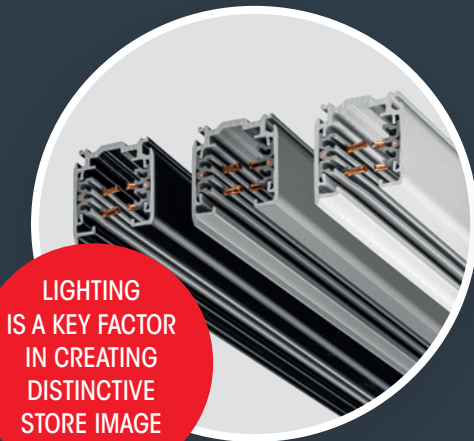
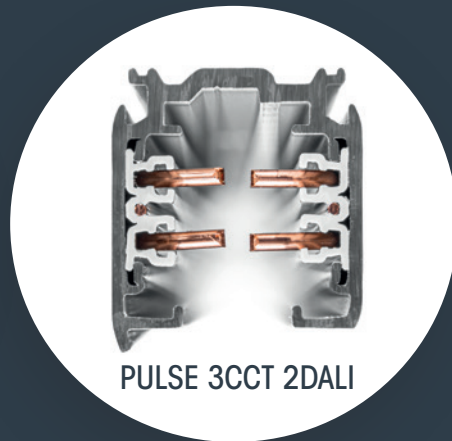


ENVIRONMENT IN MIND

GLOBAL^{trac}® PULSE



LIGHTING
IS A KEY FACTOR
IN CREATING
DISTINCTIVE
STORE IMAGE



PULSE 3CCT 2DALI

APPLICATION

- Public buildings (airports, cinemas, theaters, exhibition halls)
- Retail (supermarkets, shops)
 - Office
 - Residential



DALI

- Quality in focus

NORDIC  ALUMINIUM

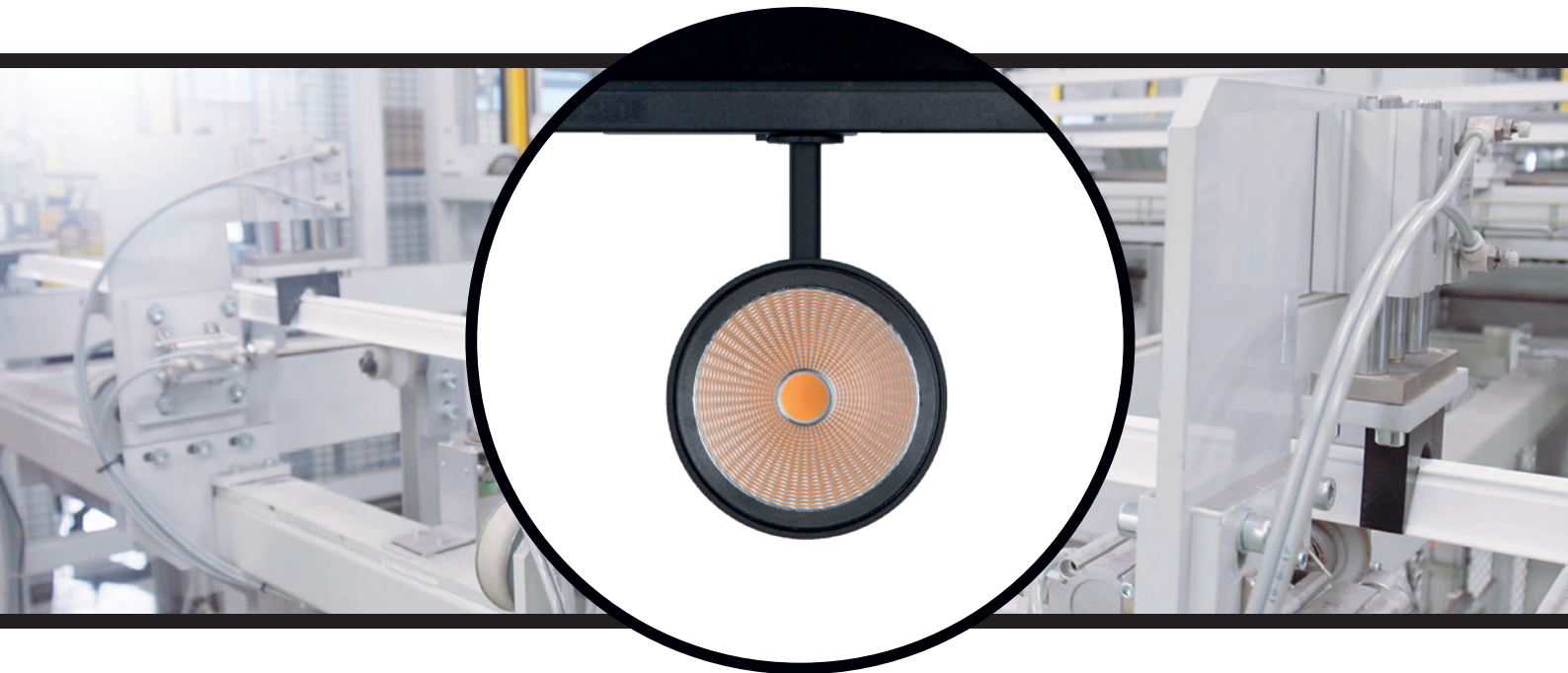
 LIVAL GROUP

ONE STOP SHOP.
EVERYTHING YOU
NEED FROM ONE
PLACE.

THE EASY WAY TO BUILD UP YOUR RETAIL LIGHTING

Our highly automated, state-of-the-art factories **in Finland** help us match customer demand at all times and guarantee, that we can manufacture and deliver a comprehensive portfolio of electrotechnical solutions quickly and cost-effectively.

With capacity for lighting tracks exceeding 5 million meters annually, Nordic Aluminium today has a position as a globally leading manufacturer.



NORDIC  **ALUMINIUM**

● **LIVAL** GROUP

GLOBAL TRAC PULSE CONTROL

GLOBAL Trac Pulse control is a lighting track system that includes both normal input voltage and wires for transmitting the control signal to the lights.

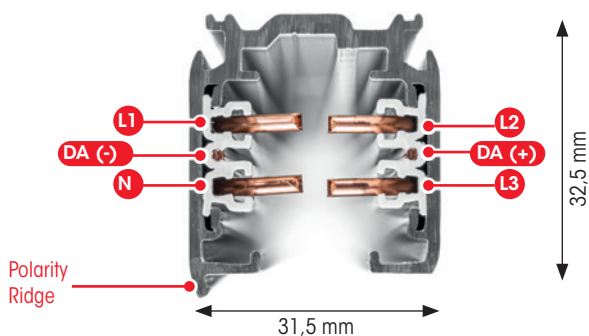
This makes it possible to use smart control systems like DALI, KNX, LON, and EIB without central units. Various manufacturers provide control units, detectors and fixtures for the control systems which all share the same goal: to transmit the control signal to individual lights using the GLOBAL Trac Pulse control's wires and to create dynamic lighting.

Needs-based lighting

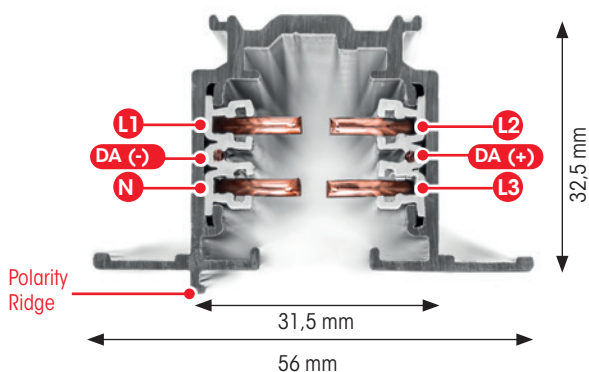
Dynamic lighting means that the lighting changes according to the situation and need. Lights can be turned on and off, brightened or dimmed flexibly as separate groups. This also saves energy, because lights are only turned on where necessary.



XTSC Surface

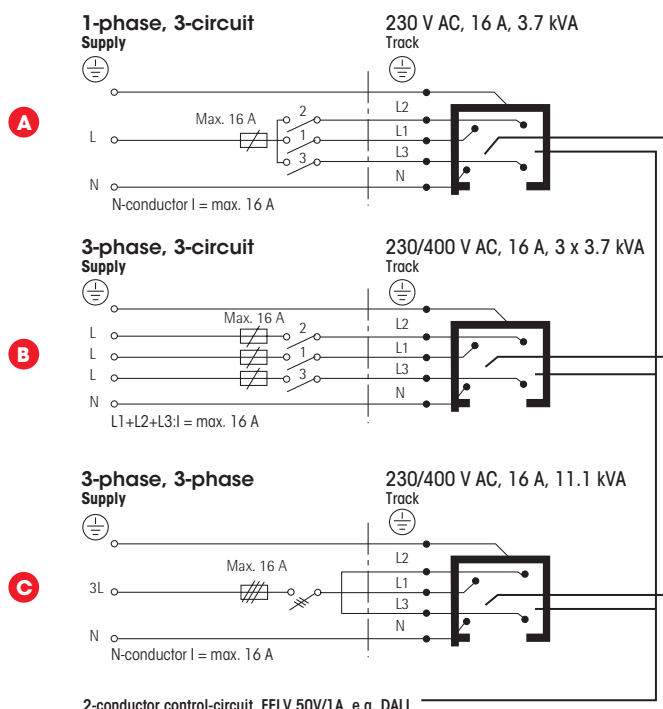


XTSCF Recessed



GLOBAL Trac Pulse control

Power Conductor Cross-Section: 4mm²
Control Conductor Cross-Section: 1,5mm²



Control conductors, max 50V

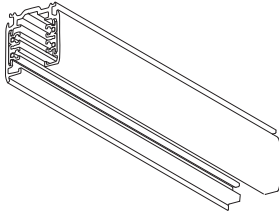
GLOBAL TRAC PULSE CONTROL TRACKS

Available colours: -1 grey (RAL 7040), -2 black (RAL 9005), -3 white (RAL 9016).

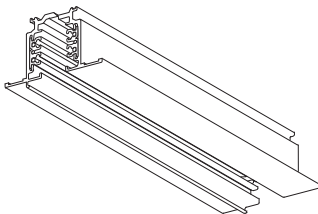
Surface Mounted Tracks:

Purchase Code	Type	EAN code	Length (mm)	Colour	PCS/ Package
KKT30511	XTSC6100-1	6410014531423	1000	Grey	4/240
KKT30512	XTSC6100-2	6410014531430	1000	Black	4/240
KKT30513	XTSC6100-3	6410014531478	1000	White	4/240
KKT30521	XTSC6200-1	6410014531485	2000	Grey	4/240
KKT30522	XTSC6200-2	6410014531492	2000	Black	4/240
KKT30523	XTSC6200-3	6410014531508	2000	White	4/240
KKT30531	XTSC6300-1	6410014531515	3000	Grey	4/240
KKT30532	XTSC6300-2	6410014531522	3000	Black	4/240
KKT30533	XTSC6300-3	6410014531539	3000	White	4/240
KKT30541	XTSC6400-1	6410014531546	4000	Grey	4/240
KKT30542	XTSC6400-2	6410014531553	4000	Black	4/240
KKT30543	XTSC6400-3	6410014531560	4000	White	4/240

XTSC 6100-6400
Surface



XTSCF 6100-6300
Recessed



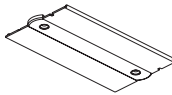
Recessed Tracks:

Purchase Code	Type	EAN code	Length (mm)	Colour	PCS/ Package
KKT305011	XTSCF6100-1	6410014531577	1000	Grey	6/180
KKT305012	XTSCF6100-2	6410014531584	1000	Black	6/180
KKT305013	XTSCF6100-3	6410014531591	1000	White	6/180
KKT305021	XTSCF6200-1	6410014531607	2000	Grey	6/180
KKT305022	XTSCF6200-2	6410014531614	2000	Black	6/180
KKT305023	XTSCF6200-3	6410014531621	2000	White	6/180
KKT305031	XTSCF6300-1	6410014531638	3000	Grey	6/180
KKT305032	XTSCF6300-2	6410014531645	3000	Black	6/180
KKT305033	XTSCF6300-3	6410014531683	3000	White	6/180

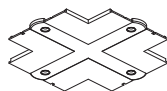
Recessed Track Accessories:

Purchase Code	Type	EAN code	Description	Colour	PCS/ Package
KKT304101	XTSF610-1	6410014532772	Cover plate : XTSC611-614	Grey	1/100
KKT304102	XTSF610-2	6410014532802	Cover plate : XTSC611-614	Black	1/100
KKT304103	XTSF610-3	6410014532819	Cover plate : XTSC611-614	White	1/100
KKT304301	XTSF630-1	6410014532826	Cover plate : XTSC634-640	Grey	1/100
KKT304302	XTSF630-2	6410014532833	Cover plate : XTSC634-640	Black	1/100
KKT304303	XTSF630-3	6410014532840	Cover plate : XTSC634-640	White	1/100

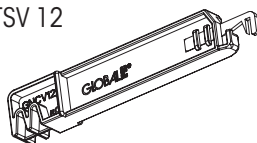
Cover plates
XTSF 610



XTSF 630



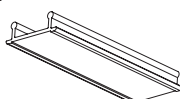
Tool XTSV 12



Bending tool for track power wires:

Purchase Code	Type	EAN code	Colour	PCS/ Package
KKT30155	XTSV12	6410014500993	Blue	1/100

Cover strip
XTSP 11





Cover strip for track opening:

Purchase Code	Type	EAN code	Length	Colour	PCS/ Package
KKT30152	XTSP11-2	6410014530990	Length 3000mm	Black	10/100
KKT30151	XTSP11-3	6410014530983	Length 3000mm	White	10/100

GLOBAL TRAC PULSE CONTROL ACCESSORIES

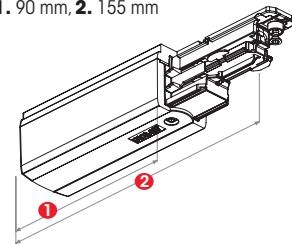
All materials are halogen free and VO self-extinguishing.
Available colours: -1 grey (RAL 7040), -2 black (RAL 9005), -3 white (RAL 9016).

End Feeds:

Purchase Code	Type	EAN code	Polarity Ridge	Colour	PCS/ Package
KKT305111	XTSC611-1	6410014532376		Grey	1/50
KKT305112	XTSC611-2	6410014532383		Black	1/50
KKT305113	XTSC611-3	6410014532390		White	1/50
KKT305121	XTSC612-1	6410014532406		Grey	1/50
KKT305122	XTSC612-2	6410014532413		Black	1/50
KKT305123	XTSC612-3	6410014532420		White	1/50

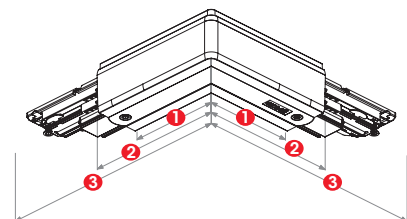
End feed XTSC 611, 612

1. 90 mm, 2. 155 mm



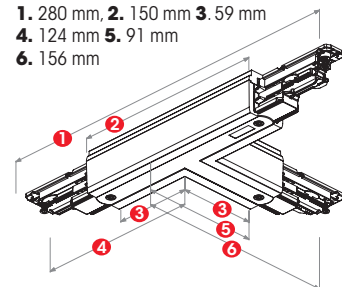
L-feed XTSNC 634, 635

1. 59 mm, 2. 91 mm 3. 156 mm



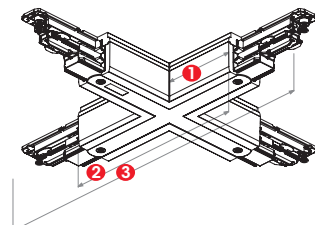
T-feed XTSNC 636, 637, 639, 640

1. 280 mm, 2. 150 mm 3. 59 mm
4. 124 mm 5. 91 mm
6. 156 mm



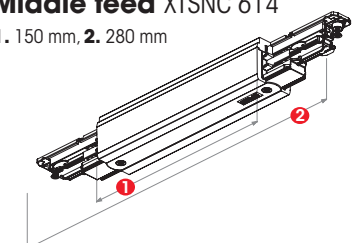
X-feed XTSNC 638

1. 59 mm, 2. 150 mm 3. 280 mm





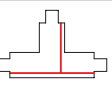
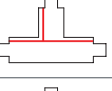
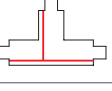
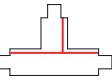
Middle feed XTSNC 614

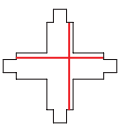
1. 150 mm, 2. 280 mm



Connectors with Power Supply Option:

KKT3053412	XTSNC634-1	6410014501006		Grey	1/25
KKT3053422	XTSNC634-2	6410014501013		Black	1/25
KKT3053432	XTSNC634-3	6410014501020		White	1/25
KKT3053512	XTSNC635-1	6410014501037		Grey	1/25
KKT3053522	XTSNC635-2	6410014501044		Black	1/25
KKT3053532	XTSNC635-3	6410014501051		White	1/25

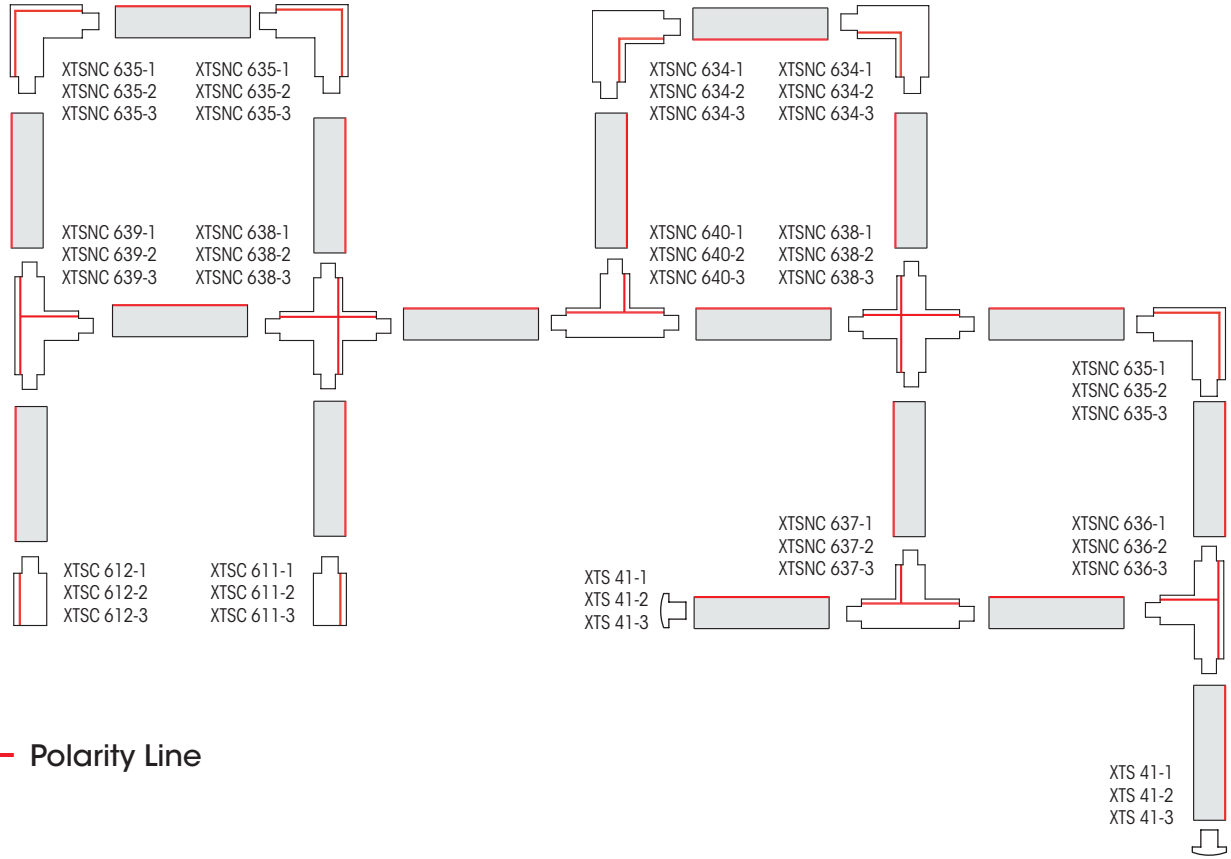
KKT3053612	XTSNC636-1	6410014501068		Grey	1/20
KKT3053622	XTSNC636-2	6410014501075		Black	1/20
KKT3053632	XTSNC636-3	6410014501082		White	1/20
KKT3053712	XTSNC637-1	6410014501099		Grey	1/20
KKT3053722	XTSNC637-2	6410014501105		Black	1/20
KKT3053732	XTSNC637-3	6410014501112		White	1/20
KKT3053912	XTSNC639-1	6410014501129		Grey	1/20
KKT3053922	XTSNC639-2	6410014501136		Black	1/20
KKT3053932	XTSNC639-3	6410014501143		White	1/20
KKT3054012	XTSNC640-1	6410014501150		Grey	1/20
KKT3054022	XTSNC640-2	6410014501167		Black	1/20
KKT3054032	XTSNC640-3	6410014501174		White	1/20

KKT3053812	XTSNC638-1	6410014501181		Grey	1/10
KKT3053822	XTSNC638-2	6410014501198		Black	1/10
KKT3053832	XTSNC638-3	6410014501204		White	1/10

KKT3051412	XTSNC614-1	6410014501211	Grey	1/25
KKT3051422	XTSNC614-2	6410014501228	Black	1/25
KKT3051432	XTSNC614-3	6410014501235	White	1/25

POLARITY IN TRAC PULSE

Use of L-, T- and X- Feed. Red line indicates polarity ridge



— Polarity Line

Connectors without option for power supply:

Purchase Code	Type	EAN code	Colour	PCS/ Package
KKT304211	XTSC621-1	6410014532109	Grey	1/100
KKT304212	XTSC621-2	6410014532116	Black	1/100
KKT304213	XTSC621-3	6410014532123	White	1/100

KKT305231	XTSC623-1	6410014532130	Grey	1/25
KKT305232	XTSC623-2	6410014532147	Black	1/25
KKT305233	XTSC623-3	6410014532154	White	1/25

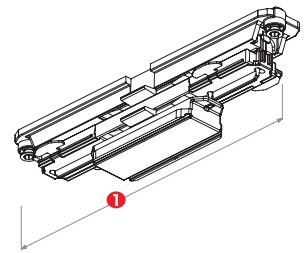
End Cap:

KKT3012165	XTS41-1	6410014507329	Grey	1/100
KKT3012166	XTS41-2	6410014506414	Black	1/100
KKT3012172	XTS41-3	6410014507411	White	1/100

- Flexibility - Enabling Energy Savings

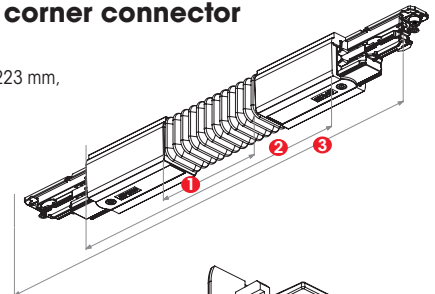
Straight connector

XTSC 621
1. 120 mm



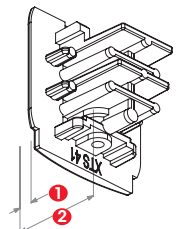
Flexible corner connector

XTSC 623
1. 82 mm, 2. 223 mm,
3. 353 mm



End cap XTS 41

1. 3 mm, 2. 21 mm



PULSE DALI 3-CIRCUIT ADAPTERS

Purchase Code	Type	EAN code	Description	Colour	PCS / Package
KKT30691	GAC69-1	6410014501860	6A 50N Slot connection	Grey	1/50
KKT30692	GAC69-2	6410014501877	6A 50N Slot connection	Black	1/50
KKT30693	GAC69-3	6410014501884	6A 50N Slot connection	White	1/50
KKT30694	GAC69L-1	6410014501365	6A 50N Slot connection	Grey	50
KKT30695	GAC69L-2	6410014501372	6A 50N Slot connection	Black	50
KKT30696	GAC69L-3	6410014501389	6A 50N Slot connection	White	50

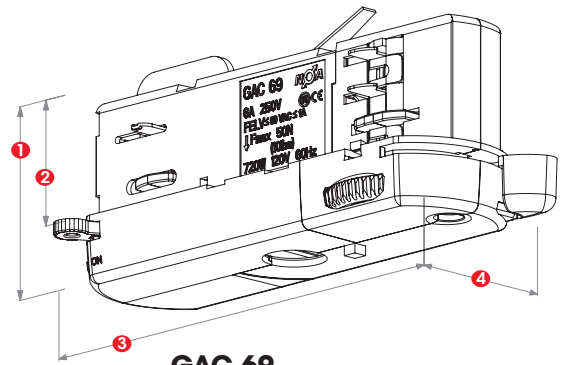
GAC 69 Wiring Options:

- To be used with stranded 0.5 ... 1.0mm² wire
- Slot Connection. The conductors are pressed into the connectors by the connector lid or by the cable mounting tool. GA 69CT.
- Optional cable grip CG 69.
- Control signal with screw connectors 0.5 ... 1,0mm² wire

KKT306001	GAC600-1	6410014532925	10A 100N Slot connection	Grey	1/50
KKT306002	GAC600-2	6410014532932	10A 100N Slot connection	Black	1/50
KKT306003	GAC600-3	6410014532949	10A 100N Slot connection	White	1/50
KKT306011	GAC600L-1	6410014501396	10A 100N Slot connection	Grey	50
KKT306012	GAC600L-2	6410014501402	10A 100N Slot connection	Black	50
KKT306013	GAC600L-3	6410014501419	10A 100N Slot connection	White	50

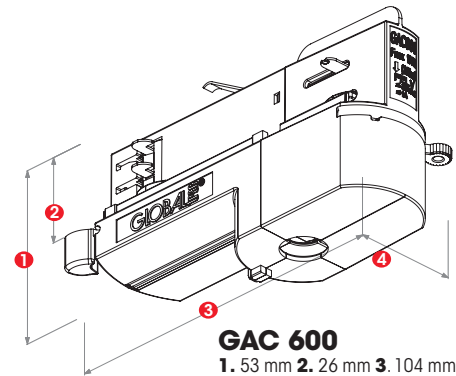
GAC 600 Wiring Options:

- To be used with stranded 0.5 ... 1.0mm² wire
- Slot Connection. The conductors are pressed into the connectors by the connector lid or by the cable mounting tool. GB 66CT.
- Optional cable grip CG 100.
- Control signal with screw connectors 0.5 ... 0,7mm² wire



GAC 69

1. 40 mm 2. 26 mm 3. 103 mm
4. 32 mm

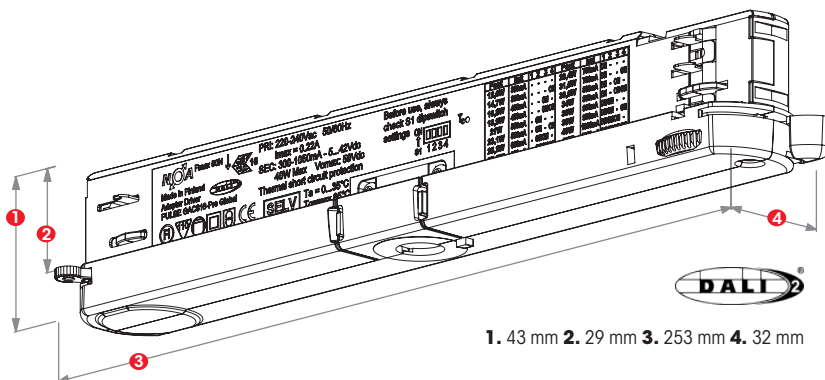


GAC 600

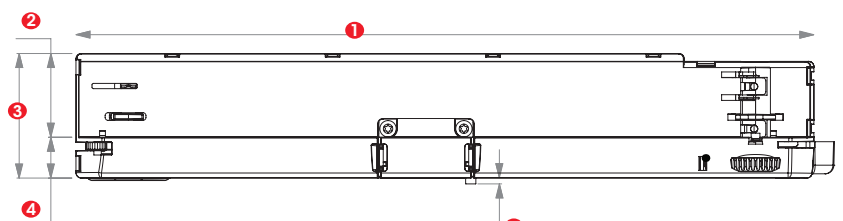
1. 53 mm 2. 26 mm 3. 104 mm
4. 32 mm

Pulse DALI 3-Circuit Adapter-Drivers:

Purchase Code	Type	EAN code	Description	Fmax	Colour	PCS / Package
LIV3013191	GAC616-1-Pro Global	6413631176930	300-1050mA : 12,6-40W	50N	Grey	10/1440
LIV3013192	GAC616-2-Pro Global	6413631176947	300-1050mA : 12,6-40W	50N	Black	10/1440
LIV3013193	GAC616-3-Pro Global	6413631176954	300-1050mA : 12,6-40W	50N	White	10/1440



1. 43 mm 2. 29 mm 3. 253 mm 4. 32 mm



1. 253 mm 2. 29 mm 3. 43 mm 4. 14 mm 5. 2 mm

- Create Your Dynamic Lighting Easily with GAC-616

GLOBAL PULSE

ADAPTER DRIVER

- Thermally strong
- Strong surge protection
- Energy efficiency
- The easy way to fix your lighting architecture in your store

*More Light – Less Electricity
Environment in mind*



DALI
DIMMING MADE THE
EASY WAY

• Quality in focus

BASIC RANGE

GAC616 CASA

Up to **125lm/W** at CRI 90+



15°, 21°, 3d 25°, 32°, 46°
net weight 460 g

GAC616 STANDARD

Up to **125lm/W** at CRI 90+



15°, 3d 24°, 3d 36°, 3d 55°
net weight 620 g

GAC616 CAFETERIA

Up to **125lm/W** at CRI 90+



15°, 3d 24°, 3d 36°, 3d 55°
net weight 690 g

HIGHLIGHT RANGE

GAC616 BING

Up to **125lm/W** at CRI 90+



15°, 21°, 3d 25°, 32°, 46°
net weight 460 g

GAC616 BINGO

Up to **125lm/W** at CRI 90+



15°, 3d 24°, 3d 36°, 3d 55°
net weight 620 g

GAC616 DINGO

Up to **120lm/W** at CRI 90+



15°, 3d 18°, 3d 28°, 35°, 3d 50°
net weight 690 g