SURGE PROTECTION DEVICE:

POWER SUPPLY LINE PROTECTION:
Protection for the Power line with Lightning & Surge protection system becomes all the more necessary in the buildings with an external lightning protection system installed on the roof.

MCR LINE PROTECTION:
Surge Arrester with combined protective circuit for the protection of MCR area which is far more sensitive area than power supply line.

DATA COMMUNICATION LINE:
Surge Arrester for low signal levels with high frequency for the data processing and communication lines and ports

TELECOMMUNICATION LINE:
For the protection of exposed antenna system and outdoor cables that extended beyond the building are considered especially at risk, since they are directly exposed to the atmospheric discharge.
INTERFACE DEVICES:

POWER SUPPLY:

QUINT POWER:
- 24 V DC / 1 AC (2.5 A, 5 A, 10 A, 20 A, 40 A)
- 24 V DC / 3 AC (5 A, 10 A, 20 A, 40 A)
- 48 V DC / 1 & 3 AC (5 A, 10 A, 20 A)
- 12 V DC / 1 AC (10 A)
- For ASi Systems

QUINT & MINI POWER DC-UPS:
- DC-UPS Battery Modules (2 A, 10 A, 20 A, 40 A)
- Battery Modules (1.3 AH, 3.4 AH, 7.2 AH, 12 AH)

QUINT & MINI POWER DC-DC CONVERTERS:
- QUINT 24 V DC / 10 A
- MINI 24 V DC / 1 A

TRIO POWER:
- 24 V DC / 1 AC (2.5 A, 5 A, 10 A, 20 A)
- 24 V DC / 3 AC (10 A, 20 A, 40 A)

MINI POWER:
- 24 V DC / 1 AC (1.3 A, 1.5 A, 2 A, 100 W, 4 A)
- Special Voltages (5V/3A, 10-15 V/2A, 10-15 V/2A, 10-15 V/8A, +/- 15 V / 1 A)

STEP POWER:
- 5, 12, 15, 24 & 48 V DC / 1 AC

RELAY

PSR Series:
- Safety Relay
  (E-Stop, Light Grids, Two hand control systems, Process Engineering)

PLC Series
- With Solid State Relay
  (12 VDC, 24 VDC, 24V AC/DC, 48 V DC, 60 V DC, 120 V AC (110 V DC), 230 V AC (220 V DC)
- As Sensor/Actuator version (5 V DC, 24 V DC)
- For High inrush/continuous currents (upto 130 A)
- Against interference currents/voltages (120 V AC, 230 V AC)
- For Railway Applications (24 VDC, 36 VDC, 48 VDC, 72 VDC, 96 VDC, 110 VDC)
- For Namur Initiators
- For electronic reversing of DC motors

PR SERIES:
- PR1 for miniature relays or solid state relays
- PR2 for industrial relays
- PR3 for octal relays
- PR1-fully fitted relay modules
- PR2-fully fitted relay modules
DEK Series:
- With relay/solid-state relay

EMG Series:
- With relay/solid-state relay

Special relay and solid-state relay modules:
- Relay Terminal Block with switch
- Interference-free relays and solid-state relays
- Relays for switching of lamp loads
- Power solid-state relay with 400 V AC/3 A output
- Short-circuit-proof solid-state relay with feedback
- 100 K Hz input solid-state relay

POWER ELECTRONICS RELAYS:
- Reversing load relays with motor management
- Reversing load relays for 3-phase networks
- Load relays for 3-phase networks
- Reversing load relays for 3-phase networks
- Reversing load relays for DC motors

ISOLATORS:
- 3-way isolating amplifier
- Signal Multiplier
- Repeater power supply
- Loop-powered isolator
- Passive Isolators

TRANSUDCERS:
- Programmable temperature measuring transducers
- Configurable temperature measuring transducers
- Temperature Realy for PT 100
- Current measuring transducers upto 400 A
- DC voltage measuring transducers upto +/- 660 V
- AC voltage measuring transducers upto +/- 440 V
- Programmable frequency measuring transducers
- digital/Analog converters

SERIAL:
- Copper bound data transmission
- Fiber optic Transmission
  (Converters for Profibus, RS-485 2-wire, Interbus, RS-232,DeviceNet,CAN,CANopen)
- Industrial Modem
  (Analog modem for remote monitoring and alarm, GSM modem )
- Wireless Transmission
  (Analog/Digital signals , Conversion from RS-232 and Rs-485 to Bluetooth)
VARIOFACE DEVICES:

(1) Varioface DC Coil Relay Modules –
1/2/4/8/16 Relays, 1/2/4 Changeover,
Freewheeling Diode is provided for
Protection against back emf, Omron/OEN
Relay with/without socket.

Varioface DC Coil Relay Modules with ‘NO’ Contact–
1/2/4/8/16 Relays, Freewheeling Diode is provided for
Protection against back emf, Omron/OEN
Relay with/without socket, 1NO Contact

(2) Varioface AC Coil Relay Modules -
1/2/4/8/16 Relays, Omron/OEN Relay
With/without socket, with/without fuse.

(3) Varioface Fused Relay Module -
1/2/4/8/16 Relays, 1/2 Changeover,
Freewheeling Diode is provided for
Protection against back emf, Omron/OEN
Relay with/without socket, Fuse is provided
In common path of every contact, fuse
Blown Indication also available

(4) Varioface Passive Module-
FLKM with D-Sub Male/Female Connectors for 9
to 50 No. of positions, with /without Light
indicator.

FLKM with FRC Connectors for 10 to
64 No. of positions, with /without Light
Indicator.
(5) Varioface CNC Interface Modules –
24 Input and Power, 16 Outputs Relay,
Freewheeling Diode is provided for Protection
Against back emf, with 1 Changeover,
With/without Fuse.

(6) Power Distribution Module -
It is a simple distribution of Power Supply into 8
or 16 Channel, Each Distribution line is provided
With fuse/fuse blown indication

(7) Utility Module-
This module is provided with ON/OFF control &
fuse protection for fans and tubes in electrical panels.

(8) Fuse Module-
Actuators, lamps, X-formers
or Semi-conductor components
must be protected against current
Overloads, high packing
Densities, fuse blown indication
make it more useful.

(9) Varioface SSR Modules –
Multi Channel, High Switching Frequency.
Opto isolation of 2500Vac, LED indication for relay on
Status, Inbuilt protection whenever required, Provision for
common negative at the input side, AC/DC i/p, o/p Module.

(10) Varioface Economy Relay Modules –
2/4/6/8/16 Channel, Compact size, LED
indication and Diode protection for each
channel, Relay o/p Contact- ‘NO’,
Available in both +Ve & -Ve common
version.

PC24DA08-N1, 5792210
(12) Varioface Digital Input Modules –
16 Channel Digital Input modules with Fuse/Status indication in every signal line.

UM-8RM/G2R-24/21-21(OFI) FRC16, 2317018

8/32 Channel is also available suitable for use with front adapters.

(13) Varioface Digital Output Modules –
8 Channel Digital Output modules with fuse in every output contact provision for Supplying 24VDC supply to PLC module, for energizing each coil independently. 16 Channel is also available.

PC24D08CO (OF)-CD15VM, 5792571

(14) Opto isolation Module –
with opto isolation between field input and PLC DI module and in-built auto test feature, it is suitable for interfacing 230VAC field input to 24VDC PLC DI Module.

PC24DIF (ISO)-D25 (110), 5792594

(15) Current Amplifier Module-
There are three different modules like –source to source (PC-SO2SO-01), source to sink (PC-SO2SI-02), and sink to sink (PC-SI2SI-03).
AUTOMATION DEVICES:

1. Industrial Ethernet Solutions -
   Managed and Unmanaged Ethernet Switches, Hubs and accessories

2. I/O systems –
   I/O systems in the IP 20 control cabinet
   - Inline modular IOs
   - Inline Block IOs

3. I/O systems in the field, IP 65
   - Fieldline Modular IOs
   - Fieldline Standalone IOs

4. Wireless Communication
   - Industrial wireless LAN
   - Wireless IO Bluetooth
**TERMINAL BLOCKS:**

**Product Profile Industrial Connection Technology:**

<table>
<thead>
<tr>
<th>Type of Terminal Block</th>
<th>Description</th>
<th>Technology Screw</th>
<th>Technology Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Feed-Through Terminal Blocks</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-Conductor (1 IN / 1 OUT)</td>
<td><img src="image1.png" alt="Image" /></td>
<td></td>
<td><img src="image2.png" alt="Image" /></td>
</tr>
<tr>
<td>3-Conductor (1 IN / 2 OUT)</td>
<td><img src="image3.png" alt="Image" /></td>
<td></td>
<td><img src="image4.png" alt="Image" /></td>
</tr>
<tr>
<td>4-Conductor (2 IN / 2 OUT)</td>
<td><img src="image5.png" alt="Image" /></td>
<td></td>
<td><img src="image6.png" alt="Image" /></td>
</tr>
<tr>
<td><strong>Multi-level Terminal Blocks</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Double Level</td>
<td><img src="image7.png" alt="Image" /></td>
<td></td>
<td><img src="image8.png" alt="Image" /></td>
</tr>
<tr>
<td>Three Level</td>
<td><img src="image9.png" alt="Image" /></td>
<td></td>
<td><img src="image10.png" alt="Image" /></td>
</tr>
<tr>
<td>Four Level</td>
<td><img src="image11.png" alt="Image" /></td>
<td></td>
<td><img src="image12.png" alt="Image" /></td>
</tr>
<tr>
<td><strong>Functional Terminal Blocks</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fuse Terminal Block</td>
<td><img src="image13.png" alt="Image" /></td>
<td></td>
<td><img src="image14.png" alt="Image" /></td>
</tr>
<tr>
<td>Disconnect Terminal Block</td>
<td><img src="image15.png" alt="Image" /></td>
<td></td>
<td><img src="image16.png" alt="Image" /></td>
</tr>
<tr>
<td>Switchable Terminal Block</td>
<td><img src="image17.png" alt="Image" /></td>
<td></td>
<td><img src="image18.png" alt="Image" /></td>
</tr>
<tr>
<td>Component Terminal Block</td>
<td><img src="image19.png" alt="Image" /></td>
<td></td>
<td><img src="image20.png" alt="Image" /></td>
</tr>
<tr>
<td>Pluggable Terminal Blocks</td>
<td>1P / 2P &amp; 4P</td>
<td></td>
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<tr>
<td>---------------------------</td>
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</tr>
<tr>
<td><strong>Special Terminal Block</strong></td>
<td>Solder, Slip-On, Wire-Wrap,</td>
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<tr>
<td></td>
<td>Miniature Circuit-Breakers</td>
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<td></td>
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<tr>
<td></td>
<td>Feed-Through Terminal Blocks</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Feed-Through Terminal Blocks</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### CONNECTION SYSTEM DEVICES:

#### Pluscon-Industrial plug connectors for Control Cabinet and Device

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Item</th>
<th>Description and Classifications</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PLUSCON Data</td>
<td>Bus and Data Plug Connectors</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(a) Bus Plug Connectors</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(b) Sturdy Data Plug Connectors</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>PLUSCON Field</td>
<td>Sensor/Actuator Cabling</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(a) M12 Quick Locking</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(b) Configuration Software</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(d) Free Assembly M12/M8 Plug Connectors</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(e) Preassembled M12/M8 Sensor/Actuator Cables</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(f) Sensor/Actuator Boxes</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>PLUSCON Device</td>
<td>Appliance Multi Pin Plug Connector Systems</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>PLUSCON</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
(a) Heavycon-Heavy-Duty Industrial Plug Connectors

(b) Duplicon-Power Distribution Connectors

5 Coninvers

Round Plug Connectors for Power and Signal(M23-M27 for Signal and M23-M58 for Power)

**COMBICON - Printed Circuit Board Connectors and Housings**

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Item</th>
<th>Description and Classifications</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>COMBICON Control</td>
<td>This product line offers both directly PCB mounted or pluggable PCB connectors</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(a) Pitch of 2.54 to 7.62 mm</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(b) Connection technology Screw / Spring / IDC(Insulation displacement con.</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>(c) Conductor cross section 0.08 to 6 sqmm</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>(d) Designed for up to 32A and 400V</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>COMBICON Power</td>
<td>This product line offers both directly PCB mounted or pluggable PCB connectors</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(a) Pitch of 7.62 to 15.00 mm</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(b) Connection technology Screw / Spring</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(c) Conductor cross section 0.2 to 25 sqmm</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(d) Designed for up to 125 A and 1000V</td>
<td></td>
</tr>
</tbody>
</table>
COMBICON Compact

This product line offers Small but powerful the COMBICON Compact series PCB connectors

(a) Pitch up to 3.81 mm  
(b) Connection technology Screw / Spring  
(c) Conductor cross section 0.12 to 1.5 sqmm  
(d) Designed for up to 4 A and 160V

COMBICON Special Purpose Connectors

This product line offers Small but powerful the COMBICON Compact series PCB connectors

(a) Rail Mounted pluggable connector  
(b) Panel mounted connector  
(c) Fiber Optic Connector

COMBICON Housings

This product spectrum contains different types housings or enclosures and profile.

(a) Enclosed housing  
(b) Ventilated housing  
(c) UM profile