management system that supports Parts 251/252/253. Available on firmware 2.0 and above (.02 generation).

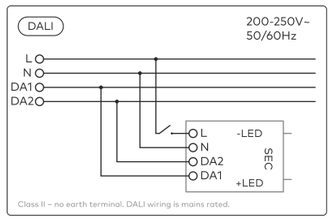
Max Capacity of Automatic Circuit Breakers (to Inrush Current)	**C10**	**C16**	**C25**	**C32**	**Inrush peak**	**Time**
UN956 (all current settings)	9	14	23	30	56A	200µs

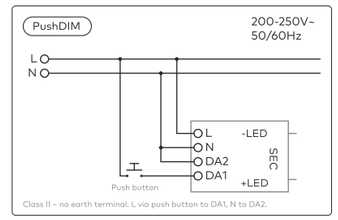
Maximum values calculated from inrush current, based on ABB S200 series MCBs with an 80% margin. Do not exceed the continuous current rating of the circuit breaker. Actual values may differ with breaker type and installation.

PushDIM Operation	
Wiring	Momentary push button: L via button to DA1, N to DA2
Short press	On / off
Long press	Dim up or down (direction alternates)
Double-click when on	Save current level as default
Double-click when off	Clear saved default (returns to 100%)
Press 10s	Synchronise all drivers to 100%
Press 120s	Corridor mode on: dims to 10% when no signal
5 presses within 3s	Corridor mode off
Power on	Restores last level or saved default

Functions	**DALI-2**	**PushDIM**	**DIP switch**
Output current (550-1050mA, 8 settings)			●
Dimming 1%-100%	●	●	
Groups and scenes	●		
Power-on level / memory after power loss	●	●	
System failure level	●		
Fade time and fade rate	●		
Synchronisation		●	
Corridor mode		●	
Energy data (Part 252)	●		
Diagnostics data (Part 253)	●		
Luminaire data (Part 251)	●		

Connections	
Input Terminals	L, N · 0.75-1.5mm² · strip 8mm
Control Terminals	DA1, DA2 · 0.75-1.5mm² · strip 8mm
Output Terminals	LED+, LED– · 0.75-1.5mm² · strip 8mm
Max Output Cable	0.8m (remote), 0.6m (built-in)
Remote Use	Fit strain-relief cap (134mm overall)
Hot Plugging	Not permitted. If the LED load is disconnected, output stays off until the mains is cycled or a DALI dimming command is sent.





DIP Switch Settings

DIP	Switch 1	Switch 2	Switch 3	Irated	Uoutput
1 2 3	OFF	OFF	OFF	550mA	9-40V
1 2 3	ON	OFF	OFF	600mA	9-40V
1 2 3	OFF	ON	OFF	700mA	9-40V
1 2 3	ON	ON	OFF	750mA	9-40V

Output current is set with the 3-way DIP switch on the driver, as shown on the product label. Slider up = ON, down = OFF.

DIP	Switch 1	Switch 2	Irated	Uoutput	Prated
1 2 3	OFF	OFF	ON	800mA	9-40V
1 2 3	ON	OFF	ON	900mA	9-40V
1 2 3	OFF	ON	ON	1000mA	9-40V
1 2 3	ON	ON	ON	1050mA	9-40V

Output current is set with the 3-way DIP switch on the driver, as shown on the product label. Slider up = ON, down = OFF.

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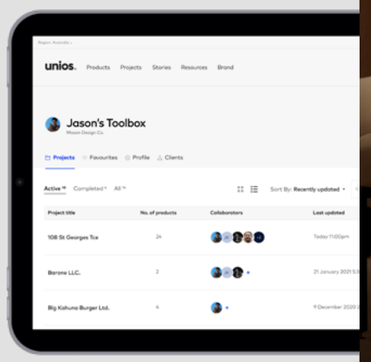
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