

**SUPPLIERS**

**PRODUCTS/SERVICES**

|                                   | 50Hz Solutions 61 2 9439 0041 | ABB Australia 1300 782 527 | Alstom Grid 61 2 9739 3000 | American Superconductor 3 9225 5217 | Ampcontrol 61 2 4961 9000 | Arthur D. Riley 64 4 472 7614 | Bri-Tech 61 8 9270 6200 | Chase Power 61 7 3822 8000 | CSE-Uniserve 61 2 8853 4200 | Delstar NZ 64 9835 3400 | EATON 1300 332 866 | Hylec Energy Solutions 61 7 3890 0966 | Insulect Australia www.insulect.com | IPD Industrial Products 1300 556 601 | Performance Electrics 0404 478 744 | Powereng 61 2 9439 0041 | S&C Electric www.sandc.com | SATEC (Australia) 61 2 4774 2959 | Schneider Electric 1300 369 233 | Sunstate Electrical 61 7 3488 0412 | TE Connectivity Crompton 1300 656 090 | TWS Energy Controls 1800 124 747 |
|-----------------------------------|-------------------------------|----------------------------|----------------------------|-------------------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|-----------------------------|-------------------------|--------------------|---------------------------------------|-------------------------------------|--------------------------------------|------------------------------------|-------------------------|----------------------------|----------------------------------|---------------------------------|------------------------------------|---------------------------------------|----------------------------------|
| <b>Components</b>                 |                               | ✓                          | ✓                          |                                     | ✓                         | ✓                             | ✓                       | ✓                          |                             | ✓                       |                    |                                       |                                     |                                      |                                    |                         |                            |                                  | ✓                               |                                    |                                       |                                  |
| <b>Capacitors</b>                 |                               | ✓                          | ✓                          |                                     | ✓                         | ✓                             |                         | ✓                          |                             | ✓                       |                    |                                       |                                     |                                      |                                    |                         |                            |                                  | ✓                               |                                    |                                       |                                  |
| 550V                              |                               |                            |                            |                                     |                           |                               |                         | ✓                          |                             |                         |                    |                                       |                                     |                                      |                                    |                         |                            |                                  | ✓                               |                                    |                                       |                                  |
| Centralised Auto PF Banks         |                               | ✓                          | ✓                          |                                     | ✓                         |                               |                         | ✓                          | ✓                           | ✓                       |                    |                                       |                                     |                                      |                                    |                         |                            |                                  | ✓                               |                                    |                                       |                                  |
| Dry CRM                           |                               |                            |                            |                                     |                           |                               |                         | ✓                          |                             |                         |                    |                                       |                                     |                                      |                                    |                         |                            |                                  |                                 |                                    |                                       |                                  |
| Low Voltage                       |                               | ✓                          | ✓                          |                                     | ✓                         |                               |                         | ✓                          |                             | ✓                       | ✓                  |                                       |                                     |                                      |                                    |                         |                            |                                  | ✓                               |                                    |                                       |                                  |
| Medium Voltage                    |                               | ✓                          | ✓                          |                                     | ✓                         | ✓                             | ✓                       | ✓                          | ✓                           | ✓                       | ✓                  |                                       |                                     |                                      |                                    |                         |                            |                                  | ✓                               |                                    |                                       |                                  |
| High Voltage                      |                               | ✓                          | ✓                          |                                     | ✓                         | ✓                             | ✓                       | ✓                          | ✓                           |                         |                    |                                       |                                     |                                      |                                    |                         |                            |                                  | ✓                               |                                    |                                       |                                  |
| Extra High Voltage                |                               | ✓                          | ✓                          |                                     |                           | ✓                             |                         | ✓                          |                             |                         |                    |                                       |                                     |                                      |                                    |                         |                            |                                  | ✓                               |                                    |                                       |                                  |
| Metallised Polypropylene          |                               |                            |                            |                                     |                           |                               |                         | ✓                          |                             |                         |                    |                                       |                                     |                                      |                                    |                         |                            |                                  | ✓                               |                                    |                                       |                                  |
| <b>Reactors</b>                   | ✓                             |                            | ✓                          |                                     |                           | ✓                             | ✓                       | ✓                          |                             |                         | ✓                  |                                       |                                     |                                      |                                    | ✓                       |                            |                                  | ✓                               |                                    |                                       |                                  |
| Air Core                          | ✓                             |                            | ✓                          |                                     |                           |                               |                         | ✓                          |                             |                         | ✓                  |                                       |                                     |                                      |                                    | ✓                       |                            |                                  | ✓                               | ✓                                  |                                       |                                  |
| Current Limiting                  | ✓                             |                            | ✓                          |                                     |                           |                               | ✓                       | ✓                          |                             |                         |                    |                                       |                                     |                                      |                                    | ✓                       |                            |                                  | ✓                               |                                    |                                       |                                  |
| Iron Core                         | ✓                             |                            | ✓                          |                                     |                           |                               |                         | ✓                          |                             |                         | ✓                  |                                       |                                     |                                      |                                    | ✓                       |                            |                                  | ✓                               | ✓                                  |                                       |                                  |
| Chokes for PF Connections         |                               |                            | ✓                          |                                     |                           |                               |                         | ✓                          |                             |                         |                    |                                       |                                     |                                      |                                    |                         |                            |                                  | ✓                               |                                    |                                       |                                  |
| <b>Control &amp; Protection</b>   |                               | ✓                          | ✓                          |                                     | ✓                         |                               |                         | ✓                          |                             |                         | ✓                  |                                       |                                     | ✓                                    |                                    |                         | ✓                          |                                  | ✓                               |                                    |                                       | ✓                                |
| Advisory/Consulting/Specification |                               |                            | ✓                          |                                     |                           |                               |                         | ✓                          |                             |                         | ✓                  |                                       |                                     |                                      |                                    |                         |                            |                                  | ✓                               |                                    |                                       |                                  |
| <b>Control</b>                    |                               | ✓                          | ✓                          |                                     | ✓                         | ✓                             |                         | ✓                          |                             |                         | ✓                  |                                       |                                     | ✓                                    |                                    |                         | ✓                          |                                  | ✓                               |                                    |                                       | ✓                                |
| Automatic                         |                               | ✓                          | ✓                          |                                     | ✓                         |                               |                         | ✓                          |                             |                         | ✓                  |                                       |                                     |                                      |                                    |                         | ✓                          |                                  | ✓                               |                                    |                                       | ✓                                |
| Automatic Circuit Breakers        |                               |                            | ✓                          |                                     |                           |                               |                         | ✓                          |                             |                         | ✓                  |                                       |                                     | ✓                                    |                                    |                         |                            |                                  | ✓                               |                                    |                                       |                                  |
| Customised                        |                               | ✓                          | ✓                          |                                     | ✓                         |                               |                         | ✓                          |                             |                         | ✓                  |                                       |                                     |                                      |                                    |                         |                            |                                  | ✓                               |                                    |                                       | ✓                                |
| Fused Switches                    |                               |                            | ✓                          |                                     |                           |                               |                         | ✓                          |                             |                         | ✓                  |                                       |                                     | ✓                                    |                                    |                         |                            |                                  | ✓                               |                                    |                                       |                                  |
| Heat Sensitive Controllers        |                               |                            | ✓                          |                                     |                           |                               |                         | ✓                          |                             |                         | ✓                  |                                       |                                     |                                      |                                    |                         |                            |                                  |                                 |                                    |                                       |                                  |
| Interlock                         |                               | ✓                          | ✓                          |                                     | ✓                         |                               |                         | ✓                          |                             |                         | ✓                  |                                       |                                     |                                      |                                    |                         |                            |                                  | ✓                               |                                    |                                       |                                  |
| Load Break Switches               |                               |                            | ✓                          |                                     |                           |                               |                         | ✓                          |                             |                         | ✓                  |                                       |                                     | ✓                                    |                                    |                         |                            |                                  | ✓                               |                                    |                                       |                                  |
| Measurement & Protection Relays   |                               |                            | ✓                          |                                     |                           |                               |                         | ✓                          |                             |                         | ✓                  |                                       |                                     | ✓                                    |                                    |                         |                            |                                  | ✓                               |                                    |                                       |                                  |
| MCCB                              |                               |                            | ✓                          |                                     |                           |                               |                         | ✓                          |                             |                         | ✓                  |                                       |                                     | ✓                                    |                                    |                         |                            |                                  | ✓                               |                                    |                                       |                                  |
| Remote                            |                               | ✓                          | ✓                          |                                     | ✓                         |                               |                         | ✓                          |                             |                         | ✓                  |                                       |                                     | ✓                                    |                                    |                         |                            |                                  | ✓                               |                                    |                                       | ✓                                |
| <b>Protection</b>                 |                               | ✓                          | ✓                          | ✓                                   | ✓                         | ✓                             |                         | ✓                          |                             |                         | ✓                  |                                       | ✓                                   | ✓                                    |                                    |                         | ✓                          |                                  | ✓                               |                                    | ✓                                     | ✓                                |
| Current Transformers              | ✓                             |                            | ✓                          | ✓                                   | ✓                         |                               |                         | ✓                          |                             |                         | ✓                  |                                       |                                     |                                      |                                    | ✓                       |                            |                                  |                                 |                                    |                                       | ✓                                |
| Earth Fault                       |                               | ✓                          | ✓                          | ✓                                   | ✓                         |                               |                         | ✓                          | ✓                           |                         | ✓                  |                                       |                                     | ✓                                    |                                    |                         |                            |                                  | ✓                               |                                    |                                       | ✓                                |
| Harmonic                          |                               | ✓                          | ✓                          | ✓                                   | ✓                         |                               |                         | ✓                          | ✓                           |                         | ✓                  |                                       |                                     |                                      |                                    |                         |                            |                                  | ✓                               |                                    |                                       |                                  |
| Overcurrent                       |                               | ✓                          | ✓                          | ✓                                   | ✓                         |                               |                         | ✓                          | ✓                           |                         | ✓                  |                                       |                                     | ✓                                    |                                    |                         |                            |                                  | ✓                               |                                    |                                       | ✓                                |
| Overvoltage                       |                               | ✓                          | ✓                          | ✓                                   | ✓                         |                               |                         | ✓                          | ✓                           |                         | ✓                  |                                       |                                     | ✓                                    |                                    |                         |                            |                                  | ✓                               |                                    |                                       | ✓                                |
| Surge & Transient                 |                               | ✓                          | ✓                          | ✓                                   | ✓                         |                               |                         | ✓                          | ✓                           |                         | ✓                  |                                       |                                     | ✓                                    |                                    |                         |                            |                                  | ✓                               |                                    |                                       | ✓                                |
| Thermal                           |                               | ✓                          | ✓                          | ✓                                   | ✓                         |                               |                         | ✓                          | ✓                           |                         | ✓                  |                                       |                                     |                                      |                                    |                         |                            |                                  | ✓                               |                                    |                                       | ✓                                |
| Unbalance                         | ✓                             | ✓                          | ✓                          | ✓                                   | ✓                         |                               |                         | ✓                          | ✓                           |                         | ✓                  |                                       |                                     |                                      |                                    |                         |                            |                                  | ✓                               |                                    |                                       | ✓                                |

# power factor correction

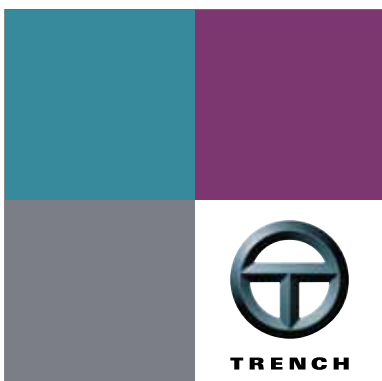
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## PRODUCTS/SERVICES

|  |  |   |   |   |   |   |   |   |   |   |   |   |  |   |   |   |   |   |   |   |  |   |
|--|--|---|---|---|---|---|---|---|---|---|---|---|--|---|---|---|---|---|---|---|--|---|
| <b>Fuse Backup Protection</b>          |  |   | ✓ |   | ✓ |   | ✓ | ✓ |   |   | ✓ |   |  | ✓ |   | ✓ |   | ✓ |   |   |  |   |
| <b>Harmonic Filters</b>                |  | ✓ | ✓ |   | ✓ | ✓ |   | ✓ |   |   | ✓ |   |  |   | ✓ |   |   |   | ✓ |   |  |   |
| Indoor                                 |  |   | ✓ |   | ✓ |   |   | ✓ |   |   | ✓ |   |  |   |   |   |   |   | ✓ |   |  |   |
| Chokes & Inductors                     |  |   | ✓ |   | ✓ |   |   | ✓ |   |   | ✓ |   |  |   |   |   |   |   | ✓ |   |  |   |
| Outdoor                                |  | ✓ | ✓ |   | ✓ |   |   | ✓ |   |   | ✓ |   |  |   |   |   |   |   | ✓ |   |  |   |
| <b>Power Factor Correction Systems</b> |  | ✓ | ✓ |   | ✓ | ✓ |   | ✓ |   | ✓ | ✓ |   |  | ✓ | ✓ |   | ✓ |   | ✓ |   |  |   |
| Expandable Units                       |  |   | ✓ |   |   |   |   | ✓ |   |   |   |   |  | ✓ | ✓ |   |   |   | ✓ |   |  |   |
| Low Voltage to 1000V                   |  | ✓ | ✓ |   | ✓ |   |   | ✓ |   | ✓ | ✓ | ✓ |  | ✓ | ✓ |   | ✓ |   | ✓ |   |  |   |
| Medium Voltage to 36kV                 |  | ✓ | ✓ |   | ✓ | ✓ |   | ✓ | ✓ | ✓ |   |   |  | ✓ |   |   | ✓ |   | ✓ |   |  |   |
| High Voltage above 36kV                |  | ✓ | ✓ |   | ✓ | ✓ |   | ✓ | ✓ |   |   |   |  | ✓ |   |   |   |   | ✓ |   |  |   |
| <b>Series Compensation</b>             |  |   | ✓ | ✓ |   | ✓ | ✓ | ✓ |   |   |   |   |  |   |   |   |   |   | ✓ |   |  |   |
| Medium Voltage                         |  |   | ✓ | ✓ |   | ✓ |   | ✓ | ✓ |   |   |   |  |   |   |   |   |   | ✓ |   |  |   |
| High Voltage                           |  |   | ✓ | ✓ |   | ✓ | ✓ | ✓ | ✓ |   |   |   |  |   |   |   |   |   |   |   |  |   |
| Extra High Voltage                     |  |   | ✓ | ✓ |   | ✓ |   | ✓ |   |   |   |   |  |   |   |   |   |   |   |   |  |   |
| <b>Services</b>                        |  | ✓ | ✓ | ✓ | ✓ |   |   | ✓ |   |   | ✓ |   |  |   | ✓ |   |   |   | ✓ | ✓ |  | ✓ |
| Detailed Design                        |  | ✓ | ✓ | ✓ | ✓ |   |   | ✓ | ✓ |   | ✓ |   |  |   | ✓ |   |   |   | ✓ | ✓ |  |   |
| Harmonic Measurements                  |  |   | ✓ | ✓ | ✓ |   |   | ✓ | ✓ |   | ✓ |   |  |   | ✓ |   |   |   | ✓ | ✓ |  | ✓ |
| Installation & Commissioning           |  | ✓ | ✓ | ✓ | ✓ |   |   | ✓ | ✓ |   | ✓ |   |  |   | ✓ |   |   |   | ✓ | ✓ |  | ✓ |
| Power System Analysis                  |  | ✓ | ✓ | ✓ | ✓ |   |   | ✓ | ✓ |   | ✓ |   |  |   | ✓ |   |   |   | ✓ | ✓ |  |   |
| Turnkey Project Management             |  | ✓ | ✓ | ✓ | ✓ |   |   | ✓ | ✓ |   | ✓ |   |  |   | ✓ |   |   |   | ✓ | ✓ |  |   |
| <b>Software</b>                        |  |   | ✓ |   |   |   |   | ✓ |   |   |   |   |  |   | ✓ |   |   |   | ✓ | ✓ |  |   |
| Control                                |  |   | ✓ |   |   |   |   | ✓ |   |   |   |   |  |   |   |   |   |   | ✓ | ✓ |  |   |
| Events                                 |  |   |   |   |   |   |   | ✓ |   |   |   |   |  |   |   |   |   |   | ✓ | ✓ |  |   |
| Harmonic Spectrum                      |  |   |   |   |   |   |   | ✓ |   |   |   |   |  |   | ✓ |   |   |   | ✓ | ✓ |  |   |
| Rating Graphs                          |  |   |   |   |   |   |   | ✓ |   |   |   |   |  |   | ✓ |   |   |   | ✓ | ✓ |  |   |
| <b>Switching Systems</b>               |  |   | ✓ |   | ✓ |   |   | ✓ |   |   |   |   |  |   |   |   |   |   | ✓ |   |  |   |
| Electromechanical                      |  |   | ✓ |   | ✓ |   |   | ✓ |   |   | ✓ |   |  |   |   |   |   |   | ✓ |   |  |   |
| Transient-free, Solid State            |  |   | ✓ |   | ✓ |   |   | ✓ |   |   |   |   |  |   |   |   |   |   | ✓ |   |  |   |
| <b>Test Sets</b>                       |  |   | ✓ |   |   |   |   | ✓ |   |   |   |   |  |   |   |   |   |   | ✓ |   |  |   |



# 50Hz

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