

### **Company Profile**

Temtec Controls is a privately owned company based in Melbourne, Australia specialising in the Manufacturing and supply of Components, Products and Solutions to the Energy Monitoring, Power Electronics, Power Quality, Process Control, E-Mobility, and Electrical Instrumentation markets.

#### We Are:

Manufacturers, importers, design/development and consulting engineers in electrical, electronic and systems solution disciplines.

# Temtec Controls expertise reflects up to 40 years experience in:

- Power Control, Process Control & Automation
- Switchgear (LV,MV,HV)
- Power Electronics Components & Assemblies
- Heatsink and Cooling
- Energy Management
- Electrical Measurement & Test
- Electrical Protection
- Power Quality
- E-Mobility

#### **Our Mission:**

- To select the most suitable components, products or engineered solutions to meet and potentially exceed our customers requirements in an unbiased and professional manner.
- To be actively involved in improving the reliability and energy efficiency of power conversion equipment, temperature and electric heating controls.
- To promote Energy Monitoring and Management solutions as the means to benchmark,



### **Process Control**

### **Temperature/Humiditiy Controllers**



Panel Mount - 48x48mm, 96x48mm, 48x96mm, 72x72mm, 96x96mm

Din Rail Mount - 22.5 x 75mm Dual Input/Dual Output options, 5 Amp Relay Alarm Output

**Dual Input and Dual Output versions** 

Step Control - Included as standard

Pattern/Kiln Controllers - Up to 10 Steps, 10 **Patterns** 

HVAC/Brewery/Servo/Valve - Low Cost SCR Controllers with integrated PID loop

TriHero Shinko CE and UL

## **Industrial Temperature & Humidity Sensors**



**MIMS Resistance Temperature Detector** 

(RTD) - Standard ranges in stock

MIMS Thermocouples - Type K, Type R, Type S (stocked)

**EGT Sensors -** Inconel 600 (Stocked)

Plastic Industry - Type K with two pin Bayonet fitting (Stocked)

Pipe/Clamp style - Made to order

**Machine/Bolt Style -** Type K (Made to order)

Accessories - BSP, Bayonet, Flange Fittings, TC Cable

Virtually any style made to order



### **Timers, Time Relays & Time Switches**



**DIN Rail Mount Analogue - Single and Dual** Timers, Multifunction, Delay ON/OFF, Assymetric, Staircase, Double Delay, Memory, Latching, Delay On Star Delta

Din Rail Mount Digital Time Switch - Daily/ Weekly, Monthly, Yearly, Dual and Astronomical Types with 100 Programs and removable

Panel Mount Digital Timers - Single and Dual Output Types, 9999 Hr timing range.

CE/UL

battery

### **Programmable Logic Controllers & HMI Touch Screens**



Miniature PLC - Din Rail Mount, 3 Ranges with various Conficurations, Millenium 3, Millenium EVO, EM4

I/O - 10/12 Input 4 Output, 14 Input 10 Output Expandable to a maximum of 54 I/O Communcation - RS485, Ethernet, Bluetooth,

3G, Wifi

HMI Touch Screen - Essential ( 4 or 7 Inch & Dual RS485 Comms), Performance (4,7 or 10 Inch Ethernet & RS485 included VNC Server) CE/UL ROHS

### Signal Conditioners/Transmitters/Transducers



Voltage & Phase Moitoring Relays - High performance, and low cost types

**Current Monitoring Relays - Single and 3** Phase, AC & DC Custom made types available **Speed Monitoring Relays -** For Motor Speed Monitoring and Control

Motor Protection Relays - Mechanical Circuit Breakers (Thermal or Thermal and Magnetic)

Tank Level Control Relays - Low cost

Signal Condtioners/Transmitters - Process Levels or AC/DC Current/Voltages

Oil Pressure/Temperature Transducers - For Compressors or Chillers CE/UL







### Motors, Starter Motors, Alternators, Encoders



Motor Contactors - DIN Rail Mount AC/DC Motor Contactors, DC PWM Rated Contactors (up to IP67K), Aviation and Milspec types **Speed Monitoring Relays - For Motor Speed** Monitoring and Control

**Encoders -** State of the art industrial postitoning and speed encoders for utilities

Electric Motors - Starter Motors, AC & DC Motors, Alternators, BLP Motors, and Electrical Drives ordered on request.

Replacement Brushes - MAHLE, Letrika, Iskra

. CE/UL

# Power Control & Power Quality

### **Phase Angle/Burst SCR Power Controllers**



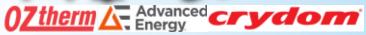
World Leading SCR Controllers -

AE(AEG)Thyro S, Thyro A, Thyro AX, Thyro PX **Din Rail Mount** - SCR and SSR Based models **100% Australian Made** - Oztherm F330, F430, F431, F311, F312 Series

**Pulse Transformers -** For reliable swithing of semiconductor gates

**HVAC Controllers -** SSR and SCR Based, PWM Controller, Compact with Display

**CE and UL** 



### **Power Factor Correction**



Power Factor Correction Capacitors - Singe
Phase and 3 Phase 440/525V 5 kVar to 40 kVar
Dry Type kept in stock, Gas Filled and Dry Type
Power Factor Correction Controllers up to 12
Steps, Basic and Logging types
Capacitor Duty Contactors - 12 kVar to 50

Capacitor Duty Contactors - 12 kVar to 50 kVar with Aux Contacts kept in stock

**Smart Capacitor Banks -** 100% Australian Made up to 600kVar with low lead time

Power Quality Meters and Transducers Panel Mount, DIN Rail, lot Loggers with Email
and Relay Alarms, and in built Web Page
CE, ANSI and ROHS

**EMC Filters, Chokes, Pulse Transformers & IEC Inlets** 

**∞ Iskra**°



**EMC(RFI) Line Filters** - Single and 3 Phase, 1 and 2 Stage, Low Leakage, Medical Grade, Assymetric and Symmetric Attenuation

**IEC Inlets -** With or Without EMC(RFI) Filter, Fuse(s), Switch or Illumination

**Chokes -** Limited Range of Chokes for Line Attenuation

**Pulse Transformers -** For optimum low EMC switching of devices.

**Appliance Fuses & Fuse Holders -** Time Lag (Slow Blow), Fast Acting types up to 30 Amp. **CE/UL** 



# Electronic Components

# **Power Capacitors**



**Low Voltage Power Factor Correction Capacitors** - 440/525VAC 5kVar to 50kVar types with triples safety feature.

Medium Voltage - 22kV, 400kVar capacitors made to order for indoor or outdoor use Induction Heating - All Types Made to order Snubber/Absorbtion (Kondensator) - Railways grade, standard and custom made types

**DC Link and Electrolytic -** Project qty's on request

CE/UL/ROHS

#### **Power Semiconductors**



Bridge Rectifiers - Single and 3 Phase, Half Controlled, Braking Diode, Welder Types Isolated Power Modules - Diodes, SCR's, Hybrid, IGBT's, Fast and Standard Types Stud Mount Devices - Metric and Imperial Diodes, SCR's, Flat Base, Rotating, Fast and Standard Types

**Capsule (PUK) Devices** - Diodes, SCR's, GTO's, Fast and Standard Types.

Press Fit Diodes - Diode Pellets, Welding Diode Capsules, Press Fit (Button) Diodes Part Cross Reference & Alternative

Sourcing Specialist CE/UL/ROHS





**DIN Rail Mount -** AC or DC Control, AC or DC Switching types with heatsink

Panel Mount - AC or DC Control, AC or DC Switching types for mounting onto heatsink Solid State Contactors - For Single and 3 Phase Heatsink Applications

Solid State Motor Contactors - 3 Phase, 7.6, and 18/20 Amps Forward and Reversing Types PCB Mount SSR's - SIP, 5 Pin Socket, and Input/Output Modules

5 Pin Socket Mount - For Standard Relay Sockets

**CE/UL & ROHS** 

# Electronic Components

### **Industrial Current & Voltage Transducers**



Current Sensors with Process Outputs Compact Designs for Process Automation,
Data Logging, and Control Systems
Solid and Split Core Current Sensors Busbar Mount, Panel Mount, DIN Rail Mount
AC/DC Current and Voltage Sensors Bidirectional Instantaneous, and Signal
Conditioned Types

**High Isolation & Operating Ranges - MV**Isolated Voltage or Measurement up to 6.4kV, 20,000 Amp AC or DC

CE/UL/ROHS

#### **Solid State Contactors**



Natural and Fan Cooled - Contactor Output Ratings @ 50 Deg C Ambient Various Control Input Types - 24VAC, 3-

32VDC, or 90-280VAC

Wide Range of Load Current/Voltage - 24-660VAC, 13-500 Amp Single or 3 Phase Two SSR Configurations - Solid State Relay

or Contactor Style Modules

**Crydom or Fastron SSR** - Crydom for UL requirement, or Fastron lower cost SSR for CE Requirement

Custom and Standard Models Available - To suit customer requirements, available space CE/UL/ROHS

# **Power Supplies**



Din Rail Mount - Plastic or metal framed types
Open Frame - Open Frame OEM style,
Bindler Reven Symplica. To aviit I FM on other

**Bipolar Power Supplies -** To suit LEM or other Hall Effect Sensors and Transucers

**Plug Packs -** Convenient GPO Mounted Plug Pack Style

**Panel Mount -** Available on Request **Custom Power Supplies -** Available on Request

AC to DC Rectifiers - Custom made on request for heavy industrial applications and retrofit

Controlled Rectifiers - For Electrolysis

CE/UL/ROHS

# Test And Measurement

### **Revenue Grade Utility, ICG, Tariff Meters**



Revenue Meters - Single and 3 Phase (ME172 & ME174), with TOU, RS485, Optical Port, Extended Load Profile, PV Friendly, Import/ Export, "No power reading" funtionality, Optional Digital I/O, 5 Years backup, Tarriff Schemes, up to 120 Amp direct connect Smart Meter - AM550 DLMS 0/1 Supported, MBus (wried or wireless), SSR/Relay Output options, Supercap or removable battery ICG Meters - MT880/MT860 Industrial Power Quality Meter, and Tarriff Meter NMI Pattern Approved

# **Power, Current, Voltage Meters**



Digital Voltmeters and Ammeters - Wide range of input options, CT Current, 4-20mA inputs with optional Relay Alarms and Retransmission output. Dual Display and LCD (non backlit) options. Up to 600VAC/DC Analogue Voltmeters and Ammeters - Direct or CT Connected, Dual Paramater, Voltage Ranges up to 690VAC/DC

**Hour Meters -** Round or Square faced with various cutout sizes, IP54

Indicators - Temperature or Proportional scalable indicators with Red/Green or White/green LED Displays

**CE and UL** 

### **Test & Measurement**



Portable Meters - Clamp Meters, Multimeters, Power Quality Analyser/Logger, Thermometer High Precisions Current Sensors - For Compliance or Medcial equipment Synchronometers - For monitoring and control of Gas/Diesel gensets

**Hand Held Clamp on Current Sensors -** For testing and analysis purposes

High Precision Potentiometers - For high precision test and calibration equipment Power Semicondutor Testers - Portable, Laboratory, or Production Line models **CE and UL** 

# Test And Measurement

### Railway Current and Voltage



Hall Effect Current Transducers - AC and DC Measurement 0-5V, +/-4V, Rm(Current) outputs Hall Effect Voltage Transducers - AC and DC Low and Medium Voltage Measurement 0-5V, +/-4V, Rm(Current) outputs

**Signal Conditioned Transducers** - Standard process outputs

**Differential Current Transducer -** For earth leakage measurement devices

**CE and UL** 

### **Power Meters & Power Quality Analysers**



**kWh Submeters** - kWh Meters, Network Recorders, Network Analysers, Power Quality Analysers, Class 0.1 to Class 1 with Various Comms, Din Rail and Panel Mount

Current Transformer - Direct, 0.333V, 1/5 Amp Modular kWh Meters - Major Cost and space savings

**EV Charger Meters -** AC, and DC Meters with PTB (Eichrect) Certification

Network Recorders - Wide range of Input
Options Galvanic Isolation, Process Outputs
Power Quality Analysers - Class A
CE/UL

### **Current Transformers**



**Solid Core Current Transformers -** Class 0.2(S), 0.5(S), 1, moulded style

**Split Core Current Transformers -** Clip, Snap, Screw on and busbar mount styles,

encapsulated and moulded types

**Signal Conditioned Output -** Solid and Split Core ranges

**Rogowski Coils -** Class 1 and Class 0.5, True RMS conditioned output, adjustable sensitivity

**Hand Held Clamp on Current Sensors - For** 

testing and analysis purposes

Output Standards - 0.333V, 1/5 Amp, or Custom models on request

**CE, ANSI and ROHS** 

# Switching Technology

### **Mechanical Relays & Bistable Switches**



Subminiature Relays - PCB or DIN Rail Mount with large flat pins

Single Pole 5 Pin 1 x 12 Amp SPDT Form C Two Pole 8 Pin 2 x 10 Amps (DPDT) Form C Four Pole 14 Pin 4 x 5 Amp SPDT Form C

Latched Relays/Bistable Switches - Position Indicator, No Hold Consumption, up to 80 Amp Ratings, Manual Switch, Modbus BiCom Versions

Slim Relays - PCB or Dln Rail Mount with 12-24VAC/DC or 240VAC Inputs

Relays Bases - Sold Seperately CE/UL and ROHS





### **Contactors**



Din Rail Mount Contactors - Ratings up to 1100 Amp Per Phase, Motor Duty Contactors Control Input Ranges - 24VAC, 24VDC, 415VAC, 240VAC, 220VDC

Capacitor Duty Contactors - For Extremely High Inductive or Capacitive Loads

Thermal Overload Relays - Adjustable type for Mounted on Contactor Output Contacts Auxilliary Contacts - Snap on Single or Multi Pole

Hermetially Sealed Types - IP67K, PWM Rated Coils, Designed for DC & AC Loads Milspec & Aviation - High reliability versions for Military, Electric Vehicle and Aviation Markets **CE/UL and ROHS** 

# **Switches for HMI and Appliances**



#### Thermal & Magnetic Circuit Breakers -

Manual and Automatic Reset Types, Optional Aux Contact, Various Mounting Types, Ratings up to 16 Amp, 28VDC

Thermoplastic Membrane Switches - HMI User Panels, Low Resistance, 48VDC 100mA, Standard and Custom Printed Versions Piezo Switches - Metal Line, Touch Sensitive, 48VDC 100mA, Long Life, Ring, Point or Button Illuminated and Standard/Custom Engraved Metal Line Switches - Switches with Latching or Non Latching Relay, 240VAC, 10 Amp, Illuminated or Standard/Custom Engraved CE/UL and ROHS

# Electrical Protection

#### Semiconductor and Solar Fuses



BS88 Fuse Links (aR) - Most Popular models kept in stock up to 700 Amp with mounting kits Cartridge Fuses (gR) - versions
NH European Style Fuses (aR,gG) - 78mm,
108mm Bussmann Equivlents
Appliance Fuses - Time Lag (Slow Blow) and

Appliance Fuses - Time Lag (Slow Blow) and Solar Fuses (gPV, Type J) - 10.3x38mm
Ratings for 1000VDC, 275VAC, 1 to 50 Amp
Fuse Holders and Standoffs - Din Rail
(Cartridge) and Panel Mount (NH, BS88)
CE/UL and ROHS

## **Surge Protection Devices**



Metal Oxide Varistors(MOV) - Up to 680VAC kept in stock (1100VAC on request)
GDT's

Surge Protection Devices(SPD) - Main/Sub Boards versions, 1, 2 and 3 Pole modular options, Type 1, 2/ B, C Class I, II. MOV and GDT, L/N-PE, L-PEN, L-N, L-PE Snubber Capacitors - LV to MV Range, Railway Grade, High Overload, AC and DC Thermal Ciruit Breakers - HMI Appliances Transient Supression Resistors - For continuous voltage clamping in drives Low Voltage Switchgear - See Next Category CE/UL and ROHS

# **Electrical Wholesale Components**



Moulded Case Circuit Breakers (MCCB) Ratings for 690VAC and 1250 Amp, Fixed,
Adjustable, and Electronic Types
Circuit Breakers (MCB) - AC Types 1 to 120
Amp 230/400VAC Rated, DC Types 1 to 63
Amp 400VDC Rated

Twilight Switches - Timers with light detection Residual Current Circuit Breakers (RCD) - 100 Amp 230/400VAC Rated

Residual Circuit Breakers with Overcurrent
Detection (RCBO) - 40 Amp, 230/400VAC
Disconnect Switches - For Solar or Industry
Busbar Systems - To suit our range
Enclosures - 4 to 36 DIN, IP65/40
CE/VDE/GHOST



# Temtec 2021 Catalogue New Technologies & Projects

### **Communication Accessories**



**Industrial Communication Gateways -**RS485, Ethernet, RS232, USB Converters Remote Web Server Datalogger - Mini web server with 1 or 8GB storage Remote Alarming System - Email, Digital or Relay Output remote Alarming Devices. Thyro Series Anybus Interface - Profibus, Profinet, EthernetlP, EtherCAT, Modbus RTU

**Energy Management Software - Fastron Ergo** and Iskra Migen scaleable software system.

CE and UL Approved

# E-Mobility & Renewables



Home EV Charger (AC) - Standard ranges up to 22kW 3 Phase or BiPhase

Public EV Charger (DC) - 160kW versions for Rapid Charging Networks

**EV Charging Systems - Secure EV Charging,** 

Payment and Notification System

Hall Effect Current Sensors - Dual Range(DHAB), and Can Bus Types(CAB)

Automotive gR Fuses - Ratings up to 200 Amp 60VDC with Enclosed Fuse Holders

Gigavac DC Contactors - 1000 Amp and 90kV Ratings IP67

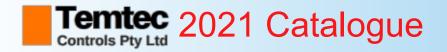
#### CE, ANSI and ROHS Approved

# **Project/Manufacturing Capabilities**



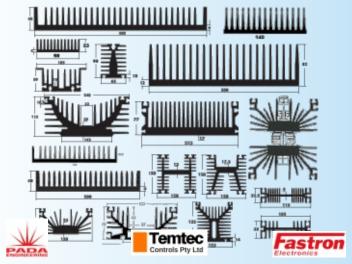
**Rectifier Design -** Forward/reversing types **DC Subsation Blocking Diodes - Proven** Railway Designs with redundancy **Rectifer Exciter Cubicles - Power stations Power Factor Correction Capacitor Banks -**100kVAr - 600kVar

**Snubber Panels - Supression Panels** Heating Control Cubicles - SCR Controller, Contactor, Relay, PID Controller Systems PLC Systems - Custom PLC Projects using Crouzet Automation min PLC, 54 I/O Maximum Metering Panels - Design and assembly or kitting



# Cooling & Assemblies

#### **Heatsink**



**Extruded** - Most popular styles kept in stock and made to order.

**High Dissipation -** Bonded and extruded types, single and double sided

**Din Rail or Panel Mount** - For all types of semiconductor mounting

**Fan Cooled** - For 92mm,120mm,150mm fans **Water Cooled** - Various configurations for extreme applications

**Machining Services -** Milling, drilling, alodining **Heatsink Design -** Custom heatsink

#### **Semiconductor Assemblies**



Bridge Rectifiers - Single, 3 Phase, 6 or 12
Pulse with or without IPT Transformer
Blocking Diodes - For Datacenter Online
Protection, Substation Fault Protection
Water Cooled - For welders, or extremely
demanding applications
Button/Pellet Diode Assemblies - Air

AC Switches - For ON/OFF or Phase Control of extremely high powered applications
High Voltage Diode Arrays - For Electrostatic

Precipitators or similar.

#### CE, ANSI and ROHS Approved

Cooled ,Low Cost, Up to

# **Cooling Accessories**



Fans for Heatsink - Ballbearing Fans for standard heatsink sizes 60x60mm, 80x80mm, 92x92mm, 120x120mm, 150x150mm

Fan Cooled Heatsink - Various sizes for almost any application, 117 x 150mm, 117 x 168mm, 125x125mm.

Thermal Paste for Heatsink - Wolfracoat C Conductive lubricating paste 400gm and 1.2kg, and small non conductive paste packs Thermal Bimetal Switches - Normally Open or Normally Closed, 70 to 150 Deg C Double and Single Sided Clamps Clamps for Capsule Devices - Insulated, Double Sided and Single Sided (Box Clamp)

Water Coolers - For Isolated Modules

or Capsule Devices



# 2021 Catalogue

# Expect Nothing Less than the Best!

For specific or general enquiries, please contact our friendly sales team



- Power Semiconductors
- Electrical Measurement
- Process Control

9B Lakewood Blvd Braeside VIC 3195 Australia

Web: www.fastron.com.au Email: sales@fastron.com.au Telephone: + 61-3-91310734 + 61 425885707