### Suspension Rope S LED

# **CURLING**

## Data Sheet









Curling perfectly combines sustainable LED technology with elegant and timeless design. Thanks to intelligent design details, Curling functions both as a downlight and a ceiling light and is perfectly suitable for a wide range of applications.

Examples of applications:

Private or commercial spaces. Singly and in series. For example over worktops, display surfaces, counters, bars, long table rows.



### Suspension Rope S LED

### Technical data sheet

The delicate glass body is available in clear or opalescent glass or as a clear outer shell with cylindrical or conical inserts. The perfect interplay of the individual design elements means light emission and moods can be perfectly tailored to every interior setting. A special optical insert, attached below the light source with two small magnets, allows for ideal light distribution and soft, glare-free light.

Design da Costa & Wolf

#### Material & surfaces









Material canopy		alı	uminum	
Surface canopy		ро	olished	
Suspension		three	steel ropes	
Glass shade	mouth-blown clear	mouth-blown opal	mouth-blown clear	mouth-blown clear
Reflector	optical insert	optical insert	cylindrical opal acrylic glass and optical insert	conical opal acrylic glass and optical insert
Dimensions				
Technical data	. min. ca. 500 – max. ca. 2000 0 80 0 105	0 80 901 0 175	. min. ca. 500 – max. ca. 2000 – 0 105 0 0 0 112 0 0 0 0 112 0 0 0 0	. min. ca. 500 – max. ca. 2000 – 000
Illuminant			ED CAR	

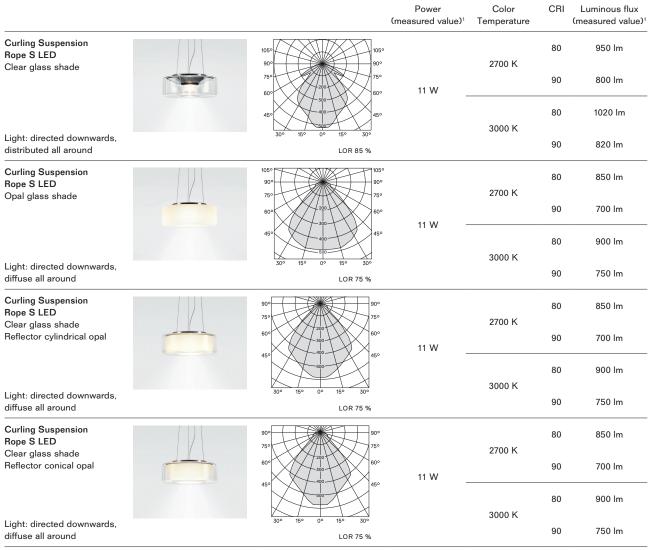
Technical data				
Illuminant	LED CoB (LED unit can be replaced on site)			
Power	11 W			
Luminous flux LED 2700K	950 lm			
(nominal value) <sup>1</sup> / Color temperature 3000K	1000 lm			
Color rendering index	> 90 CRI (other color rendering indices available on request)			
Operating voltage	primary 220 – 240 V AC, secondary 36 V D			
Control	TRIAC			
Average lifetime LED	50.000 h <sup>2</sup>			
Energy efficiency class	A++ to A			
Guarantee	2 years			
Features	glass shade mounted tool-free; 110 V versions on request; special lengths on request			
Weight	ca. 1.5 kg			





#### Photometric data sheet

Depending on the version Curling Suspension combines downwards-directed light with light softly dispersed all round or with light distributed all round. Thanks to a standardized replacement system, the LED circuit board can be replaced by qualified staff at the end of its service life.



Please note:

You can download the photometric data (EULUMDAT) from http://serien.com/downloads/.

### Suspension Rope S LED

		Output (nominal value) <sup>1</sup>	Control Technology <sup>4</sup>	CRI <sup>3</sup>	Color Temperature <sup>3</sup>	Article Number
	Curling Suspension Rope S LED Clear glass shade	11 W	TRIAC	> 90	2700 K	CU1009
					3000 K	CU1013
Rope	Curling Suspension Rope S LED Opal glass shade	11 W	TRIAC	>00	2700 K	CU1012
		11 <b>V</b> V	MIAC	> 90 -	3000 K	CU1016
Curling Suspension Rope S LED Clear glass shade Reflector cylindrical op	Rope S LED	11 W	TRIAC	> 90	2700 K	CU1011
					3000 K	CU1015
Re C	Curling Suspension Rope S LED Clear glass shade Reflector conical opal	11 W	TRIAC	> 90	2700 K	CU1010
					3000 K	CU1014
Assessories						
Cover plate Ø 11	cm				white	CU1998
					polished aluminum	CU1999
anopy profile				for two luminaires	polished aluminum	CH1002
				for three luminaires	polished aluminum	CH1005

### Recommended dimmers

The following list is the result of internal tests conducted in a controlled environment. However, in some cases there is a possibility that owing to technical specifications (e.g., drivers, cables, switches, etc.) a specific combination of dimmer and LEDs does not work. As such our recommendations do not represent a guarantee.

Curling Suspension Rope S LED with driver ELT (A-1201)	Distributed until March 2017	11 W	TRIAC	Merten MEG5300-0001 Feller 40200.LED.EB Jung 225 NV DE Berker 286710
Curling Suspension Rope S LED with driver Sinchun	Distributed after 1st quarter of 2017	11 W	TRIAC	Busch Jäger 6513 U-102 Busch Jäger 6523 U Berker 286710

Eltako EUD61NPN-UC Feller 40200.LED.EB

Jung 225 TDE Merten MEG5300-0001 Schalk ETD U2 Schalk F03 U2E

(P-4270)

<sup>1</sup> The nominal and measured values given refer to the illuminants employed at the time the data sheet was compiled. Subject to alterations.

<sup>&</sup>lt;sup>2</sup> Specified by the manufacturer, serien Raumleuchten GmbH assumes no liability for the accuracy of the information.

### Suspension Rope M LED

## **CURLING**

## Data Sheet







Curling perfectly combines sustainable LED technology with elegant and timeless design. Thanks to intelligent design details, Curling functions both as a downlight and a ceiling light and is perfectly suitable for a wide range of applications.

Examples of applications:

Private or commercial spaces. Singly and in series. For example over worktops, display surfaces, counters, bars, long rows of tables.



### Suspension Rope M LED

#### Technical data sheet

The delicate glass body is available in clear or opalescent glass or as a clear outer shell with cylindrical or conical inserts. The perfect interplay of the individual design elements means light emission and moods can be perfectly tailored to every interior setting. A special optical insert, attached below the light source with two small magnets, allows for ideal light distribution and soft, glare-free light.

Design da Costa & Wolf

#### Material & surfaces







Material canopy		alı	uminum	
Surface canopy		po	olished	
Suspension		three	steel ropes	
Glass shade	mouth-blown clear	mouth-blown opal	mouth-blown clear	mouth-blown clear
Reflector	optical insert	optical insert	cylindrical opal acrylic glass and optical insert	conical opal acrylic glass and optical insert
Dimensions				
	. min. ca. 500 - max. ca.2000 .	. min. ca. 500 – max. ca. 2000 · 85 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	. min. ca. 500 – max, ca.2000 .	. min. ca. 500 – max. ca. 2000 · 85 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
Technical data				
Illuminant			ED CoB n be replaced by qualified staff)	

Power (nominal value	e)¹	13 W	24 W	13 W	24 W	13 W	24 W	13 W	24 W
Luminous flux LED (nominal value) <sup>1</sup> /	2700K	1300 lm	2600 lm	1300 lm	2600 lm	1300 lm	2600 lm	1300 lm	2600 lm
Color temperature	3000K	1360 lm	2700 lm	1360 lm	2700 lm	1360 lm	2700 lm	1360 lm	2700 lm
Color rendering index > 9				> 90 CRI (othe	r color renderin	g indices availa	ble on request)		
Operating voltage			primary 220 - 240 V AC, secondary 36 V DC (13 W and 24 W models also available as primary 110 V AC, secondary 36 V DC)						
Control <sup>4</sup>		TRIAC	DALI 1 – 10 V	TRIAC	DALI 1 – 10 V	TRIAC	DALI 1 – 10 V	TRIAC	DALI 1 – 10 V
Average lifetime LED	)		50.000 h²						
Energy efficiency cla	iss		A++ to A						
Guarantee			2 years						

Weight ca. 2.3 kg



Mounting



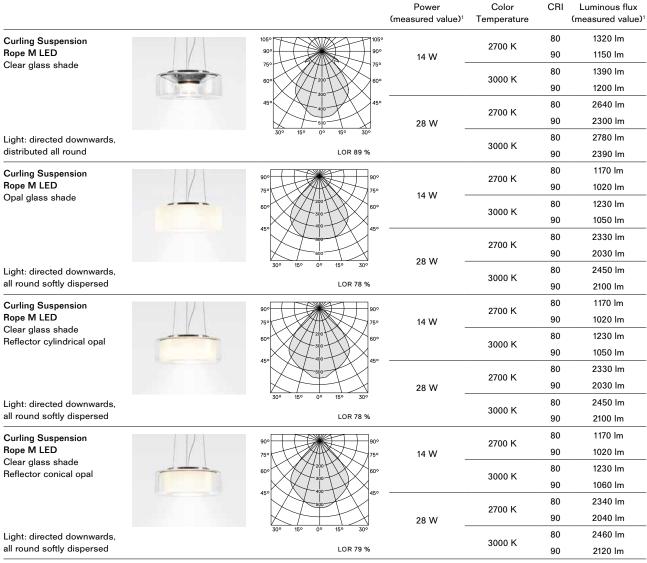


easy tool-free mounting of glass shade via bayonet catch

### Suspension Rope M LED

#### Photometric data sheet

Depending on the version Curling Suspension combines downwards-directed light with light softly dispersed all round or with light distributed all round. Thanks to a standardized replacement system, the LED circuit board can be replaced by qualified staff at the end of its service life.



Please note

You can download the photometric data (EULUMDAT) from http://serien.com/downloads/.

### Suspension Rope M LED

		Output (nominal value) <sup>1</sup>	Control Technology⁴	CRI <sup>3</sup>	Color Temperature <sup>3</sup>	Article Numbe
	Curling Suspension	40.144	TDIAC	. 22	2700 K	CU1117
	Rope M LED Clear glass shade	13 W	TRIAC	> 90	3000 K	CU1121
				0.0	2700 K	CU1169
<b>]</b>		04.144	DALI	> 90	3000 K	CU1173
		24 W			2700 K	CU1125
			1 – 10 V	> 90	3000 K	CU1129
	Curling Suspension				2700 K	CU1120
	Rope M LED Opal glass shade	13 W	TRIAC	> 90	3000 K	CU1124
			DALL		2700 K	CU1172
		0.4.147	DALI	> 90	3000 K	CU1176
		24 W	1 – 10 V	> 90	2700 K	CU1128
					3000 K	CU1132
	Curling Suspension				2700 K	CU1119
	Rope M LED Clear glass shade	13 W	TRIAC	> 90	3000 K	CU1123
	Reflector cylindrical opal				2700 K	CU1171
			DALI	> 90	3000 K	CU1175
		24 W	1 – 10 V	> 90	2700 K	CU1127
					3000 K	CU1131
П	Curling Suspension				2700 K	CU1118
	Rope M LED Clear glass shade	13 W	TRIAC	> 90	3000 K	CU1122
	Reflector conical opal		DALL		2700 K	CU1170
]			DALI	> 90	3000 K	CU1174
		24 W	4 4037		2700 K	CU1126
			1 – 10 V	> 90	3000 K	CU1130
ssessories						
over plate Ø 1	11cm				white	CU1998
					polished aluminum	CU1999

### Recommended dimmers

Canopy profile

The following list is the result of internal tests conducted in a controlled environment. However, in some cases there is a possibility that owing to technical specifications (e.g., drivers, cables, switches, etc.) a specific combination of dimmer and LEDs does not work. As such our recommendations do not represent a guarantee.

Curling Suspension Rope M LED

TRIAC

MERTEN MEG5300-0001 FELLER 40200.LED.EB

for two luminaires polished aluminum

for three luminaires polished aluminum

CH1002 CH1005

The nominal and measured values given refer to the illuminants employed at the time the data sheet was compiled. Subject to alterations.
 Specified by the manufacturer. serien Raumleuchten GmbH assumes no liability for the accuracy of the information.
 Other versions available on request.
 Control via DALI or 1-10V requires 5-wire mains cable.

### Suspension Tube S LED

## **CURLING**

## Data Sheet









Curling perfectly combines sustainable LED technology with elegant and timeless design. Thanks to intelligent design details, Curling functions both as a downlight and a ceiling light and is perfectly suitable for a wide range of applications.

Examples of applications:

Private or commercial spaces. Singly and in series. For example over worktops, display surfaces, counters, bars, long rows of tables. Also ideal as basic lighting in grid form in convention halls, auditoria, open-plan offices.



### Suspension Tube S LED

### Technical data sheet

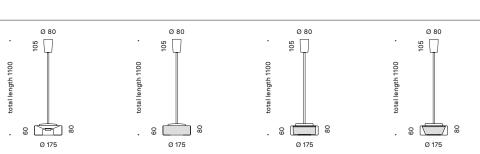
The delicate glass body is available in clear or opalescent glass or as a clear outer shell with cylindrical or conical inserts. The perfect interplay of the individual design elements means light emission and moods can be perfectly tailored to every interior setting. A special optical insert, attached below the light source with two small magnets, allows for ideal light distribution and soft, glare-free light.

Design da Costa & Wolf

#### Material & surfaces



Material canopy		aluminum						
Surface canopy		polished						
Suspension		chrome-plated steel tube						
Glass shade	mouth-blown clear	mouth-blown opal	mouth-blown clear	mouth-blown clear				
Reflector	optical insert	optical insert	cylindrical opal acrylic glass and optical insert	conical opal acrylic glass and optical insert				
Dimensions								
	Ø 80	Ø 80	Ø 80	Ø 80				
	. 5	. 105	. 105	. 105				



#### Technical data

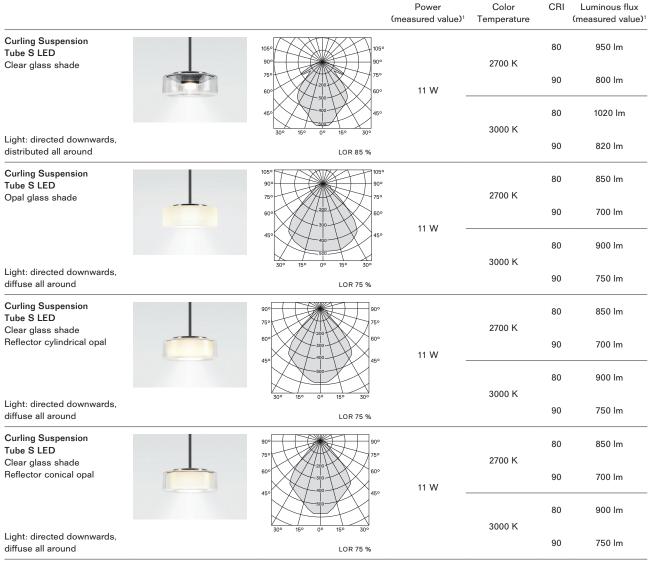
Illuminant	LED CoB (LED unit can be replaced on site)				
Power	11 W				
Luminous flux LED 2700K	950 lm				
(nominal value) 1/ Color temperature 3000K	1000 lm				
Color rendering index	> 90 CRI (other color rendering indices available on request)				
Operating voltage	primary 220 – 240 V AC, secondary 36 V DC				
Control	TRIAC				
Average lifetime LED	50.000 h²				
Energy efficiency class	A++ to A				
Guarantee	2 years				
Features	glass shade mounted tool-free; 110 V versions on request; special lengths on request				
Weight	ca. 1.7 kg				





#### Photometric data sheet

Depending on the version Curling Suspension combines downwards-directed light with light softly dispersed all round or with light distributed all round. Thanks to a standardized replacement system, the LED circuit board can be replaced by qualified staff at the end of its service life.



Please note

You can download the photometric data (EULUMDAT) from http://serien.com/downloads/.

## Suspension Tube S LED

		Output (nominal value) <sup>1</sup>	Control Technology <sup>4</sup>	CRI <sup>3</sup>	Color Temperature <sup>3</sup>	Article Numbe
	Curling Suspension Tube S LED Clear glass shade		TDIAG		2700 K	CU1017
		11 W	TRIAC	> 90	3000 K	CU1021
	Curling Suspension Tube S LED Opal glass shade		2700 K	CU1020		
		11 W	TRIAC	> 90	3000 K	CU1024
	Curling Suspension Tube S LED Clear glass shade Reflector cylindrical opal	11 W	TRIAC	> 90	2700 K	CU1019
			IIIAO	230	3000 K	CU1023
	Curling Suspension Tube S LED Clear glass shade Reflector conical opal	11 W	TRIAC	> 90	2700 K	CU1018
			to	7 00	3000 K	CU1022
ssessories						
over plate Ø 11	cm				white	CU1998
					polished aluminum	CU1999
anopy profile				for two luminaires	polished aluminum	CH1002
				for three luminaires	polished aluminum	CH1005

### Recommended dimmers

**Curling Suspension** 

The following list is the result of internal tests conducted in a controlled environment. However, in some cases there is a possibility that owing to technical specifications (e.g., drivers, cables, switches, etc.) a specific combination of dimmer and LEDs does not work. As such our recommendations do not represent a guarantee.

11 W

Tube S LED with driver ELT (A-1201)	March 2017			Feller 40200.LED.EB Jung 225 NV DE Berker 286710	
Curling Suspension Tube S LED with driver Sinchun (P-4270)	Distributed after 1 st quarter of 2017	11 W	TRIAC	Busch Jäger 6513 U-102 Busch Jäger 6523 U Berker 286710 Eltako EUD61NPN-UC Feller 40200.LED.EB	Jung 225 TDE Merten MEG5300-0001 Schalk ETD U2 Schalk F03 U2E

TRIAC

Merten MEG5300-0001

Distributed until

<sup>1</sup> The nominal and measured values given refer to the illuminants employed at the time the data sheet was compiled. Subject to alterations.

<sup>&</sup>lt;sup>2</sup> Specified by the manufacturer, serien Raumleuchten GmbH assumes no liability for the accuracy of the information.

### Suspension Tube M LED

## **CURLING**

## Data Sheet











Curling perfectly combines sustainable LED technology with elegant and timeless design. Thanks to intelligent design details, Curling functions both as a downlight and a ceiling light and is perfectly suitable for a wide range of applications.

Examples of applications:

Private or commercial spaces. Singly and in series. For example over worktops, display surfaces, counters, bars, long rows of tables. Also ideal as basic lighting in grid form in convention halls, auditoria, open-plan offices.



### Suspension Tube M LED

#### Technical data sheet

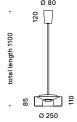
The delicate glass body is available in clear or opalescent glass or as a clear outer shell with cylindrical or conical inserts. The perfect interplay of the individual design elements means light emission and moods can be perfectly tailored to every interior setting. A special optical insert, attached below the light source with two small magnets, allows for ideal light distribution and soft, glare-free light.

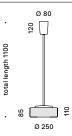
Design da Costa & Wolf

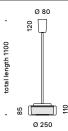
### Material & surfaces

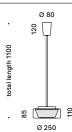


Material canopy	aluminum							
Surface canopy		polished						
Suspension		chrome-plated steel tube						
Glass shade	mouth-blown clear	mouth-blown opal	mouth-blown clear	mouth-blown clear				
Reflector	optical insert	optical insert	cylindrical opal acrylic glass and optical insert	conical opal acrylic glas and optical insert				
Dimensions								
	Ø 80	Ø 80	Ø 80	Ø 80				
	. 02	. 02	. 02	. 50				









#### Technical data

Illuminant		LED CoB (The LED circuit board can be replaced by qualified staff)									
Power (nominal value) <sup>1</sup>	13 W	24 W	13 W	24 W	13 W	24 W	13 W	24 W			
Luminous flux LED 270	0K 1300 lm	2600 lm	1300 lm	2600 lm	1300 lm	2600 lm	1300 lm	2600 lm			
(nominal value)¹/ Color temperature 300	0K 1360 lm	2700 lm	1360 lm	2700 lm	1360 lm	2700 lm	1360 lm	2700 lm			
Color rendering index			> 90 CRI (other color rendering indices available on request)								
Operating voltage		primary 220 – 240 V AC, secondary 36 V DC (13 W and 24 W models also available as primary 110 V AC, secondary 36 V DC)									
Control <sup>4</sup>	TRIAC	DALI 1 – 10 V	TRIAC	DALI 1 – 10 V	TRIAC	DALI 1 – 10 V	TRIAC	DALI 1 – 10 V			
Average lifetime LED	age lifetime LED 50.000 h <sup>2</sup>										
Energy efficiency class		A++ to A									
Guarantee		2 years									
Mounting		easy tool-free mounting of glass shade via bayonet catch									
Weight		ca. 2.7 kg									

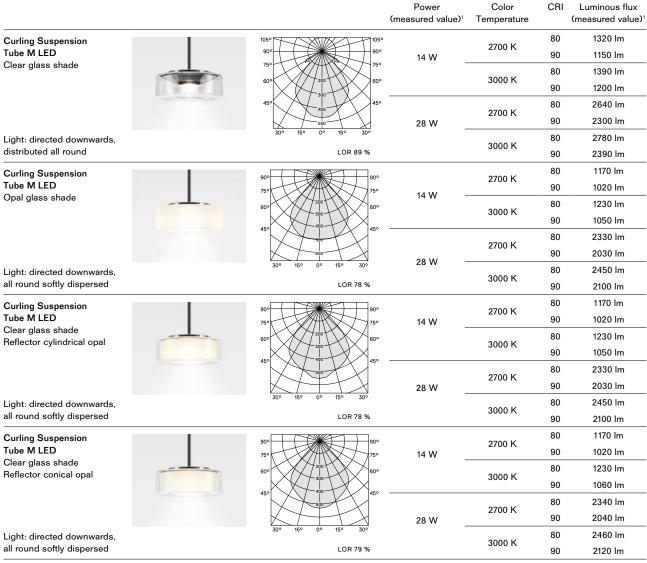




### Suspension Tube M LED

#### Photometric data sheet

Depending on the version Curling Suspension combines downwards-directed light with light softly dispersed all round or with light distributed all round. Thanks to a standardized replacement system, the LED circuit board can be replaced by qualified staff at the end of its service life.



Please note

You can download the photometric data (EULUMDAT) from http://serien.com/downloads/.

### Suspension Tube M LED

		Output (nominal value) <sup>1</sup>	Control Technology <sup>4</sup>	CRI <sup>3</sup>	Color Temperature <sup>3</sup>	Article Number
	Curling Suspension		TRIAC	> 90	2700 K	CU1133
	Tube M LED Clear glass shade	13 W			3000 K	CU1137
		24 W -	DALI	> 90	2700 K	CU1177
					3000 K	CU1181
			1 – 10 V	> 90	2700 K	CU1141
					3000 K	CU1145
	Curling Suspension	13 W	TRIAC	> 90	2700 K	CU1136
	Tube M LED Opal glass shade				3000 K	CU1140
			DALI	> 90	2700 K	CU1180
					3000 K	CU1184
		24 W	1 – 10 V	> 90	2700 K	CU1144
					3000 K	CU1148
	Curling Suspension Tube M LED Clear glass shade	13 W	TRIAC	> 90	2700 K	CU1135
					3000 K	CU1139
	Reflector cylindrical opal	24 W -	DALI	> 90	2700 K	CU1179
					3000 K	CU1183
			1 – 10 V	> 90	2700 K	CU1143
					3000 K	CU1147
	Curling Suspension	13 W	TRIAC	> 90	2700 K	CU1134
	Tube M LED Clear glass shade				3000 K	CU1138
	Reflector conical opal	04.14	DALI	> 90	2700 K	CU1178
					3000 K	CU1182
		24 W	1 – 10 V	> 90	2700 K	CU1142
					3000 K	CU1146
Assessories						
Cover plate Ø 11cm					white	CU1998
					polished aluminum	CU1999
Canopy profile				for two luminaires	polished aluminum	CH1002
				for three luminaires	polished aluminum	CH1005

The following list is the result of internal tests conducted in a controlled environment. However, in some cases there is a possibility that owing to technical specifications (e.g., drivers, cables, switches, etc.) a specific combination of dimmer and LEDs does not work. As such our recommendations do not represent a guarantee.

Curling Suspension Tube M LED

TRIAC

MERTEN MEG5300-0001 FELLER 40200.LED.EB

The nominal and measured values given refer to the illuminants employed at the time the data sheet was compiled. Subject to alterations.
 Specified by the manufacturer, serien Raumleuchten GmbH assumes no liability for the accuracy of the information.
 Other versions available on request.
 Control via DALI or 1-10V requires 5-wire mains cable.