Automatic transfer switch controllers

An intuitive reliable solution for continuous power supply

NHP

Socomec's ATyS C55/C65 controllers

In modern buildings, healthcare and industrial complexes, reliable and continuous power supply to critical loads such as essential lighting, computers and constantly operating industrial and medical equipment is vital to maximise productivity and minimise downtime.

NHP offers a wide range of reliable and versatile automatic transfer switches (ATS) from 40 to 3200A for applications where the continuous power is an absolute must.

NHP's ATS offering includes:

- Load break based Socomec ATyS range

- Socomec ATS controller solution

    - Circuit breaker based, including MCCB and ACB

    - Motorized loadbreak ATS (AtyS r and ATyS d M)

Locally stocked and technically supported within Australia and New Zealand, NHP have both off the shelf and customised ATS solutions to meet your needs.
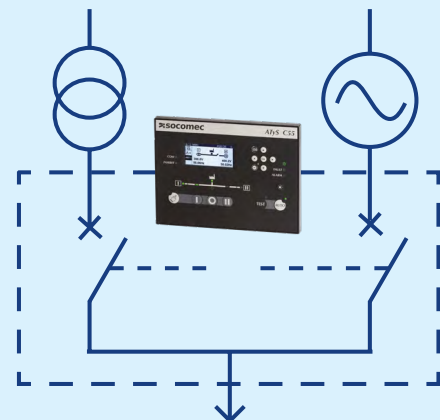
Function

Socomec ATyS C55/C65 automatic transfer switch equipment controllers can be used to pilot a remotely operated transfer switch of any technology - motorised switches (e.g. ATyS r or ATyS d M), circuit breakers or contactors. ATyS C55/65 controllers ensure the automatic or remotely controlled transfer from one source to another, with configurable timers and thresholds, for any paired combination of sources - 2 transformers, 1 transformer and 1 genset, or 2 gensets.

The automatic transfer takes place whenever predefined conditions by the user occur, such as power supply instability, fluctuations (voltage or frequency), or the need to use the most economical power source.

Advantages

- Safe controls for transfer between a normal and alternate source

- Intuitive and simple controls for local operation

- Quick, easy and safe electrical manual operation

- Straightforward installation with effective ergonomics

- A simple and secure control interface

- Easy mounting and smart configuration

- Suitable for indoor and outdoor applications (IP65 gasket available)

ATS functional process

| Normal source failure | → | Standby source start | → | Check standby source availability | → | Transfer the load to standby source | → | Normal source available | → | Transfer the load back to normal source | → | Standby source stop |

Automatic

A reliable ATS solution for your application

OEMs
Genset manufacturer

Building
Commercial, residential, government

Critical buildings
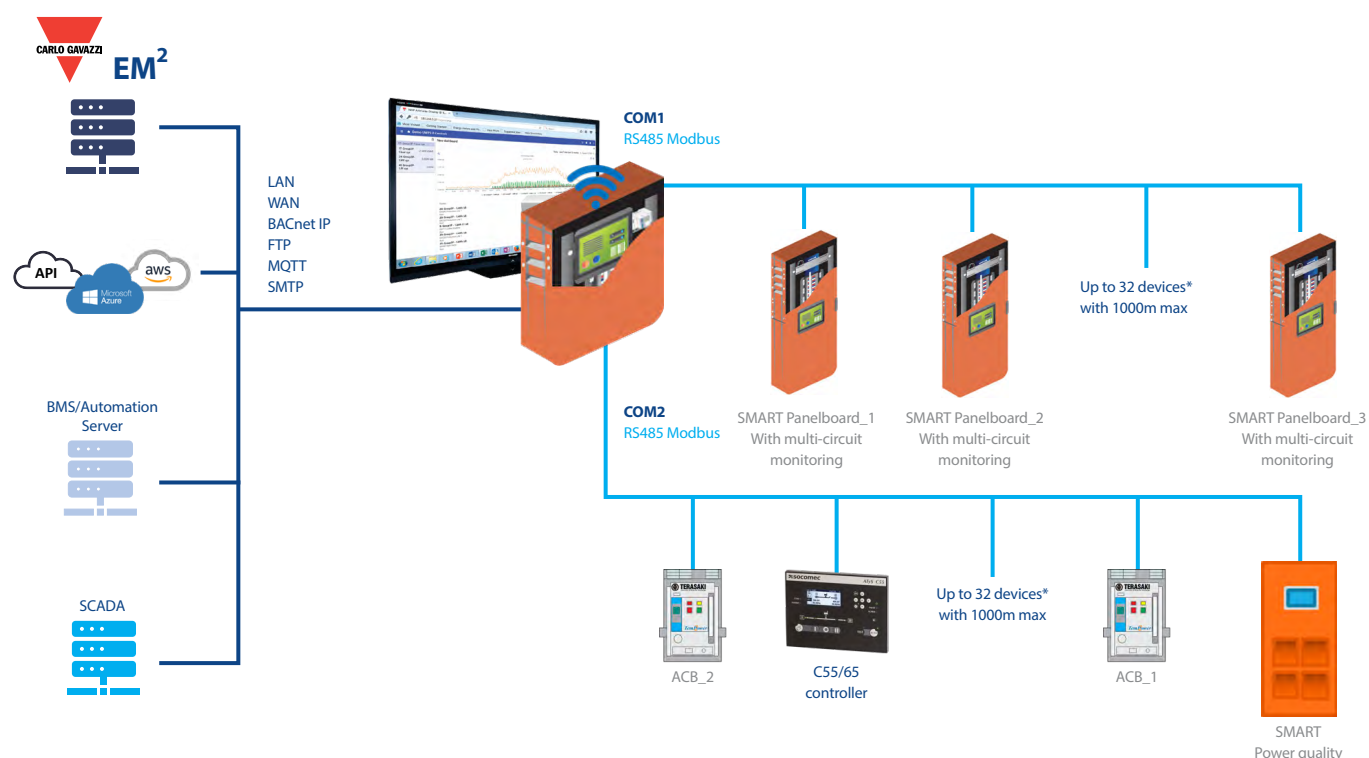Data centre, banking and insurance, healthcare building

Infrastructure
Tunnel, railway, airport, ports

Industry
Oil and gas, mining, food and beverage, utilities

Communications

Socomec ATyS C55/C65 controllers can be equipped with a range of industrial communications options, allowing them to be easily integrated into an Energy Management System (EMS) or Building Management System (BMS).

CARLO GAVAZZI
EM²

LAN
WAN
BACnet IP
FTP
MQTT
SMTP

API
Microsoft Azure
aws

BMS/Automation Server

SCADA

COM1
RS485 Modbus

COM2
RS485 Modbus

SMART Panelboard_1
With multi-circuit monitoring

SMART Panelboard_2
With multi-circuit monitoring

Up to 32 devices*
with 1000m max

SMART Panelboard_3
With multi-circuit monitoring

ACB_2

C55/65 controller

Up to 32 devices*
with 1000m max

ACB_1

SMART Power quality

Key features

ATS C55 ATS controller

Safe and reliable

- IEC 61010.2.201
- AS/NZS IEC 60947.6.1
- GB/T 14048.11 Annex C

Intuitive use

- Simple and clear dashboards to visualise all the main data
- Dedicated pushbuttons for navigation, control modes, position orders and more
- Smart commissioning wizard

High performance

- Self-powered from sensing
- Wide voltage range (88 - 576V a.c.)
- 24V d.c. aux power supply (for optional use)
- 2 latching relays
- 6 fully programmable I/O
- RS485 modbus communication
- Genset scheduler
- IP30 degree of protection (optional IP65 gasket available)
- Real time clock - replaceable battery
- Control inhibition

Easy maintenance

- Programmable maintenance alarms
- 300 events and 100 alarm/fault data storage
- Password protected
- Programmable test functions

ATS C65 ATS Controller

All the benefits and same standards compliance of the C55 controller plus the following advanced features:

- Current, power and energy monitoring
- Integrated energy backup
- Multiple fully configurable timers, thresholds and I/O
- Load shedding
- Programmable lift/elevator control
- IP65 degree of protection as standard
- Shock resistant IK08+
- 3000 events and 100 alarm/fault data storage

ATyS C55 Controller MCCB Interface Panel kit - ATYSC55CIP

The ATYSC55CIP is supplied as standard with an ATyS C55 controller and a Controller Interface Panel, ('CIP'). The interface panel is a convenient assembly, saving the user time otherwise spent on time consuming wiring.

- Compatible with NHP's TemBreak2 and TemBreak Pro BTS units (sold separately)

- A 'plug-and-play' solution for easier installation

Includes

- ATYS C55 controller (C65 controller option available - contact your local NHP Account Representative)

- Control Interface Panel

- All required wiring looms and plugs for BTS integration

ATyS C55 Controller ACB Interface Panel kit - ATYSC55CIPACB

Similar to the ATYSC55CIP, the ATYSC55CIPACB is supplied standard with an ATyS C55 controller and a Control Interface Panel. The Control Interface Panel for the ATYSC55CIPACB is specifically designed to be compatible with Terasaki's AR ACB range. The supplied connecting plug provides the freedom for the user to create looms of the appropriate length from the Control Interface Panel and each of the ACB's terminal blocks.
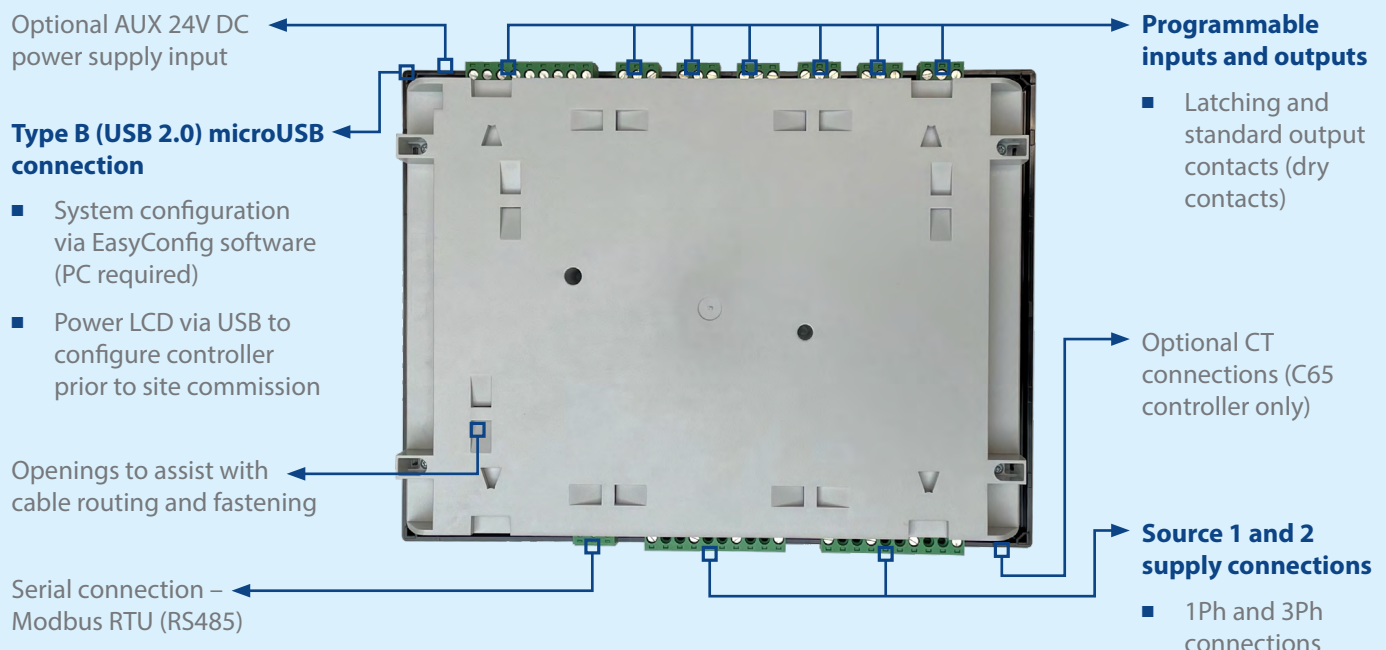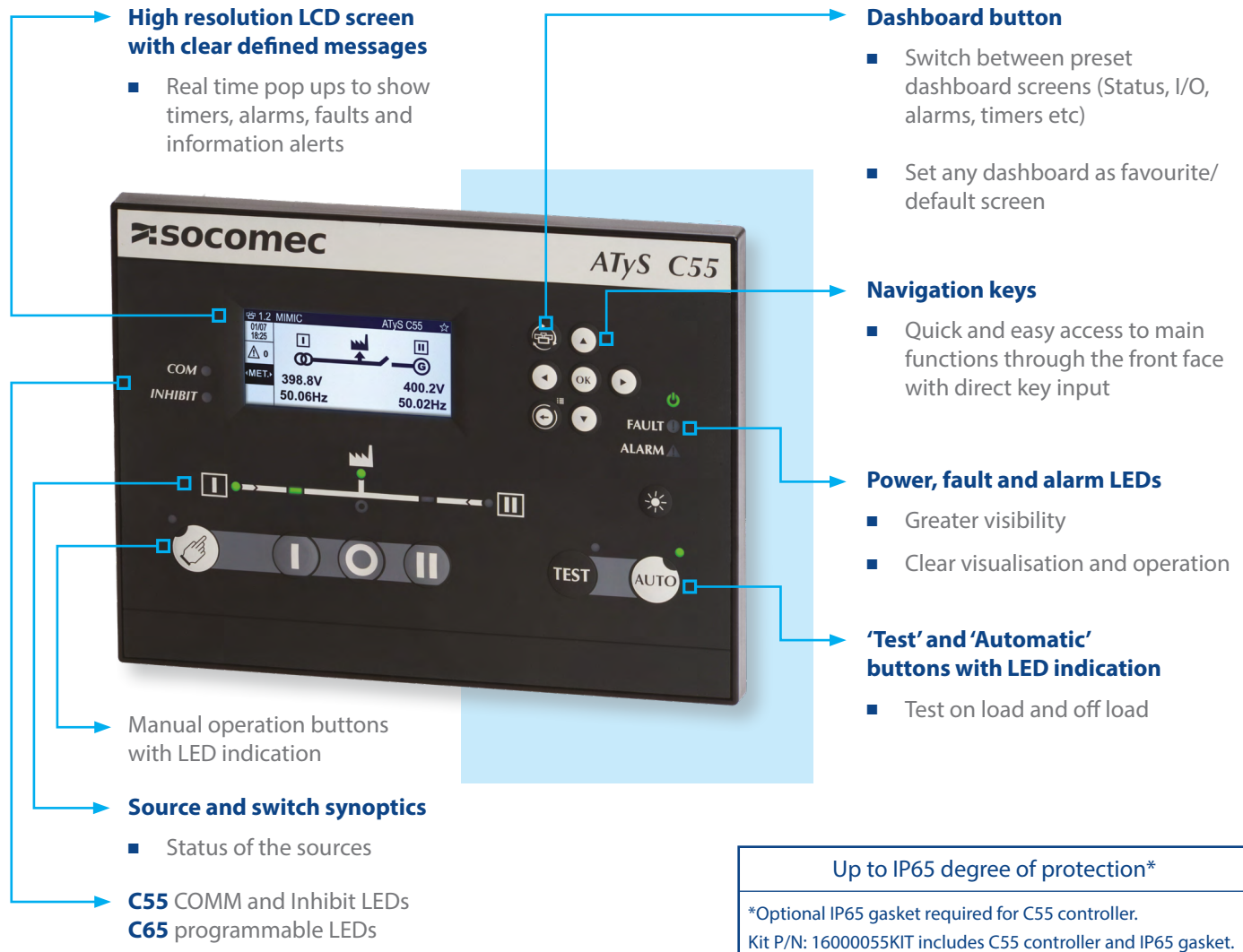
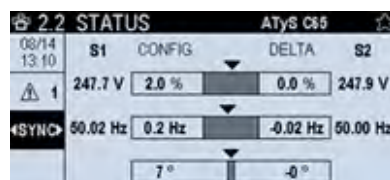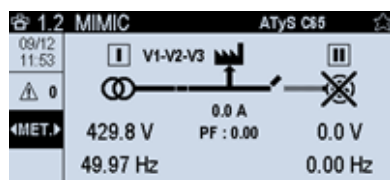- Compatible with Terasaki's AR ACBs (sold separately)

Includes

- ATYS C55 controller (C65 controller option available - contact your local NHP Account Representative)

- Control Interface Panel

- Controller to Control Interface Panel wiring looms

- Plugs for ACB integration (loose supplied) – user wiring required

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Technical features

High resolution LCD screen with clear defined messages

- Real time pop ups to show timers, alarms, faults and information alerts

Dashboard button

- Switch between preset dashboard screens (Status, I/O, alarms, timers etc)
- Set any dashboard as favourite/ default screen

Navigation keys

- Quick and easy access to main functions through the front face with direct key input

Power, fault and alarm LEDs

- Greater visibility
- Clear visualisation and operation

'Test' and 'Automatic' buttons with LED indication

- Test on load and off load

Manual operation buttons with LED indication

Source and switch synoptics

- Status of the sources

C55 COMM and Inhibit LEDs
C65 programmable LEDs

Up to IP65 degree of protection*

*Optional IP65 gasket required for C55 controller.
Kit P/N: 16000055KIT includes C55 controller and IP65 gasket.

Optional AUX 24V DC power supply input

Programmable inputs and outputs

- Latching and standard output contacts (dry contacts)

Type B (USB 2.0) microUSB connection

- System configuration via EasyConfig software (PC required)
- Power LCD via USB to configure controller prior to site commission

Optional CT connections (C65 controller only)

Openings to assist with cable routing and fastening

Source 1 and 2 supply connections

- 1Ph and 3Ph connections

Serial connection – Modbus RTU (RS485)

Dashboard name → 4.3 POWER & E ATyS

Favourite

Product name

Date/time → 08/20 13:09

Active alarms → ⚠ 1

Screen navigation → ◀Q▶

Q1 11.0 kvar
Q2 11.0 kvar
Q3 11.0 kvar

Source 1

Qtot

33.2 kvar → Information

Optional shortcuts → GRAPH

The ATS controllers include a high resolution 350x160 pixel screen that provides a clear and sharp display of key information. The dashboards enable the user to access all the main data at the push of a button.

The 'Mimic' screen gives the user general system information on the availability of the sources and the position of the switch, whereas the 'Status' screen will provide more detailed information on each source.
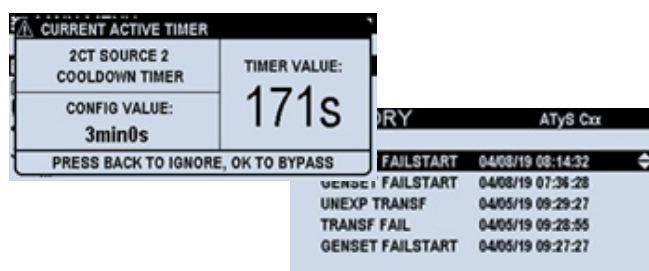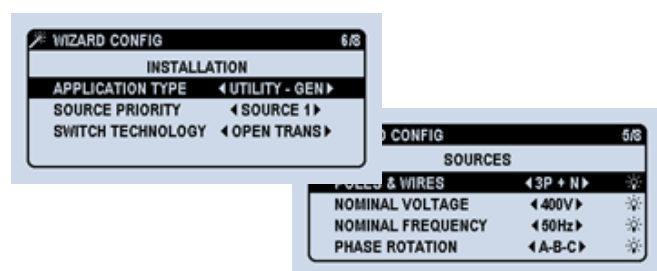

Smart wizard

Minimise your commissioning woes with a step-by-step configuration with the controller's embedded installation wizard available on first power up. The wizard will navigate you through the main configuration parameters required to have your controller operational.

Event history, alarms and pop-up notifications

If troubleshooting is required, the internal cyclic memory controllers record up to 300/3000 (C55/C65) events and 100 faults or alarms, providing useful information about the history and the performance of the system controlled, all of which is available to the user within the LOG menu.

The controller will also inform the customer about the main real-time events through a pop-up, which will appear irrespective of the current operating screen on the LCD display.
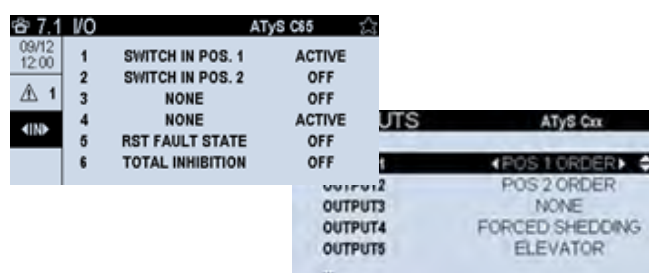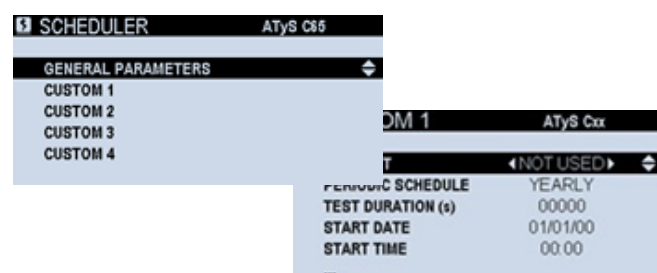
Genset scheduler

Complete maintenance tasks more easily with the ability to set up to 4 different genset exerciser programs in order of priority, allowing you to pre-configure tests (on or off load and gen-start tests) at any required periodicity and duration throughout the year.

Programmable I/O

Easily integrate with other equipment in your system using the controller's programmable internal inputs and outputs, all of which are configurable with dozens of options to suit your application.

Benefits of Socomec ATyS controllers

Switchboard Builders

- Reduced complexity in terms of hardware, spacing and component costs

- Full access to control and auxiliary terminals, reducing installation and wiring time

- Flexible enough to use in new or retrofit builds

- Fast delivery with local stock and technical support from NHP

Consultants

- Complies with standard AS/NZS IEC 60947.6.1

- Simplified logic design - one NHP ATYSC55CIP unit replaces the functionality of many individual relays

- Industrial communication options allowing for BMS integration

- Suits the most common applications such as:
  - Utility-to-generator
  - Generator-to-generator
  - Utility-to-utility

End users

- Easy to use with an intuitive menu and smart wizard

- Fast commissioning via USB and EasyConfig

- Simple ordering with local stock

- Versatile solution for many different applications

- Statistical data available via the large LCD or via the industrial communications

- Large memories to store alarms and events to allow easy troubleshooting

- Padlock function provides extra safety

- The EasyConfig system allows preset configuration to be uploaded to multiple controllers by USB or through serial converter

- Full technical support from NHP

How to order

Category	Catalogue number	Description
MCCB ATS kit	ATYSC55CIP	ATYS C55 CONTROLLER AND INTERFACE PANEL
ACB option	ATYSC55CIPACB	ATYS C55 CONTROLLER AND ACB INTERFACE PANEL
Controller only	16000055	ATYS C55 CONTROLLER INCLUDES MOUNTING KITS
	16000065	ATYS C65 CONTROLLER INCLUDES MOUNTING KITS AND IP65 GASKET
Controller kit	16000055KIT	ATYS C55 CONTROLLER INCLUDES MOUNTING KIT AND IP65 GASKET
Accessories	16090001	IP65 GASKET FOR ATYS C55/C65 CONTROLLER
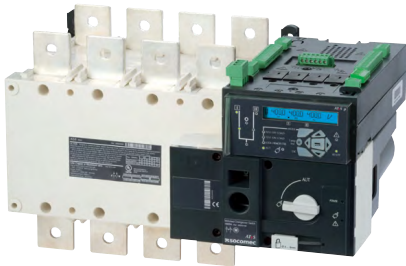
Check out the full range of the purpose built Automatic Transfer Switch here.

SCAN ME
FOR MORE INFORMATION

For all automatic transfer solutions please contact NHP

Notes

NHP

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sales@nhp.com.au

nhpnz.co.nz
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NHP Electrical Engineering Products