LED Engine

Engine ready2apply

For spotlights, downlights and Emergency lighting



Applications and Product Portfolio

Professional LED systems the easy way

Main applications

Spotlight



Engine SLA ready2apply



Replacement for halogen lamps MR16

Downlight



Engine DLA ready2apply



Replacement for compact fluorescent lamps

Emergency Downlight



Engine EM ready2apply







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The ready2apply products are suitable for direct installation in ceilings – simple and convenient because the LED module, heat sink and lens form a single unit. This means it is possible to switch very quickly and cost-effectively from conventional halogen or compact fluorescent lamps to a preconfigured professional LED solution.

The ready2apply range features installation-ready spotlight and downlight solutions to meet professional lighting requirements, for example in shops and hotels. The SLA ready2apply for spotlights is offered in two versions: one as single part (DC 700 lm or 1,200 lm) and one for phase-cut dimmers (AC pc 700 lm). The DLA ready2apply for downlights is offered in three different sizes and can be combined with the two optional drivers ESSENCE or ADVANCED. The new product EM ready2apply combines high-quality LED technology, a compact housing and a long-life lithium iron phosphate battery in a complete solution for emergency lighting in the form of a

At a glance: Engine ready2apply

- Complete ready-to-apply solution for quick and simple upgrades from conventional lighting to LED lighting (individual mounting ring required)
- Engine DLA ready2apply for downlights, with optional drivers ESSENCE or ADVANCED
- Engine SLA ready2apply for spotlights, dimming via suitable LED Driver (AC pc 700 lm Version with integrated phase-cut driver)
- Engine EM ready2apply for anti-panic, escape route and spot illumination

separate luminaire.

Engine SLA

For spotlights

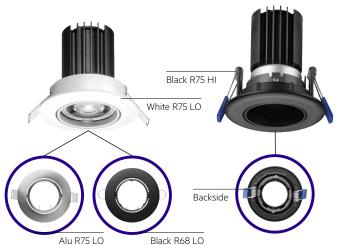


At a glance: Engine SLA ready2apply

- __ LED replacement for spotlights with halogen lamps
- Complete ready-to-apply solution comprising LED module, lens and heat sink
- __ Beam Angle: spot degree (24°) or downlight (36°)
- __ 10 W~700 lm, 12.2 W~1,200 lm
- __ Optimum quality of light: 2,700 K, 3,000 K, 4,000 K, CRI 90, MacAdam 3
- _ Electrical voltage 35 V
- _ Can be mounted with the most fixing rings on the market
- __ Nominal lifetime of 50,000 hours
- _ 5-years guarantee



LED accessory



Engine SLA ready2apply is the professional LED alternative for spotlights with halogen lamps (MR16 GU5.3, GU10) – and comes with additional benefits.

With the second generation of this product family energy costs can be reduced to as little as one eighth, thanks mainly to the optimised lumen packages of 700 lm and 1200 lm. The 700 lm variant offers a free choice of either dc or ac current thanks to the integrated phase cut driver. Common to all variants is the clever combination of reduced design, low mounting depth and heat sink, the popular facetted optics and the large selection of light colours.

At a glance: LED accessories SLA G2

- Up to 30°-swivel mounting rings for ceiling cutouts of 68 mm or 75 mm
- _ Version for 75 mm with optional anti-glare guard
- __ Available in matte white, matte black and brushed Nickel

NEW Type	OrderNr.
SLA Trim ring swivel 30D WH R75 LO	28002181
SLA Trim ring swivel 30D BK R75 LO	28002182
SLA Trim ring swivel 30D BN R75 LO	28002183
SLA Trim ring swivel 30D WH R68	28002184
SLA Trim ring swivel 30D BK R68	28002185
SLA Trim ring swivel 30D BN R68	28002186
SLA Trim ring swivel 30D WH R75 HI	28002187
SLA Trim ring swivel 30D BK R75 HI	28002188

Engine SLA

Туре	Beam characteristics	Size LED Modul (mm)	Order No.	Forward current (mA)	Colourtempera- ture (K)	Luminous flux [®] (lm)	Typ. power consumption ¹⁾ (W)	Efficacy ¹⁾ (lm/W)
SLA AC pc G2 50mm 700lm 927 24D SNC	24°	Ø 50x76	28001934	-	2,700	710	9.5	75
SLA AC pc G2 50mm 700lm 927 36D SNC	36°	Ø50x76	28001935	-	2,700	710	9.5	75
SLA AC pc G2 50mm 700lm 930 24D SNC	24°	Ø50x76	28001936	-	3,000	760	9.5	80
SLA AC pc G2 50mm 700lm 930 36D SNC	36°	Ø50x76	28001937	-	3,000	760	9.5	80
SLA AC pc G2 50mm 700lm 940 24D SNC	24°	Ø 50x76	28001938	-	4,000	810	9.5	85
SLA AC pc G2 50mm 700lm 940 36D SNC	36°	Ø 50x76	28001939	-	4,000	810	9.5	85
SLA DC G2 50mm 700lm 927 24D SNC	24°	Ø 50x60	28001942	180-250	2,700	770	8.8	88
SLA DC G2 50mm 700lm 927 36D SNC	36°	Ø 50x60	28001943	180-250	2,700	770	8.8	88
SLA DC G2 50mm 700lm 930 24D SNC	24°	Ø 50x60	28001944	180-250	3,000	840	8.8	95
SLA DC G2 50mm 700lm 930 36D SNC	36°	Ø 50x60	28001945	180-250	3,000	840	8.8	95
SLA DC G2 50mm 700lm 940 24D SNC	24°	Ø 50x60	28001946	180-250	4,000	890	8.8	101
SLA DC G2 50mm 700lm 940 36D SNC	36°	Ø 50x60	28001947	180-250	4,000	890	8.8	101
SLA DC G2 50mm 1200lm 927 24D SNC	24°	Ø 50x70	28001950	250 - 350	2,700	1,140	12.2	93
SLA DC G2 50mm 1200lm 927 36D SNC	36°	Ø 50x70	28001951	250-350	2,700	1,140	12.2	93
SLA DC G2 50mm 1200lm 930 24D SNC	24°	Ø 50x70	28001952	250-350	3,000	1,170	12.2	96
SLA DC G2 50mm 1200lm 930 36D SNC	36°	Ø 50x70	28001953	250 – 350	3,000	1,170	12.2	96
SLA DC G2 50mm 1200lm 940 24D SNC	24°	Ø 50x70	28001954	250 - 350	4,000	1,270	12.2	104
SLA DC G2 50mm 1200lm 940 36D SNC	36°	Ø 50x70	28001955	250 - 350	4,000	1,270	12.2	104

 $^{^{77}\}text{Tolerance}$ range for electrical and optical data: ±10 %

Matching Driver

Driver	Order No.	SLA G2 50mm 700lm DC SNC	SLA G2 50mm 1200lm DC SNC	SLA G2 50mm 700lm AC pc SNC	
Oriver Fixed output					
C 10W 250mA fixC C SNC	87500628	•			
.C 10W 250mA fixC SR SNC	87500580	•			
.C 10 W 150-400 mA flexC C EXC	28000692	•			
.C 10 W 150-400 mA flexC SC EXC	28000704	•			
.C 10 W 150-400 mA flexC SR EXC	28000698	•			
.C 10W 250mA fixC C SNC	87500628		•	interpreted phase and driver	
.C 10W 250mA fixC SR SNC	87500580		•	integrated phase-cut driver	
.C 13W 300mA fixC SR SNC	87500571				
.C 15W 350mA fixC C SNC	87500630				
.C 15W 350mA fixC SR SNC	87500572		•		
.C 15W 350mA fixC SC ADV	87500448		•		
.C 20W 350/500/700mA flexC SR ADV	87500621		•		
Priver Phase-cut					
CBI 10W 180mA phase-cut/1–10 V SR	87500273	•			
.CBI 10W 180mA phase-cut/1-10V lp	87500282	•			
.CA 15W 180-350mA flexC PH-C SR ADV	87500627	•	-	interpreted phase and driver	
CBI 15W 350mA BASIC PH-CUT SR ADV	87500386		-	integrated phase-cut driver	
CBI 15W 350mA BASIC Ip	89800255		•		
CA 21W 300-500mA flexC PH-C SR ADV	87500603				

Engine DLA

For downlights



At a glance: Engine DLA G2 ready2apply

- __ LED replacement for downlights with compact fluorescent lamps
- Complete ready2apply solution comprising module, driver, reflector and trim ring
- Ripple current ± 5% and UGR19 (specific model only) makes office installation possible
- Sizes: ø 100 mm with 1,000 lm, ø 150 mm with 1,000 lm/2,000 lm 200 mm with 2,000 lm/3,000 lm
- Perfect beam angle thanks to optional Tridonic reflectors with 60° or 90°
- Approved emergency solution with EM converterLED
- $_$ High efficiency of 111 lm/W (tp = 65°C)
- _ High colour rendering index of CRI > 80
- __ Small colour tolerance: MacAdam 4
- __ Nominal lifetime of up to 50,000 hours (L70/B50), 5-years guarantee

The second generation of the Engine DLA ready2apply extends the downlight's usage area with the new 200 mm size and new features. The module and driver are available as individual components, making logistics arrangements more cost-effective. Accessories and an assembly concept with integrated mounting springs offer extra convenience for installations.

The 150 mm and 200 mm design sizes can now also be used for office lighting thanks to UGR > 19 and a low flicker value. The white mounting ring available separately completes the downlight design in an aesthetic manner. A diffusor or aluminium reflector is also available with two different beam angles depending on the relevant lighting task. Emergency lighting with DLA G2 is also no problem since the entire product group is compatible with the EM converterLED 50 V. The Engine DLA ready2apply also features an impressive sophisticated and convenient assembly concept for all applications. This means that the individual components can be fitted together quickly without requiring separate tools.

Engine DLA

NEW	Туре	Size (mm)	Order No. Global	Colour- temperature (K)	Luminous flux ⁰ (lm)	Luminous flux with 60°/90° ¹⁾ (lm)	Typ. power consumption ¹⁾ (W)	Module efficacy ¹⁾ (lm/W)	Module efficacy with 60°/90° ¹⁾ (lm/W)	UGR	UGR with 60°/90°
DLA G2 100	Omm 1000lm 830 SNC EM MOD	~	28002241	3,000	980	1,060	10.2	96	104	25	20/23
DLA G2 100	0mm 1000lm 8x0 SNC EM ECG	Ø114×75	28002236								
DLA G2 100	0mm 1000lm 840 SNC EM MOD		28002242	4.000	4.070	4.440	10.0	404	100	٥٢	20/27
DLA G2 100	0mm 1000lm 8x0 SNC EM ECG	Ø114×75	28002236	4,000	1,030	1,110	10.2	101	109	25	20/23
DLA G2 150	mm 1000/2000lm 830 SNC EM MOD	01//05	28002243	- 3,000	1,000	1,110	10.1	00	100	27	1 / /20
DLA G2 150	0mm 1000lm 8x0 ADV EM ECG	Ø164×85	28002238				10.1	99	109	23	16/20
DLA G2 150	mm 1000/2000lm 830 SNC EM MOD	Ø1//0F	28002243		1.070	0.470	20.2	97	105	25	19/22
DLA G2 150	0mm 2000lm 8x0 SNC EM ECG	Ø164×85	28002238		1,970	2,130					
DLA G2 150	mm 1000/2000lm 840 SNC EM MOD	Ø1//0F	28002244		1,020 1,1	1 120	10.1	101	111	23	16/20
DLA G2 150	0mm 1000lm 8x0 ADV EM ECG	Ø164×85	28002237			1,120					
DLA G2 150	mm 1000/2000lm 840 SNC EM MOD		28002244	4,000	2.050	2.210	20.2	101	100	25	10/22
DLA G2 150	0mm 2000lm 8x0 SNC EM ECG	Ø164×85	28002238		2,050	2,210	20.2	101	109	25	19/22
DLA G2 200	mm 2000/3000lm 830 SNC EM MOD	G444 30	28002245		2.000	2,200	20.4	102	108	23	17/20
DLA G2 200	0mm 2000lm 8x0 ADV EM ECG	Ø114×72	28002239	3,000	2,080						
DLA G2 200	mm 2000/3000lm 830 SNC EM MOD	Ø11/ v.70	28002245	3,000	2.000	7.070	20.0	07	107	25	10/21
DLA G2 200	0mm 3000lm 8x0 SNC EM ECG	Ø114×72	28002240		2,900	3,070	29.8	97	103	25	18/21
DLA G2 200	mm 2000/3000lm 840 SNC EM MOD	Ø11/ v.70	28002270		2,120	2.250	20.4	104	110	23	17/20
DLA G2 200	0mm 2000lm 8x0 ADV EM ECG	Ø114×72	28002239	4,000	2,120	2,250	20.4	104	110	23	17/20
DLA G2 200	mm 2000/3000lm 840 SNC EM MOD	Ø114×72	28002270		3,000	7 100	29.8	101	107	25	18/21
DLA G2 200	0mm 3000lm 8x0 SNC EM ECG	W114X72	28002240		3,000	3,180	27.0	101	107	25	10/21
Accessories											
ACD REFLEC	CTOR G2 100mm 60 D	Ø 97 x 35.8	28002190								
ACD REFLEC	CTOR G2 100mm 90 D	Ø 97 x 35.8	28002191								
ACD REFLEC	CTOR G2 150mm 60 D	Ø135 x 65.2	28002192								
ACD REFLEC	CTOR G2 150mm 90 D	Ø135 x 65.2	28002193								
ACD REFLEC	CTOR G2 200mm 60 D	Ø182×80.2	28002194								
ACD REFLEC	CTOR G2 200mm 90 D	Ø182×80.2	28002195								

Ø100

Ø150

Ø 200

Ø 26.29 x 43

28002196

28002197

28002198

28002189

ACD TRIM RING 100MM WHITE

ACD TRIM RING 150MM WHITE

ACD TRIM RING 200MM WHITE

ACD EM LED INDICATOR HOLDER

6

Tolerance range for electrical and optical data: ±10 %

For anti-panic, escape route and spot illumination



At a glance: Engine EM ready2apply

- __ LED emergency module suitable for direct installation in ceilings
- Complete set with integrated electronics, LED module, heat sink, optics and battery
- _ Includes click-in multi-lens option for anti-panic, escape route and spot illumination
- _ 1 or 3 h rated duration (separate variants)
- __ Plug-in Lithium Iron Phosphate battery with strain-relief
- Nominal life-time of 50,000 hours
- __ 5 years guarantee electronic (LED Driver)
- _ 3 years guarantee battery

This new EM ready2apply combines high-quality LED technology, a compact housing and a long-life lithium iron phosphate battery in a complete solution for emergency lighting in the form of a complete luminaire.

With three interchangeable optics, EM ready2apply is ideally equipped for anti-panic lighting, for illuminating escape routes and for use as a spotlight. Thanks to the integrated installation aid this luminaire is quick and easy to install. The mounting depth of only 80 mm means that attractive emergency lighting can be provided even if space in the ceiling is restricted.

Туре	Rated duration (h)	Order No.	Operation	Number of cells	Output power (W)	
Engine EM ready2apply BASIC						
EM R2A BASIC NM 111 2W	1	89800534	non-maintained	1	1.50	
EM R2A BASIC M 111 2W	1	89800535	maintained	1	1.50	
EM R2A BASIC NM 131 1W	3	89800533	non-maintained	1	0.75	
EM R2A BASIC NM 132 2W	3	89800536	non-maintained	2	1.50	
EM R2A BASIC M 132 2W	3	89800537	maintained	2	1.50	
Engine EM ready2apply PRO						
EM R2A PRO NM 111 2W	1	89800542	non-maintained	1	1.50	
EM R2A PRO M 111 2W	1	89800543	maintained	1	1.50	
EM R2A PRO NM 122 2W	2	89800546	non-maintained	2	1.50	
EM R2A PRO M 122 2W	2	89800547	maintained	2	1.50	
EM R2A PRO NM 132 2W	3	89800544	non-maintained	2	1.50	
EM R2A PRO M 132 2W	3	89800545	maintained	2	1.50	
Engine EM ready2apply SELFTEST						
EM R2A ST NM 111 2W	1	89800538	non-maintained	1	1.50	
EM R2A ST M 111 2W	1	89800539	maintained	1	1.50	
EM R2A ST NM 132 2W	3	89800540	non-maintained	2	1.50	
EM R2A ST M 132 2W	3	89800541	maintained	2	1.50	

__ Test variants:

BASIC, tests have to be carried out manually and test results must be manually documented

SELFTEST, tests carried out automatically and the results are documented manually

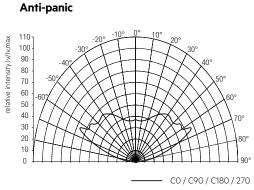
PRO, test procedures and test sequences as well as the documentation of test results can be managed through a central DALI system

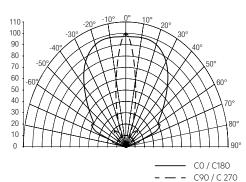
Replacement Batteries

Туре	Order No.
PACK-LiFePO4 1,5Ah R2A	89800555
PACK-LiFePO4 3,0Ah R2A	89800556

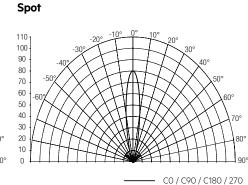
Optical properties

Туре	Luminous flux Anti-panic (lm)	Luminous flux escape route (lm)	Luminous flux spot (lm)
EM R2A BASIC 1W	121	117	115
EM R2A BASIC 2W	200	200	200
EM R2A PRO 2W	200	200	200
EM R2A SELFTEST 2W	200	200	200





Escape Route



Support and advice

From a single source



We will help you to create lighting solutions that are unbeatable in terms of economyand functionality, according to the slogan: We devote all our energy to your light.

As an international company, Tridonic is represented worldwide by 30 branch offices and partners in 73 countries.







