a generation

your needs

TRIDONIC

A generation 4 your needs

The fourth generation is more than just a new product family with technical updates. Generation 4 stands for a comprehensive bundle of benefits which covers the driver portfolio as well as sustainability, systems and services.

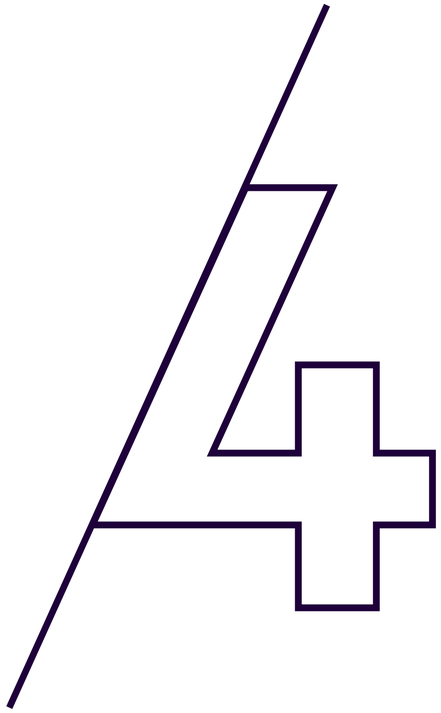
Generation 4 combines maximum flexibility in application and design with simple handling and at the same time protects the environment from unnecessary impact.

Tridonic optimises existing technologies and combines them with a series of new features that enable essential luminaire data to be used, uncomplicated fault management to be performed and rapid on-site changes to be made.

Tridonic also facilitates certification for sustainable luminaires through its numerous services. This results in innovative, tailor-made solutions from a single source, benefiting luminaire manufacturers, users and the environment alike.

Content

Generation 4: New generation – new benefits	**4**
Features	**5**
Increased operating window	6
NFC programming	8
Miniaturisation	9
lumDATA	11
Portfolio overview	**12**
PRE4	13
EXC4	19
SNC4	24



Generation 4

New generation – new benefits

built 4 inspiring possibilities
With Generation 4, Tridonic drivers have reached new levels in many respects – with so many benefits for you. Not only in their applications but also in each step of luminaire production. The benefits include greater freedom for luminaire designers, a unique variety of systems and applications, and efficient handling and warehousing.

proactive 4 making a change
Generation 4 is fit for future developments not only in terms of technology. In the interests of a future worth living, Tridonic is linking the new generation of drivers with an extensive sustainability programme focusing on Cradle-to-cradle. Numerous small details add up to a huge difference for you.

system solutions 4 expanded success and efficiency
As a full-service provider, Tridonic supplies not only individual drivers but also perfectly matched systems from a single source. From elementary to versatile and from wireless to IoT networking. It is all geared to success – with Generation 4 your solutions will be even more efficient, more flexible and easier to handle.

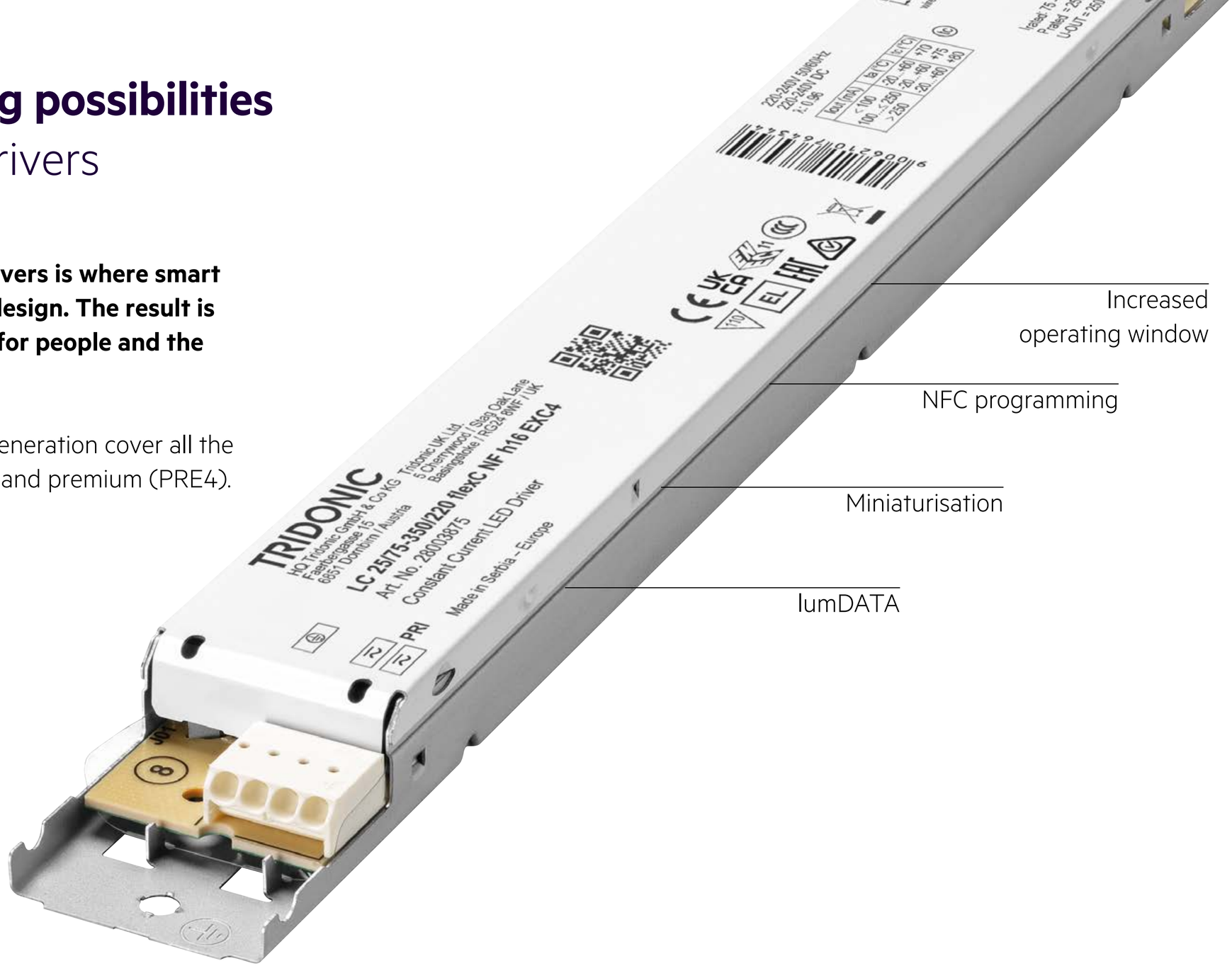
open ears 4 a trustful partnership
Our services are as flexible and wide-ranging as the portfolio of fourth-generation drivers. All our services and support activities aim to simplify your work processes and assist you in the manufacture of luminaires. They lay the foundation for long-term partnerships and deep trust.

Built 4 inspiring possibilities

Generation 4 drivers

This new generation of drivers is where smart features meet intelligent design. The result is a whole string of benefits for people and the environment.

The features of the fourth generation cover all the drivers in the excite (EXC4) and premium (PRE4).



Increased operating window 4 easier decisions

The more applications a driver can cover, the easier it is always to have the right product in stock.

What's needed is an operating window of appropriate size. Tridonic goes one step further however. The operating windows overlap from one driver to the next. This results in maximum flexibility and covers all the operating points within the voltage range. It is then possible to maintain reduced stock levels and still be able to choose a driver that is not only suitable but also more efficient. And because the new Generation 4 drivers are backwards compatible, luminaires can easily be updated with state-of-the-art technology.

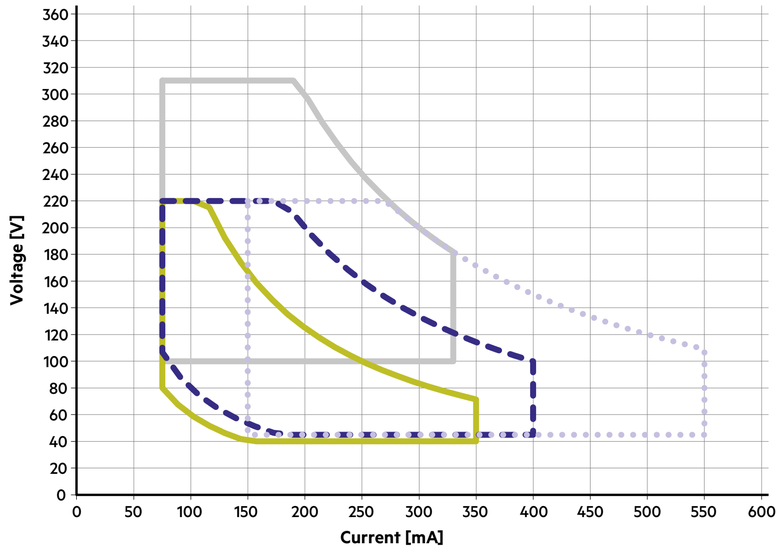
Increased operating window 4 easier decisions

The larger overlapping operating windows of the fourth generation enable both dimmable and non-dimmable drivers to be used in a wide range of applications.

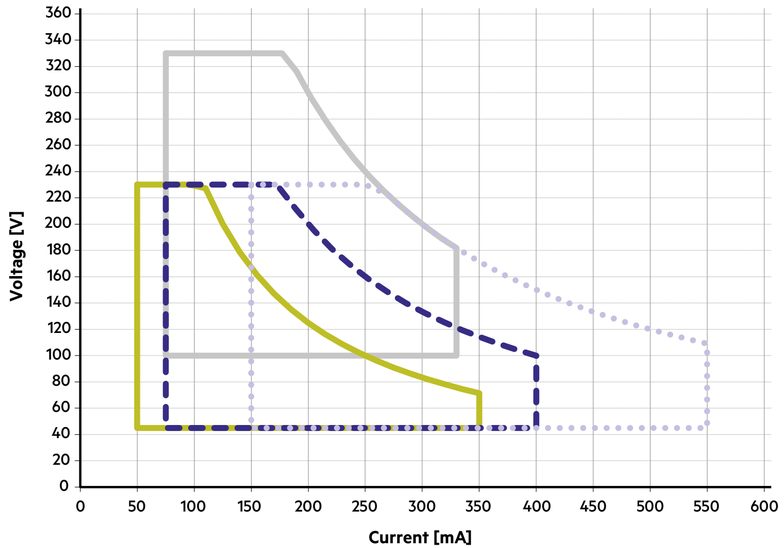
25 W / 45 W / 60 W

90 W / 120 W

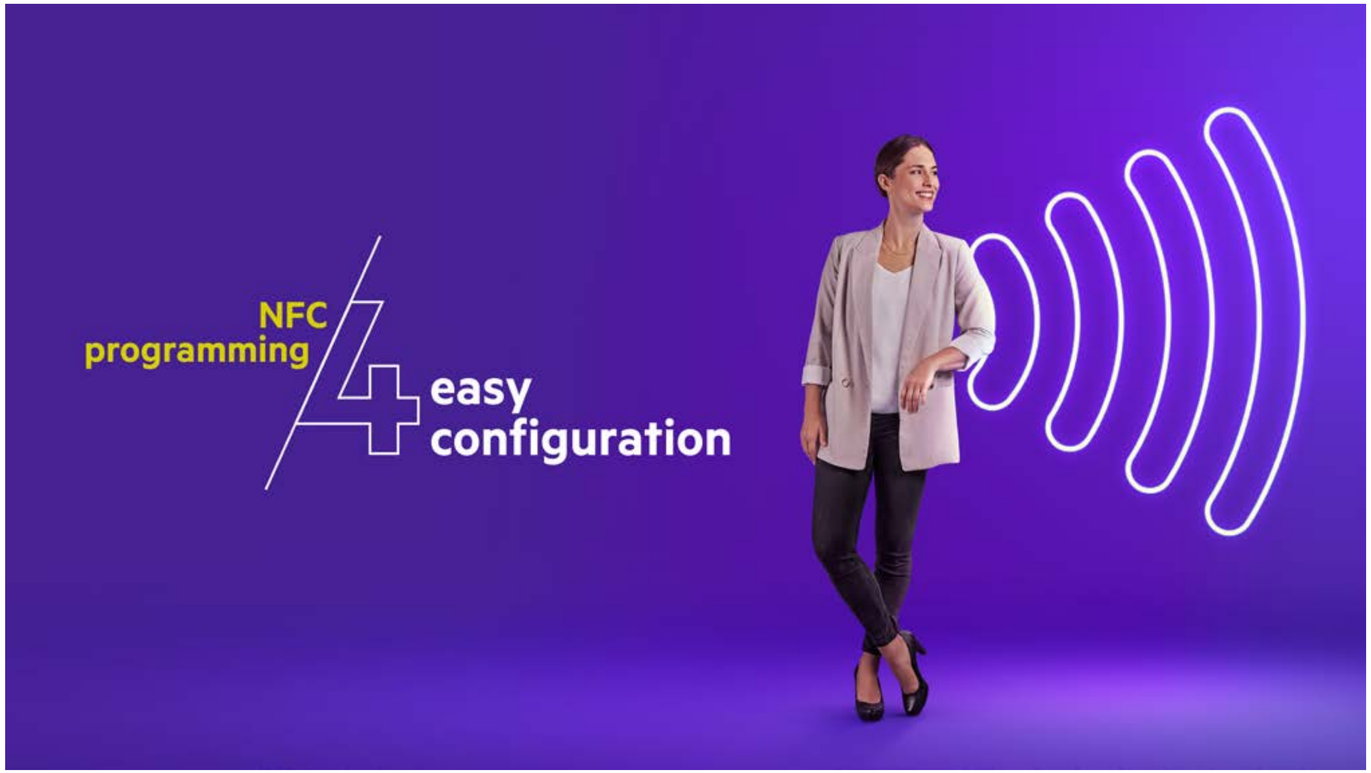
Non dimmable NFC



Dimmable NFC lumDATA DALI



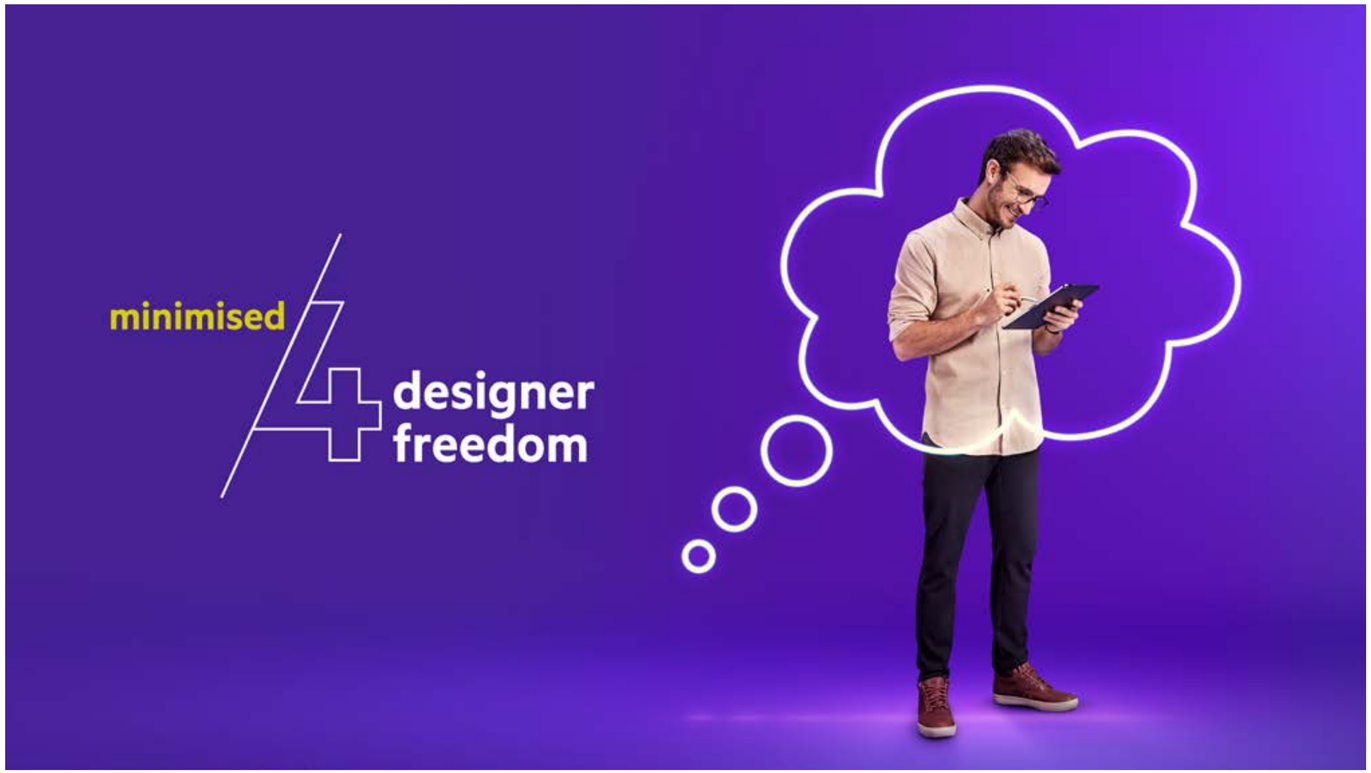
NFC programming 4 easy configuration



New standards help to simplify complex processes and make them more flexible. NFC programming of drivers is a good example.

Generation 4 consigns plug settings to the history books. Since the driver does not need to be powered for NFC programming the process is safer, faster and more reliable. Even more time is saved with NFC multi-programming which allows entire packaging units to be programmed in a single step. companionSUITE from Tridonic is the ideal software collection for simple, fast and flexible configuration.

Minimised 4 designer freedom



Generation 4 drivers prove that true greatness comes from within.

Just 16 mm high, the slim low-profile drivers are packed with possibilities – from space-saving freedom for designing luminaires to attractive savings on materials and resources. Since the 16 mm format is offered across all wattages at Tridonic, there is also an efficiency gain in luminaire production because a uniform format means that the same fastening mechanisms and tools can be used for all luminaires. And if you are using the current 21 mm standard you will also benefit because the 21 mm format can be replaced one-for-one by slim Generation 4 products. And for all you minimalists, there will also be a choice of 11 mm high drivers.

Minimised 4 designer freedom

One generation. Three heights. Maximum freedom of design.
The Tridonic drivers are available in three different heights to suit requirements and available space. The 16 mm high drivers now replace the 21 mm versions as the new standard in the EXC4 and PRE4* series. This gives luminaire designers even more freedom to create miniaturised luminaires.

*Except for the LCI 220W PRE4 industry driver with a height of 28 mm.

lumDATA 4 smart data usage

lumDATA supplements the DALI-2 and D4i standards with a pragmatic intermediate solution for smart buildings and IoT concepts.

lumDATA includes all the DALI specifications of parts 251, 252 and 253 that enable essential lighting, energy and diagnostic data to be stored and shared.

For example, the luminaire identification data of DALI part 251 enables luminaires to be assigned during installation, ensures efficient monitoring during operation and simplifies on-site commissioning.

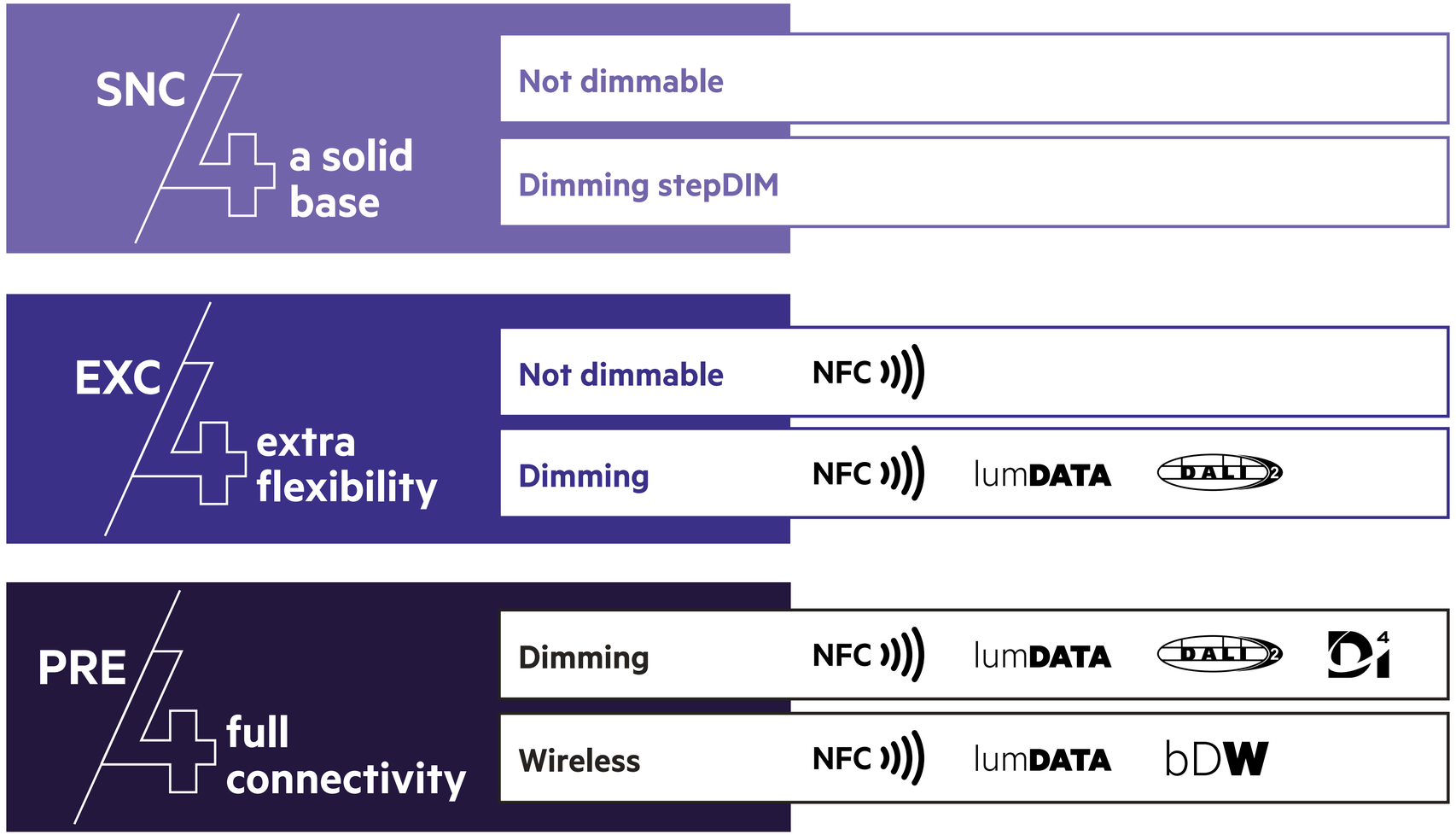
DALI part 252 captures and transmits the energy data of each individual luminaire within a lighting system. This enables energy consumption to be monitored and targeted optimisation to be carried out.

DALI part 253 provides important diagnostic data for each luminaire so troubleshooting is quick and easy. This makes it easier for both Tridonic and the customer to display faults, and provides the basis for predictive maintenance.

Portfolio overview

We are constantly updating our range with new technologies and innovative options. To help you find the product you are looking for quickly and easily, despite the ever-expanding range, we sometimes have to restructure our portfolio.

Instead of four categories previously, we now have three: **essence (SNC), excite (EXC) and premium (PRE), each of which performs different tasks and meets different needs.**



PRE4: non-SELV, wireless

LC 25 W / 40 W / 60 W / 90 W

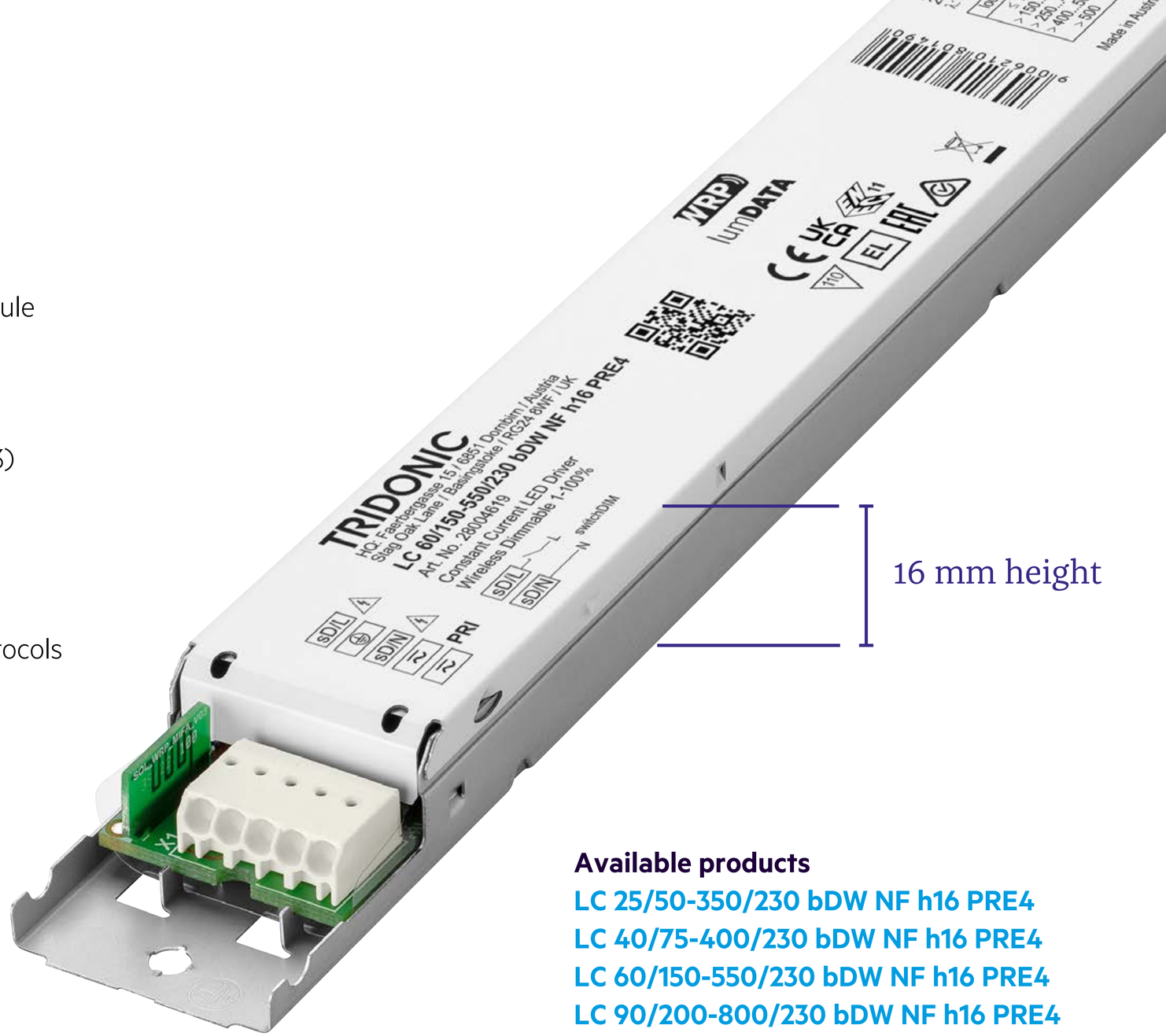
For the 4th generation we have reduced the size of the housing for our basicDIM Wireless driver by 24 percent. But that's not all. As the first 16 mm low-profile driver, it has all the technology needed for a wireless indoor lighting solution because Tridonic has integrated the usually separate wireless module directly in the driver. All thanks to the innovative Wireless Reference Platform (WRP).

Combining components saves not only space in the luminaire but also valuable resources. For you, this means less installation work and a lower purchase price. The premium driver features the Casambi protocol as standard, but can be equipped with other wireless protocols such as Matter or WiSilica on request.

PRE4: non-SELV, wireless

LC 25 W / 40 W / 60 W / 90 W

- 16 mm low-profile driver with integrated basicDIM Wireless module
- Housing size reduced by 24 %
- Efficiency of up to 95 %
- Dimming range: 1 to 100 %
- Future-proof thanks to lumDATA (DALI-2 parts 251, 252 and 253)
- Large operating window: adjustable output current between 50 and 800 mA across the entire product family
- Compatibility of WRP with popular wireless standards thanks to the 2.4 GHz frequency band
- Casambi protocol, also available with other popular wireless protocols (DALI+, Matter, WiSilica) on request
- NFC interface for multiprogramming and simple configuration
- Output current adjustable via companionSUITE
- Direct replacement for existing DALI and flexC drivers while retaining existing functions (for DesignIn)
- Long life of up to 100,000 hours



Available products

LC 25/50-350/230 bDW NF h16 PRE4
LC 40/75-400/230 bDW NF h16 PRE4
LC 60/150-550/230 bDW NF h16 PRE4
LC 90/200-800/230 bDW NF h16 PRE4

PRE4: driver with integrated wireless module

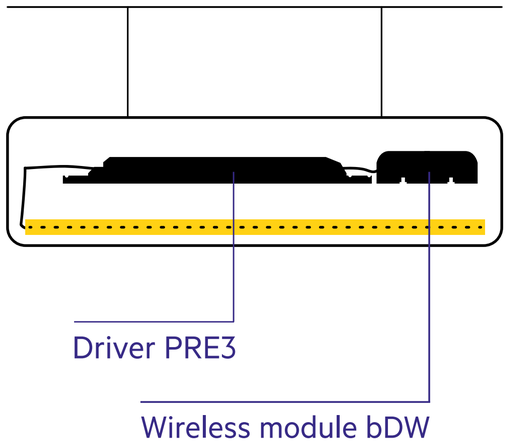
Simple wireless lighting control

With basicDIM Wireless we offer a simple way to add wireless control to lighting systems without having to make any structural modifications. A luminaire needs a driver and wireless module that communicate with each other via Casambi-ready basicDIM Wireless technology.

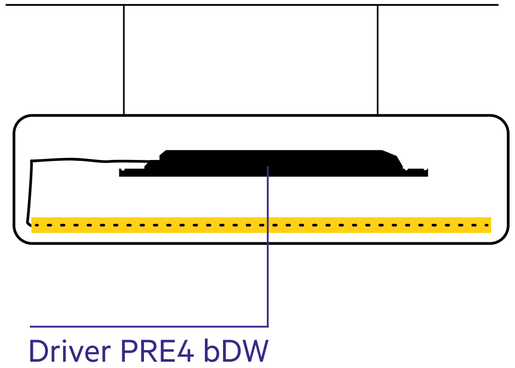
Equipped with the Wireless Reference Platform (WRP), the premium Generation 4 drivers add a further option to the portfolio – for simple, cost-optimised lighting management. **Thanks to WRP, the wireless module is integrated directly in the driver. By combining the components, we have reduced the consumption of valuable raw materials. And as a customer you benefit from lower installation and acquisition costs.**

Like the proven two-component solution, the combined wireless version offers numerous benefits and functions for simple, convenient and versatile lighting control. While the integrated driver solution offers more space in the luminaire, the separate wireless module can be placed outside the luminaire with a high degree of flexibility, making the classic solution ideal especially for rooms with partitions or niches.

Two-component solution
Flexible and versatile



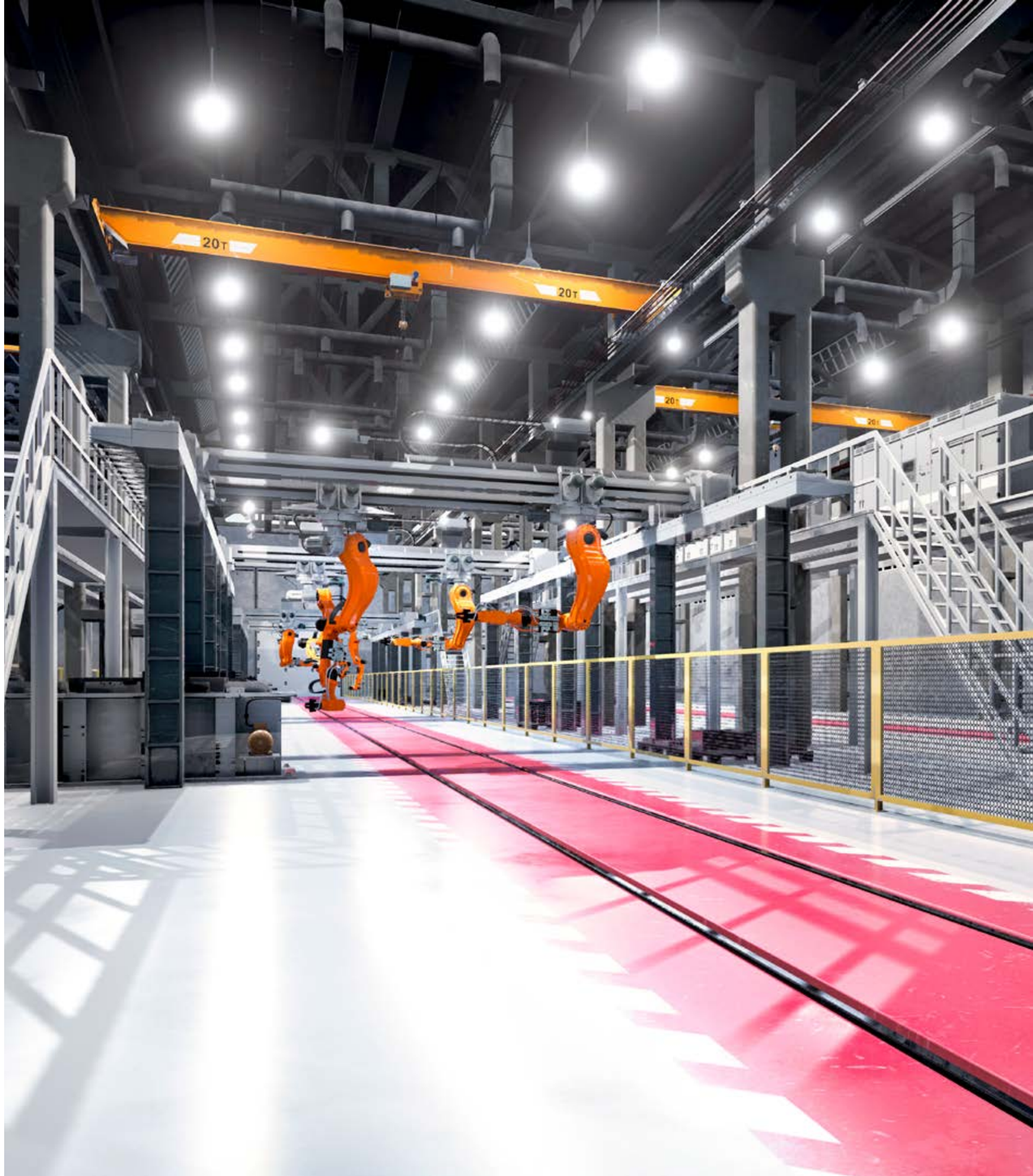
Integrated solution
Cost-optimised and simple



PRE4 industry: dimming
LCI 220 W

The Generation 4 industry driver offers a whole range of clever features, starting with the NFC interface which enables the premium driver (PRE4) to conduct time-saving multi-programming and simple configuration via companionSUITE. The driver complies with the D4i standard and provides an optimized output of 220 W. This means that even very powerful industrial luminaires delivering up to 40,000 lumens can operate on a single driver. It also means luminaire production is simpler and less costly.

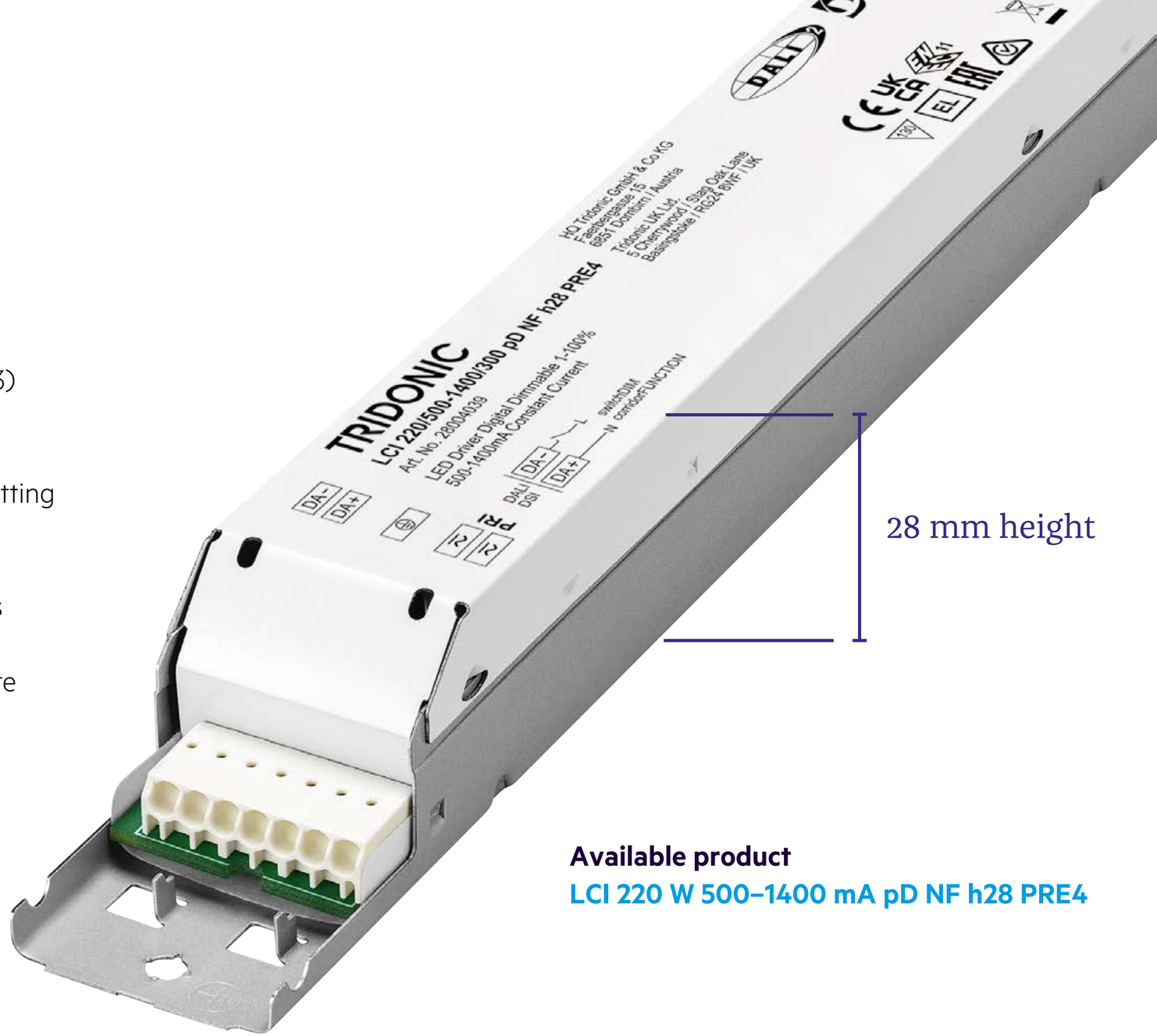
Tridonic is the only manufacturer of luminaire components that offers a combination of a long service life of up to 100,000 hours at an ambient temperature of 65 °C and an eight-year guarantee. Users can therefore be confident that their lighting will operate reliably for a long time – even in very demanding applications such as production and assembly halls, high-bay warehouses and exhibition halls.



PRE4 industry: dimming

LCI 220 W

- Constant current driver for luminaire installation with integrated DALI bus power supply (DALI-2 part 250)
- Future-proof thanks to lumDATA (DALI-2 parts 251, 252 and 253)
- Optimized output power: 220 W
- Dimming range: 1 to 100 %
- NFC interface for multi-programming, easy configuration and setting of the output current via companionSUITE
- Extended temperature range: –40 to +75 °C
- Integrated inrush current limiter to prevent peak inrush currents
- For luminaires in protection classes I and II
- Long life-time up to 100,000 hours at 65 °C ambient temperature
- 8-year guarantee



Available product

LCI 220 W 500–1400 mA pD NF h28 PRE4

PRE4 industry: driver with inrush current limiter

Saves space and costs

The higher the peak inrush currents, the slower-acting and more expensive the circuit breakers required for the switching cabinet.

Generation 4 industry drivers are supplied with an integrated inrush current limiter which prevents the occurrence of high peak inrush currents from the outset. This means that not only can simpler and more cost-effective circuit breakers be installed in the switching cabinet, but significantly fewer are needed.

When Generation 4 industry drivers are used a single circuit breaker can be used for about three times the number of luminaires compared to conventional drivers. That not only saves costs but also space in the switching cabinet.

For a lighting installation in a standard warehouse with 400 luminaires the savings on the purchase costs for circuit breakers may be as high as 70 %.

Saves up to 70 % of acquisition costs

	Without inrush current limiter	With inrush current limiter	Savings
No. of luminaires	400 pieces	400 pieces	
Costs per standard B16 circuit breaker[1]	€ 3,20	€ 3,20	
No. of standard B16 circuit breakers	100 pieces	31 pieces	**~70 %**
Total cost	€ 320	€ 99.20	**€ 220.80[2]**

[1] With the main function, tripping characteristic and power protection

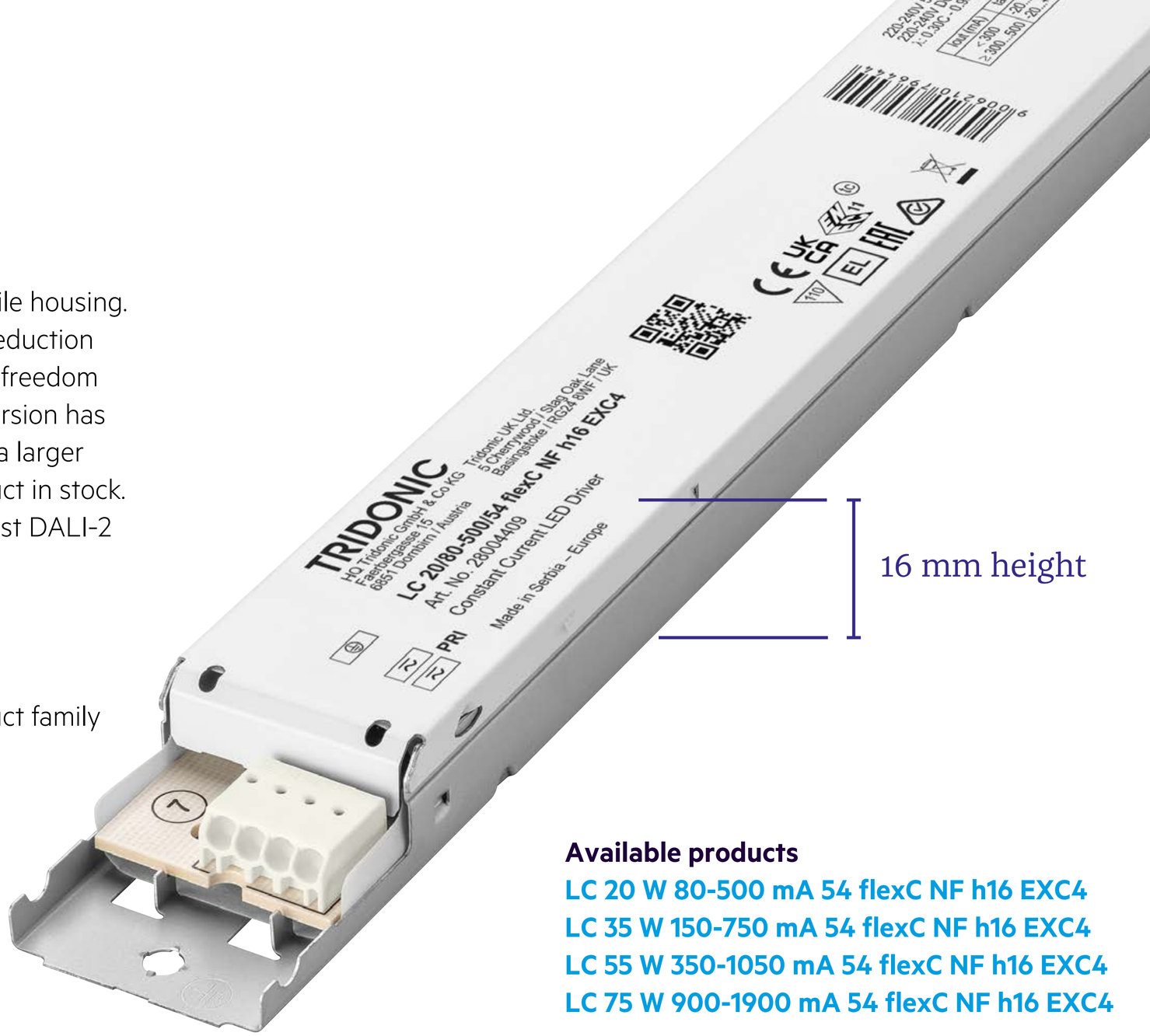
[2] The savings for the reduced amount of work required for cabling and for the use of faster and therefore more economical circuit breakers are not taken into account.

EXC4: SELV, not dimmable

LC 20 W / 35 W / 55 W / 75 W

Tridonic has launched the first SELV driver with a 16 mm low-profile housing. Compared to a conventional 21 mm SELV driver, this 24 percent reduction in size offers significantly more space in the luminaire and greater freedom of design. Like the other 4th generation excite drivers, the SELV version has an optimised operating window which allows each driver to cover a larger number of applications. You therefore always have the right product in stock. excite drivers include lumDATA as standard, which covers the latest DALI-2 parts.

- Efficiency of up to 87 %
- Housing size reduced by 24 %
- Large operating window: 80 to 1,900 mA across the entire product family
- Output current adjustable in 2 mA steps via NFC
- Quick and easy configuration with companionSUITE
- Multiprogramming via the NFC interface
- Mains-side overvoltage monitoring (IVG)
- Constant light output function (CLO)
- Long life of up 100,000 hours



Available products

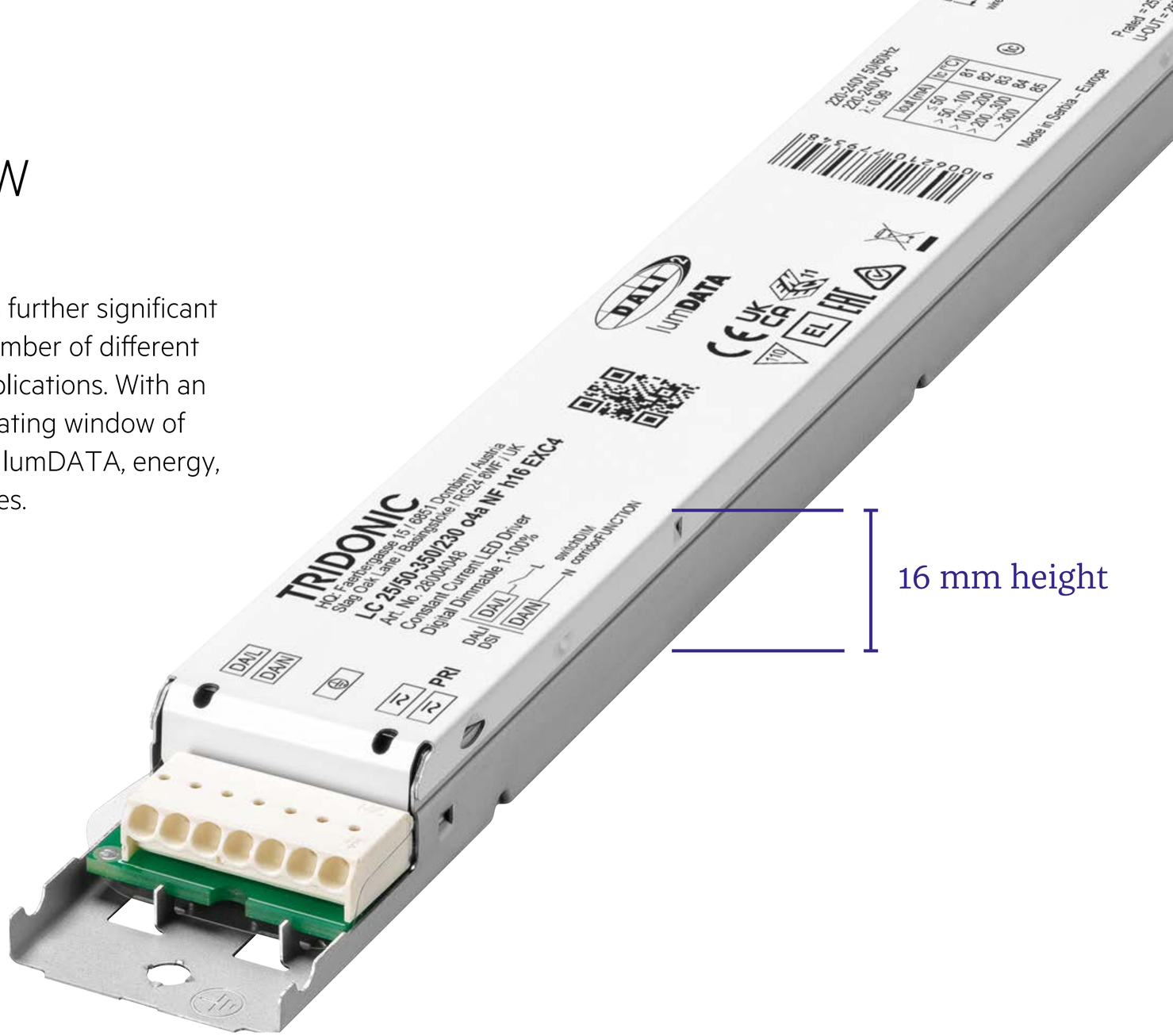
LC 20 W 80-500 mA 54 flexC NF h16 EXC4
LC 35 W 150-750 mA 54 flexC NF h16 EXC4
LC 55 W 350-1050 mA 54 flexC NF h16 EXC4
LC 75 W 900-1900 mA 54 flexC NF h16 EXC4

EXC4: non-SELV, dimming

LC 25 W / 40 W / 60 W / 90 W / 120 W

The high flexibility of the 16 mm high excite driver series is given a further significant boost with the dimmable version. The one4all interface offers a number of different dimming options, making this driver ideal for more demanding applications. With an NFC interface for quick and easy programming and the large operating window of the fourth generation the ideal driver is always at hand. Thanks to lumDATA, energy, lighting and diagnostic data can be easily used for specific purposes.

- lumDATA (DALI-2 parts 251, 252 and 253)
- Efficiency of up to 96.9 %
- Dimming range: 1 to 100 %
- Standby losses < 0.15 W
- Large operating windows: 50 to 1,050 mA
- Output current can be flexibly adjusted via NFC interface
- Quick and easy configuration via companionSUITE
- Overvoltage and undervoltage monitoring
- Constant light output function (CLO)
- Power-up fading and fade2zero
- High lifetime up to 100,000 hours
- 90-watt version optionally available with low voltage or high voltage

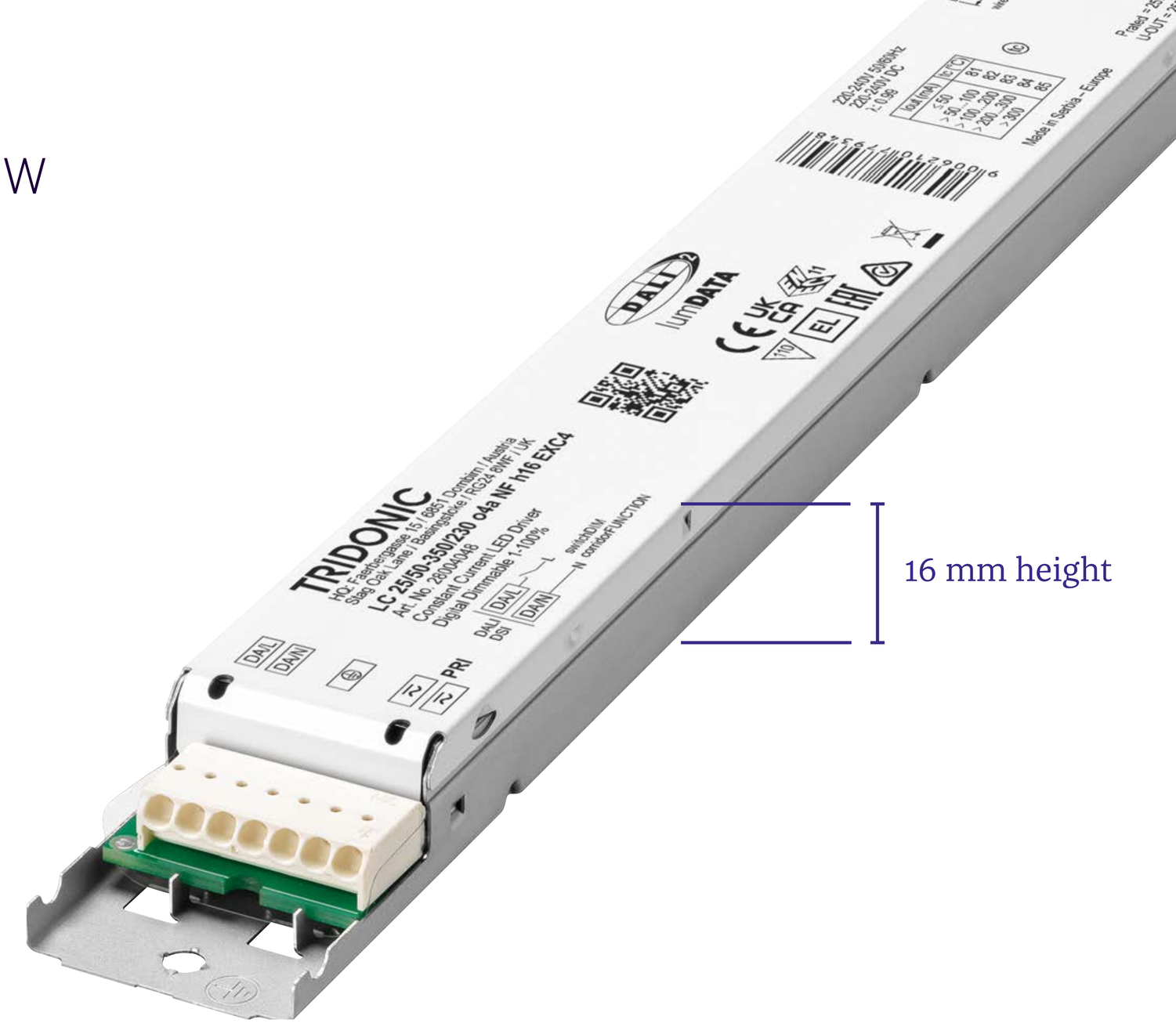


EXC4: non-SELV, dimming

LC 25 W / 40 W / 60 W / 90 W / 120 W

Available products

LC 25 W 50–350 mA 230V o4a NFC h16 EXC4
LC 40 W 75–400 mA 230V o4a NFC h16 EXC4
LC 60 W 75–330 mA 300V o4a NFC h16 EXC4
LC 60 W 150–550 mA 230V o4a NFC h16 EXC4
LC 90 W 150–400 mA 330V o4a NFC h16 EXC4
LC 90 W 200–800 mA 230V o4a NFC h16 EXC4
LC 120 W 350–1050 mA 230V o4a NFC h16 EXC4

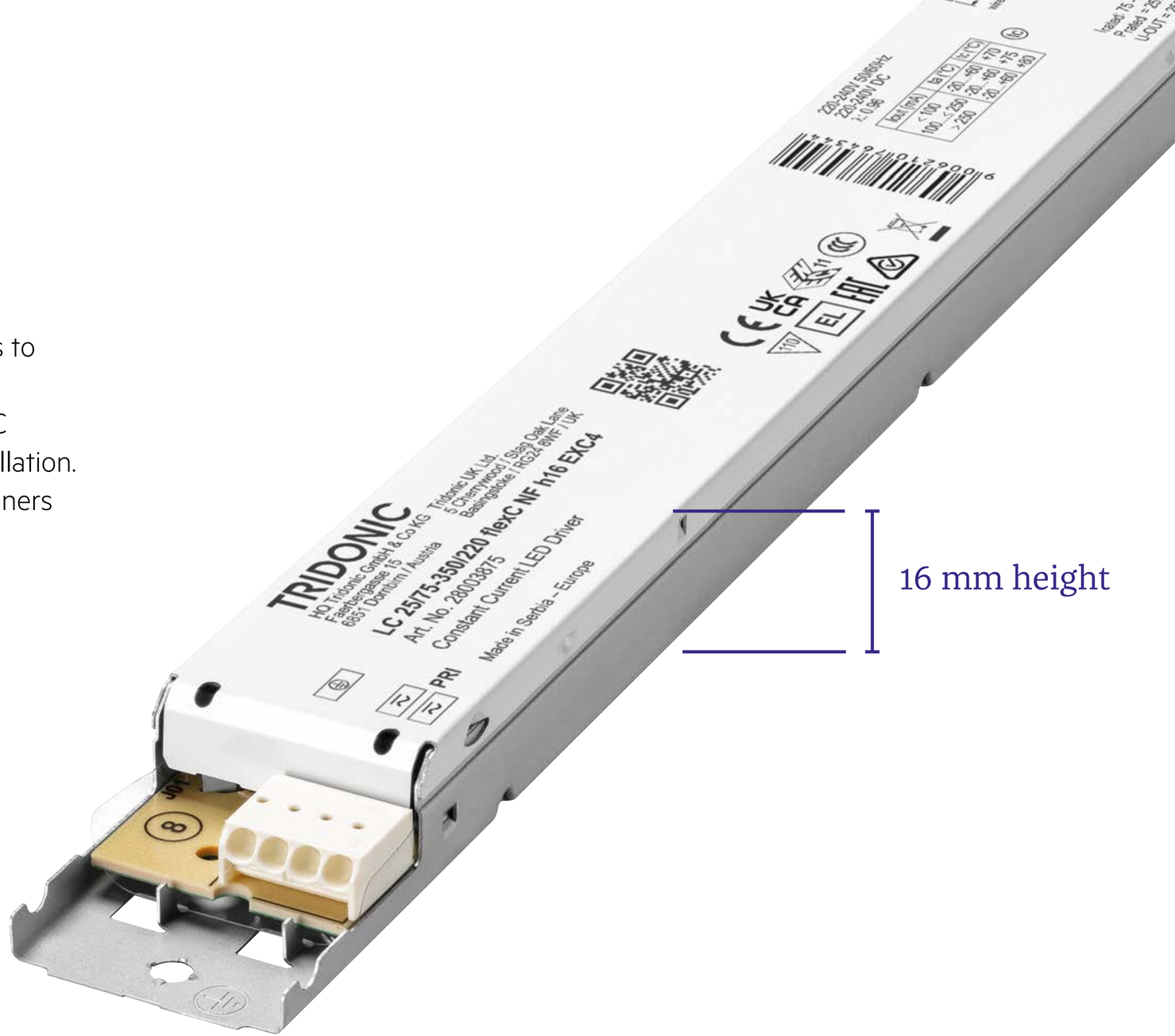


EXC4: non-SELV, not dimmable

LC 25 W / 40 W / 60 W

The 4th generation of the excite driver (EXC4) offers maximum flexibility for lighting systems that do not require dimming. Thanks to the large operating window, a single driver can cover a wide range of applications. The driver can be quickly programmed via the NFC interface and can be easily and wirelessly adapted even after installation. The slim, low-profile housing is only 16 mm high, which gives designers enormous freedom to create exceptional luminaires.

- Constant current driver for luminaire installation
- Efficiency of up to 95 %
- Large operating windows: 75 to 1,050 mA
- Flexible output current via NFC interface
- Quick and easy configuration via companionSUITE
- Protection features: overtemperature, short circuit, overload
- No-load operation, input voltage range
- Constant light output function (CLO)
- High lifetime up to 100,000 hours
- 90-watt version optionally available with low voltage or high voltage

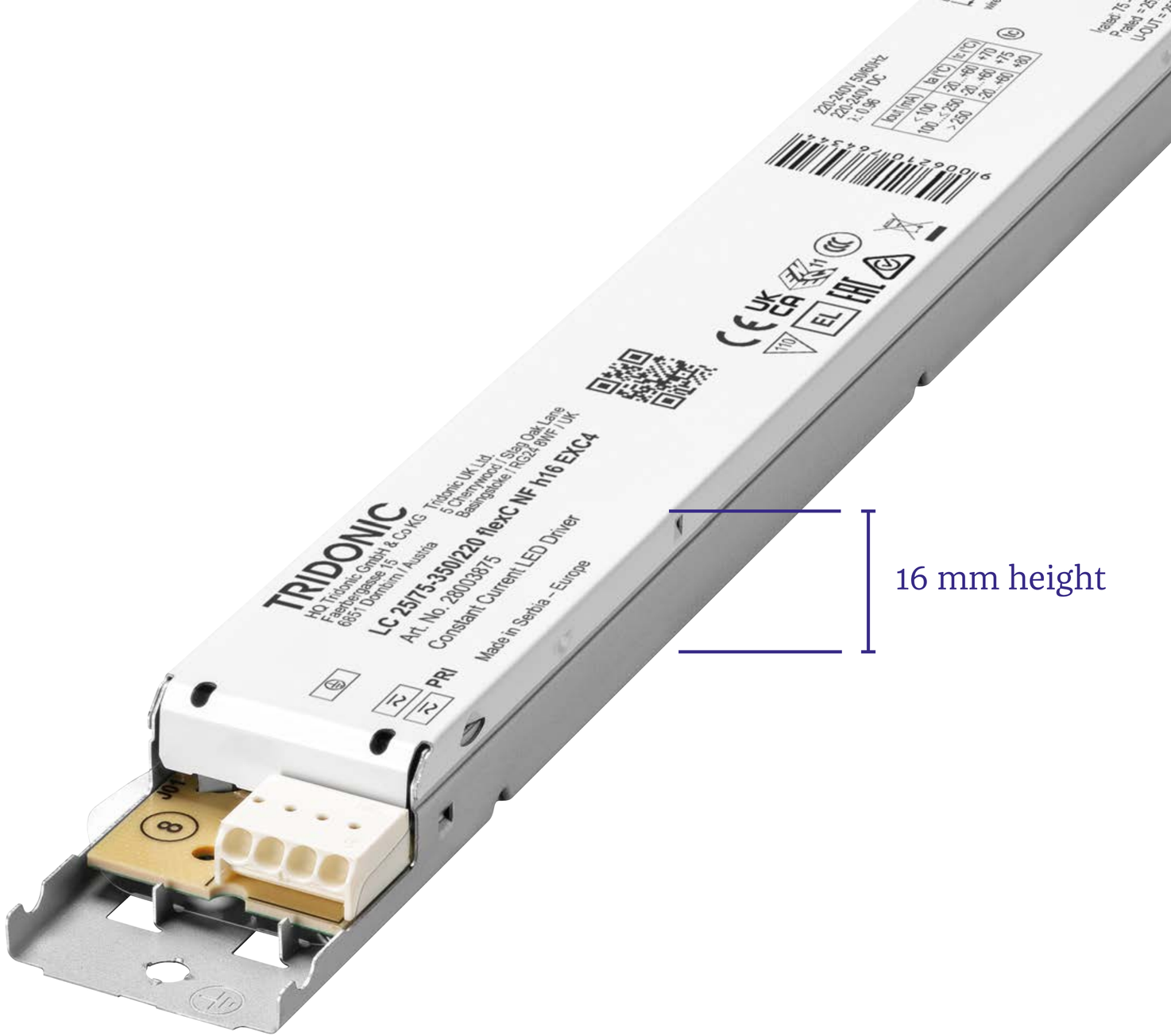


EXC4: non-SELV, not dimmable

LC 25 W / 40 W / 60 W

Available products

LC 25 W 75–350 mA flexC NF h16 EXC4
LC 40 W 75–400 mA flexC NF h16 EXC4
LC 60 W 75–330 mA flexC NF h16 EXC4
LC 60 W 150–550 mA flexC NF h16 EXC4
LC 90 W 150–400 mA 310V flexC NF h16 EXC4
LC 90 W 200–800 mA 220V flexC NF h16 EXC4
LC 120 W 350–1050 mA 230V flexC NF h16 EXC4

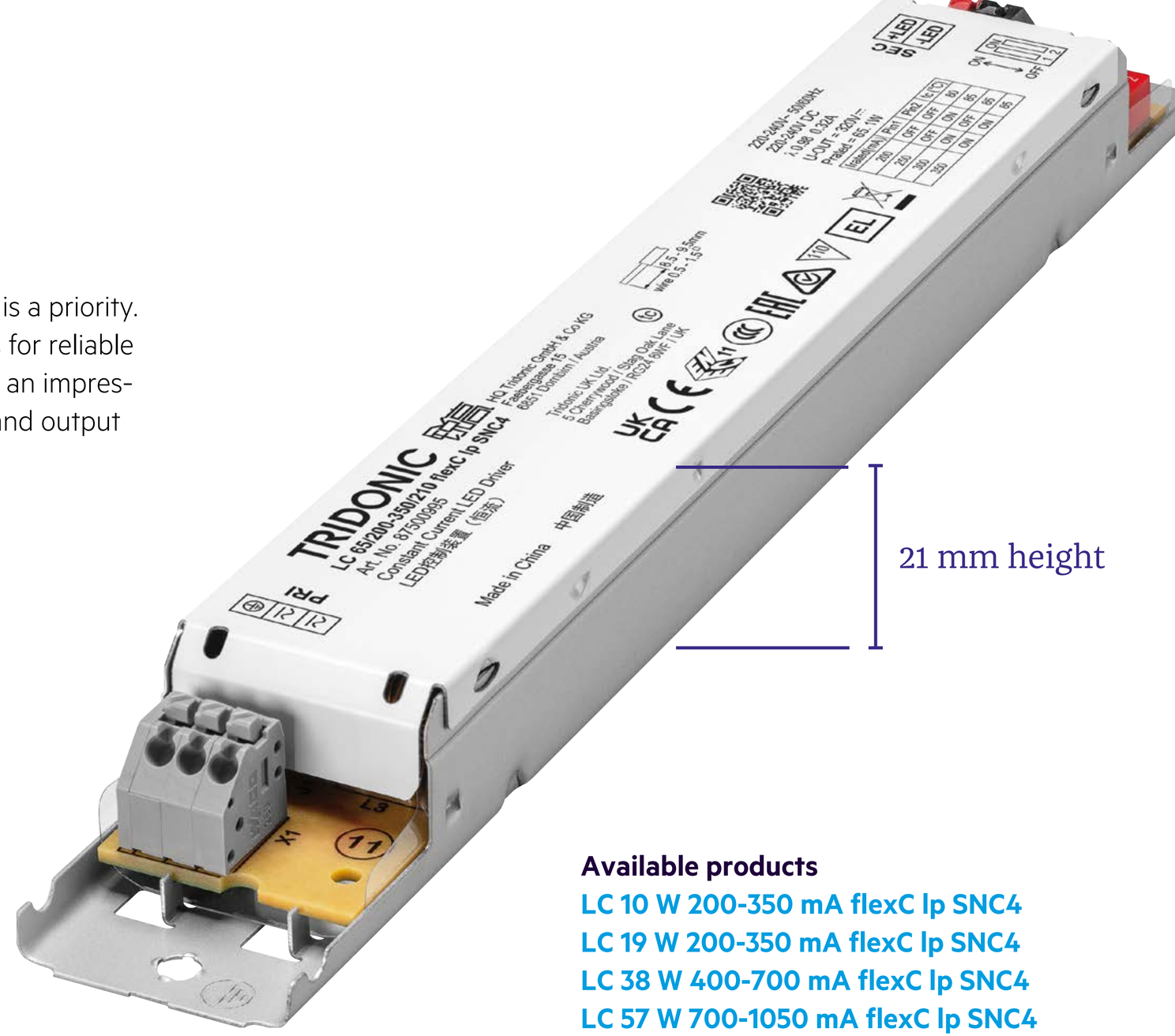


SNC4: SELV, not dimmable

LC 10 W / 19 W / 38 W / 57 W / 75 W

The Generation 4 essence drivers are ideal for when functionality is a priority. The SELV drivers with low-profile housings meet all requirements for reliable lighting. In addition to offering a high level of efficiency, they have an impressively long lifetime and are available in a wide range of wattages and output currents.

- Constant current driver for luminaire installation
- For luminaires of protection class I and class II
- Efficiency of up to 89 %
- Ripple current reduced to ± 5 %
- Broad range of fixed output currents: 200 mA to 1,400 mA
- Withstands ambient temperatures from -20 to +60 °C
- Thermal protection as per EN 61347-2-13 C5e
- Nominal lifetime up to 50,000 hours



Available products

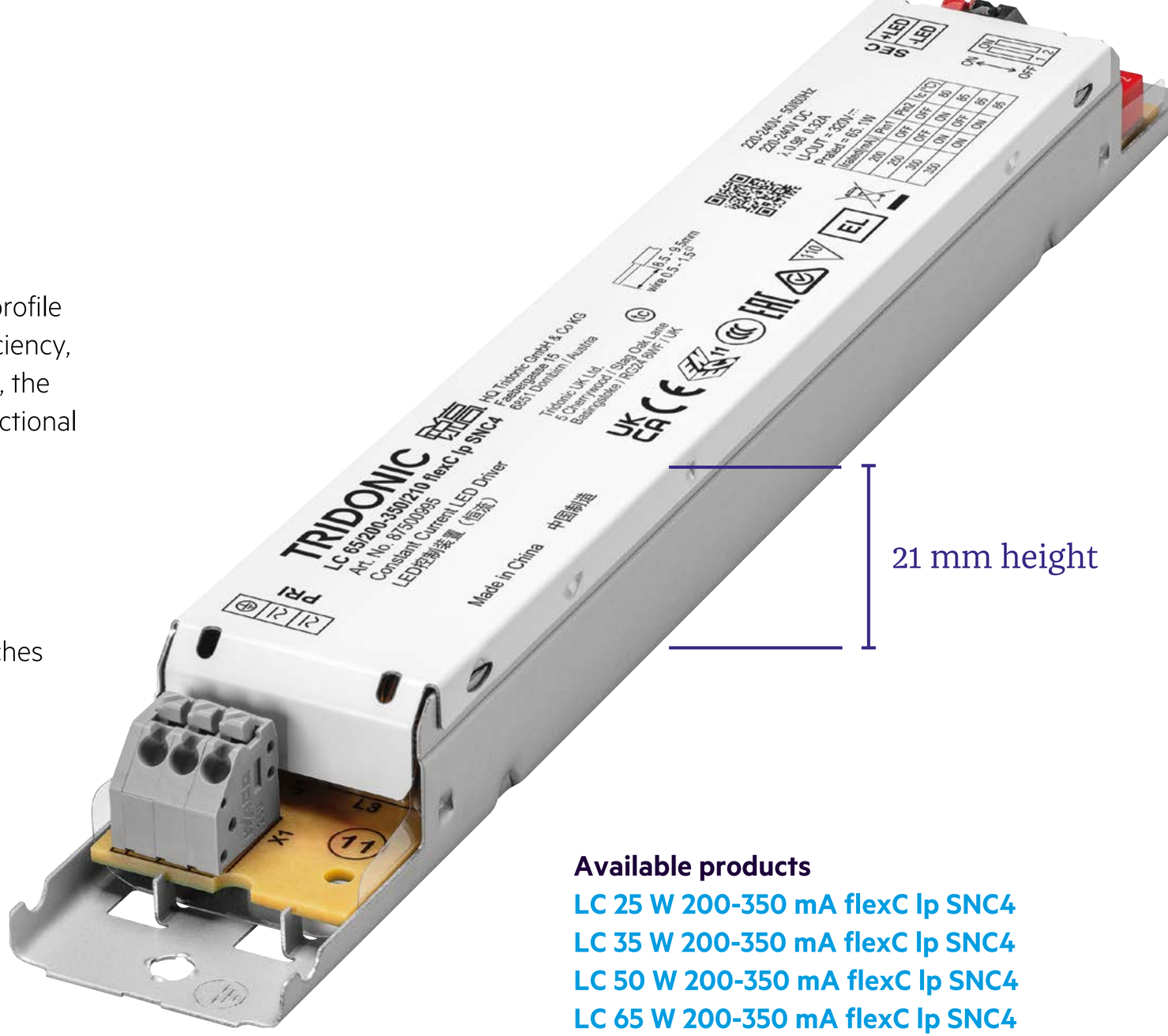
LC 10 W 200-350 mA flexC lp SNC4
LC 19 W 200-350 mA flexC lp SNC4
LC 38 W 400-700 mA flexC lp SNC4
LC 57 W 700-1050 mA flexC lp SNC4
LC 75 W 1100-1400 mA flexC lp SNC4

SNC4: non-SELV, not dimmable

LC 25 W / 35 W / 50 W / 65 W

Thanks to optimised thermal performance, the space-saving low-profile driver is perfect for slim designs. With its combination of good efficiency, long service life and a wide range of wattages and output currents, the essence driver (SNC4) has all the essential features for simple, functional and reliable lighting solutions.

- Constant current driver for luminaire installation
- For luminaires of protection class I
- Efficiency of up to 94 %
- Choice of fixed output currents (200 to 350 mA) using DIP switches
- Withstands ambient temperatures from –20 to +60 °C
- Thermal protection as per EN 61347-2-13 C5e
- Nominal lifetime up to 50,000 hours



Available products

LC 25 W 200-350 mA flexC lp SNC4
LC 35 W 200-350 mA flexC lp SNC4
LC 50 W 200-350 mA flexC lp SNC4
LC 65 W 200-350 mA flexC lp SNC4

Have we whetted your appetite for more?

www.tridonic.com/generation4

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