Agile Distributed Generation Relay with DNP3, 11IN/12OUT, TCS

- RS485 communication port plus second port options: RS485, Fiber Optic, RJ45, Dual FO or Dual RJ45 Ethernet
- Wide range of communication protocols: IEC-103, IEC-61850, Modbus, Courier, DNP3 or DNP3 Ethernet
- Universal power supply, 1A / 5A CT inputs, and universal binary inputs allow standardising cubicles and reducing spare holding
- Up to 13 digital inputs and up to 12 relay output contacts for application in complex protection schemes

**SPECIFICATIONS**

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<th>Function(s), Current, IEEE/ANSI C37.2</th>
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<td>Blocking or &quot;Out-of-Step&quot; Relay: Inrush Blocking [68]</td>
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<td>Reverse-Phase or Phase-Balance Current: Negative Sequence Overcurrent [46]; 4-Element</td>
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<td>Overvoltage Relay: Overvoltage [59]; 3-Stage</td>
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<td>Overvoltage Phase-Sequence or Phase-Balance Voltage: Negative Sequence Overvoltage [47]</td>
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</table>
Function(s), Frequency, IEEE/ANSI C37.2 | Frequency Relay: Over Frequency [81O]; 9-Stage Frequency Relay: Under Frequency [81U]; 9-Stage Frequency Relay: Undervoltage Blocking of Frequency Protection [81V] | IEEE C37.2

Function(s), Power, IEEE/ANSI C37.2 | Directional Power Relay: Phase (Forward/Reverse/Under/Over) [32]; 2-Element | IEEE C37.2


Details, Accuracy, Current | 0.05 to 4 In ±0.5% of reading (1A input) , 0.05 to 4 In ±0.1% of reading (5A input) |

Details, Accuracy, Voltage | 0.05 to 2 Vn ±0.1% of reading |

Details, Accuracy, Frequency | 40 to 70 Hz ±0.025 Hz |

Details, Accuracy, Power | 0.2 to 2 Vn and 0.05 to 3 In ±5.0% of reading at unity power factor |

Details, Accuracy, Energy | 0.2 to 2 Vn and 0.2 to 3 In ±5.0% of reading at zero power factor |

Burden per Phase @In, Max | 0.05 VA max@In |

Input Voltage, AC, Min | 100 V AC min |

Input Voltage, AC, Max | 120 V AC max |

Burden per Phase @Un, Max | 0.1 VA max@Un |

Input Frequency, Min | 50 Hz |

Input Frequency, Max | 60 Hz |

Ith, Thermal Current, Continuous (with 1A CT) | 4 kA, 1A CT |

Ith, Thermal Current, Short Time, 1s (with 1A CT) | 100 kA, 1A CT |

Ith, Thermal Current, Short Time, 10s (with 1A CT) | 30 kA, 1A CT |

Ith, Thermal Current, Continuous (with 5A CT) | 20 kA, 5A CT |

Ith, Thermal Current, Short Time, 1s (with 5A CT) | 500 kA, 5A CT |

Ith, Thermal Current, Short Time, 10s (with 5A CT) | 150 kA, 5A CT |

Vth, Thermal Voltage, Continuous | 220 V |

Vth, Thermal Voltage, Short Time, 10s | 286 V |

Nominal Supply Voltage, AC, Min | 110 V AC min |

Nominal Supply Voltage, AC, Max | 240 V AC max |

Umin, Supply Voltage, AC, Min | 88 V AC |

Umax, Supply Voltage, AC, Max | 264 V AC |

Nominal Supply Voltage, DC, Min | 24 V DC min |

Nominal Supply Voltage, DC, Max | 250 V DC max |

Umin, Supply Voltage, DC, Min | 19 V DC |

Umax, Supply Voltage, DC, Max | 300 V DC |

Ripple Voltage, Supply, Max | 37.5 V |

Supply Frequency, Min | 45 Hz min |

Supply Frequency, Max | 65 Hz max |

Mounting | Panel Mount |

IP rating, body / housing | IP50 |

IP Rating, Front | IP52 |

IP Rating, Side | IP30 |

IP Rating, Back | IP10 |

Communication Port(s) | RJ45 USB Standard Type A (normal USB) Fibre Optic LC |
## AGILE DISTRIBUTED GENERATION RELAY DNP3 11IN/12OUT TCS

Medium Voltage Power > MV Substation Automation > MV and HV Protection > Agile P14N / P14D / P94 Feeder Management Relays > P14DG Distributed Generation Relays

| Communication Protocol(s) | DNP 3.0 (Serial)  
|                          | RS-485  
|                          | Courier  
|                          | IRIG-B  
|                          | USB  
|                          | Modbus RTU (Serial)  
|                          | IEC 61850  
| Number of Ethernet Fibre Ports | 1 ports  
| Fibre Port Type | 100Base-FX  
| Number of Ethernet Copper Ports | 1 ports  
| Storage Type | Flash Memory (Unspecified)  
| Number of Stored Events | 2048 qty stored  
| Number of Stored Faults | 10 qty stored  
| Number of Stored Maintenance Logs | 10 qty stored  
| Built-in Display | Yes  
| Details, Display | Front panel display or MiCOM S1 Agile  
| Quantity, Digital Input | 8 qty  
| Type, Digital Input | 24-250V DC, Isolated type  
| Quantity, Relay Output | 8 qty  
| Type, Relay Output | NO 300V AC/DC type  
| Shock Response Class, IEC/EN 60255-21-2 | 2 Class  
| Shock Withstand Class, IEC/EN 60255-21-2 | 1 Class  
| Bump Withstand Class, IEC/EN 60255-21-2 | 1 Class  
| Vibration Response Class, IEC/EN 60255-21-1 | 2 Class  
| Vibration Endurance Class, IEC/EN 60255-21-1 | 2 Class  
| Seismic Test Rating | IEC / EN 60255-21-3  
| Seismic Test Class, IEC/EN 60255-21-3 | 2 Class  
| Operating Temperature, Min | -25 °C min  
| Operating Temperature, Max | 55 °C max  
| Storage Temperature, Min | -25 °C min  
| Storage Temperature, Max | 70 °C max  
| Height | 177 mm  
| Width | 154.2 mm  
| Depth | 243.1 mm  
| Weight | 4 kg  
| Shock Rating | IEC / EN 60255-21-2  
| Vibration Rating | IEC / EN 60255-21-1  
| Certifications | CE  
|              | C-UL  
|              | C-UL-US  
|              | UL  
|              | ATEX  
|              | EAC-EX  

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**Catalogue No:** P14DG11C4C0540A
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AGILE DISTRIBUTED GENERATION RELAY DNP3 11IN/12OUT TCS

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