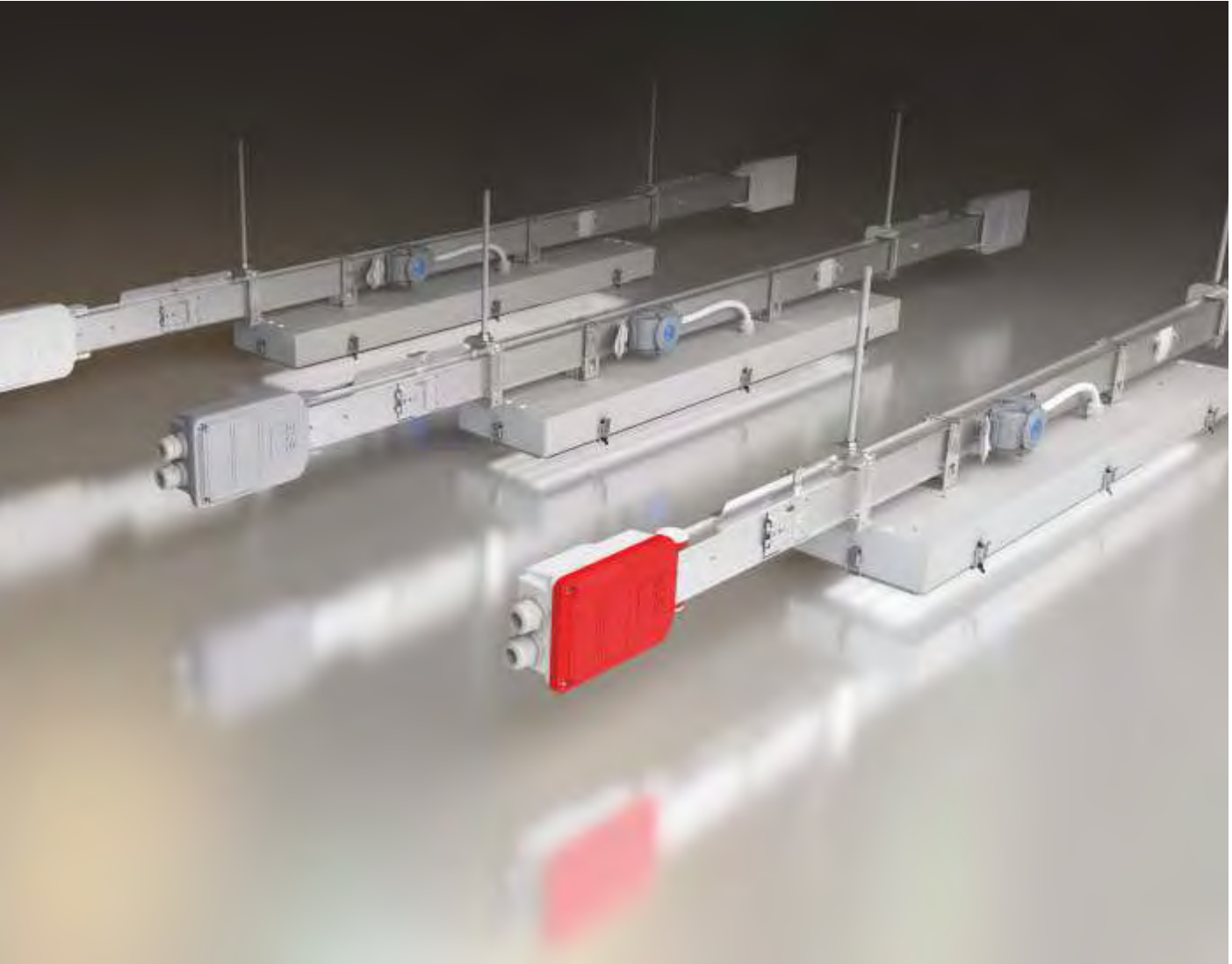




# E-LINEDL

Low Power & Lighting Busbar System 25-32-40 A



## DL / DL-DALI / DL-DIM

### LIGHTING BUSBAR SYSTEM TECHNICAL SUMMARY TABLE (IEC 61439-6)

GROUP LINE	BUSBAR					OUTLET PLUG-IN				BODY	CONDUCTOR <sup>(*)</sup>	
	DESCRIPTION	DISTRIBUTION STRUCTURE	CAPACITY (A)		STD.LENGTH (mm)	LOCATION	FUNCTION	DISTANCE (mm)	QUANTITY (pc.)			
1	DL	3P+N+PE	25	32	40	3000	FRONT	Power	750	4	0.5 mm Galvanized sheet metal. Elektrostatic Paint (RAL 7038) is optional	Tin plated and full length insulation
		3P+N+PE+CE					BACK			4		
2	DL-DALI	3P+N+PE	25	32	40	3000	FRONT	Power	750	4		
							BACK	Dali + Kit		4		
3	DL-DIM <sup>(*)</sup>	3P+N+PE	25	32	40	3000	FRONT	Power	750	4		
							BACK	Sensor + Control		4		

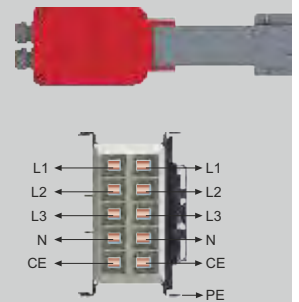
TAP-OFF (Plug-Box)	RATED CURRENT <sup>(*)</sup>						CABLE					
	UNFUSED			FUSED			SECTION (mm <sup>2</sup> )	TYPE		LENGTH <sup>(*)</sup> (m)		
	(A)	SYMBOL	TYPE	(A)	SYMBOL	TYPE		Halogen Free	Standard (PVC)			
Colour Coded Covers indicate the phases, Special Lock Mechanism and Earthing Safety	DL	PLUG	10	BL	L/N/PE	-	-	-	3x0,75	052XZ1-F	-	0,75
			16	B	L/N/PE(CE)	-	-	-	3x1,5	052XZ1-F	NYMHY	0,75
				K	3P/N/PE(CE)	-	-	-	5x1,5	052XZ1-F	NYMHY	0,75
		BOX	-	-	-	16	FS	L/N/PE(CE)	-	-	-	-
			-	-	-	25	S	Empty <sup>(*)</sup>	-	-	-	-
			-	-	-	16	FS	10x38mm	-	-	-	-
	DL-DALI	PLUG (Feeder)	16	B	L/N/PE	-	-	-	3x1,5	052XZ1-F	NYMHY	0,75
			K	L/N/PE	16	FS	L/N/PE	-	-	-	-	
		PLUG (Control)	16	B	D1/D2	-	-	-	2x1,5	052XZ1-F	NYMHY	0,75
			K	D1/D2	-	-	-	-	-	-	-	
		DALI Emergency Kit	B <sub>Emg.</sub>	D1/L <sub>Emg.</sub> /N <sub>Emg.</sub> /D2	-	-	-	-	4x1,5	052XZ1-F	NYMHY	0,75
			K <sub>Emg.</sub>	D1/L <sub>Emg.</sub> /N <sub>Emg.</sub> /D2	-	-	-	-	-	-	-	
DL-DIM <sup>(*)</sup>	PLUG (Feed)	16	B	L/N/PE	-	-	-	3x1,5	052XZ1-F	NYMHY	0,75	
	PLUG (Control) SENSOR Emergency Kit	K (1,2,3)	K(1,2,3)/N	-	-	-	2x1,5	052XZ1-F	NYMHY	0,75		
		S (1,2,3)	K(1,2,3)/P/N	-	-	-	3x1,5	052XZ1-F	NYMHY	0,75		
		K (1,2,3)-ACK	K(1,2,3)/P/N	-	-	-	3x1,5	052XZ1-F	NYMHY	0,75		

DESCRIPTIONS:	SYMBOLS :
<b>(*1)</b> Housing is the PE conductor. Equivalent cross-section area is 5,8 mm <sup>2</sup> . For clean earth (CE), conductor cross-section area is 2,54 mm <sup>2</sup> for 25A; 3,98 mm <sup>2</sup> for 32A and 6,16 mm <sup>2</sup> for 40A.	<b>BL / B</b> Tap-off Plug (Unfused with cable)
<b>(*2)</b> DL-DIM busbar is used to DIM the lighting fittings locally which has corridor function ballast.	<b>K</b> Tap-off Plug with Clips (Unfused)
<b>(*3)</b> 10A. (BL) Tap-off Plug / 16A. (B) Tap-off Plug / 16A. (FS) Fused Holder Tap-off Plug / 16A. (K) Tap-off Plug with clips / 25A-S, 16A-FS. Empty Tap-off Box;It can be manufactured with clean earth (CE).	<b>FS</b> With cylindrical fuse (The cylindrical fuse holder is 5x20 mm. or 10x38 mm. and fuse is not included.)
<b>(*4)</b> Included DIN rail. Optionally, can be manufactured with mounted MCB.	<b>S</b> Empty, Suitable for MCB usage. (MCB is not included.)
<b>(*5)</b> Cables may be manufactured with the desired length. (Standard length is 0,75m.)	<b>Emg.</b> Emergency kit reference voltage / feed.
	<b>K (1,2,3)</b> For control side (1 <sup>st</sup> control remote, 2 <sup>nd</sup> control remote, 3 <sup>rd</sup> control remote)
	<b>S (1,2,3)</b> For Sensor control side (1 <sup>st</sup> sensor remote, 2 <sup>nd</sup> sensor remote, 3 <sup>rd</sup> sensor remote)
	<b>ACK</b> Emergency kit unit.

E-LINED/DALI/DIM

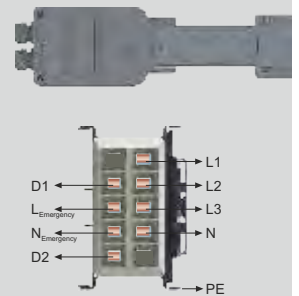
▶▶ **E-LINE DL**

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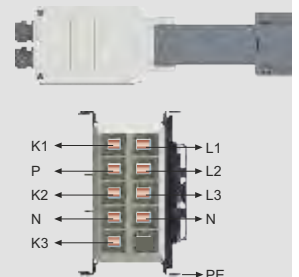
▶▶ **E-LINE DL - DALI**

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▶▶ **E-LINE DL - DIM**

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▶▶ **E-LINE DL / DL - DALI / DL - DIM**

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## ►► General Characteristics

E-Line DL Busbar Distribution Systems are used in building electrical installations with a power requirement of 25 to 40A. 16A output sockets and 25A output boxes are designed to supply lighting and wall socket circuit as per their specifications.

EAE Busbar Systems are produced in accordance with ISO 9001 standards with a certified Quality Assurance System using the world's latest manufacturing technologies. Units are designed and tested according to IEC 61439-6.



### Tap-off Plugs

Tap-off plugs for DL Busbar systems are designed with different contact arrangements.

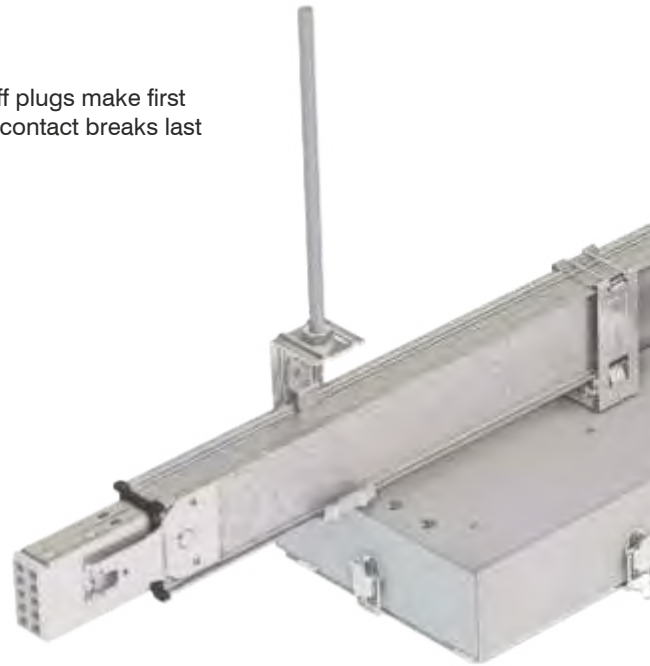
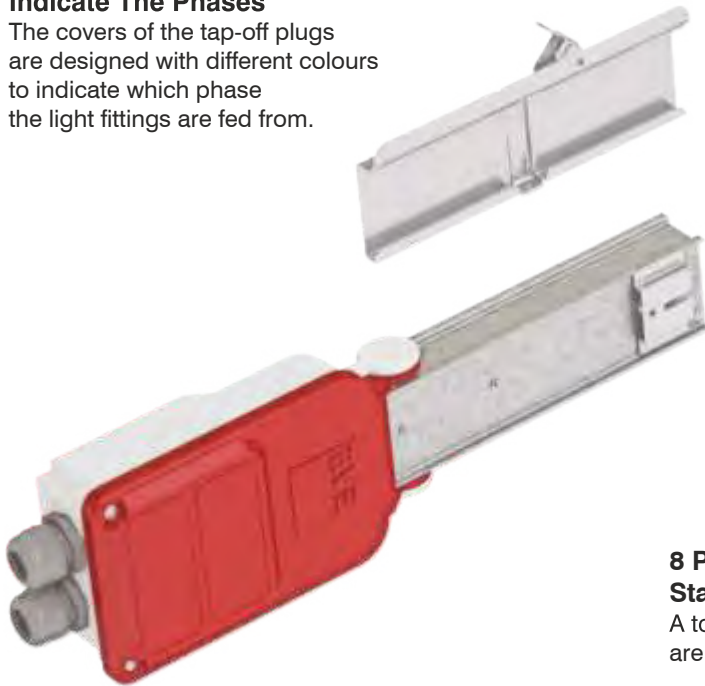
All the plugs are produced in order to be connected to the busbar in one direction to prevent the use of a wrong phase.

### Safety

Earth contacts of the tap-off plugs make first when plugging-in, and the contact breaks last when unplugging.

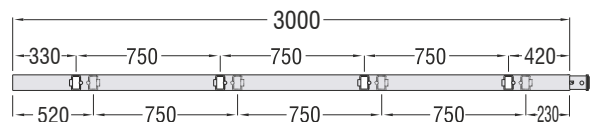
### Colour Coded Covers Indicate The Phases

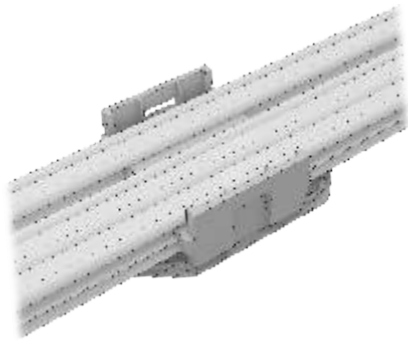
The covers of the tap-off plugs are designed with different colours to indicate which phase the light fittings are fed from.



### 8 Plug-in Points are provided on a Standard 3m Length

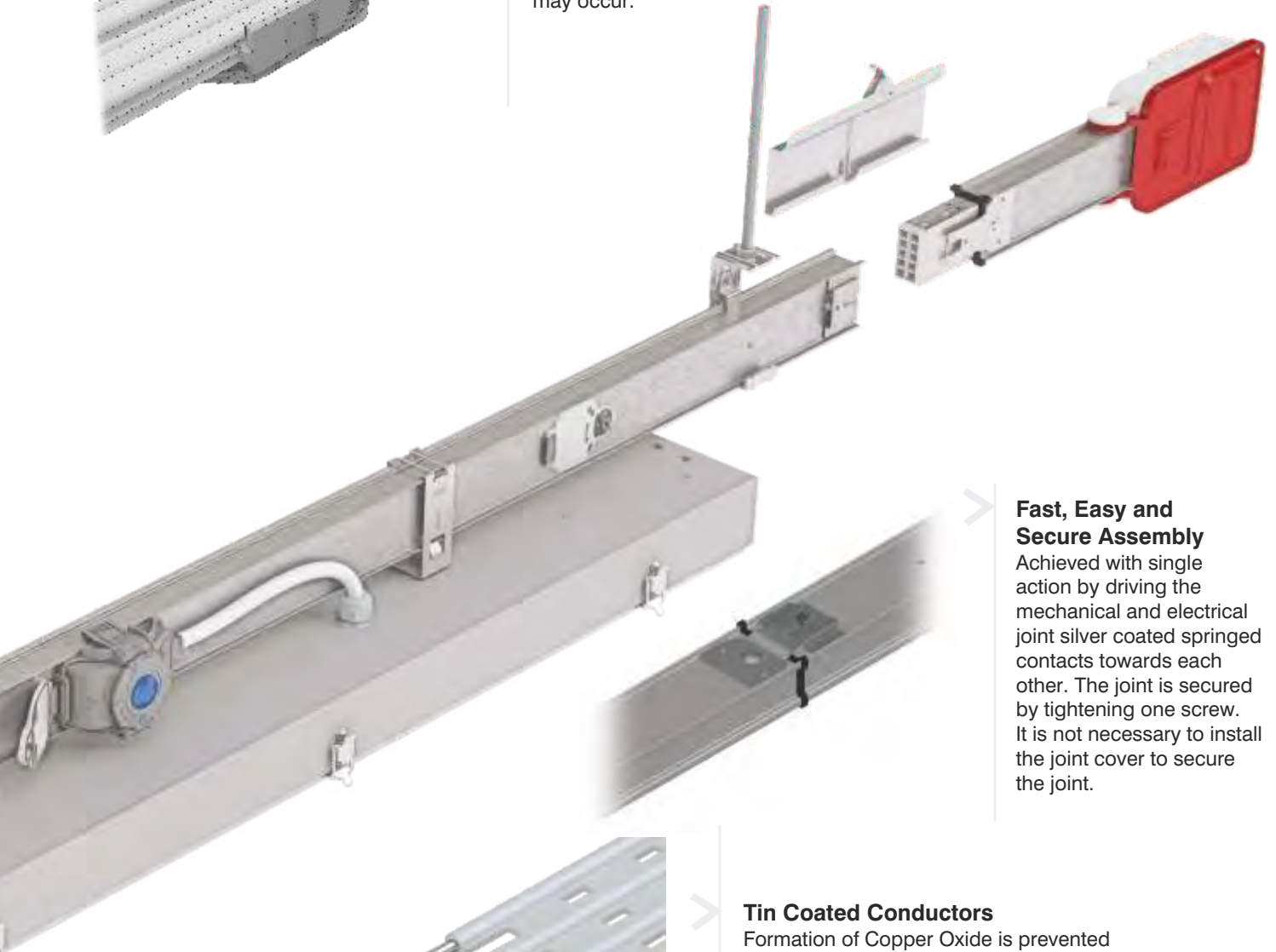
A total of 8 plug-in points (4 on each side) are provided as standard.





### Full Isolation

The busbar conductors are coated in flame-proof insulation material. Total security regarding human safety is provided even when the body is severely damaged due to external heavy impacts that may occur.



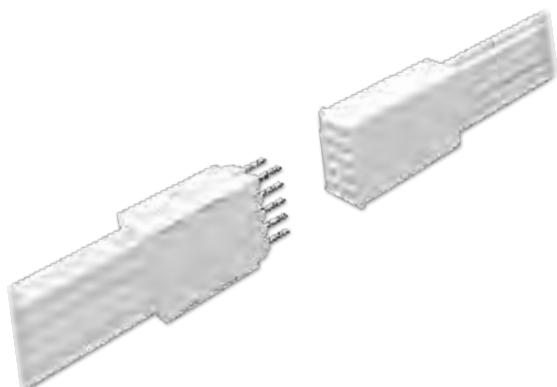
### Fast, Easy and Secure Assembly

Achieved with single action by driving the mechanical and electrical joint silver coated spring contacts towards each other. The joint is secured by tightening one screw. It is not necessary to install the joint cover to secure the joint.



### Tin Coated Conductors

Formation of Copper Oxide is prevented by tin plating the conductors along their full length. This ensures that contact resistances are minimised. The contacts of the tap-off plugs contact the busbar conductors on two surfaces.



### Silver Coated Joint Contacts

The contacts at the joints of the busbar and the contacts of all tap-off units are silver coated. The silver coating minimises the contact impedances, thus preventing the over-heating of the contacts in case of possible over-loads.

BUSBAR TYPE  
 BUSBAR CURRENT RATING 1  
 CONDUCTOR CONFIGURATION  
 BUSBAR CURRENT RATING 2  
 CONDUCTOR CONFIGURATION  
 PAINTED (B) / UNPAINTED (-)  
 COMPONENT

**DL 2 5 2 5 - B - S T D**

**Busbar Type**

25 A	2
32 A	3
40 A	4

**Busbar Current Rating 1**

2 Conductors	2
3 Conductors	3
4 Conductors	4
5 Conductors	5

**1<sup>st</sup> Conductor Configuration**

25 A	2
32 A	3
40 A	4

**Busbar Current Rating 2**

2 Conductors	2
3 Conductors	3
4 Conductors	4
5 Conductors	5

**2<sup>nd</sup> Conductor Configuration**

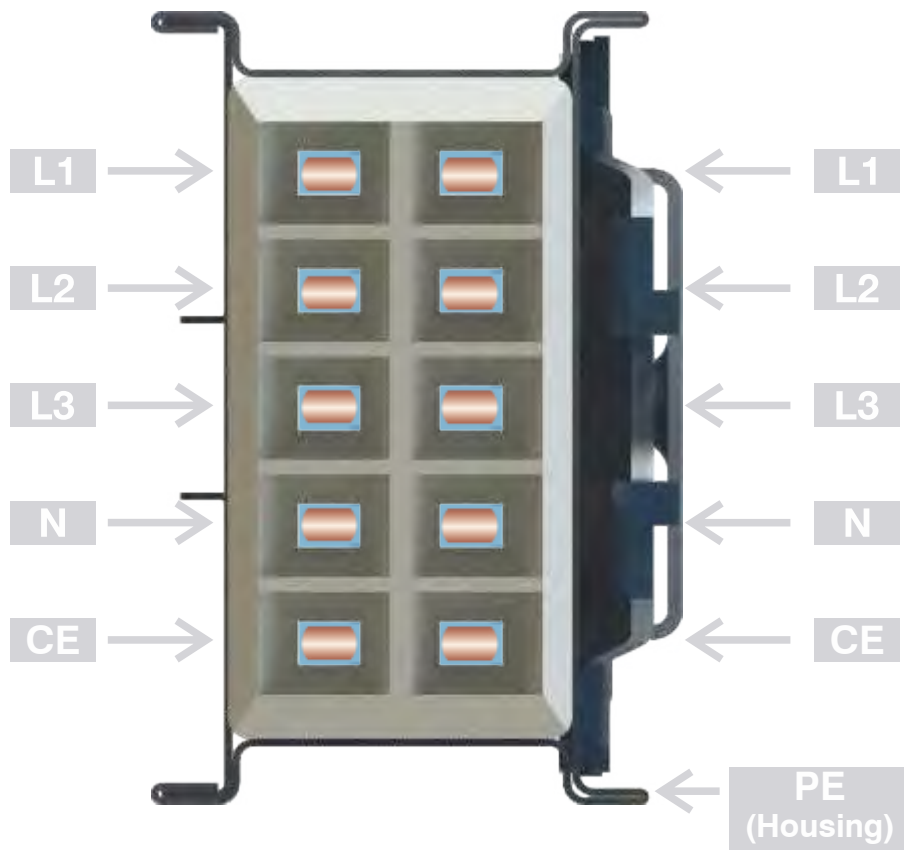
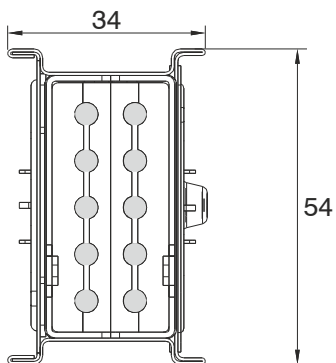
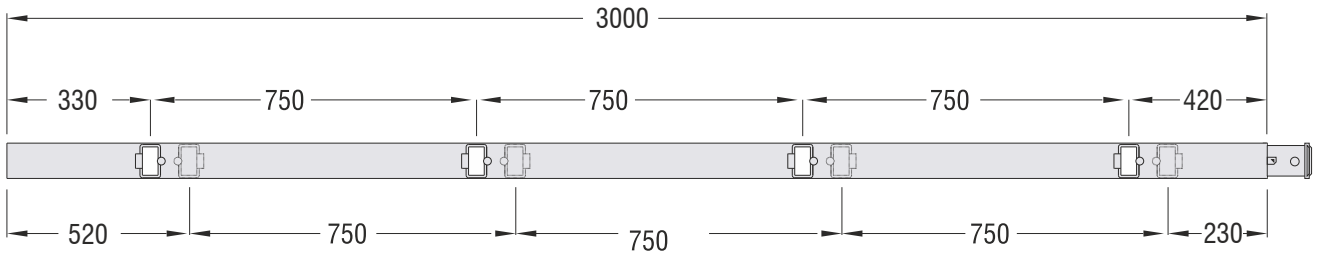
Painted(*)	B
Unpainted	-

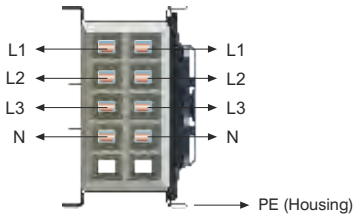
### Components

Standard Length	STD
Special Length	X
Feeder Box	B1
End Feeder Box	B2
Central Feeder Box	BO
Flexible Elbow	FD
Underfloor Feeder	B1
Underfloor End Feeder	B2

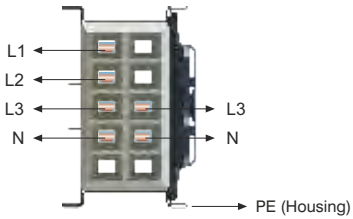
(\*) It may be manufactured as painted as per customer request.

■ Body is manufactured from 0.50 mm galvanized sheet steel.

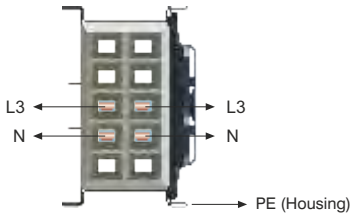




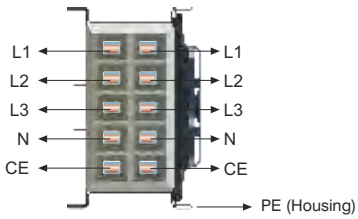
Current (A)	Description	Conductor Conf.	Order Code
25	DL 2424 2x25 A Busbar	4+4	3024786
32	DL 3434 2x32 A Busbar	4+4	3024788
40	DL 4444 2x40 A Busbar	4+4	3024790



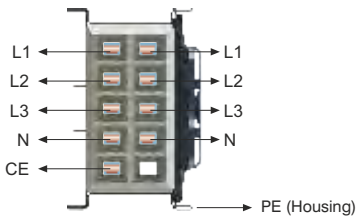
Current (A)	Description	Conductor Conf.	Order Code
25	DL 2422 2x25 A Busbar	4+2	3024792
32	DL 3432 2x32 A Busbar	4+2	3024794
40	DL 4442 2x40 A Busbar	4+2	3024796



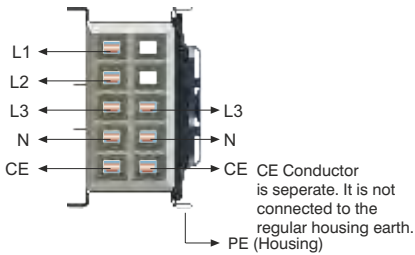
Current (A)	Description	Conductor Conf.	Order Code
25	DL 2222 2x25 A Busbar	2+2	3024798
32	DL 3232 2x32 A Busbar	2+2	3024800
40	DL 4242 2x40 A Busbar	2+2	3024802



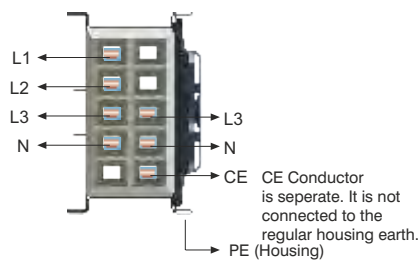
Current (A)	Description	Conductor Conf.	Order Code
25	DL 2525 2x25 A Busbar	5+5	3024804
32	DL 3535 2x32 A Busbar	5+5	3024806
40	DL 4545 2x40 A Busbar	5+5	3024808



Current (A)	Description	Conductor Conf.	Order Code
25	DL 2524 2x25 A Busbar	5+4	3066712
32	DL 3534 2x32 A Busbar	5+4	3066713
40	DL 4544 2x40 A Busbar	5+4	3066714



Current (A)	Description	Conductor Conf.	Order Code
25	DL 2523 2x25 A Busbar	5+3	3024810
32	DL 3533 2x32 A Busbar	5+3	3024812
40	DL 4543 2x40 A Busbar	5+3	3024814



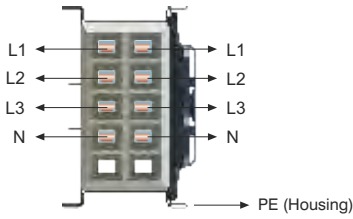
Current (A)	Description	Conductor Conf.	Order Code
25	DL 2423 2x25 A Busbar	4+3	3066718
32	DL 3433 2x32 A Busbar	4+3	3066720
40	DL 4443 2x40 A Busbar	4+3	3066721

■ Body is manufactured from 0.50 mm galvanised sheet steel.

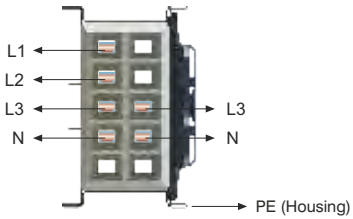
■ For non-standard product, please contact our technical office.



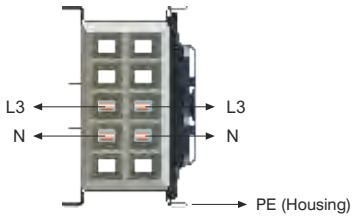
### Special Length Busbars are manufactured as 1m/1,5m/2m/2,5m.



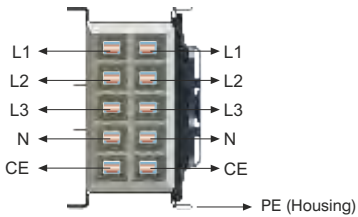
Current (A)	Description	Conductor Conf.	Order Code
25	DL 2424 2x25 A Special Length	4+4	3024822
32	DL 3434 2x32 A Special Length	4+4	3024824
40	DL 4444 2x40 A Special Length	4+4	3024826



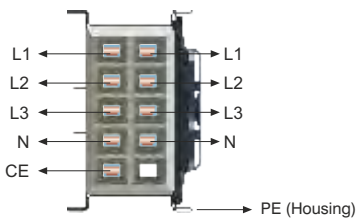
Current (A)	Description	Conductor Conf.	Order Code
25	DL 2422 2x25 A Special Length	4+2	3024828
32	DL 3432 2x32 A Special Length	4+2	3024830
40	DL 4442 2x40 A Special Length	4+2	3024832



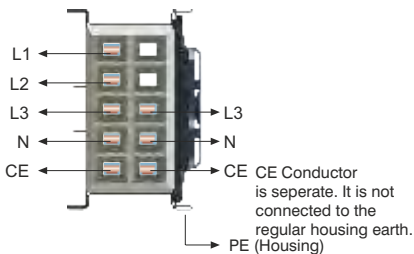
Current (A)	Description	Conductor Conf.	Order Code
25	DL 2222 2x25 A Special Length	2+2	3024834
32	DL 3232 2x32 A Special Length	2+2	3024836
40	DL 4242 2x40 A Special Length	2+2	3024838



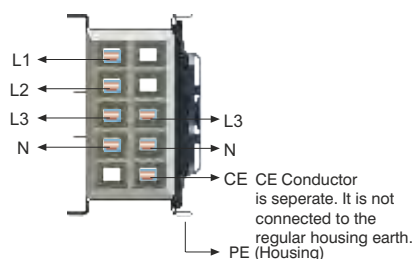
Current (A)	Description	Conductor Conf.	Order Code
25	DL 2525 2x25 A Special Length	5+5	3024840
32	DL 3535 2x32 A Special Length	5+5	3024842
40	DL 4545 2x40 A Special Length	5+5	3024844



Current (A)	Description	Conductor Conf.	Order Code
25	DL 2524 2x25 A Special Length	5+4	3066715
32	DL 3534 2x32 A Special Length	5+4	3066716
40	DL 4544 2x40 A Special Length	5+4	3066717



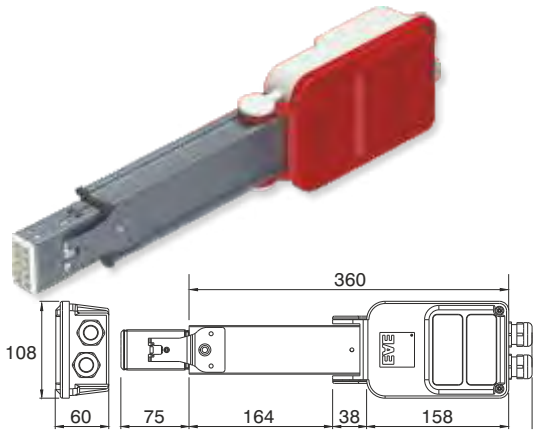
Current (A)	Description	Conductor Conf.	Order Code
25	DL 2523 2x25 A Special Length	5+3	3024846
32	DL 3533 2x32 A Special Length	5+3	3024848
40	DL 4543 2x40 A Special Length	5+3	3024850



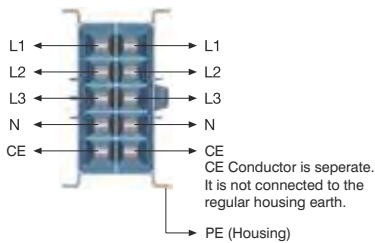
Current (A)	Description	Conductor Conf.	Order Code
25	DL 2423 2x25 A Special Length	4+3	3066722
32	DL 3433 2x32 A Special Length	4+3	3066723
40	DL 4443 2x40 A Special Length	4+3	3066724

■ Body is manufactured from 0.50 mm galvanised sheet steel.

■ For non-standard product, please contact our technical office.



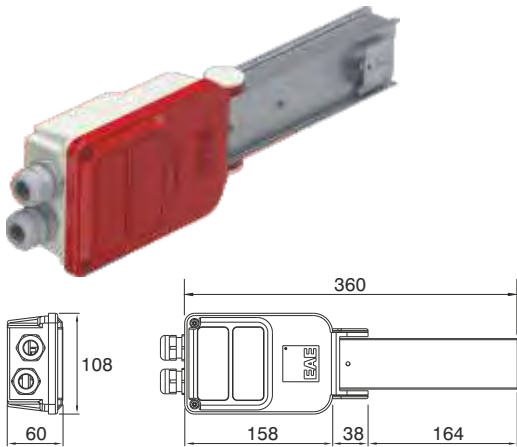
Feeder Unit



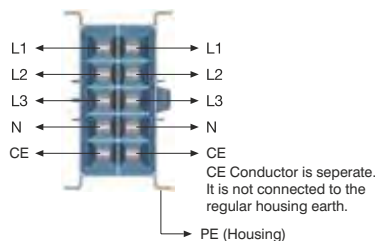
## (B1) Feeder Units

Current (A)	Description	Busbars	Order Code
25	DL 2525 - B1 Feeder Unit	DL 2424 DL 2422 DL 2222 DL 2524 DL 2523 DL 2423	3024858
32	DL 3535 - B1 Feeder Unit	DL 3434 DL 3432 DL 3232 DL 3534 DL 3533 DL 3423	3024860
40	DL 4545 - B1 Feeder Unit	DL 4444 DL 4442 DL 4242 DL 4544 DL 4543 DL 4443	3024862

\* With PE Conductor and M25 Gland as standard.



End Feeder Unit

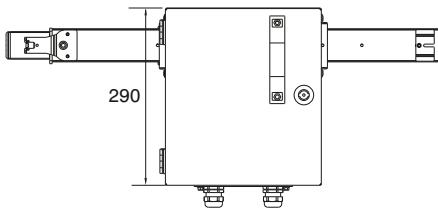
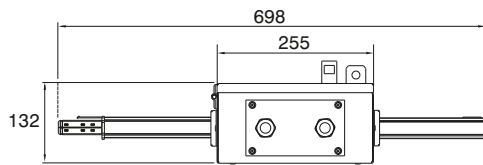


## (B2) End Feeder Units

Current (A)	Description	Busbars	Order Code
25	DL 2525 - B2 End Feeder Unit	DL 2424 DL 2422 DL 2222 DL 2524 DL 2523 DL 2423	3024864
32	DL 3535 - B2 End Feeder Unit	DL 3434 DL 3432 DL 3232 DL 3534 DL 3533 DL 3423	3024866
40	DL 4545 - B2 End Feeder Unit	DL 4444 DL 4442 DL 4242 DL 4544 DL 4543 DL 4443	3024868

\* With PE Conductor and M25 Gland as standard.

- The body is manufactured from 0,50 mm galvanised sheet steel.
- For non-standard product, please contact our technical office.

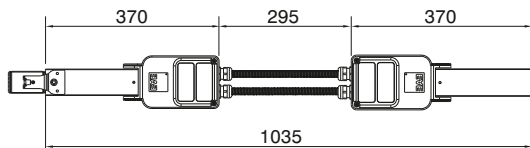


Central Feeder Unit

### (BO) Central Feeder Units

Current (A)	Description	Busbars	Order Code
25	DL 2525 - BO Central Feeder Unit	DL 2424 DL 2422 DL 2222 DL 2524 DL 2523 DL 2423	3133141
32	DL 3535 - BO Central Feeder Unit	DL 3434 DL 3432 DL 3232 DL 3534 DL 3533 DL 3423	3133143
40	DL 4545 - BO Central Feeder Unit	DL 4444 DL 4442 DL 4242 DL 4544 DL 4543 DL 4443	3133145

\* With PE Conductor and M25 Gland as standard.



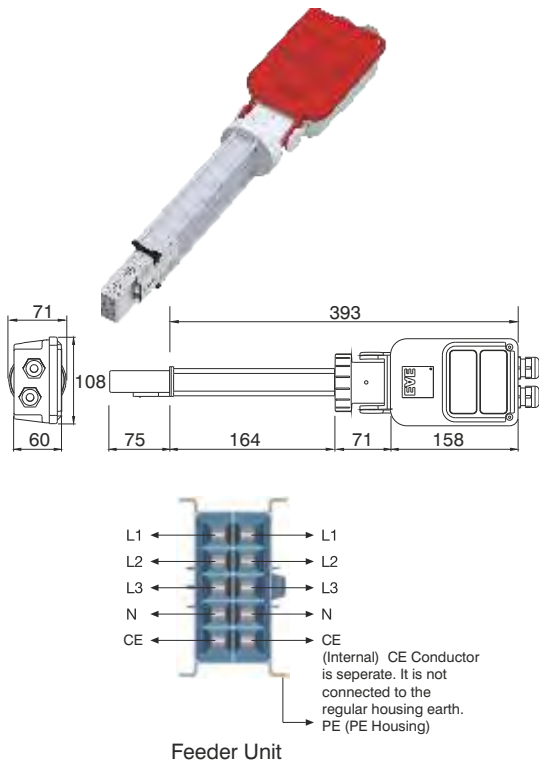
Flexible Elbow

### (FD) Flexible Elbow

Current (A)	Description	Busbars	Order Code
25	DL 2525 - FD Flexible Elbow	DL 2424 DL 2422 DL 2222 DL 2524 DL 2523 DL 2423	3024882
32	DL 3535 - FD Flexible Elbow	DL 3434 DL 3432 DL 3232 DL 3534 DL 3533 DL 3423	3024884
40	DL 4545 - FD Flexible Elbow	DL 4444 DL 4442 DL 4242 DL 4544 DL 4543 DL 4443	3024886

\* With PE Conductor and M25 Gland as standard.

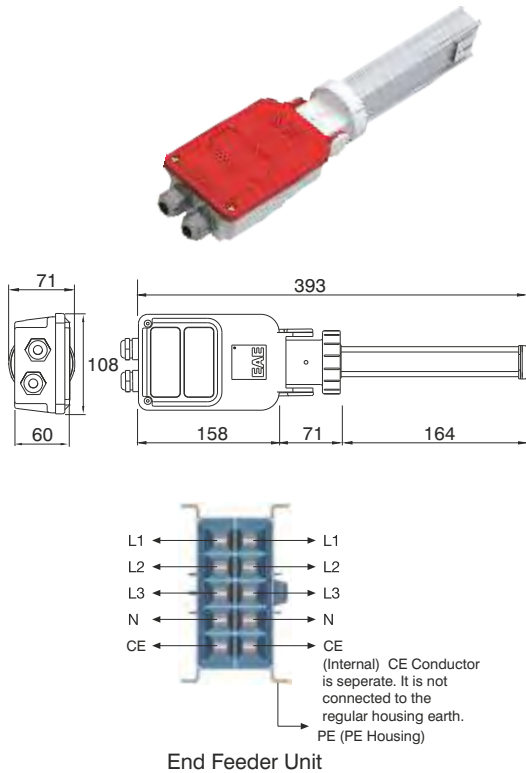
- Body is manufactured from 0.50 mm galvanised sheet steel.
- For non-standard product, please contact our technical office.



### (B1) Feeder Units

Current (A)	Description	Busbars	Order Code
25	DL 2525 - B1 Raised Underfloor Feeder Unit	DL 2424 DL 2422 DL 2222 DL 2524 DL 2523 DL 2423	3024541
32	DL 3535 - B1 Raised Underfloor Feeder Unit	DL 3434 DL 3432 DL 3232 DL 3534 DL 3533 DL 3423	3024542
40	DL 4545 - B1 Raised Underfloor Feeder Unit	DL 4444 DL 4442 DL 4242 DL 4544 DL 4543 DL 4443	3024543

\* With PE conductor and M25 Gland as standard.



### (B2) End Feeder Units

Current (A)	Description	Busbars	Order Code
25	DL 2525 - B2 Raised Underfloor End Feeder Unit	DL 2424 DL 2422 DL 2222 DL 2524 DL 2523 DL 2423	3024544
32	DL 3535 - B2 Raised Underfloor End Feeder Unit	DL 3434 DL 3432 DL 3232 DL 3534 DL 3533 DL 3423	3024545
40	DL 4545 - B2 Raised Underfloor End Feeder Unit	DL 4444 DL 4442 DL 4242 DL 4544 DL 4543 DL 4443	3024546

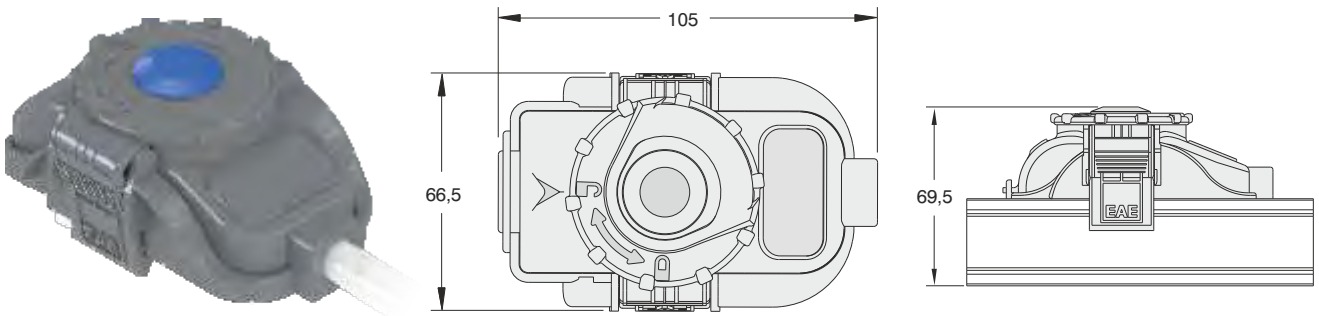
\* With PE conductor and M25 Gland as standard.

- Body is manufactured from 0.50 mm galvanised sheet steel.
- For non-standard product, please contact our technical office.

## Tap-off Plug (B)

Current (A)	Description	Cable Length / Type		Phase	Properties	Order Code	
		Halogen Free	Standard (PVC)			Halogen Free	Standard (PVC)
16	DL / SL 16 - B Tap-off Plug L1	0,75 m.	0,75 m.	L1, N, PE	With Black Cover	3063696	3086972
	DL / SL 16 - B Tap-off Plug L2	052XZ1-F 3x1,5 mm <sup>2</sup> cable(*)	NYMHY 3x1,5 mm <sup>2</sup> cable(*)	L2, N, PE	With Yellow Cover	3063697	3086974
	DL / SL 16 - B Tap-off Plug L3			L3, N, PE	With Blue Cover	3063698	3086975
	DL / SL 16 - B Tap-off Plug L123	5x1,5 mm <sup>2</sup>	5x1,5 mm <sup>2</sup>	L1, L2, L3, N, PE	With Grey Cover	3066319	3086976

\* Plugs with different length cable available upon request.

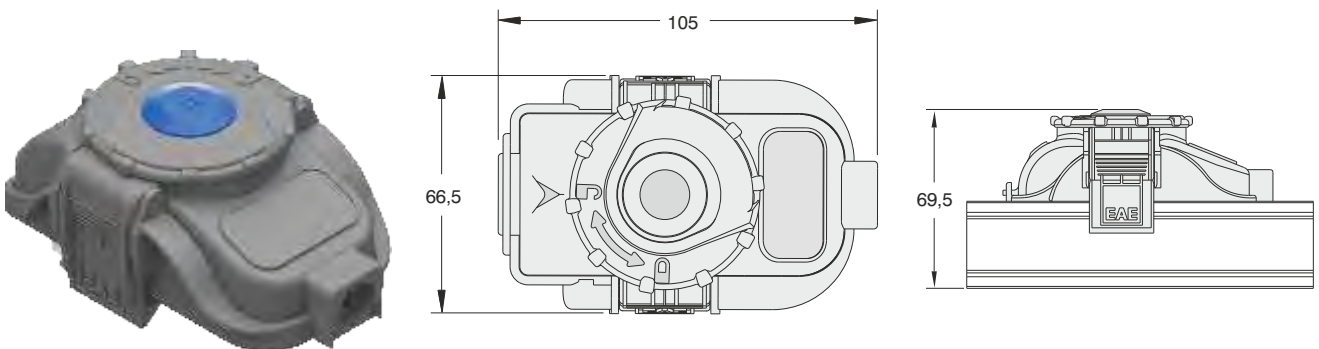


DL / SL 16 - B

## Plug with Fuse Holder (FS) / Plug with Clips (K)

Current (A)	Description	Cable Length / Type	Phase	Properties	Order Code
16	DL / SL 16 - FS Tap-off Plug L1	-	L1, N, PE	With Black Cover	3063703
	DL / SL 16 - FS Tap-off Plug L2	-	L2, N, PE	With Yellow Cover	3063704
	DL / SL 16 - FS Tap-off Plug L3	-	L3, N, PE	With Blue Cover	3063705
16	DL / SL 16 - K Tap-off Plug L1	-	L1, N, PE	With Black Cover	3063699
	DL / SL 16 - K Tap-off Plug L2	-	L2, N, PE	With Yellow Cover	3063701
	DL / SL 16 - K Tap-off Plug L3	-	L3, N, PE	With Blue Cover	3063702
	DL / SL 16 - K Tap-off Plug L123	-	L1, L2, L3, N, PE	With Grey Cover	3063700

\*\* Cylindrical fuse not included.

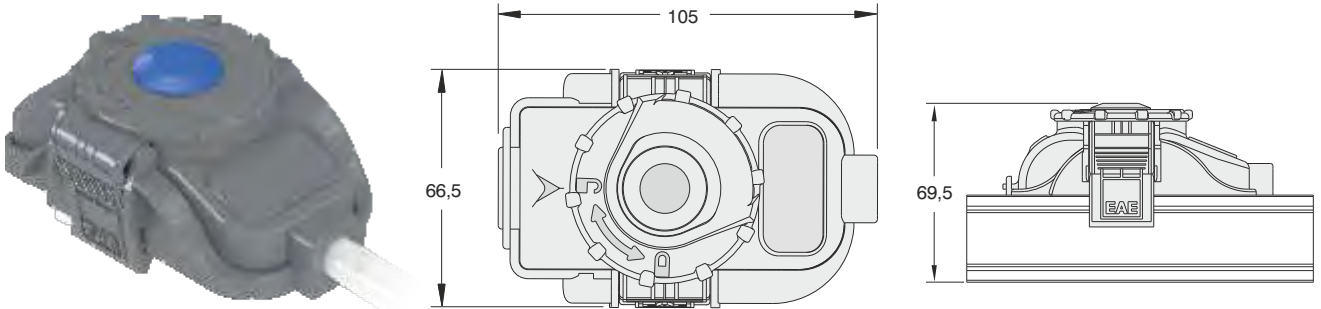


DL / SL 16 - FS  
DL / SL 16 - K

## Tap-off Plug (B) (Clean Earth)

Current (A)	Description	Cable Length / Type		Phase	Properties	Order Code	
		Halogen Free	Standard (PVC)			Halogen Free	Standard (PVC)
16	DL / SL 16 - B - CE Tap-off Plug L1	0,75 m.	0,75 m.	L1, N, CE	With Black Cover	3063709	3086978
	DL / SL 16 - B - CE Tap-off Plug L2	052XZ1-F 3x1,5 mm <sup>2</sup> cable(*)	NYMHY 3x1,5 mm <sup>2</sup> cable(*)	L2, N, CE	With Yellow Cover	3063710	3086979
	DL / SL 16 - B - CE Tap-off Plug L3			L3, N, CE	With Blue Cover	3063711	3086980
	DL / SL 16 - B - CE Tap-off Plug L123	5x1,5 mm <sup>2</sup>	5x1,5 mm <sup>2</sup>	L1, L2, L3, N, CE	With Grey Cover	3066323	3086982

\* Plugs with different length cable available upon request.

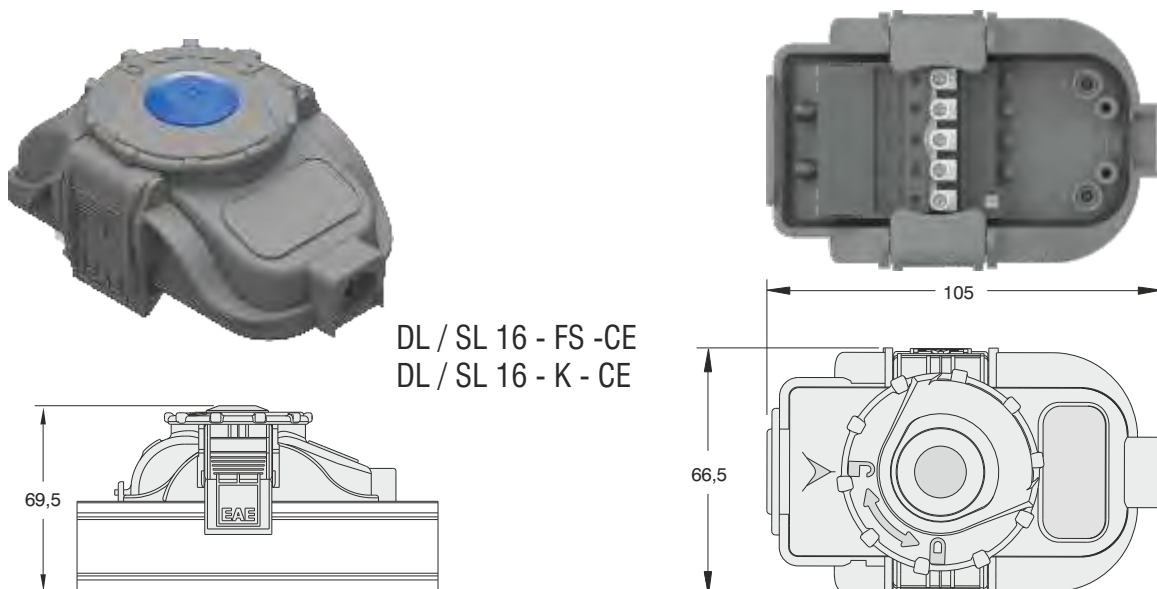


DL / SL 16 - B - CE

## Plug with Fuse Holder (FS) / Plug with Clips (K) (Clean Earth)

Current (A)	Description	Cable Length / Type	Phase	Properties	Order Code	
16	DL / SL 16 - FS - CE Tap-off Plug L1	-	L1, N, CE	With Black Cover	With 5 x 20 mm fuse holders (**) Max. diameter of feeder cable is Ø 11 mm.	3063717
	DL / SL 16 - FS - CE Tap-off Plug L2	-	L2, N, CE	With Yellow Cover		3063718
	DL / SL 16 - FS - CE Tap-off Plug L3	-	L3, N, CE	With Blue Cover		3063719
16	DL / SL 16 - K - CE Tap-off Plug L1	-	L1, N, CE	With Black Cover	Without Fuses. Max. diameter of feeder cable is Ø 11 mm.	3063712
	DL / SL 16 - K - CE Tap-off Plug L2	-	L2, N, CE	With Yellow Cover		3063715
	DL / SL 16 - K - CE Tap-off Plug L3	-	L3, N, CE	With Blue Cover		3063716
	DL / SL 16 - K - CE Tap-off Plug L123	-	L1, L2, L3, N, CE	With Grey Cover		3063713

\*\* Cylindrical fuse not included.

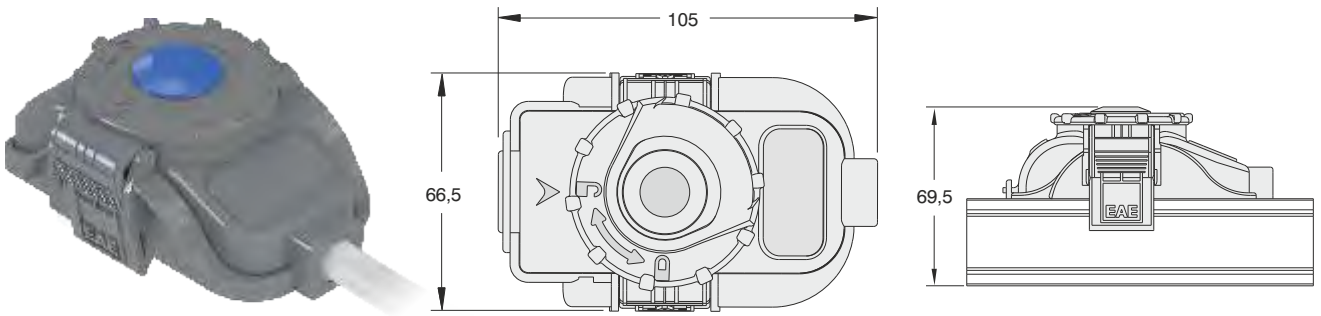


DL / SL 16 - FS - CE  
DL / SL 16 - K - CE

### Tap-off Plug (BL)\*\*

Current (A)	Description	Cable Length / Type	Phase	Properties	Order Code
					Halogen Free
10	DL / SL 10 - BL Tap-off Plug L1	0,75 m. 052XZ1-F 3x0,75 mm <sup>2</sup> cable(*)	L1, N, PE	With Black Cover	3134599
	DL / SL 10 - BL Tap-off Plug L2		L2, N, PE	With Yellow Cover	3134600
	DL / SL 10 - BL Tap-off Plug L3		L3, N, PE	With Blue Cover	3134601

- \* Plugs with different length cable available upon request.
- \*\* It is used only for lighting fittings supply in lighting circuits.



DL / SL 10 - BL



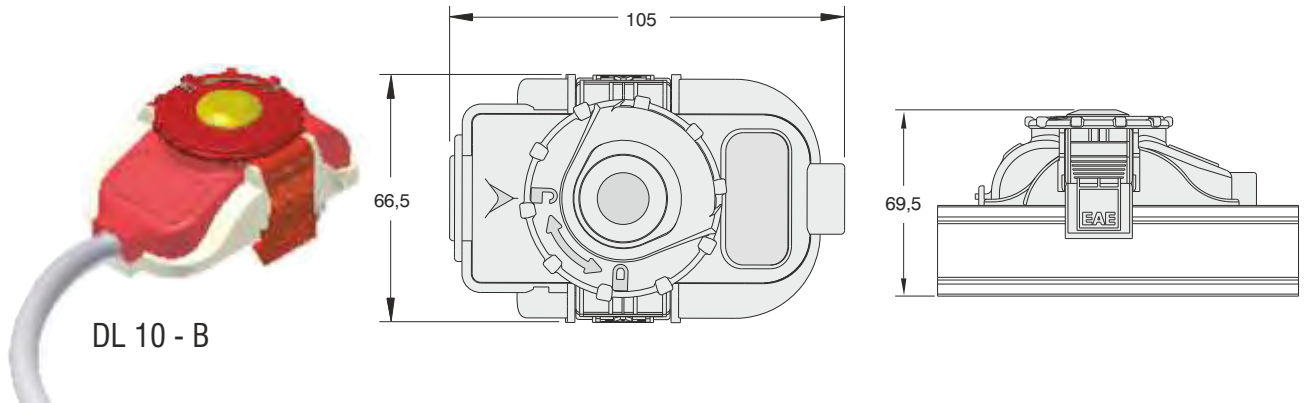
## ▶▶ Product Selection Tables / Tap-off Plugs (Old Model)

(WARNING: Tap-off Plugs, which will be used with DL Busbar bought before April 2015, should be selected from this page.)

### Tap-off Plug (B)

Current (A)	Description	Cable Length / Type	Phase	Properties	Order Code
10	DL 10 - B Tap-off Plug L1	0,75 m. NYMHY Cable	L1, N, PE	With Black Cover	3024870
	DL 10 - B Tap-off Plug L2	0,75 m. NYMHY Cable	L2, N, PE	With Yellow Cover	3024871
	DL 10 - B Tap-off Plug L3	0,75 m. NYMHY Cable	L3, N, PE	With Blue Cover	3024872

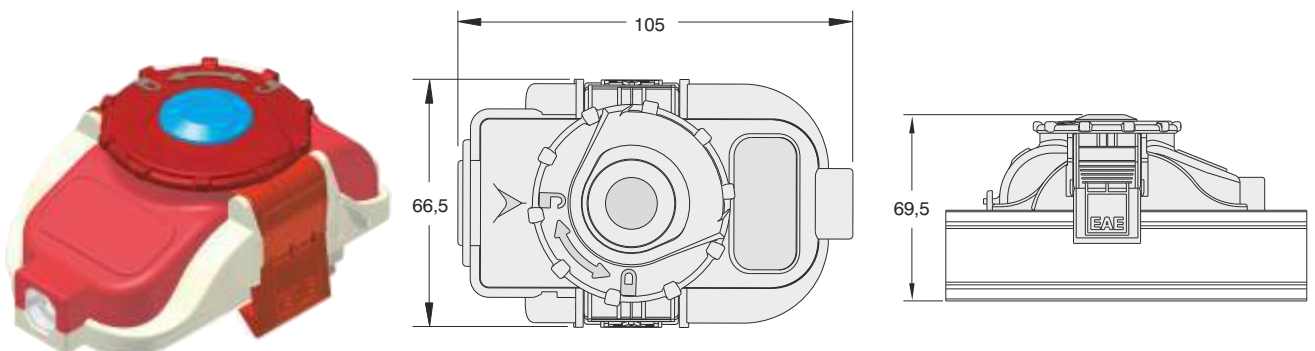
\* Plugs with different length cable available upon request.



### Plug with Fuse Holder (FS) / Plug with Clips (K)

Current (A)	Description	Cable Length	Phase	Properties	Order Code
16	DL 16 - FS Tap-off Plug L1	-	L1, N, PE	With 5 x 20 mm fuse holders (**) Max. diameter of feeder cable is Ø 11 mm.	3024873
	DL 16 - FS Tap-off Plug L2	-	L2, N, PE		3024874
	DL 16 - FS Tap-off Plug L3	-	L3, N, PE		3024875
16	DL 16 - K Tap-off Plug L1	-	L1, N, PE	Without Fuses. Max. diameter of feeder cable is Ø 11 mm.	3024778
	DL 16 - K Tap-off Plug L2	-	L2, N, PE		3024777
	DL 16 - K Tap-off Plug L3	-	L3, N, PE		3024776
	DL 16 - K Tap-off Plug L123	-	L1, L2, L3, N, PE		3024775

\*\* Cylindrical fuse not included.



DL 16 - FS  
DL 16 - K



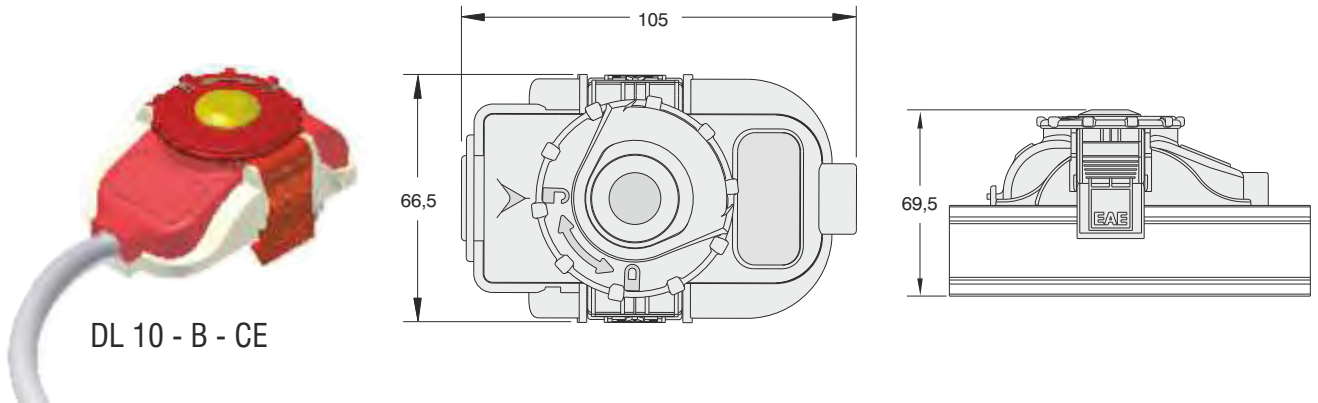
## ▶▶ Product Selection Tables / Tap-off Plugs (Clean Earth) (Old Model)

(WARNING: Tap-off Plugs, which will be used with DL Busbar bought before April 2015, should be selected from this page.)

### Tap-off Plugs (B) (Clean Earth)

Current (A)	Description	Cable Length / Type	Phase	Properties	Order Code
10	DL 10 - B - CE Tap-off Plug L1*	0,75 m. NYMHY Cable	L1, N, CE	With Black Cover	3024779
	DL 10 - B - CE Tap-off Plug L2*	0,75 m. NYMHY Cable	L2, N, CE	With Yellow Cover	3024780
	DL 10 - B - CE Tap-off Plug L3*	0,75 m. NYMHY Cable	L3, N, CE	With Blue Cover	3024781

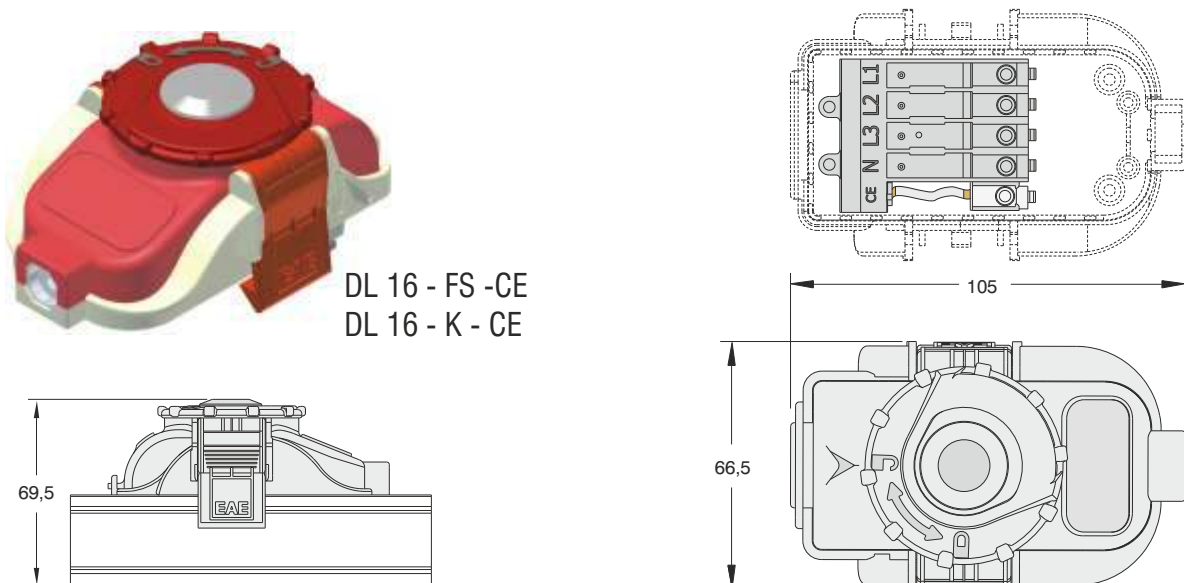
\* Plugs with different length cable available upon request.



### Plug with Fuse Holder (FS) / Plug with Clips (K)(Clean Earth)

Current (A)	Description	Cable Length	Phase	Properties	Order Code
16	DL 16 - FS - CE Tap-off Plug L1	-	L1, N, CE	With 5 x 20 mm fuse holders (**). Max. diameter of feeder cable is Ø 11 mm.	3024881
	DL 16 - FS - CE Tap-off Plug L2	-	L2, N, CE		3024785
	DL 16 - FS - CE Tap-off Plug L3	-	L3, N, CE		3024784
16	DL 16 - K - CE Tap-off Plug L1	-	L1, N, CE	Without Fuses. Max. diameter of feeder cable is Ø 11 mm.	3024592
	DL 16 - K - CE Tap-off Plug L2	-	L2, N, CE		3024591
	DL 16 - K - CE Tap-off Plug L3	-	L3, N, CE		3024590
	DL 16 - K - CE Tap-off Plug L123	-	L1, L2, L3, N, CE		3024589

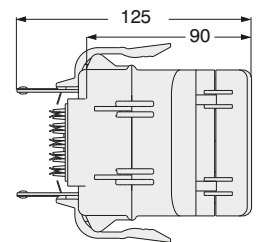
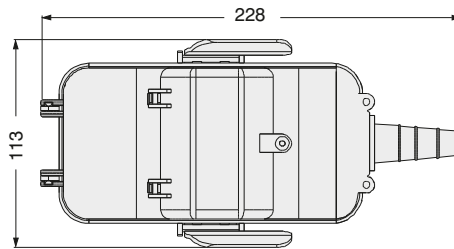
\*\* Cylindrical fuse not included.



### Suitable for MCB Empty Tap-off Box (S)

Current (A)	Description	Phase	Properties	Order Code
25	DL/SL 25 - S Empty Tap-off Box(CE)* L1,L2,L3	L1, L2, L3, N, CE	Included DIN rail. It can be used with MCB.(*)	3024481
	DL/SL 25 - S Empty Tap-off Box(CE)* L1	L1, N, CE		3066511
	DL/SL 25 - S Empty Tap-off Box(CE)* L2	L2, N, CE		3066512
	DL/SL 25 - S Empty Tap-off Box(CE)* L3	L3, N, CE		3066513
	DL/SL 25 - S Empty Tap-off Box (PE)* L1,L2,L3	L1, L2, L3, N, PE		3024482
	DL/SL 25 - S Empty Tap-off Box (PE)* L1	L1, N, PE		3066508
	DL/SL 25 - S Empty Tap-off Box (PE)* L2	L2, N, PE		3066509
	DL/SL 25 - S Empty Tap-off Box (PE)* L3	L3, N, PE		3066510

\* MCB not included.

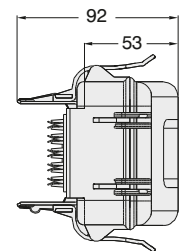
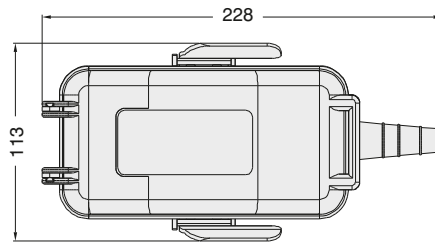


DL 25 - S (CE)  
DL 25 - S (PE)

### Suitable for Fuse Holder Empty Tap-off Box (FS)

Current (A)	Description	Phase	Properties	Order Code
16	DL/SL 16 - FS Empty Tap-off Box(CE)* L1,L2,L3	L1, L2, L3, N, CE	Included DIN rail. It can be used with 10x38mm cylindrical fuse holder and cylindrical fuse. (**)	3084928
	DL/SL 16 - FS Empty Tap-off Box(CE)* L1	L1, N, CE		3084929
	DL/SL 16 - FS Empty Tap-off Box(CE)* L2	L2, N, CE		3084930
	DL/SL 16 - FS Empty Tap-off Box(CE)* L3	L3, N, CE		3084931
	DL/SL 16 - FS Empty Tap-off Box (PE)* L1,L2,L3	L1, L2, L3, N, PE		3084923
	DL/SL 16 - FS Empty Tap-off Box (PE)* L1	L1, N, PE		3084925
	DL/SL 16 - FS Empty Tap-off Box (PE)* L2	L2, N, PE		3084926
	DL/SL 16 - FS Empty Tap-off Box (PE)* L3	L3, N, PE		3084927

\*\* Cylindrical fuse not included.



DL 16 - FS (CE)  
DL 16 - FS (PE)

## False Ceiling (Lighting Circuits)




## Raised Underfloor (Power Circuits; Mains / UPS)



## Open / High Ceiling (Lighting Circuits)



Component List	Component	Quantity
Item		
Company :		
Project :		
Project No :		
Prepared by	Name :	
	Date :	
	Signature :	



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# ELINEDL-DALI

## ►► General Characteristics

E-Line DL-DALI Busbar Systems are used in the building lighting installations where 25-40A energy is needed. In order to be controlled within the lighting management system of DALI ballast lighting fittings. 16A plugs are designed in order to control and supply energy to the lighting fittings with DALI Ballast.

EAE Busbar Systems are produced in accordance with ISO 9001 standards with a certified Quality Assurance System using the world's latest manufacturing technologies. Units are designed and tested according to IEC 61439-6.



### Tap-off Plugs

Tap-off plugs of DL-DALI busbar systems are designed with different contact arrangements. All the plugs are produced in one direction to prevent the use of a wrong phase.

### Safety

Earth contacts of the tap-off plugs make first when plugging-in, and the contact breaks last when unplugging.

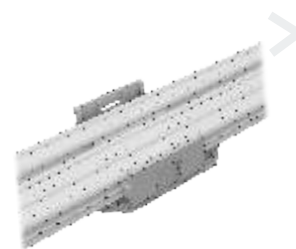
### Colour Coded Covers Indicate The Phases

The covers of the tap-off plugs are designed with different colours to indicate which phase the light fittings are fed from.



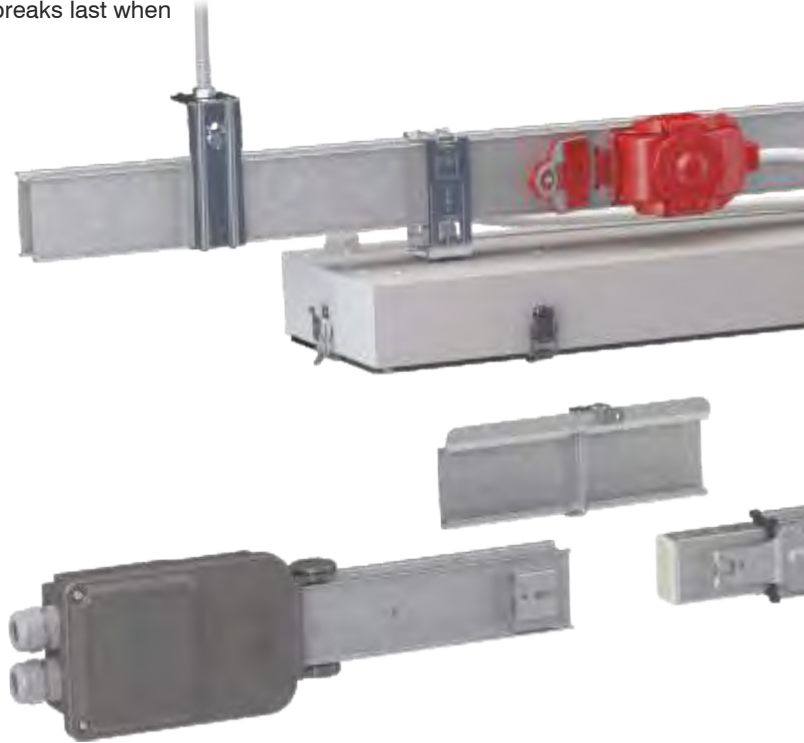
### Fast, Easy and Secure Assembly

Achieved with single action by driving the mechanical and electrical joint silver coated spring coated contacts towards each other. The joint is secured by tightening one screw. It is not necessary to install the joint cover to secure the joint.



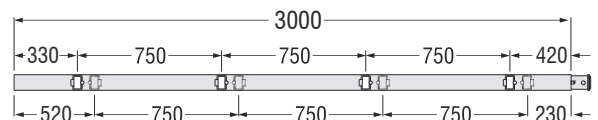
### Full Isolation

The busbar conductors are coated in flame-proof insulation material. Total security regarding human safety is provided even when the body is severely damaged due to external heavy impacts that may occur.

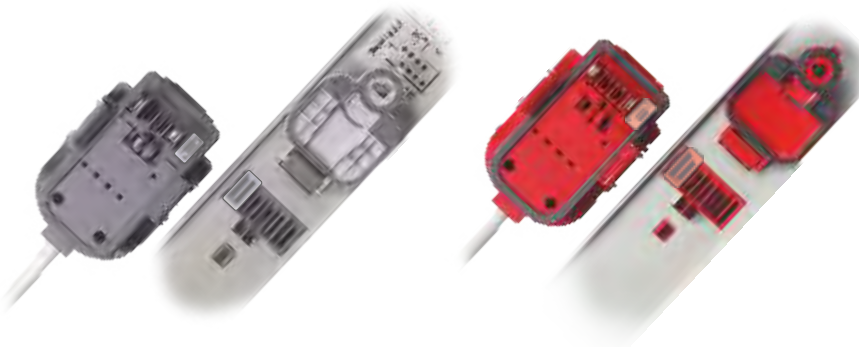


### Total of 8 plug-in points; 4 Plug-in points for Mains and 4 Plug-in points for control are provided on a Standard 3m Length

A total of 8 plug-in points (4 each side) are provided as standard.

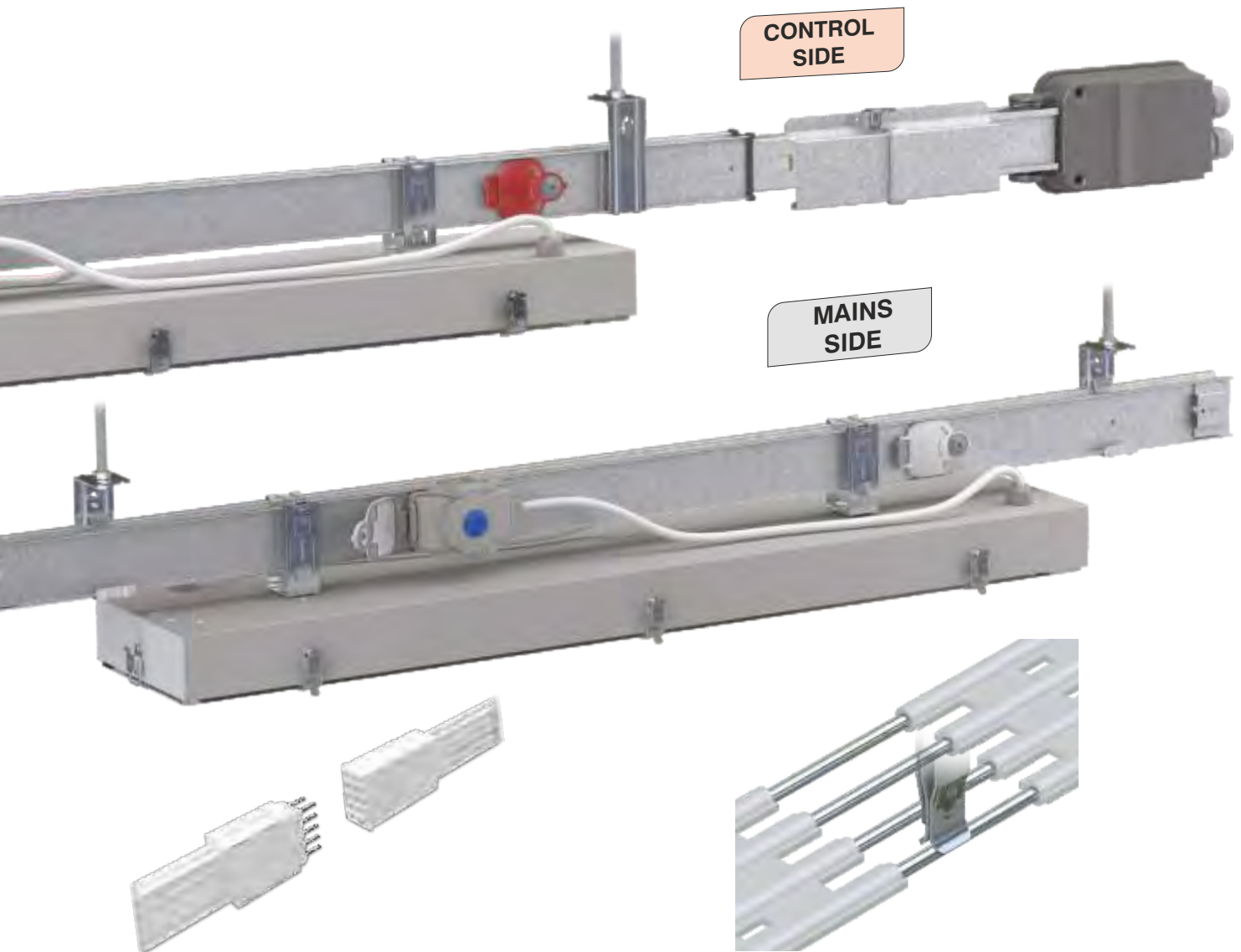


Body is manufactured from 0.50 mm thick, galvanized sheet metal.



**Addressed Plug and Window**

Plugs and plug-in windows are addressed to prevent any faulty usage. (Supply plugs can not be used in the control side of the busbar and control plugs can not be used in the mains side.)



CONTROL  
SIDE

MAINS  
SIDE

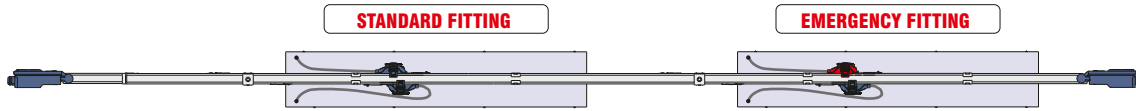
**E-LINE DL-DALI**

**Silver Coated Joint Contacts**

The contacts at the joints of the busbar and the contacts of all tap-off units are silver coated. The silver coating minimises the contact impedances, thus preventing the over-heating of the contacts in case of possible over-loads.

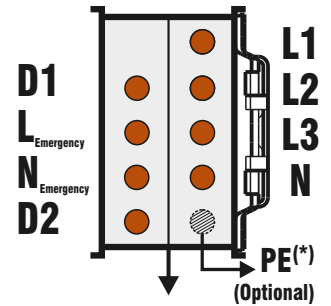
**Tin Coated Conductors and Contact Structure**

Formation of Copper Oxide is prevented by tin plating the conductors along their full length. This ensures that contact resistances are minimised. The contacts of the tap-off plugs contact the busbar conductors on two surfaces.



### Three Phase DALI Busbar

Current (A)	Description	Conductor Conf.	Order Code	
			(4+4)	(4+5)
25	DL -2424/2425 - DALI - STD Busbar	4+4(5)	3063687	3063707
32	DL -3434/3435 - DALI - STD Busbar		3063815	3063816
40	DL -4444/4445 - DALI - STD Busbar		3063819	3063820



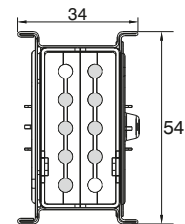
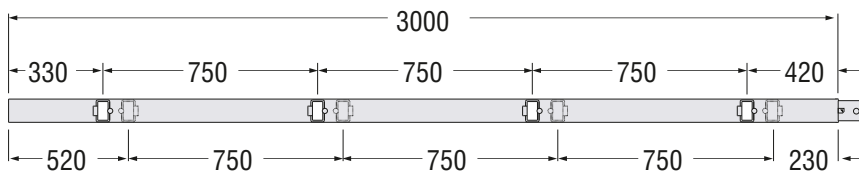
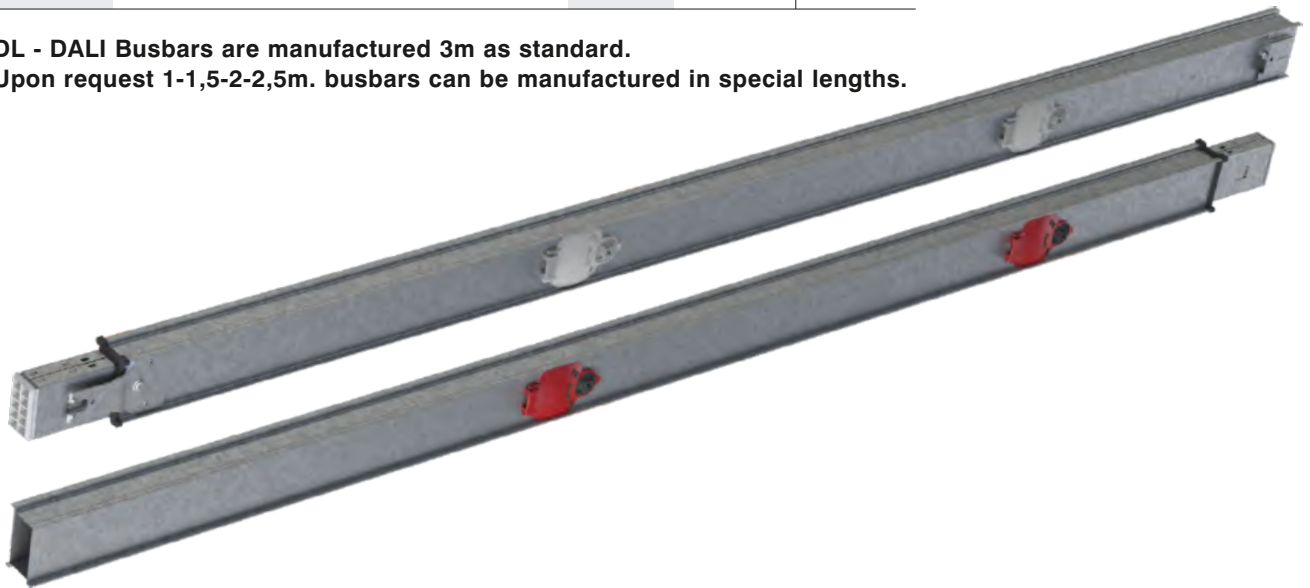
### (PE Housing)

(\*) Based on requirement "PE" can be manufactured as a separate conductor independent from housing.

### Three Phase DALI Special Length

Current (A)	Description	Conductor Conf.	Order Code	
			(4+4)	(4+5)
25	DL - 2424/2425 - DALI - X Special Length	4+4(5)	3063688	3063708
32	DL - 3434/3435 - DALI - X Special Length		3063823	3063824
40	DL - 4444/3435 - DALI - X Special Length		3063827	3063828

DL - DALI Busbars are manufactured 3m as standard. Upon request 1-1,5-2-2,5m. busbars can be manufactured in special lengths.



■ Body is manufactured from 0.50 mm galvanised sheet steel.

■ For non-standard product, please contact our technical office.



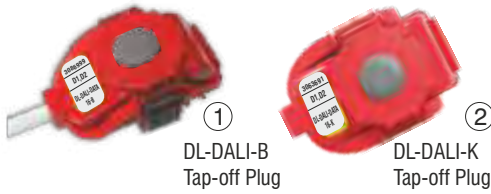
## ►► Product Selection Tables / Tap-off Plugs (For Three Phase Busbars) CONTROL (LEFT SIDE)

- DALI Tap-off Plug (B)  
(Cables are of 2x1.5 mm<sup>2</sup> 052XZ1-F type, and manufactured with a standard length of 0,75m. Optionally, they may be manufactured with the desired length.)

Description	Order Code	
	Halogen Free	Standard (PVC)
DL - DALI 16 -B Tap-off Plug ( D1, D2)	3063689	3086999

- DALI Tap-off Plug (K)(with Clips)

Description	Order Code
DL - DALI 16 -K Tap-off Plug ( D1, D2)	3063691



- DALI+Emergency Tap-off Plug (B)  
(Cables are of 4x1.5 mm<sup>2</sup> 052XZ1-F type, and manufactured with a standard length of 0,75m. Optionally, they may be manufactured with the desired length.)

Description	Order Code	
	Halogen Free	Standard (PVC)
DALI+ACK 16 -B Emergency Tap-off Plug(D1, L <sub>emg</sub> , N <sub>emg</sub> , D2)	3063693	3086998

- DALI Emergency Tap-off Plug (K) (with Clips)

Description	Order Code
DALI+ACK 16 -K Emergency Tap-off Plug(D1, L <sub>emg</sub> , N <sub>emg</sub> , D2)	3063694

- DALI Emergency Tap-off Plug(FS) (Fuse Holder)(\*)

Description	Order Code
DALI+ACK 16-FS Emergency Tap-off Plug(D1, L <sub>emg</sub> , N <sub>emg</sub> , D2)	3063695

\* The cylindrical fuse holder is 5x20mm and the fuse is not included.



### WARNING :

Lighting fittings must be on the same phase as the emergency kit.

## MAINS (RIGHT SIDE)

- DL/SL Tap-off Plugs (B)

(Cables are of 3x1.5 mm<sup>2</sup> 052XZ1-F type, and manufactured with a standard length of 0,75m. Optionally, they may be manufactured with the desired length.)

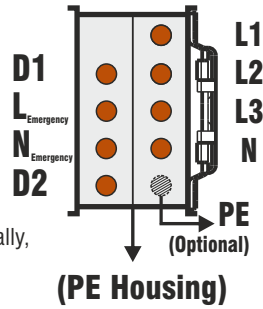
Description	Order Code	
	Halogen Free	Standard (PVC)
① DL/SL 16 - B Tap-off Plug L1 (L1, N, PE <sub>Housing</sub> )	3063696	3086972
② DL/SL 16 - B Tap-off Plug L2 (L2, N, PE <sub>Housing</sub> )	3063697	3086974
③ DL/SL 16 - B Tap-off Plug L3 (L3, N, PE <sub>Housing</sub> )	3063698	3086975
Optional ① DL/SL 16 - B Tap-off Plug L1 (L1, N, PE)	3063709	3086978
Optional ② DL/SL 16 - B Tap-off Plug L2 (L2, N, PE)	3063710	3086979
Optional ③ DL/SL 16 - B Tap-off Plug L3 (L3, N, PE)	3063711	3086980

### ATTENTION :

(\*) These plugs must be used when the PE protection conductor is selected as a separate conductor from the body.

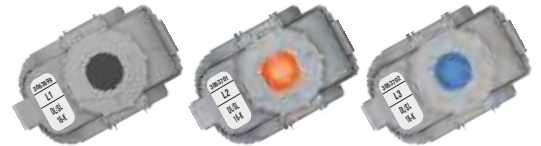


① DL/SL 16-B L1 Tap-off Plug    ② DL/SL 16-B L2 Tap-off Plug    ③ DL/SL 16-B L3 Tap-off Plug



- Tap-off Plugs with Clips (K)

Description	Order Code
① DL/SL 16 - K Tap-off Plug L1 (L1, N, PE <sub>Housing</sub> )	3063699
② DL/SL 16 - K Tap-off Plug L2 (L2, N, PE <sub>Housing</sub> )	3063701
③ DL/SL 16 - K Tap-off Plug L3 (L3, N, PE <sub>Housing</sub> )	3063702
Optional ① DL/SL 16 - K Tap-off Plug L1 (L1, N, PE)	3063712
Optional ② DL/SL 16 - K Tap-off Plug L2 (L2, N, PE)	3063715
Optional ③ DL/SL 16 - K Tap-off Plug L3 (L3, N, PE)	3063716

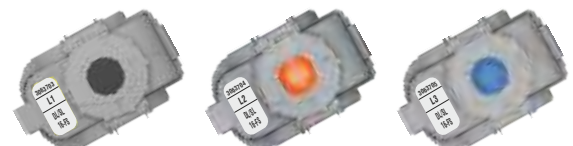


① DL/SL 16-K L1 Tap-off Plug    ② DL/SL 16-K L2 Tap-off Plug    ③ DL/SL 16-K L3 Tap-off Plug

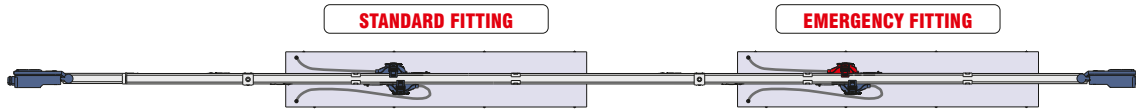
- Fuse Holder Tap-off Plugs (FS) (\*)

Description	Order Code
① DL/SL 16 - FS Tap-off Plug L1 (L1, N, PE <sub>Housing</sub> )	3063703
② DL/SL 16 - FS Tap-off Plug L2 (L2, N, PE <sub>Housing</sub> )	3063704
③ DL/SL 16 - FS Tap-off Plug L3 (L3, N, PE <sub>Housing</sub> )	3063705
Optional ① DL/SL 16 - FS Tap-off Plug L1 (L1, N, PE)	3063717
Optional ② DL/SL 16 - FS Tap-off Plug L2 (L2, N, PE)	3063718
Optional ③ DL/SL 16 - FS Tap-off Plug L3 (L3, N, PE)	3063719

\* The cylindrical fuse holder is 5x20mm and the fuse is not included.

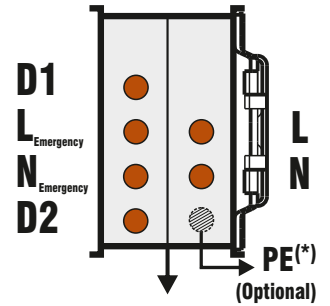


① DL/SL 16-FS L1 Tap-off Plug    ② DL/SL 16-FS L2 Tap-off Plug    ③ DL/SL 16-FS L3 Güç Fişi



► **Single Phase DALI Busbar**

Current (A)	Description	Conductor Conf.	Order Code	
			(4+2)	(4+3)
25	DL -2422/2423 - DALI - STD Busbar	4+2(3)	3063721	3063723
32	DL -3432/3433 - DALI - STD Busbar		3063817	3063818
40	DL -4442/4443 - DALI - STD Busbar		3063821	3063822



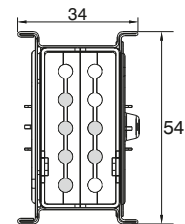
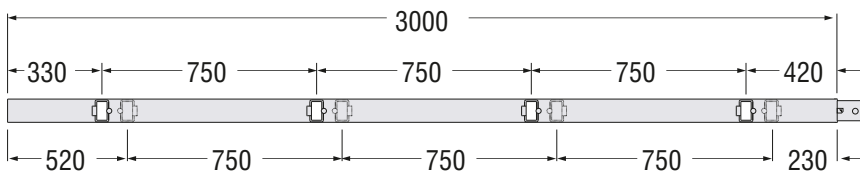
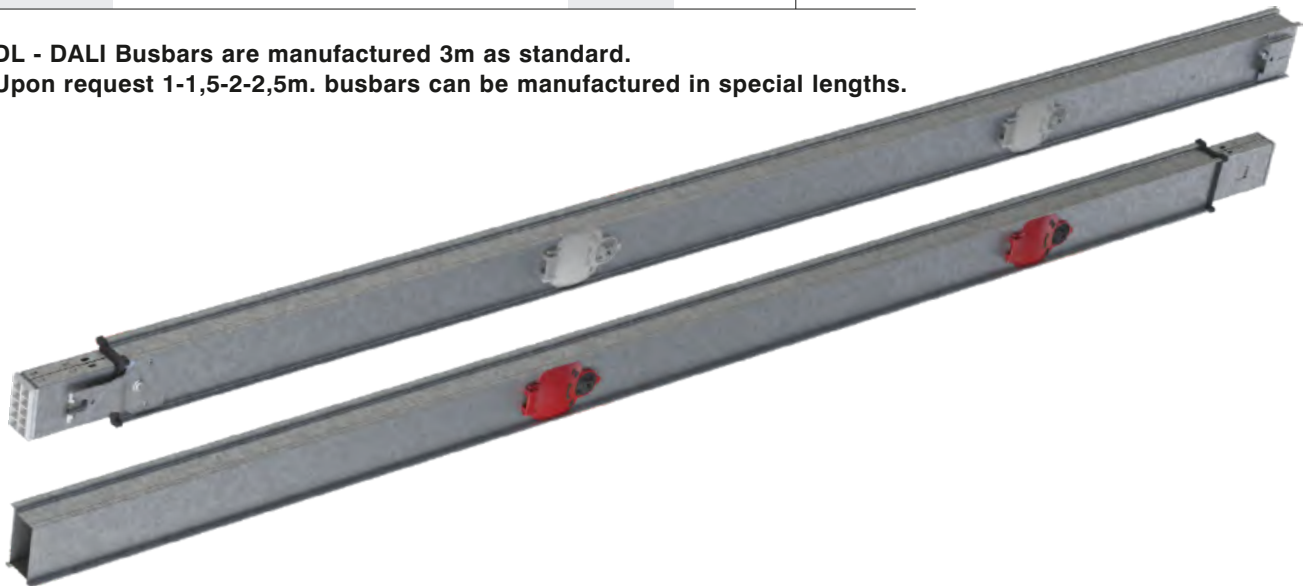
**(PE Housing)**

(\*) Based on requirement "PE" can be manufactured as a separate conductor independent from housing.

► **Single Phase DALI Special Length**

Current (A)	Description	Conductor Conf.	Order Code	
			(4+2)	(4+3)
25	DL - 2422/2423 - DALI - X Special Length	4+2(3)	3063722	3063724
32	DL - 3432/3433 - DALI - X Special Length		3063825	3063826
40	DL - 4442/3433 - DALI - X Special Length		3063829	3063831

DL - DALI Busbars are manufactured 3m as standard.  
Upon request 1-1,5-2-2,5m. busbars can be manufactured in special lengths.



■ Body is manufactured from 0.50 mm galvanised sheet steel.

■ For non-standard product, please contact our technical office.

## ►► Product Selection Tables / Tap-off Plugs (For Single Phase Busbars)

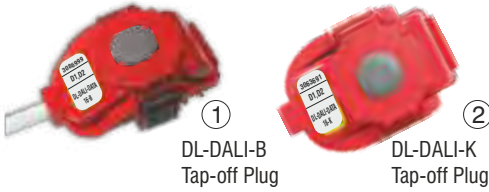
### CONTROL (LEFT SIDE)

- **DALI Tap-off Plug (B)**  
(Cables are of 2x1.5 mm<sup>2</sup> 052XZ1-F type, and manufactured with a standard length of 0,75m. Optionally, they may be manufactured with the desired length.)

Description	Order Code	
	Halogen Free	Standard (PVC)
DL - DALI 16 -B Tap-off Plug ( D1, D2)	3063689	3086999 ①

- **DALI Tap-off Plug (K)(with Clips)**

Description	Order Code
DL - DALI 16 -K Tap-off Plug ( D1, D2)	3063691 ②



- **DALI+Emergency Tap-off Plug (B)**  
(Cables are of 4x1.5 mm<sup>2</sup> 052XZ1-F type, and manufactured with a standard length of 0,75m. Optionally they may be manufactured with the desired length.)

Description	Order Code	
	Halogen Free	Standard (PVC)
DALI+ACK 16 -B Emergency Tap-off Plug(D1, L <sub>emg</sub> , N <sub>emg</sub> , D2)	3063693	3086998 ①

- **DALI Emergency Tap-off Plug (K) (with Clips)**

Description	Order Code
DALI+ACK 16 -K Emergency Tap-off Plug(D1, L <sub>emg</sub> , N <sub>emg</sub> , D2)	3063694 ②

- **DALI Emergency Tap-off Plug(FS) (Fuse Holder)(\*)**

Description	Order Code
DALI+ACK 16-FS Emergency Tap-off Plug(D1, L <sub>emg</sub> , N <sub>emg</sub> , D2)	3063695 ③

\* The cylindrical fuse holder is 5x20mm and the fuse is not included.



### **WARNING :**

Lighting fittings must be on the same phase as the emergency kit.

### MAINS (RIGHT SIDE)

- **DL/SL Tap-off Plugs (B)**  
(Cables are of 3x1.5 mm<sup>2</sup> 052XZ1-F type, and manufactured with a standard length of 0,75m. Optionally, they may be manufactured with the desired length.)

Description	Order Code	
	Halogen Free	Standard (PVC)
DL / SL 16 - B Tap-off Plug (L, N, PE <sub>Housing</sub> )	3063698	3086975
Optional { DL / SL 16 - B Tap-off Plug (L, N, PE)(*)	3063711	3086980

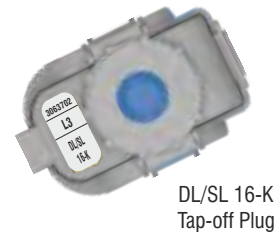
### **ATTENTION :**

(\*) These plugs must be used when the PE protection conductor is selected as a separate conductor from the body.



- **Single Phase Tap-off Plugs with Clips(K)**

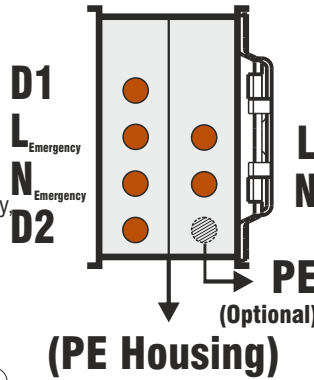
Description	Order Code
DL / SL 16 - K Tap-off Plug (L, N, PE <sub>Housing</sub> )	3063702
Optional { DL / SL 16 - K Tap-off Plug (L, N, PE)	3063716



- **Single Phase Fuse Holder Tap-off Plugs (FS)(\*)**

Description	Order Code
DL / SL 16 - FS Tap-off Plug (L, N, PE <sub>Housing</sub> )	3063705
Optional { DL / SL 16 - FS Tap-off Plug (L, N, PE)	3063719

\* The cylindrical fuse holder is 5x20mm and the fuse is not included.

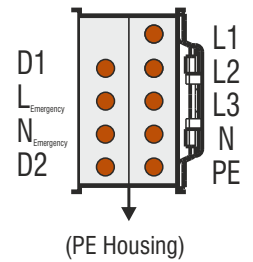
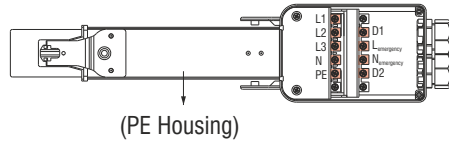
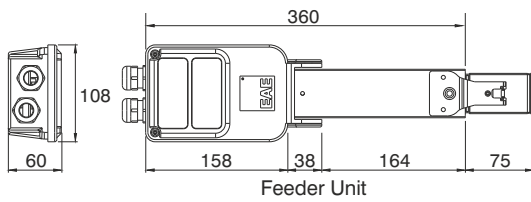


## (B1) Feeder Units

Current (A)	Description	Conductor Conf.	Order Code
25	DL - 2425 - DALI - B1 Feeder Unit	4+5	3024938
	DL - 2425 - DALI - B1 Feeder Unit (3xM25 Gland) (*)		3047853
32	DL - 3435 - DALI - B1 Feeder Unit		3063832
	DL - 3435 - DALI - B1 Feeder Unit (3xM25 Gland) (*)		3063872
40	DL - 4445 - DALI - B1 Feeder Unit		3056015
	DL - 4445 - DALI - B1 Feeder Unit (3xM25 Gland) (*)		3063874



\* With PE Conductor and M25 Gland as standard.

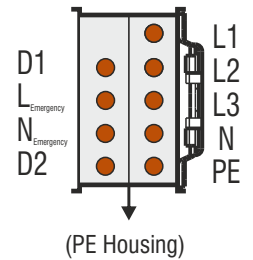
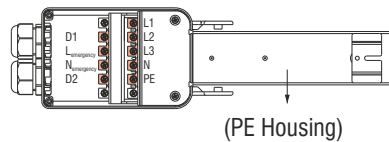
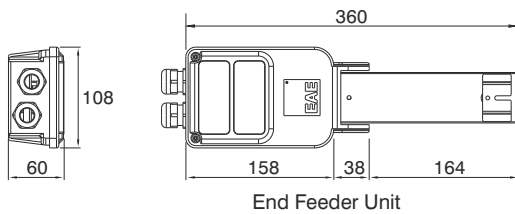


## (B2) End Feeder Units

Current (A)	Description	Conductor Conf.	Order Code
25	DL - 2524 - DALI - B2 End Feeder Unit	5+4	3024939
	DL - 2524 - DALI - B2 End Feeder Unit (3xM25 Gland) (*)		3047854
32	DL - 3534 - DALI - B2 End Feeder Unit		3063834
	DL - 3534 - DALI - B2 End Feeder Unit (3xM25 Gland) (*)		3063873
40	DL - 4544 - DALI - B2 End Feeder Unit		3056139
	DL - 4544 - DALI - B2 End Feeder Unit (3xM25 Gland) (*)		3063875



\* With PE Conductor and M25 Gland as standard.



### ATTENTION :

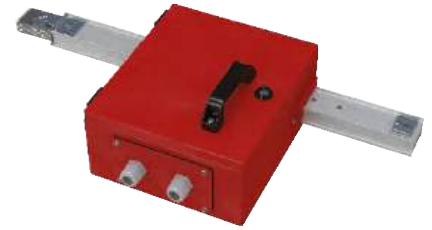
(\*) The main supply, DALI and emergency kit (ACK) supply must be selected from the DL-DALI busbar start/end supply units which has 3 (three) union types.

■ Body is manufactured from 0.50 mm galvanised sheet steel.

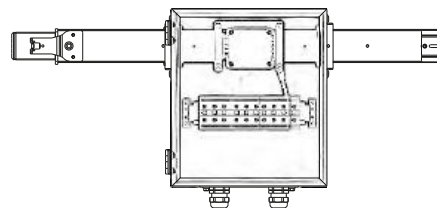
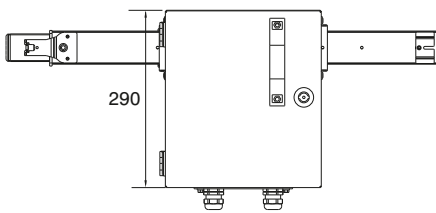
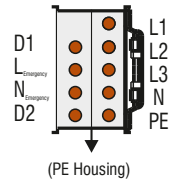
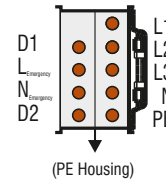
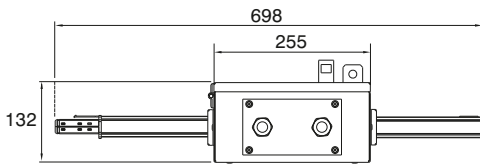
■ For non-standard product, please contact our technical office.

## (BO) Central Feeder Units

Current (A)	Description	Conductor Conf.	Order Code
25	DL - 2425 - DALI - BO Central Feeder	4+5	3133087
32	DL - 3435 - DALI - BO Central Feeder		3133148
40	DL - 4445 - DALI - BO Central Feeder		3133150



\* With PE Conductor and M25 Gland as standard.

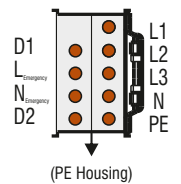
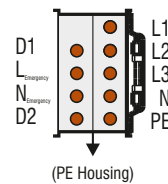
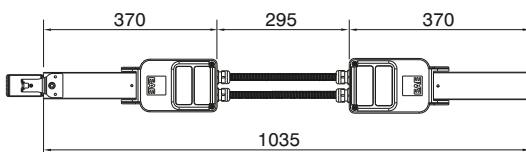


## (FD) Flexible Elbow

Current (A)	Description	Conductor Conf.	Order Code
25	DL - 2425 - DALI - FD Flexible Elbow	4+5	3024941
32	DL - 3435 - DALI - FD Flexible Elbow		3063836
40	DL - 4445 - DALI - FD Flexible Elbow		3063785



\* With PE Conductor and M25 Gland as standard.



■ Body is manufactured from 0.50 mm galvanised sheet steel.

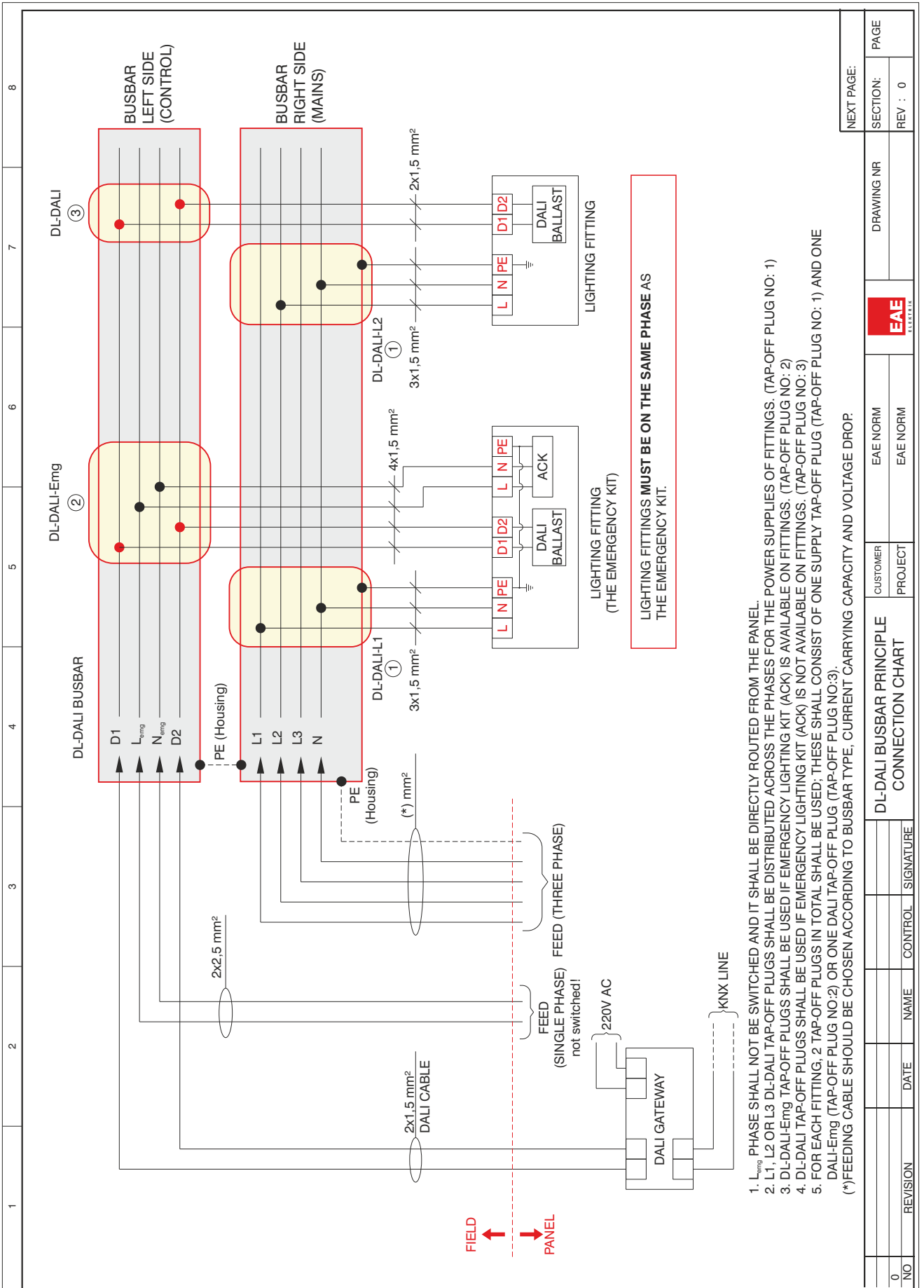
■ For non-standard product, please contact our technical office.

## Offices



## Plants





1. L<sub>Emg</sub> PHASE SHALL NOT BE SWITCHED AND IT SHALL BE DIRECTLY ROUTED FROM THE PANEL.
  2. L1, L2 OR L3 DL-DALI TAP-OFF PLUGS SHALL BE DISTRIBUTED ACROSS THE PHASES FOR THE POWER SUPPLIES OF FITTINGS. (TAP-OFF PLUG NO: 1)
  3. DL-DALI-Emg TAP-OFF PLUGS SHALL BE USED IF EMERGENCY LIGHTING KIT (ACK) IS AVAILABLE ON FITTINGS. (TAP-OFF PLUG NO: 2)
  4. DL-DALI TAP-OFF PLUGS SHALL BE USED IF EMERGENCY LIGHTING KIT (ACK) IS NOT AVAILABLE ON FITTINGS. (TAP-OFF PLUG NO: 3)
  5. FOR EACH FITTING, 2 TAP-OFF PLUGS IN TOTAL SHALL BE USED; THESE SHALL CONSIST OF ONE SUPPLY TAP-OFF PLUG (TAP-OFF PLUG NO: 1) AND ONE DALI-Emg (TAP-OFF PLUG NO: 2) OR ONE DALI TAP-OFF PLUG (TAP-OFF PLUG NO: 3).
- (\*) FEEDING CABLE SHOULD BE CHOSEN ACCORDING TO BUSBAR TYPE, CURRENT CARRYING CAPACITY AND VOLTAGE DROP.

LIGHTING FITTINGS MUST BE ON THE SAME PHASE AS THE EMERGENCY KIT.

NO	REVISION	DATE	NAME	CONTROL	SIGNATURE	DL-DALI BUSBAR PRINCIPLE CONNECTION CHART		CUSTOMER	EAE NORM	EAE NORM	DRAWING NR	SECTION:	PAGE
0									EAE	EAE NORM		REV : 0	0

NEXT PAGE:

## DIM Busbar

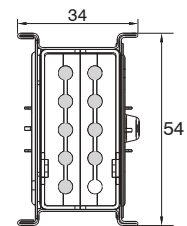
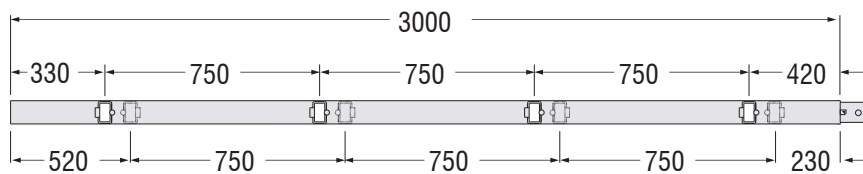
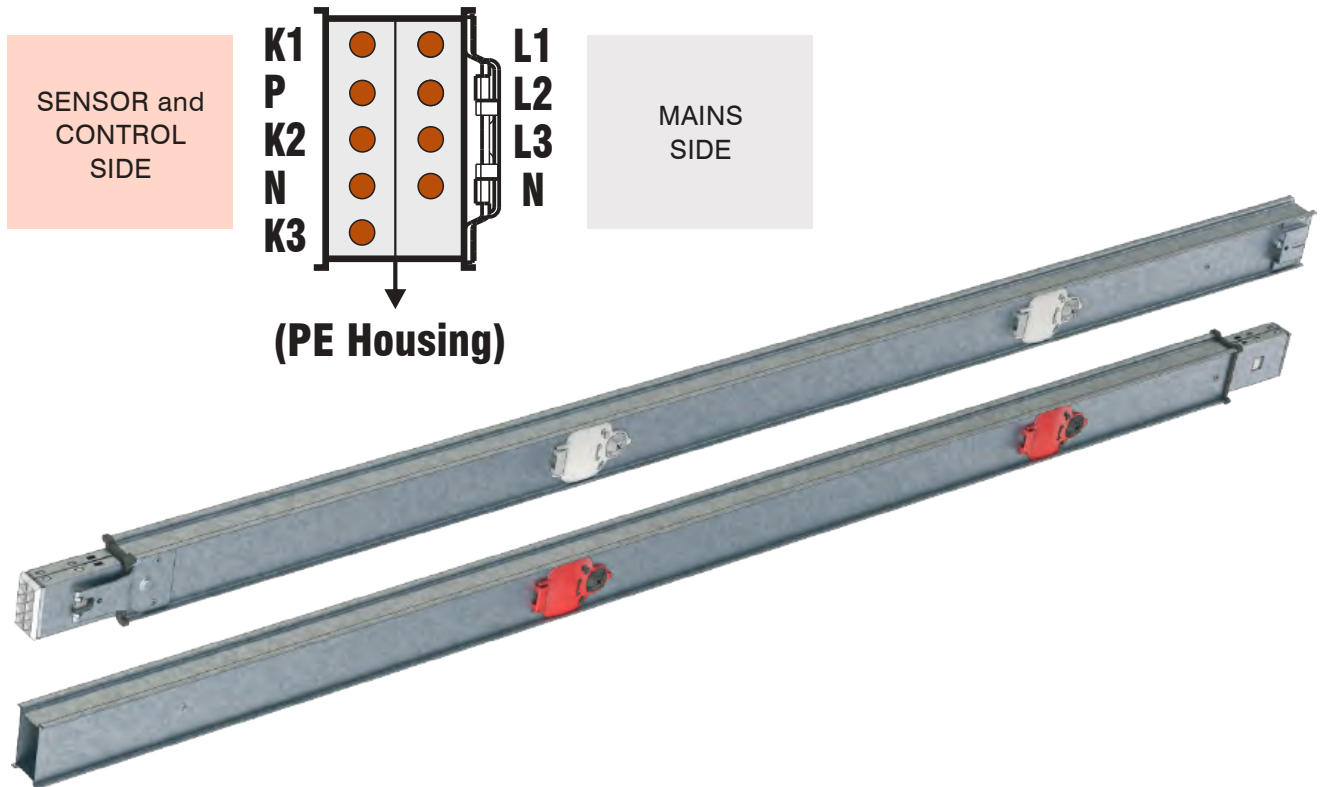
Current (A)	Description	Conductor Conf.	Order Code
25	DL - 2524 - DIM - STD Busbar	5+4	3048449
32	DL - 3534 - DIM - STD Busbar		3063859
40	DL - 4544 - DIM - STD Busbar		3063860

## DIM Special Length

Current (A)	Description	Conductor Conf.	Order Code
25	DL - 2524 - DIM - X Special Length	5+4	3048450
32	DL - 3534 - DIM - X Special Length		3063863
40	DL - 4544 - DIM - X Special Length		3063864

E-Line DL - DIM Busbar; The lighting fittings with corridor function ballast are locally controlled with a max and min of 2 levels of "DIM".

DL - DIM Busbars are manufactured 3m as standard.  
Upon request 1-1,5-2-2,5m busbars can be manufactured in special lengths.



■ Body is manufactured from 0.50 mm galvanised sheet steel.

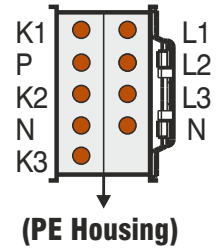
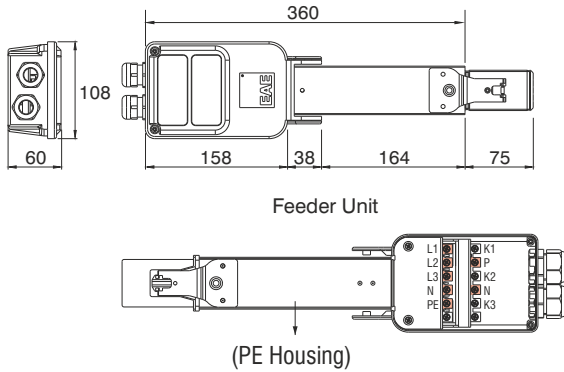
■ For non-standard product, please contact our technical office.



### (B1) Feeder Units

Current (A)	Description	Conductor Conf.	Order Code
25	DL - 2224 - DIM - B1 Feeder Unit	2+4	3048451
32	DL - 3234 - DIM - B1 Feeder Unit		3063843
40	DL - 4244 - DIM - B1 Feeder Unit		3063844

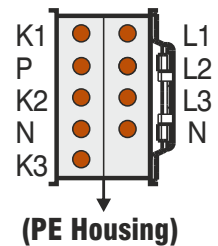
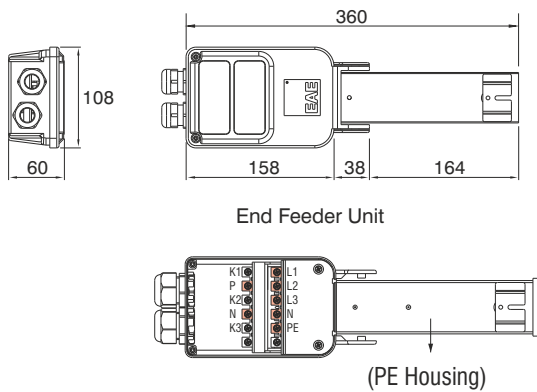
\* With PE Conductor and M25 Gland as standard.



### (B2) End Feeder Units

Current (A)	Description	Conductor Conf.	Order Code
25	DL - 2224 - DIM - B2 End Feeder Unit	4+2	3048452
32	DL - 3234 - DIM - B2 End Feeder Unit		3063847
40	DL - 4244 - DIM - B2 End Feeder Unit		3063848

\* With PE Conductor and M25 Gland as standard.



■ Body is manufactured from 0.50 mm galvanised sheet steel.

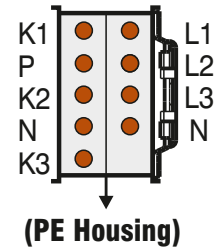
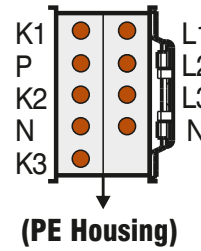
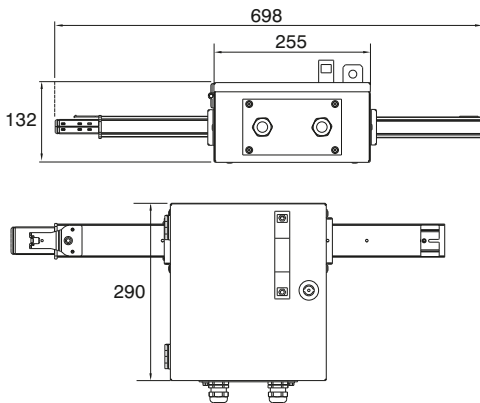
■ For non-standard product, please contact our technical office.

## (BO) Central Feeder Units

Current (A)	Description	Conductor Conf.	Order Code
25	DL - 2524 - DIM - BO Central Feeder	5+4	3133152
32	DL - 3534 - DIM - BO Central Feeder		3133154
40	DL - 4544 - DIM - BO Central Feeder		3133156



\* With PE Conductor and M25 Gland as standard.

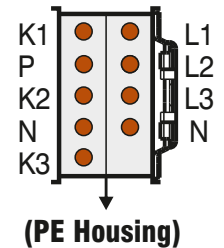
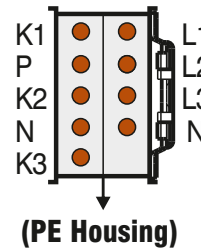
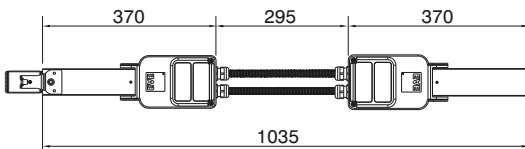


## (FD) Flexible Elbow (1)

Current (A)	Description	Conductor Conf.	Order Code
25	DL - 2524 - DIM - FD Flexible Elbow	5+4	3048453
32	DL - 3534 - DIM - FD Flexible Elbow		3063857
40	DL - 4544 - DIM - FD Flexible Elbow		3063858



\* With PE Conductor and M25 Gland as standard.

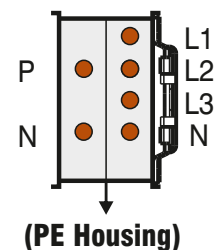
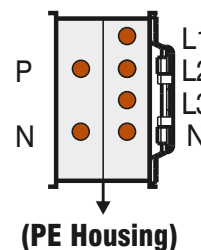
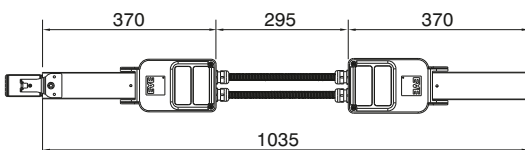


## (FD) Flexible Elbow (2)

Current (A)	Description	Conductor Conf.	Order Code
25	DL - 2224 - DIM - FD Flexible Elbow	2+4	3066726
32	DL - 3234 - DIM - FD Flexible Elbow		3066728
40	DL - 4244 - DIM - FD Flexible Elbow		3066730



\* With PE Conductor and M25 Gland as standard.



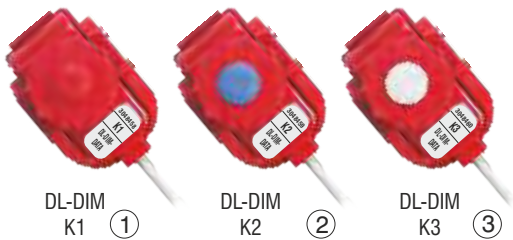
■ Body is manufactured from 0.50 mm galvanised sheet steel.

■ For non-standard product, please contact our technical office.

### CONTROL (LEFT SIDE)

- ▶ **DL-DIM Control Tap-off Plug (B)**  
(Cables are of 2x1.5 mm<sup>2</sup> 052XZ1-F type, and manufactured with a standard length of 0,75m. Optionally, they may be manufactured with the desired length.)

Description	Order Code		
	Halogen Free	Standard (PVC)	
DL - DIM - K1 Tap-off Plug (K1, N)	3048458	3087000	①
DL - DIM - K2 Tap-off Plug (K2, N)	3048459	3087002	②
DL - DIM - K3 Tap-off Plug (K3, N)	3048460	3087004	③



- ▶ **DL-DIM Sensor Control Tap-off Plug (B)**  
(Cables are of 3x1.5 mm<sup>2</sup> 052XZ1-F type, and manufactured with a standard length of 0,75m. Optionally, they may be manufactured with the desired length.)

Description	Order Code		
	Halogen Free	Standard (PVC)	
DL - DIM - S1 Tap-off Plug (K1, P, N)	3048455	3087006	①
DL - DIM - S2 Tap-off Plug (K2, P, N)	3048456	3087007	②
DL - DIM - S3 Tap-off Plug (K3, P, N)	3048457	3087008	③



- ▶ **DL-DIM+Emergency Control Tap-off Plug (B)**  
(Cables are of 3x1.5 mm<sup>2</sup> 052XZ1-F type, and manufactured with a standard length of 0,75m. Optionally, they may be manufactured with the desired length.)

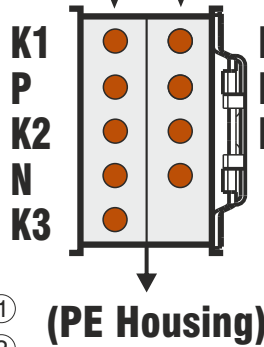
Description	Order Code		
	Halogen Free	Standard (PVC)	
DL - DIM - K1 - ACK Tap-off Plug (K1, P, N)	3048461	3087001	①
DL - DIM - K2 - ACK Tap-off Plug (K2, P, N)	3048462	3087003	②
DL - DIM - K3 - ACK Tap-off Plug (K3, P, N)	3048463	3087005	③



### MAINS (RIGHT SIDE)

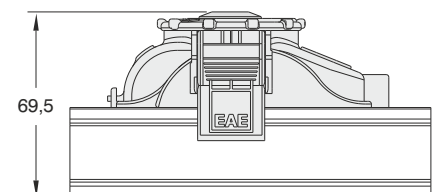
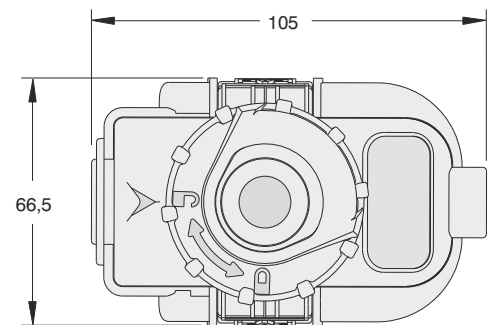
- ▶ **DL / SL Tap-off Plugs (B)**  
(Cables are of 3x1.5 mm<sup>2</sup> 052XZ1-F type, and manufactured with a standard length of 0,75m. Optionally, they may be manufactured with the desired length.)

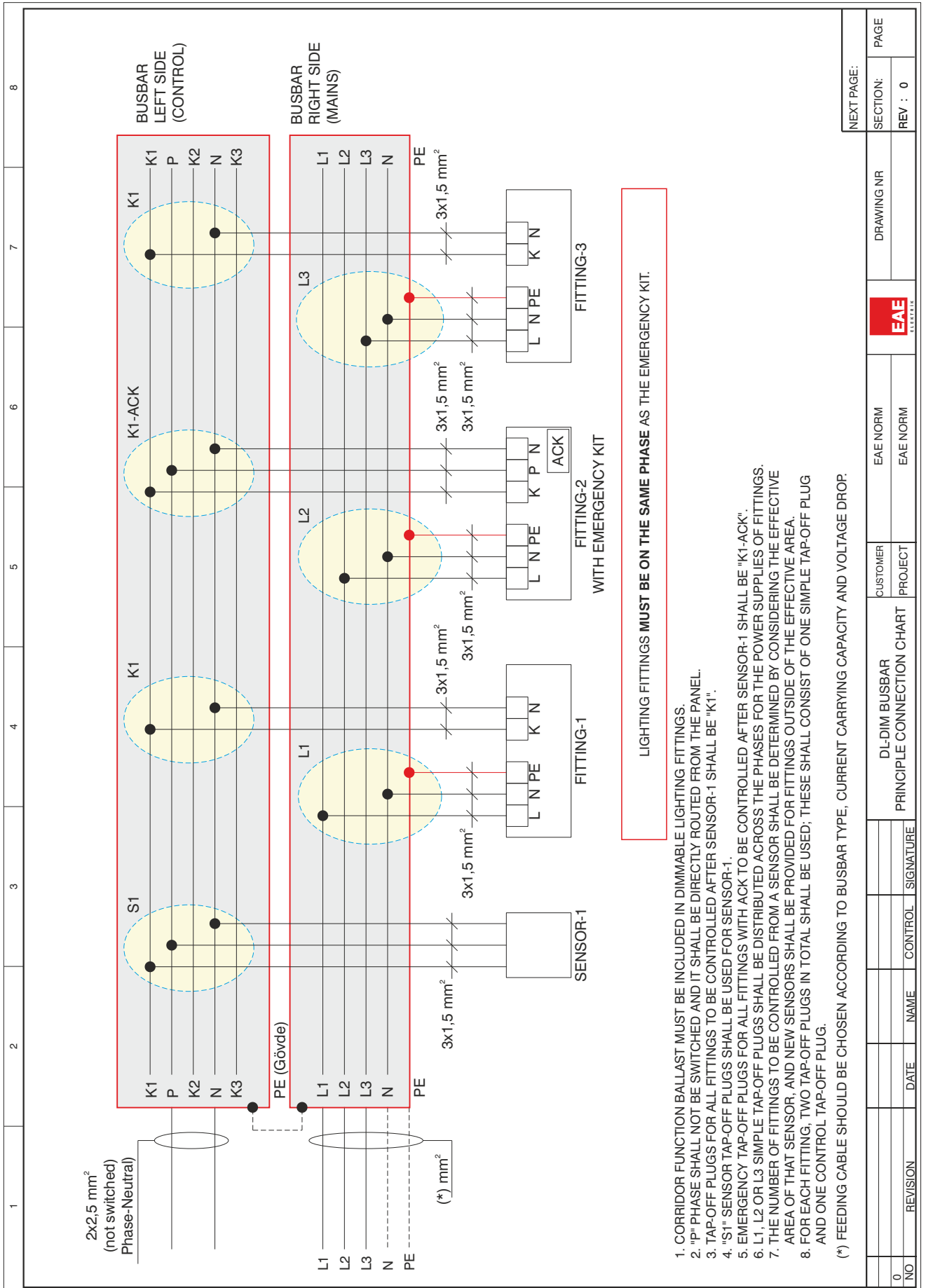
Description	Order Code		
	Halogen Free	Standard (PVC)	
DL / SL 16 - B Tap-off Plug L1 (L1, N, PE)	3063696	3086972	①
DL / SL 16 - B Tap-off Plug L2 (L2, N, PE)	3063697	3086974	②
DL / SL 16 - B Tap-off Plug L3 (L3, N, PE)	3063698	3086975	③



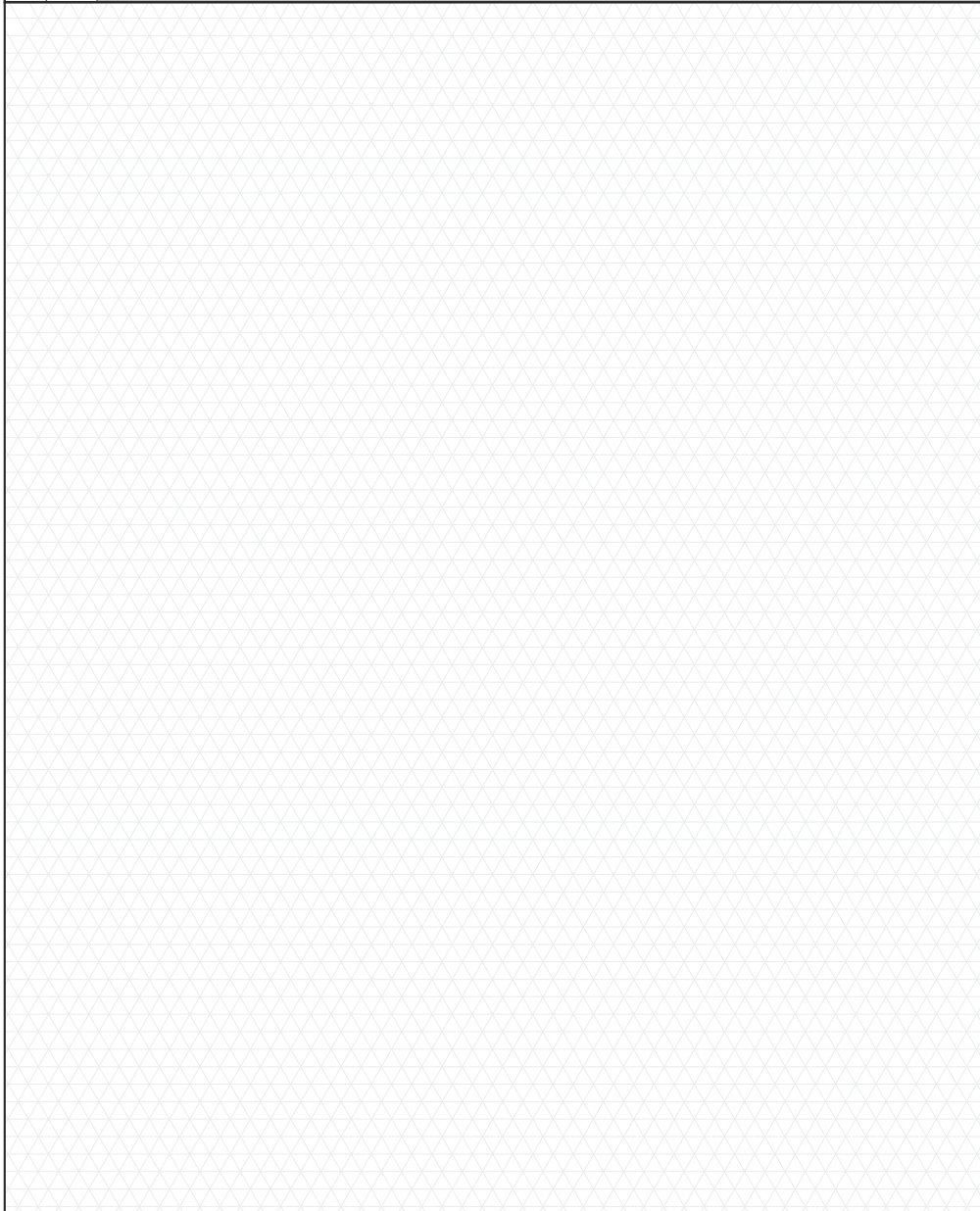
#### WARNING :

Lighting fittings must be on the same phase as the emergency kit.





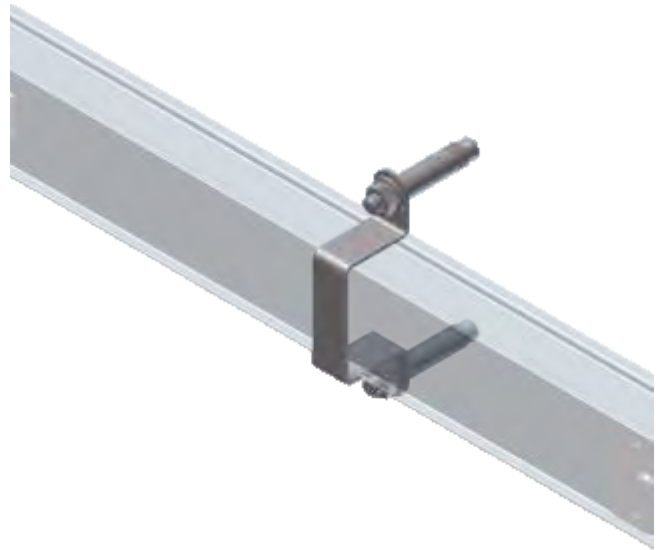
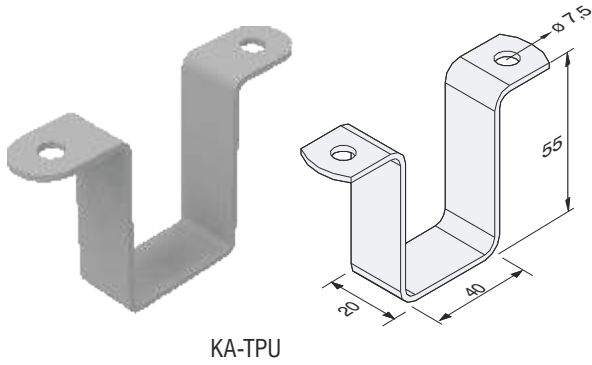
1. CORRIDOR FUNCTION BALLAST MUST BE INCLUDED IN DIMMABLE LIGHTING FITTINGS.
  2. "P" PHASE SHALL NOT BE SWITCHED AND IT SHALL BE DIRECTLY ROUTED FROM THE PANEL.
  3. TAP-OFF PLUGS FOR ALL FITTINGS TO BE CONTROLLED AFTER SENSOR-1 SHALL BE "K1".
  4. "S1" SENSOR TAP-OFF PLUGS SHALL BE USED FOR SENSOR-1.
  5. EMERGENCY TAP-OFF PLUGS FOR ALL FITTINGS WITH ACK TO BE CONTROLLED AFTER SENSOR-1 SHALL BE "K1-ACK".
  6. L1, L2 OR L3 SIMPLE TAP-OFF PLUGS SHALL BE DISTRIBUTED ACROSS THE PHASES FOR THE POWER SUPPLIES OF FITTINGS.
  7. THE NUMBER OF FITTINGS TO BE CONTROLLED FROM A SENSOR SHALL BE DETERMINED BY CONSIDERING THE EFFECTIVE AREA OF THAT SENSOR, AND NEW SENSORS SHALL BE PROVIDED FOR FITTINGS OUTSIDE OF THE EFFECTIVE AREA.
  8. FOR EACH FITTING, TWO TAP-OFF PLUGS IN TOTAL SHALL BE USED; THESE SHALL CONSIST OF ONE SIMPLE TAP-OFF PLUG AND ONE CONTROL TAP-OFF PLUG.
- (\*) FEEDING CABLE SHOULD BE CHOSEN ACCORDING TO BUSBAR TYPE, CURRENT CARRYING CAPACITY AND VOLTAGE DROP.

Component List	Item	Component	Quantity	
				Company :
				Project :
				Project No :
Prepared by	Name :			
	Date :			
	Signature :			

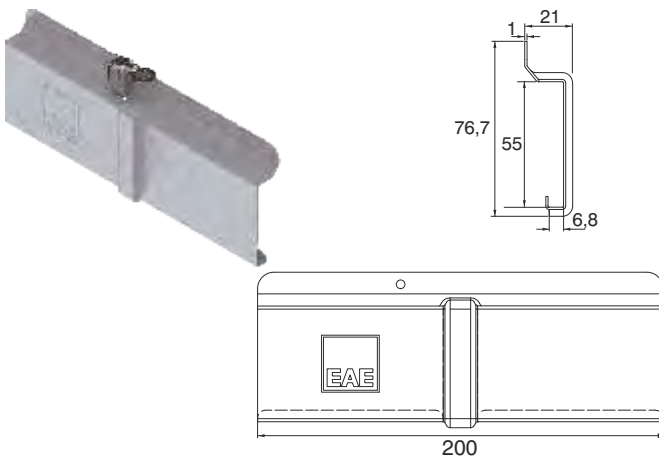
Please duplicate this page for your own use.

**NOTE:** All specified accessories; DL, DL-DALI, DL-DIM is valid for all busbar models.

Description	Order Code
KA - TPU Fitting U - Unpainted	3025158
KA - TPU Fitting U - Painted	3025159

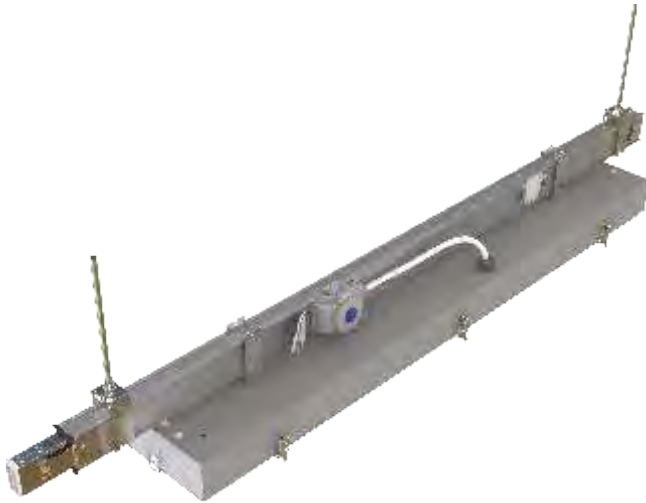


Description	Order Code
DL / SL Joint Cover-Unpainted	1015520
DL / SL Joint Cover-Painted	2054580

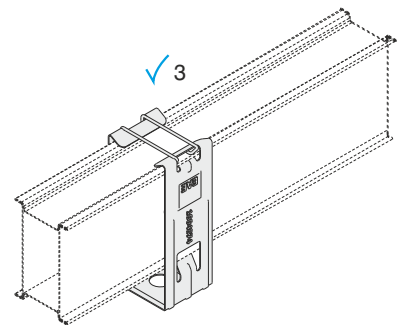
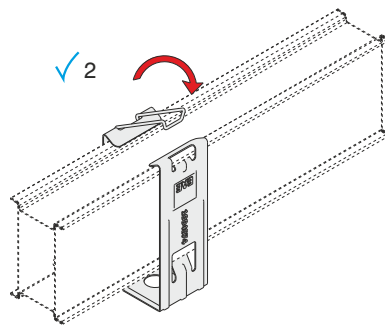
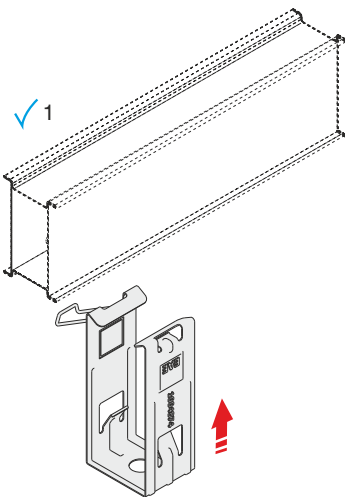
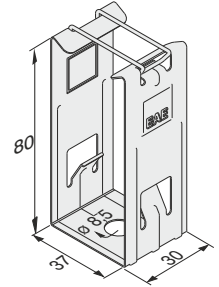


**ATTENTION:**

The joint cover must be attached to the screwless side of the busbar.

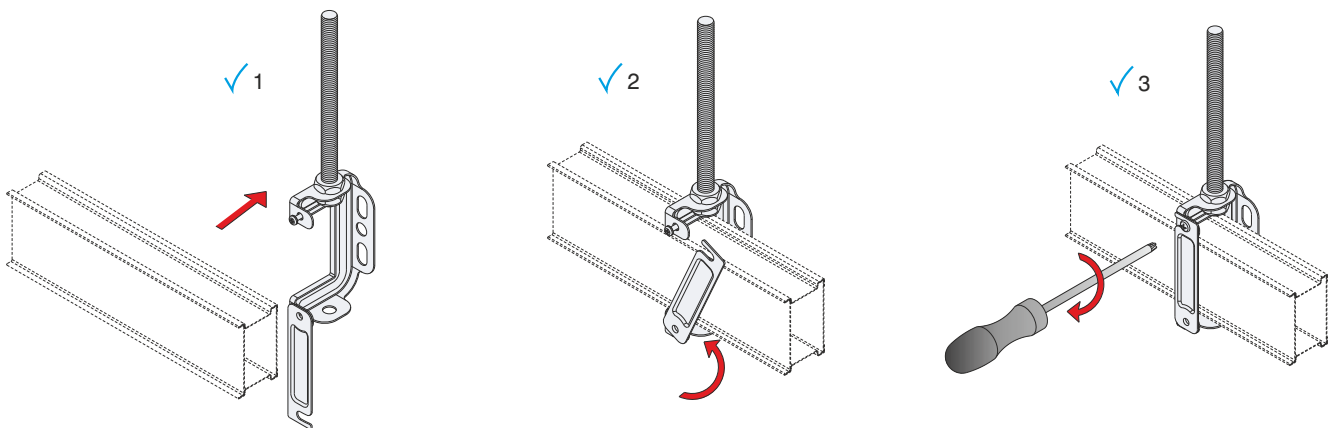
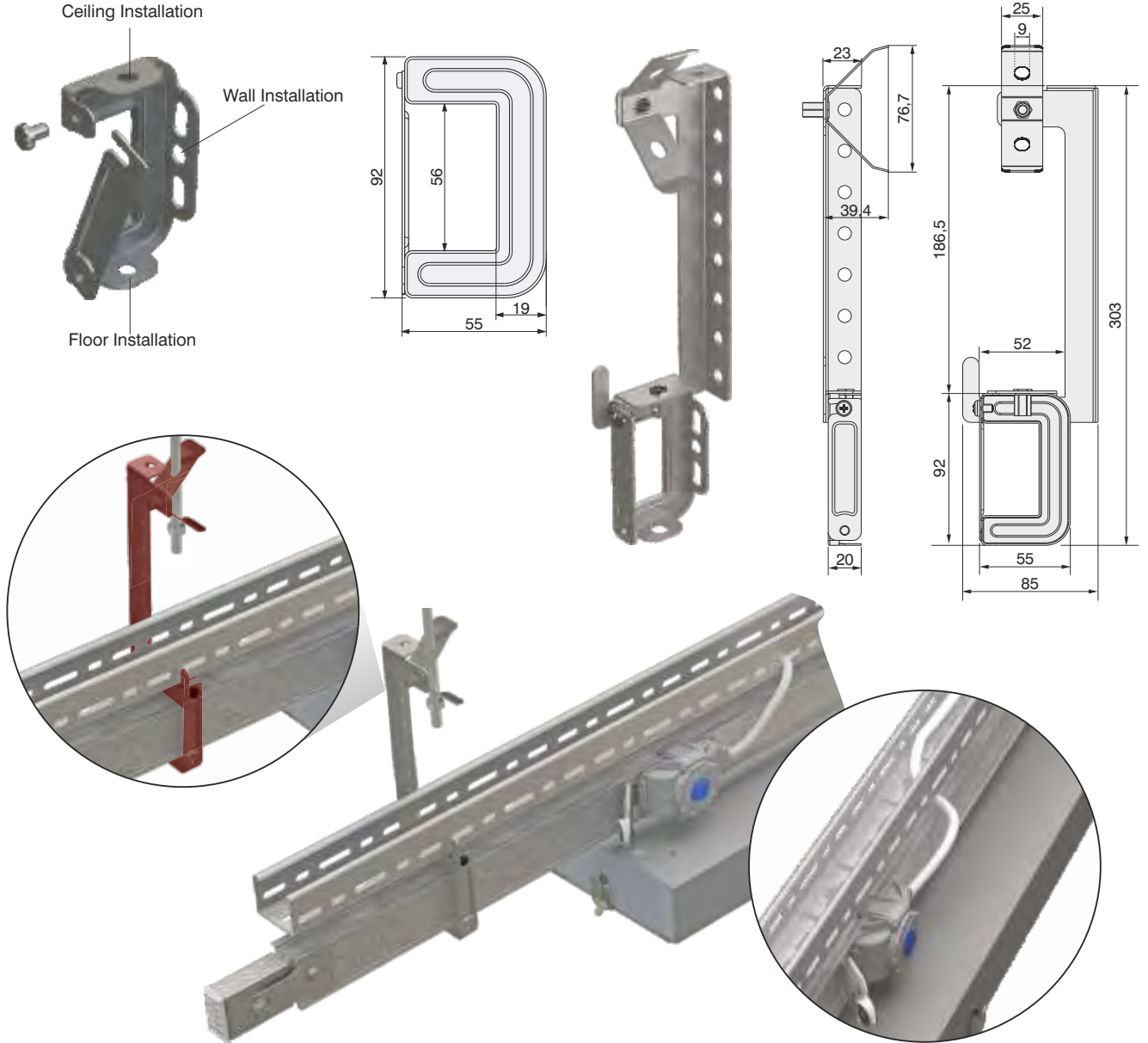


Description	Order Code
U-Bracket - Unpainted	1004874
U-Bracket - Painted	2037294



Description	Order Code
Universal Fitting Bracket - Unpainted	1004189
Universal Fitting Bracket - Painted	2033519

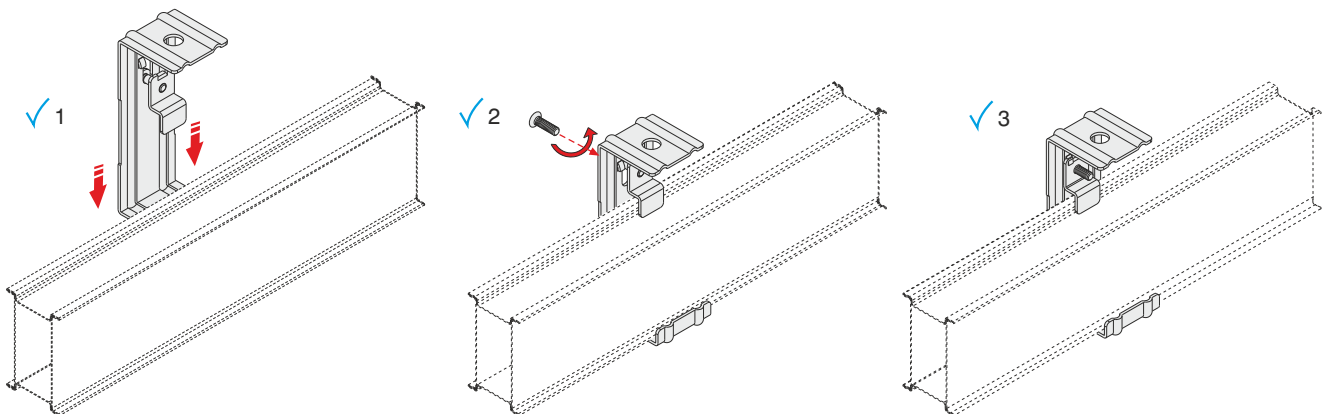
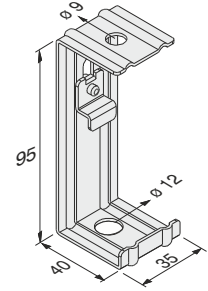
Description	Order Code
DL/SL Multifunctional Bracket - Unpainted	3122646
DL/SL Multifunctional Bracket - Painted	3122647





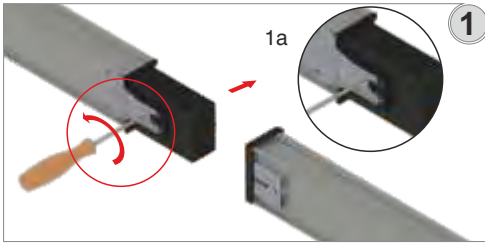


Description	Order Code
L-Bracket - Unpainted	1004283
L-Bracket - Painted	2037295

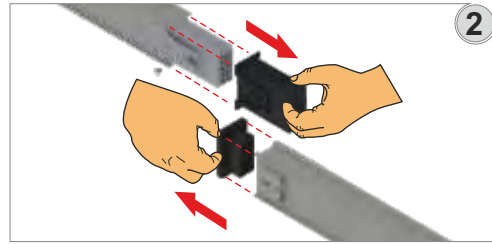


## ►► Busbar Joint Installation

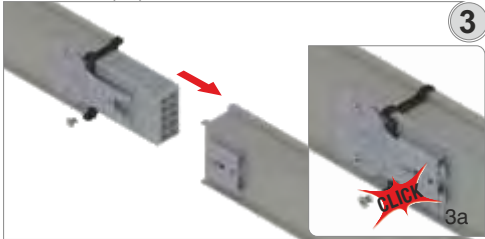
### ► DL Busbar Joint Installation



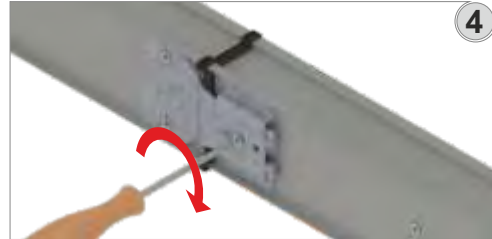
Detach the protective plastic from both ends of the busbar. (1a)



Remove the plastic protective covers from the system as shown in the figure.



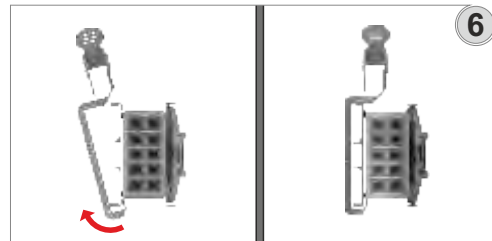
Connect the male side of the busbar with the female side of the other busbar. Make sure that you hear the locking sound for correct connection. (3a)



Tightening the joint screw.



Install the joint cover to the screwless side.



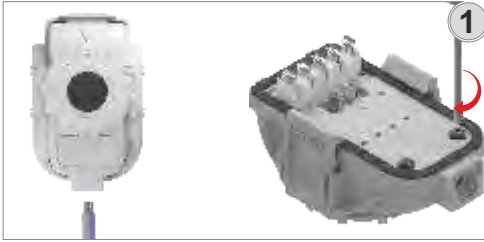
Make sure that the joint cover structure fully grips the busbars.

**(Caution:** The joint cover must be attached to the screwless side of the busbar.)

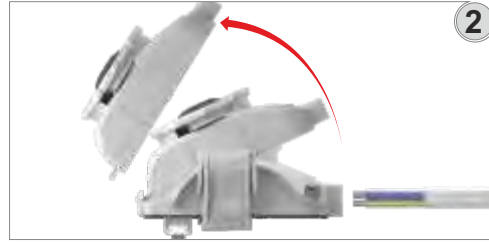


By closing the snap-in latch, you may complete the snap-in connection.

### ▶ Tap-off Plugs with clips/Cylindrical Fuse Installation



Use 052XZ1-F type cable, (3x1,5mm<sup>2</sup> for single phase, 5x1,5mm<sup>2</sup> for three phase) as required. Turn over the plug and remove the two screws.



Remove the cover by pressing the lug with EAE logo as shown in figure.



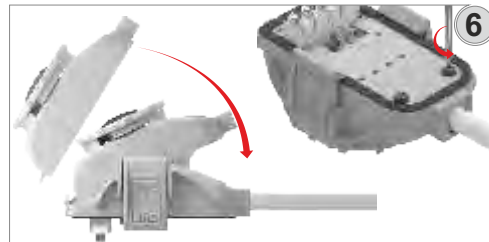
Remove the plastic cable grip. Pass the cable through the gland which maintains the IP rating.



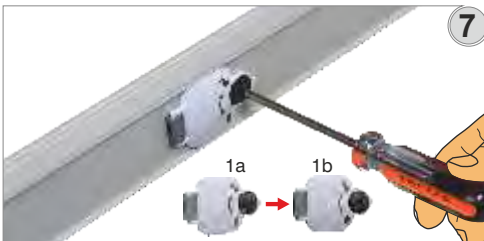
Connect the yellow green cable to the earth terminal, blue cable to "N" terminal and phase cables to related terminals of plug.



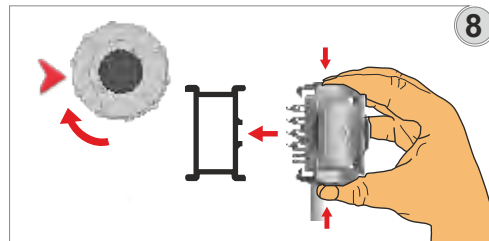
Refit the plastic cable grip.



Replace the cover and turn over the plug and tighten the screws.



Put the plug in cover into open (1a) position.



Put the lock mechanism of plug into open (1b) position.

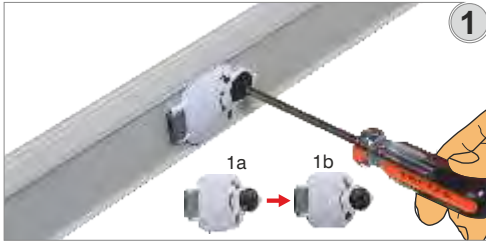


Direction of contacts should be as shown figure.

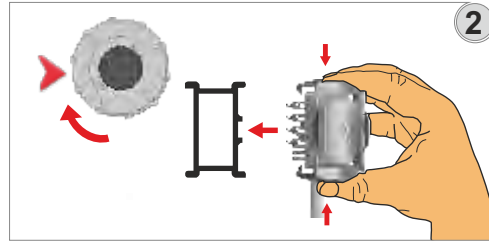


After connecting plug to busbar, put the lock mechanism of plug into close position.

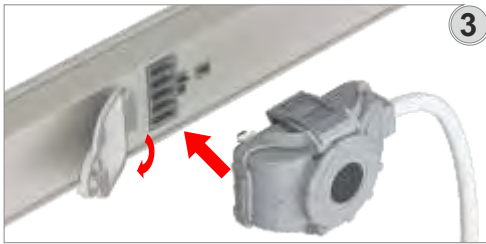
### ▶ Tap-off Plug Fixing



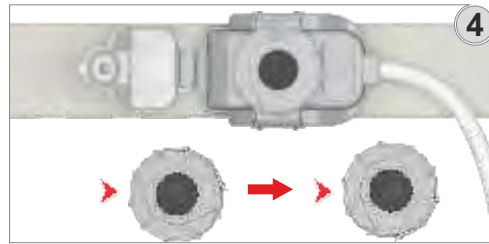
Turn the locking button on the busbar to OPEN (🔓) position.



Put the lock mechanism of plug into open (▶🔓) position.



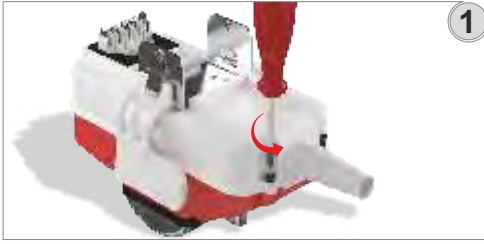
Direction of contacts should be as shown figure.



After fixing the plug to the busbar properly, turn the locking knob to LOCK (▶🔒) position.

## ▶▶ Tap-off Box Installation

### ▶ Mounting Tap-off Box with Miniature Circuit Breaker (MCB)



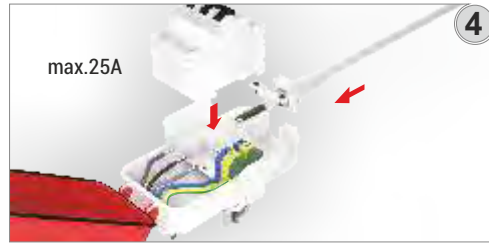
Use 052XZ1-F type cable, (3x2,5mm<sup>2</sup> for single phase, 5x2,5mm<sup>2</sup> for three phase) as required. Turn over the tap-off box and remove the two screws.



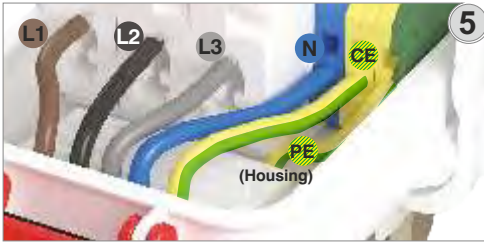
Open the cover of tap-off box.



Remove the plastic cable grip. Pass the cable through the gland which maintains the IP rating.



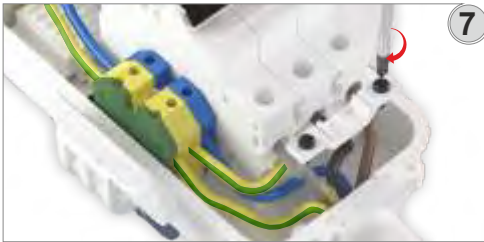
Install the MCB with a maximum of 25A to the DIN rail. (MCB should be "OFF" position.)



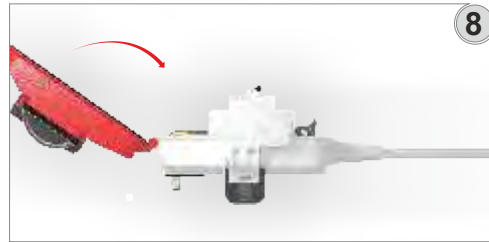
Connect the wiring at fuse entry terminal according to the colour combination as shown in the image. Make sure that the screws are tight.



Install the feeder cable at the fuse outlet terminal in the same way. Make sure that the screws are tight.



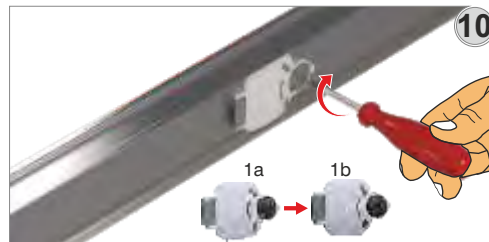
Refit the plastic cable grip.



Close the cover of tap-off box.



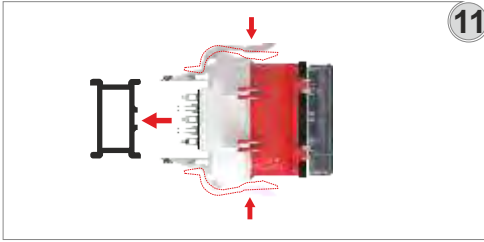
Turn over the tap-off box and tighten the screws. Make sure that the screws are tight.



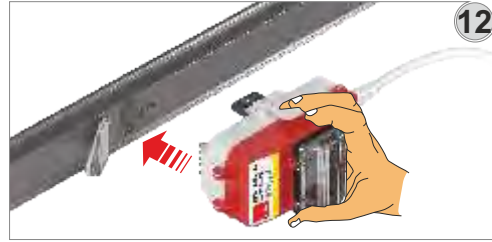
Put the plug in cover into open (1a) position.

## ▶▶ Tap-off Box Installation

### ▶ Mounting Tap-off Box with Miniature Circuit Breaker (MCB)



Align tap-off box with busbar plug-in while squeezing the ears on the sides of tap-off boxes.



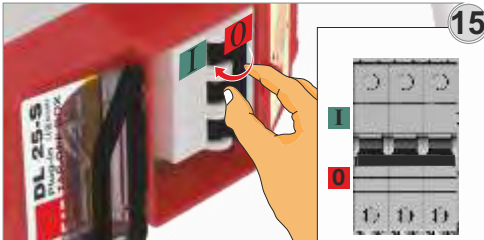
Direction at the tap-off box should be as shown in figure.



First, connect product earth terminal to busbar plug-in point. Then make sure that other terminals connect to busbar. Finally you should hear "CLICK" sound when you press tap-off box towards busbar.



Open the transparent cover of the tap-off box by untightening the screw.



Put " Miniature Circuit Breaker (MCB) "ON" position.



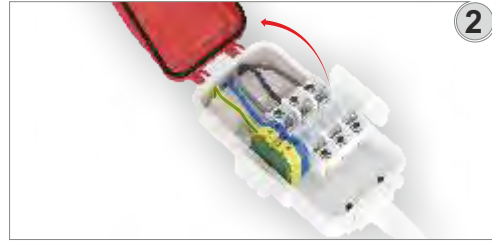
Close the transparent cover of the tap-off box by screwing.

## ▶▶ Tap-off Box Installation

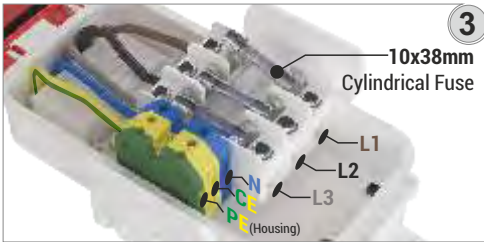
### ▶ Mounting Tap-off Box with Cylindrical Fuse



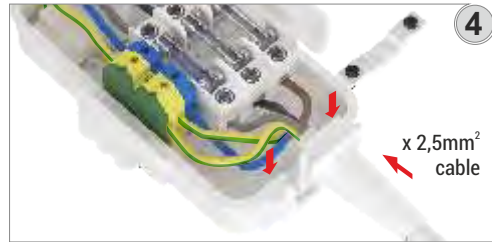
Use 052XZ1-F type cable, (3x2,5mm<sup>2</sup> for single phase, 5x2,5mm<sup>2</sup> for three phase) as required. Turn over the tap-off box and remove the two screws.



Open the cover of tap-off box.



Install 10x38mm cylindrical fuse with maximum of 16A to fuse holder.



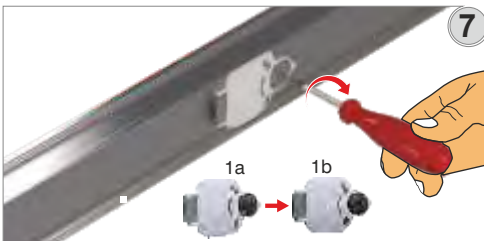
Connect feeder cables as shown above.



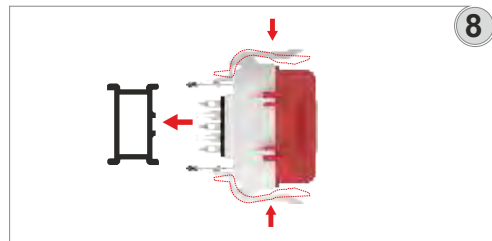
Fit the plastic component that organizes the cables and holds them together.



After closing the tap-off box cover, turn the tap-off box upside down and tighten the screws.



Put the plug-in cover to (1a) position.



Align tap-off box with busbar plug-in while squeezing the ears on the sides of tap-off boxes.



Direction at the tap-off box should be as shown in figure.



First, connect product earth terminal to busbar plug-in point. Then make sure that other terminals connect to busbar. Finally you should hear "CLICK" sound when you press tap-off box towards busbar.



Make sure that tap-off box is locked.

### DL / DL-DALI / DL-DIM

Rated Current	$I_n$	A	25	32	40
<b>Busbar Code</b>			<b>24</b>	<b>35</b>	<b>45</b>
Main Standards	IEC 61439-1/6, TS EN 61439-1/6				
Rated Isolation Voltage	$U_i$	V	690	690	690
Rated Frequency	f	Hz	50	50	50
Protection Degree	IP55				
External Mechanical Impacts (IK Code)*	IK07				
Rated Short-time Withstand Current (0,1s)	$I_{cw}$	kA <sub>(rms)</sub>	2,5	3	4
Rated Peak Withstand Current	$I_{pk}$	kA	4	5	6,5
<b>MEAN PHASE CONDUCTOR CHARACTERISTICS AT RATED CURRENT <math>I_n</math></b>					
Resistance at a conductor temperature of 20 °C	$R_{20}$	mW/m	5,745	4,400	2,938
Resistance at an ambient air temperature of 35 °C	R	mW/m	7,174	5,566	3,751
Reactance (Independent from Temperature)	X	mW/m	1,338	0,327	0,486
Positive and negative sequence impedances at an ambient air temperature of 35 °C	Z	mW/m	7,298	5,575	3,783
Positive and negative sequence impedances at a conductor temperature of 20 °C	$Z_{20}$	mW/m	5,898	4,412	2,978
Rated Power Loss at 35 °C		W/m	15,6	17,0	18,7
DC Resistance at a conductor temperature of 20 °C for Phases	$R_{ortPh}$	mW/m	5,581	4,320	3,035
DC Resistance at a conductor temperature of 20 °C for Neutral	$R_N$	mW/m	5,603	4,296	2,985
DC Resistance at a conductor temperature of 20 °C for PE	$R_{PE}$	mW/m	3,09	3,09	3,09
DC Resistance at a conductor temperature of 20 °C for CE	$R_{CPE}$	mW/m	5,633	4,335	3,015
<b>SECTIONS</b>					
<b>L1,L2,L3,N</b>		mm <sup>2</sup>	2,54	3,98	6,16
<b>CE</b> (5 Conductors - Optional "PE" for DL-DALI)		mm <sup>2</sup>	2,54	3,98	6,16
<b>PE</b> (Sheet Steel)		mm <sup>2</sup>	105	105	105
<b>PE</b> (Cu Equivalent-Sheet Steel)		mm <sup>2</sup>	5,8	5,8	5,8
<b>Busbar Weight</b> (4 Conductors)		kg/m	1,400	1,430	1,600
<b>Busbar Weight</b> (5 Conductors)		kg/m	1,500	1,550	1,720



## 25-32-40A PLUG-IN BUSBAR SYSTEMS PRODUCT SPECIFICATION (E-Line DL)

- 1- The busbar systems shall be type tested and certified according to IEC 61439-6 by international laboratories. They shall be manufactured in an ISO 9001 and ISO 14001 certified facility.
- 2- The rated insulation voltage of the system shall be 690V.
- 3- The busbar system shall have current ratings between 25A-32A-40A, Conductors shall be electrolytic copper and continuously tin plated along their entire length.
- 4- The conductors in the housing shall be insulated along their whole length and only stripped at the plug-in points to create the contact area.
- 5- The busbar shall have a total of 8 tap-off points (4 on each side) on a standard 3m length. The system should have the possibility to increase the number of tap-off points at the time of ordering. The tap-off points shall have protective covers to maintain the IP55 rating.
- 6- The DL Busbar System is double sided with a maximum of five independent conductors on each side. The number of conductors and the phase structure alternatives are as follows.
  - a) 2 Conductors; L1 / N / PE (Housing)
  - b) 3 Conductors; L1 / N / CE + PE (Housing)
  - c) 4 Conductors; L1 / L2 / L3 / N / PE (Housing)
  - d) 5 Conductors; L1 / L2 / L3 / N / CE + PE (Housing)
  - Phase and Neutral conductor sections ;
    - for 25A ; **2,54** mm<sup>2</sup>
    - for 32A ; **3,98** mm<sup>2</sup>
    - for 40A ; It is produced as **6,16** mm<sup>2</sup>.
  - PE (Housing); The body is used as an earth conductor and the equivalent copper cross-sectional area is 5,8 mm<sup>2</sup>.
  - CE (Clean Earth); Clean Earth is a separate and independent conductor, the cross-sectional area is equivalent to the phase conductors.

The conductors and numbers mentioned above are valid for each side, and the DL Busbar system can be produced in different structures for both sides, depending on demand and supply.
- 7- There shall be insulator supports at the plug-in points.
- 8- The joint of the busbar shall be a push-fit joint. Joint contacts shall be silver plated. To ensure a secure joint contact there shall be springs on both sides of the joint.
- 9- The IP rating of the busbar shall be IP55.
- 10- The housing of the busbar shall be manufactured from 0.50mm thick galvanised sheet steel with an option for a RAL 7038 electrostatic oven dried paint finish.
- 11- The contacts on the tap-off plugs shall be silver plated jawed construction which contact the conductors on both sides.
- 12- Standard brackets and fittings suitable for the housing of the busbar shall be those produced by the busbar manufacturer.

# DALI APPLIED LIGHTING BUSBAR SYSTEM GENERAL PRODUCT SPECIFICATIONS (E-Line DL-DALI)

Dali applied lighting busbar system ;

- 1- The busbar systems shall be type tested and certified according to IEC 61439-6 by international laboratories. They shall be manufactured in an ISO 9001 and ISO 14001 certified facility.
- 2- Devices to be connected shall be manufactured as per IEC 62386.
- 3- Tap-off plugs shall have physical measures to prevent incorrect connection and shall be manufactured so that no voltage will be present on the 'DALI' line due to the conductor configuration even if connected incorrectly.
- 4- The rated insulation voltage of the system shall be 690V.
- 5- The conductors have a current carrying capacity of at least 25 A and are tin-plated copper.
- 6- The conductors in the housing shall be insulated along their whole length and only stripped at the plug-in points to create the contact area.
- 7- The busbar system shall offer the following phase configuration options:
  - a) 9 conductors : L1 / L2 / L3 / N / CE + PE (Housing) and D1 / L(emg.) / N(emg.) / D2 "Three Phase+ Clean Earth"
  - b) 8 conductors : L1 / L2 / L3 / N + PE (Housing) and D1 / L(emg.) / N(emg.) / D2 "Three Phase"
  - c) 7 conductors : L / N / CE + PE (Housing) and D1 / L(emg.) / N(emg.) / D2 "Single Phase + Clean Earth"
  - d) 6 conductors : L / N + PE (Housing) and D1 / L(emg.) / N(emg.) / D2 "Single Phase"
- Phase and Neutral conductor sections ;
  - for 25A ; **2,54** mm<sup>2</sup>
  - for 32A ; **3,98** mm<sup>2</sup>
  - for 40A ; It is produced as **6,16** mm<sup>2</sup>.
- PE (Housing); The body is used as an earth conductor and the equivalent copper cross-sectional area is 5,8 mm<sup>2</sup>.
- 8- On a standard 3m length the busbar shall have a total of 4 tap-off points on each side, one side for the luminaire power supply and the other side for the DALI ballast and emergency kit control. The system should have the possibility to increase the number of tap-off points at the time of ordering. The tap-off points shall have protective covers to maintain the IP55 rating.
- 9- There shall be insulator supports at the plug-in points.
- 10- The tap-off covers for the luminaire supplies and the Dim Control tap-offs shall be of different colours and labelled to indicate which phase each is supplied from.
- 11- Conductors shall be electrolytic copper and continuously tin plated along their entire length.
- 12- The joint points of the main body are manufactured with snap-on, screw-on and capped construction.
- 13- Joint contacts shall be silver plated. To ensure a secure joint contact there shall be springs on both sides of the joint.
- 14- The tap-off points shall have protective covers to maintain the IP55 rating.
- 15- The housing of the busbar shall be manufactured from 0.50mm thick galvanised sheet steel with an option for a RAL 7038 electrostatic oven dried paint finish.
- 16- The contacts on the tap-off plugs shall be silver plated jawed construction which contact the conductors on both sides.
- 17- Standard brackets and fittings suitable for the housing of the busbar shall be those produced by the busbar manufacturer.

## DIM APPLIED LIGHTING BUSBAR SYSTEM GENERAL PRODUCT SPECIFICATIONS (E-Line DL-DIM)

Dim applied lighting busbar system ;

- 1- The busbar systems shall be type tested and certified according to IEC 61439-6 by international laboratories. They shall be manufactured in an ISO 9001 and ISO 14001 certified facility.
- 2- Tap-off plugs shall have physical measures to prevent incorrect connection and shall be manufactured so that no voltage will be present on the 'Dim Control' line due to the conductor configuration even if connected incorrectly.
- 3- The rated insulation voltage of the system shall be 690V.
- 4- The conductors have a current carrying capacity of at least 25 A and are tin-plated copper.
- 5- The conductors in the housing shall be insulated along their whole length and only stripped at the plug-in points to create the contact area.
- 6- The nine conductors shall be manufactured as one side L1/L2/L3/N+PE (Housing) and the other side as K1/P/K2/N/K3 " Three Phase".
  - Phase and Neutral conductor sections ;
    - for 25A ; **2,54** mm<sup>2</sup>
    - for 32A ; **3,98** mm<sup>2</sup>
    - for 40A ; It is produced as **6,16** mm<sup>2</sup>.
  - PE (Housing); The body is used as an earth conductor and the equivalent copper cross-sectional area is 5,8 mm<sup>2</sup>.
- 7- On a standard 3m length the busbar shall have a total of 4 tap-off points on each side, one side for the luminaire supply and the other side for the Dim and emergency kit. The system should have the possibility to increase the number of tap-off points at the time of ordering. The tap-off points shall have protective covers to maintain the IP55 rating.
- 8- There shall be insulator supports at the plug-in points.
- 9- The tap-off covers for the luminaire supplies and the Dim Control shall be of different colours and labelled to indicate which phase each is supplied from.
- 10- Conductors shall be electrolytic copper and continuously tin plated along their entire length.
- 11- The joint of the busbar shall be a push-fit joint.
- 12- Joint contacts shall be silver plated. To ensure a secure joint contact there shall be springs on both sides of the joint.
- 13- The tap-off points shall have protective covers to maintain the IP55 rating.
- 14- The housing of the busbar shall be manufactured from 0.50mm thick galvanised sheet steel with an option for a RAL 7038 electrostatic oven dried paint finish.
- 15- The contacts on the tap-off plugs shall be silver plated jawed construction which contact the conductors on both sides.
- 16- Standard brackets and fittings suitable for the housing of the busbar shall be those produced by the busbar manufacturer.

# CE DECLARATION OF CONFORMITY

**Product Group** E-Line DL Busbar Systems  
E-Line DL - DALI Busbar Systems  
E-Line DL - DIM Busbar Systems

**Manufacturer** EAE Elektrik Asansor End. Insaat San. ve Tic. A.S.  
Akçaburgaz Mahallesi, 3114. Sokak,  
No:10 34522 Esenyurt-Istanbul

The objects of the declaration described below is in conformity with the relevant Union harmonisation legislation. This declaration of conformity is issued under the sole responsibility of the manufacturer.

**Standard :**

**EN 61439-6**

Low-voltage switchgear and controlgear assemblies - Part 6: Busbar trunking systems

**CE - Directive**

2014/35/EU "The Low Voltage Directive"

2014/30/EU "Electromagnetic Compatibility (EMC) Directive"

2011/65/EU "Restriction of the use of certain hazardous substances (RoHS)"

**Technical Document Preparation Official:**

EAE Elektrik Asansör End. İnşaat San. ve Tic. A.Ş.  
Akçaburgaz Mahallesi, 3114. Sokak, No:10 34522 Esenyurt-Istanbul

Emre GÜRLEYEN

**Date**

08.03.2021

**Document Authorized Signatory**

Elif Gamze KAYA OK  
Deputy General Manager





# TEST CERTIFICATE

Issued to:	EAE Elektrik Asansör End. İnsaat San. ve Tic. A.Ş. Akçaburgaz Mahallesi 119, Sokak No: 10 34510 Esenyurt / İstanbul Turkey
For the product:	Low-voltage busbar trunking system
Trade name:	EAE
Type/Model:	DL 02
Ratings:	$I_{trc}$ 25 A at 50 Hz, $U_i$ 690 V, $U_{imp}$ 6 kV, $I_{sc}$ 2,5 kA - 0,1 s For more details see annex
Manufactured by:	EAE Elektrik Asansör End. İnsaat San. ve Tic. A.Ş. Akçaburgaz Mahallesi 119, Sokak No: 10 34510 Esenyurt / İstanbul Turkey
Subject:	Design verification
Requirements:	IEC 61439-6: 2012 Clauses: 10.2, 10.3, 10.4, 10.5, 10.9, 10.10, 10.11, 10.101 and Annex BB, CC, and DD
Remarks:	Busbar trunking system consists of feeder box, joint and straight lengths

This Test Certificate is granted on account of an examination by DEKRA, the results of which are laid down in report no. 2172392.01-INC, dated 4 May 2015.

The examination has been carried out on one single specimen of the product, submitted by the manufacturer. The Attestation does not include an assessment of the manufacturer's production. Conformity of his production with the specimen tested by DEKRA is not the responsibility of DEKRA.

Arnhem, 4 May 2015

Number: 2172392.100

DEKRA Certification B.V.



F.S. Strikwerda  
Certification Manager

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For the product:	Low-voltage busbar trunking system
Trade name:	EAE
Type/Model:	DL 03
Ratings:	$I_{nc}$ 32 A at 50 Hz, $U_i$ 690 V, $U_{imp}$ 6 kV, $I_{cw}$ 3 kA - 0,1 s For more details see annex
Manufactured by:	EAE Elektrik Asansör End. Insaat San. ve Tic. A.S. Akçaburgaz Mahallesi 119, Sokak No: 10 34510 Esenyurt / İstanbul Turkey
Subject:	Design verification
Requirements:	IEC 61439-6: 2012 Clauses: 10.2, 10.3, 10.4, 10.5, 10.9, 10.10, 10.11, 10.101 and Annex BB, CC, and DD
Remarks:	Busbar trunking system consists of feeder box, joint and straight lengths

This Test Certificate is granted on account of an examination by DEKRA, the results of which are laid down in report no. 2172392.02-INC, dated 4 May 2015.

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Issued to:	EAE Elektrik Asansör End. İnsaat San. ve Tic. A.Ş. Akçaburgaz Mahallesi 119, Sokak No: 10 34510 Esenyurt / İstanbul Turkey
For the product:	Low-voltage busbar trunking system
Trade name:	EAE
Type/Model:	DL 04
Ratings:	$I_{nc}$ 40 A at 50 Hz, $U_i$ 690 V, $U_{imp}$ 6 kV, $I_{cw}$ 4 kA - 0,1 s For more details see annex
Manufactured by:	EAE Elektrik Asansör End. İnsaat San. ve Tic. A.Ş. Akçaburgaz Mahallesi 119, Sokak No: 10 34510 Esenyurt / İstanbul Turkey
Subject:	Design verification
Requirements:	IEC 61439-6: 2012 Clauses: 10.2, 10.3, 10.4, 10.5, 10.9, 10.10, 10.11, 10.101 and Annex BB, CC, and DD
Remarks:	Busbar trunking system consists of feeder box, joint and straight lengths


This Test Certificate is granted on account of an examination by DEKRA, the results of which are laid down in report no. 2172392.03-INC, dated 4 May 2015.

The examination has been carried out on one single specimen of the product, submitted by the manufacturer. The Attestation does not include an assessment of the manufacturer's production. Conformity of his production with the specimen tested by DEKRA is not the responsibility of DEKRA.

Amhem, 4 May 2015

Number: 2172392.102

DEKRA Certification B.V.




F.S. Strikwerda  
Certification Manager

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Component List	Component	Quantity
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Company : Project : Project No :		Prepared by Name : Date : Signature :



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Project No :		Date :
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Project :		
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Prepared by	Name :	
	Date :	
	Signature :	



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# PRODUCT TYPES



## BUSBAR ENERGY DISTRIBUTION SYSTEMS

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## CABLE TRAYS

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## TROLLEY BUSBAR ENERGY DISTRIBUTION SYSTEMS

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## INDOOR SOLUTIONS

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## SUPPORT SYSTEMS

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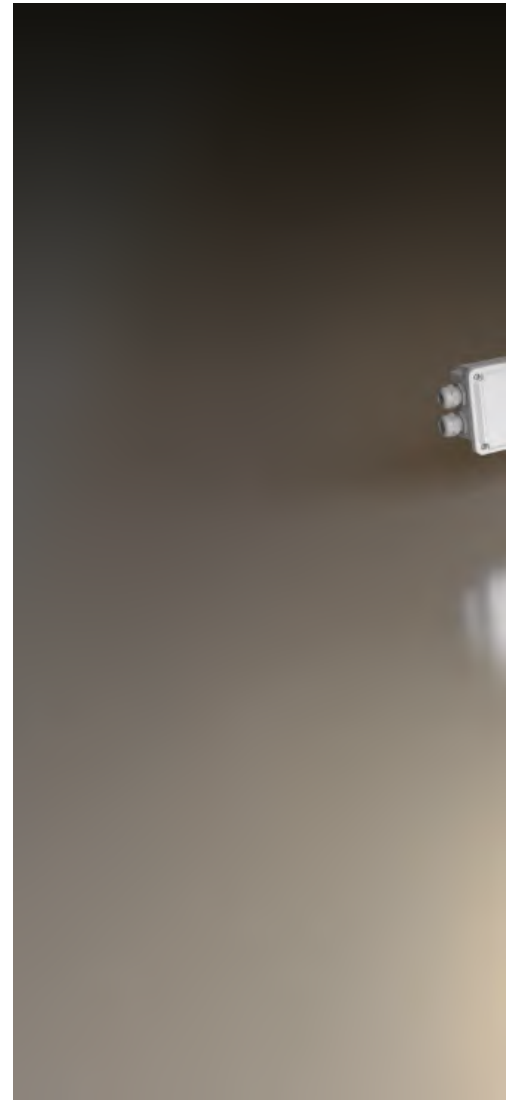
EAE Elektrik A.Ş.  
Akcaburgaz Mahallesi,  
3114. Sokak, No:10 34522  
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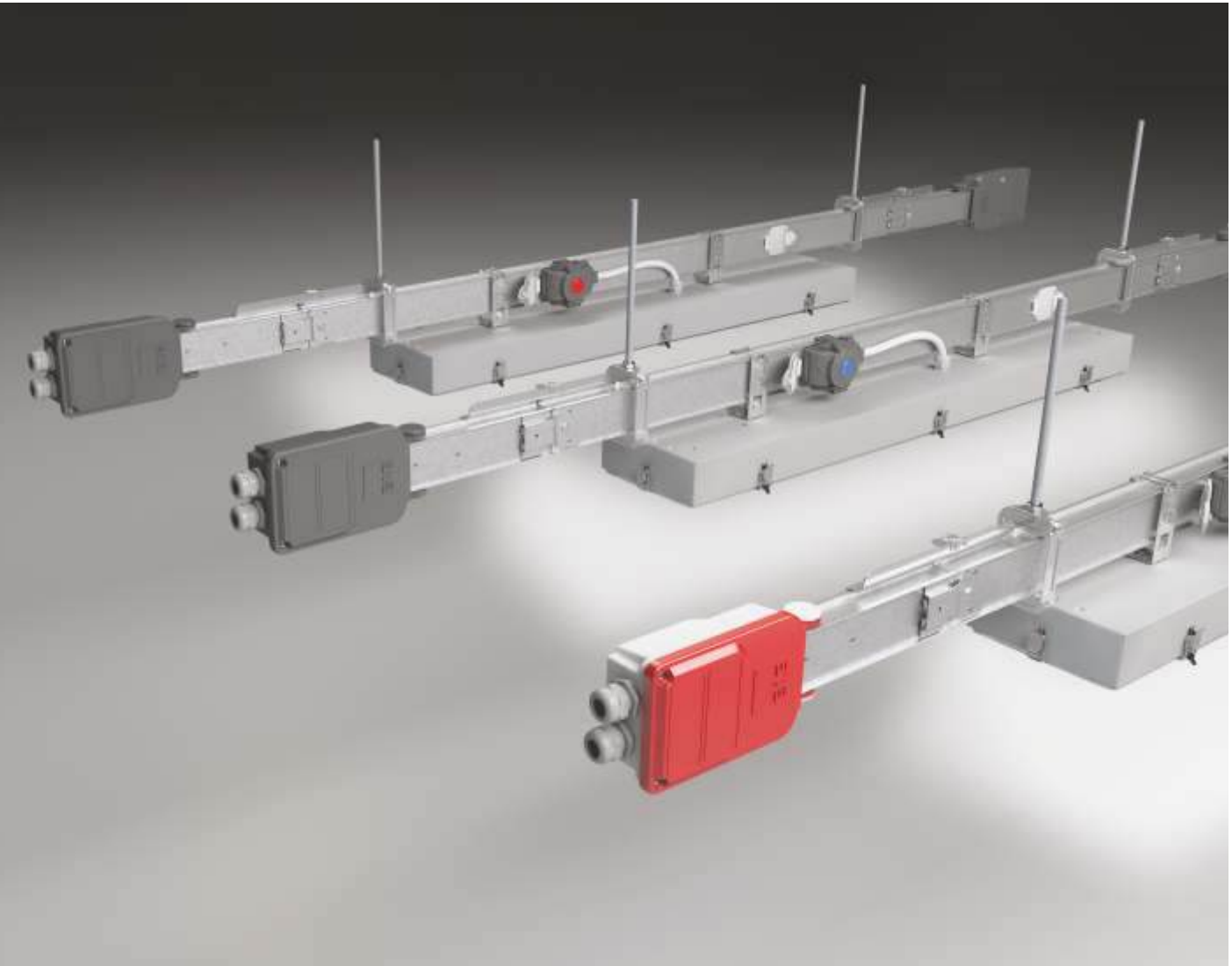
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# E-LINESL

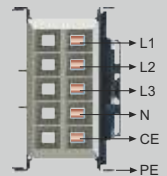
Low Power&Lighting Busbar System 25-32-40 A





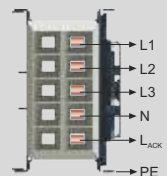
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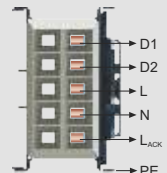
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## ►► General Characteristics

E-Line DL Busbar Distribution Systems are used in building electrical installations with a power requirement of 25 to 40A. 16A output sockets and 25A output boxes are designed to supply lighting and wall socket circuit as per their specifications.

EAE Busbar Systems are produced in accordance with ISO 9001 standards with a certified Quality Assurance System using the world's latest manufacturing technologies. Units are designed and tested according to IEC 61439-6.



### Tap-off Plugs

Tap-off plugs for SL Busbar systems are designed with different contact arrangements.

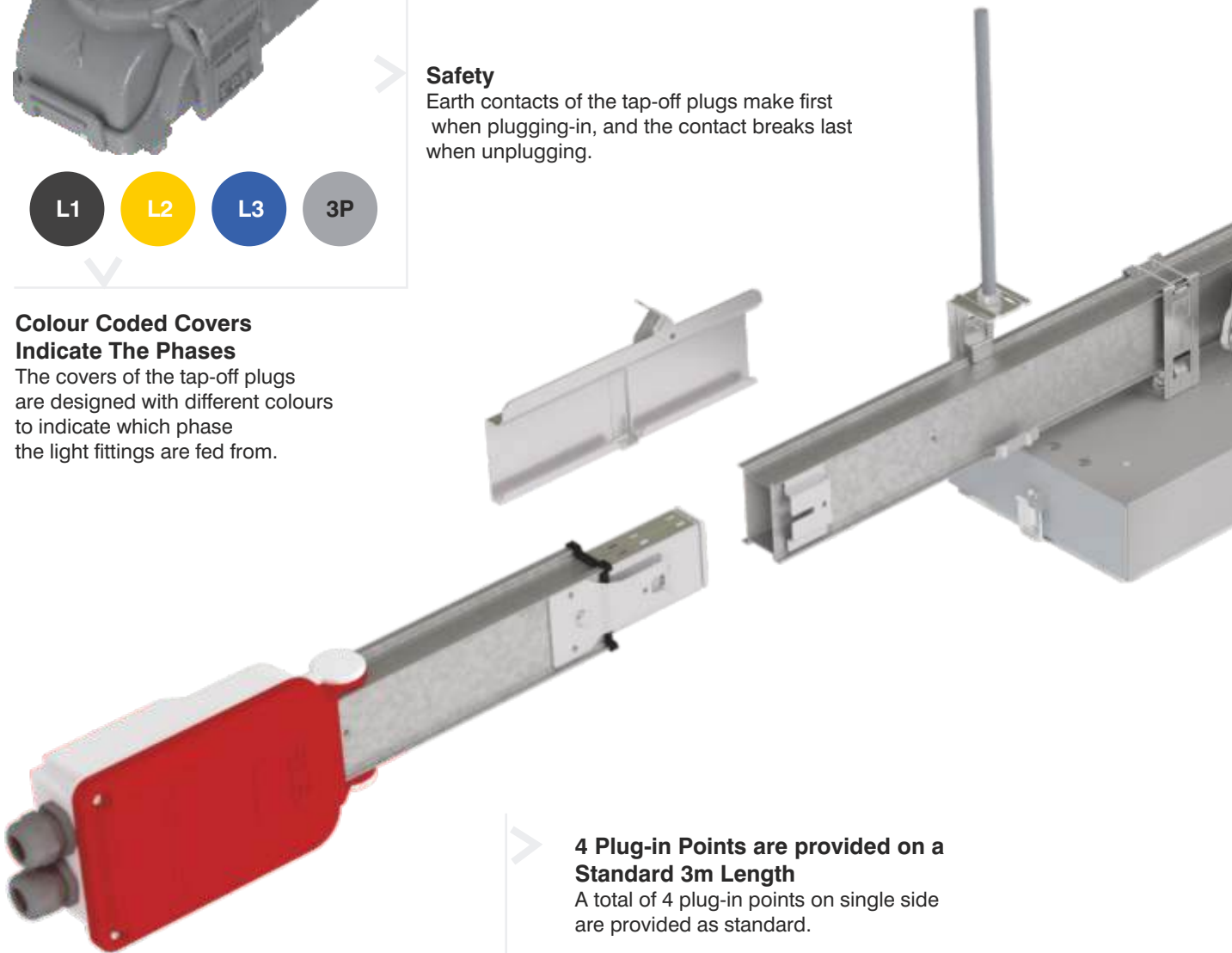
All the plugs are produced in order to be connected to the busbar in one direction to prevent the use of a wrong phase.

### Safety

Earth contacts of the tap-off plugs make first when plugging-in, and the contact breaks last when unplugging.

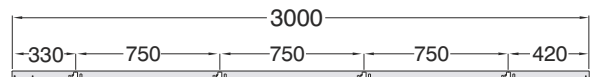
### Colour Coded Covers Indicate The Phases

The covers of the tap-off plugs are designed with different colours to indicate which phase the light fittings are fed from.

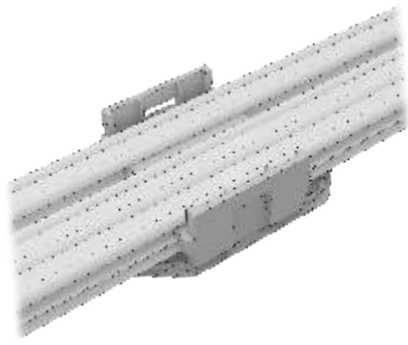


### 4 Plug-in Points are provided on a Standard 3m Length

A total of 4 plug-in points on single side are provided as standard.

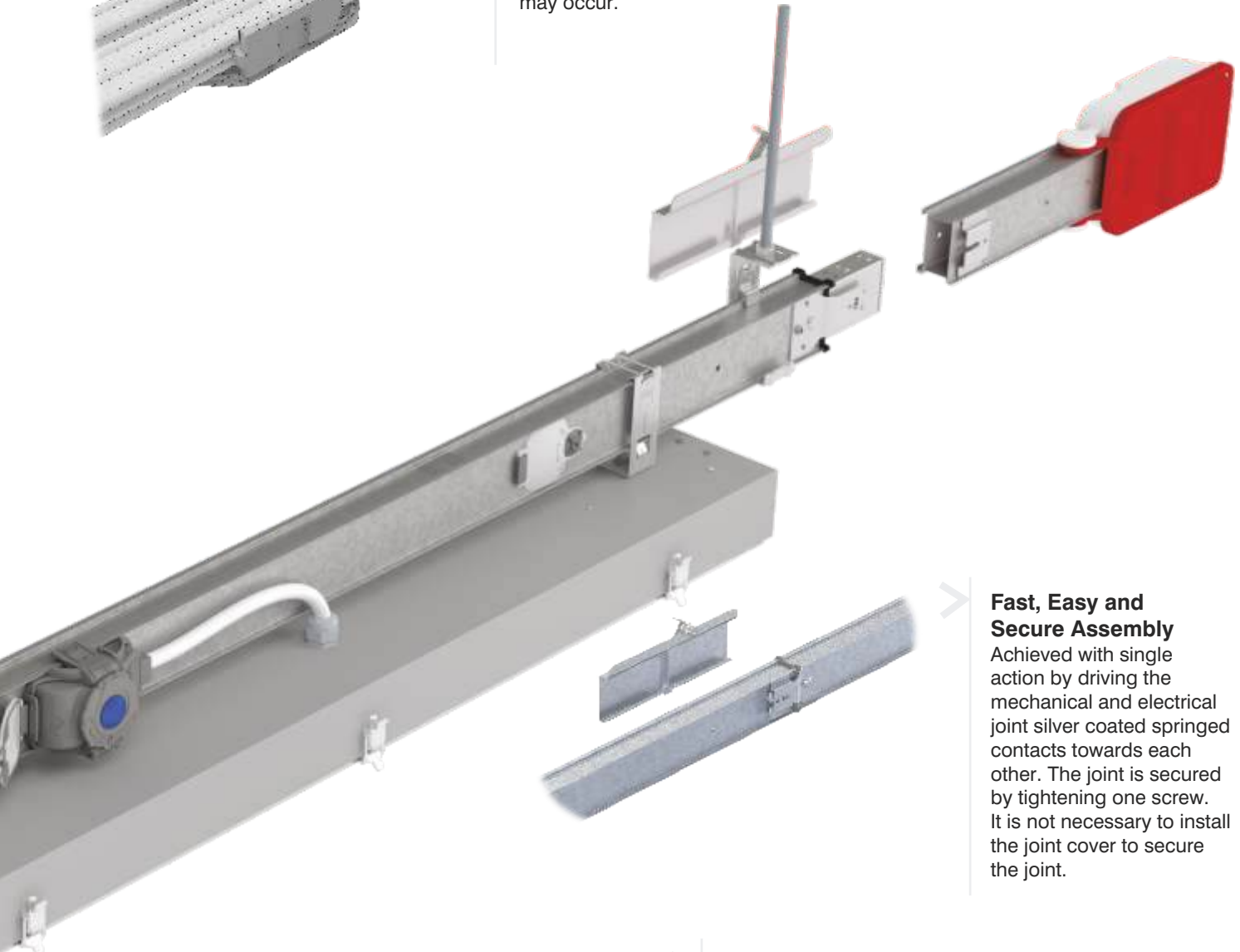






### Full Isolation

The busbar conductors are coated in flame-proof insulation material. Total security regarding human safety is provided even when the body is severely damaged due to external heavy impacts that may occur.



### Fast, Easy and Secure Assembly

Achieved with single action by driving the mechanical and electrical joint silver coated springed contacts towards each other. The joint is secured by tightening one screw. It is not necessary to install the joint cover to secure the joint.



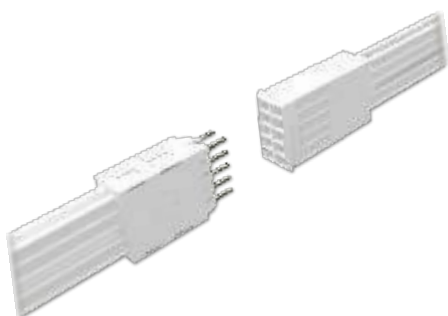
### Tin Coated Conductors

Formation of Copper Oxide is prevented by tin plating the conductors along their full length. This ensures that contact resistances are minimised. The contacts of the tap-off plugs contact the busbar conductors on two surfaces.



### Silver Coated Joint Contacts

The contacts at the joints of the busbar and the contacts of all tap-off units are silver coated. The silver coating minimises the contact impedances, thus preventing the over-heating of the contacts in case of possible over-loads.



BUSBAR TYPE  
 BUSBAR CURRENT RATING  
 CONDUCTOR CONFIGURATION  
 PAINTED (B) / UNPAINTED (-)  
 COMPONENT

SL 2 5 B - S T D

Busbar Type

	Busbar Rated Current	Code
SL	25A	2
	32A	3
	40A	4

Busbar Current Rating

### Components

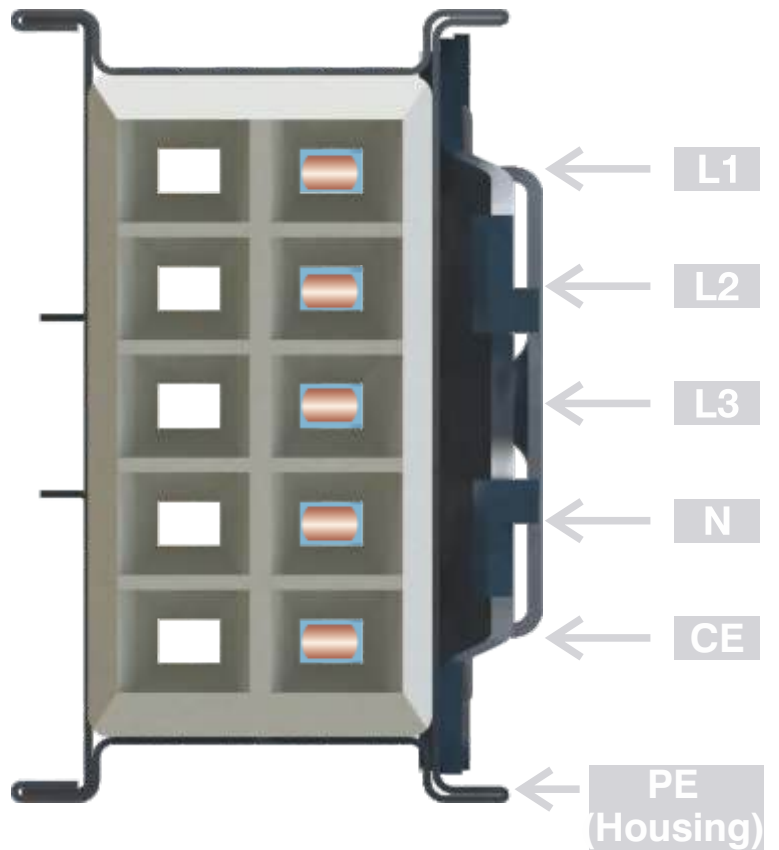
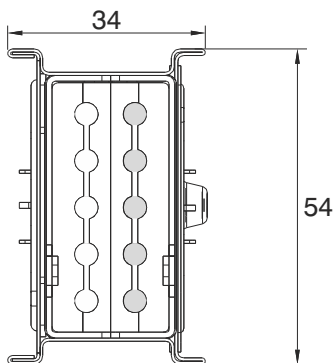
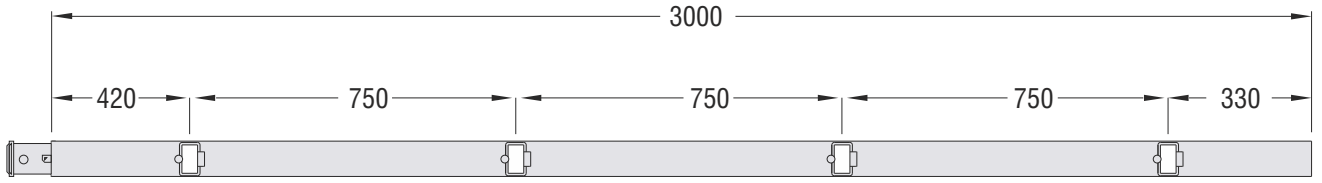
Standard Length	STD
Special Length	X
Feeder Box	B1
End Feeder Box	B2
Central Feeder Box	BO
Flexible Elbow	FD
Underfloor Feeder	B1
Underfloor End Feeder	B2

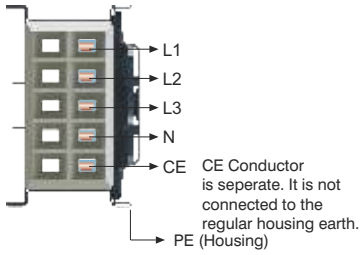
Painted(*)	B
Unpainted	-

(\*) It may be manufactured as painted as per customer request.

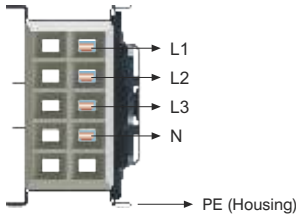
### Conductor Configuration

Conductor Size	Code	Configuration
2 Conductors	2	L3, N, PE(Housing)
3 Conductors	3	L3, N, CE,PE(Housing)
4 Conductors	4	L1, L2, L3, N, PE(Housing)
5 Conductors	5	L1, L2, L3, N, CE,PE(Housing)

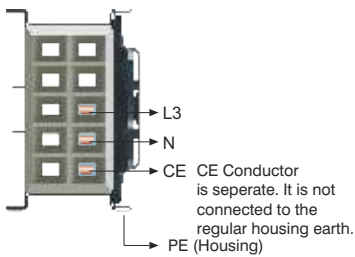




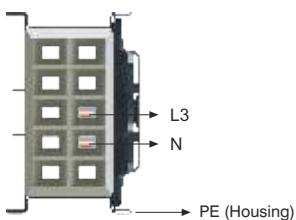
Current (A)	Description	Conductor Conf.	Order Code
25	SL 25 Busbar	5	3055928
32	SL 35 Busbar	5	3055929
40	SL 45 Busbar	5	3055930



Current (A)	Description	Conductor Conf.	Order Code
25	SL 24 Busbar	4	3055924
32	SL 34 Busbar	4	3055925
40	SL 44 Busbar	4	3055927



Current (A)	Description	Conductor Conf.	Order Code
25	SL 23 Busbar	3	3055921
32	SL 33 Busbar	3	3055922
40	SL 43 Busbar	3	3055923

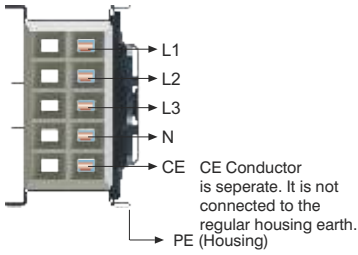


Current (A)	Description	Conductor Conf.	Order Code
25	SL 22 Busbar	2	3055917
32	SL 32 Busbar	2	3055918
40	SL 42 Busbar	2	3055919

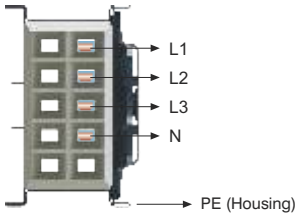
■ Body is manufactured from 0.50 mm galvanised sheet steel.

■ For non-standard product, please contact our technical office.

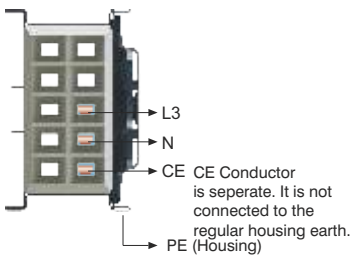
### Special Length Busbars are manufactured as 1m/1,5m/2m/2,5m.



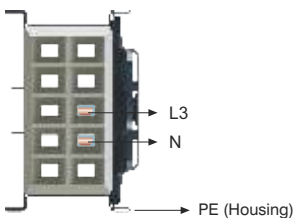
Current (A)	Description	Conductor Conf.	Order Code
25	SL 25 Special Length	5	3055940
32	SL 35 Special Length	5	3055941
40	SL 45 Special Length	5	3055942



Current (A)	Description	Conductor Conf.	Order Code
25	SL 24 Special Length	4	3055937
32	SL 34 Special Length	4	3055938
40	SL 44 Special Length	4	3055939



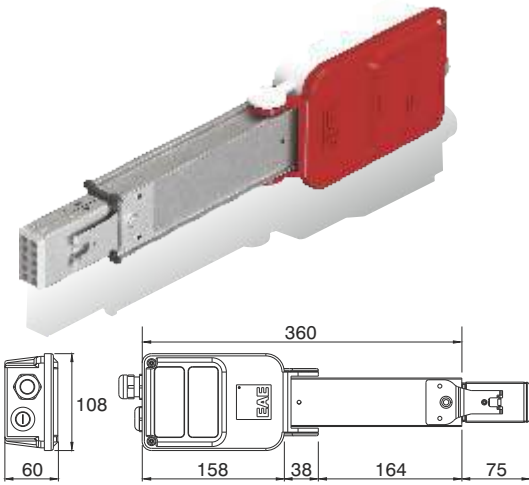
Current (A)	Description	Conductor Conf.	Order Code
25	SL 23 Special Length	3	3055934
32	SL 33 Special Length	3	3055935
40	SL 43 Special Length	3	3055936



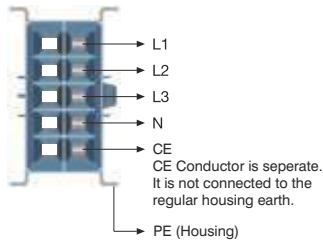
Current (A)	Description	Conductor Conf.	Order Code
25	SL 22 Special Length	2	3055931
32	SL 32 Special Length	2	3055932
40	SL 42 Special Length	2	3055933

■ Body is manufactured from 0.50 mm galvanised sheet steel.

■ For non-standard product, please contact our technical office.



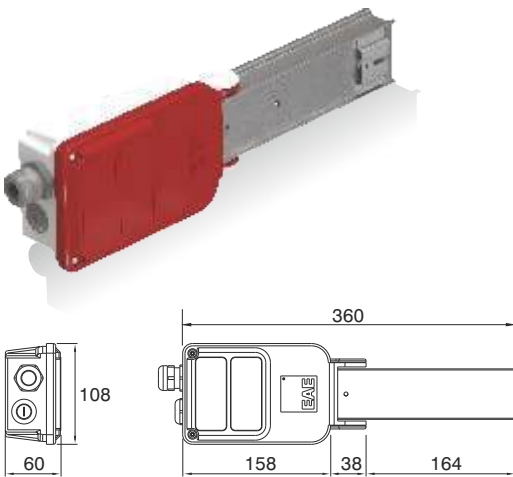
Feeder Unit



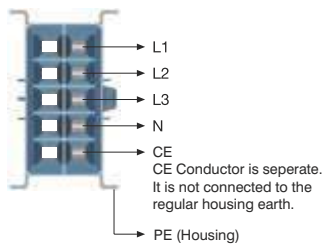
### (B1) Feeder Units

Current (A)	Description	Busbars	Order Code
25	SL 25 - B1 Feeder Unit	SL 25 SL 24 SL 23 SL 22	3055943
32	SL 35 - B1 Feeder Unit	SL 35 SL 34 SL 33 SL 32	3055945
40	SL 45 - B1 Feeder Unit	SL 45 SL 44 SL 43 SL 42	3055946

\* With PE Conductor and M25 Gland as standard.



End Feeder Unit



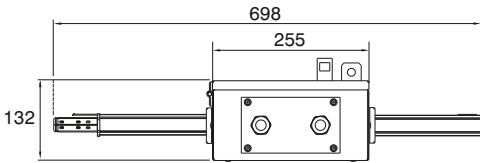
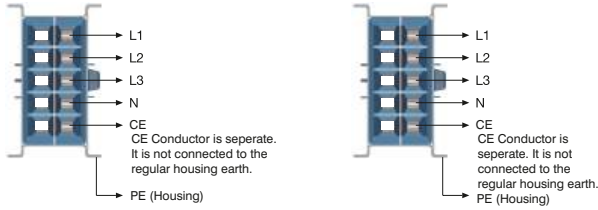
### (B2) End Feeder Units

Current (A)	Description	Busbars	Order Code
25	SL 25 - B2 End Feeder Unit	SL 25 SL 24 SL 23 SL 22	3055948
32	SL 35 - B2 End Feeder Unit	SL 35 SL 34 SL 33 SL 32	3055949
40	SL 45 - B2 End Feeder Unit	SL 45 SL 44 SL 43 SL 42	3055951

\* With PE Conductor and M25 Gland as standard.

- The body is manufactured from 0,50 mm galvanised sheet steel.
- For non-standard product, please contact our technical office.

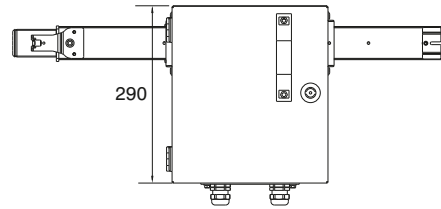
### (BO) Central Feeder Units



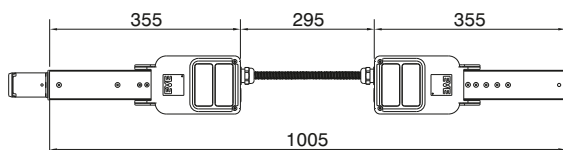
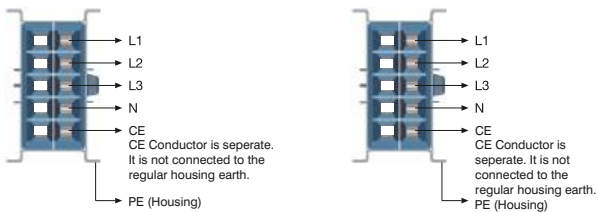
Central Feeder Unit

Current (A)	Description	Busbars	Order Code
25	SL 25 - BO Central Feeder Unit	SL 25 SL 24 SL 23 SL 22	3133158
32	SL 35 - BO Central Feeder Unit	SL 35 SL 34 SL 33 SL 32	3133160
40	SL 45 - BO Central Feeder Unit	SL 45 SL 44 SL 43 SL 42	3133162

\* With PE Conductor and M25 Gland as standard.



### (FD) Flexible Elbow

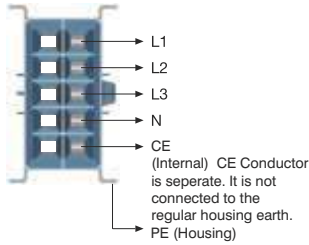
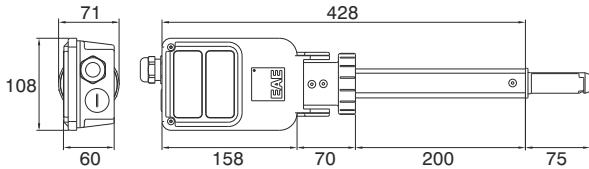


Flexible Elbow

Current (A)	Description	Busbars	Order Code
25	SL 25 - FD Flexible Elbow	SL 25 SL 24 SL 23 SL 22	3055952
32	SL 35 - FD Flexible Elbow	SL 35 SL 34 SL 33 SL 32	3055953
40	SL 45 - FD Flexible Elbow	SL 45 SL 44 SL 43 SL 42	3055954

\* With PE Conductor and M25 Gland as standard.

- Body is manufactured from 0.50 mm galvanised sheet steel.
- For non-standard product, please contact our technical office.

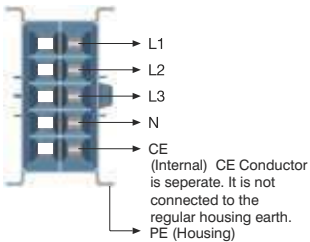
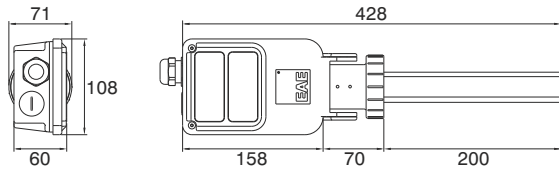


Feeder Unit

### (B1) Feeder Units

Current (A)	Description	Busbars	Order Code
25	SL 25 - B1 Raised Underfloor Feeder Unit	SL 25	3055973
		SL 24	
		SL 23 SL 22	
32	SL 35 - B1 Raised Underfloor Feeder Unit	SL 35	3055974
		SL 34	
		SL 33 SL 32	
40	SL 45 - B1 Raised Underfloor Feeder Unit	SL 45	3055975
		SL 44	
		SL 43	
		SL 42	

\* With PE conductor and M25 Gland as standard.



End Feeder Unit

### (B2) End Feeder Units

Current (A)	Description	Busbars	Order Code
25	SL 25 - B2 Raised Underfloor End Feeder Unit	SL 25	3055980
		SL 24	
		SL 23 SL 22	
32	SL 35 - B2 Raised Underfloor End Feeder Unit	SL 35	3055981
		SL 34	
		SL 33 SL 32	
40	SL 45 - B2 Raised Underfloor End Feeder Unit	SL 45	3055982
		SL 44	
		SL 43	
		SL 42	

\* With PE conductor and M25 Gland as standard.

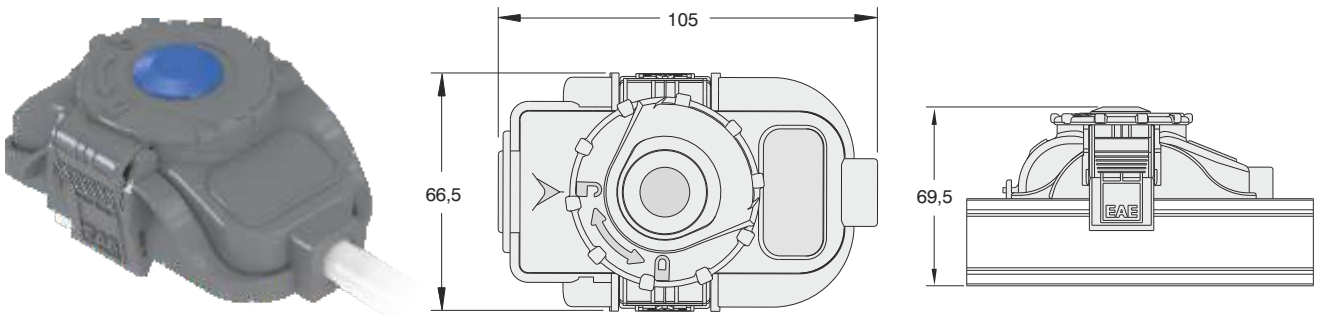
- Body is manufactured from 0.50 mm galvanised sheet steel.
- For non-standard product, please contact our technical office.



## Tap-off Plug (B)

Current (A)	Description	Cable Length / Type		Phase	Properties	Order Code	
		Halogen Free	Standard (PVC)			Halogen Free	Standard (PVC)
16	DL / SL 16 - B Tap-off Plug L1	0,75 m.	0,75 m.	L1, N, PE	With Black Cover	3063696	3086972
	DL / SL 16 - B Tap-off Plug L2	052XZ1-F 3x1,5 mm <sup>2</sup> cable(*)	NYMHY 3x1,5 mm <sup>2</sup> cable(*)	L2, N, PE	With Yellow Cover	3063697	3086974
	DL / SL 16 - B Tap-off Plug L3			L3, N, PE	With Blue Cover	3063698	3086975
	DL / SL 16 - B Tap-off Plug L123	5x1,5 mm <sup>2</sup>	5x1,5 mm <sup>2</sup>	L1, L2, L3, N, PE	With Grey Cover	3066319	3086976

\* Plugs with different length cable available upon request.

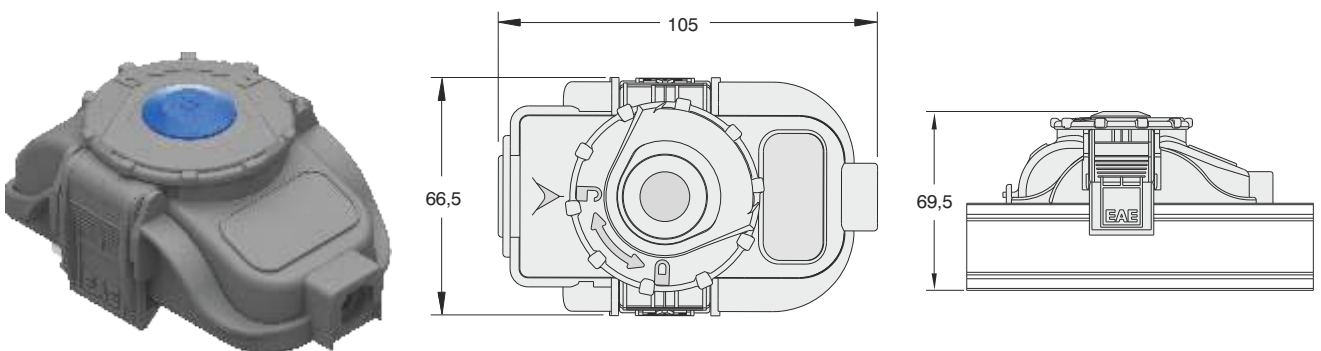


DL / SL 16 - B

## Plug with Fuse Holder (FS) / Plug with Clips (K)

Current (A)	Description	Cable Length / Type	Phase	Properties	Order Code
16	DL / SL 16 - FS Tap-off Plug L1	-	L1, N, PE	With Black Cover	3063703
	DL / SL 16 - FS Tap-off Plug L2	-	L2, N, PE	With Yellow Cover	3063704
	DL / SL 16 - FS Tap-off Plug L3	-	L3, N, PE	With Blue Cover	3063705
16	DL / SL 16 - K Tap-off Plug L1	-	L1, N, PE	Without Fuses.	3063699
	DL / SL 16 - K Tap-off Plug L2	-	L2, N, PE	Without Fuses.	3063701
	DL / SL 16 - K Tap-off Plug L3	-	L3, N, PE	Without Fuses.	3063702
	DL / SL 16 - K Tap-off Plug L123	-	L1, L2, L3, N, PE	Without Fuses.	3063700

\*\* Cylindrical fuse not included.

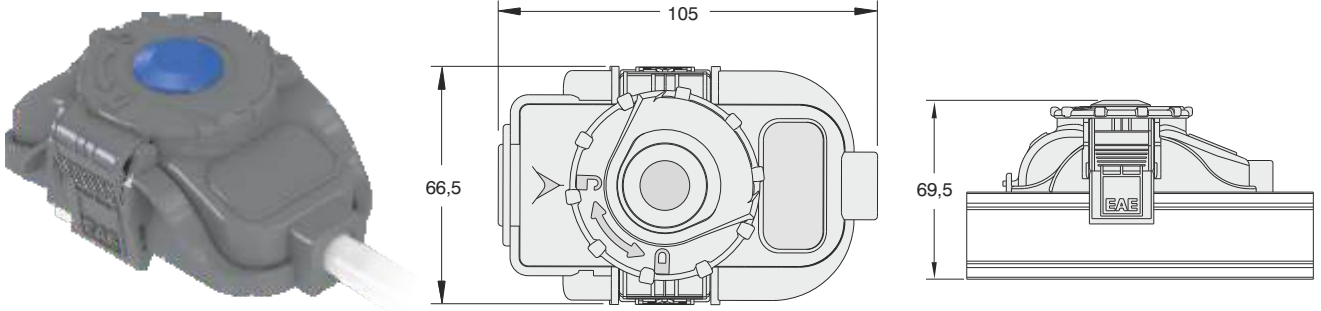


DL / SL 16 - FS  
DL / SL 16 - K

### Tap-off Plug (B) (Clean Earth)

Current (A)	Description	Cable Length / Type		Phase	Properties	Order Code	
		Halogen Free	Standard (PVC)			Halogen Free	Standard (PVC)
16	DL / SL 16 - B - CE Tap-off Plug L1	0,75 m.	0,75 m.	L1, N, CE	With Black Cover	3063709	3086978
	DL / SL 16 - B - CE Tap-off Plug L2	052XZ1-F 3x1,5 mm <sup>2</sup> cable(*)	NYMHY 3x1,5 mm <sup>2</sup> cable(*)	L2, N, CE	With Yellow Cover	3063710	3086979
	DL / SL 16 - B - CE Tap-off Plug L3			L3, N, CE	With Blue Cover	3063711	3086980
	DL / SL 16 - B - CE Tap-off Plug L123	5x1,5 mm <sup>2</sup>	5x1,5 mm <sup>2</sup>	L1, L2, L3, N, CE	With Grey Cover	3066323	3086982

\* Plugs with different length cable available upon request.

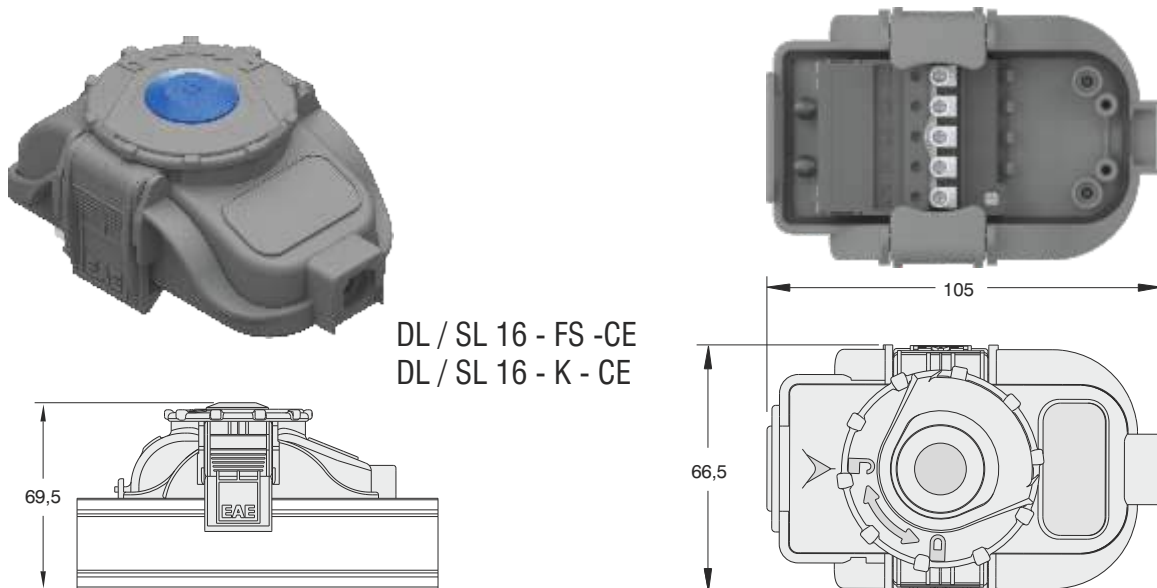


DL / SL 16 - B - CE

### Plug with Fuse Holder (FS) / Plug with Clips (K) (Clean Earth)

Current (A)	Description	Cable Length / Type	Phase	Properties	Order Code	
16	DL / SL 16 - FS - CE Tap-off Plug L1	-	L1, N, CE	With Black Cover	With 5 x 20 mm fuse holders (**) Max. diameter of feeder cable is Ø 11 mm.	3063717
	DL / SL 16 - FS - CE Tap-off Plug L2	-	L2, N, CE	With Yellow Cover		3063718
	DL / SL 16 - FS - CE Tap-off Plug L3	-	L3, N, CE	With Blue Cover		3063719
16	DL / SL 16 - K - CE Tap-off Plug L1	-	L1, N, CE	With Black Cover	Without Fuses. Max. diameter of feeder cable is Ø 11 mm.	3063712
	DL / SL 16 - K - CE Tap-off Plug L2	-	L2, N, CE	With Yellow Cover		3063715
	DL / SL 16 - K - CE Tap-off Plug L3	-	L3, N, CE	With Blue Cover		3063716
	DL / SL 16 - K - CE Tap-off Plug L123	-	L1, L2, L3, N, CE	With Grey Cover		3063713

\*\* Cylindrical fuse not included.



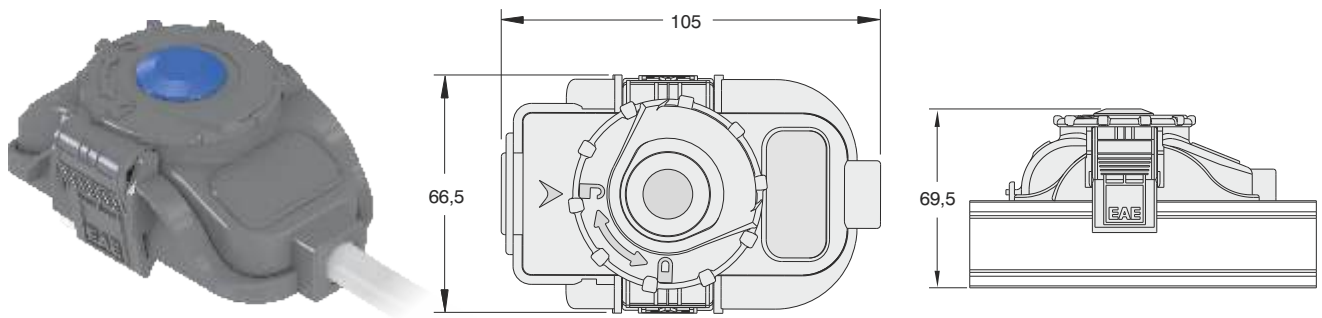
DL / SL 16 - FS - CE  
DL / SL 16 - K - CE

## Tap-off Plug (BL)\*\*

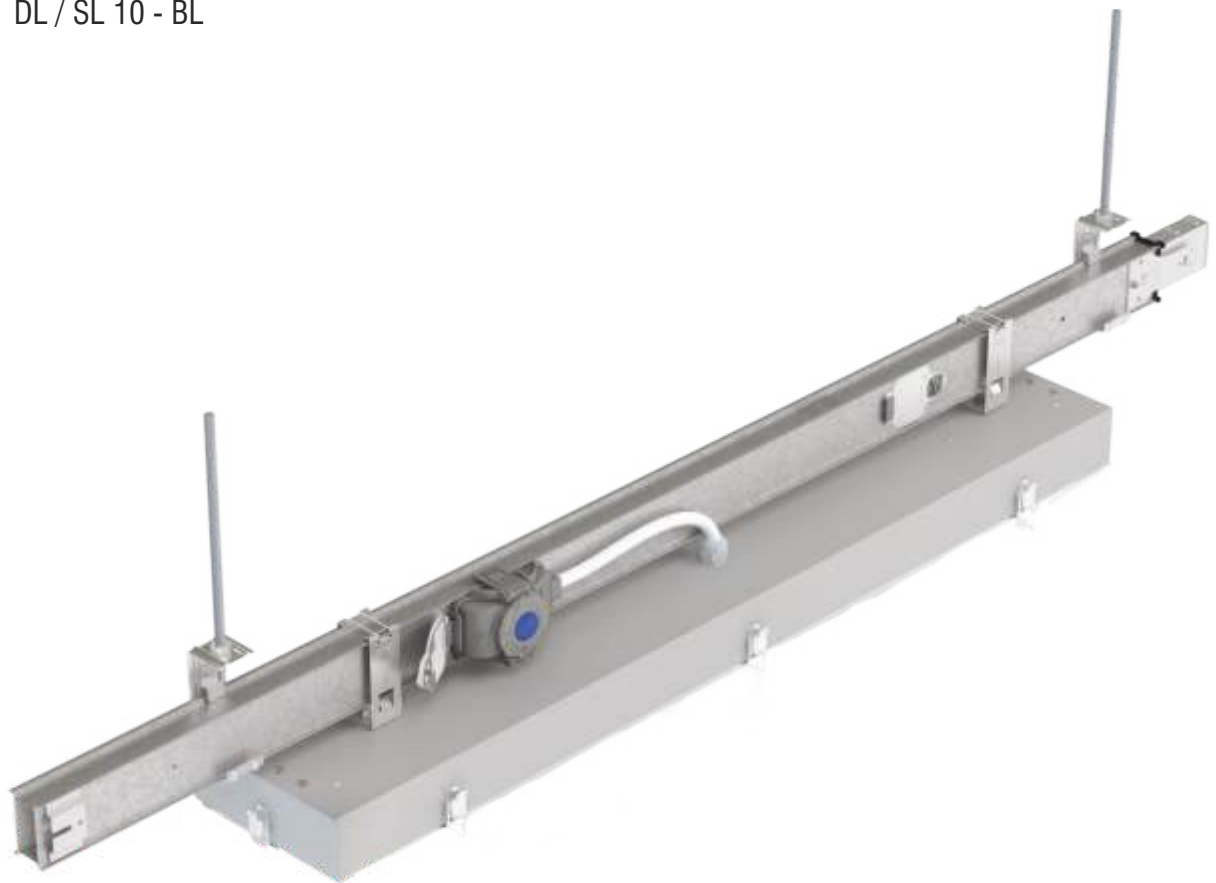
Current (A)	Description	Cable Length / Type	Phase	Properties	Order Code
					senza alogeno
10	DL / SL 10 - BL Tap-off Plug L1	0,75 m. 052XZ1-F 3x0,75 mm <sup>2</sup> cable(*)	L1, N, PE	With Black Cover	3134599
	DL / SL 10 - BL Tap-off Plug L2		L2, N, PE	With Yellow Cover	3134600
	DL / SL 10 - BL Tap-off Plug L3		L3, N, PE	With Blue Cover	3134601

\* Plugs with different length cable available upon request.

\*\* It is used only for lighting fittings supply in lighting circuits.



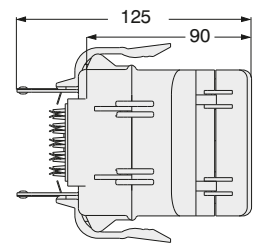
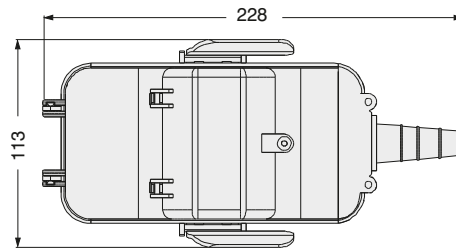
DL / SL 10 - BL



### Suitable for MCB Empty Tap-off Box (S)

Current (A)	Description	Phase	Properties	Order Code
25	DL/SL 25 - S Empty Tap-off Box(CE)* L1,L2,L3	L1, L2, L3, N, CE	Included DIN rail. It can be used with MCB.(*)	3024481
	DL/SL 25 - S Empty Tap-off Box(CE)* L1	L1, N, CE		3066511
	DL/SL 25 - S Empty Tap-off Box(CE)* L2	L2, N, CE		3066512
	DL/SL 25 - S Empty Tap-off Box(CE)* L3	L3, N, CE		3066513
	DL/SL 25 - S Empty Tap-off Box (PE)* L1,L2,L3	L1, L2, L3, N, PE		3024482
	DL/SL 25 - S Empty Tap-off Box (PE)* L1	L1, N, PE		3066508
	DL/SL 25 - S Empty Tap-off Box (PE)* L2	L2, N, PE		3066509
	DL/SL 25 - S Empty Tap-off Box (PE)* L3	L3, N, PE		3066510

\* MCB not included.

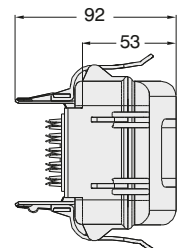
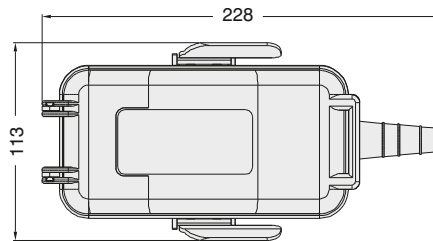


DL / SL 25 - S (CE)  
DL / SL 25 - S (PE)

### Suitable for Fuse Holder Empty Tap-off Box (FS)


Current (A)	Description	Phase	Properties	Order Code
16	DL/SL 16 - FS Empty Tap-off Box(CE)* L1,L2,L3	L1, L2, L3, N, CE	Included DIN rail. It can be used with 10x38mm cylindrical fuse holder and cylindrical fuse. (**)	3084928
	DL/SL 16 - FS Empty Tap-off Box(CE)* L1	L1, N, CE		3084929
	DL/SL 16 - FS Empty Tap-off Box(CE)* L2	L2, N, CE		3084930
	DL/SL 16 - FS Empty Tap-off Box(CE)* L3	L3, N, CE		3084931
	DL/SL 16 - FS Empty Tap-off Box (PE)* L1,L2,L3	L1, L2, L3, N, PE		3084923
	DL/SL 16 - FS Empty Tap-off Box (PE)* L1	L1, N, PE		3084925
	DL/SL 16 - FS Empty Tap-off Box (PE)* L2	L2, N, PE		3084926
	DL/SL 16 - FS Empty Tap-off Box (PE)* L3	L3, N, PE		3084927

\*\* Cylindrical fuse not included.



DL / SL 16 - FS (CE)  
DL / SL 16 - FS (PE)

Component List	Component	Quantity
Item		
Company : Project : Project No :		Prepared by Name : Date : Signature :



Please duplicate this page for your own use.

# ELINESL-ACK

## ►► General Characteristics

E-Line SL-ACK Busbar Systems are used in 25-40A energy consuming building electrical installations. Due to the features of the 16A outlet plugs, especially the lighting fixtures with emergency lighting kit (ACK) is designed to feed lighting circuits on a single output pin.

EAE Busbar Systems are produced in accordance with ISO 9001 standards with a certified Quality Assurance System using the world's latest manufacturing technologies. Units are designed and tested according to IEC 61439-6.

### Tap-off Plugs

Tap-off plugs of SL-ACK busbar systems are designed with different contact arrangements. All the plugs are produced in one direction to prevent the use of a wrong phase.

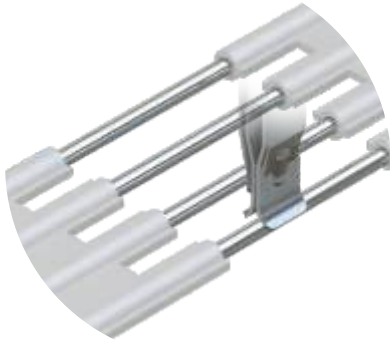
### Safety

Earth contacts of the tap-off plugs make first when plugging-in, and the contact breaks last when unplugging.



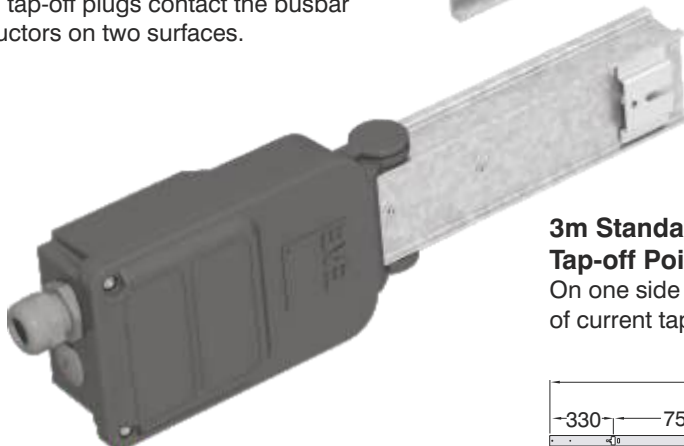
### Colour Coded Covers Indicate The Phases

The covers of the tap-off plugs are designed with different colours to indicate which phase the light fittings are fed from.



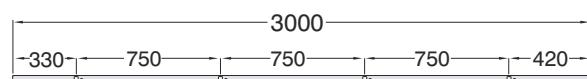
### Tin Coated Conductors and Contact Structure

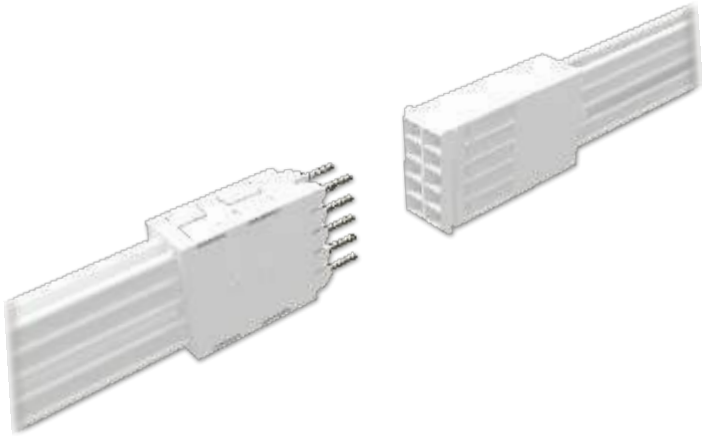
Formation of Copper Oxide is prevented by tin plating the conductors along their full length. This ensures that contact resistances are minimised. The contacts of the tap-off plugs contact the busbar conductors on two surfaces.



### 3m Standard Length 4 Current Tap-off Points

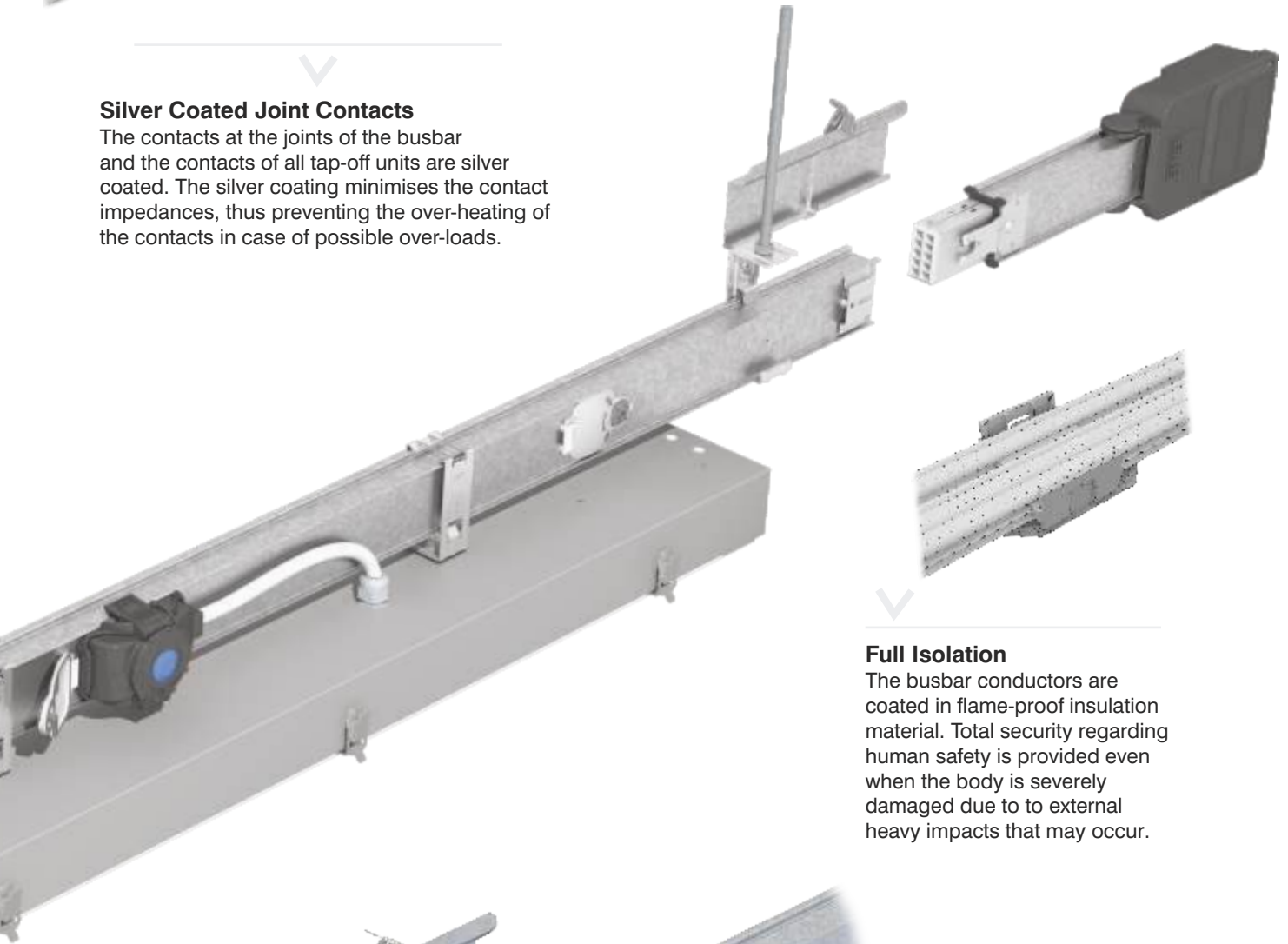
On one side of the busbar there is a total of 4 points of current tap-off points and is offered as standard.





### Silver Coated Joint Contacts

The contacts at the joints of the busbar and the contacts of all tap-off units are silver coated. The silver coating minimises the contact impedances, thus preventing the over-heating of the contacts in case of possible over-loads.



### Full Isolation

The busbar conductors are coated in flame-proof insulation material. Total security regarding human safety is provided even when the body is severely damaged due to external heavy impacts that may occur.

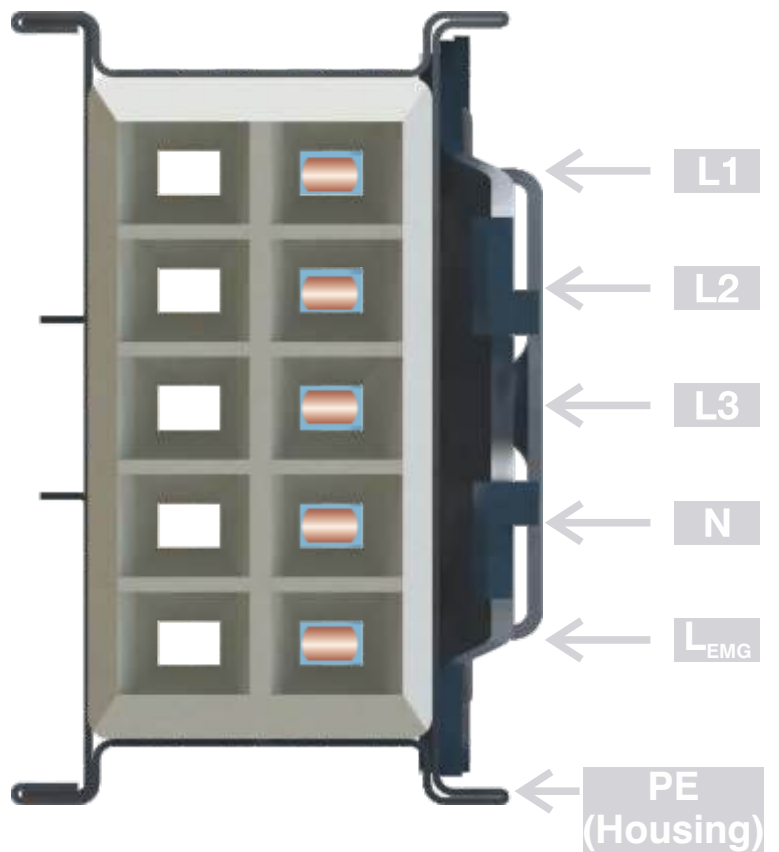
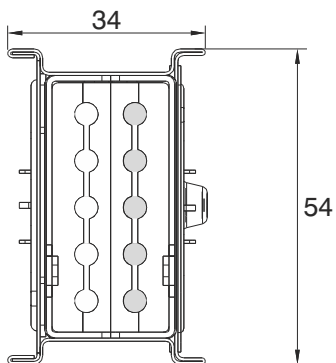
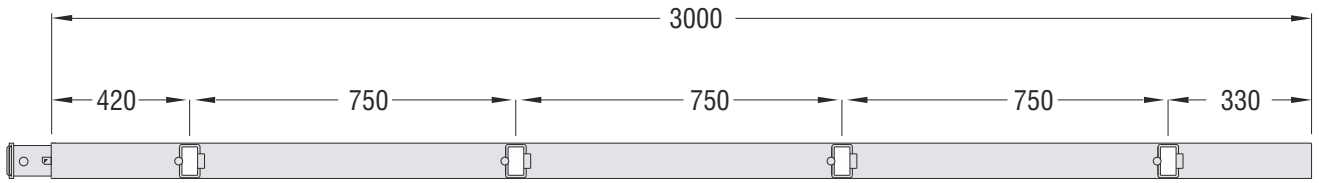


### Fast, Easy and Secure Assembly

Achieved with single action by driving the mechanical and electrical joint silver coated sprung contacts towards each other. The joint is secured by tightening one screw. It is not necessary to install the joint cover to secure the joint.

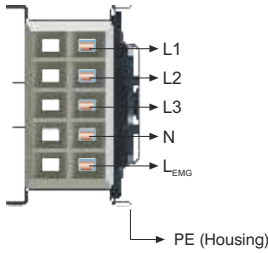
# ELINESL-ACK

►► Product Selection Tables / Standard Busbars

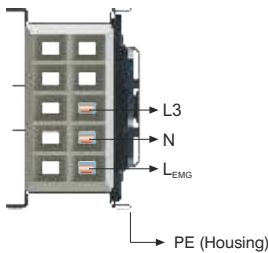




### Standard Busbar (3m)

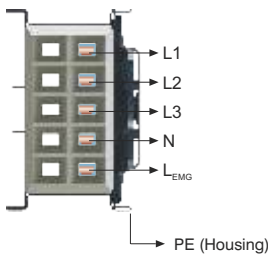


Current (A)	Description	Conductor Conf.(*)	Order Code
25	SL 25 - ACK - STD Busbar	5	3108871
32	SL 35 - ACK - STD Busbar	5	3108888
40	SL 45 - ACK - STD Busbar	5	3108904

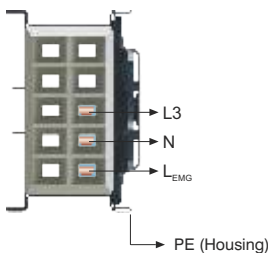


Current (A)	Description	Conductor Conf.(*)	Order Code
25	SL 23 - ACK - STD Busbar	3	3108872
32	SL 33 - ACK - STD Busbar	3	3108889
40	SL 43 - ACK - STD Busbar	3	3108905

### Special Length Busbar (Special Length Busbars are manufactured as 1m/1,5m/2m/2,5m.)



Current (A)	Description	Conductor Conf.(*)	Order Code
25	SL 25 - ACK - X Special Length	5	3108873
32	SL 35 - ACK - X Special Length	5	3108890
40	SL 45 - ACK - X Special Length	5	3108906



Current (A)	Description	Conductor Conf.(*)	Order Code
25	SL 23 - ACK - X Special Length	3	3108874
32	SL 33 - ACK - X Special Length	3	3108891
40	SL 43 - ACK - X Special Length	3	3108907

#### ATTENTION :

(\*) SL-ACK Busbar; Is three phase, and the reference voltage of the power supply, remote control and emergency kit unit (ACK) of the luminaries is provided by a single plug.

■ Body is manufactured from 0.50 mm galvanised sheet steel.

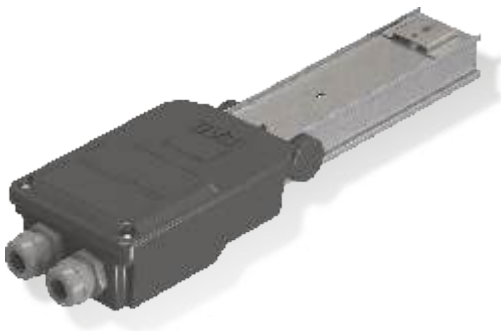
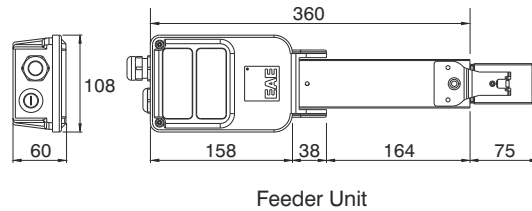
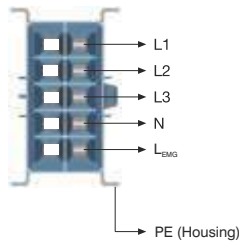
■ For non-standard product, please contact our technical office.



### (B1) Feeder Units

Current (A)	Description	Busbars	Order Code
25	SL 25 - ACK - B1 Feeder Unit	SL - ACK 25 SL - ACK 23	3108878
32	SL 35 - ACK - B1 Feeder Unit	SL - ACK 35 SL - ACK 33	3108895
40	SL 45 - ACK - B1 Feeder Unit	SL - ACK 45 SL - ACK 43	3108911

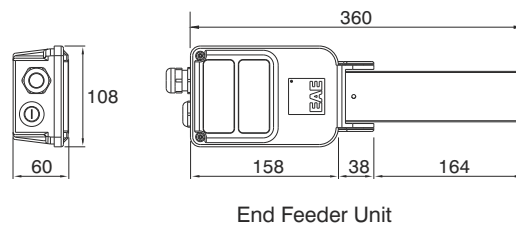
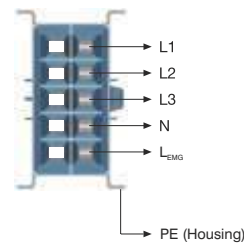
\* With M25 Gland as standard.



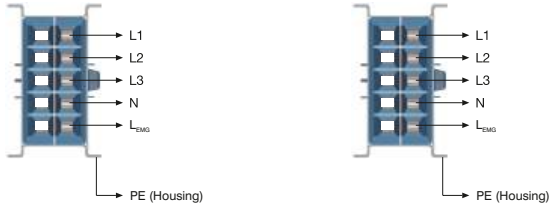
### (B2) End Feeder Units

Current (A)	Description	Busbars	Order Code
25	SL 25 - ACK - B2 End Feeder Unit	SL - ACK 25 SL - ACK 23	3108879
32	SL 35 - ACK - B2 End Feeder Unit	SL - ACK 35 SL - ACK 33	3108896
40	SL 45 - ACK - B2 End Feeder Unit	SL - ACK 45 SL - ACK 43	3108912

\* With M25 Gland as standard.



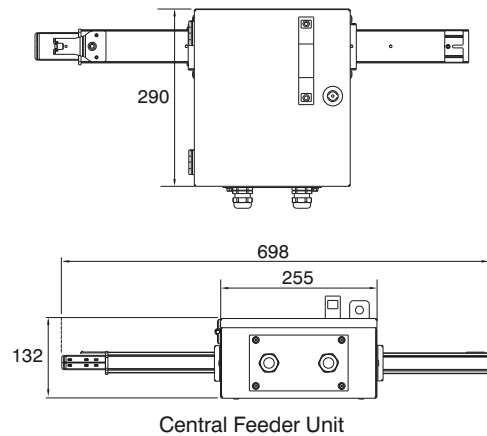
■ The body is manufactured from 0,50 mm galvanised sheet steel.  
 ■ For non-standard product, please contact our technical office.



## (BO) Central Feeder Units

Current (A)	Description	Busbars	Order Code
25	SL 25 - ACK - BO Central Feeder Unit	SL - ACK 25 SL - ACK 23	3133164
32	SL 35 - ACK - BO Central Feeder Unit	SL - ACK 35 SL - ACK 33	3133166
40	SL 45 - ACK - BO Central Feeder Unit	SL - ACK 45 SL - ACK 43	3133168

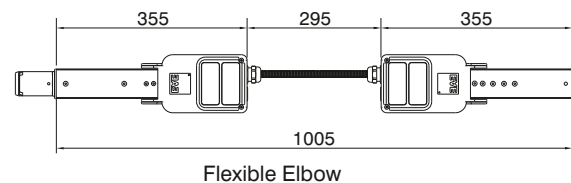
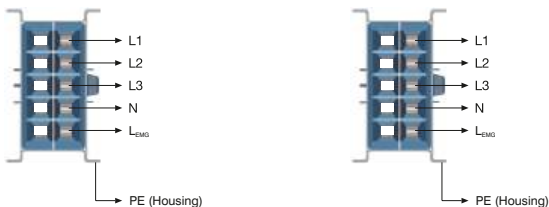
\* With M25 Gland as standard.



## (FD) Flexible Elbow

Current (A)	Description	Busbars	Order Code
25	SL 25 - ACK - FD Flexible Elbow	SL - ACK 25 SL - ACK 23	3108882
32	SL 35 - ACK - FD Flexible Elbow	SL - ACK 35 SL - ACK 33	3108899
40	SL 45 - ACK - FD Flexible Elbow	SL - ACK 45 SL - ACK 43	3108915

\* With M25 Gland as standard.

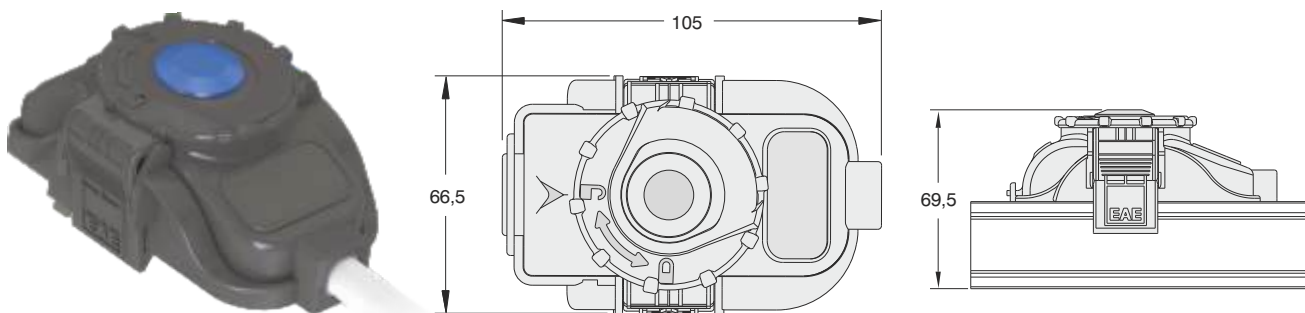


■ Body is manufactured from 0.50 mm galvanised sheet steel.  
 ■ For non-standard product, please contact our technical office.

## Tap-off Plug (B)

Current (A)	Description	Cable Length / Type		Phase	Properties	Order Code	
		Halogen Free	Standard (PVC)			Halogen Free	Standard (PVC)
16	SL - ACK 16 - B Power Tap-off Plug L1	0,75 m. 052XZ1-F	0,75 m. NYMHY	L1, N, PE	With Black Cover	3108952	3108953
	SL - ACK 16 - B Power Tap-off Plug L2	3x1,5 mm <sup>2</sup>	3x1,5 mm <sup>2</sup>	L2, N, PE	With Yellow Cover	3108956	3108957
	SL - ACK 16 - B Power Tap-off Plug L3	Cable(*)	Cable(*)	L3, N, PE	With Blue Cover	3108958	3108959
16	SL-ACK 16 - B Power+ACK Tap-off Plug L1	0,75 m. 052XZ1-F	0,75 m. NYMHY	L1, N, L <sub>ACK</sub> , PE	With Black Cover	3108960	3108961
	SL-ACK 16 - B Power+ACK Tap-off Plug L2	4x1,5 mm <sup>2</sup>	4x1,5 mm <sup>2</sup>	L2, N, L <sub>ACK</sub> , PE	With Yellow Cover	3108962	3108963
	SL-ACK 16 - B Power+ACK Tap-off Plug L3	Cable(*)	Cable(*)	L3, N, L <sub>ACK</sub> , PE	With Blue Cover	3108964	3108965

\* Plugs with different length cable available upon request.

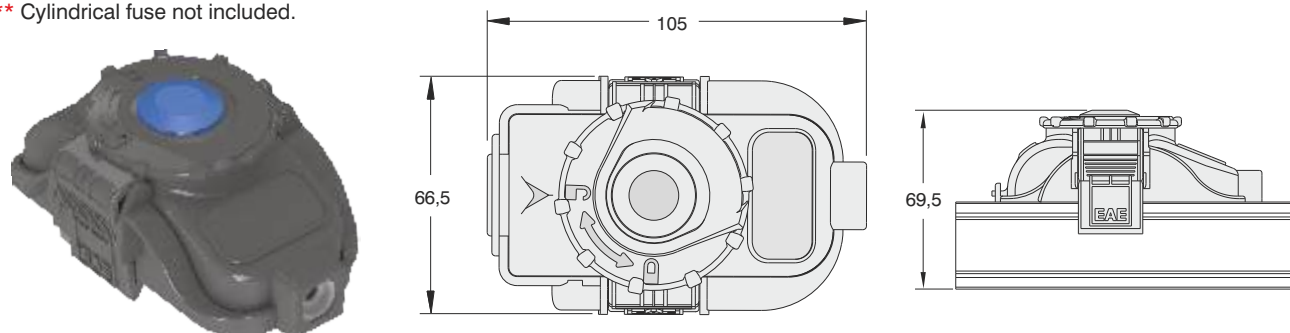


SL - ACK 16 - B Power  
SL - ACK 16 - B Power+ACK

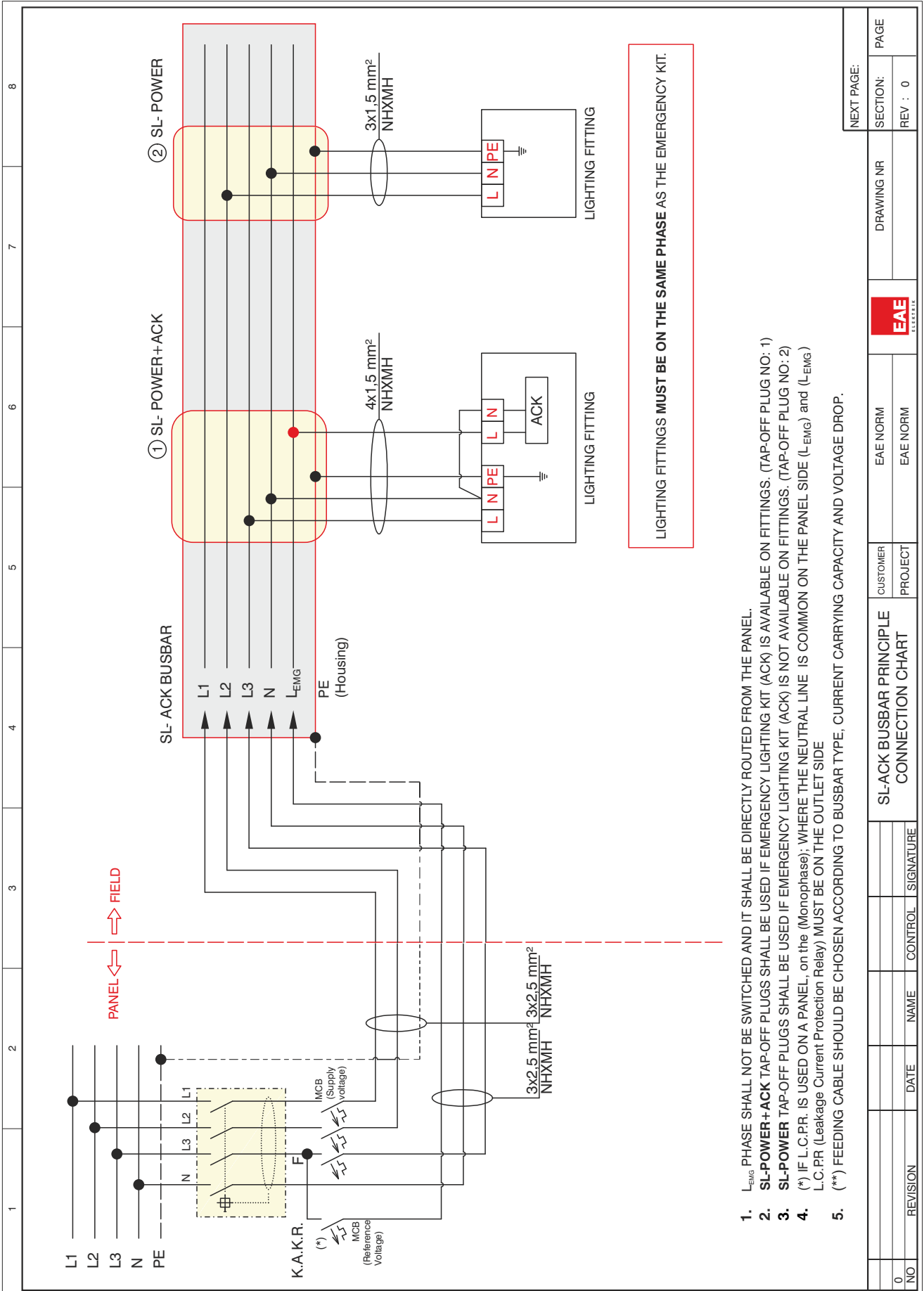
## Plug with Fuse Holder (FS) / Plug with Clips (K)

Current (A)	Description	Cable Length / Type	Phase	Properties	Order Code	
16	SL-ACK 16 - FS Power Tap-off Plug L1	-	L1, N, PE	With Black Cover	With 5 x 20 mm fuse holders (**). Max. diameter of feeder cable is Ø 11 mm.	3108966
	SL-ACK 16 - FS Power Tap-off Plug L2	-	L2, N, PE	With Yellow Cover		3108967
	SL-ACK 16 - FS Power Tap-off Plug L3	-	L3, N, PE	With Blue Cover		3108968
16	SL-ACK 16 - K Power Tap-off Plug L1	-	L1, N, PE	With Black Cover	Without Fuses. Max. diameter of feeder cable is Ø 11 mm.	3108972
	SL-ACK 16 - K Power Tap-off Plug L2	-	L2, N, PE	With Yellow Cover		3108973
	SL-ACK 16 - K Power Tap-off Plug L3	-	L3, N, PE	With Blue Cover		3108974
16	SL-ACK 16 - FS Power+ACK Tap-off Plug L1	-	L1, N, L <sub>ACK</sub> , PE	With Black Cover	With 5 x 20 mm fuse holders (**). Max. diameter of feeder cable is Ø 11 mm.	3108969
	SL-ACK 16 - FS Power+ACK Tap-off Plug L2	-	L2, N, L <sub>ACK</sub> , PE	With Yellow Cover		3108970
	SL-ACK 16 - FS Power+ACK Tap-off Plug L3	-	L3, N, L <sub>ACK</sub> , PE	With Blue Cover		3108971
16	SL-ACK 16 - K Power+ACK Tap-off Plug L1	-	L1, N, L <sub>ACK</sub> , PE	With Black Cover	Without Fuses. Max. diameter of feeder cable is Ø 11 mm.	3108976
	SL-ACK 16 - K Power+ACK Tap-off Plug L2	-	L2, N, L <sub>ACK</sub> , PE	With Yellow Cover		3108977
	SL-ACK 16 - K Power+ACK Tap-off Plug L3	-	L3, N, L <sub>ACK</sub> , PE	With Blue Cover		3108978

\*\* Cylindrical fuse not included.



SL - ACK 16 - FS  
SL - ACK 16 - K



1. L-EMG PHASE SHALL NOT BE SWITCHED AND IT SHALL BE DIRECTLY ROUTED FROM THE PANEL.
2. SL-POWER+ACK TAP-OFF PLUGS SHALL BE USED IF EMERGENCY LIGHTING KIT (ACK) IS AVAILABLE ON FITTINGS. (TAP-OFF PLUG NO: 1)
3. SL-POWER TAP-OFF PLUGS SHALL BE USED IF EMERGENCY LIGHTING KIT (ACK) IS NOT AVAILABLE ON FITTINGS. (TAP-OFF PLUG NO: 2)
4. (\*) IF L.C.P.R. IS USED ON A PANEL, on the (Monophase); WHERE THE NEUTRAL LINE IS COMMON ON THE PANEL SIDE (L-EMG) and (L-EMG) L.C.P.R. (Leakage Current Protection Relay) MUST BE ON THE OUTLET SIDE
5. (\*\*\*) FEEDING CABLE SHOULD BE CHOSEN ACCORDING TO BUSBAR TYPE, CURRENT CARRYING CAPACITY AND VOLTAGE DROP.

NO		REVISION	DATE	NAME	CONTROL	SIGNATURE	SL-ACK BUSBAR PRINCIPLE CONNECTION CHART		CUSTOMER PROJECT	EAE NORM	EAE NORM	DRAWING NR	SECTION:	PAGE
0													REV : 0	0

# ELINESL-DALI+ACK

## ►► General Characteristics

E-Line SL-DALI + ACK Busbar Systems are used in 25-40A energy consuming building electrical installation. Due to their 16A outlet plug features, especially the lighting fixtures with emergency lighting kit (ACK), DALI ballast lighting is designed to supply lighting circuits within lighting automation of luminaires.

EAE Busbar Systems are produced in accordance with ISO 9001 standards with a certified Quality Assurance System using the world's latest manufacturing technologies. Units are designed and tested according to IEC 61439-6.

### Tap-off Plugs

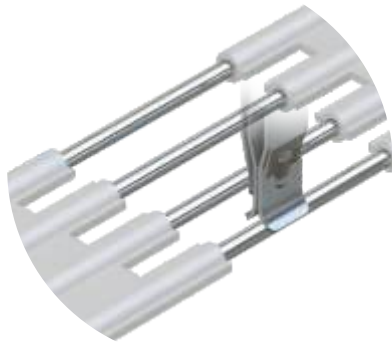
Tap-off plugs of SL-DALI+ACK busbar systems are designed with different contact arrangements. All the plugs are produced in one direction to prevent the use of a wrong phase.

### Safety

Earth contacts of the tap-off plugs make first when plugging-in, and the contact breaks last when unplugging.



DALI



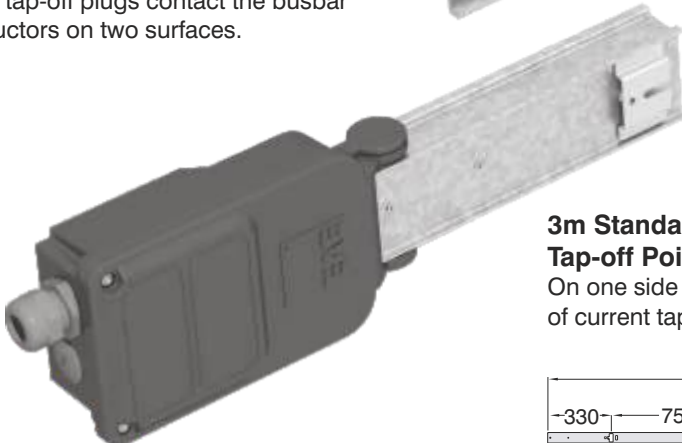
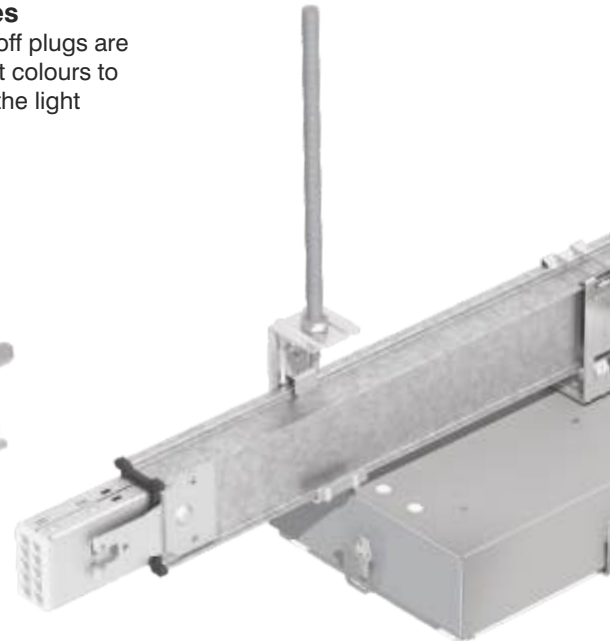
### Colour Coded Covers Indicate The Phases

The covers of the tap-off plugs are designed with different colours to indicate which phase the light fittings are fed from.



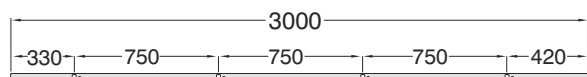
### Tin Coated Conductors and Contact Structure

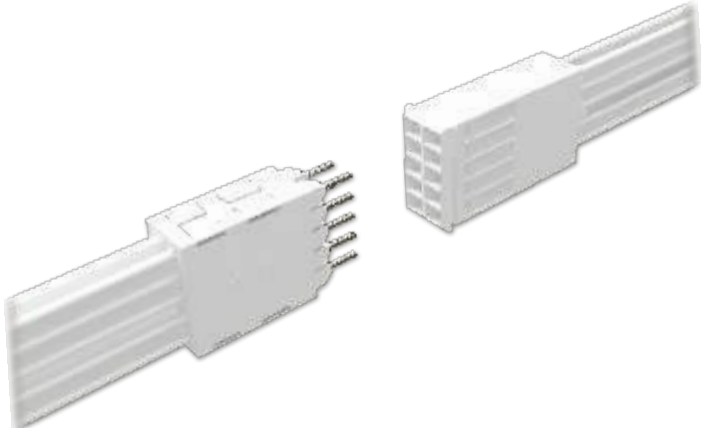
Formation of Copper Oxide is prevented by tin plating the conductors along their full length. This ensures that contact resistances are minimised. The contacts of the tap-off plugs contact the busbar conductors on two surfaces.



### 3m Standard Length 4 Current Tap-off Points

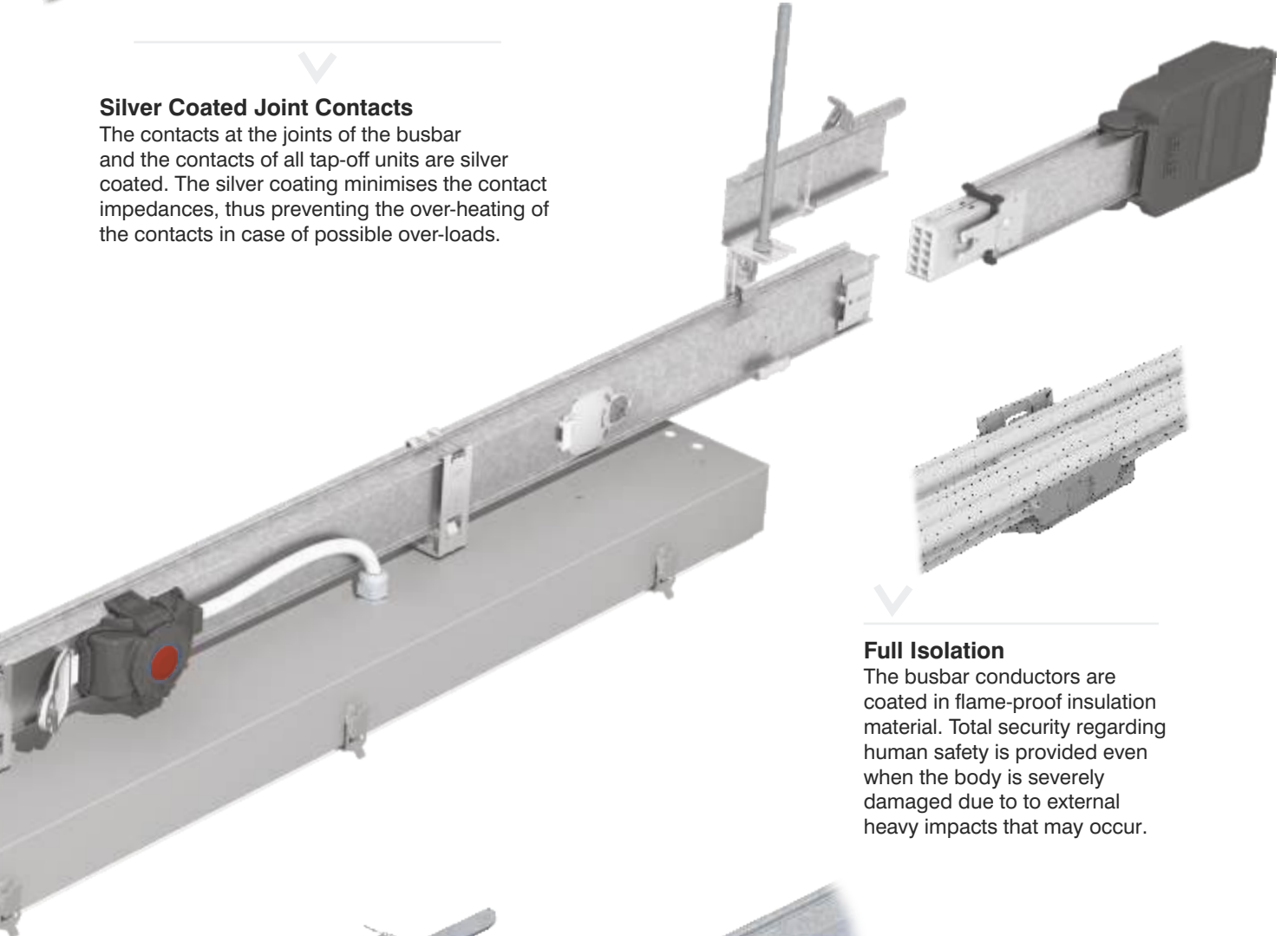
On one side of the busbar there is a total of 4 points of current tap-off points and is offered as standard.





### Silver Coated Joint Contacts

The contacts at the joints of the busbar and the contacts of all tap-off units are silver coated. The silver coating minimises the contact impedances, thus preventing the over-heating of the contacts in case of possible over-loads.



### Full Isolation

The busbar conductors are coated in flame-proof insulation material. Total security regarding human safety is provided even when the body is severely damaged due to external heavy impacts that may occur.

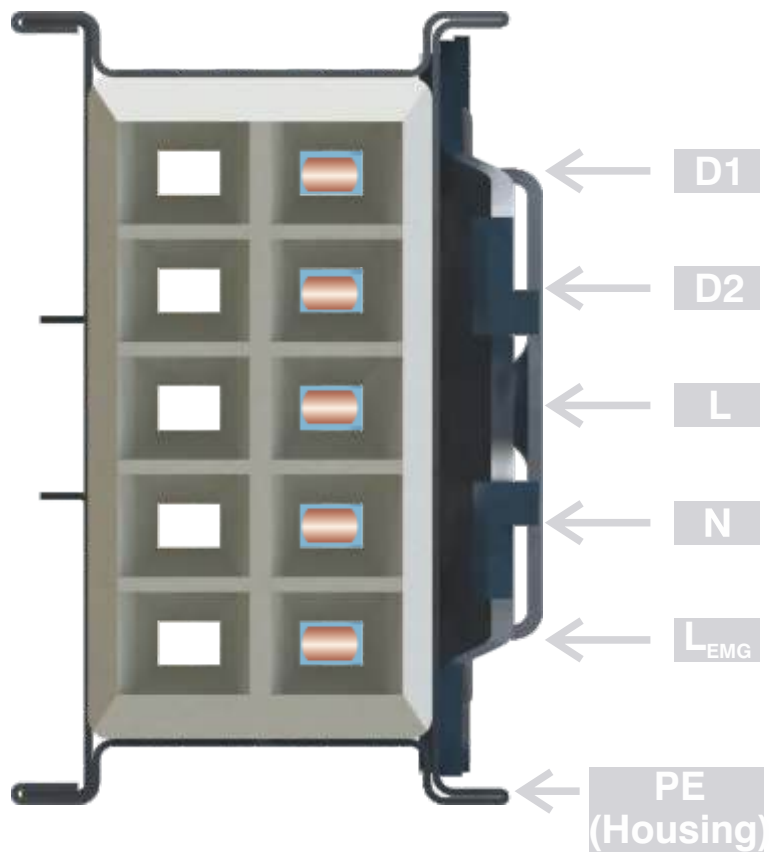
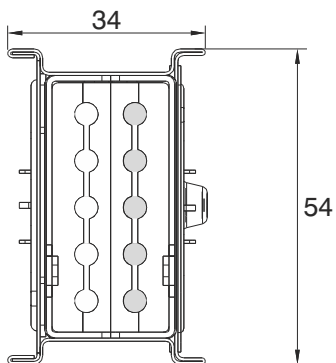
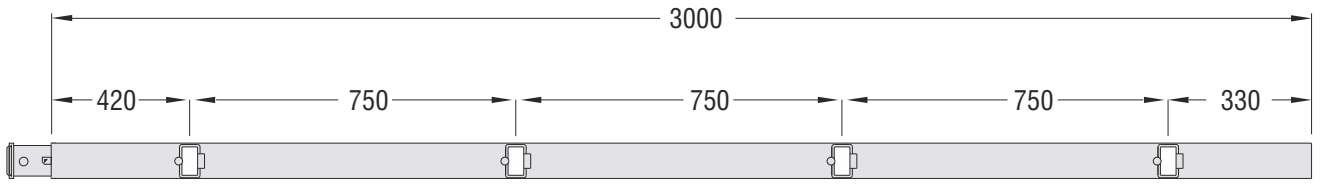


### Fast, Easy and Secure Assembly

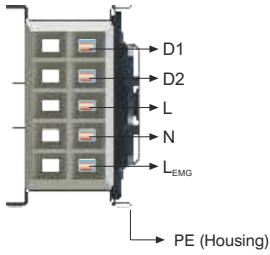
Achieved with single action by driving the mechanical and electrical joint silver coated springed contacts towards each other. The joint is secured by tightening one screw. It is not necessary to install the joint cover to secure the joint.

# ELINESL-DALI+ACK

►► Product Selection Tables / Busbars

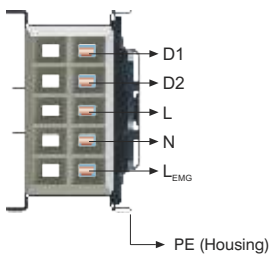






### Standard Busbars (3m)

Current (A)	Description	Conductor Conf.(*)	Order Code
25	SL 25 - DALI+ACK - STD Busbar	5	3108918
32	SL 35 - DALI+ACK - STD Busbar	5	3108930
40	SL 45 - DALI+ACK - STD Busbar	5	3108942



### Special Length Busbars (Special Length Busbars are manufactured as 1m/1,5m/2m/2,5m.)

Current (A)	Description	Conductor Conf.(*)	Order Code
25	SL 25 - DALI+ACK - X Special Length	5	3108919
32	SL 35 - DALI+ACK - X Special Length	5	3108931
40	SL 45 - DALI+ACK - X Special Length	5	3108943

**ATTENTION :**

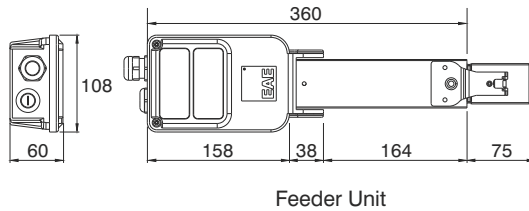
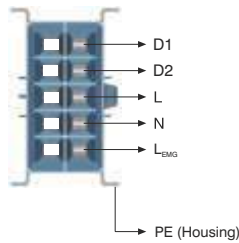
(\*) SL-DALI + ACK Busbar is single phase, and the reference voltage of the power supply, remote control and emergency kit unit (ACK) of the luminaries is provided by a single plug.



## (B1) Feeder Units

Current (A)	Description	Busbars	Order Code
25	SL 25 - DALI + ACK B1 Feeder Unit	SL-DALI+ACK 25	3108923
32	SL 35 - DALI + ACK B1 Feeder Unit	SL-DALI+ACK 35	3108935
40	SL 45 - DALI + ACK B1 Feeder Unit	SL-DALI+ACK 45	3108947

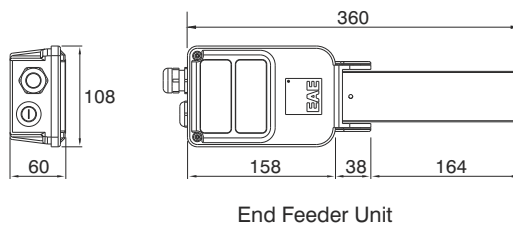
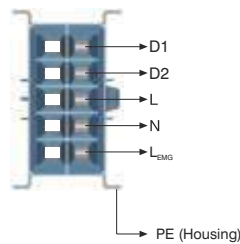
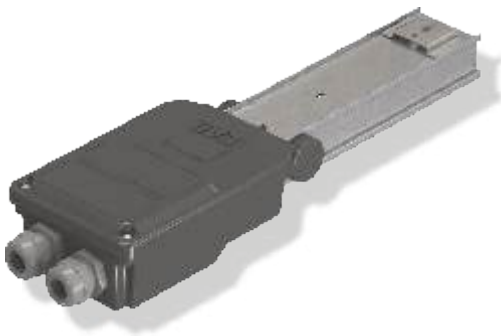
\* With M25 Gland as standard.



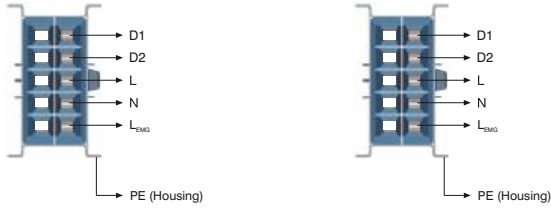
## (B2) End Feeder Units

Current (A)	Description	Busbars	Order Code
25	SL 25 - DALI + ACK B2 End Feeder Unit	SL-DALI+ACK 25	3108924
32	SL 35 - DALI + ACK B2 End Feeder Unit	SL-DALI+ACK 35	3108936
40	SL 45 - DALI + ACK B2 End Feeder Unit	SL-DALI+ACK 45	3108948

\* With M25 Gland as standard.



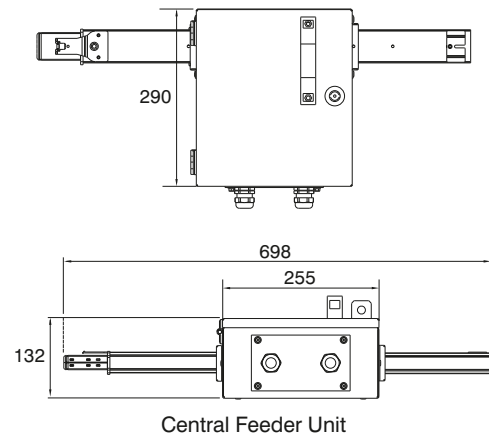
■ The body is manufactured from 0,50 mm galvanised sheet steel.  
 ■ For non-standard product, please contact our technical office.



## (BO) Central Feeder Units

Current (A)	Description	Busbars	Order Code
25	SL 25 - DALI +ACK BO Central Feeder Unit	SL-DALI+ACK 25	3133171
32	SL 35 - DALI +ACK BO Central Feeder Unit	SL-DALI+ACK 35	3133173
40	SL 45 - DALI +ACK BO Central Feeder Unit	SL-DALI+ACK 45	3133175

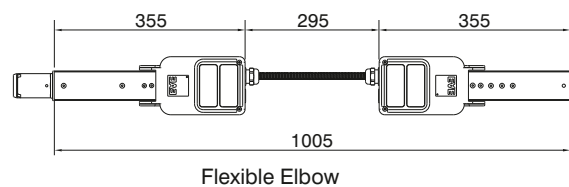
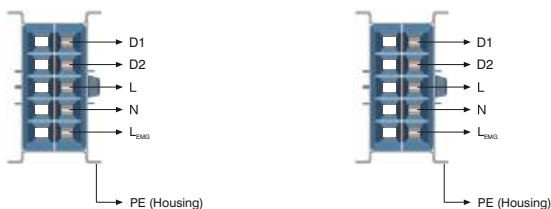
\* With M25 Gland as standard.



## (FD) Flexible Elbow

Akim (A)	Description	Busbars	Order Code
25	SL 25 - DALI +ACK FD Flexible Elbow	SL-DALI+ACK 25	3108927
32	SL 35 - DALI +ACK FD Flexible Elbow	SL-DALI+ACK 35	3108939
40	SL 45 - DALI +ACK FD Flexible Elbow	SL-DALI+ACK 45	3108951

\* With M25 Gland as standard.

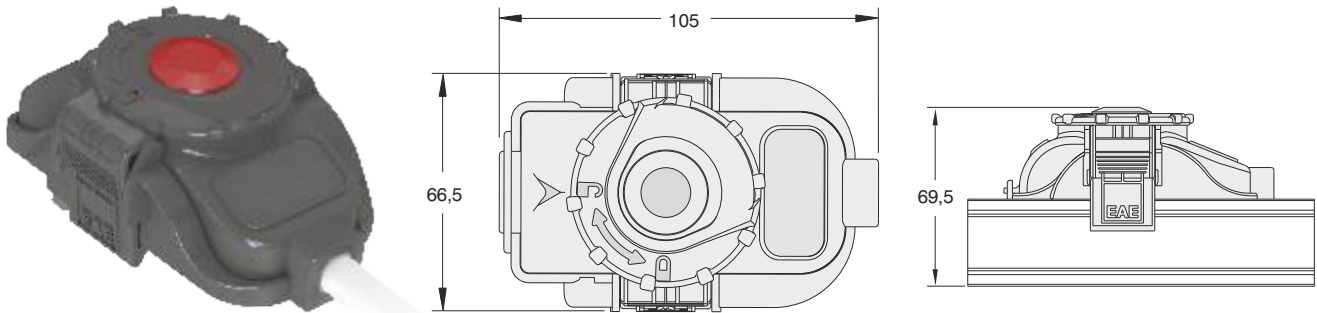


- Body is manufactured from 0.50 mm galvanised sheet steel.
- For non-standard product, please contact our technical office.

## Tap-off Plug (B)

Current (A)	Description	Cable Length / Type		Phase	Properties	Order Code	
		Halogen Free	Standard (PVC)			Halogen Free	Standard (PVC)
16	SL-DALI+ACK 16 - B Tap-off Plug D1,D2,L,N,L <sub>EMG</sub>	0,75 m. 052XZ1-F 6x1,5 mm <sup>2</sup> Cable(*)	0,75 m. NYMHY 6x1,5 mm <sup>2</sup> Cable(*)	D1, D2, L, N, L <sub>EMG</sub> , PE	With Red Cover	3108982	3108983
	SL-DALI 16 - B Tap-off Plug D1,D2,L,N	5x1,5 mm <sup>2</sup>	5x1,5 mm <sup>2</sup>			D1, D2, L, N, PE	3108984

\* Plugs with different length cable available upon request.

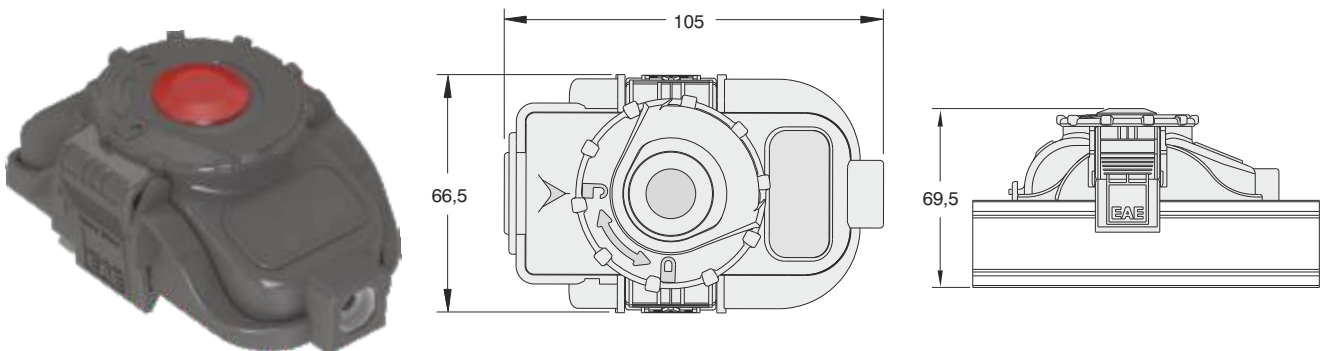


SL - DALI + ACK 16 - B  
SL - DALI 16 - B

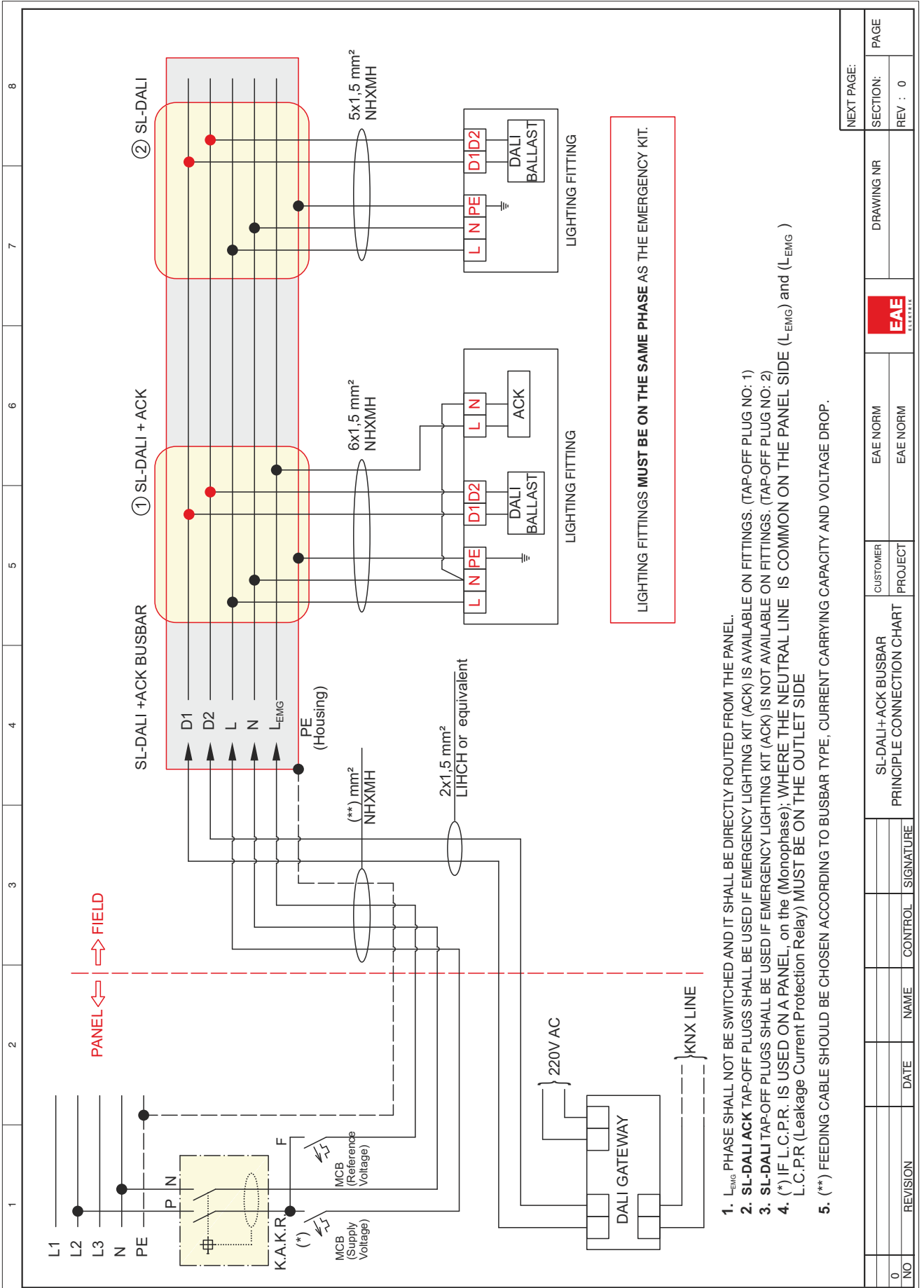
## Plug with Fuse Holder (FS) / Plug with Clips (K)

Current (A)	Description	Cable Length / Type	Phase	Properties	Order Code
16	SL 16 - FS DALI+ACK Tap-off Plug D1,D2,L,N,L <sub>EMG</sub>	-	D1, D2, L, N, L <sub>ACK</sub> , PE	With Red Cover	With 5 x 20 mm fuse holders (**) Max. diameter of feeder cable is Ø 11 mm.
	SL 16 - FS DALI Tap-off Plug D1,D2,L,N	-	D1, D2, L, N, PE		
16	SL 16 - K DALI+ACK Tap-off Plug D1,D2,L,N,L <sub>EMG</sub>	-	D1, D2, L, N, L <sub>ACK</sub> , PE	With Red Cover	Without Fuses. Max. diameter of feeder cable is Ø 11 mm.
	SL 16 - K DALI Tap-off Plug D1,D2,L,N	-	D1, D2, L, N, PE		

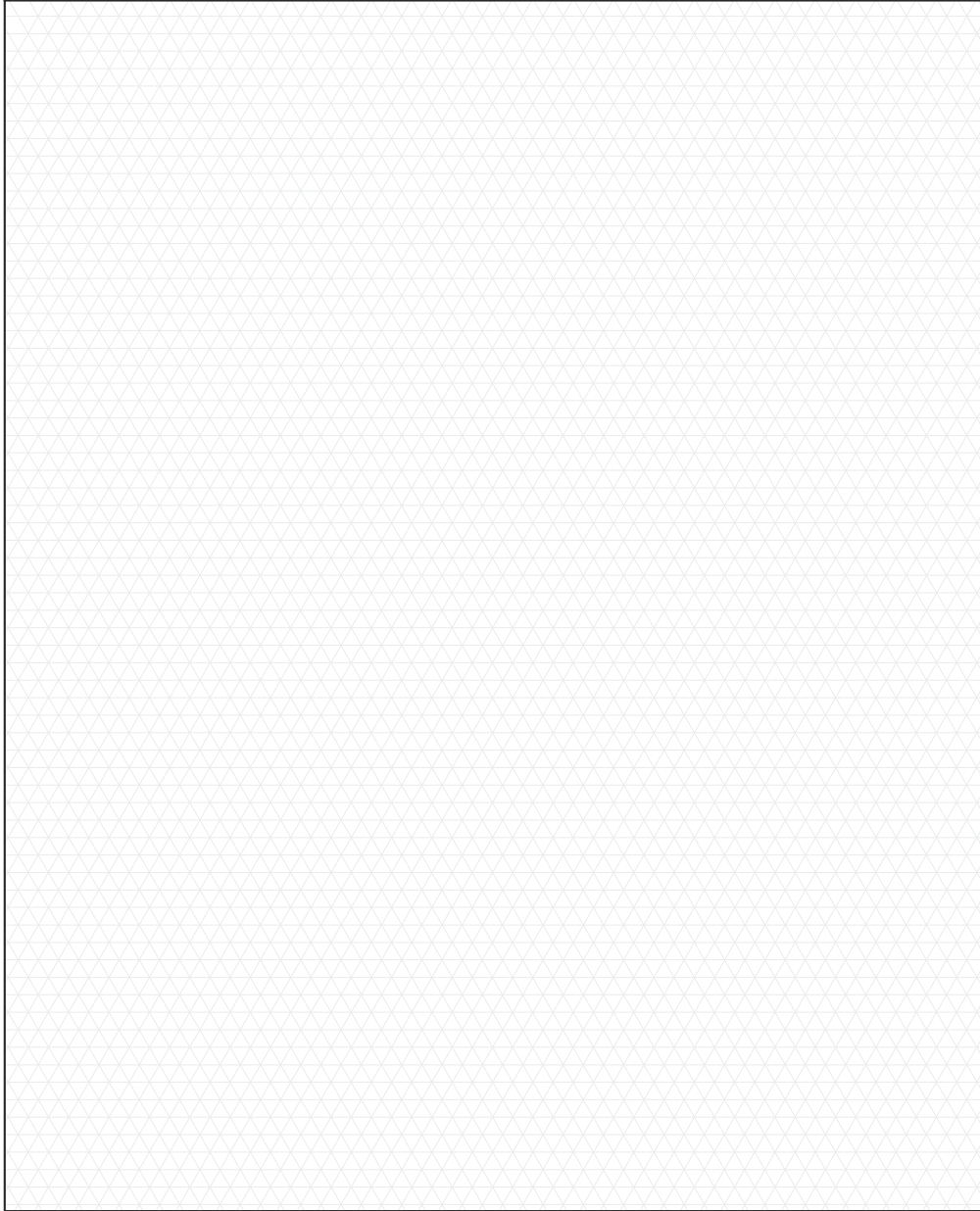
\*\* Cylindrical fuse not included.




SL - DALI + ACK 16 - FS  
SL - DALI + ACK 16 - K  
SL - DALI 16 - FS  
SL - DALI 16 - K



NO		REVISION	DATE	NAME	CONTROL	SIGNATURE	SL-DALI+ACK BUSBAR PRINCIPLE CONNECTION CHART		CUSTOMER PROJECT	EAE NORM	EAE NORM	DRAWING NR	SECTION:	PAGE
0													REV : 0	0

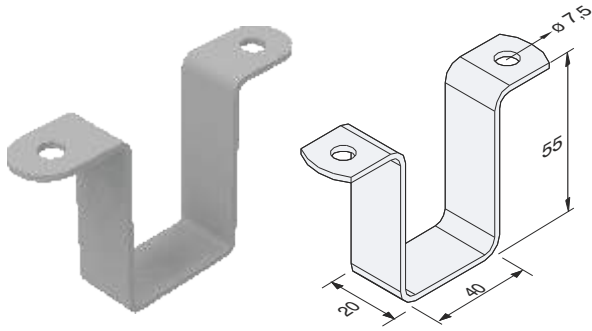
Component List	Item	Component	Quantity		
				Company :	Prepared by
				Project :	
				Project No :	Name :
					Date :
					Signature :



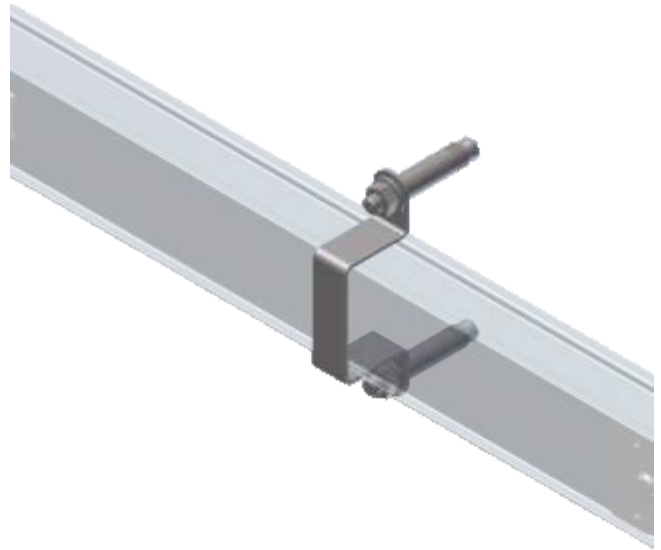
Please duplicate this page for your own use.

**NOTE:** All specified accessories; SL, SL-ACK, SL-DALI+ACK is valid for all busbar models.

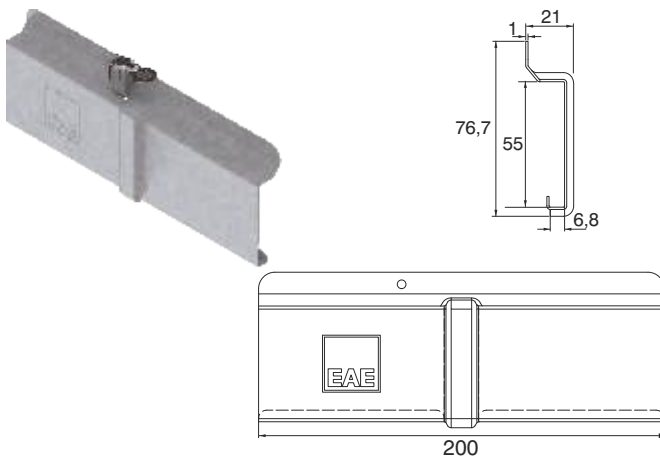
Description	Order Code
KA - TPU Fitting U - Unpainted	3025158
KA - TPU Fitting U - Painted	3025159



KA-TPU

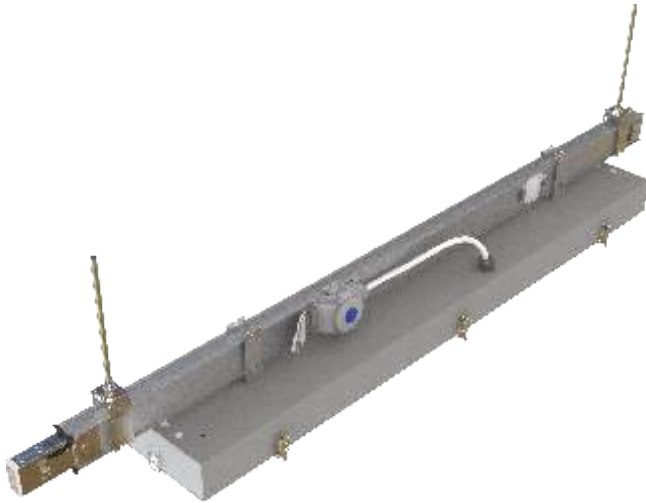


Description	Order Code
DL / SL Joint Cover-Unpainted	1015520
DL / SL Joint Cover-Painted	2054580

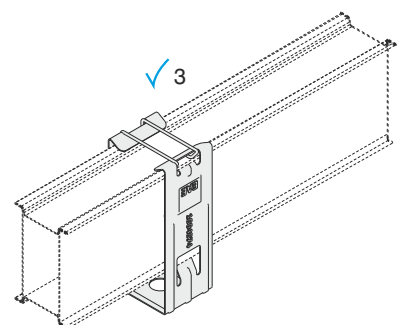
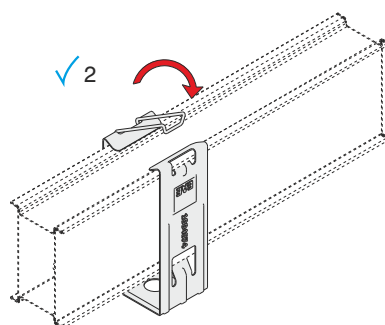
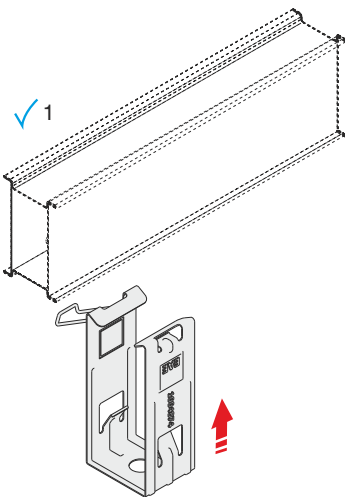
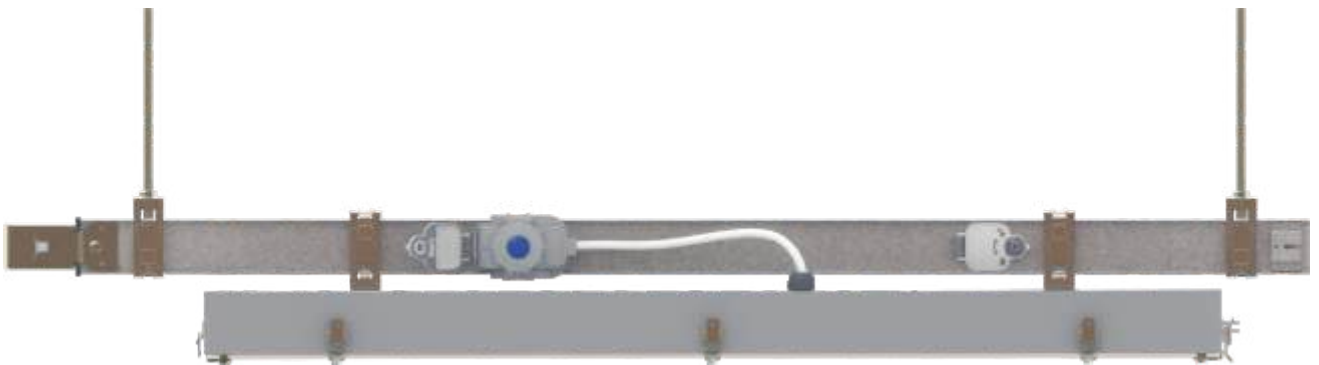
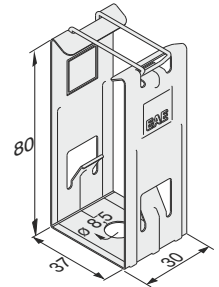


**ATTENTION:**

The joint cover must be attached to the screwless side of the busbar.



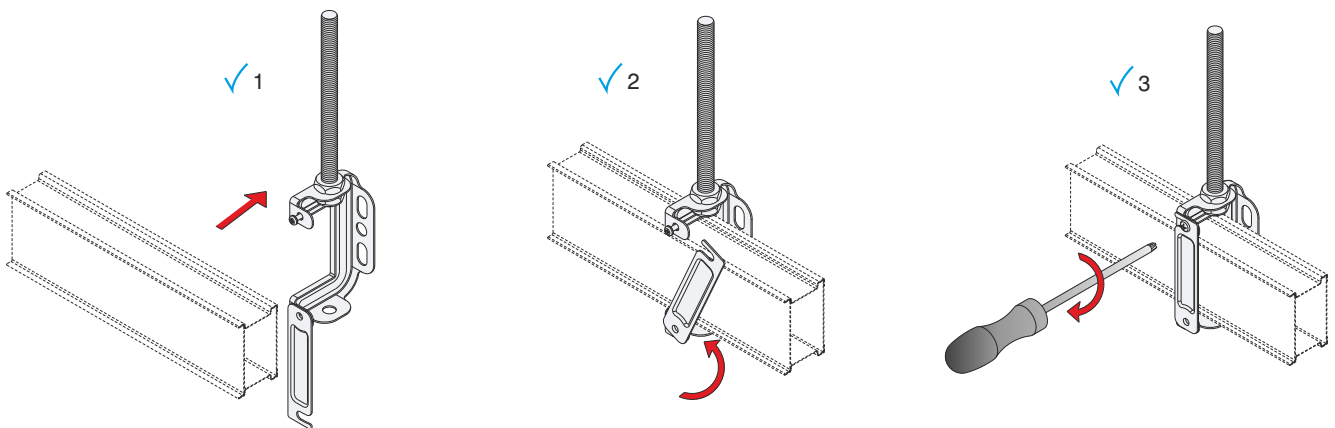
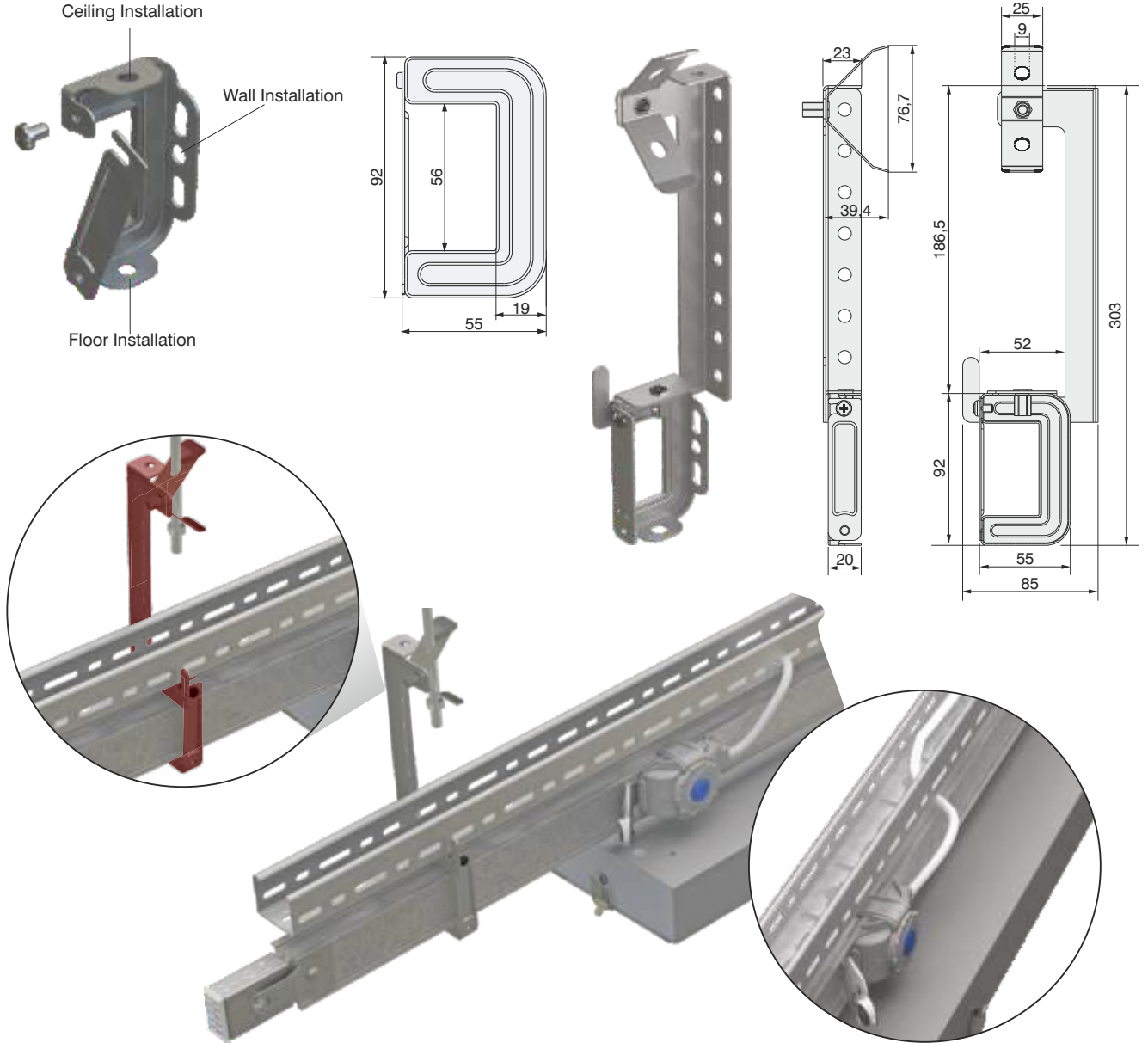
Description	Order Code
U-Bracket - Unpainted	1004874
U-Bracket - Painted	2037294

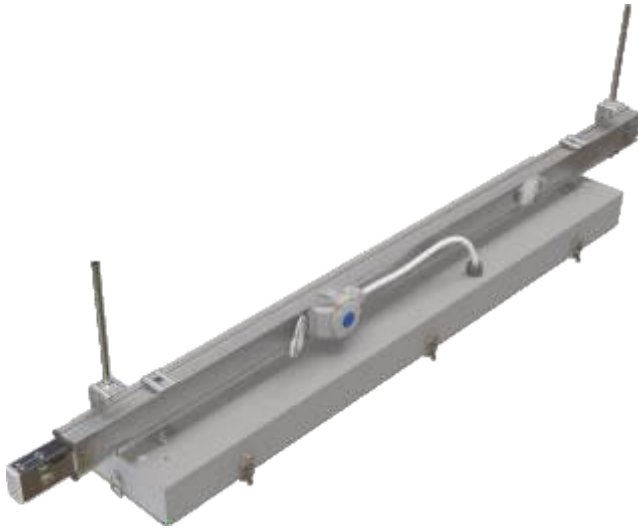




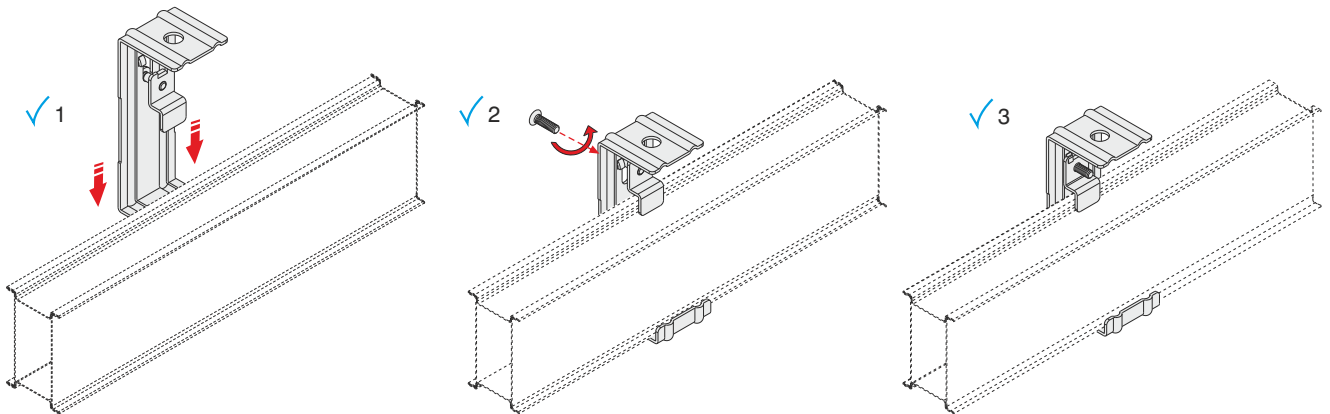
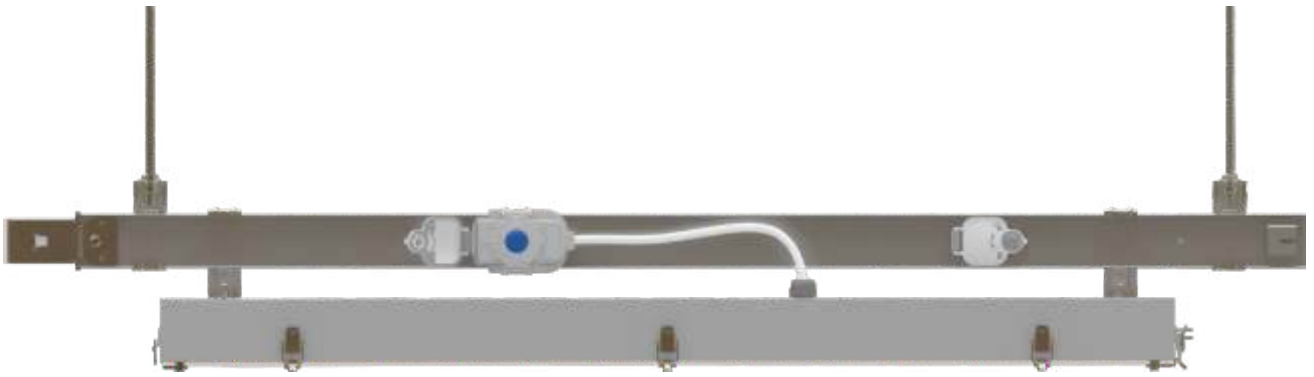
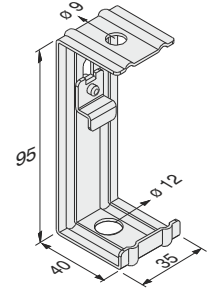
Description	Order Code
Universal Fitting Bracket - Unpainted	1004189
Universal Fitting Bracket - Painted	2033519

Description	Order Code
DL/SL Multifunctional Bracket - Unpainted	3122646
DL/SL Multifunctional Bracket - Painted	3122647

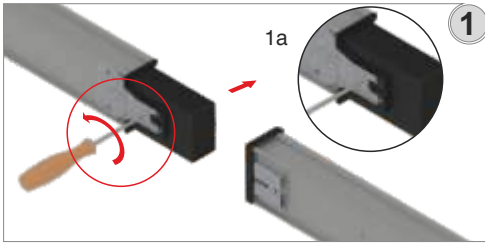




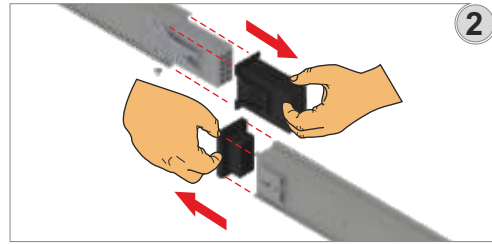
Description	Order Code
L-Bracket - Unpainted	1004283
L-Bracket - Painted	2037295



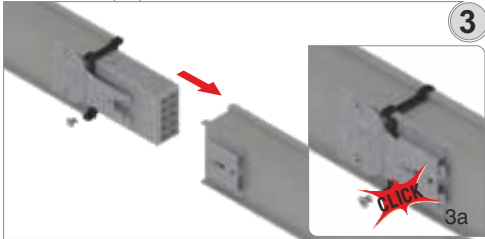
### ► SL Busbar Joint Installation



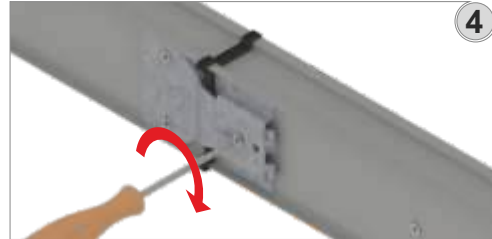
Detach the protective plastic from both ends of the busbar. (1a)



Remove the plastic protective covers from the system as shown in the figure.



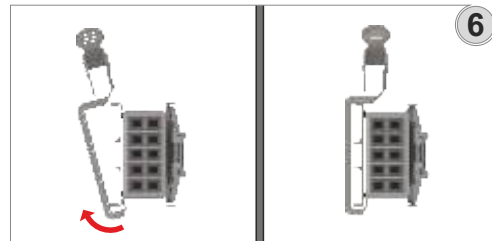
Connect the male side of the busbar with the female side of the other busbar. Make sure that you hear the locking sound for correct connection. (3a)



Tightening the joint screw.

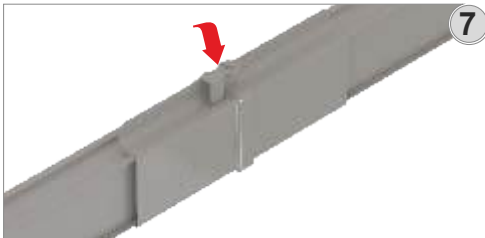


Install the joint cover to the screwless side.



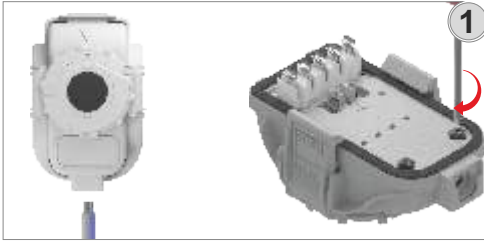
Make sure that the joint cover structure fully grips the busbars.

**(Caution:** The joint cover must be attached to the screwless side of the busbar.)

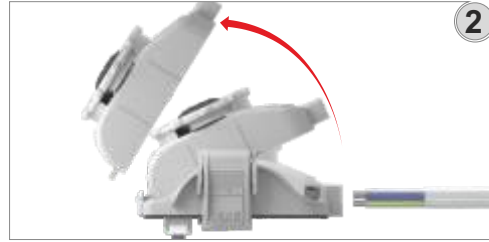


By closing the snap-in latch, you may complete the snap-in connection.

### ▶ Tap-off Plugs with clips/Cylindrical Fuse Installation



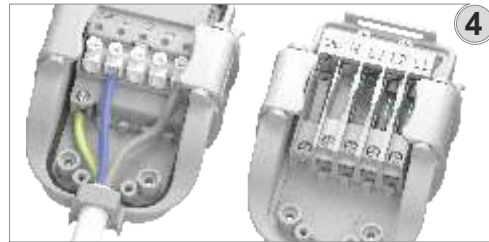
Use 052XZ1-F type cable, (3x1,5mm<sup>2</sup> for single phase, 5x1,5mm<sup>2</sup> for three phase) as required. Turn over the plug and remove the two screws.



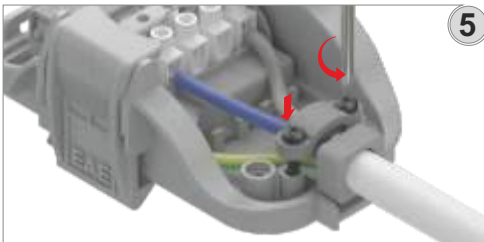
Remove the cover by pressing the lug with EAE logo as shown in figure.



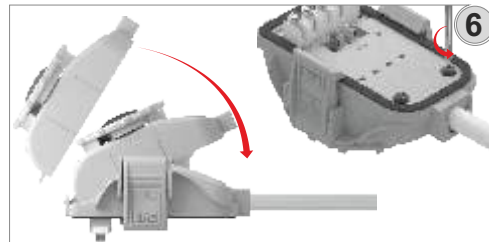
Remove the plastic cable grip. Pass the cable through the gland which maintains the IP rating.



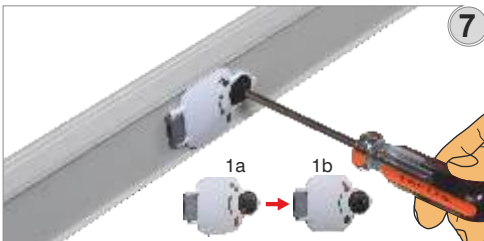
Connect the yellow green cable to the earth terminal, blue cable to "N" terminal and phase cables to related terminals of plug.



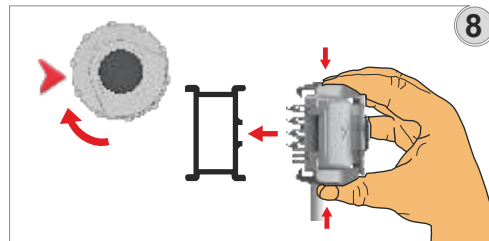
Refit the plastic cable grip.



Replace the cover and turn over the plug and tighten the screws.



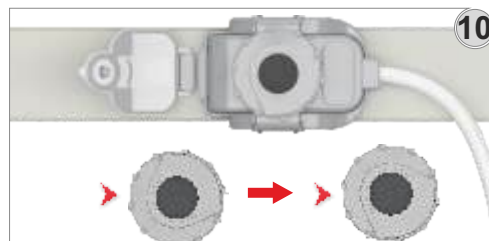
Put the plug in cover into open (☞) position.



Put the lock mechanism of plug into open (☞) position.

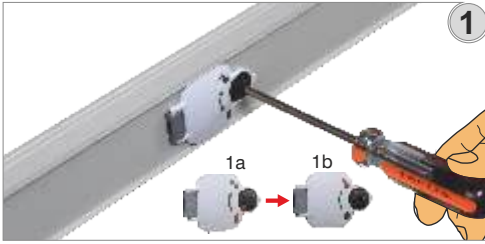


Direction of contacts should be as shown figure.

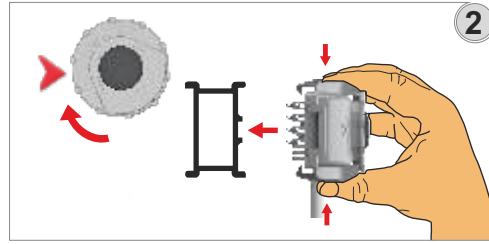


After connecting plug to busbar, put the lock mechanism of plug into close (☑) position.

### ▶ Tap-off Plug Fixing



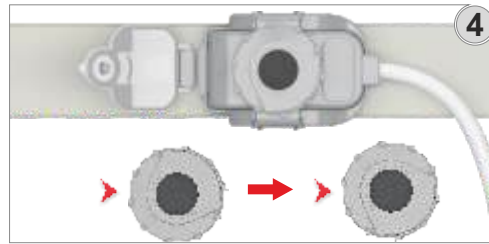
Turn the locking button on the busbar to OPEN (🔓) position.



Put the lock mechanism of plug into open (▶🔓) position.



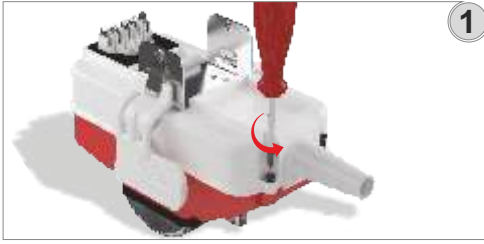
Direction of contacts should be as shown figure.



After fixing the plug to the busbar properly, turn the locking knob to LOCK (▶🔒) position.

## ▶▶ Tap-off Box Installation

### ▶ Mounting Tap-off Box with Miniature Circuit Breaker (MCB)



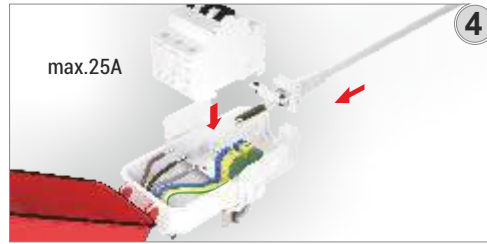
Use 052XZ1-F type cable, (3x2,5mm<sup>2</sup> for single phase, 5x2,5mm<sup>2</sup> for three phase) as required. Turn over the tap-off box and remove the two screws.



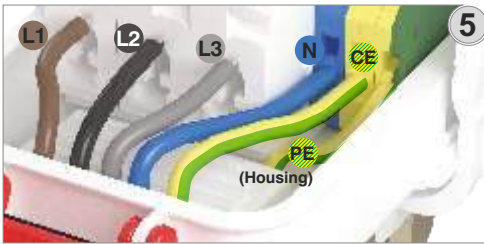
Open the cover of tap-off box.



Remove the plastic cable grip. Pass the cable through the gland which maintains the IP rating.



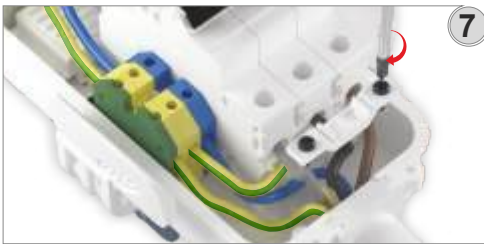
Install the MCB with a maximum of 25A to the DIN rail. (MCB should be "OFF" position.)



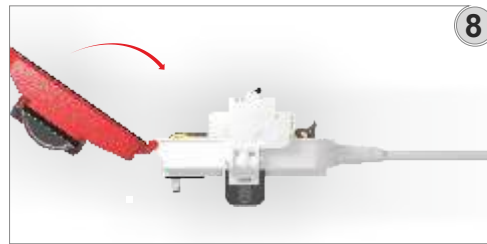
Connect the wiring at fuse entry terminal according to the colour combination as shown in the image. Make sure that the screws are tight.



Install the feeder cable at the fuse outlet terminal in the same way. Make sure that the screws are tight.



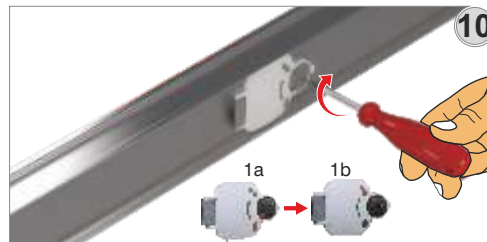
Refit the plastic cable grip.



Close the cover of tap-off box.



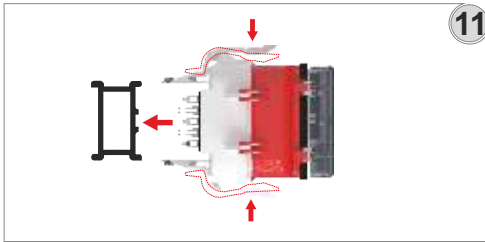
Turn over the tap-off box and tighten the screws. Make sure that the screws are tight.



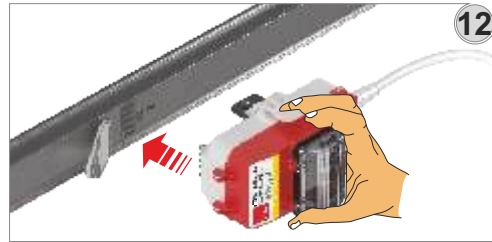
Put the plug in cover into open (☐) position.

## ▶▶ Tap-off Box Installation

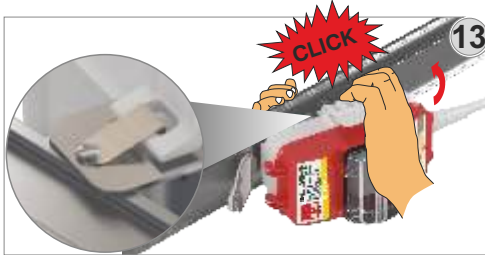
### ▶ Mounting Tap-off Box with Miniature Circuit Breaker (MCB)



Align tap-off box with busbar plug-in while squeezing the ears on the sides of tap-off boxes.



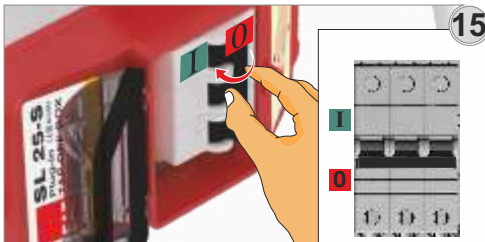
Direction at the tap-off box should be as shown in figure.



First, connect product earth terminal to busbar plug-in point. Then make sure that other terminals connect to busbar. Finally you should hear "CLICK" sound when you press tap-off box towards busbar.



Open the transparent cover of the tap-off box by untightening the screw.



Put " Miniature Circuit Breaker (MCB) "ON" position.



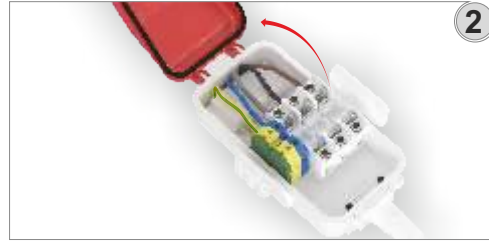
Close the transparent cover of the tap-off box by screwing.

## ▶▶ Tap-off Box Installation

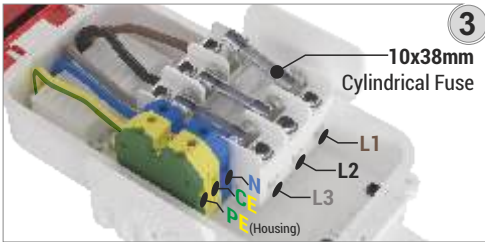
### ▶ Mounting Tap-off Box with Cylindrical Fuse



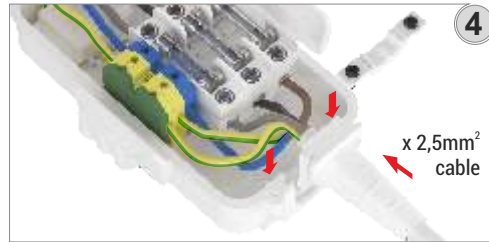
Use 052XZ1-F type cable, (3x2,5mm<sup>2</sup> for single phase, 5x2,5mm<sup>2</sup> for three phase) as required. Turn over the tap-off box and remove the two screws.



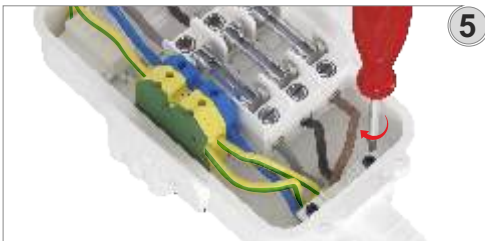
Open the cover of tap-off box.



Install 10x38mm cylindrical fuse with maximum of 16A to fuse holder.



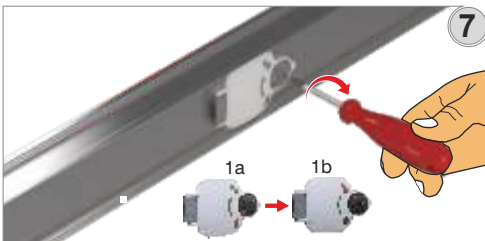
Connect feeder cables as shown above.



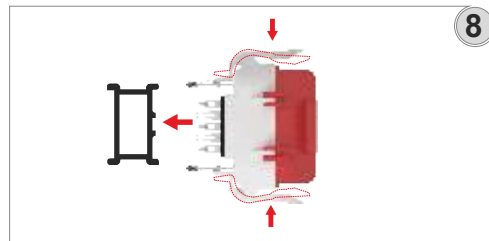
Fit the plastic component that organizes the cables and holds them together.



After closing the tap-off box cover, turn the tap-off box upside down and tighten the screws.



Put the plug-in cover to (1a) position.



Align tap-off box with busbar plug-in while squeezing the ears on the sides of tap-off boxes.



Direction at the tap-off box should be as shown in figure.



First, connect product earth terminal to busbar plug-in point. Then make sure that other terminals connect to busbar. Finally you should hear "CLICK" sound when you press tap-off box towards busbar.



Make sure that tap-off box is locked.



### SL / SL-ACK / SL-DALI+ACK

Rated Current	$I_n$	A	25	32	40
<b>Busbar Code</b>			<b>24</b>	<b>35</b>	<b>45</b>
<b>Main Standards</b>	IEC 61439-1/6, TS EN 61439-1/6				
<b>Rated Isolation Voltage</b>	$U_i$	V	690	690	690
<b>Rated Frequency</b>	f	Hz	50	50	50
<b>Protection Degree</b>	IP55				
<b>External Mechanical Impacts (IK Code)*</b>	IK07				
<b>Rated Short-time Withstand Current (0,1s)</b>	$I_{cw}$	kA <sub>(ms)</sub>	2,5	3	4
<b>Rated Peak Withstand Current</b>	$I_{pk}$	kA	4	5	6,5
<b>MEAN PHASE CONDUCTOR CHARACTERISTICS AT RATED CURRENT <math>I_n</math></b>					
<b>Resistance at a conductor temperature of 20 °C</b>	$R_{20}$	mW/m	7,643	4,525	3,021
<b>Resistance at an ambient air temperature of 35 °C</b>	R	mW/m	9,185	5,424	3,584
<b>Reactance (Independent from Temperature)</b>	X	mW/m	0,974	0,632	0,381
<b>Positive and negative sequence impedances at an ambient air temperature of 35 °C</b>	Z	mW/m	9,237	5,461	3,604
<b>Positive and negative sequence impedances at a conductor temperature of 20 °C</b>	$Z_{20}$	mW/m	7,705	4,569	3,045
<b>Rated Power Loss at 35 °C</b>		W/m	16,8	16,1	17,3
<b>DC Resistance at a conductor temperature of 20 °C for Phases</b>	$R_{ortPh}$	mW/m	7,116	4,456	3,030
<b>DC Resistance at a conductor temperature of 20 °C for Neutral</b>	$R_N$	mW/m	7,067	4,384	3,026
<b>DC Resistance at a conductor temperature of 20 °C for PE</b>	$R_{PE}$	mW/m	3,090	3,090	3,090
<b>DC Resistance at a conductor temperature of 20 °C for CE</b>	$R_{CPE}$	mW/m	7,118	4,400	3,032
<b>SECTIONS</b>					
<b>L1,L2,L3,N</b>		mm <sup>2</sup>	2,54	3,98	6,16
<b>CE</b> (5 Conductors - Optional "PE" for DL-DALI)		mm <sup>2</sup>	2,54	3,98	6,16
<b>PE</b> (Sheet Steel)		mm <sup>2</sup>	105	105	105
<b>PE</b> (Cu Equivalent-Sheet Steel)		mm <sup>2</sup>	5,8	5,8	5,8
<b>Busbar Weight</b> (4 Conductors)		kg/m	0,948	1,005	1,070
<b>Busbar Weight</b> (5 Conductors)		kg/m	0,986	1,040	1,134

## 25-32-40A PLUG-IN BUSBAR SYSTEMS PRODUCT SPECIFICATION (E-Line SL)

- 1- The busbar systems shall be type tested and certified according to IEC 61439-6 by international laboratories. They shall be manufactured in an ISO 9001 and ISO 14001 certified facility.
- 2- The rated insulation voltage of the system shall be 690V.
- 3- The busbar system shall have current ratings between 25A-32A-40A, Conductors shall be electrolytic copper and continuously tin plated along their entire length.
- 4- The conductors in the housing shall be insulated along their whole length and only stripped at the plug-in points to create the contact area.
- 5- The busbar shall have a total of 4 tap-off points on single side only on a standard 3m length. The system should have the possibility to increase the number of tap-off points at the time of ordering. The tap-off points shall have protective covers to maintain the IP55 rating.
- 6- The SL Busbar System has five independent conductors and is produced with outlets on one side only. The number of conductors and the phase structure alternatives are as follows.
  - a) 2 Conductors; L3 / N / PE (Housing)
  - b) 3 Conductors; L3 / N / CE + PE (Housing)
  - c) 4 Conductors; L1 / L2 / L3 / N / PE (Housing)
  - d) 5 Conductors; L1 / L2 / L3 / N / CE + PE (Housing)
  - Phase and Neutral conductor sections ;
    - for 25A ; **2,54** mm<sup>2</sup>
    - for 32A ; **3,98** mm<sup>2</sup>
    - for 40A ; It is produced as **6,16** mm<sup>2</sup>.
  - PE (Housing); The body is used as an earth conductor and the equivalent copper cross-sectional area is 5,8 mm<sup>2</sup>.
  - CE (Clean Earth); Clean Earth is a separate and independent conductor, the cross-sectional area is equivalent to the phase conductors.

The conductors and numbers mentioned above are valid for single side, and the SL Busbar system can be produced in different structures for single side, depending on demand and supply.
- 7- There shall be insulator supports at the plug-in points.
- 8- The joint of the busbar shall be a push-fit joint. Joint contacts shall be silver plated. To ensure a secure joint contact there shall be springs on both sides of the joint. Also, the additional cover which prevents extension points from flexing and squeezing, can be easily mounted without screws and without the need for a hand tool.
- 9- SL Busbars are within the IP 55 protection and IK07 mechanical impact resistance class.
- 10- The housing of the busbar shall be manufactured from 0.50mm thick galvanised sheet steel with an option for a RAL 7038 electrostatic oven dried paint finish.
- 11- The contacts on the tap-off plugs shall be silver plated jawed construction which contact the conductors on both sides.
- 12- Standard brackets and fittings suitable for the housing of the busbar shall be those produced by the busbar manufacturer. The suspension brackets can also carry 50 mm cable ducts using additional components.

## 25-32-40A SL-ACK PLUG-IN BUSBAR SYSTEMS PRODUCT SPECIFICATION (E-Line SL-ACK)

- 1- SL-ACK busbar systems shall be type tested and certified according to IEC 61439-6 by international laboratories. They shall be manufactured in an ISO 9001 and ISO 14001 certified facility.
- 2- The rated insulation voltage of the system shall be 690V.
- 3- The busbar system shall have current ratings between 25A-32A-40A, Conductors shall be electrolytic copper and continuously tin plated along their entire length.
- 4- The conductors in the housing shall be insulated along their whole length and only stripped at the plug-in points to create the contact area.
- 5- The SL-ACK Busbar System is produced in a standard length of 3 m and has a total of 4 plug-in tap-off points on one side. The number of tap-off points can be increased upon special requests. Also, on the plug-in tap-off point there is a IP55 protection that has a sealed and hinged protective cover.
- 6- SL-ACK Busbar System; has 5 independent conductors and is produced with a single sided outlet. The number of conductors and the phase structure alternatives are as follows;
  - a) 3 Conductors; L3 / N / L<sub>EMG</sub> / PE (Housing) - Single Phase Systems
  - b) 5 Conductors; L1 / L2 / L3 / N / L<sub>EMG</sub> / PE (Housing) - Three Phase Systems
  - Phase and Neutral conductor sections ;
    - for 25A ; **2,54** mm<sup>2</sup>
    - for 32A ; **3,98** mm<sup>2</sup>
    - for 40A ; It is produced as **6,16** mm<sup>2</sup>.
  - PE (Housing); The body is used as an earth conductor and the equivalent copper cross-sectional area is 5,8 mm<sup>2</sup>.

The conductors and numbers mentioned above are suitable for single sided outlets, and for a single side of the SL-ACK Busbar system depending on need and demand can be produced in different structures .
- 7- The SL-ACK Busbar tap-off plugs are manufactured to be fitted only on one side of the busbar, and the use to prevent connection to the wrong phase. The covers of the tap-off plugs have coloured labels fitted to indicate which phase the luminaires are fed from.
- 8- The SL-ACK busbar tap-off points are plug contacts are addressed, and the SL and DL group busbar tap-off plugs have been disabled for this use .
- 9- There shall be insulated conductor supports at the plug-in points.
- 10- The joint of the SL-ACK Busbar shall be a push-fit joint. Joint contacts shall be silver plated. To ensure a secure joint contact there shall be springs on both sides of the joint. Also, the additional cover which prevents extension points from flexing and squeezing, can be easily mounted without screws and without the need for a hand tool.
- 11- SL-ACK Busbars are within the IP 55 protection and IK07 mechanical impact resistance class.
- 12- The housing of the SL-ACK Busbar shall be manufactured from 0.50mm thick galvanised sheet steel with an option for a RAL 7038 electrostatic oven dried paint finish.
- 13- The contacts on the tap-off plugs shall be silver plated jawed construction which contact the conductors on both sides.
- 14- Busbar system has a standard suspension system suitable and fixing elements and are manufactured by the manufacturer. By attaching additional small pieces to the suspension elements can also carry a 50 mm cable tray.

# 25-32-40A SL-DALI+ACK PLUG-IN BUSBAR SYSTEMS PRODUCT SPECIFICATION (E-Line SL-DALI+ACK )

- 1- SL-DALI+ACK busbar systems shall be type tested and certified according to IEC 61439-6 by international laboratories. They shall be manufactured in an ISO 9001 and ISO 14001 certified facility.
- 2- The rated insulation voltage of the system shall be 690V.
- 3- The busbar system shall have current ratings between 25A-32A-40A, Conductors shall be electrolytic copper and continuously tin plated along their entire length.
- 4- The conductors in the housing shall be insulated along their whole length and only stripped at the plug-in points to create the contact area.
- 5- The SL-DALI+ACK Busbar System is produced in a standard length of 3 m and has a total of 4 plug-in tap-off points on one side. The number of tap-off points can be increased upon special requests. Also, on the plug-in tap-off point there is a IP55 protection that has a sealed and hinged protective cover.
- 6- SL-DALI+ACK Busbar System; has 5 independent conductors and is produced with a single sided outlet. The number of conductors and the phase structure alternatives are as follows;
  - 5 Conductors; D1 / D2 / L / N / L<sub>EMG</sub> / PE (Housing) - Single Phase System
  - Phase and Neutral conductor sections ;
    - for 25A ; **2,54** mm<sup>2</sup>
    - for 32A ; **3,98** mm<sup>2</sup>
    - for 40A ; It is produced as **6,16** mm<sup>2</sup>.
  - PE (Housing); The body is used as an earth conductor and the equivalent copper cross-sectional area is 5,8 mm<sup>2</sup>.

The conductors and numbers mentioned above are suitable for single sided outlets, and for a single side of the SL-DALI+ACK Busbar system depending on need and demand can be produced in different structures.
- 7- Within the SL-DALI + ACK Busbar system, the centralized control of the DALI ballasts used for lighting automation within a scenario allows the lighting fixture energy supplies to be "single phase" and at the same time the provision of the reference voltage of the emergency lighting kits (ACK) in the luminaires is possible with a single "tap-off plug".
- 8- SL-DALI + ACK Busbar tap-off points and plug contacts are addressed, and the SL and DL group busbar tap-off plugs are prevented from being used in this mode.
- 9- There shall be insulated conductor supports at the plug-in points.
- 10- SL-DALI + ACK Busbar tap-off plugs are manufactured to be installed only on one side of the busbars to prevent connection to the wrong phase. The covers of the tap-off plugs have coloured labels fitted to indicate which phase the luminaires are fed from.
- 11- The joint points of the SL-DALI + ACK Busbar System shall be a push-fit joint. Joint contacts shall be silver plated. To ensure a secure joint contact there shall be springs on both sides of the joint. Also, the additional cover which prevents extension points from flexing and squeezing, can be easily mounted without screws and without the need for a hand tool.
- 12- SL-DALI + ACK Busbars are within the IP 55 protection and IK07 mechanical impact resistance class.
- 13- The housing of the SL-DALI + ACK Busbar System shall be manufactured from 0.50mm thick galvanised sheet steel with an option for a RAL 7038 electrostatic oven dried paint finish.
- 14- The contacts on the tap-off plugs shall be silver plated jawed construction which contact the conductors on both sides.
- 15- Busbar system has a standard suspension system suitable and fixing elements and are manufactured by the manufacturer. By attaching additional small pieces to the suspension elements can also carry a 50 mm cable tray.

# CE DECLARATION OF CONFORMITY

**Product Group** E-Line SL Busbar Systems

**Manufacturer** EAE Elektrik Asansor End. Insaat San. ve Tic. A.S.  
Akçaburgaz Mahallesi, 3114. Sokak,  
No:10 34522 Esenyurt-Istanbul

The objects of the declaration described below is in conformity with the relevant Union harmonisation legislation. This declaration of conformity is issued under the sole responsibility of the manufacturer.

**Standard :**

**EN 61439-6**

Low-voltage switchgear and controlgear assemblies - Part 6: Busbar trunking systems

**CE - Directive**

2014/35/EU "The Low Voltage Directive"

2014/30/EU "Electromagnetic Compatibility (EMC) Directive"

2011/65/EU "Restriction of the use of certain hazardous substances (RoHS)"

**Technical Document Preparation Official:**

EAE Elektrik Asansör End. İnşaat San. ve Tic. A.Ş.  
Akçaburgaz Mahallesi, 3114. Sokak, No:10 34522 Esenyurt-Istanbul

Emre GÜRLEYEN

**Date**

20.04.2022

**Document Authorized Signatory**

Elif Gamze KAYA OK  
Deputy General Manager





# TEST CERTIFICATE

Issued to:	EAE Elektrik Asansör End. Insaat San. ve Tic. A.S. Akçaburgaz Mahallesi 119, Sokak No: 10 34510 Esenyurt / Istanbul Turkey
For the product:	Low-voltage busbar trunking system
Trade name:	EAE
Type/Model:	DL 02
Ratings:	$I_{nc}$ 25 A at 50 Hz, $U_i$ 690 V, $U_{imp}$ 6 kV, $I_{cw}$ 2,5 kA - 0,1 s For more details see annex
Manufactured by:	EAE Elektrik Asansör End. Insaat San. ve Tic. A.S. Akçaburgaz Mahallesi 119, Sokak No: 10 34510 Esenyurt / Istanbul Turkey
Subject:	Design verification
Requirements:	IEC 61439-6: 2012 Clauses: 10.2, 10.3, 10.4, 10.5, 10.9, 10.10, 10.11, 10.101 and Annex BB, CC, and DD
Remarks:	Busbar trunking system consists of feeder box, joint and straight lengths

This Test Certificate is granted on account of an examination by DEKRA, the results of which are laid down in report no. 2172392.01-INC, dated 4 May 2015.

The examination has been carried out on one single specimen of the product, submitted by the manufacturer. The Attestation does not include an assessment of the manufacturer's production. Conformity of his production with the specimen tested by DEKRA is not the responsibility of DEKRA.

Arnhem, 4 May 2015

Number: 2172392.100

DEKRA Certification B.V.



F.S. Strikwerda  
Certification Manager

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# TEST CERTIFICATE

Issued to:	EAE Elektrik Asansör End. Insaat San. ve Tic. A.S. Akçaburgaz Mahallesi 119, Sokak No: 10 34510 Esenyurt / İstanbul Turkey
For the product:	Low-voltage busbar trunking system
Trade name:	EAE
Type/Model:	DL 03
Ratings:	$I_{nc}$ 32 A at 50 Hz, $U_i$ 690 V, $U_{imp}$ 6 kV, $I_{cw}$ 3 kA - 0,1 s For more details see annex
Manufactured by:	EAE Elektrik Asansör End. Insaat San. ve Tic. A.S. Akçaburgaz Mahallesi 119, Sokak No: 10 34510 Esenyurt / İstanbul Turkey
Subject:	Design verification
Requirements:	IEC 61439-6: 2012 Clauses: 10.2, 10.3, 10.4, 10.5, 10.9, 10.10, 10.11, 10.101 and Annex BB, CC, and DD
Remarks:	Busbar trunking system consists of feeder box, joint and straight lengths

This Test Certificate is granted on account of an examination by DEKRA, the results of which are laid down in report no. 2172392.02-INC, dated 4 May 2015.

The examination has been carried out on one single specimen of the product, submitted by the manufacturer. The Attestation does not include an assessment of the manufacturer's production. Conformity of his production with the specimen tested by DEKRA is not the responsibility of DEKRA.

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Number: 2172392.101

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For the product:	Low-voltage busbar trunking system
Trade name:	EAE
Type/Model:	DL 04
Ratings:	$I_{nc}$ 40 A at 50 Hz, $U_i$ 690 V, $U_{imp}$ 6 kV, $I_{cw}$ 4 kA - 0,1 s For more details see annex
Manufactured by:	EAE Elektrik Asansör End. İnsaat San. ve Tic. A.S. Akçaburgaz Mahallesi 119, Sokak No: 10 34510 Esenyurt / İstanbul Turkey
Subject:	Design verification
Requirements:	IEC 61439-6: 2012 Clauses: 10.2, 10.3, 10.4, 10.5, 10.9, 10.10, 10.11, 10.101 and Annex BB, CC, and DD
Remarks:	Busbar trunking system consists of feeder box, joint and straight lengths

This Test Certificate is granted on account of an examination by DEKRA, the results of which are laid down in report no. 2172392.03-INC, dated 4 May 2015.

The examination has been carried out on one single specimen of the product, submitted by the manufacturer. The Attestation does not include an assessment of the manufacturer's production. Conformity of his production with the specimen tested by DEKRA is not the responsibility of DEKRA.

Arnhem, 4 May 2015

Number: 2172392.102

DEKRA Certification B.V.


  
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Component List	Component	Quantity
Item		
Company : Project : Project No :		Prepared by Name : Date : Signature :



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Component List	Item	Component	Quantity		
				Company : Project : Project No :	Name : Date : Signature :
				Prepared by	

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# PRODUCT TYPES

## BUSBAR ENERGY DISTRIBUTION SYSTEMS



## CABLE TRAYS



## TROLLEY BUSBAR ENERGY DISTRIBUTION SYSTEMS



## INDOOR SOLUTIONS



## SUPPORT SYSTEMS



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D.S.

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