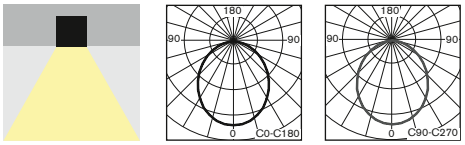
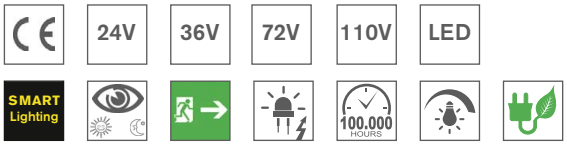
DESIRO-HC EndCar / SIEMENS

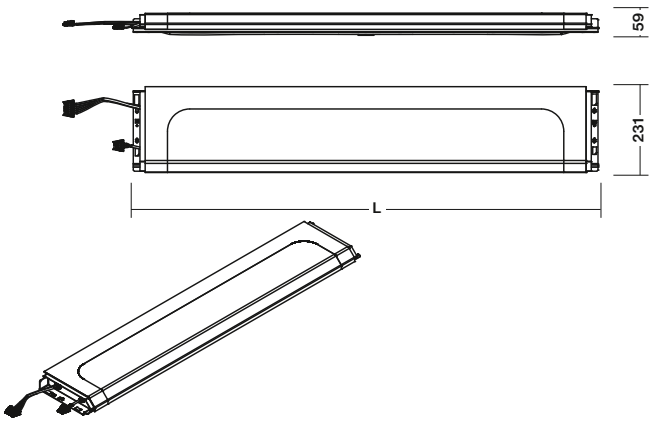




- DESIRO HC-LED is customized lighting system designed for **SIEMENS-DESIRO-HC project.** It is modular lighting system designed for direct illumination for all EndCars and MiddleCars (Lower Deck and Higher Deck)
- Controlled by SIBAS Siemens Control Unit (Stepless Dimming and 4 levels of Emergency Lighting)
- Thanks to the variable lengths it is possible to create continuous lighting band along the entire vehicle lenght.
- The complete system includes also speakers.
- All fixtures are equipped by SEC LED modules based on OSRAM Osconiq MidPower LongLife LEDs. Thanks to this both the maintenance and service costs are reduced.

- DESIRO-HC-LED je zákaznícky svetelný systém navrhnutý pre S**IEMENS-DESIRO-HC projekt.** Jedná sa o modulárny systém pre priame osvetlenie
- Napojené na centrálnu riadiacu jednotku SIEMENS SIBAS na plynulé riadenie stmievania a 4 úrovne núdzového osvetlenia
- Vďaka modulom rôznej dĺžky (vrátane reproduktorov a koncových dielov) je možné vytvoriť "inline" systém po celej dĺžke vagóna
- Svietidlá sú vybavené dlhoživotnými MidPower LED OSRAM Osconiq, čím sa výrazne zredukovali náklady na údržbu a servisné zásahy





STANDARD ACCESSORIES / ŠTANDARDNÁ VÝBAVA

- MidPower LEDs 205lm/W OSRAM Osconiq type serie
- LED Binning ≤ 3 MacAdam Steps
- SEC LED electronic ballast with Dimming Function
- Central Control
- AL sheet base painted in RAL9003
- Diffuser made of semi-opal milky colour PC complying and EN45545, partly painted with Mankiewicz paint
- Halogen-free "INLINE" wiring
- WAGO I/O connectors

- MidPower LED 205lm/W OSRAM Osconiq
- LED Binning ≤ 3 MacAdam Steps
- SEC LED stmievateľný elektronický predradník
- Central Control
- Základňa svietidla vyrobená z AL, lakovaná v RAL9003
- difúzor svietidla vyrobený z poloopálového PC spĺňajúci EN45545, čiastočne lakovaný farbou Mankiewicz
- Halogénovo bezpečné vodiče a priebežná kabeláž
- WAGO I/O konektory

OPTIONS / PRÍPLATKY

- Alternative colour surface treatment
- Alternative customised dimmensions
- Alternative LED light colour
- SMART Light & DATA BUS Control (refer to page No 45-51)

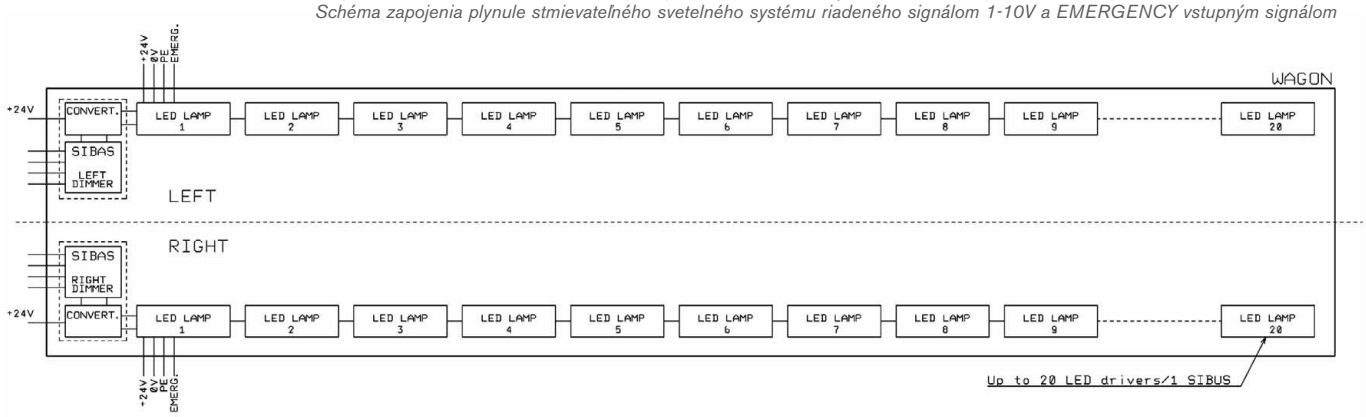
- Alternatívna farba svetla pre LED
- Alternatívna farba povrchu
- Alternatívne rozmery modulov
- SMART Light & DATA BUS riadenie a komunikácia (pozri str.45-51)

DESIRO-HC-LED (308-B)

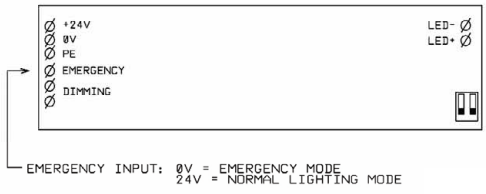
Type / Typ	LENGTH mm	Power Supply	Light Source	Dimming	SMART Lighting
ENDCAR LED	718 mm	DC 110V	MidPower LEDs	YES	OPTION
ENDCAR LED	840 mm	DC 110V	MidPower LEDs	YES	OPTION
ENDCAR LED	817 mm	DC 110V	MidPower LEDs	YES	OPTION
ENDCAR LED	1223 mm	DC 110V	MidPower LEDs	YES	OPTION
ENDCAR LED	932 mm	DC 110V	MidPower LEDs	YES	OPTION
ENDCAR LED	1628 mm	DC 110V	MidPower LEDs	YES	OPTION
ENDCAR LED	1132 mm	DC 110V	MidPower LEDs	YES	OPTION
ENDCAR LED	1674 mm	DC 110V	MidPower LEDs	YES	OPTION
ENDCAR LED	1492 mm	DC 110V	MidPower LEDs	YES	OPTION
ENDCAR SPEAKER MODULE	250 mm	-	-	YES	OPTION
ENDCAR CAMERA MODULE	250 mm	-	-	YES	OPTION
ENDCAR LED - CUSTOMISED	CUSTOMISED	CUSTOMISED	CUSTOMISED	OPTION	OPTION

Ask SEC for detailed drawings or the specific item order code (design@sec.sk)

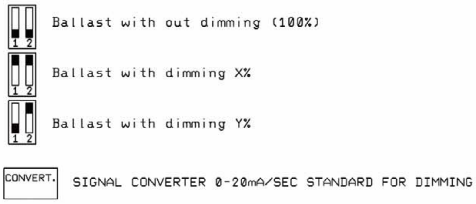
Electrical diagram for Stepless dimmable LED lighting fixtures controlled by 1-10V control signal and EMERGENCY control input signal
Schéma zapojenia plynule stmievateľného svetelného systému riadeného signálom 1-10V a EMERGENCY vstupným signálom



LED DRIVER DETAIL:



DIP SWITCH DETAIL FOR EMERGENCY MODE:



X%= customised emergency lighting output level set-up in order to achieve eg 5lux on the floor
Y%= customised emergency lighting output level set-up in order to achieve eg 40lux in threshold door area

X%= nastavenie výkonu tak, aby sa dosiahlo napr. 5lx na podlahe
Y%= nastavenie výkonu tak, aby sa dosiahlo napr. 40lx v priestore dverí




SEC
SYSTEM SUPPLIER
abellio
94 80 0462 101-7 D-SDEHC
2R B
Copyright: SIEMENS AG
SIEMENS

SEC LED Lighting

DESIRO HC / SIEMENS



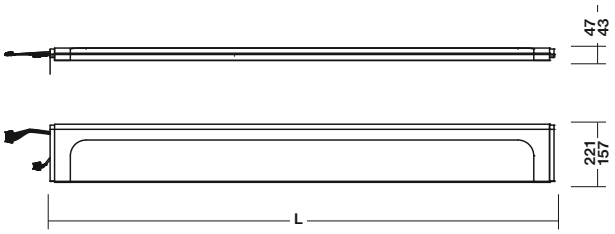
DESIRO-HC MiddleCar **/ SIEMENS**

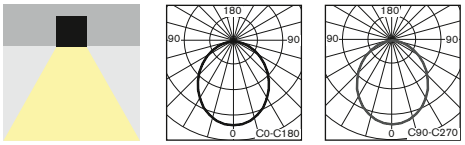


LED LIGHTING FIXTURE - UPPER DECK



LED LIGHTING FIXTURE - LOWER DECK





- DESIRO HC-LED is customized lighting system designed for **SIEMENS-DESIRO-HC project.** It is modular lighting system designed for direct illumination for all EndCars and MiddleCars (Lower Deck and Upper Deck)
- Controlled by SIBAS Siemens Control Unit (Stepless Dimming and 4 levels of Emergency Lighting)
- Thanks to the combination of both LEDs layout and the special PC diffuser the high lighting uniformity on the cover is achieved - without any neither dark areas nor visible LED SPOTs.
- Thanks to the variable lengths it is possible to create continuous lighting band along the entire vehicle lenght.
- The complete system includes also speakers.
- All fixtures are equipped by SEC LED modules based on OSRAM Osconiq MidPower LongLife LEDs.
  Thanks to this both the maintenance and service costs are reduced.

- DESIRO-HC-LED je zákaznícky svetelný systém navrhnutý pre **SIEMENS-DESIRO-HC projekt**. Jedná sa o modulárny systém pre priame osvetlenie
- Napojené na cetrálnu riadiacu jednotku SIEMENS SIBAS na plynulé riadenie stmievania a 4 úrovne núdzového osvetlenia
- Vďaka modulom rôznej dĺžky (vrátane reproduktorov a koncových dielov) je možné vytvoriť "inline" systém po celej dĺžke vagóna
- Svietidlá sú vybavené dlhoživotnými MidPower LED OSRAM Osconiq, čím sa výrazne zredukovali náklady na údržbu a servisné zásahy

STANDARD ACCESSORIES / ŠTANDARDNÁ VÝBAVA

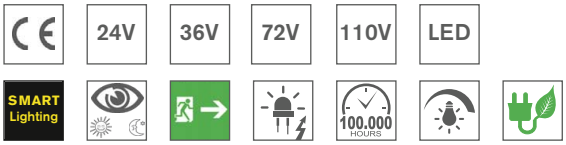
- MidPower 3000K/4000K LEDs 205lm/W OSRAM Osconiq type serie
- LED Binning ≤ 3 MacAdam Steps
- SEC LED electronic ballast with Dimming Function
- Central Control
- AL sheet base painted in RAL9003
- Diffuser made of semi-opal milky colour PC complying and EN45545, partly painted with Mankiewicz paint
- Halogen-free "INLINE" wiring + WAGO I/O connectors

- MidPower LED 205lm/W OSRAM Osconiq 3000K/4000K
- LED Binning ≤ 3 MacAdam Steps
- SEC LED stmievateľný elektronický predradník
- Central Control
- Základňa svietidla vyrobená z AL, lakovaná v RAL9003
- difúzor svietidla vyrobený z poloopálového PC spĺňajúci EN45545, čiastočne lakovaný farbou Mankiewicz
- Halogénovo bezpečné vodiče a priebežná kabeláž + WAGO I/O konektory

OPTIONS / PRÍPLATKY

- Alternative colour surface treatment
- Alternative customised dimmensions
- Alternative LED light colour
- SMART Light & DATA BUS Control (refer to page No 45-51)

- Alternatívna farba svetla pre LED
- Alternatívna farba povrchu
- Alternatívne rozmery modulov
- SMART Light & DATA BUS riadenie a komunikácia (pozri str.45-51)



DESIRO-HC-LED (308-B)

Type / Typ	LENGTH mm	Power Supply	Light Source	Dimming	SMART Lighting
MIDDLE CAR LOWER DECK LED	1917 mm	DC 110V	MidPower LEDs	YES	OPTION
MIDDLE CAR LOWER DECK LED	1133 mm	DC 110V	MidPower LEDs	YES	OPTION
MIDDLE CAR LOWER DECK LED	844 mm	DC 110V	MidPower LEDs	YES	OPTION
MIDDLE CAR UPPER DECK LED	1463 mm	DC 110V	MidPower LEDs	YES	OPTION
MIDDLE CAR SPEAKER MODULE	250 mm	-	-	-	-
MIDDLE CAR LED - CUSTOMISED	CUSTOMISED	CUSTOMISED	CUSTOMISED	OPTION	OPTION

Ask SEC for detailed drawings or the specific item order code (design@sec.sk)





SIEMENS