

# ALSTOM RELAY PRODUCT RANGE

Jakarta  
February 2014

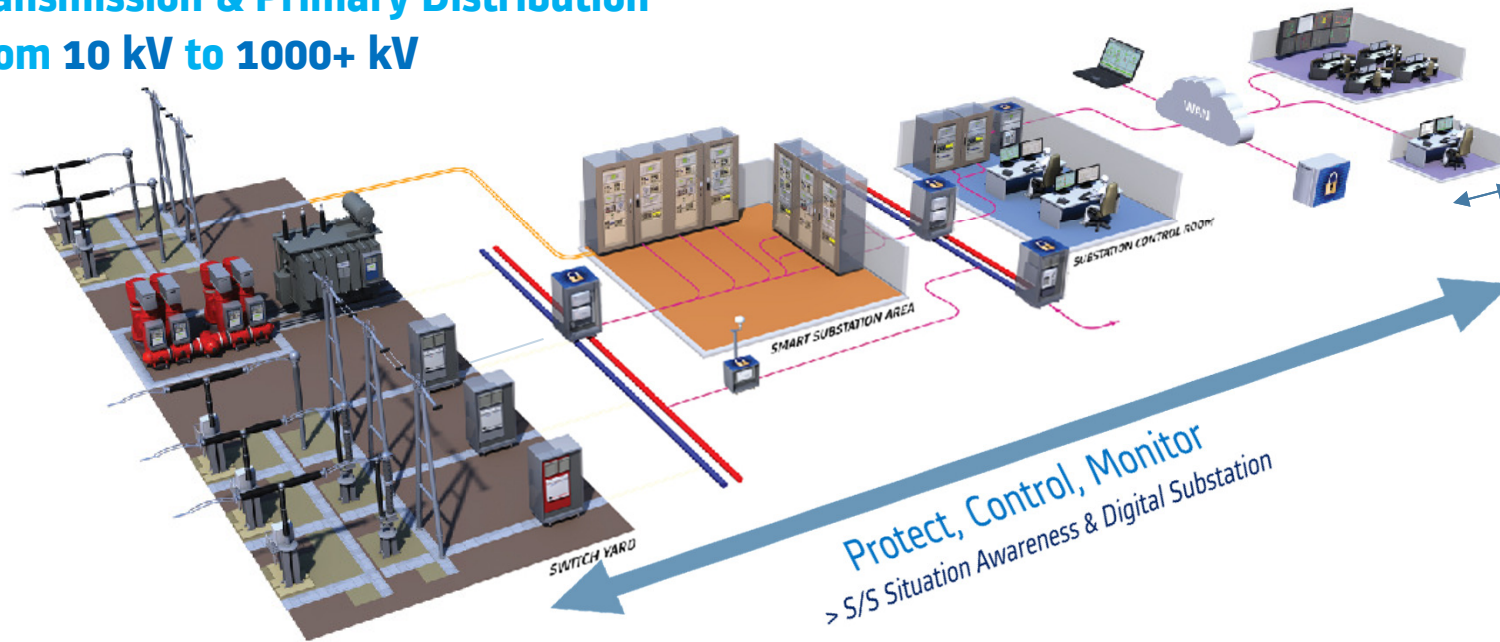
GRID |

**ALSTOM**

# Substation Automation Solutions Offer



**Transmission & Primary Distribution**  
**From 10 kV to 1000+ kV**



**MiCOM AGILE S1**

**MU Agile AMU**

**MiCOM P40 Agile**



**DS Agile**  
 DIGITAL SUBSTATION



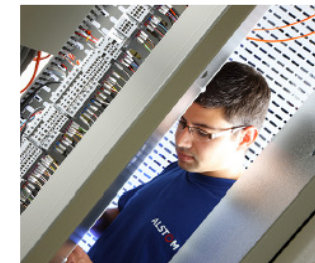
**MiCOM & IEDs**



**Control Systems**



**Projects & Engineering**



**Support**

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# A Proud History

## Historical milestones



CDG



MCGG



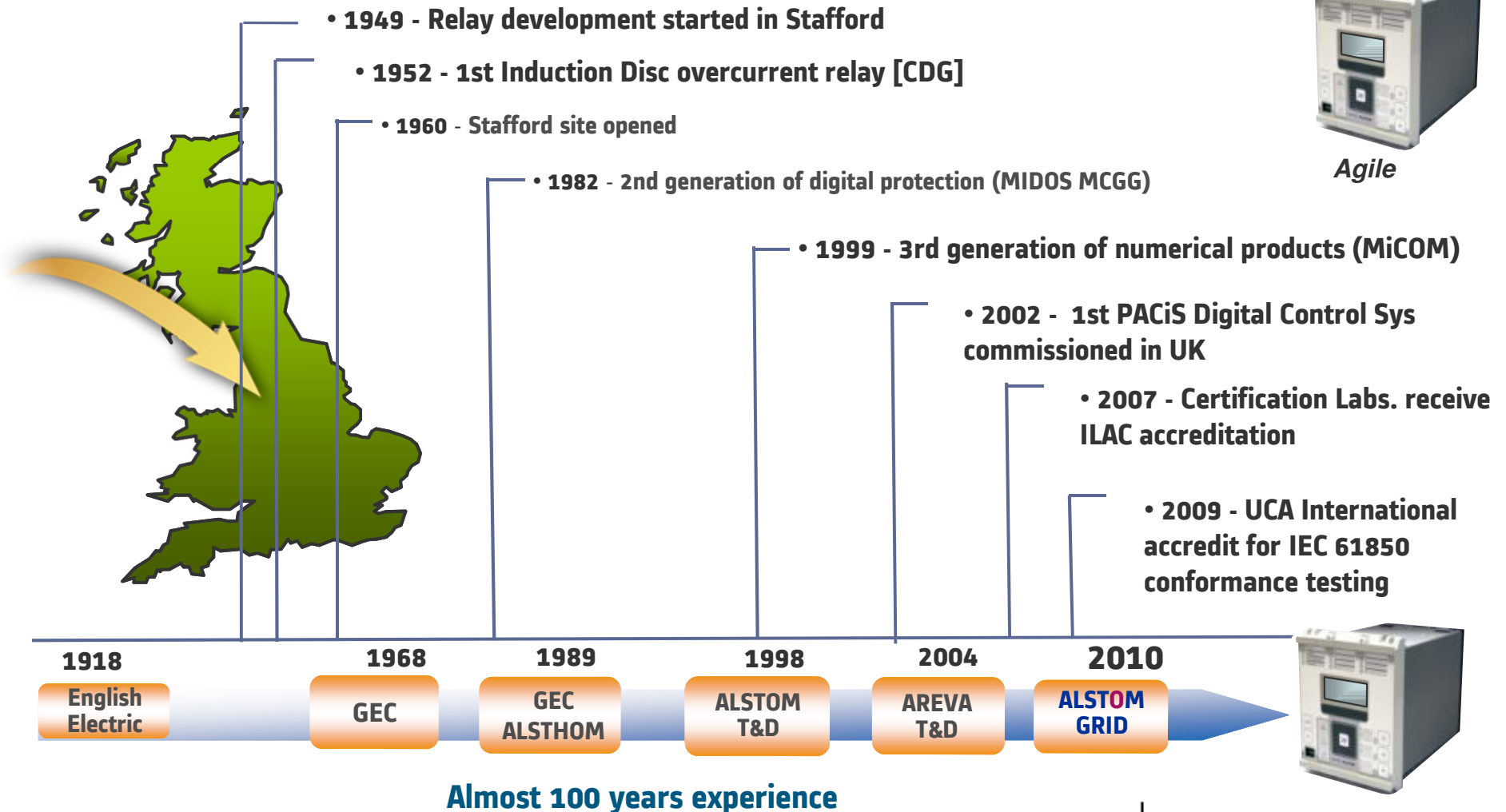
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P14x

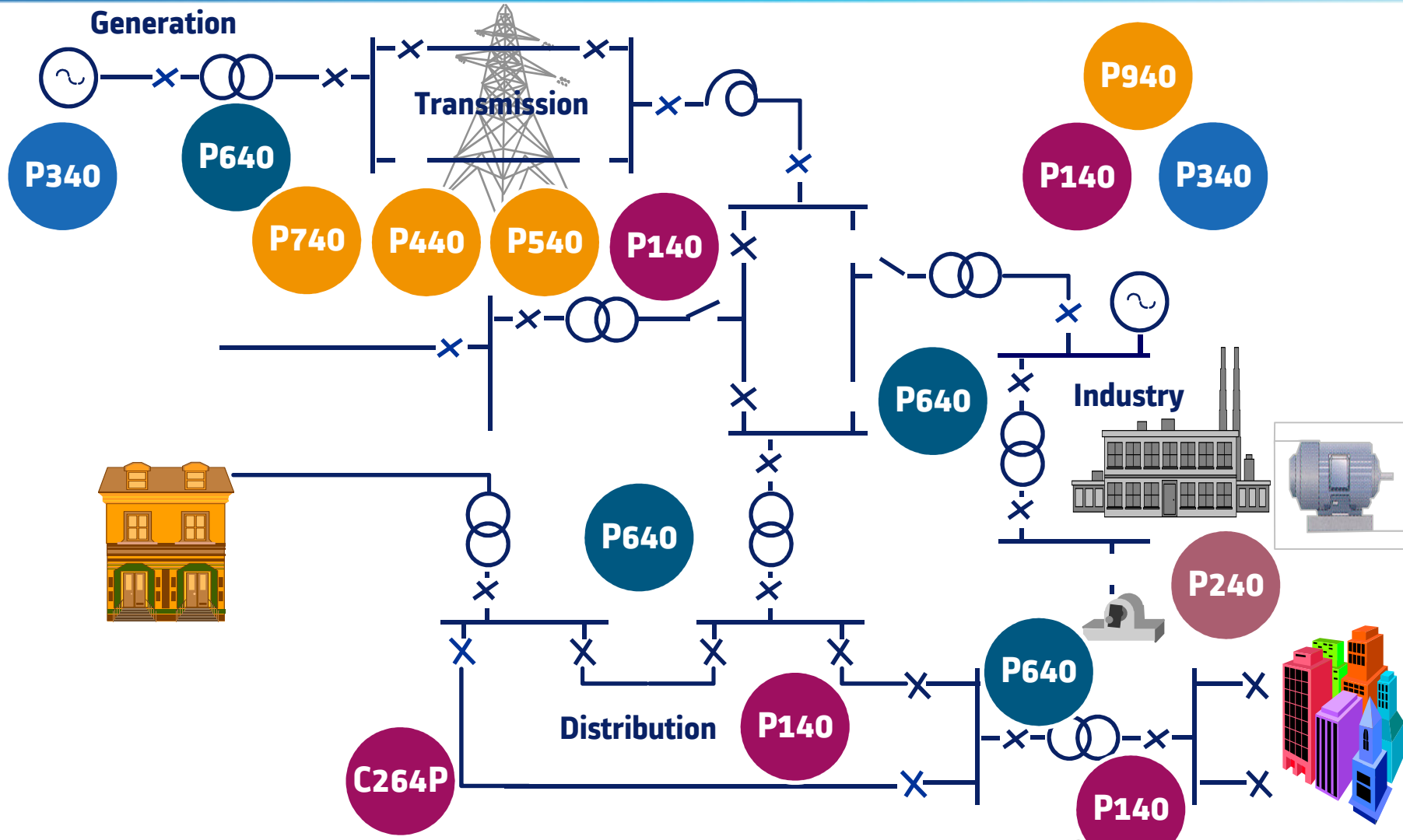


Agile



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# ALSTOM GRID Protection Covers all Areas of your Power System



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# Substation Automation Solutions

*Portfolio and offering*

Numerical Protection Relays  
MiCOM Alstom Px40

MiCOM Px40 Agile  
Feeder Management

Digital Protection Relays  
MiCOM Alstom Px40-9.2

P847 Phasor Measurement Unit  
Mx70 Measurement

Electromechanical  
Hinged Armature relays



Digital Control System  
DS Agile incl. C264

Substation Digitalization  
DAP Server (ASAT)

Control Switches

Legacy DCS  
SPACE2000, PSCN, PACiS

Conventional Control  
Protection panels



# MiCOM Alstom Complete Protection Range



- Comprehensive Range
- Fault Analysis Tools
- Programmability
- Customisation
- Instrumentation
- Self Diagnostics &
- Commissioning Tools
- Communications
- Bay Monitoring & Control

**IEC61850, Cyber Security**

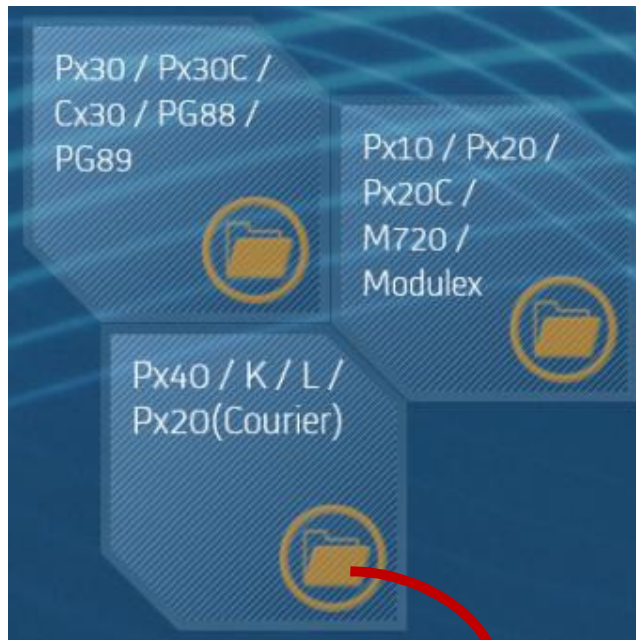
**Redundant Ports**

# MiCOM S1 Agile



## Device Configuration

- Setting file and logic creation, editing and transfer to and from the IEDs.
- Management of events and disturbance records



## System Explorer

- Displays a virtual system of the managed devices.
- System is graphically displayed as tree with different nodes referred as elements (system, substations, voltage levels, bays, etc.,)

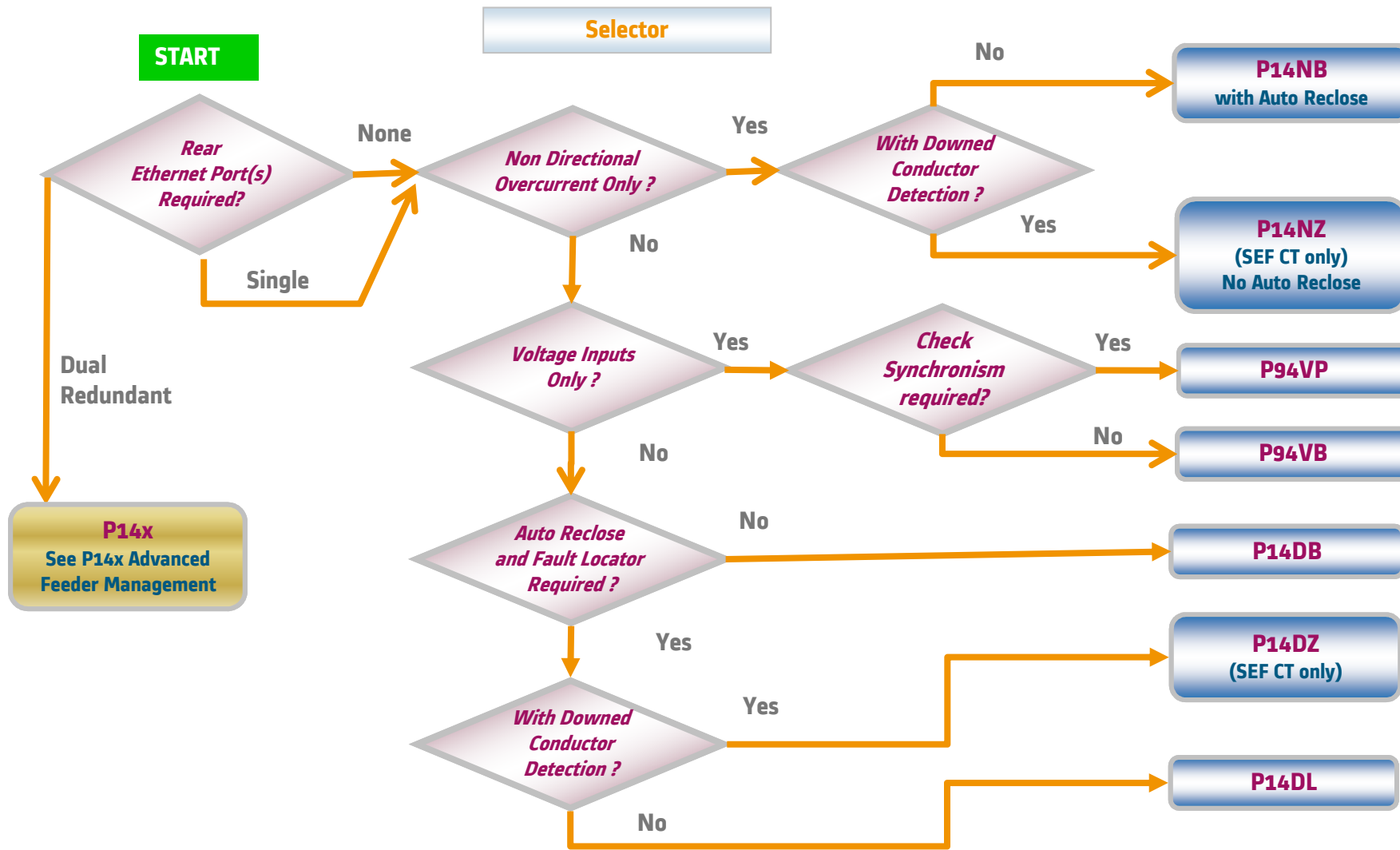




# Product Selection



# Overcurrent & Voltage Feeder Relays



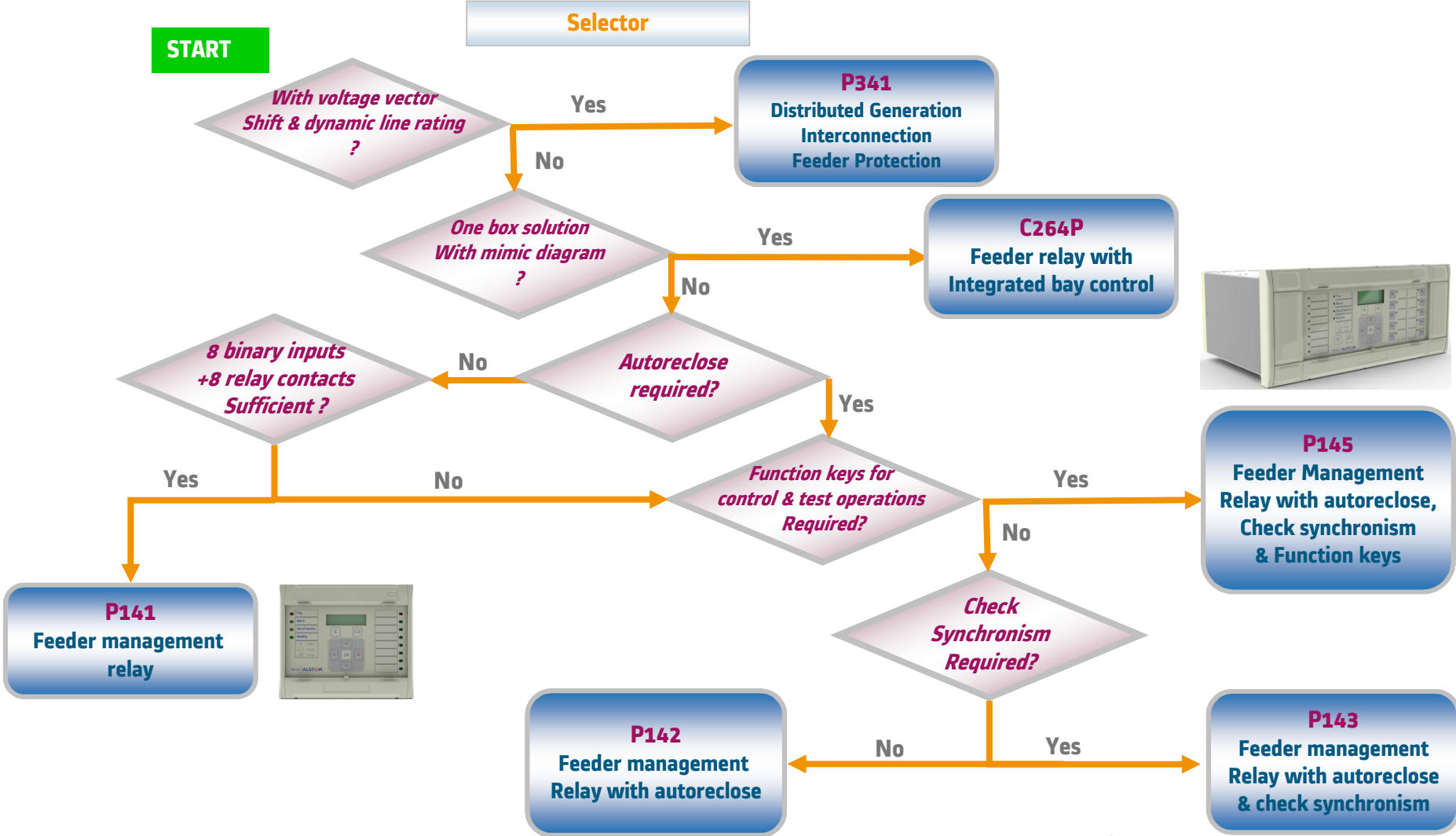
Product selector - 08.2010 - P 14

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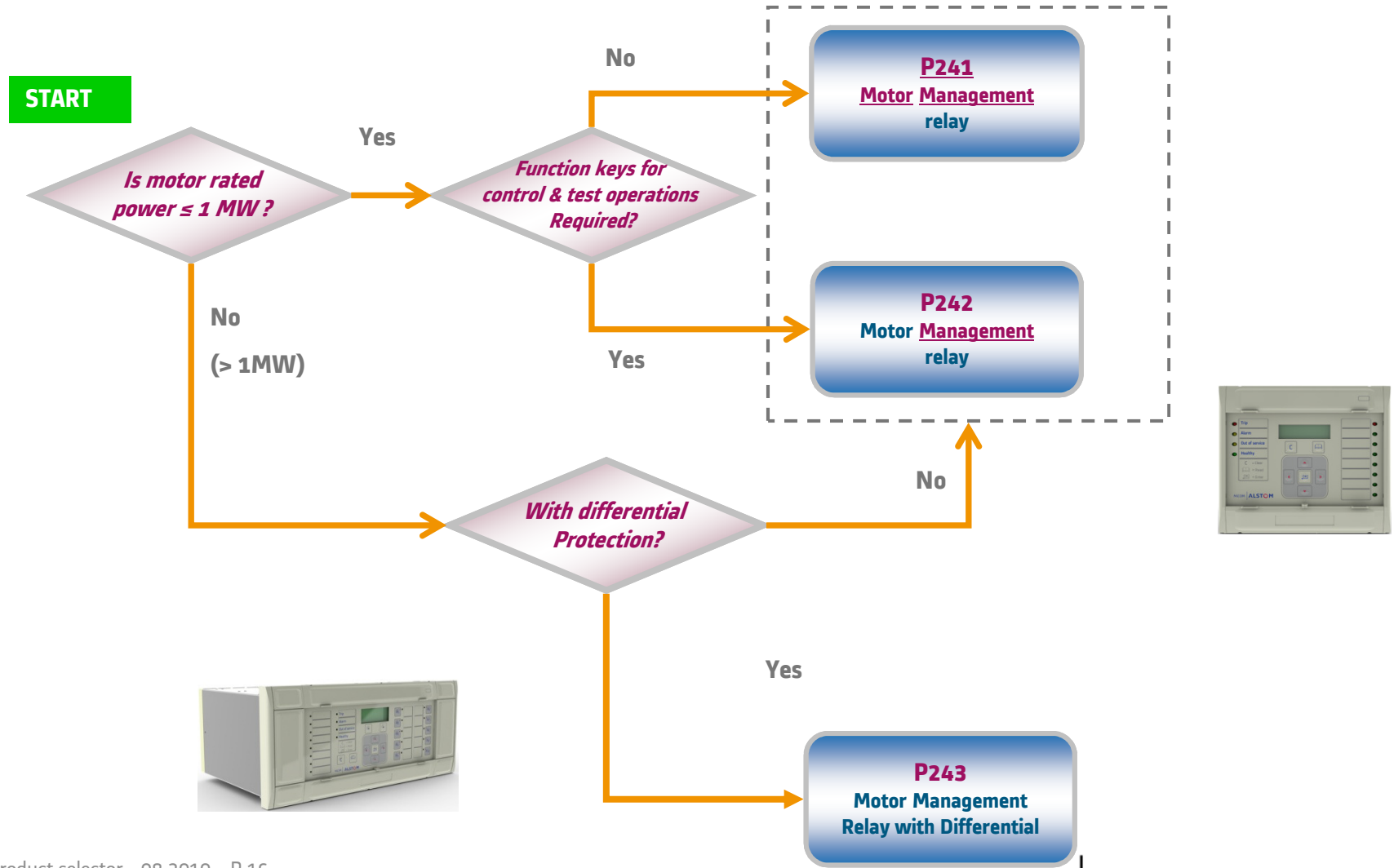
# Advanced Feeder Management



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# Motor Protection



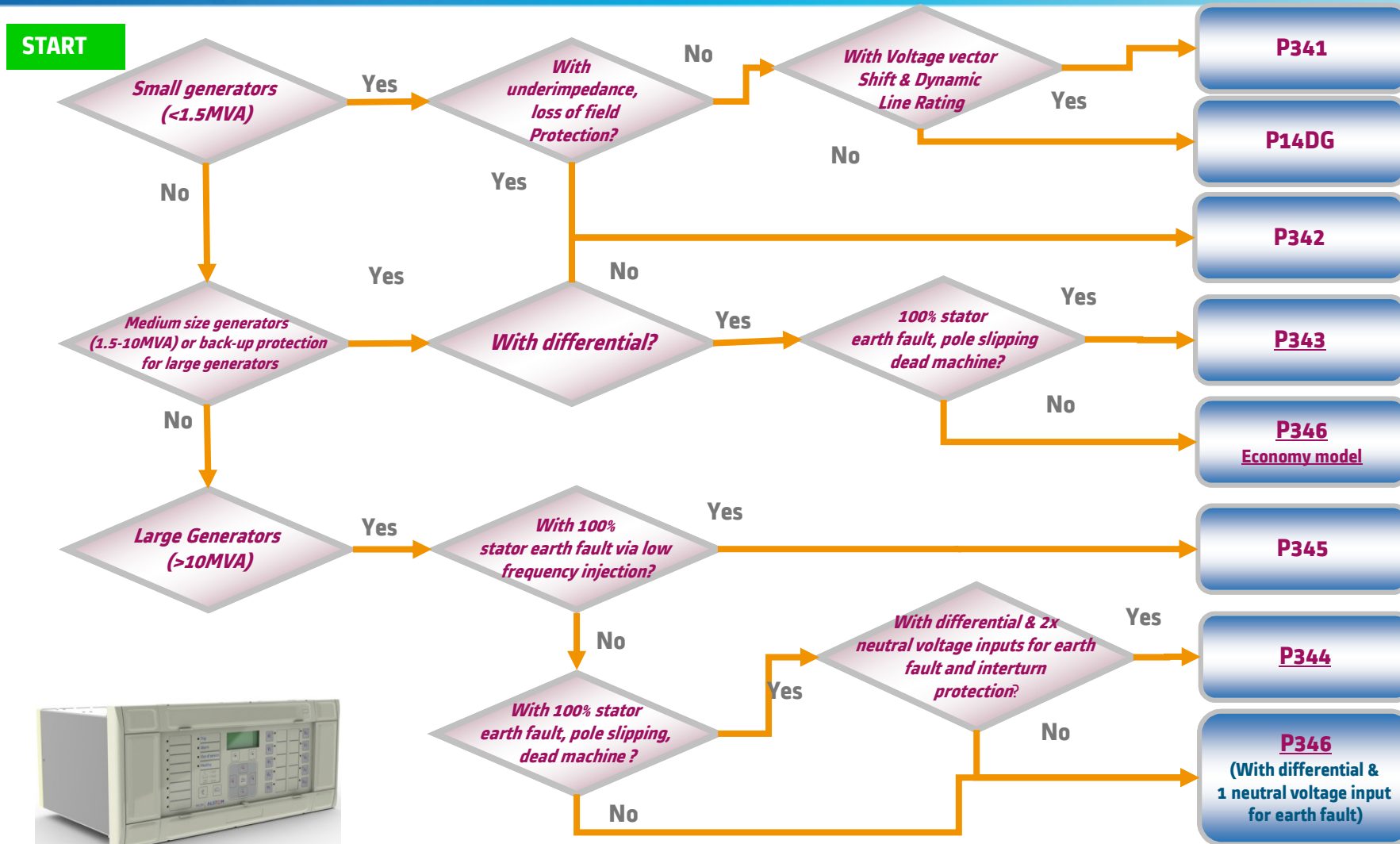
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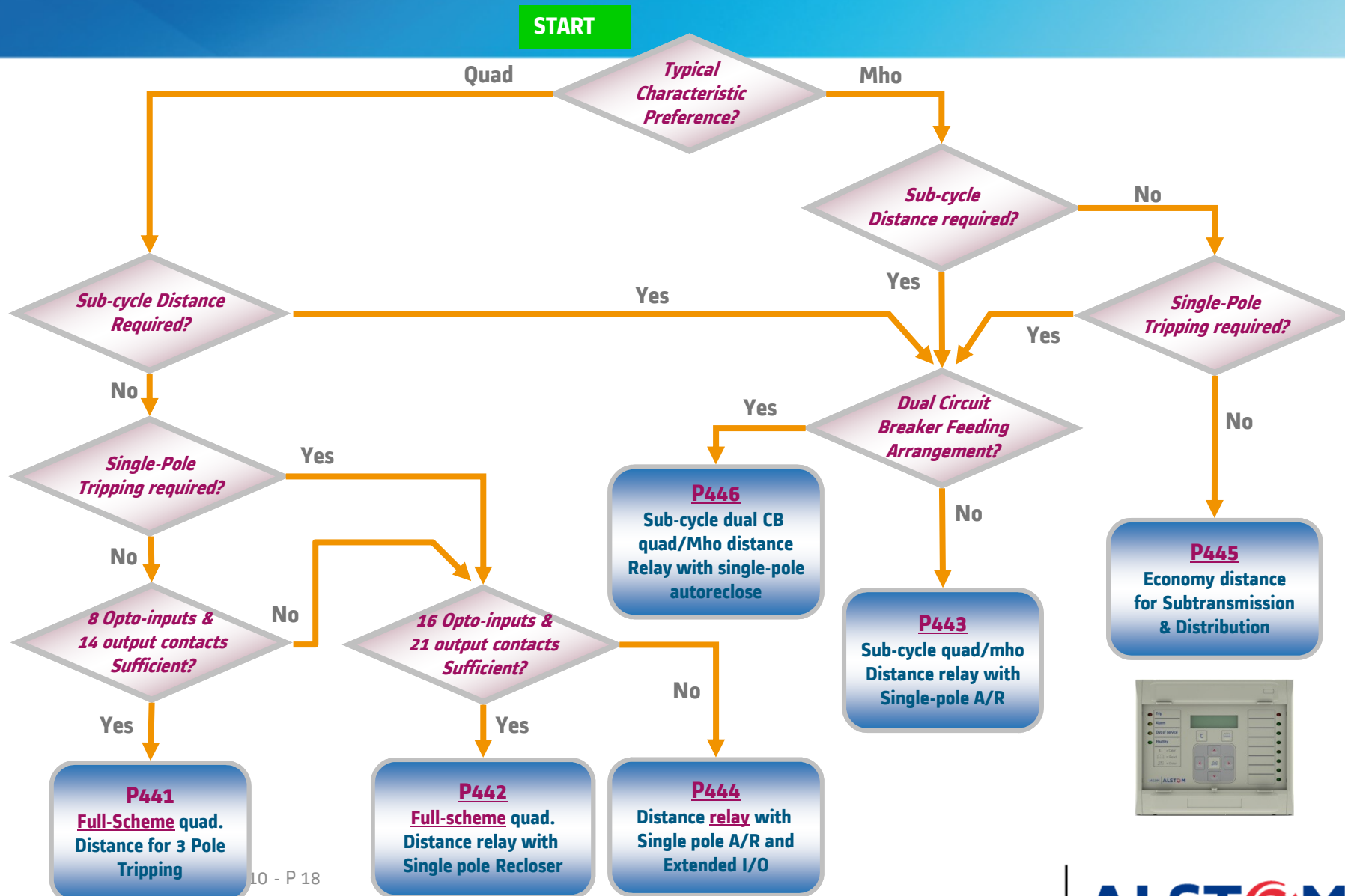


# Generator Protection



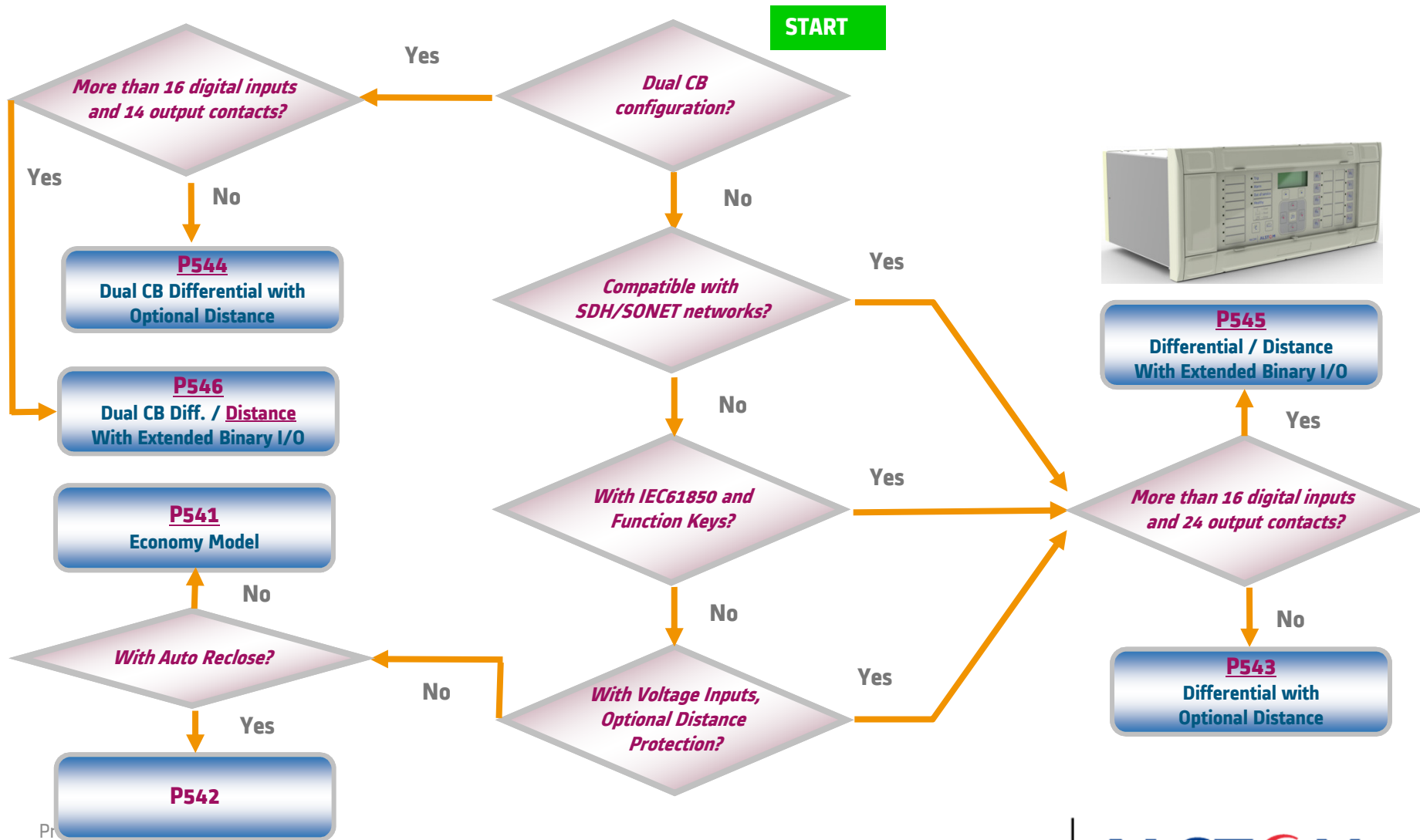
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# Distance Protection



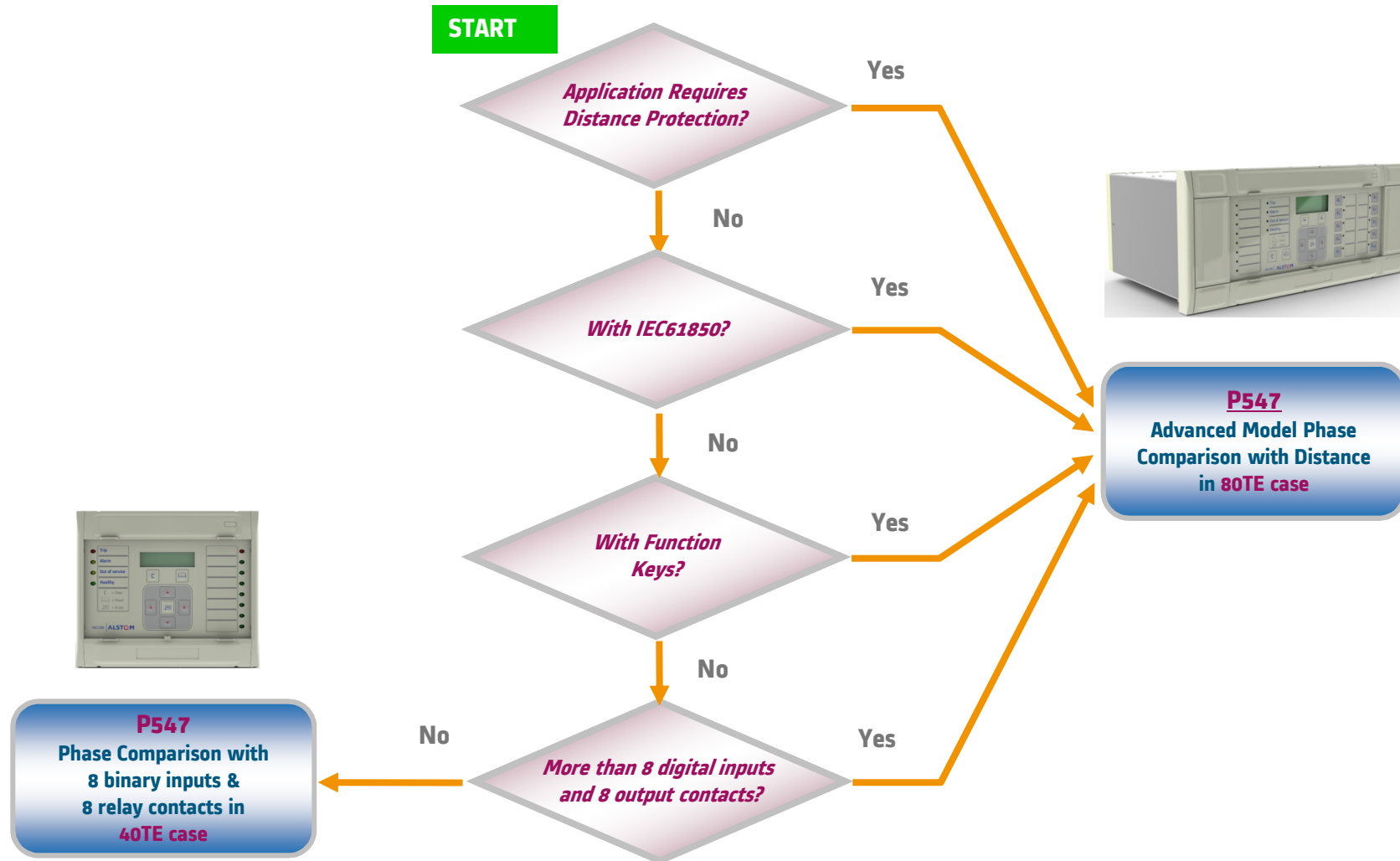
10 - P 18

# Line & Cable Differential



**P545**  
Differential / Distance  
With Extended Binary I/O

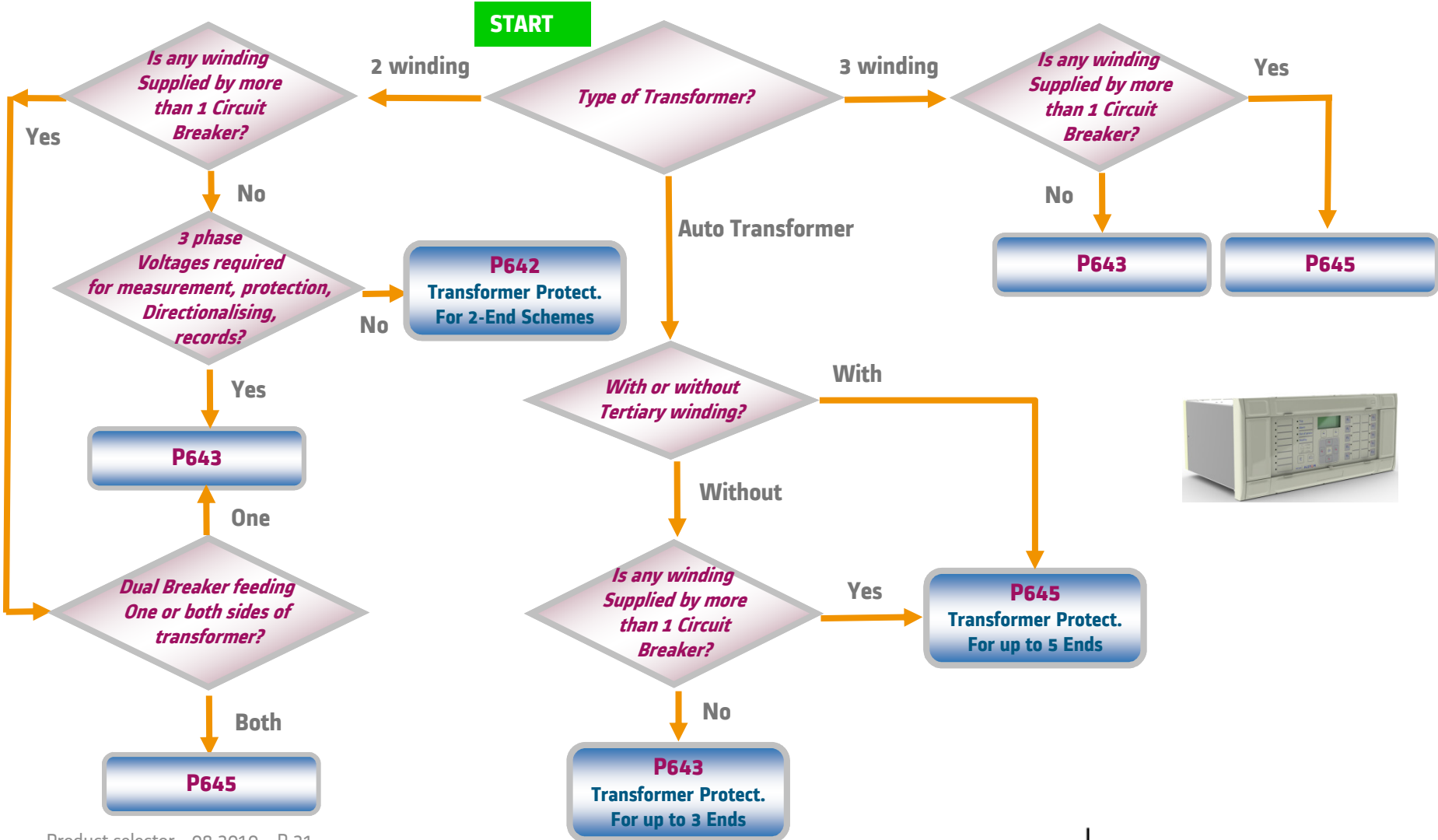
# Phase Comparison Protection



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# Transformer Protection

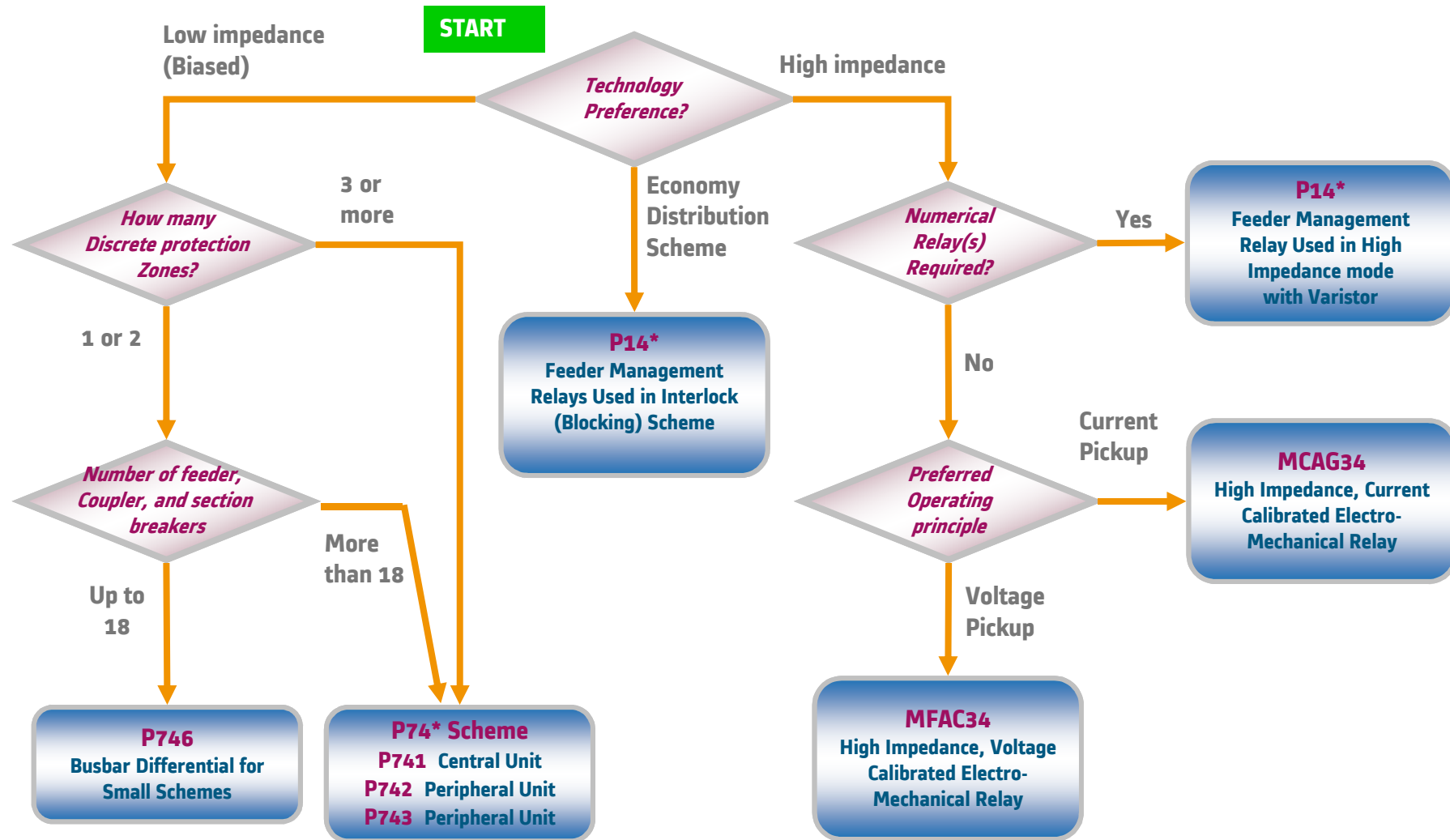


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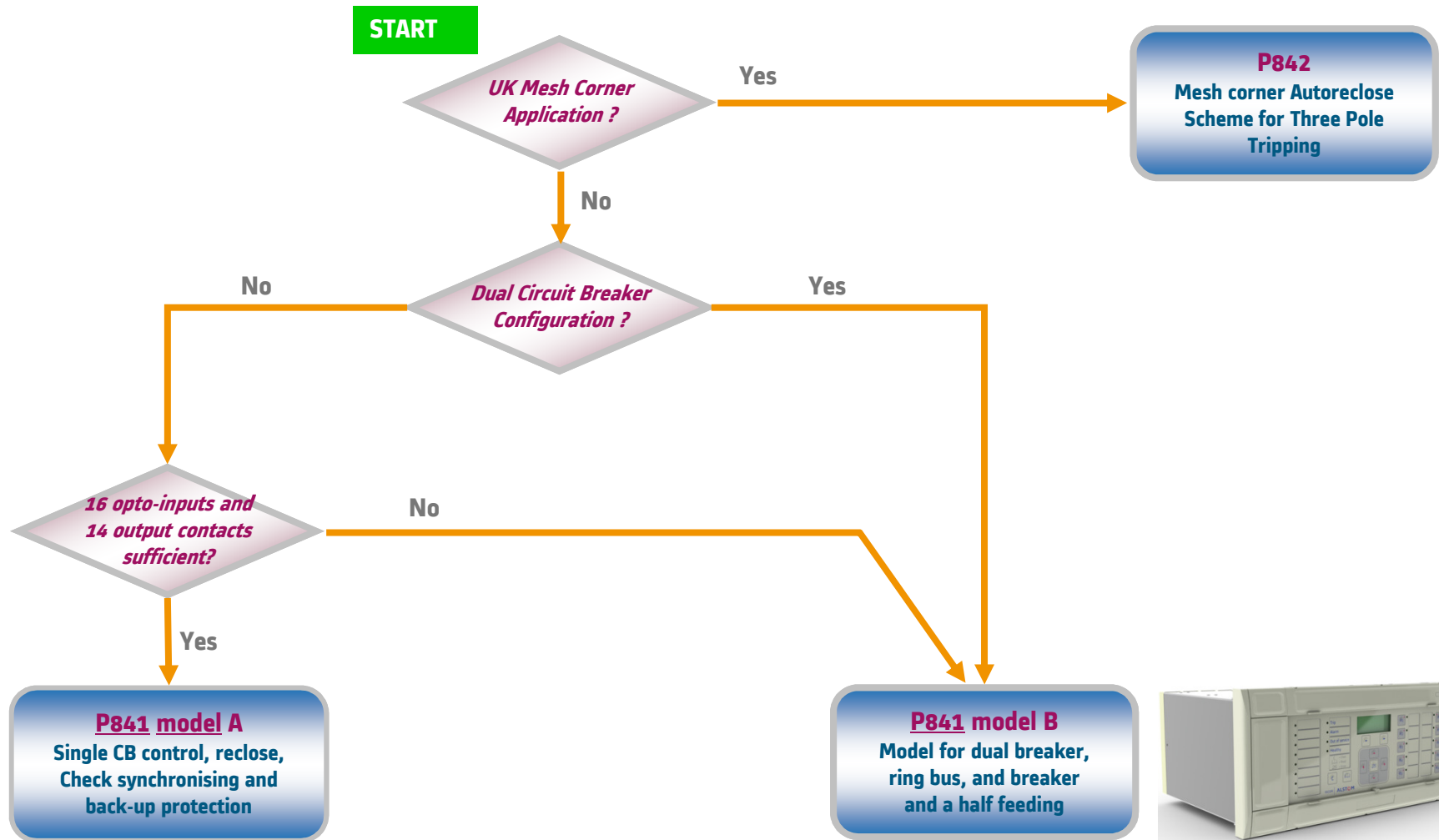


# Busbar Protection



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# Autoreclose & Breaker Fail



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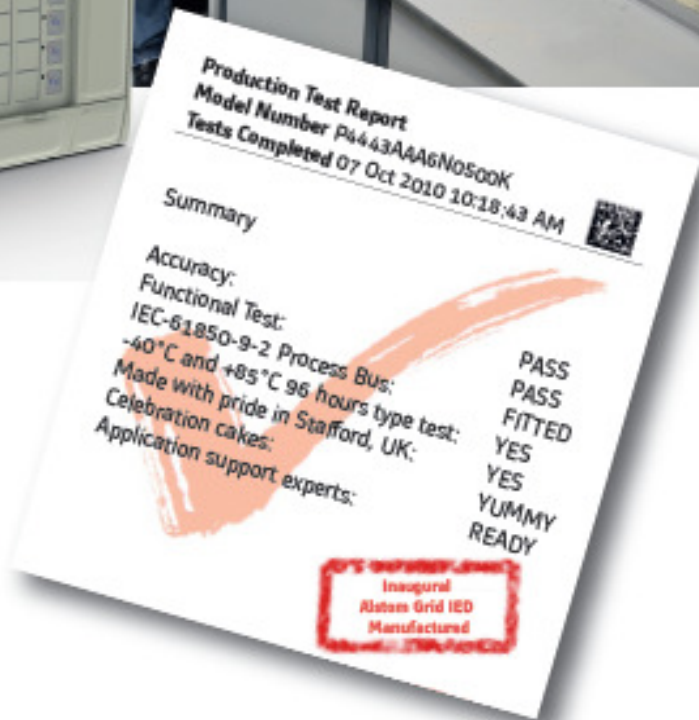
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## MiCOM ALSTOM: Reborn at the Stafford Centre of Excellence



Rejuvenating the  
substation environment,  
committed to serve you!



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