

# Marketplace

YOUR ELECTRICAL ASSET | MAY - JUNE 2023

**POWERBASE** 

**WIN!** AN ACTION PACKED  
*Experience*  
AT HIGHLANDS with NEXANS

  
**Highlands**  
EXPERIENCE THE EXCEPTIONAL

 **Nexans**

**WISER CONTROL  
DEVICES**

Reimagine how you live with  
PDL Wiser Smart Home solution

**+** PLUS

**Industry Updates**

The latest new products  
and innovations

Life Is On

**Schneider**  
 **Electric**

# GIVEAWAYS

**BUY MORE**

*Live More*



**GIFT WITH PURCHASE**

\$50 Prezzy card giveaway PLUS a chance to  
WIN one of 60 places to the NZ Darts Masters 2023

**FREE JERSEY**

with Schneider Electric  
56 Series. While stocks last

# BUY MORE

# *Live More*



Purchase either the PDL Iconic Bulk Pack, 50x PDL 600 or 50x PDL Pro Series and receive a \$50.00 Prezzy Card. While stocks last. Plus go on the draw to WIN one of 60 places to the NZ Darts Masters in August 2023.



Life Is On



by Schneider Electric

**PLUS**  
*Go in the  
draw to Win*

One of 60 places to  
the NZ Darts Masters  
in August 2023

**GIFT WITH  
PURCHASE**

Purchase any PDL Iconic  
bulk pack and receive  
a \$50.00 Prezzy Card.  
While Stocks last.

The promotion runs from 1 May - 30 June 2023. Entry to the promotion is open to customers of participating Powerbase Members. Terms and Conditions available at participating branches and [marketplacemagazine.co.nz](http://marketplacemagazine.co.nz)



# FORGET COLD



**SPEND \$250 ON PDL 56 SERIES PRODUCTS  
AND RECEIVE A SCHNEIDER BRANDED JERSEY\***



\*While stocks last. The promotion runs from 1 May to 30 June 2023. Entry to this promotion is open to customers of participating Powerbase Members. Terms and conditions available at participating branches.

Life Is On

**Schneider**  
Electric



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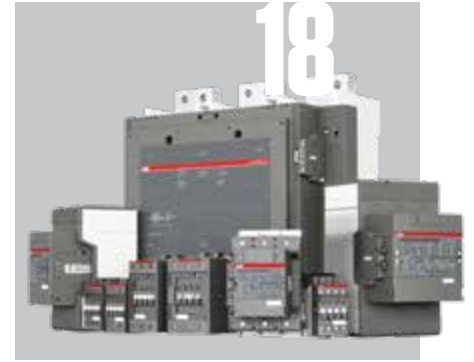
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Life Is On



by Schneider Electric

# The Essentials

Don't forget to stock up on your everyday PDL Essentials



Single Screw Connectors

PDL501J/50



Junction Box

PDL544



Flexible Conduit

9025TCM20-GY



Straight Gland

279C25-GY



Flush Box

PDL144M



Mounting Block

PDL89DI



Flush Box

PDL144P



Flush Box Concrete

PDL141C



Mounting Bracket

PDL145V



Surface Socket

PDL51SS



Mounting Block

PDL300SMB-VW



Connector Strip

PDL151



Universal Mounting Block

PDL89SP



Mounting Wall Box

3157/4PRM



Mounting block

PDL137MB-VW

[pdl.co.nz](http://pdl.co.nz)

Life Is On

**Schneider**  
Electric



**TRIP TO BALI, FRONT ROW AT THE CHILLIS, YEAR'S SUPPLY OF PIES, NOISE CANCELLING HEADPHONES, FIVE PERSON TENT, HI-FI SOUND SYSTEM, FLAT SCREEN TELEVISION, DOWNHILL MOUNTAIN BIKE, IPHONE, CHROME RIMS, FIVE BURNER BBQ, PLAYSTATION FOR THE KIDS, HOME GYM, MACBOOK PRO, WEEKEND AT WEARABLE ARTS, FIVE NIGHTS ON THE GC, STAND UP PADDLE BOARD, SET OF IRONS, JET SKI, SURFBOARD, DIRTBIKE, FISHING TRIP WITH THE LADS, SHOPPING VOUCHERS, SNOWBOARD, ROOFRACKS.**

## **WE REWARD GOOD BUGGERS.**

**POWERPOINTS CAN BE REDEEMED FOR WHATEVER YOU WANT.**

Talk with your local Powerbase member for further information, conditions apply.

[powerbase.co.nz/powerpoints](http://powerbase.co.nz/powerpoints)

**powerpoints®**

**POWERBASE**  
NEW ZEALAND'S ELECTRICAL WHOLESALE GROUP



**Welcome to our Autumn issue of MarketPlace for 2023, the promotional and business publication from the members of the Powerbase electrical wholesale group.**

We hope the technical features and advertorials in this issue spark ideas that will help grow your business or make it more effective. For more details on these product ranges contact your local Powerbase branch.

Let us know if you have an industry topic or product install case study that we could feature in MarketPlace.

Email your submission to [national.office@marketplacemagazine.co.nz](mailto:national.office@marketplacemagazine.co.nz)

Also, if you happen to come across an electrical botch-up in your daily work, photograph it, and send it in. It could be featured in our Epic Fail section and you could win a \$50 Subway voucher!

Powerbase is the largest group of independent electrical wholesalers, all locally owned and operated. The people you deal with are the ones that own the business – so we're committed to keeping you happy!

**Kevin Lynn**  
Group Commercial Manager  
Powerbase Limited







Highland's will mark its 10th birthday celebration this year with one lucky spectator getting to drive home in a Lamborghini.

In November 2023, it will be 10 years since the inaugural Highlands 101 - which was the first race meeting to be held at the Cromwell based, world class racing circuit.

And to celebrate the milestone, an event worthy of all the bells and whistles and bagpipes will take place between 3rd-5th November 2023 with the headline event the New Zealand Endurance Championship.

The inaugural Highlands 101 featured an endurance race for Australian GT cars and was won by circuit owner Tony Quinn and Fabian Coulthard in an Aston Martin Vantage GT3.

The icing on the Highlands 2023 birthday cake will be the giving away of a Lamborghini Huracan, currently based at Tony Quinn's Hampton Downs circuit. The supercar will be a prize for someone who pre-purchases a ticket for the 10th anniversary race meeting.

"I've tasked the team to come up with something out of the box for this event, and to show I mean business, I've put the Hampton's Lamborghini in the prize pool.

I'm determined that the prize pool will be the biggest New Zealand has seen - for competitors and for the public, as well ensuring there is plenty of action on and off the track - I can't wait!" Quinn said from his Queensland base.

Quinn purchased the Lambo Huracan in 2014 for Targa New Zealand, and it became the park's Fast Dash Car. In 2016 it was transferred to Hampton Downs and became the popular Hot Lap car it is today. While it cannot claim to have one lady owner, and only driven on Sundays, it has delighted many customers over the last seven years.

Highlands is the first of three New Zealand race tracks now owned by Quinn. He later purchased Hampton Downs and more recently Bruce McLaren Motorsport Park now known as Taupo International Motorsport Park and Event Centre.

Quinn and his team are no strangers to creating innovative and unique motorsport events.

To mark the 10th anniversary the Highlands 6 Hour Enduro will also offer competitors the biggest prize pool seen in a New Zealand motorsport event, and once again feature a unique Le Mans start to the race.

"We brought back the Le Mans start when people told us it was a crazy idea. We made motorsport accessible again by inviting spectators to do a grid walk and get up close and personal to the cars and the drivers just before the start of the race, and we opened up the pits to everyone, not just corporate guests. It's fair to say we've had some real highlights over the years," said Quinn.

A host of other support racing and special celebrations will be unveiled closer to the event, but one thing is for sure, the Highlands 6 Hour Enduro in 2023, will be a motorsport celebration that New Zealand race fans can look forward to!

"We've proudly hosted the NZ Endurance Championship as our marquee event at Highlands for the last six years, focusing on championing NZ motorsport. It was only right that our tenth birthday showcases the very best of NZ stars and cars, with a few 'invited' aussie cousins. We've been delighted with the support from NIERDC and SIERDC and we are all really excited about delivering a very special and entertaining event," said Highlands CEO, Josie Spillane.

**Mark the weekend now.  
The 3rd-5th November, 2023** ■





# Highlands

EXPERIENCE THE EXCEPTIONAL

## WIN!

AN ACTION PACKED  
*Experience*  
AT HIGHLANDS  
with NEXANS

21-23 September 2023

PURCHASE \$1000 +GST  
OF NEXANS CABLE ON  
ONE INVOICE AND GO IN  
THE DRAW TO WIN  
1 OF 20 PLACES

 **Nexans**



The promotion runs from 1 May to 30 June 2023. Entry to this promotion is open to customers of participating Powerbase Members. Terms and conditions available at participating branches.







# BE INTO WIN

## 1 OF 8 PS5 BUNDLES

**\*Spend \$300net** on one invoice on stocked Pierlite product and receive an entry into the draw to **WIN 1 of 8 PS5 PlayStation 5 825GB Console God of War Ragnarök Bundles** RRP\$939.



### ECO BATTEN

- **COLOUR** SELECT 4000K / 5000K / 6500K, CRI80
- Flicker free design
- Insect proof removable LED module for easy installation

#### ECOBAT404ECSLS

4FT/1200MM **LUMEN** SELECT  
20W / 2400LM, 26W / 3000LM  
31W / 3500LM, 37W / 3900LM

#### ECOBAT505ECSLS

5FT/1500MM **LUMEN** SELECT  
29W / 4000LM, 37W / 5000LM  
45W / 5800LM, 52W / 6400LM

#### ECOBAT505ECS/ME

Emergency 5FT/1500MM **LUMEN** SELECT  
29W / 4000LM, 37W / 5000LM  
45W / 5800LM, 52W / 6400LM



### LED SMART PHASE DIMMER KIT

#### MEMD-KIT

Dim to OFF with most LED light sources  
Mechanical adjustment for minimum brightness level  
'Two wire' design - no neutral connection required  
2W - 400W load  
With new iconic adapter

Compatible with PDL Iconic (1 & 2 Gang), PDL 600, PDL Saturn Zen, Legrand Excel Life, Clipsal C2000, HPM Excel and Vynco Home switch plates.



### LITELUX DOWNLIGHT

- **COLOUR** SELECT 3000K / 4000K / 6500K
- IC-4/IC-F, IP65 (front)/IP20 (rear), Class II
- Beam Angle Symmetrical, 100°
- Phase Dimming

DLP6FWG3NZ  
8W / 800LM



### ORION OYSTER

- **COLOUR** SELECT 3000K / 4000K / 6000K
- Phase dimming as standard
- Optional integrated on/off motion and daylight sensor
- Center cable entry, Large terminal block for easy installation
- IP54 with removable trim

ORN16W3/4/6KDG3  
Ø300mm  
16W / Up to 1800LM

ORN23W3/4/6KDG3  
Ø350mm  
**LUMEN** SELECT  
16W / Up to 1700LM,  
23W / Up to 2400LM

ORN23W3/4/6KSG3  
Ø350mm with sensor  
**LUMEN** SELECT  
16W / Up to 1500LM,  
23W / Up to 2100LM



### SHADOW ECO FLOODLIGHT

- **COLOUR** SELECT 3000K / 4000K / 6500K
- IP65 & IK06 rated
- Operating temp. -10°C to +40°C
- Robust aluminium housing (copper content <0.1%)
- Complete with corner mount bracket

SHADOWECO30CSLS  
**LUMEN** SELECT  
15W / 1800LM  
29W / 3300LM

SHADOWECO50CS  
47W / 5100LM



### TABLET WALL LIGHT

- 3000K
- IP65
- Beam angle Symmetrical, Direct or Direct & indirect
- Back entry for easy installation, Large terminal block

TABL830B  
Direct  
4W / 330LM

TABLDI830B  
Direct & Indirect  
8W / 650LM

# Megger Multifunction Testers for all applications and budgets



*Megger MFT1845+*

## MEGGER MFT RANGE

- 3 year warranty on all units
- Access to online training and knowledge archive
- RCD Testing
- Insulation Testing
- Loop Testing
- Earth Testing
- Engineered performance
- MFT1845+
  - EV Charger testing
  - Non trip 10mA loop testing
  - Loop confidence meter



*Megger MFT1825*



*Megger MFT1815*



**BE INTO  
WIN**

**1 OF 16  
HOT DEVIL®  
BOOMBOXES**

\*TERMS & CONDITIONS APPLY



SCAN TO VIEW  
IN ACTION

**PURCHASE ANY HOT DEVIL PRODUCT  
& GO IN THE DRAW TO WIN 1 OF 16  
60W BOOMBOX SPEAKERS  
WORTH \$395.00 EACH.**



HDPRO



HDGAS5



HD7011



HDPTK



H08CD

**HAMER**

[www.hamer.co.nz](http://www.hamer.co.nz)



# EMERGENCY LIGHTING ECONOMY SERIES

Simple, efficient and cost effective, Legrand's Economy Series has been designed and manufactured in Australia with safety and affordability as the number one priority.

Equipped with a Lithium-ion battery, enjoy a long-lasting battery life of 50,000+ LED hours minimising maintenance costs of Emergency Lighting equipment. The economy series also features a 3 year manufacturer's warranty.

Designed for both recessed and surface installations.



3 YEAR  
WARRANTY

THE GLOBAL SPECIALIST IN ELECTRICAL AND  
DIGITAL BUILDING INFRASTRUCTURES

[legrand.co.nz](http://legrand.co.nz)

 **legrand**<sup>®</sup>



# INDUSTRY UPDATES

The latest new products and innovations.  
For more information contact your local Powerbase Branch



## EVLINK™ HOME

Looking to gear your business up to maximise the growing New Zealand EV residential charging market?

EVlink Home is a simple and easy-to-install charger that protects the asset (car) and user, ensures the right charge in residential settings, minimises peak impacts, and avoids power overruns - all at an affordable price.

It also allows a convenient charge of the vehicle at home without impacting power availability.

### Features

- In-built RDC-DD  
1 Phase: 7.4kW | 3Phase:  
11kW options
- Wall mounted
- Attached cable 5m or  
Type 2 socket
- Compatible with home  
anti-tripping system  
(Peak Controller)
- CTs are included with  
Peak Controllers
- Certification IEC 61851-1  
Ed. 3.0
- RCM GMA-513376



## EVLINK ANTI- TRIPPING SYSTEM

Home anti tripping system is a power load management system to adapt continuously the power delivered by the charger to the EV according to power available at home.

The power availability is calculated by the Home Anti-tripping system by comparing the utility power limit and the home consumption gathered by a current transformer positioned on the bottom of the main circuit breaker.

The communication between the Home Anti-tripping system and EVlink Home charger is done with power line communication, so no need to add communication cable.

### Features

- Power load management  
- Avoid any disruption in the power supply and manage available power efficiently
- Budget-friendly and easy to install
- Certified and aesthetic –  
Compliant with strict safety certifications
- Environmental performance

## NEW GRANDSTREAM MANAGED NETWORK SWITCHES

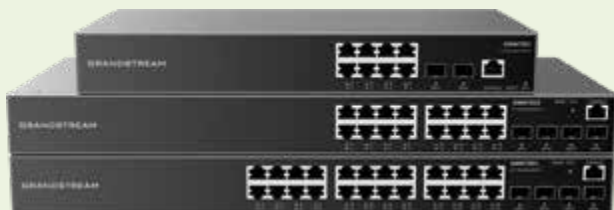
The new GWN7800 Series are Layer 2+ managed network switches that allow businesses and small-to-medium enterprises to build scalable, secure, fully manageable, high performance smart business networks.

There are 6 model options, including 3 with smart dynamic PoE output, while offering 8, 16 or 24 Gigabit ports and 2 or 4 Gigabit SFP ports. The PoE models provide smart dynamic PoE output to power IP phones, IP cameras, Wi-Fi access points and other PoE endpoints.

The GWN7800 series provides numerous flexible and free management options, including GWN.Cloud and GWN Manager.

### Features

- Layer 2+ Managed Switches
- Models with or without PoE
- 8, 16 or 24 Gigabit Ports



## UNICO PRO

Designed and made in Italy, the Unico Pro is the original wall-mounted air conditioner with no external unit. Featuring 3.0kW of heating and 3.4kW of cooling power, the Unico Pro also has fan and dehumidifier modes. As the Unico Pro can be installed from inside the building, the entire process is much safer and quicker than that of a conventional split.

### Features

- Plugs into a standard wall plug; no need for a dedicated circuit or isolator.
- Can be installed at floor or ceiling level; choose the option that best suits your home.
- Covered by a 5 year parts and labour warranty for additional peace of mind.



## POWERBASE NOTEBOOK

### NANOLEAF MATTER A19

Nanoleaf, the popular smart lighting brand, announced its first smart lights that work with Matter. In addition to this A19 bulb, it announced several other smart bulbs and a smart lighting strip — all of which support Matter.



### STAR WARS JEDI: SURVIVOR

Launched on 28 April for Xbox Series X|S, PS5, and PC. This narratively-driven, single player title picks up five years after the events of Star Wars Jedi: Fallen Order and follows Cal's increasingly desperate fight as the galaxy descends further into darkness.

OUT  
NOW



### RAY-BAN STORIES

Ray-Ban Stories' dual integrated 5MP cameras let you capture life's spontaneous moments as they happen from a unique first-person perspective.



### ADIDAS FIFA WORLD CUP OFFICIAL MATCH BALL

The adidas Suspension System allowed for the most time-precise motion sensor to ever be used inside a World Cup Official Match Ball, tracking every touch of the game at a rate of 500 times per second.





# OUTDOOR METERING AND DISTRIBUTION ENCLOSURES



## RESIDENTIAL & COMMERCIAL APPLICATIONS



**12616**

DCB1S-D16

Outdoor Meterbox with 16 Way Distribution

400 (W) x 600 (H) x 220 (D)

IP 44



**10064**

DC3S-D30

Outdoor Meterbox with 30 Way Distribution

500 (W) x 650 (H) x 220 (D)

IP 44



**12860**

DC5S-D60

Outdoor Meterbox with 60 Way Distribution

650 (W) x 950 (H) x 220 (D)

IP 44

# Campbell Burnes on Rugby IN RAZOR WE TRUST

Former Manu Samoa No 10 and freelance rugby scribe Campbell Burnes says New Zealand Rugby made the right call in elevating Scott Robertson to the All Blacks head coaching post from 2024.

In the end, New Zealand Rugby moved faster than we thought it would.

We had been told the position of All Blacks head coach from 2024 would be named by mid-April. Knowing how NZR moves and works, that timeline looked to be conservative. But then, seemingly out of the blue, on March 21, NZR decided to strike while the iron was hot and name Scott Robertson as the eighth All Blacks head coach of the professional era.

It was a two-horse race, Jamie Joseph the only other serious candidate after Joe Schmidt had withdrawn from the reckoning. It will be disappointing to some that Joseph, with Tony Brown on his ticket, did not win the nod. If not now for that pair, then when? Late 2027 after the next Rugby World Cup cycle? Maybe.

But the man they call 'Razor' is the anointed one. Other than leading the UK Barbarians to victory over the All Blacks XV, a not insignificant effort, his international experience is minimal, but so what? He has won six Super Rugby titles in six years. If that does not count for something, then that makes a mockery of that competition.

Robertson would have learned from the experience of late 2019 when, under the white-hot glare of a grilling from Sir Graham Henry on the appointments panel, he failed to convince that he was the man

to replace Sir Steve Hansen. Instead, NZR opted for continuity. That has proven divisive, with all due respect to incumbent Ian Foster, who may still engineer a worthy RWC challenge in a few months.

But Robertson is seen as the people's choice. He's a zany character who loves a surf at Sumner Beach before work and thinks outside the square. Funnily enough, the social media world was split on him, but how much store should be placed on that, given many who inhabit that sphere are fully paid up members of the flat earth society or climate change deniers?

Nothing had changed since Robertson was placed on standby to replace Foster last August when the All Blacks were in turmoil, other than a couple of surprise defeats for the Crusaders in the early weeks of Super Rugby Pacific.

The notion that Robertson was distracted was nonsense. In 2008, Robbie Deans was in the bizarre situation of coaching the Crusaders to a title on Saturday night and then starting with the Wallabies on Monday morning. But Deans' focus was not in question, at least in hindsight.

The All Blacks of 2024 will look very different. There will be no Aaron Smith, Sam Whitelock, Dane Coles, Richie Mo'unga, Shannon Frizell or Brodie Retallick. We don't yet know about Rieko loane and Beauden Barrett. Ardie Savea

will miss Super Rugby. To a certain extent, Robertson's All Blacks will be rebuilding. In 2012 and 2016 we saw Hansen expertly balance the twin goals of rebuilding while winning. It didn't go so well under Foster in 2020.

Razor will surround himself with good men. A coaching team of Jason Ryan, Leon MacDonald and perhaps Scott McLeod is seasoned and high-powered. We should aim high with our expectations. After all, Razor's been doing that, and winning, for the last decade. He's in the hot seat but one would think he'll be up to it. ■

Robertson will be at the helm of the team he was so desperate to coach from 2024.







---

## **ABB Video Indoor Station 7"**

Full control of what happens in  
front of your door

The Video Indoor Station 7" is the latest addition to the ABB-Welcome door communication world. With its impressive 7" design, white color, and simplicity of use, it is the perfect choice for modern homes. Thanks to the intuitive design, all functionalities are only a fingertip away, with additional programmable buttons enabling flexible customization to cover all your needs. ABB's Video Indoor Station 7" provides the best level of security for your network and data while protecting your home and your family's well-being.



# AF CONTACTOR RANGE

A new industry standard - secure uptime and optimize stocks with the latest AF technology up to 2850A

## Advantages

- A reduction of the coil's energy consumption by 80% lets you save energy
- Up to 560kW - 400V AC-3, 900hp - 480V and 2850A - 690V AC-1, 2850A - general use
- Only 4 coils cover 24V - 500VAC and 20V - 500VDC
- Dedicated 24VDC coil for direct control by PLC-output < 250mA, low holding consumption up to 1.7W.
- Screw, Push-in Spring, and ring tongue connection types
- Built-in surge suppression
- Connection sets and interlock unit for reversing and star-delta starter for an easy, fast, and secure assembly of starters
- Mirror and mechanically linked contacts.

The latest range of ABB's contactors establishes a new industry benchmark. The electronically controlled coil offers multiple benefits over conventional alternatives, and together with ABB's wide product offering – an optimal configuration, every time.

The AF contactor range covers small motor starting solutions from 4kW up to big power switching solutions with our unique AF2650, the biggest single case block contactor in the world. The contactor and motor protection range are part of one of the widest product offerings on the market meaning that ABB not only can provide the contactor but the full solution. In addition to the standard product range ABB also offer products for special needs such as Bar contactors, GAF and contactors for capacitor switching.

The contactor and motor protection range from ABB is compatible with


all major national and international standards and is available in NZ through the wholesale network. The core coil of the AF contactor range covers 100-250VACDC, 50 / 60 Hz.

The AF contactor range is perfect for motor starting applications and for solutions where space is limited. You can create any motor starting type and save assembly time with a complete range of accessories and connection sets. With its contactor and motor protection range, ABB has managed to reduce the number of contactor coils to just four. For example, one contactor coil now handles 100V – 250VACDC. In addition, the total number of product variants has been reduced by up to 90%, which simplifies your business' logistics and cuts administration costs.

By reducing contactor coil energy consumption by up to 80%, panels can be built smaller and transformers more compact. All the features of the AF technology, along with access to drawings and coordination tables online, simplifies your design and assembly process.

Time to prevent stoppages caused by voltage fluctuations. The AF contactor ensures distinct operation in unstable networks and signifies a major advance in motor control and power switching. Voltage sags, dips and surges pose no threat. The AF contactor secures your uptime.

Select thermal overload relays (trip class 10) or electronic overload relays (trip class 10E, 20E, 30E in the same product) to protect your motors against overload and phase failure. Interlocking reversing pairs requires no spacing between contactors, meaning you can fit more functionality into cabinets or other enclosures.

With conventional contactor technology, it is recommended to use an external surge suppressor, an accessory that could cost as much as half of the contactor. With the AF technology, the surges are handled by the contactor and never reach the control circuit. One less product and one less complication to worry about. 


**ABB**



# FIRSTFLEX ADDS NEUTRAL SCREENS TO CABLE SOLUTIONS OFFERING



**F**irstflex – providers of New Zealand's largest range of premium industrial and flexible cables – has extended its broad product portfolio further by releasing its Neutral Screen (NS) family. The range has been released in response to strong demand by the industry and supplies the mains power to a variety of domestic and commercial end-use applications.

The NSU and NSUX series are suitable for direct burial underground as per AS/NZS 4961; offering a 3.2mm thick, special polyvinyl chloride (SPVC) outer sheath.

The NSU series' copper conductors are insulated with SPVC, providing a flexible material for electrical and physical protection. This insulating SPVC material is UV-stabilised, offering further durability to withstand outdoor environmental conditions.

The NSUX series' copper conductors are insulated with cross-linked polyethylene (XLPE), reducing the overall diameter of the cable. Although less flexible than PVC conductors, in comparison, XLPE allows a higher maximum operating temperature and greater current carrying capability.

Firstflex's Neutral Screen Trayscreen (NST) series is constructed with a SPVC outer sheath that is 1.8mm thick and its copper conductors are also insulated with SPVC. The reduced sheath thickness allows greater flexibility, providing easier installation. Trayscreen cables can be terminated in smaller glands and are desirable for use in applications where space is limited such as on streetlight poles, within internal wiring between distribution boards and installing onto commercial cable trays.

Like all Firstflex cables the NS family can be cut to length with no cutting fees and no minimum order quantity, and is backed by Firstflex's almost 50-year promise of getting product on hand, on site and on time.





**Q: What is the difference between insulation and sheath on a cable?**

**A:** Insulation is the material around the copper conductors. The sheath is the outer protection layer on a cable.

**Q: Can special polyvinyl chloride (SPVC) sheathed Neutral Screen cables be buried direct?**

**A:** All of our Neutral Screen cables have a SPVC outer sheath, however the sheath must be 3.2mm thick to be buried directly underground. Our NSU and NSX cables both have a 3.2mm thick outer sheath and can be buried direct.

**Q: Why do some Neutral Screen cables have SPVC versus cross-linked polyethylene insulation (XLPE)?**

**A:** The NSU series has copper conductors insulated with SPVC which provides a flexible material for electrical and physical protection. The insulating SPVC material is UV-stabilised, making the NSU cable perfect for use when insulation is exposed to the sun.

The NSUX series' conductors are insulated with XLPE which has a thinner insulation thickness and reduces the overall diameter of the cable. Although less flexible than SPVC conductors, in comparison, XLPE allows a higher maximum operating temperature and greater current carrying capability.

**Q: What is the key difference between the Neutral Screen NSU/NSUX versus the Neutral Screen Trayscreen® series?**

**A:** The Neutral Screen NSU & NSUX series have a 3.2mm sheath and can be buried direct. Trayscreen® (NST) cables have a 1.8mm sheath and cannot be buried direct.

**Q: Why does Firstflex have a Trayscreen cable series?**

**A:** Firstflex's Neutral Screen Trayscreen® (NST) series is constructed with a SPVC outer sheath that is 1.8mm thick and its copper conductors are also insulated with SPVC. The reduced sheath thickness

allows greater flexibility, providing easier installation. Trayscreen® cables can be terminated in smaller glands and are desirable for use in applications where space is limited such as on street light poles, within internal wiring between distribution boards and installing onto commercial cable trays.

**Q: Can Trayscreen® cables be buried underground?**

**A:** No – not directly. They can however be installed inside ducting or conduit.

**Q: Can Firstflex's Neutral Screen cables be used in outdoor applications?**

**A:** Yes – our Neutral Screen cables are extruded for protection against sunlight and water ingress.

**Available to order through your local Powerbase wholesaler.**

**Features:**

- Stocked cables cut to length – no cutting fees, no minimum order quantity
- Annealed plain copper stranded wire (Class 2)
- Screen provides coverage to facilitate mechanical protection
- Available in 1.8mm (NST) or 3.2mm (NSU/NSUX) special PVC outer sheath
- SPVC (NST/NSU) or XLPE (NSUX) conductor insulation
- UV-stabilised
- Heat, oil, chemical resistant and flame retardant
- Tested and certified to all relevant AS/NZS standards.

## Product Series Comparison

	NSU	NSUX	NST
Outer sheath	3.2mm SPVC	3.2mm SPVC	1.8mm SPVC
Conductor insulation	SPVC	XLPE	SPVC
Buried direct			
Heat, oil, chemical resistant and flame retardant			
UV-stabilised			
Tested and certified to all relevant AS/NZS standards			



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## 18V XR HEAT GUN - BARE UNIT (DCE530N-XJ)

The DCE530 is our first dedicated cordless heat gun designed for many users and applications on site such as shrinking electrical tubing, bending PVC pipes, drying materials, loosening nuts and bolts and many more. Compatible with all 18V XR batteries the DCE530 features a compact size, 2 temperature settings with a maximum of 530°C to allow for maximum versatility in applications and a lock on switch to improve comfort in longer jobs. Bare unit, batteries and charger sold separately.



## 18V XR ELECTRICIANS STAPLER - BARE UNIT (DCN701N-XJ)

The DCN701 18V XR allows electrical contractors to secure cables on the jobsite faster and more consistently. The tool automatically adjusts depth of drive based on cable thickness and staple fits snugly without pinching. A compact size of 200mm allows the user to work between joists and a built in LED light illuminates the working area when power isn't available. Bare unit, batteries and charger sold separately.



## 18V XR BRUSHLESS COMPACT IMPACT DRIVER - BARE UNIT (DCF850N-XJ)

Our smallest most powerful 18V XR impact driver giving you more comfort and better application speed. The DCF850 delivers 205Nm in a 100mm compact body perfect for a wide range of applications across construction, industrial and automotive environments. Other features include a 3 mode switch for enhanced control including Precision Drive which stops the material and fastener been damaged in smaller jobs and a LED ring light to deliver the best visibility in the toughest environments. Bare unit, batteries and charger sold separately.



## 18V XR BRUSHLESS OSCILLATING MULTI-TOOL (DCS356N-XJ)

Powered by an 18V XR battery and delivering up to 20,000opm, the oscillating multi-tool can perform an outstanding variety of cutting and sanding applications. The new 3 speed selector provides the ultimate speed and application control. Bare unit, batteries and charger sold separately.



## 12V XR 2 SPOT CROSS LINE GREEN LASER - 1 X 2AH (DCE0822D1G-XE)

Projects a full cross line (horizontal & vertical) + 2 independent spot points allows for a multi-use tool. Cross line function features a 150 degree fan angle which provides ample coverage with little set-up time. Projects Down Beam with raised clearance to provide dot visibility and alignment for wall track layout.



### 18V XR 10 PIECE KIT 5AH (DCZ1082P4-XE)

#### Kit Includes:

- 1 x 18V Brushless Hammer Drill Skin (DCD996N-XE)
- 1 x 18V Brushless 1/4in Impact Driver Skin (DCF887N-XE)
- 1 x 18V Brushless 1/2in XR Compact Impact Wrench HR Skin (DCF921N-XJ)
- 1 x 18V Brushless Reciprocating Saw Skin (DCS382N-XJ)
- 1 x 18V Brushless 125mm Angle Grinder Skin (DCG406N-XJ)
- 1 x 18V Brushless 184mm Circular Saw Skin (DCS570N-XE)

1 x 18V Oscillating Multi-Tool with 29 Piece Accessory Set (DCS355N-XE)

1 x 18V 1.9L Wet & Dry Vacuum Skin (DCV517N-XJ)

1 x 18V Blower Skin (DCV100-XE)

1 x 18V 120~1000 Lumen LED Spotlight Skin (DCL043-XJ)

#### Supplied with:

1 x 10.8V-18V XR Li-ion Battery Charger (DCB115-XE)

4 x 18V XR 5.0Ah Lithium-Ion Battery (DCB184-XE)

1 x 560x285x340mm Nylon Tool Bag with Heavy Duty Zip (DWST1-81341)



### 18V XR BL COMPACT TWIN KIT (DCK2060D2T-XE)

#### Kit Includes:

1 x Hammer drill (DCD778-XE)

1 x Impact driver (DCF787)

2 x 2.0Ah 18v batteries

1 x DeWalt charger

1 x DeWalt Tstak case sold separately.

# DEWALT

**18V**  
BRUSHLESS  
**XR**

Contact your local Powerbase Branch to find out more.





The journey in to solid-fuel (charcoal, coal briquettes and wood) barbecue can be a steep and somewhat frustrating learning curve, but there are a handful of essentials that will greatly lessen that curve. In this article, I will share some of those tips to get your barbecue on track.



## #1 - QUALITY CHARCOAL & PROPERLY SEASONED SMOKING WOOD

Not all coal and wood is created equally and for the most part the adage of “you get what pay for” rings true. There are plenty of options on the market, but I have found from decades of barbecue’ing to be wary of the “cheap” options. In my opinion, some brands to look for when selecting fuel are the imported Heatbeads Briquettes and Lump, Samba Competition Lump and Cocoshots and the New Zealand made Urban Lumberjack Smoking Wood and Manuka Wood Supplies Lump & Wood Splits. Not only are they consistent in size and flavours that they impart to your barbecue, and locally sourced but also created through sustainable processes.







## #2 - CHARCOAL STARTER CHIMNEYS

enable you to get your coals glowing and up to cooking temperature with minimal fuss and time. Simply put your desired amount of coal into the chimney with a heat source from underneath (in order of preference - scrunched-up newspaper, natural fire lighters or for the real deal a flame wand) to ignite the coals.

Depending on the type of fuel and what you use to start the coals, it can take anywhere from just a few minutes to around 20 minutes to get them glowing hot, ashed-over and ready to hit the grill. Chimneys are available from specialty barbecue shops and most chain stores. My advice is, if budget allows, a stainless steel Pro-Q chimney - they are built to last.

## #3 - FLAME WAND CHARCOAL IGNITERS

After spending literally hours and hours starting charcoal chimneys with scrunched-up newspaper and waiting for the coals to be ready, a game-changer happened along a few xmas mornings ago, when I was gifted a Barbecue BOI - Fire Boi Charcoal Igniter. These attach to any LPG gas bottle and provide an almost instant solution to starting up your barbecue. Turn the gas on, fire up the igniter with a push of a button, squeeze the throttle lever, aim the flame at the coals (from underneath the chimney is best) and in just a minute or two you are done and ready to cook.

## #4 - INSTANT READ MEAT THERMOMETERS

have been an absolute game changer. Simple to operate and provide an instant snap-shot of how your barbecue or indeed any cooking that you are doing is progressing.



Readings from instant read thermometers not only provide an indication of "doneness" but also ensures that food safety temperatures are adhered to. Simply a must!

## #5 - QUALITY MEAT

that has the characteristics required for the barbecue you are undertaking is probably the most important factor when wanting to up your cooking game. My advice when starting out, is to get to know your local butcher and discuss the proteins that you are wanting to cook. For example, if you are wanting cook a brisket there are things to look for such as marbling (inter-muscular fats), grass or grain feed, whether it is a point, flat or full-packer, hard fats to meat ratio and overall appearance. Primal barbecue cuts are no longer in the realms of "cheap", so purchasing a great vs mediocre cut at the same \$s per kilogram will greatly improve the result.



Above are my Top 5 Barbecue Essential Tips, there are many more to learn along the way and a great resource for kiwis starting out is joining the NZ Barbecue Alliance on Facebook. Use the search function and ask questions. The community is supportive and has a "no dumb questions" mantra, also feel free to reach out directly via email ([events@barbecuelife.co.nz](mailto:events@barbecuelife.co.nz)). ▣

**WITH WINTER APPROACHING REMEMBER "BARBECUE IS NOT A SEASON"**

**UNTIL NEXT TIME**



**NEW!**

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**Easy Connection**  
Fast click & twist connection points

**2 Models**  
Standard or Emergency

**Weather Protection**  
IP65 Rating



**Easy Installation**  
Large connector blocks for easy wiring



**Wattage Selectable**  
4 x Wattage options  
33W | 40W | 50W | 60W



**Conduit Entry**  
4 x cable entry points



**CCT Selectable**  
3 x Colour Temperature options  
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ASYMMETRICAL IP65 WALL PACK



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- High quality LEDs, driver and components
- Surge protection to 10kV
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- Ta:-30°C to + 50°C

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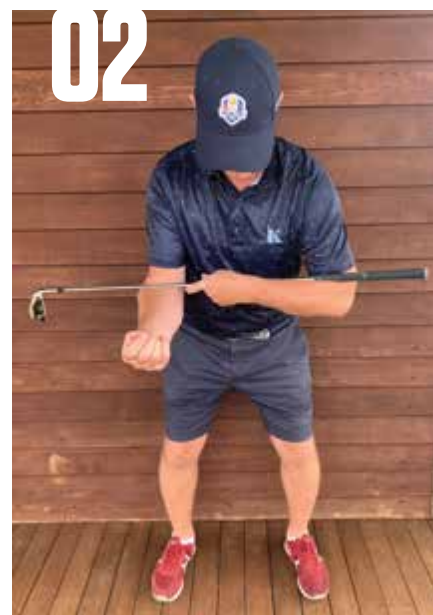


GLW756

GLW755

BACK CABLE ENTRY

*A Brighter Future Together*



Many poor golf swings causing errant golf shots stem from one common fault = the right-arm being too dominant on the backswing.

When the right arm is too active in the take-away, the arms separate excessively from the body. The result is a completed backswing loaded with faults with only the downswing left to correct them. This scenario will never lead to consistent golf shots.

The following practise drill will give you a feeling of how the arms and body should stay in sync during the rotation of the backswing whilst also training where the right arm should be positioned at the top. It will help to train the correct weight shift/load and also assist in you staying in your posture until impact.

- Take a golf club and position the grip end across the inner fold of your left elbow.
- With your left hand grip the shaft: when doing this, ensure that the grip stays on your left arm elbow fold (pic 1)
- Position the shaft on top of your inner right arm elbow crease (pic 2)
- Assume your golfing address position and correct posture (pic 3)
- Turn your shoulders to complete your backswing- ensuring that the grip and shaft stay connected to your elbow creases. Whilst carrying out this step of the routine, it's important to maintain your spinal angle to the completion of your backswing (pic 4).

This drill will train your arms and torso to be more connected on the backswing and as a result will lead to more consistent golf shots. 🏌️







# BIZZARRINI 5300 GT:

The gorgeous Italian Car  
you have never heard of



What does the Ferrari 250 GTO, the Lamborghini V12 engine and the Iso Grifo all have in common? Well, apart from these being grand testimonials

to Italian car design, one man had a hand their creation. That man was Giotto Bizzarrini and we owe him a lot.

Born in Livorno, Italy in 1926, the young

Bizzarrini had a privileged upbringing with his family owning a lot of land in Tuscany. He developed a keen interest in machinery and left Pisa University in 1953 with a degree in engineering.

From here, he went to Milan to work for Alfa Romeo before being offered a job at Ferrari in 1957. Here Bizzarrini rose through the ranks at Maranello before becoming a test driver and Enzo's chief engineer. He also had a hand in such illustrious prancing horses as the 250 Testarossa and 250 GT Short Wheelbase.

His finest hour with Ferrari came with what would eventually become the now legendary 250 GTO (Gran Turismo Omologato). However, Bizzarrini left Ferrari along with dozens of other disgruntled engineers and designers in 1961.

The reason for this came after Ferrari sales manager Girolamo Gardini had a spat with Laura Ferrari, Enzo's wife. Gardini sent a letter to Ferrari which was also signed by Bizzarrini and Chiti among others stating the problem. Enzo summoned them all to his office and what resulted became known as the "palace revolt" with all engineers involved walking out.

Here Bizzarrini and the others set up a new racing company, ATS which specialised in racing engines and single seater racing cars. At this time Bizzarrini was also approached by another Italian who had no liking of Enzo Ferrari. Ferruccio Lamborghini asked Bizzarrini to design a V12 production engine for his new car company.

After some detuning to make it more street-able, Bizzarrini gave Lamborghini his first road car V12 engine which remained in production in one form or another for nearly 50 years.

From here, Bizzarrini worked for Iso in 1964 and became heavily involved with the design of the Iso Rivolta GT and Grifo

## WAIMAK CLASSICS FOR SALE



1977 MGB GT

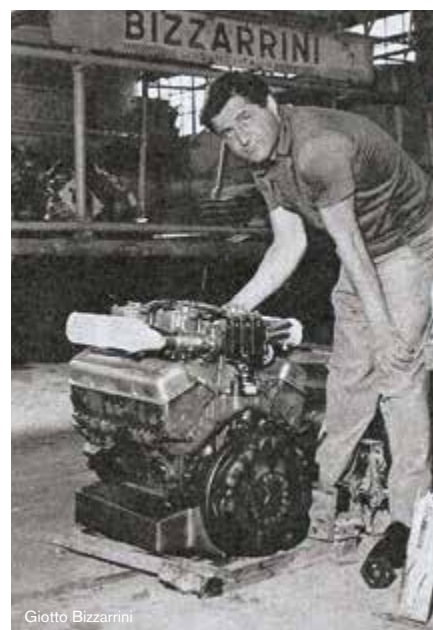


1987 FORD F250 XLT LARIAT



1937 BUICK SPECIAL





production grand tourers. What made these Italian thoroughbreds unique is they used all-American engine and running gear in the form of a 327ci Chevrolet V8 and automatic gearbox. Plus, they were absolutely gorgeous to behold.

This inspired Bizzarrini to go it alone. He created his own versions of the Iso Grifo concept under the name of Bizzarrini S.P.A. Bizzarrini was keen to build another 250 GTO and used the Iso Grifo as a base to do just that. The result was the Bizzarrini 5300 GT.

The 5300 GT was designed to be racing car first and foremost, just like the 250

GTO. Its incredibly pretty low-slung coupe body was designed to be as slippery as possible. The Chevy 5.4L V8 could be tuned for 400hp in Corsa spec. The engine was mounted behind the chassis frame making it a mid-engine/ front engine car.

Underneath sat a four-speed manual gearbox and a limited slip differential. The whole car weighed in at 1200kg thanks to its tubular frame and that handsome alloy body. Plus, with full independent suspension, it was more advanced than the 250 GTO. The end result was American muscle in an Italian suit.

The 5300 GT saw action in the Sebring 12 hours but results were poor. Its finest hour came with a first in class win at Le Mans in 1964 and 1965. Bizzarrini made 148 versions of the 5300 GT including Strada versions sold to the public. While the company Giotto founded produced a few other models including the race prepared P538 Barchetta, the company shut its doors in 1969.

Giotto's ambitions to beat Ferrari at his own game may not have materialized, but the cult following of the cars which bore his name began in earnest. Many have tried to resurrect the Bizzarrini name but with no success, until now that is.

Today Bizzarrini is back, with the new owners building 24 continuation versions of the 5300 GT Corsa. Each example is a tribute to the car which won its class at Le Mans. One's pockets will have to be quite deep to get a look in though, as they retail for 1.65 million GBP. Then again, its still great value when compared to the Ferrari 250 GTO which inspired it. ■



1970 DUCATI 450 MK3D CORSA



1954 TRIUMPH TR2

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Classic Car Sales

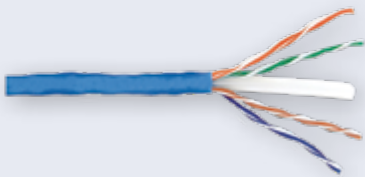
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Actassi UTP Cable 305m  
Cat6 Blue CM 4pr
- VDIB17386UTN  
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300 series 40M, Unshielded,  
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- Single Screw Insulated  
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- PDL Iconic Flush Switch
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### **PD682WH**

- PDL 600 Series Flush Switch
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- 20A / 16AX



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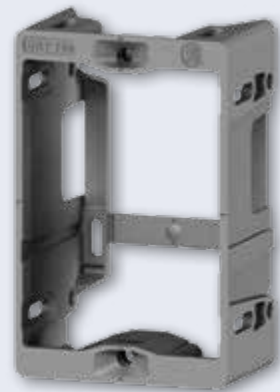
**PDL681WH**  
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- 1 Gang
- 20A / 16AX



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BOX OF 100



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- Flexible - Either end fixing with longer screw slots
- Practical - Designed to support back to back installations.





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- Ideal use for air extraction and air transfer
- 2 Speed switch
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- Cut out 160mm
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- Available for Apple (TI222) or Android devices (TI220)
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Reimagine how you live with a PDL Wiser Smart Home solution.

Imagine being in control of every aspect of your home – from the temperature to the lighting to your energy use – with just a few taps on your smartphone, or a few words to your voice assistant. Imagine how comfortable you'd feel having everything set just how you like it, whenever you want. Imagine the secure feeling, knowing that you never have to worry about whether you have shut a door or turned off an appliance. And imagine how environmentally sensitive and economical you'll be by using energy more efficiently. Now imagine being in control of all aspects of your home easily and intuitively, with a simple yet powerful smart home solution that can grow to meet your changing needs.

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- Create and schedule your own 'Moments', like movie nights or family dinners, where settings such as the lighting and temperature change to just how you like them.

- Set the lights and devices in your home office to power up with a pre-scheduled program before you start working, then go on standby when you're done.
- Let your home automatically anticipate your needs, reducing your living costs and environmental footprint.
- Choose how you control your smart home, with the Wiser by SE app, voice assistants or automatically. Imagine all this control over your comfort, peace of mind and energy efficiency, right at your fingertips. With a PDL Wiser Smart Home, you can.

Here is a simplified selection chart to help you find the right module to make any home a Wiser home.

Find out more about PDL Wiser @ [pdl.co.nz/wiser](http://pdl.co.nz/wiser)

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by Schneider Electric

[pdl.co.nz/wiser](http://pdl.co.nz/wiser)

[pdl.co.nz/iconic](http://pdl.co.nz/iconic)



Remote me

Product Name	Smart PB Remote mech with LED
Model #	PDL356PBSSL-VW
2-Wire/ 3-Wire	3-Wire (Active, Neutral, ControlLink)
Multway control	Slave / Remote control
Configurable LED indicator	YES
Configurable min brightness	NA
Min load	NA
Max load	ControlLink communication only, no direct load control
Timer range	NA
Built-in over-temp, overload, short circuit protection	NA
Suitable for fan motors	NA
Depth from grid Compatible wall box	39mm standard
No. of units in a plate	6
Application	Provides multiway control with matching LED indicator



Product Name	Connected Switch 10AX (BLE)
Model #	PDL356PB10MBTW-VW
Connectivity	BLE & Zigbee 3.0 (BLE Default)
2-Wire/ 3-Wire	3 - wire
Multway control (ControlLink)	YES (Multiway switching)
Configurable LED indicator	YES
Configurable min/max brightness	NA
Max load ratings	10AX/15A Res 10A @0.8pf M40 (6A @0.5pf)
Timer	Delay timer and run-on timer 1s – 24hr
24/7 Scheduler	YES
Suitable for fan motors	YES
Depth from grid compatible wall box	70mm Deep
No. of units in a plate	3
Applications	Indoor and outdoor lighting, Heat lamps, outdoor IR heaters, heated towelrail, pool pumps



## Switch Mechanisms

## Dimmers

## USB chargers

## Sensor

ControlLink Remote Mech	Rotary LED Dimmer 2-Wire	Rotary Uni Dimmer 2-Wire	PB Dimmer w CTL 2-Wire	Single Port 1.5A USB Charger	Dual Port 3.1A USB Charger	Dual Port 3.1A USB A+C Charger	Single Port 25W USB-C charger	PIR Motion Sensor Mech
PDL356PBSS-VW	PDL354RDMLED2-VW	PDL354RDMUN-VW	PDL354PBDMUN-VW	PDL342USB-VW	PDL342USB2-VW	PDL342USB2AC-VW	PDL342USBC-VW	PDL 352MPIR-TN
2-Wire	2-Wire	2-Wire	2-Wire	Active, neutral	Active, neutral	Active, Neutral	Active, Neutral	3-Wire
Slave / Remote control	Suitable for 1/2 way switching	Suitable for 1/2 way switching	Multiway dimming	NA	NA	NA	NA	Can parallel multiple devices
NO	NO	NO	YES	NA	NA	NA	NA	LED present but not configurable
NA	YES	YES	YES	NA	NA	NA	NA	NA
NA	5W	1W	10W	NA	NA	NA	NA	NA
240V 50mA	150W	350W	300W	1.5A	2.1A per port (3.1A max)	2.4A(Type A), 3A (Type C) - 3.1A max	PD3.0 (type C) 25W Max	750W max, 150W LED, M3 (0.5A@0.5pf)
NA	NA	NA	NA	NA	NA	NA	NA	10s-15min
Overload	YES	YES	YES	YES	YES	YES	YES	Overtemp
NO	NO	YES	NO	NA	NA	NA	NA	YES
39mm standard	36mm standard	36mm standard	39mm standard	37mm standard	55mm deep	55mm deep	55mm deep	41mm standard
6	3 (de-rating applies)	3 (de-rating applies)	6 (de-rating applies)	3	2	2	2	3
Provides multiway control	Lighting – LED, halogen, incandescent	Lighting – LED, halogen, small fans, incandescent	Lighting – Clipsal LED, halogen, incandescent	Kitchen, bedroom, study	Kitchen, bedroom, study	Kitchen, bedroom, study	Kitchen, bedroom, study	Hallway, stairs, pantry, WIR, entry, bathrooms



## Iconic connected switches

## Iconic connected dimmers

## Micro Modules (for use with any wall plate)

Connected Switch 10AX (Zigbee)	Connected Switch 2AX (BLE)	Connected Switch 2AX (Zigbee)	Connected Dimmer (BLE)	Connected Dimmer (Zigbee)	Micro module Switch (Zigbee)	Micromodule Dimmer (Zigbee)	Micromodule Blind controller (Zigbee)
PDL356PB10MBTZ-VW	PDL356PB2MBTW-VW	PDL356PB2MBTZ-VW	PDL354PBDMBTW-VW	PDL354PBDMBTZ-VW	PDL5011WSZ	PDL5010WDZ	PDL5015WBZ
BLE & Zigbee 3.0 (Zigbee default)	BLE & Zigbee 3.0 (BLE Default)	BLE & Zigbee 3.0 (Zigbee default)	BLE & Zigbee 3.0 (BLE Default)	BLE & Zigbee 3.0 (Zigbee default)	Zigbee 3.0	Zigbee 3.0	Zigbee 3.0
3 - wire	3 - wire	3 - wire	3 - wire	3 - wire	3 - wire	2 - wire	3 - wire
YES (Multiway switching)	Not available (use Automations)	Not available (use Automations)	YES (Multiway dimming)	YES (Multiway dimming)	YES (using parallel bell press switches)	YES (using parallel bell press switches)	YES (using parallel bell press switches)
YES	YES	YES	YES	YES	NO	NO	NO
NA	NA	NA	YES	YES	NA	YES	NA
10AX/15A Res 10A @0.8pf M40 (6A @0.5pf)	2AX 2A @0.6pf 2A Motor	2AX 2A @0.6pf 2A Motor	150W Dimmable LED 300W Incandescent 300W Halogen & ELV.	150W Dimmable LED 300W Incandescent 300W Halogen & ELV.	10AX/15A Res 6A @0.6pf 10A motor	100W Dimmable LED 200W Incandescent 150W Halogen & ELV.	240V twin active motor 4A 0.6-1.0pf
Delay timer 1-5 hrs (as an Automation)	Delay and run-on timer 1s- 24hr	Delay timer 1-5 hrs (as an Automation)	Delay timer 1s – 24hr	Delay timer 1-5 hrs (as an Automation)	Delay timer 1-5 hrs (as an Automation)	Delay timer 1-5 hrs (as an Automation)	Delay timer 1-5 hrs (as an Automation)
YES (as an Automation)	NO	YES (as an Automation)	YES	YES (as an Automation)	YES (as an Automation)	YES (as an Automation)	YES (as an Automation)
YES	YES	YES	NO	NO	YES	NO	NO
70mm Deep	39mm Standard	39mm Standard	70mm Deep	70mm Deep	Switch plate dependent	Switch plate dependent	Switch plate dependent
3	6	6	3	3	6 (wired to bell press switches)	6 (wired to bell press switches)	6 (wired to bell press switches)
Indoor and outdoor lighting, heat lamps, outdoor IR heaters, heated towelrail, pool pumps	Indoor and outdoor lighting, small motors, exhaust fans – run on timer, heated towel rails	Indoor and outdoor lighting, small motors, exhaust fans, heated towel rails. Moment triggering (via automations)	Dimmable LEDs, Incandescent and halogen lighting	Dimmable LEDs, Incandescent and halogen lighting	Garage door and gate motors, Indoor and outdoor lighting, heat lamps, exhaust fans, heated towel rails, pool pumps	Dimmable LEDs, Incandescent and halogen lighting (31LCDA recommended for LEDs)	240V twin active blind motors equipped with an end position switch.





### Mini Thermal IMAGING CAMERA for Smartphones

**NEW**

- High IR resolution at 19,200 pixels
- Fast image frequency at 25Hz
- Smooth video & measurements while panning
- Object temperature range 20°C~350°C
- NETD: < 40mK
- Free Smartphone App makes easy to share images
- USB Type-C interface (Android)
- Portable design

**MINI1**
**\$509.00**


### Pocket-Size THERMAL IMAGING CAMERA

- Innovative macro mode can see details as small as 500 microns
- High IR resolution at 49,152 pixels
- NETD: < 40mK
- 3.5" LCD touch screen
- IP54 Rated & 2m drop protection
- Object temperature range -20°C~400°C
- Built-in 16GB on-board memory
- Connect via WiFi or Hotspot to free mobile App
- Portable Design

**POCKET2**
**\$1125.00**

### Handheld WiFi THERMAL IMAGING CAMERA

**NEW**

- High image quality from 19,200 pixels
- NETD: < 40mK
- Connect via WiFi or Hotspot to free mobile App
- IP54 Rated & 2m drop protection
- Clip-on micro lens to see details as small as 500 microns
- Fast image frequency at 25Hz
- 3.2" LCD screen
- Object temperature range -20°C~550°C
- Built-in 16GB flash memory
- Includes free HIKMICRO analyzer software


**B1L**  
(19,200 Pixels)

**\$865.00**

**B20**  
(49,152 Pixels)

**\$1050.00**

### Advanced Thermal IMAGING CAMERA

- High image quality 110,592 pixels
- Adjustable focus ring
- Interchangeable battery system
- IP54 Rated & 2m drop protection
- Laser pointer
- 3.5" LCD screen
- Object temperature range -20°C~550°C
- Removable 16GB Micro-SD card
- Includes free HIKMICRO analyzer software


**M30**
**\$3700.00**

# PRODUCTS IN FOCUS

## METRO BLACK SWITCHGEAR

- Satin finish
- Slim 6.5mm profile\*
- Available in black and white
- Designed in New Zealand

- 5 year warranty

\*double horizontal with extra switch/USB has an 8.5mm profile

**VYNCO**

### HORIZONTAL POWERPOINTS

**MP1HB**

**MP2HB**

**MP2HU2B**

**MP2HXB**


### VERTICAL POWERPOINTS

**MP1VB**

**MP2VB**


### STANDARD SWITCHES

**MSW1B**

**MSW2B**

**MSW3B**


### COVER PLATES

**MSW1PB - 1 GANG**
**MSW2PB - 2 GANG**
**MSW3PB - 3 GANG**
**MSW4PB - 4 GANG**
**MSW5PB - 5 GANG**
**MSW6PB - 6 GANG**
**MSWBPB - BLANK**




**Arrowhead**  
Alarm Products

# Smart Security & Control

## Active Deterrence Camera

4MP 2.8 - 12mm lens & 50m IR with smart AI detection

### Features

- Progressive scan BSI & NIR image sensor
- Up to 2560 x 1440 resolution
- Bi-directional audio with built-in mic & speaker
- AI based human & vehicle detection, classification & tracking, perimeter precaution & cross line detection
- Outdoor ready (IP66)
- Fast & accurate 4 x optical zoom
- 8 cruises, up to 16 presets for each cruise

**TVT**  
TVT-MINI-PTZ



## IP Access Control Gate Station

Access keypad with RFID reader & Bluetooth transceiver

### Features

- Illuminated keypad, configurable & up to 500 pin codes
- Outdoor ready (IP65)
- Smartphone app available on iOS & Android
- RFID reader
- Wiegand interface (125KHz)
- Perfect for pedestrian gates, underground car-parks & storage facilities
- Compact design & easy install



**DoorBird**  
Technology meets Design.  
DB-A1121-S



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INNOVATION SINCE 1915



## ABRASION RESISTANT GP KNIT GLOVES

**B-90342** Medium / **B-90386** Large / **B-90392** X-Large



**ML003G**

### 40Vmax XGT / 18V LXT LED Worklight

- Powered 40Vmax XGT or 18V LXT Batteries
- Lightweight for operator comfort
- High-intensity LED lights for wider range
- Compatible with 40Vmax XGT / 18V / 14.4V LXT batteries



**DML812**

### 18V LXT LED Flashlight / Spotlight

- Long beam distance lights up objects up to 640 metres away
- 4 output modes: spot light, flood light, spot/flood and strobe
- High brightness neutral white LED's provide a maximum 1,250lm
- Continuous runtime up to 10 hours with a 6.0Ah in spotlight mode



**E-08698**

### 8pc 1/4" Hex Shank Flat Bit Set

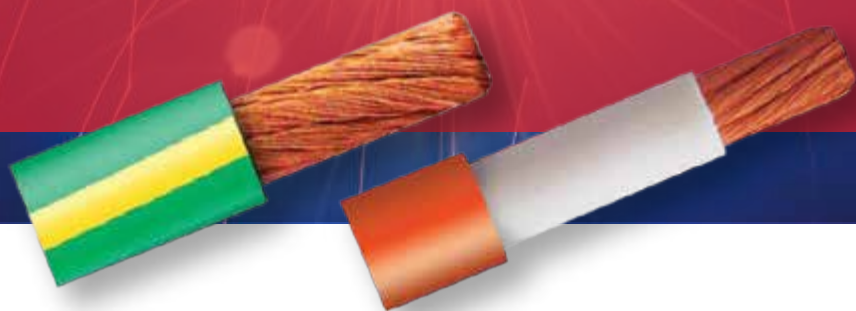
- 8 different sizes flat wood spade bits
- Sizes: 12, 14, 16, 18, 20, 22, 25, 32mm
- Ideal for most types of wood, hard or soft
- Case specially designed hard plastic top and bottom

Promo period 1<sup>st</sup> May - 30<sup>th</sup> June 2023 | For T&C's: [www.makita.co.nz/promotions/](http://www.makita.co.nz/promotions/)





# ALL YOUR POWER FLEX CABLE SORTED



## POWER FLEX FEATURES

- 4mm<sup>2</sup> - 120mm<sup>2</sup>
- Insulated up to 105°C
- ROHS Compliant & New Zealand Certified
- Known for incredible flexibility
- Available as Single and Double Insulated
- Assorted Colours available



# GENERATOR CONNECTION SWITCHES



Respectfully to all those affected by Cyclone Gabrielle and other recent extreme weather events, a review of the options when installing a Mains – Off - Gen switch, and the prescribed electrical connection of standby generators, may be timely and relevant.

Today, it is not only plant such as chillers and freezers that require auxiliary power during a mains failure, as everyday operations across farms, orchards, vineyards, small business and homes rely on electricity for basic communication and operational functions – for example home based medical equipment. Computers are everywhere and the facility to connect a stand-by generator has become a frequent requirement for many businesses and homeowners.

The prescribed connection of both permanent and temporary generators is covered by the electrical standard AS/NZS 3010 which should be referenced in all instances. The following information is taken from the standard, however is not a complete and full summary and does not replace the standard.

## Function

The purpose of a Mains Off Generator switch is to safely enable a load to be supplied by either Mains Power or Auxiliary Power – and ensure only one source can be connected to the load at any time. An Off position to isolate the load from either power source is a very popular option, for maintenance of the load, for example.

In reference to 'standard' single phase or three phase and Neutral installations, all phases are switched on both the Mains and Generator sides. However, as New Zealand installations employ a MEN (Multiple Earth Neutral) connection at the Main board, the Neutral on the Mains side must not be switched - it must be permanently connected.

Conversely - the Neutral from the Generator supply is always switched, unless it is also permanently connected to the Neutral Bar at the Main board. There are exceptions with some installations and AS/NZS 3010:2005 should be referenced for all details.

Very Importantly – in three phase applications, the switch must be designed such that when switching to the Generator supply, the Neutral from the Generator supply is connected (contact closed) before the phases from the generator are

connected (contacts closed); inversely when switching back to OFF from Gen, the Neutral contact opens only after all phases are disconnected (contacts open).

In single phase applications, the neutral contact shall open and close simultaneously with the phase contact.

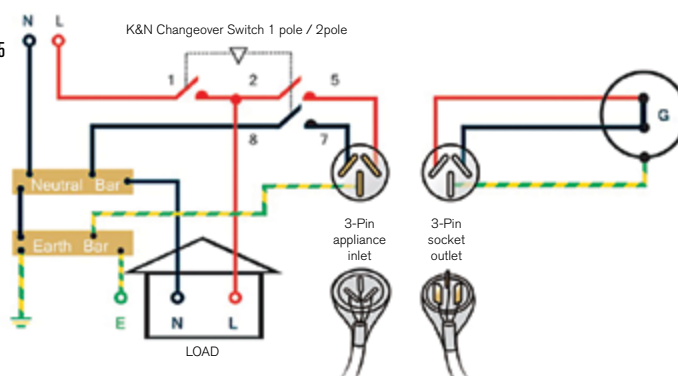
## Connection Diagrams according to AS/NZS 3010:2005

Please refer to the following diagrams for single phase and three phase installations.

Example of connections to AS/NZS 3000:2007 & 3010:2005

### SINGLE PHASE

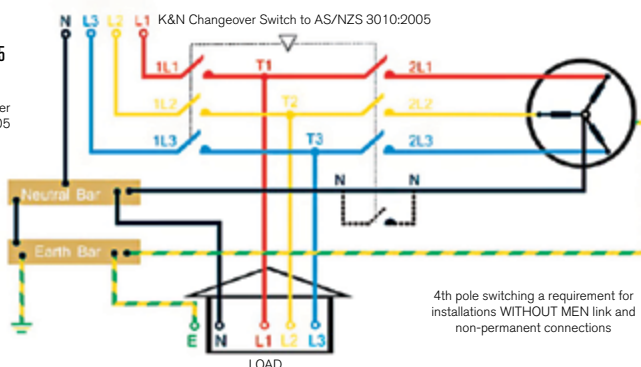
Mains Off Generator Switches to AS/NZS 3010:2005



Example of connections to AS/NZS 3000:2007 & 3010:2005

### THREE PHASE

Mains Off Generator Changeover Switches to AS/NZS 3010:2005



4th pole switching a requirement for installations WITHOUT MEN link and non-permanent connections

## Frequently Asked Questions

Here are a list of FAQ's that are often raised by installers (answers in accordance with AS/NZS 3010:2005)

**Q.** Can I replace a permanently connected main switch with a MOG switch?

**A.** A permanently connected changeover device (MOG switch) with an intermediate OFF position may replace a main switch.

**Q.** Do I need to switch the generator neutral on permanently wired generators?

**A.** When a generator neutral is permanently wired to the main neutral bar and a MEN link is provided, there is no requirement to switch the generator neutral. The main supply neutral is not switched.

**Q.** Do I need to switch the generator neutral on removable generators, i.e., connected with an appliance inlet?

**A.** When a generator is not permanently wired there is a requirement to switch the generator neutral. The main supply neutral is not switched.

**Q.** Do I need to switch neutrals where there is no MEN link?

**A.** The generator neutral is switched. The mains supply neutral is not switched.

**Q.** Why do I need an Early Make Late Break Neutral?

**A.** The neutral must not close after the main contacts, or open before the main contacts. In practical terms, a late make early break contact development is required.

**Q.** Is it possible to have a Multi-source changeover switch?

**A.** Switches are available for multi-source installations. e.g., mains, generator, solar, turbine.

**Q.** Can it be mounted in modern domestic distribution boards?

**A.** Switches are available with MCB fronts and shallow handles which fit inside modern distribution boards

## Selecting a Mains Off Gen Switch

The following information is required when selecting a Mains Off Gen Switch

- Supply current (Amps)
- Mains cable size
- Switched neutral on the generator yes / no (see FAQ's above)
- Mounting Data (panel mount, base mount with long shaft and door clutch, DIN mount with MCB front plate)
- Enclosed indoor / outdoor
- With an appliance inlet plug (if yes what amperage)

## The Range and Options for Mains Off Gen Switches

The following are examples of popular single and three phase MOG switches and mounting options although there are many more variations and custom options available.

### KN416

63A 1Ø Mains-Off-Gen  
1 Pole + Thru Neutral Mains / 2 Pole Gen  
Din Mount – 4 MCB Spaces

### KN417

63A 3Ø Mains-Off-Gen  
3 Pole Mains / 4 Pole Gen  
Din Mount – 7 MCB Spaces

### MOG631-32P

63A 1Ø Mains-Off-Gen  
1 Pole + Thru Neutral Mains /  
2 Pole Gen Enclosure IP65 Outdoor  
Use: 280x190x180  
32A 3 Pin Appliance Inlet

### MOG633P

63A 3Ø Mains-Off-Gen  
3 Pole Mains / 4 Pole Gen  
Enclosure IP65 Outdoor Use: 280x190x180  
63A 5 Pin Appliance Inlet

### MOG1253P

125A 3Ø Mains-Off-Gen  
3 Pole Mains / 4 Pole Gen  
Enclosure IP65 Outdoor Use: 380x280x180  
125A 5 Pin Appliance Inlet

### KN408

80A 3Ø Mains-Off-Gen  
3 Pole Mains / 4 Pole Gen  
Base Mount - Door Clutch



## In Summary

Please refer to pages 28 – 33 of Kraus & Naimer's local catalogue to view more of the range or contact your local Powerbase Branch for further information; Catalogue: [https://flippingbook.krausnaimer.com/Catalogue\\_NZL/29/](https://flippingbook.krausnaimer.com/Catalogue_NZL/29/) ■



**Energizer®**

E300436400  
HC Pro Headlight ENR

E300689000 ENL  
H-C PIVOT PLUS  
300L HCSW21

E302717100  
ENR Ultimate Lithium  
Bulk AAA DP10

E302717200  
ENR Ultimate Lithium  
Bulk AA DP10

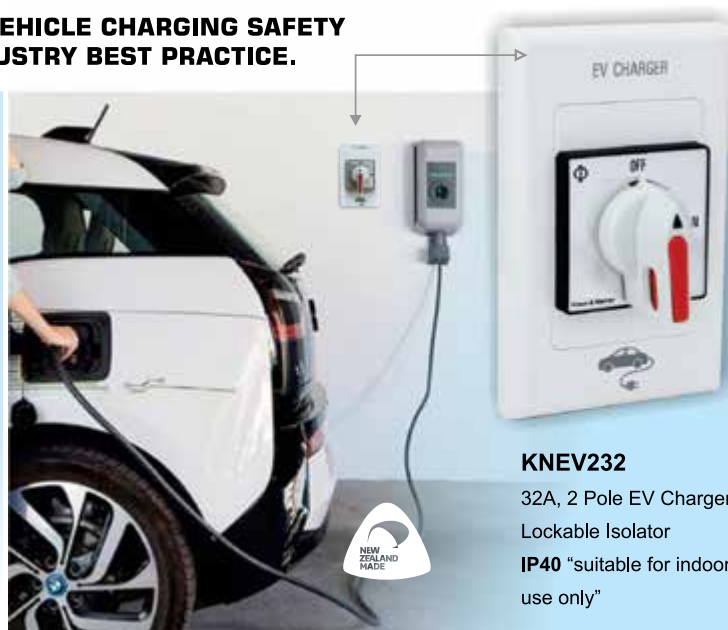
## KRAUS & NAIMER ELECTRIC VEHICLE (EV) CHARGER ISOLATOR

### KRAUS & NAIMER'S NEW EV CHARGER ISOLATION SWITCH MEETS ALL THE REQUIREMENTS

**WORKSAFE / ENERGY SAFETY - ELECTRIC VEHICLE CHARGING SAFETY GUIDELINES, THE WIRING RULES AND INDUSTRY BEST PRACTICE.**

#### REQUIREMENTS:

- ✓ Double pole – disconnect all live conductors (neutral is a live conductor)
- ✓ Lockable in OFF
- ✓ Only indicate OFF if the contacts are physically open
- ✓ OFF position clearly labelled
- ✓ Minimum current rating 32A
- ✓ Won't close with impact or vibration
- ✓ Withstand specified impulse voltages



#### KNEV232

32A, 2 Pole EV Charger  
Lockable Isolator  
IP40 "suitable for indoor use only"



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# Prysmian Group

**A world leader in sustainability**

**Prysmian Group ranks first in the Dow Jones Sustainability World Index**



## **Linking sustainable ideas to real world results**

Prysmian Group, world leader in the energy and telecom cables system industry, ranks first with 87 points on the Dow Jones Sustainability World Index. Prysmian is the only pure cable maker included in the most recognised sustainability index at global level, covering over 5,300 companies.

Our goal is an environmentally sustainable business. With services beyond the ordinary, Prysmian New Zealand offers a drum returns process to allow for recycling or future reuse of resources to minimise waste and maintain supply.



# Harmony

## Harmony XALD, XALK plastic control stations



For Harmony XB5, control and signaling units Ø 22

### Discover Harmony

Advanced operator interface and industrial relays

Harmony operator interface and industrial relays enhance operational efficiency and equipment availability across industrial and building applications. Harmony includes intelligent connected products and edge terminals that visualize, gather and process data, enabling informed operator decisions

### Explore our offer

- Harmony Push Buttons and Switches
- Harmony HMI Operator Terminals, IPC and EdgeBox
- Harmony Signaling Devices
- Harmony Electrical Relays
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Get technical information about your product



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## APPRENTICE CORNER

## CALLING ALL APPRENTICES!

Welcome to the Apprentice Corner, a section for you in every issue of your Marketplace Magazine.

Apprentice Corner provides an opportunity for training providers to update our apprentices' potential employers with opportunities for future apprentice employment.

# MAI KAEWSAEM

## THE ETCO MODEL

Mai KaewsaeM left a career with Air New Zealand, took up an electrical pre-trade with Etco and hasn't looked back.

The Pre-Trade Foundation Programme is a year-long, part-time Level 3 course and an opportunity to bridge the gap for those who need the NCEA credits required to go directly into an electrical apprenticeship.

Mai went to school in the Bay of Plenty before joining Air NZ as a Customer Service Agent.

But when the pandemic struck and colleagues were made redundant, she decided to pursue her interest in 'how things work'.

"I was looking at carpentry but then a friend pointed out the Etco course. We

started with atoms and I didn't understand why we were learning physics. But as weeks went on, I realised why and it all started to flow".

Etco's Pre-trade Foundation Programme is well-known for providing a nurturing environment that supports all students while also integrating industry theory tailored specifically to service technicians. By equipping individuals with the necessary qualifications, this program is a pathway to an electrical apprenticeship, and opens a wealth of opportunities for careers in exciting fields such as home automation, electrical servicing, data communication, and beyond.

After graduating, Mai was invited to apply for an Etco apprenticeship. Within two

days of completing the Etco work-ready programme, she was working with a host.

"Everyone in the class passed the course – we were so stoked about that. I was delighted to be offered an apprenticeship and to get a host placement in Tauranga so quickly."

Mai is currently working with the team at John Ward Electrical, who specialise in industrial solutions for cool stores, packhouses, and factories and still enjoys the continued support she gets from the Etco Tauranga Team.

"Having an Etco mentor you can go to with any issues is really good. Also, anything I need, like new PPE, my mentor gets for me – I seem to go through quite a few gloves!"

To find out more about training, taking on an apprentice, industry courses or our pre-trade programme, give us a call on 0800 ASK ETCO or visit [www.etco.co.nz](http://www.etco.co.nz)



**etco**  
The electrical  
training experts



# CELEBRATING EXCELLENCE AT ATT

ATT  
Apprenticeship Training Trust



March 2023 was a month of celebrations for the Apprenticeship Training Trust, holding three Graduation and Award events across the country – Wellington, Auckland, and Christchurch. The last time we were able to hold these events in person was in 2019, so to celebrate our 2022 graduates and award winners was incredibly special for all of us at ATT.

In total, fifty-six ATT apprentices graduated from their chosen trades across the country – thirty-six in the Northern region and twenty in the South. In addition, more than sixty awards were presented to apprentices, hosts and supervisors

across a variety of categories recognising excellence in electrical, plumbing, leadership, cultural mana, inspiration, and health & safety.

The premier award presented is the ATT Apprentice of the Year and is presented to an apprentice who is the best all-rounder, having excelled in all areas. This year, presented at the Auckland event and sponsored by ToolWare, in memory of James Merrill, the Apprentice of the Year, was won by Nick Hattingh, hosted by Griffin's Foods Ltd.

Nick met all the requirements, 'plus!' His Area Manager says, "Nick is polite,

well-presented and stays on top of all on-job learning. He has grown and developed over the past year and shows an eagerness to learn and improve while continuing to achieve greatness, with work ethics that are contagious." At 23 years of age, Nick is now halfway through his four-year apprenticeship and is proud of the work he does as one of four electricians at the huge biscuit factory in Papakura.

Congratulations to all electrical apprentices, hosts and supervisors who won awards across New Zealand. Thank you also to Powerbase for their ongoing support. 🏆



Northern Awards – Electrical	Winner	Host Business
Powerbase Most Outstanding Apprentice	Female: Nadia Lidderd Male: Josh Crampton	D & T Electrical Ltd Callander Electrics Ltd
Powerbase Award for Excellence, Year 1	Taryn Protzman	Ele-Power Electrical Ltd
Powerbase Award for Excellence, Year 2	Caleb Odium	Lyndon Jones Electrical Ltd
Powerbase Award for Excellence, Year 3	Luciano Harth	Entec Services Ltd
Powerbase Personal Growth & Development	Kayden Ralph-Smith	Kinetic Electrical East Tamaki
Powerbase Outstanding Supervisor Award	Tony Dikmans	Ele-Power Electrical Ltd
ATT Electrical Host Business of the Year	Akon Electrical Engineering	

Southern Awards – Electrical	Winner	Host Business
Powerbase Most Outstanding Apprentice	Female: Phoebe Hartley-Flynn Male: Dipak Ranchhod	A.C. Connections Ltd Seven Electrical Wellington
Powerbase Award for Excellence, Year 1	Robert Astkin	Greg Topp Betta Electrical (ATL Reefton Ltd)
Powerbase Award for Excellence, Year 2	Zach Cabreana	Butler Electrical (Butler 2012 Ltd)
Powerbase Award for Excellence, Year 3	Jesse Lowe	Canterbury District Health Board (CDHB)
Powerbase Personal Growth & Development	Albert Dennison	Laser Electrical Gore
Powerbase Outstanding Supervisor Award	John Dyksma	University of Canterbury
ATT Electrical Host Business of the Year (Joint Winners)	Caldwell and Levesque Ltd (Canterbury + Queenstown)	





## SQUARE INLET FASCIA

FV110-XTS

WEISS APOLLO MIXED FLOW 150MM INLINE  
DUCTED EXTRACTOR FAN

- Weiss Apollo High Performance Mixed Flow inline fan
- Includes 2m flex and plug
- Includes surface socket
- Includes 6m of 150mm dia. duct
- Suitable for a bathroom up to 4m x 5m



High output free air fan performance: 510m<sup>3</sup>/hr / 141.6l/sec

## LED CENTRE LIGHT

FV160LED-CP6

WEISS 150MM CEILING EXTRACTOR SYSTEM  
WITH LOW VOLTAGE LED LIGHT

- 12v AC transformer and LED light included
- Designed to wire to existing light switch
- Low wattage effective inline fan
- Includes surface socket and duct tape
- Suitable for a bathroom up to 4m x 5m
- Includes 6m of 150mm dia. duct



High output free air fan performance: 405m<sup>3</sup>/hr / 112.5l/sec

## SURFACE MOUNT SPACE HEATER 2400 WATTS

SM2400

2400W SPACE HEATER WITH TOUCH  
PAD CONTROL

- Easy surface mount
- Powerful, quiet tangential fan
- Optional run timer
- Adjustable thermostat
- Electronic control
- Frost guard function



High heat output: 2400W

## 150MM UNIVERSAL CEILING OR WALL APOLLO EC FAN (FAN ONLY)

FV158-EC

WEISS 150MM UNIVERSAL 240V EC  
FAN - OPEN FLOW GRILL

- Fan only supplied
- High performance Electronically Controlled fan
- Suitable for a bathroom up to 4m x 4m
- Suits ceiling installation outside Zone 1
- Universal can be installed in wall or ceiling



High output free air fan performance: 340m<sup>3</sup>/hr / 94.4l/sec

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MORE  
BUT SO MUCH  
LESS**

# TRADE

S E R I E S

The Trade Series range from Clevertronics offers not only a wide range of product but some of the most competitive prices available.

**THE TRADIES CHOICE.**



### **EBLLED-CM-LI**

#### **Trade Series Boxlite Exit**

- Single or double sided
- Ceiling mount



### **ECILLED-LI**

#### **Trade Series Circulite LED**

- Circular oyster
- Opal diffuser
- Maintained



### **ELIFE-X-LI-SM-WP**

#### **Trade Series Lifelight Surface Mount Weatherproof**

- Low power consumption
- D50 classification
- IP65 weatherproof
- IK08 impact protection



### **EBULK**

#### **Bulkite Emergency**

- IP65 weatherproof
- IK08 impact protection
- Lithium powered
- Fittings are non-maintained by default but can easily be switched to maintained mode



# ARGO WEATHERPROOF BATTENS

## Switchable Colour & Dual Output Weatherproof Battens

The ARGO 1200mm Weatherproof is the perfect all-rounder when it comes to projects requiring a reliable, weatherproof batten. With IP65 and IK08 impact ratings combined with switchable colour and output, the ARGO provides greater flexibility on each project.

The emergency version contains market-leading Lithium Iron Phosphate battery technology and testing options are available with the LP range. Packed with features at the right price and backed by Clevertronics reliability. You won't be let down by the ARGO.

### Applications



Car Parks



Corridors



Stairwells



Back of House



Fire Stairs

**TRADE**  
SERIES  
THE TRADES CHOICE

[clevertronics.co.nz](http://clevertronics.co.nz)



### Features & Benefits

- AS/NZS 2293.3 compliant
- 1200mm / 4ft
- IP65
- Long life, energy efficient LED strip module
- Switchable colour (3000K / 4000K / 5700K)
- Switchable output
- 4608lm @ 125lm/W
- Lithium (LiFePO<sub>4</sub>) battery technology
- Quick connect surface mount brackets and on-carton mounting template
- Large terminal block for easy installation
- IPART/VEU approval



LED



Switchable  
Colour



Sustained



50,000hrs



IP65



Large  
Terminal  
Blocks



Surface  
Mount



Switchable  
Output



LiFePO<sub>4</sub>



UV  
Stabilised  
Case



Quick  
Connect  
Brackets



# Switch Lighting launches new showroom in Christchurch

We are thrilled to have officially launched our brand new Christchurch Switch Lighting showroom in March 2023, where we unveiled this stunning new space, filled with the latest and most innovative lighting solutions in the market. Over two days we hosted twelve sessions bringing through Architects, Lighting Designers, Interior Designers, Electricians, Builders, Specifiers and Electrical Wholesalers through the space.

As a leading provider of lighting solutions, we take great pride in offering our customers the very best products and services. With this new showroom, we aim to provide an immersive and interactive experience that allows our customers to see and experience our products first hand.

Our showrooms are not only places for us to showcase our products, but they are also spaces for us to engage with our customers, to understand their needs and to tailor our solutions to meet their specific requirements. We believe that this new showroom will not only be a place for our customers to find the perfect lighting solution for their home or business, but it will also be a place where they can come to learn and be inspired by the latest trends and lighting technology.

The latest addition in Christchurch takes our network of showrooms across the country up to three, with our other showrooms located in Nelson at our Switch HQ and in Auckland at 49 Ponsonby Road. We invite you to visit our newest showroom at 227a High Street, Christchurch and allow us to take you on an exciting journey into the world of Switch Lighting and to continue to provide you with the best lighting solutions and services available.

Contact our professional lighting consultants for a personalised bespoke showroom experience by appointment.

Christchurch@switch-lighting.co.nz | 03 281 8216  
Auckland@switch-lighting.co.nz | 09 972 0607  
Nelson@switch-lighting.co.nz | 03 970 0755

[www.switch-lighting.co.nz](http://www.switch-lighting.co.nz)







# A HIT OF KIWI HOPS

Some beer styles have been with us for hundreds of years. Porter for instance has been around since the 1700s. And Germans have been making various forms of lager dating back to the 1500s.

But there are other beer types that are relatively new “inventions” — the most obvious being the “Hazy” IPA which has been around for only 15 years but it's only in the past three or four years that it's been accepted as an official “style”.

Styles are determined by those charged with running beer competitions such as World Beer Cup, the world's most prestigious beer-judging event which is to be held in Nashville, Tennessee this month (May). Another group that rubber-stamps styles is the Beer Judge Certification Programme (BJCP).

The World Beer Cup has 103 official styles of beer but many of them have a multitude of sub-classes with the bulk having historical links back to England, Ireland, Germany and Belgium, while many of the modern styles are, to quote The Boss, born in the USA.

Among their recent additions to judging are two specific New Zealand categories, which is an acknowledgement of the role New Zealand hops play on the international stage. They judge New

Zealand-style pale ale and IPA.

We recently had the annual hop harvest in Nelson, which goes from late February to early April, and brewers from around the world came here to try to get the pick of bunch. They sample all the freshly harvested hops trying to decide what they want to use for the year ahead.

One of the reasons New Zealand hops are so valued is the breeding programme run by Plant & Food Research, which has focused on creating unique hops. The latest is called Superdelic which has flavours of berries, mango and bubblegum! Plus our small production volume creates FOMO.

There's the likes of Nelson Sauvignon, with its unrivalled sauvignon blanc grape character, passionfruit-driven Riwaka, pineapple Nectar, and the lime-zest of Motueka plus many more.

So what is New Zealand-style pale ale or IPA?

The World Beer Cup says a Kiwi pale ale should be easy drinking, refreshing with

distinctive hop aromas of tropical fruit, passionfruit, stone fruit, cut grass, or diesel.

And the IPA should “exhibit attributes such as floral, fruity (tropical, stone fruit, and other), sulphur/diesel-like, citrusy, and grassy”.

Some good examples of NZ IPAs include 8 Wired's Hopwired, which is a big punchy beer that's as much wine gums as grapes on the flavour front, or Emerson's Reverb, with grapefruit, grape and juicy fruit chewing gum flavours.

In the pale ales, McLeod's from Northland do a classic with Paradise Pale Ale. It's got hints of papaya and passionfruit undercut by lime juice and orange zest, while Liberty Brewing's Oh Bro is a classic of the style with sweet orange on a biscuity malt. ☑





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- 40 dB(A)



FAN7031

Fascia Selections:



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Round White



DCT4511  
Round Black



DCT4514  
Round LED White



DCT4515  
Round LED Black



DCT4512  
Square White



DCT4513  
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DCT4517  
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Powerful centrifugal fan with  
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& **LOW SPEED OPTION**

- Boost level for KITCHEN installation
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- Low speed for LONG TERM TRICKLE ventilation



FAN7201

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Laundry Installations  
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- 2 x 275W, 3000K LED
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FAN0995  
4 Heat Lamp & Fan Unit  
with LED Centre Light

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- 83Pa Max. Fan Pressure
- 60 l/s, 216m³/hr
- 4 x 275W, 3000K LED
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DCT4257  
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DCT4400  
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DCT4261  
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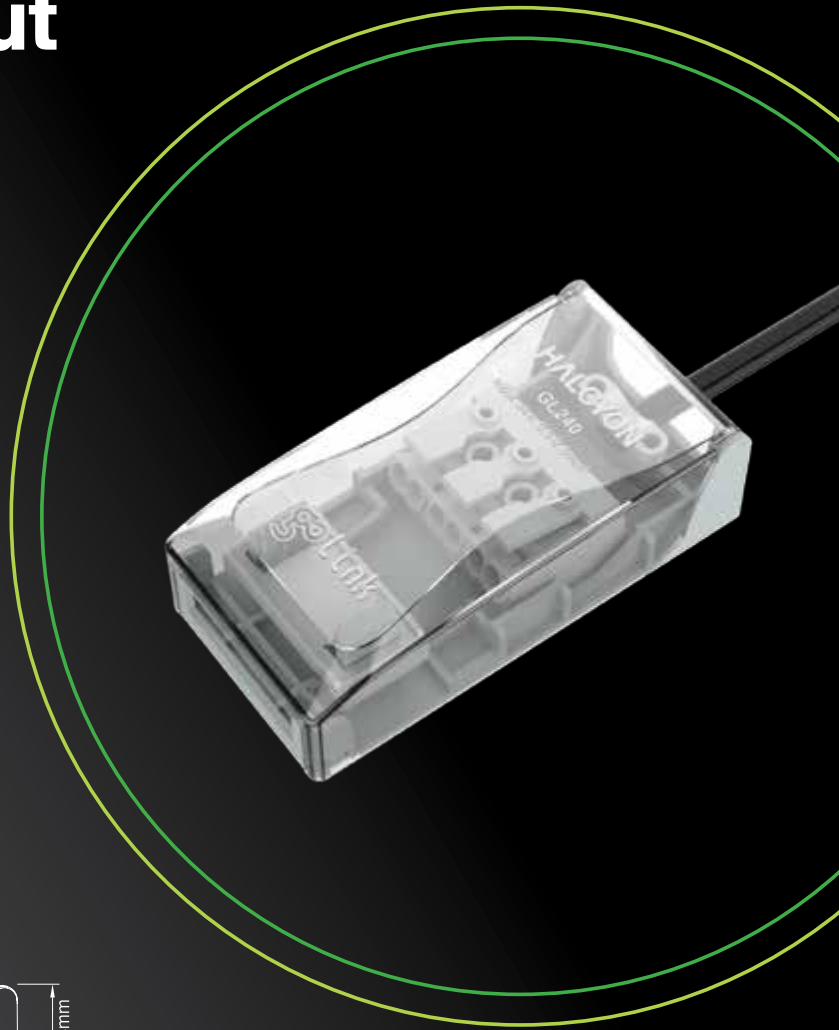
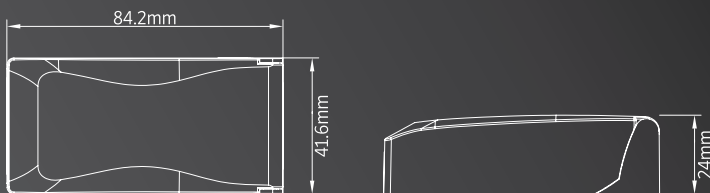
goLink GL240

## Loop-in Loop-out Mains Adaptor

Designed with the installer in mind for use with compact and/or European style control gear with small mains terminals. Halcyon GL240 Go-link Mousetrap comes complete with 125mm 2x0.75mm<sup>2</sup> mains feed cable pre-wired to a loop-in loop-out terminal block with a cable clamp.

GL240 is also suitable for adapting miniature drivers with pre-wired feeds for use in ceiling spaces, simply remove the 125mm 2x0.75mm<sup>2</sup> pre-wired feed cable and terminate mini driver primary feed directly into adaptor.

Visit [www.halcyonlights.co.nz](http://www.halcyonlights.co.nz) for detailed specifications.





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**CAT III  
600V**

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# WHAT YOU NEED TO KNOW ABOUT EMPLOYMENT AGREEMENTS

A well written employment agreement helps the employee and employer to know what is expected from them and what they're entitled to.

This means misunderstandings are less likely to happen and if a problem does come up then the employee and employer can go to the employment agreement to clarify things.

## 30-day rule for new employees

For the first 30 days, new employees must be employed under terms consistent with the collective agreement, where there is a collective agreement in place. An employee and employer may agree on additional terms that are more favourable than the terms specified in the collective agreement.

After the 30-day period expires, if the employee has not become a member of the union then the employee and employer are free to negotiate and agree on different terms and conditions in the individual employment agreement.


## Every employee must have a written employment agreement.

- An employer must provide an employee with a copy of their individual employment agreement.
- Failure to ensure the employment agreement is in writing may result in a fine of \$1,000 per employee.

- The employment agreement can be either an individual agreement or a collective agreement. If there's a relevant collective agreement, employers must provide an employee with the Form for new employees to indicate if they intend to join a union [PDF 264KB] within first 10 days of the employee starting their new job.
- The type of employment agreement an employee is on may depend on whether or not they are in a union. It is the employee's choice whether they join a union, and an employer can't unduly influence their choice. If an employee chooses to join a union, they will be covered by the relevant collective agreement, if there is one.
- An individual employment agreement should be signed by the employer and employee, although it can still be valid even if it isn't. For example, when there is verbal or written acceptance. Electronic signatures, if agreed between the employer and employee, are acceptable to meet this requirement.
- There are some things that must be in your employment agreement and other things that are usually in employment

agreements but don't have to be, such as your notice period.

- Minimum rights (such as the minimum wage and annual holidays) are legal requirements and apply even if they're not in the employment agreement. Your employment agreement can't reduce these or trade them off for other things.

Employers are required to keep a copy of the employment agreement (or the current signed terms and conditions of employment). The employer must keep an 'intended agreement' even if the employee hasn't signed it. Employees are entitled to a copy of their agreement on request. 

To read more visit <https://www.employment.govt.nz/starting-employment/employment-agreements/>



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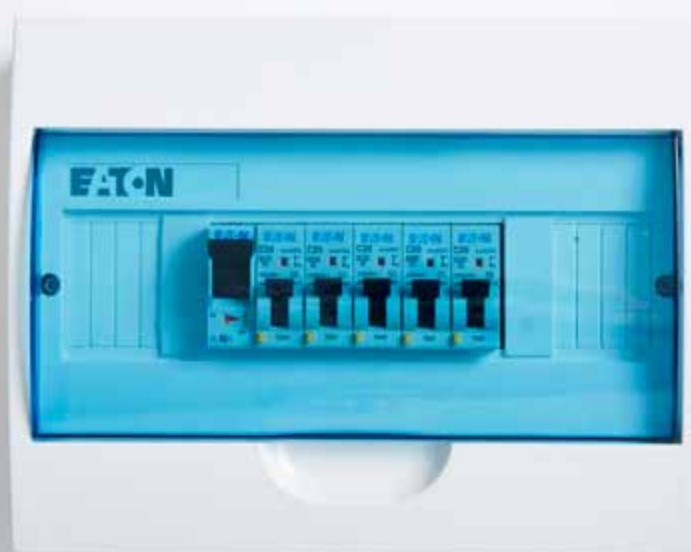
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# THE MOST TERRIFYING ROAD RACE IN THE WORLD THE ISLE OF MAN TT

**The Isle of Man TT (Tourist Trophy) is a famous or maybe that should be 'infamous' motorcycle race that takes place every June on the Isle of Man, (a small island in the Irish Sea).**

It's a perilous event, where racers compete on closed public two-lane country roads at speeds exceeding 320kph, making it one of the most dangerous motorcycle races in the world, with fatalities 'being commonplace'.

The history of how the race began is a bit of an oddity, and somewhat circumstantial. Around the turn of the century, 1903 in fact, the U.K. Parliament passed an act that forbade racers from exceeding 20mph. Evidently unhappy with this, Sir Julian Orde, the Secretary of the Automobile Club of GB and Ireland, ventured across to the independently-governed IOM to seek

permission to race cars on public roads. Permission was granted and motor racing began on the Isle of Man in 1904 with the Gordon Bennett Trial, a 52.15 mi (83.93 km) course which was originally restricted to touring cars.

For the 1905 Gordon Bennett Car event a trial for motorcycles was to be held the day after. However, the inability of the motorcycle competitors to climb the steep primary A18 Snaefell Mountain Road section of the course forced the organisers to use a 25-mile (40km) section of the Gordon Bennett Trial course.

The first Isle of Man TT (inaugural Auto

Cycle Tourist Trophy) race took place on May 28, 1907, it was organised by the Auto Cycle Union (formerly Auto Cycle Club) and was a 10-lap race of the island's 15+ mile St. John's Short Course. It was won by Charlie Collier riding a Matchless motorcycle. The race was an instant success, drawing crowds of spectators and competitors from all over the world.

In 1911 the TT switched to the substantially longer 37.73 mile Snaefell Mountain Course. A literal beast of a track carved out of the island's public roads and one which even now, still includes over 200 bends. Added to this, being a public road, the course itself has also altered and evolved over the years, with changes including widening in some areas and the introduction of (non-adhered to) traffic systems.

The classes have changed a lot over the years too, with the current line up being Lightweight TT, Junior TT / Supersport TT, Superbike TT, Superstock TT, Sidecar TT and the Senior TT - which is the oldest class (1909-present). And although the bikes have obviously changed in the last century, the Senior TT remains as the event's biggest race and the most coveted trophy for competitors. Topping it off, the racing format has also changed since the races' inception, with 'clutch start' (where the racers are started singly at 10-second intervals), being the current method.

To date, 265 riders have been killed on the famous Mountain Course at various events since it was first used in 1911 (essentially the only year without a fatality was 1982). The 99th proved one of the most significant though, when Italian rider Gilberto Parlotti died while racing



at the TT in 1972, the subsequent rider's boycott had the TT stripped of its world championship status - meaning that from 1977, everyone racing the TT does it because they want to!!!

The riders not only risk their lives every time they set off down Bray Hill, the circuit's starting point, but their finances too. They spend countless sums of money and use their limited vacation days to take part in the TT, simply for a shot at glory or simply to chase a childhood dream.

The preparation involved in participating in the TT is eye watering. In addition to the years it takes to memorise the 37.73 mile course, those aspiring to compete in the TT must first take part in several other closed public road races in Ireland, such as the Northwest 200 and Ulster Grand Prix. So just to get on the grid at the TT is a feat unto itself.

As outlined, the financial rewards are minimal, (winning the Senior TT race, if you manage to lead all laps, will net you around £18,000), however, notoriety is a strong probability and the chance to ride

alongside some big names, both on and off the track, is obviously very persuasive. Joey Dunlop is the TT's most successful rider with 26 wins, from the 1970s through to his death in 2000, however, names such as Geoff Duke, Mike Hailwood, Steve Hislop and TV celeb Guy Martin (to name but a few) have all competed at this epic event.

Safety is always improving on the island, with no wet riding allowed for two decades now, newcomers going through extensive education and starting numbers reduced for 2022 to get rid of backmarkers. On top of that, new Formula 1-style LED marshalling panels were installed for 2022 to act as a better warning system in the event of incidents.

Today, the Isle of Man TT is a spectacle, a week-long festival of motorcycle racing, featuring a range of events including the Superbike, Supersport, and Superstock races, as well as sidecar races and the TT Zero race for electric motorcycles. Yes it's got more than its fair share of risks, but isn't that what life's all about?

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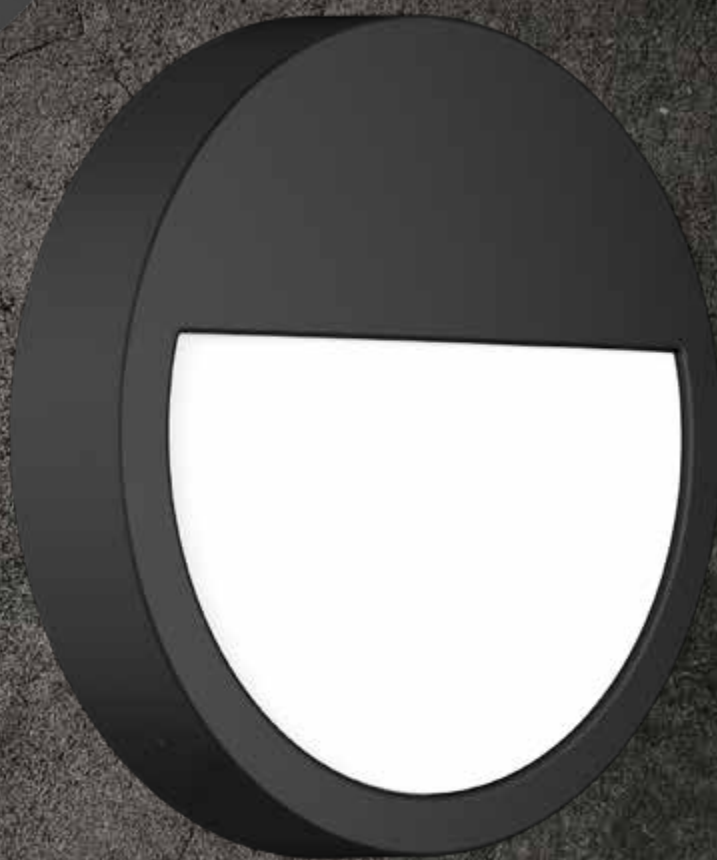
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Cat. No.	Description
750WPR5-GY	Infrascan Motion Sensor, IP66 – Grey Body
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[clipsal.com/sensors](https://clipsal.com/sensors)

## Benefits

- Automatically switching lighting on when movement is detected, helping to improve security around building perimeters
- Helping to provide peace of mind and convenience at night
- Lights are on only when needed, improves energy savings, and reduces operating costs
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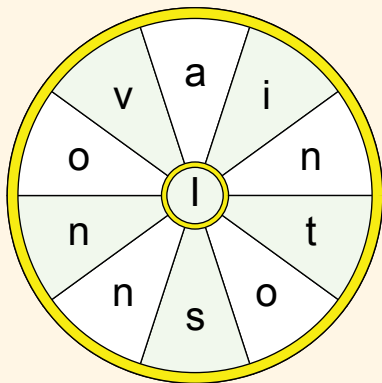
# SMOKO BREAK

## CHALLENGING SUDOKU

Fill in the missing boxes so that the numbers 1-9 appear in every row, column and 3x3 square.

				9		7	
	5					1	4
	7			4			
7		6	4				
						1	7
9				5	3		
	6					7	
	1				7		
			1		5		

## WORD WHEEL



Find as many words as possible using the letters in the wheel. Each word must use the centre letter and at least 2 others. Letters can only be used once. Use all 11 letters to form one word. Here is a little help to find the word: I... is the way forward.

// 15 words - Good

// 30 words - Excellent

// 50 words - Genius

FOR ANSWERS AND SOLUTIONS VISIT

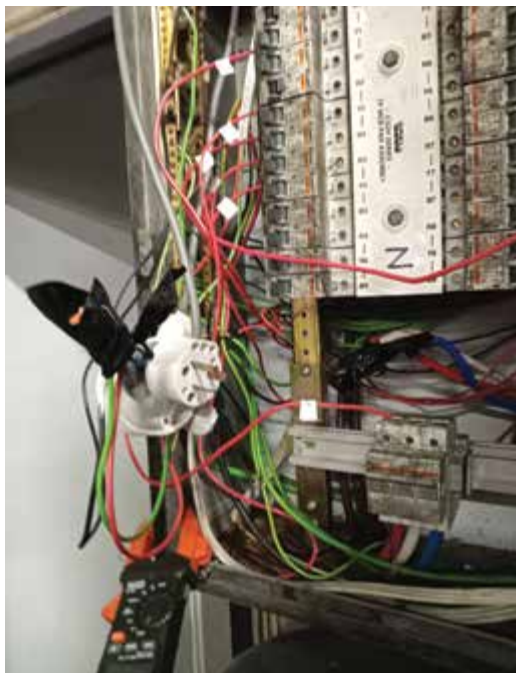
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# AUTUMN FUNFACTS

## PEOPLE BORN IN AUTUMN LIVE LONGER

Research has shown that people born in the Autumn are more likely to live to 100 years old, and no, it's not just a coincidence. Studies show that the month you're born in can influence the environment you develop in, both inside the womb and out. That environment can do everything from affecting your behavior to your overall health.

## AUTUMN OR FALL?

We typically think of 'fall' as the North American version of the word 'autumn', but it was in fact in widespread usage in England until relatively recently. Originally a shortening of the phrase fall of the leaf, the phrase was common in England in the 17th century. The word autumn entered English from the French automne and didn't become common usage until the 18th century.

## LEAF COLOURS ARE CAUSED BY SUGAR

Leaf colors are caused by certain pigments in the leaves, and different kinds of trees produce different pigments. When you notice leaves that are purple and red, that's caused by the "anthocyanins" pigment, which is only produced in Autumn when sugars are trapped in the leaves.

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<b>Carrel Electrade</b>	+0.9%	April 1
<b>Cavius Nano</b>	+1.8%	April 1
<b>CRC</b>	+5.8%	April 1
<b>CSL Weidmuller</b>	+2%	April 1
<b>Energizer</b>	+5.6%	April 3
<b>Hobeca</b>	+12.0%	April 1
<b>SPL</b>	+3.4%	April 1
<b>Superlux Gartner</b>	+9.8%	April 3
<b>ESC</b>	+2.2%	May 1
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<b>Newtech</b>	+3.0%	May 1
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