# LED Modules for Direct Connection to Mains Voltage 220–240 V

# LED MODULES FOR MAINS VOLTAGE

DRIVER-ON-BOARD TECHNOLOGY





# LED MODULES READYLINE C

# Built-in LED modules with integrated driver for direct connection to mains voltage

With so-called Driver-on-Board technology (DoB), the control gear unit is directly integrated into the LED module, which permits direct connection to mains voltage (220–240 V, 50–60 Hz).

The built-in LED modules of the ReadyLine series are suitable for residential and furniture lighting, as a replacement for halogen, energy-saving compact fluorescent lamps.

#### Advantages at a glance

- Direct connection to mains voltage
- Protection cover to prevent electrical shock
- More flexible space-saving luminaire designs due to absence of driver
- Direct replacement for conventional lamps in existing luminaires
- High power factor: > 0.9
- Long service life: up to 50,000 hours

#### **Technical notes**

Mains voltage: 220–240 V, 50/60 Hz Aluminium PCB for optimum thermal management Heat sink made of thermoconductive resin or co-moulded heat sink made of thermoconductive resin and aluminium Protection cover: PC, UV-glued or rivetted (module with heat sink)

RFI suppressed

#### **Typical applications**

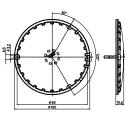
- Replacement for compact fluorescent lamps
- Integration in luminaires
- Residential lighting
- Architectural lighting
- Retail lighting
- Furniture lighting

# ReadyLine C 10

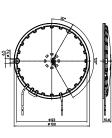
#### **Technical notes**

Power factor: > 0.97 Dimensions: Ø 100 mm, Ø 120 mm with heat sink Screw terminals for LED module with heat sink: 2.5 mm<sup>2</sup> Welded leads for LED module without heat sink: double FEP/FEP-insulation, length: 300 mm, central or lateral lead exit Fixing holes for screws M3 or self-tapping screws 2.9

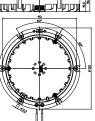
#### With central lead exit



With lateral lead exit



With heat sink, protection cover and 2-poles screw terminals



1 [cd/klm] 23 250 375 500 30°

Max.	Туре	Ref. No.		Voltage AC	Number	Colour	Correlated	Cover	Lumino	us flux	CRI	Lead exit	Energy
output		with	without	50/60 Hz	of LEDs		colour temperature		lm				efficiency
W		heat sink	heat sink	V	pcs.		К		min.	typ.	Ra		
10	LR54	559537	559539	220-240	54	warm white	26002900	clear	1010	1120	> 80	central	A++
	LR54	on request	559540									lateral	A++
	LR54	559538	559541	220-240	54	warm white	26002900	diffuse	890	950	> 80	central	A+
	LR54	on request	559542	1								lateral	A+
	LR54	554951	554943	220-240	54	warm white	29003200	clear	1100	1200	> 80	central	A++
	LR54	on request	554944	1								lateral	A++
	LR54	554952	554945	220–240	54	warm white	29003200	diffuse	935	1020	> 80	central	A+
	LR54	on request	554946									lateral	A+
	LR54	554953	554947	220–240	54	neutral white	37004200	clear	1150	1250	> 80	central	A++
	LR54	on request	554948									lateral	A++
	LR54	554954	554949	220-240	54	neutral white	37004200	diffuse	980	1060	> 80	central	A+
	LR54	on request	554950									lateral	A+
17.5	LR42	559543		220–240	42	warm white	26002900	clear	1140	1330	> 80	central	A+
	LR42	on request	559546									lateral	A+
	LR42	559544	559547	220–240	42	warm white	26002900	diffuse	930	1100	> 80	central	A
	LR42	on request	559548									lateral	A
	LR42	553828	553820	220–240	42	warm white	29003200	clear	1440	1550	> 80	central	A+
	LR42	on request	553821									lateral	A+
	LR42	553829	553822	220–240	42	warm white	29003200	diffuse	1230	1340	> 80	central	A+
	LR42	on request	553823									lateral	A+
	LR42	553830	553824	220–240	42	neutral white	37004200	clear	1480	1590	> 80	central	A+
	LR42	on request	553825									lateral	A+
	LR42	553831	553826	220-240	42	neutral white	37004200	diffuse	1260	1370	> 80	central	A+
	LR42	on request	553827									lateral	A+
Accessories		Description					Tape thickness		s Thermal conductivity		Breakdown	voltage*	
_	_	552039	Cord grip with 2 screws for LED modules with heat sink				t sink					-	0
_	-	555012		ermally conductive adhesive transfer tape Ø 100 mm ermally conductive transfer tape, non-adhesive Ø 99 mm					0.25 mm 0.25 mm		//mK	5.5 kV	
_	_	553981	Thermally of								тК	3 kV	
_	_	553795**	Thermally conductive transfer tape, adhesive on both sides Ø 104 mm 0.19 mm 0.9 W/mK						10.3 kV				

\* Average value (not for specification purpose) | \*\* For use in luminaires of protection class I (has to be tested in luminaire)

The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.

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# **ReadyLine C 08**

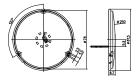
#### **Technical notes**

Power factor: > 0.97 Dimensions: Ø 81.5 mm, Ø 120 mm with heat sink Screw terminals for LED module with heat sink: 2.5 mm<sup>2</sup> Welded leads for LED module without heat sink: double FEP/FEP-insulation, length: 300 mm, central or lateral lead exit Fixing holes for screws M3 or self-tapping screws 2.9

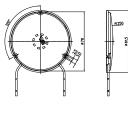




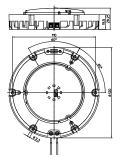
#### With central lead exit



#### With lateral lead exit



With heat sink, protection cover and 2-poles screw terminals



Max.	Туре	Ref. No.		Voltage AC	Number	Colour	Correlated	Cover	Luminou	uminous flux		Lead	Energy
output		with	without	50/60 Hz	of LEDs		colour temperature		lm			exit	efficiency
W		heat sink	heat sink	V	pcs.		К		min.	typ.	Ra		
13	LR30W	559550	559552	220–240	30	warm white	26002900	clear	910	940	> 80	central	A+
	LR30W	on request	559553									lateral	A+
	LR30W	559551	559554	]				diffuse	780	800	> 80	central	А
	LR30W	on request	559555									lateral	A
	LR30W	557843	557834	220-240	30	warm white	29003200	clear	1100	1190	> 80	central	A+
	LR30W	on request	557835	]								lateral	A+
	LR30W	557844	557836					diffuse	935	1010	> 80	central	A+
	LR30W	on request	557837									lateral	A+
	LR30W	557845	557838	220-240	30	neutral white	37004200	clear	1140	1210	> 80	central	A+
	LR30W	on request	557839	]								lateral	A+
	LR30W	557846	557840	]				diffuse	955	1030	> 80	central	A+
	LR30W	on request	557841									lateral	A+
Acces	Accessories		Description						Tape thickness		Thermal conductivity		Breakdown voltage*
-	-	557692 Thermally c		v conductive transfer tape Ø 76 mm					0.25 mm		0.8 W/mK		5.5 kV
-	-	558229	Thermally conductive non-adhesive transfer t				Ø 76 mm	0.25 mm		2 W/mK		3 kV	
-	-	557691**	Thermally c	onductive trai	nsfer tape, adhesive on both sides Ø 82 mm			0.19 mm		0.9 W/mK		10.3 kV	

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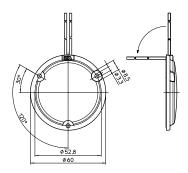
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# **ReadyLine C 06**

#### **Technical notes**

Power factor: > 0.95 Dimensions: Ø 60 mm Welded leads: double FEP/FEP-insulation, length: 300 mm, lateral lead exit Fixing holes for screws M3





Max.	Туре	Ref. No.	Voltage AC	Number of LEDs	Colour	Correlated colour	Cover	Luminous flux		CRI Lead exit		Energy efficiency
output			50/60 Hz			temperature		lm				
W			V	pcs.		К		min.	typ.	Ra		
8.7	LR12W	559565	220-240	12	warm white	26002900	clear	590	650	> 80	lateral	A+
	LR12VV	559566					diffuse	480	530	> 80		A
	LR12VV	559567	220-240	12	warm white	29003200	clear	720	780	> 80	lateral	A+
	LR12VV	559568					diffuse	610	660	> 80		A+
	LR12W	559569	220-240	12	neutral white	37004200	clear	740	800	> 80	lateral	A+
	LR12W	559570					diffuse	630	680	> 80		A+
Accesso	ories		Description						Tape thickness The		l conductivity	Breakdown voltage*
-	-	559968	Thermally co	nductive adhesive	ð 64 mm	nm 0.25		0.25 mm 0.8		//mK	5.5 kV	
-	-	559969	Thermally co	Thermally conductive transfer tape, non-adhesive Ø 59 mm						2 W/mK		3 kV
-	-	559970**	Thermally co	nductive transfer to	pe, adhesive	ve on both sides Ø 64 mm		0.19 mm		0.9 W/mK		10.3 kV

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