

UNISON SSR

Approved By

cUL[®]US
File no. E481640



IEC 60947-5-1:2016



SOLID STATE RELAYS(SSR)

THYRISTOR POWER CONTROLLER

3 PHASE SEMICONDUCTOR MOTOR
CONTROLLER - CURRENT & VOLTAGE DETECT

FAULT DETECTION & PROTECTION SSR

RS-485 COMMUNICATION PID
TEMPERATURE CONTROLLER

DC TO DC SHORT CIRCUIT PROTECTION SSR

HEATSINKS

www.unisoncontrols.com

TECHNICAL CAPABILITIES

- **Electrical circuit/PCB Simulation and 3D Designing**
- **3D Plastic Mold Designing and prototypes on 3D printer**
- **Automatic test benches for SSR testing
(In process & Post process Q.C)**
- **Power/Harmonic Analyzers**
- **Digital and Power Oscilloscopes**
- **Spectrum Analyzers**
- **High Frequency pure Sine wave generators upto 400 Hz**
- **High AC/DC voltage insulation testers with minute mA setting**
- **Humidity chamber from -20 to 100 C for
simulation of products**
- **Capacitive loads up to 65 kVAr**
- **Thermal simulation software**
- **Up to 200 Amps AC Resistive load test benches (High Voltage
and High current) along with Short circuit testing**
- **Up to 125 Amps DC load test benches (High Voltage and
High Current) along with Short circuit testing**
- **Multiple 3 Phase inductive motor loads for Forward/Reverse
Semiconductor Motor Controllers**
- **Inductive loads, Capacitive loads and Transformer
load simulation test benches**
- **Different ratings of DC motor, Solenoid valves, Hydraulic
valves and actuators for DC load short circuit simulation**
- **Plastic industry – Barrel, Screw and Heater simulation
setup for Heat only and Heat + Cool PID temperature
controller simulation**

**Fully automatic manufacturing process for
90 A, 150 A & 200 A Back to Back SCR module**

MODEL 901 - UL AND CE APPROVED SSR

DC TO AC SOLID STATE RELAY

Approved By



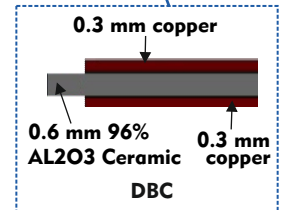
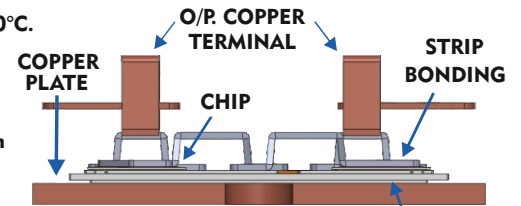
IEC 60947-5-1:2016

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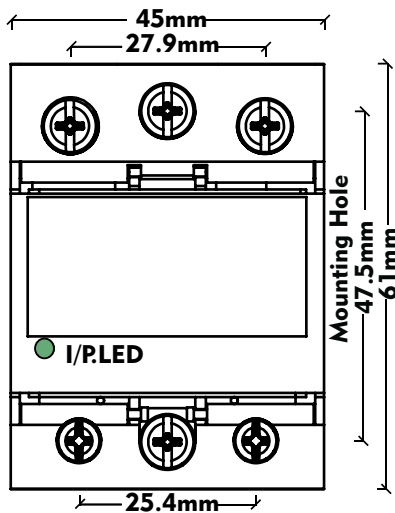
MODEL 901



- Input: 4-32VDC / 4-16mA. Input LED: **Green**
- Output: 24-480VAC (47-63 Hz)
- PIV: 800 or 1200 Vpk. Zero Cross Over
- Product Temp. withstand capacity 150°C.
- Body Insulation: 6kV for 1 min
- I/P. to O/P. Insulation: 8kV for 1 min
- Flaps on I/P & O/P Terminals
- Short Circuit Protection by "B" Curve DP MCB
- Short circuit Current Rating: 10kA for <3mS
- Available Amp Range : 25, 40, 50, 90 and 200 Amp Load Current at 40°C with Heat Sink



AC TO AC SOLID STATE RELAY



- Input: 100-280VAC / 4-12mA. Input LED: **Green**
- Output: 24-600 VAC(47-63 Hz)
- PIV: 800 or 1200 Vpk. Zero Cross Over
- Product Temp. withstand capacity 150°C
- Body Insulation: 6kV for 1 min
- I/P. to O/P. Insulation: 8kV for 1 min
- Flaps on I/P & O/P Terminals
- Short Circuit Protection by "B" Curve DP MCB
- Short circuit Current Rating: 10kA for <3mS
- Available Amp Range : 25, 40, 50, 90 and 200 Amp Load Current at 40°C with Heat Sink

MODEL 901

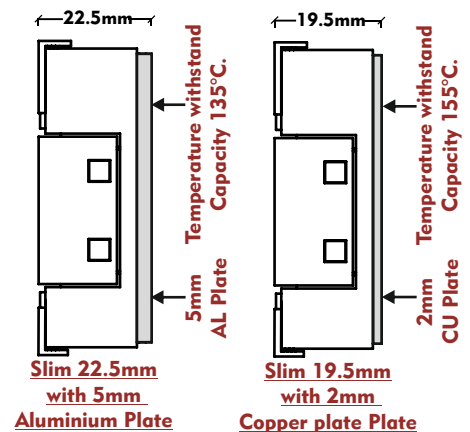


RANDOM SOLID STATE RELAY

MODEL 901



- Input: 4-32VDC / 4-16mA. Input LED: **Green**
- Output: 24-480 VAC(47-63 Hz)
- PIV: 800 or 1200 Vpk. Random Switching
- Product Temp. withstand capacity 150°C.
- Body Insulation: 6kV for 1 min
- I/P. to O/P. Insulation: 8kV for 1 min
- With easy open & lock IP 20 protection
- Flaps on I/P & O/P Terminals
- Short Circuit Current Rating : 10kA for <3mS
- Available Amp Range : 25, 40, 50, 90 and 200 Amp Load Current at 40°C with Heat Sink



MODEL 901 - UL AND CE APPROVED SSR

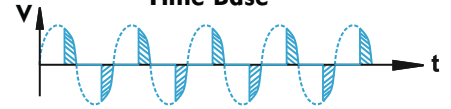
PHASE ANGLE CONTROL SSR

MODEL 901

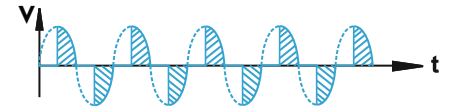


- Input: 4 to 20mA or 0-10VDC
- Output: 230VAC/440VAC (47-63 Hz)
- PIV: 800 or 1200 Vpk.
- Product Temp withstand capacity 150°C.
- Body insulation: 4kV for 1 min
- I/P. to O/P. insulation: 8kV for 1 min
- With easy open & lock IP 20 protection
- Short Circuit Current Rating: 10kA for <3mS
- Flaps on I/P & O/P Terminals
- Available Amp Range : 25, 40, 50, 90 and 200 Amp Load Current at 40°C with Heat Sink

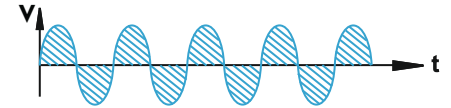
Analog Phase Angle Controller Time Base



25% Load Voltage (VAC)
Control Signal : 8mA/2.5VDC



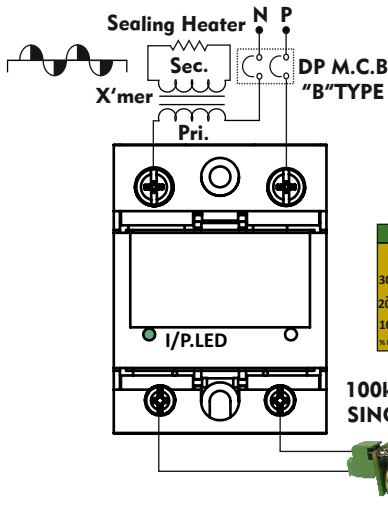
50% Load Voltage (VAC)
Control Signal : 12mA/5VDC



100% Load Voltage (VAC)
Control Signal : 20mA/10VDC

PHASE ANGLE CONTROL BY POT 4 TERMINAL SSR

FULL CONTROL Impulse Sealing Heater



100kE/250kE/470kE SINGLE TURN POT

Input: POT 100KE, 250KE, 470KE

Output: 0 - 110 VAC/230 VAC/440 VAC

PIV: 800, Frequency : 47 - 63 Hz

Product Temp. withstand capacity 150°C

Body Insulation: 6kV for 1 min

I/P. to O/P. Insulation: 8kV for 1 min

Use POT 100kE for Output 110 VAC

Use POT 250kE for Output 230 VAC

Use POT 470kE for Output 440 VAC

Available Amp Range : 25 & 40 Amp Load Current at 40°C with Heat Sink

MODEL 901

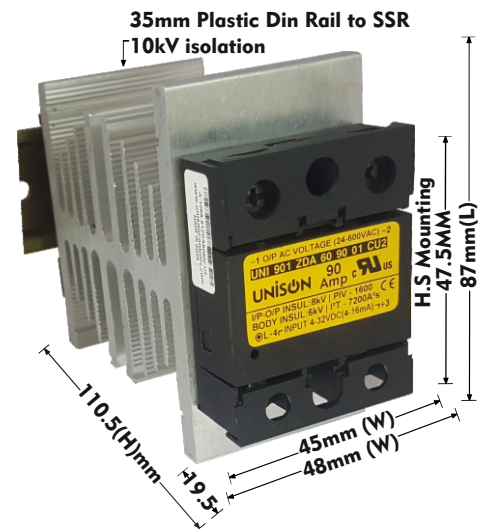


200AMP-MODEL 901 ZDA 48 200 01 CU2 - 3Nos.
SSR "A-190" H.S. WITH 230VAC FAN



190mm(W) Heat sink + 25mm Fan
Plastic Bush for 10kVA insulation

90AMP- MODEL 901 ZDA 60 90 01 CU2
WITH "B-48" H.S.



MODEL 901 - UL & CE THYRISTOR CONTROL

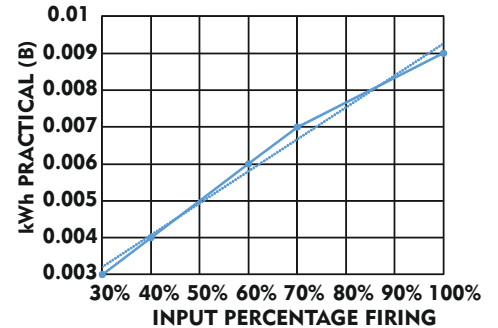
MICRO CONTROLLER BASE BURST FIRE CONTROL SSR



- Input: 4 to 20mA/51E or 0-10VDC/1ME
- Input LED: **Green**
- Fix Supply: 24VDC/30mA
- Output: 24-600VAC (47-63 Hz)
- PIV : 1200 or 1600Vpk
- Body Insulation: 6kV for 1 min
- I/P. to O/P. Insulation: 6kV for 1 min
- Short Circuit Current Rating: 10kA for <3mS
- Available Amp Range : 50, 90, 200 Amp Load Current at 40°C with Heat Sink

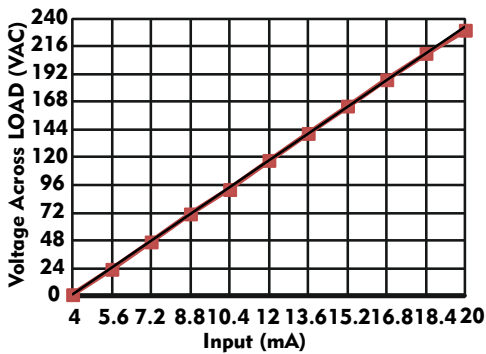
Linear kWh control

Micro controller base variable time proportional Burst control SSR



Linear kW control

Micro controller base Linear SCR Power controller with 1% accuracy in temperature control



SCR POWER CONTROLLER

- Input: 4 to 20mA/51E or 0-10VDC/1ME
- Input LED: **Green**
- Fix Supply: 24VDC/30mA
- Output: 90-480VAC (47-63 Hz)
- PIV : 1600Vpk
- Body Insulation : 6kV for 1min
- I/P. to O/P. Insulation : 6kV for 1min
- Short Circuit Current Rating: 10kA for <3mS
- Available Amp Range : 50, 90, 200 Amp Load Current at 40°C with Heat Sink



200AMP-MODEL 901 MCBUR 60 200 420 CU2 1S- 3NOS. SSR "A-285" H.S. WITH 230VAC FAN



MODEL 901 - UL & CE THYRISTOR CONTROL

BURST FIRE CONTROL

S.C.R. Power Controller Linear Micro-controller Burst Fire Control - Time Base

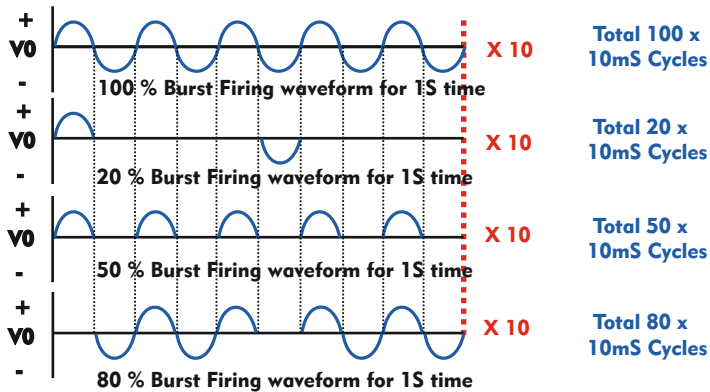


Linear kWh control

Every SSR is suitable for any voltage between 90-600 VAC & any frequency between 47Hz to 63Hz.

Micro controller base variable time proportional Burst Fire SSR

Selectable 1 Second or 4 Second equally distributed cycle time



For 4s selection 10mS (One half cycle) = 40 mS (4 half cycles)

MCBUR SSR

- Zero Volt Switching
- No EMI / R.F / Surge generation
- No Harmonics and less reactive (kVAR)
- Power factor stability so no penalty from Electricity Board
- Neutral current in Three phase system is more stable
- Tighter control of heater due to less excursion from set temperature
- Less hassle for CE certification due to less conducted emission and Radiated Emission
- 9 Nos. SSRs can be put in series by one 4-20mA O/P. with 500E O/P impedance Temperature Controller.
- Suitable to any electrical heater wiring diagram Star with Neutral/ Star Without Neutral/Delta/Open Delta.
- 20% Power Saving
- Current measurement difficult between 0 to 50% firing by analog or digital meter. Measure current at 100% firing.

PHASE ANGLE CONTROL

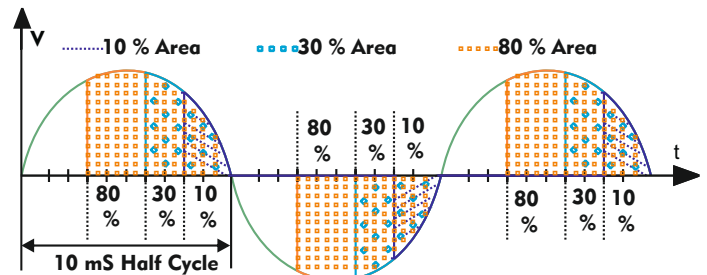
S.C.R. Power Controller Linear Micro-controller Phase Angle Control - Area Base



Linear kW control

Every SSR is suitable for any voltage between 90-480 VAC & any frequency between 47Hz to 63Hz.

Micro controller base Linear SCR Power controller with 1% accuracy in temperature control



MCPHT SSR

- Zero angle switching for 0-10 V and 4-20 mA control input
- EMI / R.F / Surge generation from the SSR
- More Harmonics and reactive (kVAR)
- No Power factor stability so penalty from Electricity Board
- Neutral current in Three phase system varies for different control inputs
- Tighter control of heater due to less excursion from set temperature
- More hassle for CE certification due to conducted emission and Radiated Emission
- 9 Nos. SSRs can be put in series by one 4-20mA O/P. with 500E O/P impedance Temperature Controller.
- Suitable to any electrical heater wiring diagram Star with Neutral and Open Delta.
- No Power Saving
- Current measurement is linear in analog or digital meter during 0 to 100% firing.

MODEL 803 - UL AND CE APPROVED SSR

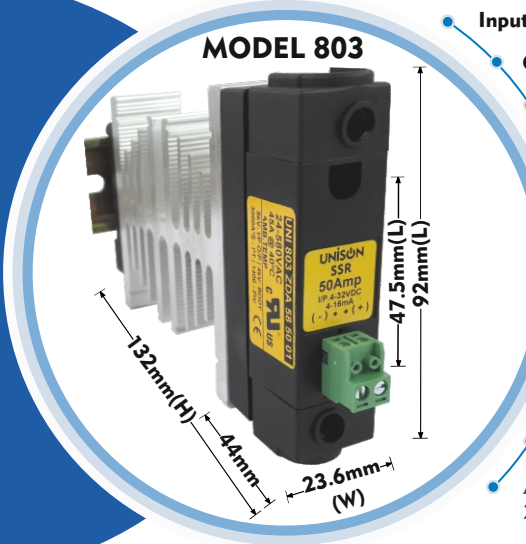
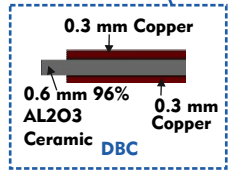
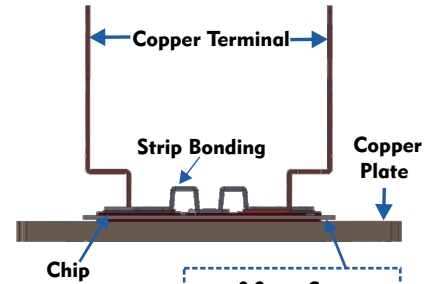
DC TO AC SOLID STATE RELAY

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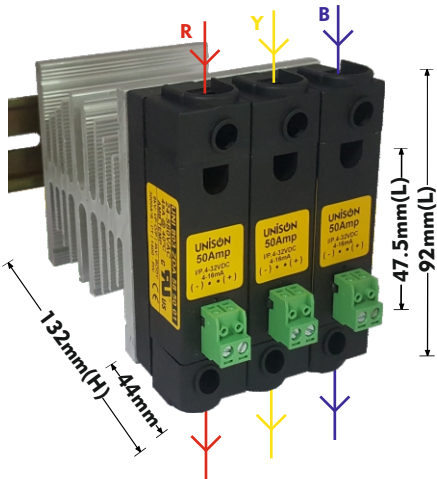
803 DBC MODULE



- Input: 4-32VDC / 4-16mA. Input LED: **Red**
- Output: 24-480/580VAC (47-63 Hz)
- PIV: 800 or 1400 Vpk. Zero Cross Over
- Product Temp. withstand capacity 150°C.
- Body Insulation : 4kV for 1 min
- I/P. to O/P. Insulation : 8kV for 1 min
- With IP 20 Protection Cover
- Short Circuit Protection by "B" Curve DP MCB
- Short circuit Current Rating: 10kA for <3mS
- Available Amp Range : 25, 40, 50, 90 and 200 Amp Load Current at 40°C with Heat Sink

AC TO AC SOLID STATE RELAY

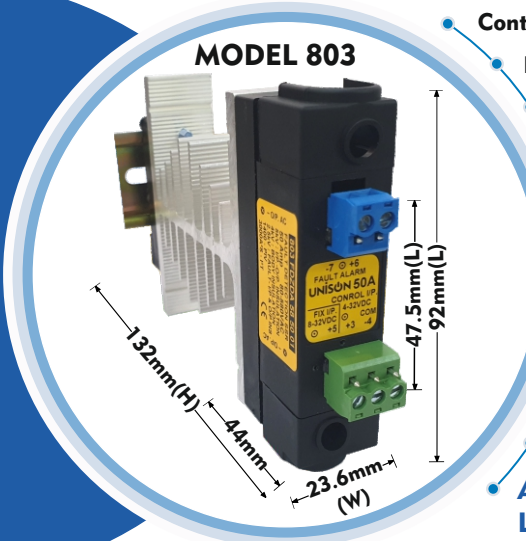
50AMP-MODEL 803 ZDA 58 50 01
3 NOS. SSR WITH "B-72" H.S.



- Input: 20-260VAC / 4-45mA. Input LED: **Red**
- Output: 24-480/580 VAC (47-63 Hz)
- PIV: 800 or 1400 Vpk. Zero Cross Over
- Product Temp. withstand capacity 150°C
- Body Insulation: 4kV for 1 min
- I/P. to O/P. Insulation: 6kV for 1 min
- With IP 20 Protection Cover
- Short Circuit Protection by "B" Curve DP MCB
- Short circuit Current Rating: 10kA for <3mS
- Available Amp Range : 25, 40, 50, 90 and 200 Amp Load Current at 40°C with Heat Sink



FAULT DETECTION SOLID STATE RELAY



- Control Input : 4-32VDC/6-18mA
- Fix Input: 8-32VDC/4-25mA
- Input LED indication : **Green**
- Output : 80-580VAC (47-63 Hz)
- O/p. Fault Alarm LED indication : **Red**
- Body insulation : 2.5kV for 1min
- I/P. to O/P. insulation : 2.5kV for 1min
- Short Circuit Protection by "B" Curve DP MCB
- Short Circuit Current Rating : 10kA for <3mS
- Available Amp Range : 40, 50, 90 Amp Load Current at 40°C with Heat Sink

PROTECTION & FEEDBACK AGAINST FOLLOWING FAULTS:

1. INPUT PHASE FAILURE (MCB OFF)
2. OUTPUT LOAD NOT CONNECTED
3. OUTPUT LOAD SHORT (MCB TRIPS)
4. SSR SHORT

FAULT INDICATION VIA RED LED AND OPTOCOUPLER REMOTE FEEDBACK TO PLC OR BUZZER

COMPATIBLE WITH INDUSTRY 4.0 AND ABOVE

LED INDICATION

Control Input Status Indication	● GREEN
Isolated Fault ALARM output Indication	● RED
Fix Input Power supply Indication	● BLUE

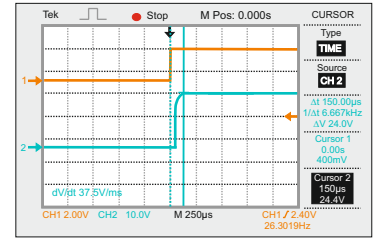
MODEL 803 - DC TO DC SOLID STATE RELAY

DC TO DC SOLID STATE RELAY POWER MOSFET

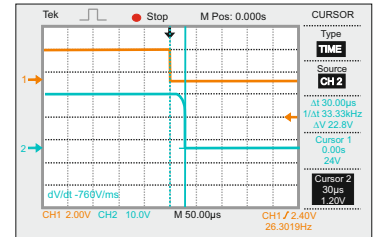


- Input: 3-32VDC / 4-20mA. Input LED: Red
- Output : 5 - 150VDC
- Product Temp. withstand capacity 125°C.
- Reverse Polarity Protection on Input Side.
- N/O Configurations only.
- Body Insulation : 2.5kV for 1min
- I/P. to O/P. Insulation : 2.5kV for 1min
- IP 20 protection Flaps on I/P & O/P Terminals.
- Turn ON: 150 μ S, Turn OFF: 40 μ S
- Available Amp Range : 15, 25 Amp Load Current at 40°C with Heat Sink

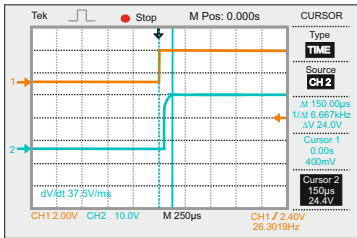
TURN ON Time 150 μ S Waveform of Power MOSFET



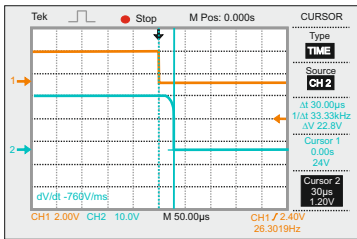
TURN OFF Time 30 μ S Waveform of Power MOSFET



TURN ON Time 150 μ S Waveform of IGBT

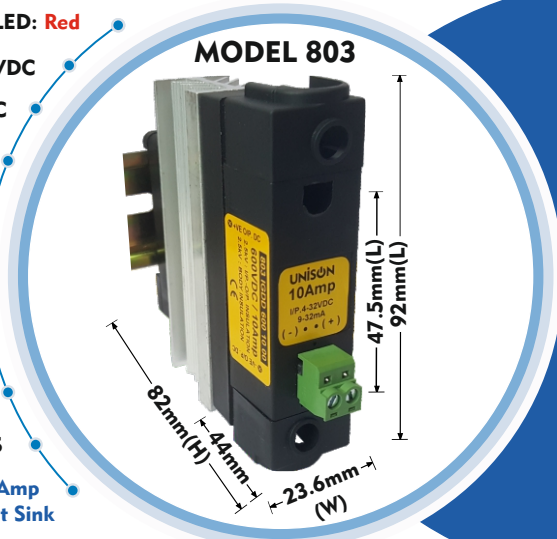


TURN OFF Time 30 μ S Waveform of IGBT

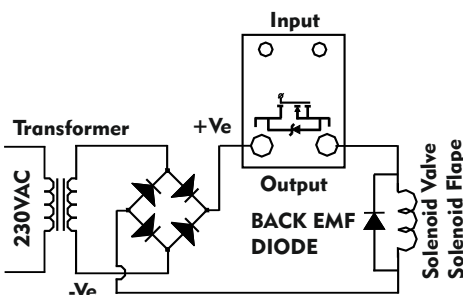


DC TO DC SOLID STATE RELAY IGBT

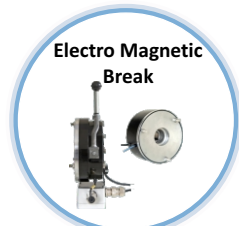
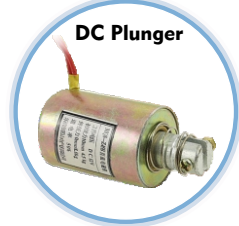
- Input: 4-32VDC / 9-32mA. Input LED: Red
- Output : 5 - 200VDC
- Product Temp. withstand capacity 125°C
- Reverse Polarity Protection on Input Side
- N/O Configurations only
- Body Insulation : 2.5kV for 1min
- I/P. to O/P. Insulation : 2.5kV for 1min
- IP 20 protection Flaps on I/P & O/P Terminals
- Turn ON: 150 μ S, Turn OFF: 40 μ S
- Available Amp Range : 15, 25 Amp Load Current at 40°C with Heat Sink



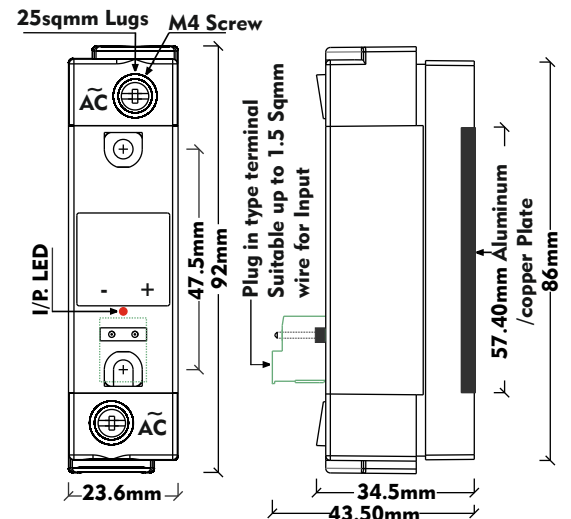
Solenoid Valve / DC Load Application For Power Mosfet



- Power MOSFET works for Unregulated Power Supply (Transistor will not work for Unregulated Power Supply)
- Power MOSFET having voltage drop of milli voltage so less heat generation (transistor having voltage drop more than 1.2VDC so higher heat generation)



803 MODEL DIMENSION



MODEL 905 - 3 PHASE MOTOR CONTROL

3 PH FORWARD/REVERSE SEMICONDUCTOR MOTOR STARTER WITH OVERLOAD/SINGLE PHASE PROTECTION

MODEL 905 3FR



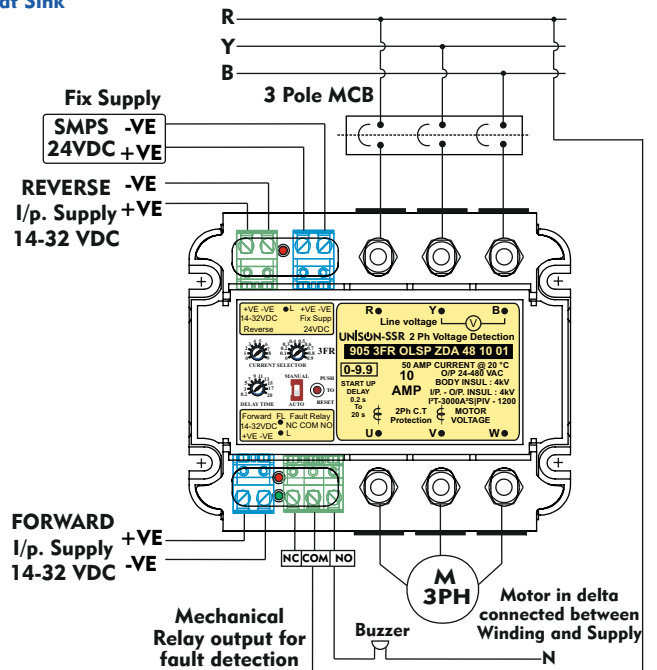
U Phase and Y Phase Motor Current Detection | Y Phase and B Phase Voltage Detection

- Fwd I/p. Supp: 14-32 VDC/5-6 mA (Green LED) | Rev I/p. Supp: 14-32 VDC/5-6 mA (Red LED)
- Fix Supply: 22-26VDC/38 mA | O/P. Fault indication (Red LED) and Mechanical Relay NO/NC
- Output: 24-480 VAC (47-63 Hz) | PIV: 1200Vpk
- Body insulation: 4kV for 1min | I/P. to O/P. insulation: 4kV for 1min
- Overload current setting by POT | Start delay timer POT for initial inrush current bypass
- O/P. will be OFF during Phase Failure/unbalance, Overload, Single phasing & Earth fault
- Manual Reset: O/P. latched for fault and reset after switching OFF/ON 24 VDC fix supply
- AUTO Reset: O/P. latched for 18 seconds during fault and reset after every 18 seconds.
- Available Amp Range : 05, 10, 15 Amp Load Current at 40°C with Heat Sink

ADVANTAGES :

- Single module for Forward and Reverse of 3 phase motor with inbuilt motor protection via current and voltage detection
- If both forward and reverse input signal is given then there will be interlocking of circuit and output will be OFF within 4.8 μs
- No need to use external bi metallic overload relay or MPCB protection
- Very compact design which occupies less space and has easy panel wiring
- Remote fault indication via mechanical changeover relay
- Selectable starting delay timer POT to disable false fault detection due to initial inrush current.
- Starting delay timer can solve locked rotor/shaft problem. Output will be OFF if there is current inrush after fixed delay time.

Fault condition	SSR Output	Fault red LED indication	Fault Mechanical Relay change over
Current Overload	OFF	YES	YES
Single Phasing	OFF	YES	YES
Input Phase Failure	OFF	YES	YES
Phase Unbalance	OFF	YES	YES
Locked Rotor / Shaft	OFF	YES	YES
Earth Fault	OFF	YES	YES



3 PH FORWARD SEMICONDUCTOR MOTOR STARTER WITH OVERLOAD/SINGLE PHASE PROTECTION

MODEL 905 3FW



- Fwd I/p. Supp: 14-32 VDC/5-6mA (Green LED)
- Output: 24-480VAC (47-63 Hz)
- Fix Supply: 22-26VDC / 38 mA
- Output Fault indication (Red LED) and Mechanical Relay NO/NC
- PIV : 1200Vpk
- Body insulation: 4kV for 1 min
- I/P. to O/P. insulation: 4kV for 1 min
- Over load current setting by POT
- Available Amp Range : 05, 10, 15 Amp Load Current at 40°C with Heat Sink

SSR SELECTION FOR 3 PHASE MOTOR (INDUCTIVE LOAD)

905 MODEL	HP / kW Rating	05 AMP	10 AMP	15 AMP
	HP Rating	Upto 3	Upto 5	Upto 7.5
	kW Rating	Upto 2.2	Upto 3.7	Upto 5.5

OVER CURRENT SELECTOR POT

POT INDICATION	CURRENT RATING
0.5 TO 5	05 A
0 TO 9.9	10 A
0 TO 14.35	15 A

STARTING DELAY TIME POT

0.2 Second To 20 Second

MANUAL

MANUAL/AUTO RESET SWITCH
AUTO TIME: 18 Seconds



Output will be latched for any fault condition and reset after pressing these reset button for 24 VDC fix supply ON/OFF.

MODEL 905 - 3 PHASE CONTROL

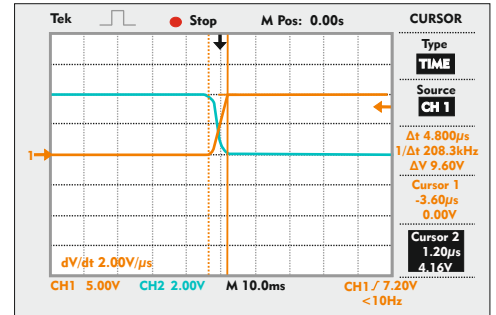
3 PHASE FORWARD & REVERSE SSR

MODEL 905 3FR



- Forward & Reverse Input: 20-32VDC, 10-16mA
- Forward I/p. signal LED Indication : **Red**
- Reverse I/p. signal LED Indication: **Green**
- Interlocking Within : 4.8 μ s
- Output : 24-480VAC (47-63 Hz)
- PIV : 1200Vpk
- Zero Cross Over SSR
- Body isolation : 4kV for 1min
- I/P. to O/P. isolation : 4kV for 1min
- Available Amp Range : 25, 50, 90 Amp Load Current at 40°C with Heat Sink

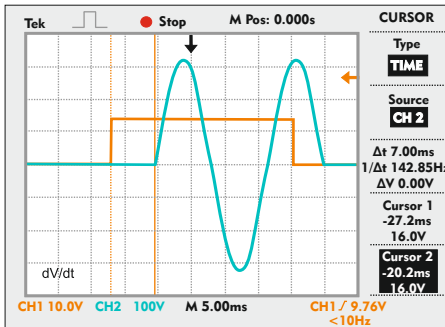
3FR Interlocking Waveform of ZDA



Interlocking Time Period \leq 4.80 μ s

3 PHASE DC TO AC & UNIVERSAL INPUT SSR

ZERO CROSSOVER Waveform



Input : 4-32VDC, 15-20mA & 12-270VAC/DC, 5-20mA

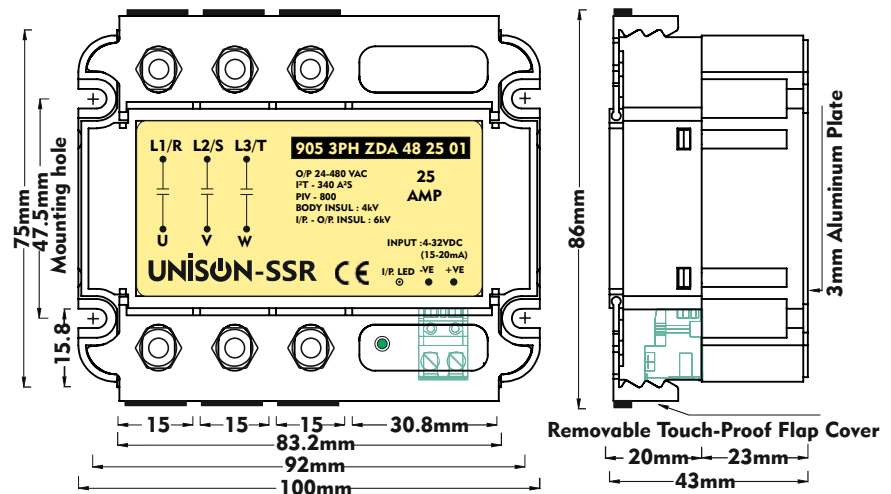
- Input LED Indication: **Green**
- Output : 24-480VAC (47-63 Hz)
- PIV : 800/1200Vpk
- Zero Cross Over SSR
- Body insulation : 4kV for 1min
- I/P. to O/P. insulation : 6kV for 1min
- Short Circuit Current Rating : 10kA for <3ms

Available Amp Range:
25, 40, 50, 90 Amp

MODEL 905



APPLICATIONS



UNISON CONTROLS PVT. LTD.

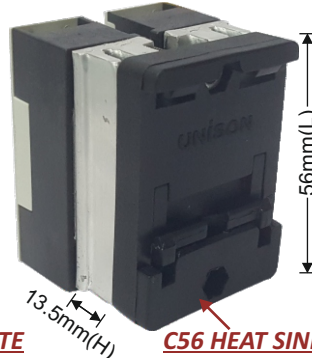
SOLID STATE RELAY

MODEL 101 DC TO AC SOLID STATE RELAY

Approved By
 **LEAD - FREE**
RoHS
 COMPLIANT
 EN-60947-5-1

10AMP MODEL 101 ZDA 48 10 00 AL5

ITEM	HEAT SINK	LOAD CURRENT
101 ZDA 48 10 00 AL5	NO - DINRAIL ONLY	05 Amp
101 ZDA 48 10 00 AL5	C-56 + DIN	10 Amp



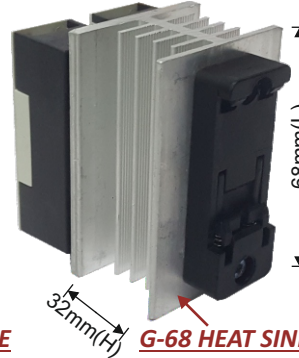
5mm AL PLATE
 Only AL plate takes 05 Amp
 Load Current at 40°C.

C56 HEAT SINK
 10 Amp Load Current
 at 40°C.

Model 101 - 10Amp
 Zero Cross Over SSR
Input : 4-32VDC/4-16mA
 Input LED Indication : **Green**
Output : 24-480VAC (47-63 Hz)
PIV : 800Vpk
I²T : 32A²S for 9.6mS
Body isolation : 6kV for 1min
I/P. to O/P. isolation : 6kV for 1min
 Inbuilt surge voltage protection of
 2700Vrms

16AMP MODEL 101 ZDA 48 16 00 AL5

ITEM	HEAT SINK	LOAD CURRENT
101 ZDA 48 16 00 AL5	NO - DINRAIL ONLY	08 Amp
101 ZDA 48 16 00 AL5	C-56 + DIN	12 Amp
101 ZDA 48 16 00 AL5	G-68 + DIN	16 Amp



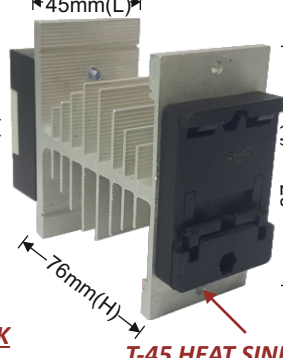
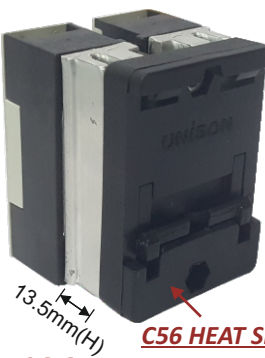
5mm AL PLATE
 Only AL plate takes 08 Amp
 Load Current at 40°C.

G-68 HEAT SINK
 16 Amp Load Current
 at 40°C.

Model 101 - 16Amp
 Zero Cross Over SSR
Input : 4-32VDC/4-16mA
 Input LED Indication : **Green**
Output : 24-480VAC (47-63 Hz)
PIV : 800Vpk
I²T : 128A²S for 9.6mS
Body isolation : 6kV for 1min
I/P. to O/P. isolation : 6kV for 1min
 Inbuilt surge voltage protection of
 2700Vrms

25AMP MODEL 101 ZDA 48 25 00 AL5

ITEM	HEAT SINK	LOAD CURRENT
101 ZDA 48 25 00 AL5	C-56 + DIN	14 Amp
101 ZDA 48 25 00 AL5	G-68 + DIN	18 Amp
101 ZDA 48 25 00 AL5	T-45 + DIN	20 Amp
101 ZDA 48 25 00 AL5	B-48 + DIN	25 Amp
101 ZDA 48 25 00 AL5 - 2nos.	T-90 + DIN	24 Amp + 24 Amp



C56 HEAT SINK
 14 Amp Load Current
 at 40°C.

T-45 HEAT SINK
 20 Amp Load Current
 at 40°C.

Model 101 - 25Amp
 Zero Cross Over SSR
Input : 4-32VDC/4-16mA
 Input LED Indication : **Green**
Output : 24-480VAC (47-63 Hz)
PIV : 800Vpk
I²T : 450A²S for 9.6mS
Body isolation : 6kV for 1min
I/P. to O/P. isolation : 6kV for 1min
 Inbuilt surge voltage protection of
 2700Vrms

UNISON CONTROLS PVT. LTD.

SOLID STATE RELAY

MODEL 101 DC TO AC SOLID STATE RELAY

Approved By
CE
 EN-60947-5-1
LEAD - FREE
RoHS
COMPLIANT

40AMP MODEL 101 ZDA 60 40 00 AL5

< SHORT CIRCUIT PROTECTED MODEL >



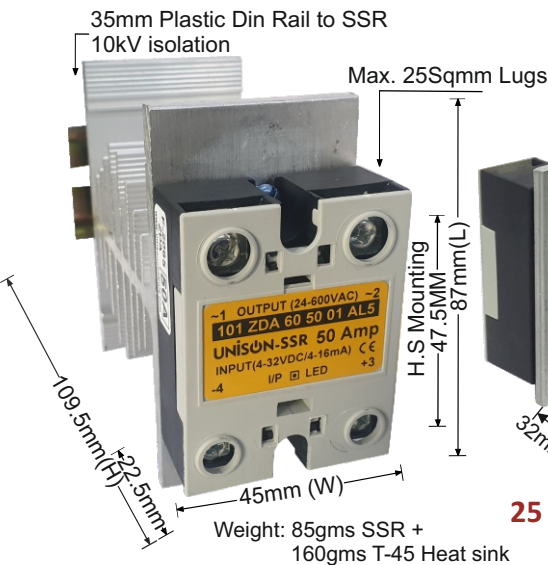
ITEM	HEAT SINK	LOAD CURRENT
101 ZDA 60 40 00 AL5	C-56 + DIN	18 Amp
101 ZDA 60 40 00 AL5	G-68 + DIN	22 Amp
101 ZDA 60 40 00 AL5	T-45 + DIN	30 Amp
101 ZDA 60 40 00 AL5	B-48 + DIN	35 Amp
101 ZDA 48 40 00 AL5 - 2nos.	T-90 + DIN	35 Amp + 35 Amp



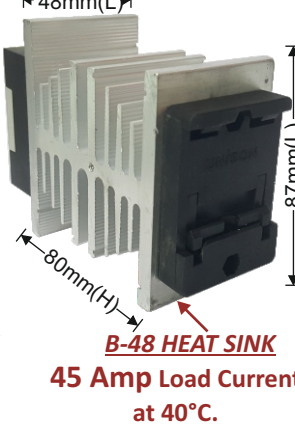
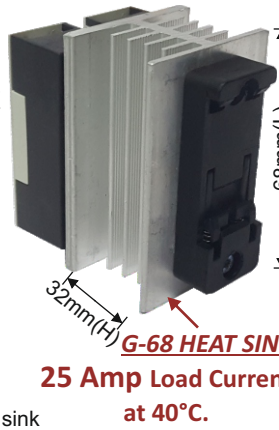
Model 101 - 40Amp Zero Cross Over SSR
Input : 4-32VDC/4-16mA
Input LED Indication : Green
Output : 24-600VAC (47-63 Hz)
 Short Circuit Protection by "B" Curve DP MCB
09Amp Load Current/10Amp DP "B" Curve DP MCB
PIV : 1600Vpk, **I²T** : 1060A²S for 9.6mS
Body isolation : 6kV for 1min
I/P. to O/P. isolation : 8kV for 1min
 Inbuilt surge voltage protection of 2700Vrms

50AMP MODEL 101 ZDA 60 50 01 AL5

< SHORT CIRCUIT PROTECTED MODEL >

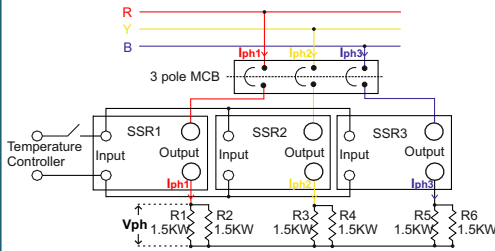


ITEM	HEAT SINK	LOAD CURRENT
101 ZDA 60 50 01 AL5	C-56 + DIN	20 Amp
101 ZDA 60 50 01 AL5	G-68 + DIN	25 Amp
101 ZDA 60 50 01 AL5	T-45 + DIN	35 Amp
101 ZDA 60 50 01 AL5	B-48 + DIN	45 Amp
101 ZDA 60 50 01 AL5 - 2nos.	T-90 + DIN	38 Amp + 38 Amp

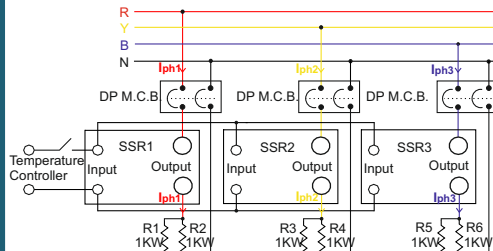


Model 101 - 50Amp Zero Cross Over SSR
Input : 4-32VDC/4-16mA
Input LED Indication : Green
Output : 24-600VAC (47-63 Hz)
 Short Circuit Protection by "B" Curve DP MCB
15Amp Load Current/16Amp DP "B" Curve DP MCB
PIV : 1600Vpk, **I²T** : 3000A²S for 9.6mS
Body isolation : 6kV for 1min
I/P. to O/P. isolation : 8kV for 1min
 Inbuilt surge voltage protection of 2700Vrms

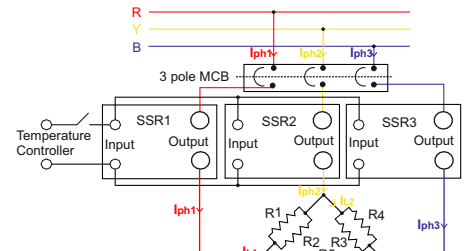
Circuit diagram 101 model - ON/OFF type Star Connection without neutral



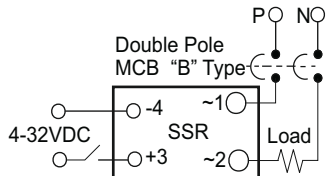
Circuit diagram 101 model - ON/OFF type Star Connection with neutral



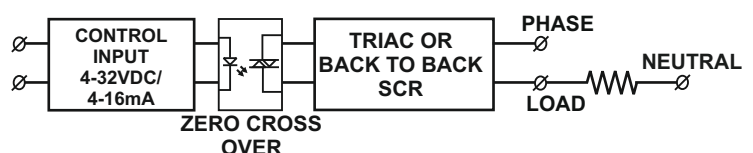
Circuit diagram 101 model - ON/OFF type Closed Delta Connection



CONNECTION DIAGRAM ZDA



ZERO CROSS OVER AC TO DC BLOCK DIAGRAM



UNISON CONTROLS PVT. LTD.

SOLID STATE RELAY

MODEL 102- 2 CHANNEL DC TO AC SOLID STATE RELAY

Approved By

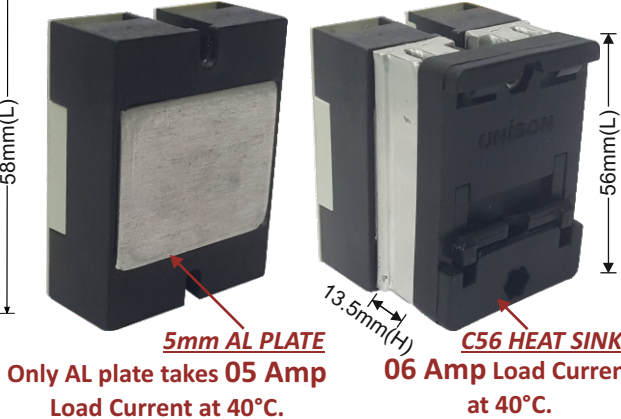
 EN-60947-5-1

LEAD - FREE

 COMPLIANT

10AMP MODEL UNI 102 ZDA 48 10/10 00

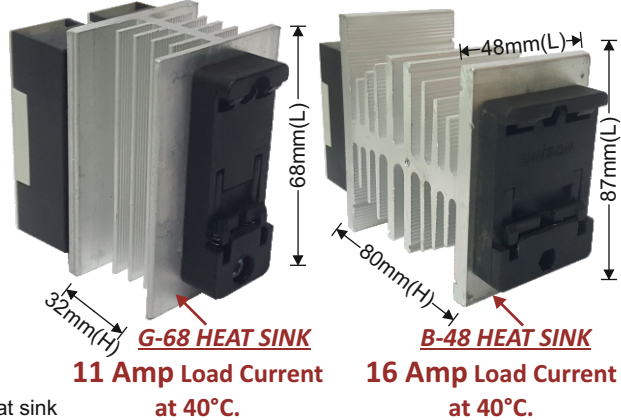
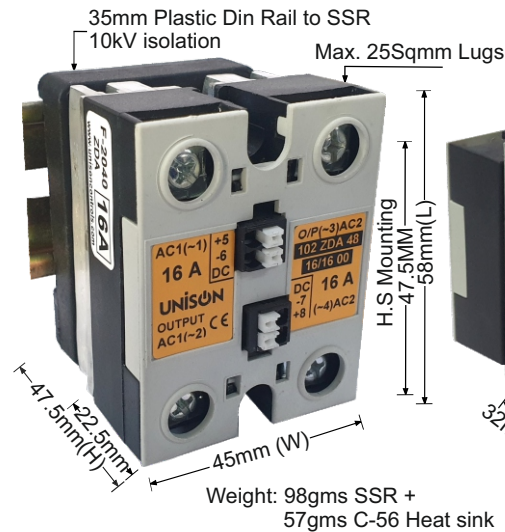
ITEM	HEAT SINK	LOAD 1 CURRENT	LOAD 2 CURRENT
102 ZDA 48 10/10 00	NO - DINRAIL ONLY	05 Amp	05 Amp
102 ZDA 48 10/10 00	C-56 + DIN	06 Amp	06 Amp
102 ZDA 48 10/10 00	G-68 + DIN	10 Amp	10 Amp



Model 102 - 10/10 Amp Zero Cross Over SSR
Input(+5/-6 & -7/+8) :
 4-32VDC/4-16mA
Input LED Indication : Green
Output(~1/~2 & ~3/~4) :
 24-480VAC (47-63 Hz)
PIV : 800Vpk
I²T : 32A²S for 9.6mS
Body isolation : 6kV for 1min
I/P. to O/P. isolation : 6kV for 1min
 Inbuilt surge voltage protection of 2700Vrms

16AMP MODEL UNI 102 ZDA 48 16/16 00

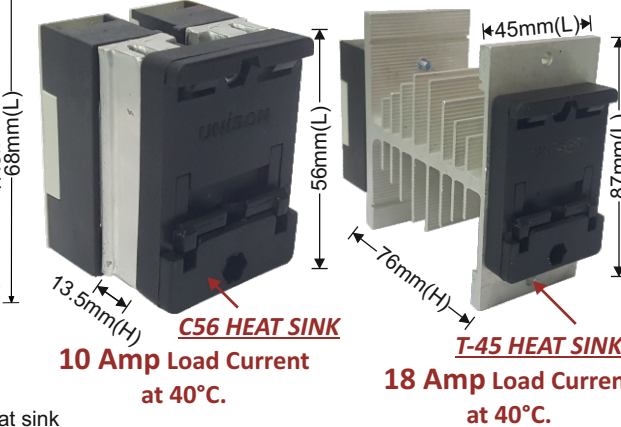
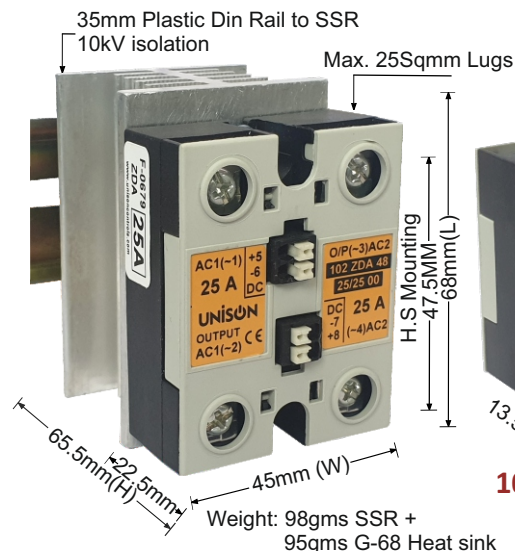
ITEM	HEAT SINK	LOAD 1 CURRENT	LOAD 2 CURRENT
102 ZDA 48 16/16 00	C-56 + DIN	09 Amp	09 Amp
102 ZDA 48 16/16 00	G-68 + DIN	11 Amp	11 Amp
102 ZDA 48 16/16 00	T-45 + DIN	14 Amp	14 Amp
102 ZDA 48 16/16 00	B-48 + DIN	16 Amp	16 Amp
102 ZDA 48 16/16 00- 2nos.	T-90 + DIN	10+10 Amp	10+10 Amp



Model 102 - 16/16 Amp Zero Cross Over SSR
Input(+5/-6 & -7/+8) :
 4-32VDC/4-16mA
Input LED Indication : Green
Output(~1/~2 & ~3/~4) :
 24-480VAC (47-63 Hz)
PIV : 800Vpk
I²T : 128A²S for 9.6mS
Body isolation : 6kV for 1min
I/P. to O/P. isolation : 6kV for 1min
 Inbuilt surge voltage protection of 2700Vrms

25AMP MODEL UNI 102 ZDA 48 25/25 00

ITEM	HEAT SINK	LOAD 1 CURRENT	LOAD 2 CURRENT
102 ZDA 48 25/25 00	C-56 + DIN	10 Amp	10 Amp
102 ZDA 48 25/25 00	G-68 + DIN	14 Amp	14 Amp
102 ZDA 48 25/25 00	T-45 + DIN	18 Amp	18 Amp
102 ZDA 48 25/25 00	B-48 + DIN	20 Amp	20 Amp
102 ZDA 48 25/25 00- 2nos.	T-90 + DIN	15+15 Amp	15+15 Amp



Model 102 - 25/25 Amp Zero Cross Over SSR
Input(+5/-6 & -7/+8) :
 4-32VDC/4-16mA
Input LED Indication : Green
Output(~1/~2 & ~3/~4) :
 24-480VAC (47-63 Hz)
PIV : 800Vpk
I²T : 450A²S for 9.6mS
Body isolation : 6kV for 1min
I/P. to O/P. isolation : 6kV for 1min
 Inbuilt surge voltage protection of 2700Vrms

UNISON CONTROLS PVT. LTD.

SOLID STATE RELAY

MODEL 102- 2 CHANNEL DC TO AC SOLID STATE RELAY

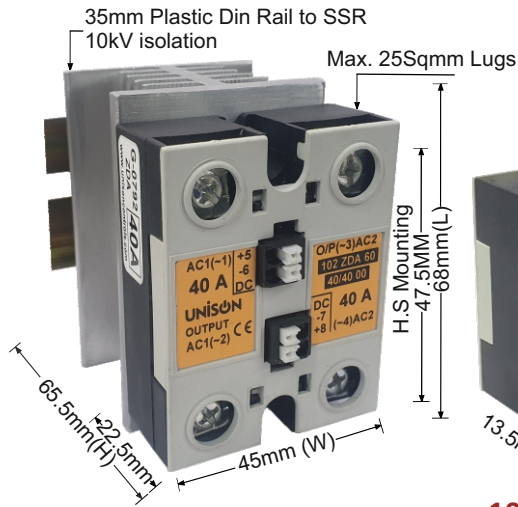
Approved By

 EN-60947-5-1

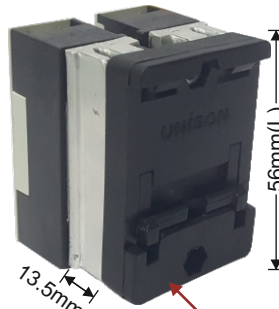
LEAD - FREE

 COMPLIANT

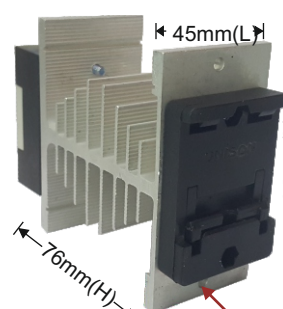
40AMP MODEL UNI 102 ZDA 60 40/40 00



Weight: 98gms SSR +
 95gms G-68 Heat sink



C56 HEAT SINK
10 Amp Load Current
 at 40°C.



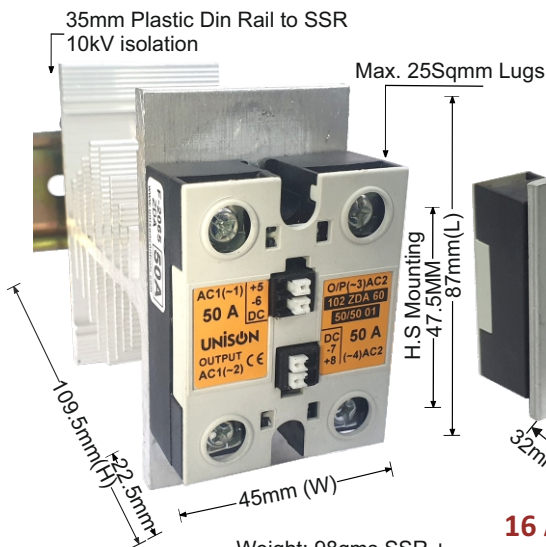
T-45 HEAT SINK
20 Amp Load Current
 at 40°C.

< SHORT CIRCUIT PROTECTED MODEL >

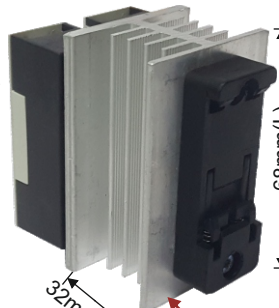
ITEM	HEAT SINK	LOAD 1 CURRENT	LOAD 2 CURRENT
102 ZDA 60 40/40 00	C-56 + DIN	10 Amp	10 Amp
102 ZDA 60 40/40 00	G-68 + DIN	15 Amp	15 Amp
102 ZDA 60 40/40 00	T-45 + DIN	20 Amp	20 Amp
102 ZDA 60 40/40 00	B-48 + DIN	24 Amp	24 Amp
102 ZDA 60 40/40 00- 2nos.	T-90 + DIN	20+20 Amp	20+20 Amp

Model 102 - 40/40 Amp
 Zero Cross Over SSR
Input(+5/-6 & -7/+8) :
 4-32VDC/4-16mA
Input LED Indication : Green
Output(~1/~2 & ~3/~4) :
 24-600VAC (47-63 Hz)
 Short Circuit Protection by
 "B" Curve DP MCB
09Amp Load Current/10Amp
 DP "B" Curve DP MCB
PIV : 1600Vpk, I^2T : 1060A²S for 9.6mS
Body isolation : 6kV for 1min
I/P. to O/P. isolation : 8kV for 1min
 Inbuilt surge voltage protection of
 2700Vrms

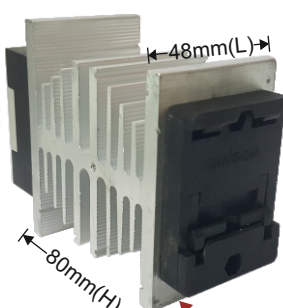
50AMP MODEL UNI 102 ZDA 60 50/50 01



Weight: 98gms SSR +
 160gms T-45 Heat sink



G-68 HEAT SINK
16 Amp Load Current
 at 40°C.



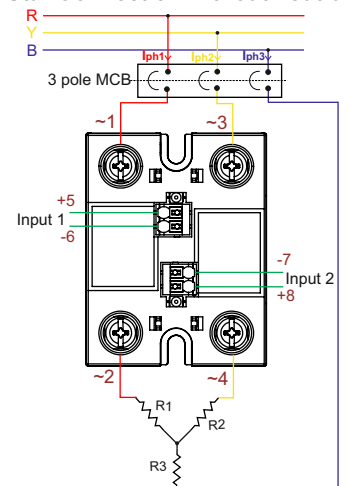
B-48 HEAT SINK
27 Amp Load Current
 at 40°C.

< SHORT CIRCUIT PROTECTED MODEL >

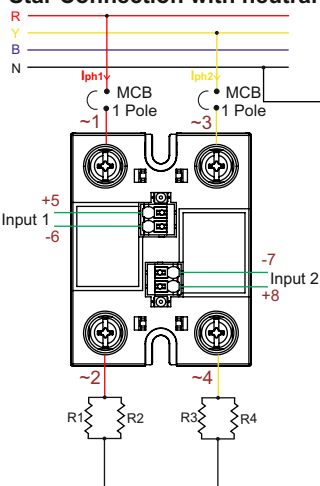
ITEM	HEAT SINK	LOAD 1 CURRENT	LOAD 2 CURRENT
102 ZDA 60 50/50 01	C-56 + DIN	10 Amp	10 Amp
102 ZDA 60 50/50 01	G-68 + DIN	16 Amp	16 Amp
102 ZDA 60 50/50 01	T-45 + DIN	24 Amp	24 Amp
102 ZDA 60 50/50 01	B-48 + DIN	27 Amp	27 Amp
102 ZDA 60 50/50 01- 2nos.	T-90 + DIN	25+25 Amp	25+25 Amp

Model 102 - 50/50 Amp
 Zero Cross Over SSR
Input(+5/-6 & -7/+8) :
 4-32VDC/4-16mA
Input LED Indication : Green
Output(~1/~2 & ~3/~4) :
 24-600VAC (47-63 Hz)
 Short Circuit Protection by
 "B" Curve DP MCB
15Amp Load Current/16Amp
 DP "B" Curve DP MCB
PIV : 1600Vpk, I^2T : 3000A²S for 9.6mS
Body isolation : 6kV for 1min
I/P. to O/P. isolation : 8kV for 1min
 Inbuilt surge voltage protection of
 2700Vrms

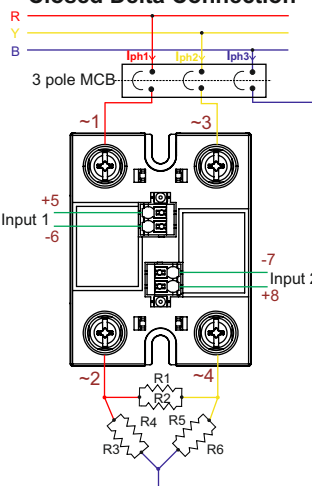
Circuit diagram 102 model - ON/OFF type Star Connection without neutral



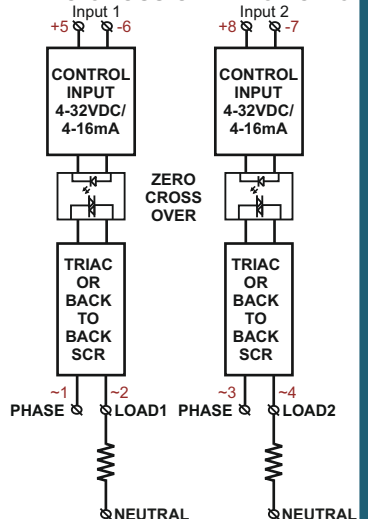
Circuit diagram 102 model - ON/OFF type Star Connection with neutral



Circuit diagram 102 model - ON/OFF type Closed Delta Connection

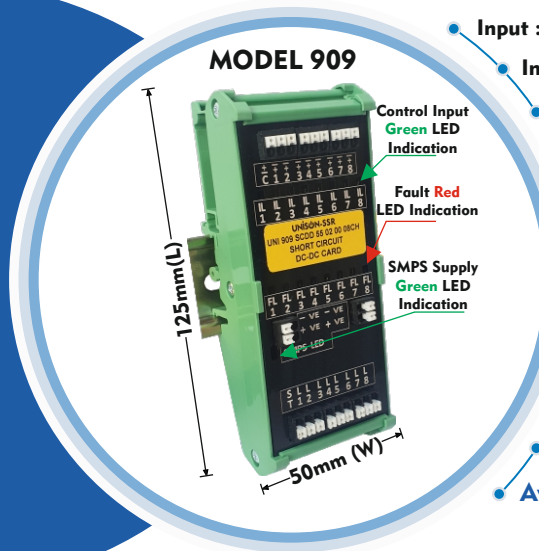


BLOCK DIAGRAM ZERO CROSS OVER AC TO DC



DC TO DC SHORT CIRCUIT PROTECTION CARD

DC TO DC SHORT CIRCUIT PROTECTION CARD (MULTICHANNEL)



- Input : 4-32VDC, 2-20mA.
- Input is Polarity Free.
- Green Input LED indication.
- Output : 10 to 55 VDC, 2 Amp.
- Red LED Fault indication.
- Inbuilt Back EMF Diode for fast switching.
- No need of External Fuse.
- Transparent conformal coating on TOP side.
- Black non transparent PU coating on BOTTOM side.
- Available Amp Range : 2 Amp



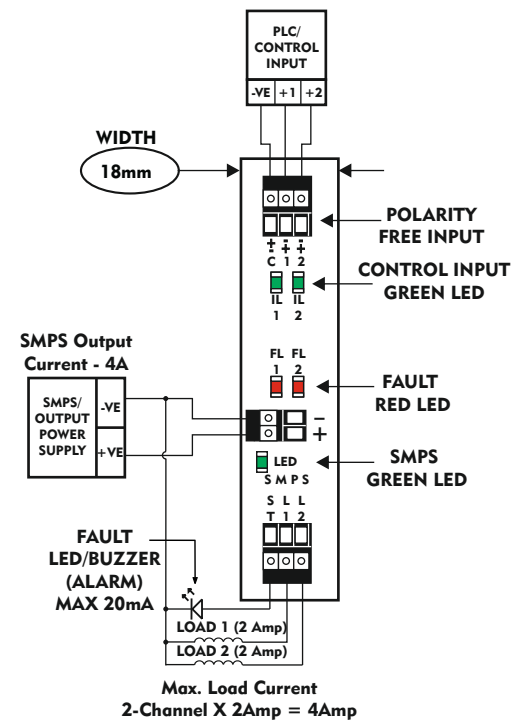
UNI 909 SCDD 55 02 00 02CH

CARD AVAILABLE

2 Channel, 4 Channel, 8 Channel, 16 Channel, 24 Channel

INPUT SUPPLY	FAULT CONDITION	OUTPUT FROM CARD	FAULT LED	STATUS INDICATION
ON	OUTPUT LOAD IS SHORT	OFF	ON	ON
OFF	OUTPUT LOAD IS SHORT	OFF	OFF	OFF
ON	OUTPUT LOAD IS OPEN	OFF	OFF	OFF
OFF	OUTPUT LOAD IS OPEN	OFF	ON	ON
ON	OVER CURRENT OR HIGH TEMPERATURE ABOVE 180 °C	OFF	ON	ON
OFF	OVER CURRENT OR HIGH TEMPERATURE ABOVE 180 °C	OFF	OFF	OFF
ON	MOSFET SHORT INSIDE CARD	ON	OFF	OFF
OFF	MOSFET SHORT INSIDE CARD	ON	ON	ON

Note: When output power supply is given from SMPS and reverse polarity connection is done on card, SMPS will shut down as per manufacturer's specifications.

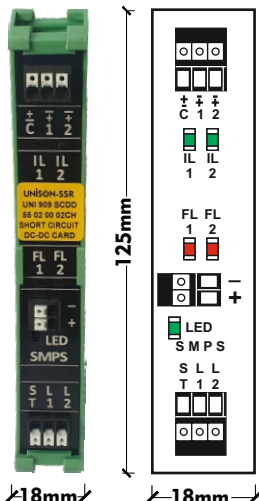


UNI 909 SCDD 55 02 00 02CH

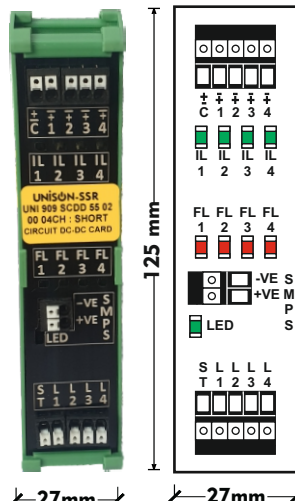
UNI 909 SCDD 55 02 00 04CH

UNI 909 SCDD 55 02 00 08CH

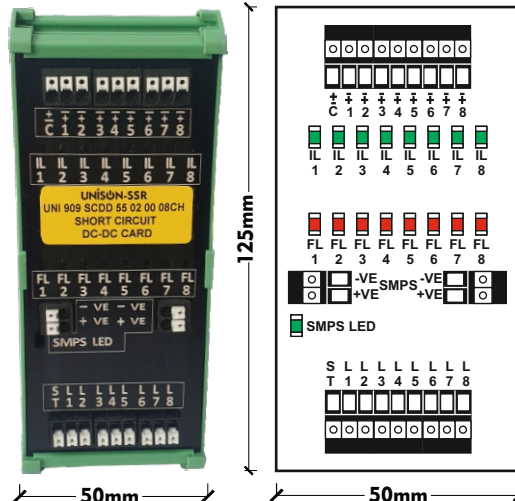
35mm Din Rail



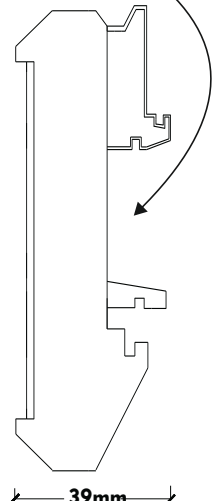
FRONT VIEW
2 CH SCDD CARD



FRONT VIEW
4 CH SCDD CARD



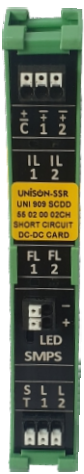
FRONT VIEW
8 CH SCDD CARD



SIDE VIEW

DC TO DC SHORT CIRCUIT PROTECTION CARD

UNISON 909 ADVANCED SHORT CIRCUIT DC TO DC CARD



**2 CH SCDD
CARD**



**4 CH SCDD
CARD**



**8 CH SCDD
CARD**

- Unison 909 card is Auto resettable. Once fault is solved, output from card will be ON. No need to depute engineer for replacement on site. Cost saving of maintenance/site engineer frequent visits for problem solving and replacement.
- Product quality is maintained using feedback from relay card. Don't need to wait for manual operator intervention to check material quality and see if the DC load is not working properly. Instant feedback increases productivity by stopping the process hence maintaining material quality and productivity
- Easy identification of particular DC load fault which helps in feedback which is required in Industry 4.0 and above.
- If you use Fuse along with SSR or Mechanical Relay than FUSE needs to manually changed after problem is resolved. FUSE size and availability near machine site is also a concern. Using FUSE will not help identify Load OPEN fault or Over temperature fault
- OUTPUT Load is protected from short circuit
- Instantaneous Load open indication
- Instantaneous MOSFET short indication
- Over current/over temperature detection of MOSFET junction temperature at 180°C
- Faster turn ON/turn OFF time - 3kHz switching response
- Easy Din Rail mountable

SLIM SSR WITH FUSE / MECHANICAL RELAY

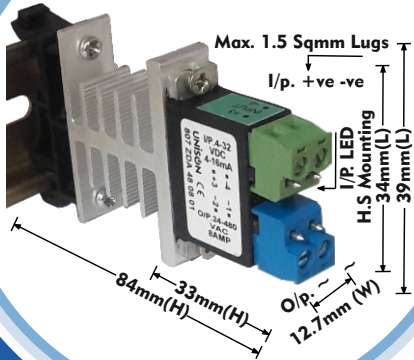


- SLIM SSR with FUSE or SLIM Mechanical relay of any make is not AUTO resettable. Maintenance/Site engineer is to be deputed for identification of problem and replacement of load and Relay module
- Product quality is not maintained. There is production loss of few minutes or hours depending on process. Visual inspection by operator or Q.C team identifies the problem in material quality and that is followed by tedious machine inspection and DC load checking manually to pin point actual problem
- Identification of particular DC load fault may take upto hours. Non compliance to industry 4.0 or higher
- Manual replacement of series Fuse after identification of problem. Availability of specific size and rating of fuse in market. FUSE will not help in Load OPEN or Over temperature fault
- No Load short circuit protection. No Load open indication
- No MOSFET short indication
- No over current/over temperature detection of MOSFET junction temperature at 180°C
- Lagged Turn ON/Turn OFF time
- Easy Din Rail mountable with socket only

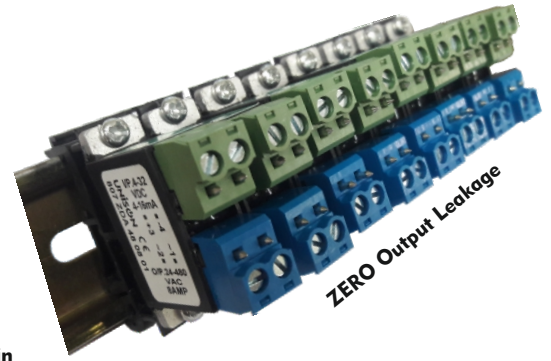
PCB MOUNTED MODEL

DC TO AC SOLID STATE RELAY

MODEL 807



- Input: 4-32VDC / 4-16mA.
- Input LED: **Green**
- Output: 24-480VAC (47-63 Hz)
- PIV: 800 or 1600 Vpk.
- Zero Cross Over SSR
- Body Insulation: 3kV for 1 min
- I/P. to O/P. Insulation: 3kV for 1 min
- Green** Plug in type cage clamp terminal Block
- Blue** Plug in type cage clamp terminal Block
- Available Amp Range : 8 Amp
Load Current at 40°C with Heat Sink



DC TO DC SOLID STATE RELAY

Input: 3-32VDC / 4-16mA

Input LED: **Green**

Output: 5-100VDC

Body Insulation: 3kV for 1min

I/P. to O/P. Insulation: 3kV for 1min

ON State Voltage Drop: $\leq 0.3V_{dc}$

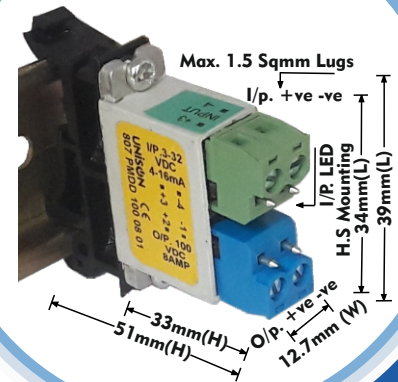
Turn ON time: 2.5 mS

Turn OFF time: 40 μ S

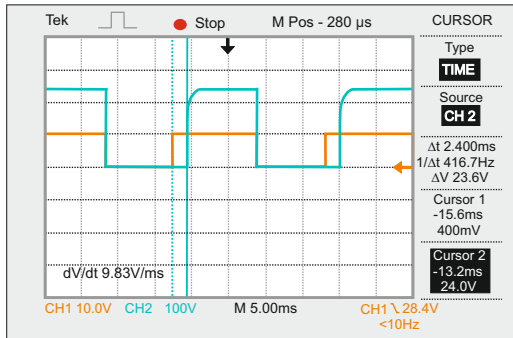
No Leakage Current at output side

Available Amp Range : 4 Amp
Load Current without Heat Sink

MODEL 807



Switching Response Time 2.4ms
Waveform of
Power MOSFET - Input to Output



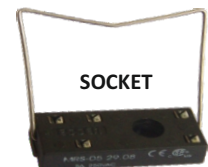
DC TO AC SOLID STATE RELAY

MODEL 806



- Polarity Free Input: 4-32VDC/4-16mA
- Input LED: **Green**
- Output: 24-480VAC (47-63 Hz) - 5Amp
- I/P. to O/P. Insulation: 2.5kV for 1 min
- PIV: 800 Vpk
- DC TO DC SOLID STATE RELAY**
- Polarity Free Input: 4-32VDC/4-16mA
- Output: 5-100VDC - 5 Amp
- I/P. to O/P. Insulation: 2.5kV for 1 min
- Turn ON time: 2.5 mS, Turn OFF time: 40 μ S

DC TO DC SOLID STATE RELAY



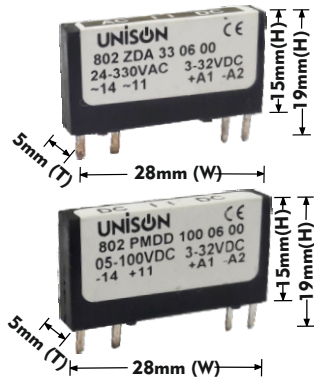
Difference Between
Power MOSFET & Transistor

Power MOSFET	Transistor
High Speed ON/OFF (High Frequency)	Low Speed ON/OFF
High Power Capacity	Low Power Capacity
Voltage Drop Across Power MOSFET is Less	Voltage Drop Across Transistor is more
Size of Heat sink less	Size of Heat sink is more

PCB MOUNTED MODEL

DC TO AC SLIM SOLID STATE RELAY

MODEL 802



- Input: 3-32VDC, 5-15mA
- Output: 24-330VAC (47-63 Hz)
- PIV: 700 Vpk
- I/P. to O/P. insulation: 2.5kV for 1min

DC TO DC SLIM SOLID STATE RELAY

- Input: 3-32VDC/5-15mA
- Output: 5-100VDC
- Turn ON time: 2.5 mS
- Turn OFF time: 40 μ S
- Available Amp Range: 2 Amp

Jumper For +VE Common Terminal Press Type



802 SLIM SOCKET

- > Polarity free Input : 6-32VDC in socket
- > Jumper for +VE or -VE common in socket
- > Input LED Indication with socket

DC TO AC SOLID STATE RELAY

Input: 4-32VDC, 5-15mA

Output: 24-330VAC (47-63 Hz) - 3 Amp

PIV: 800 Vpk

I/P. to O/P. insulation: 2.5kV for 1min

DC TO DC SOLID STATE RELAY

Input: 4-32VDC, 5-15mA

Output: 5-200VDC - 5 Amp

I/P. to O/P. insulation: 2.5kV for 1min

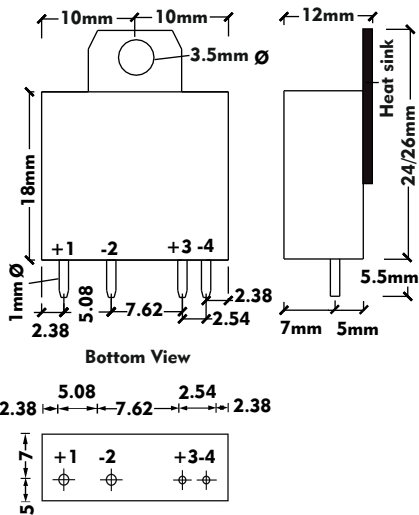
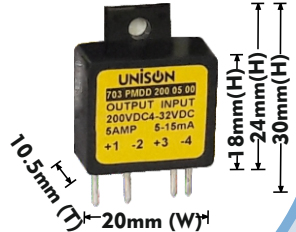
Turn ON time: 2.5 mS

Turn OFF time: 40 μ S

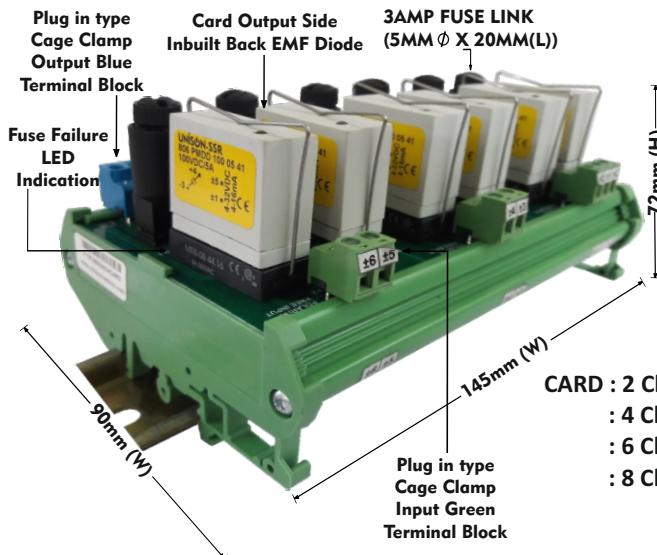
MODEL 703

DC TO AC SSR

DC TO DC SSR

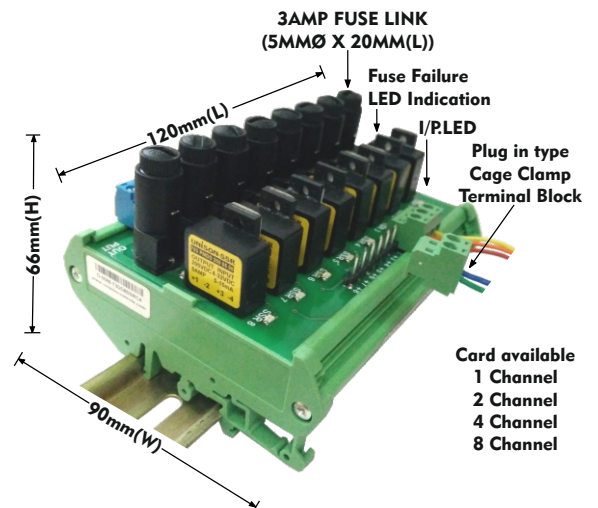


MODEL 806 INTERFACE RELAY CARD - 6 CHANNEL



- CARD : 2 Channel
: 4 Channel
: 6 Channel
: 8 Channel

MODEL 703 INTERFACE MODULE CARD WITH DIODE - 8 CHANNEL



- Card available
1 Channel
2 Channel
4 Channel
8 Channel

CURRENT PROPORTIONAL VOLTAGE MODULE

8 CHANNEL CURRENT PROPORTIONAL VOLTAGE MODULE

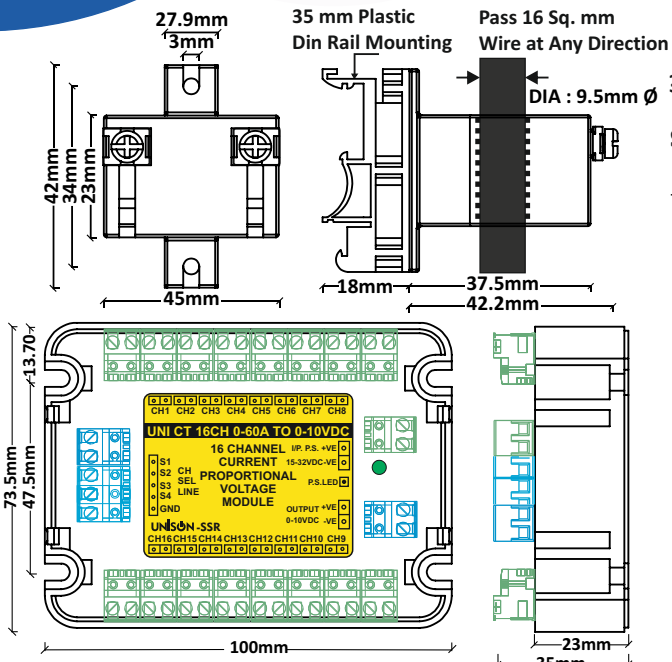
8 CHANNEL MODULE



- 0 TO 60 AMPERE PROPORTIONAL 0 TO 10 VDC.
- Read from 2 Ampere. Accuracy: $\pm 2\%$ of Rated Value. (1 Amp = 0.166 VDC)
- 8 CHANNEL can be selected via Digital channels of PLC.
- Output has to be scanned in cyclic continuous manner from PLC.
- Current Transformer can not be damaged due to short circuit or Motor Inrush Current up to 20 times the Rated Current.
- CT is suitable for maximum 10 sq. mm pin type bootless lugs and 16 sq. mm wire
- Connect any length of wire from CT to MODULE
- Isolated Input Digital Selector Signal : 3-32 VDC/ 1-20mA
- I/P. Regulated Power Supply : 15 to 32 VDC/ 25 mA
- Application: Current Monitor/ Heater Failure Analysis
- Available : 08, 16 Channels

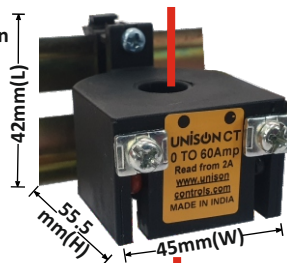
Scanning for 8 Input CH1 TO CH8

Isolated Digital Signals			
S3	S2	S1	O/P
0	0	0	CH1
0	0	1	CH2
0	1	0	CH3
0	1	1	CH4
1	0	0	CH5
1	0	1	CH6
1	1	0	CH7
1	1	1	CH8

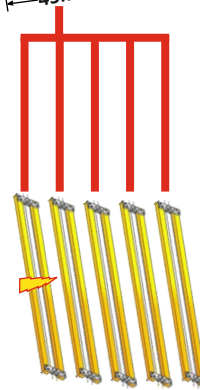


16 CHANNEL CURRENT PROPORTIONAL VOLTAGE MODULE

16 CHANNEL MODULE

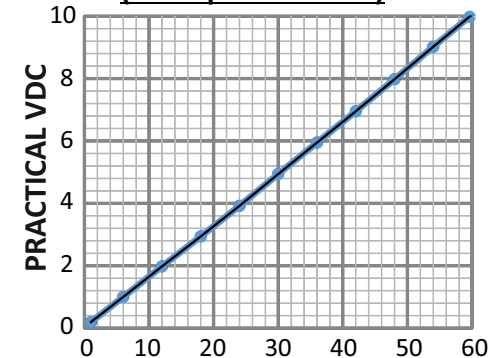


8 or 16 X Nos. Included



HEATER FAILURE INDICATION IN MULTIPLE PARALLEL HEATER CONNECTION.

0-60 Amp Proportional to 0-10 VDC (1 Amp = 0.16 VDC)



Scanning for 16 Input CH1 TO CH16

Isolated Digital Signals				
S4	S3	S2	S1	O/P
0	0	0	0	CH1
0	0	0	1	CH2
0	0	1	0	CH3
0	0	1	1	CH4
0	1	0	0	CH5
0	1	0	1	CH6
0	1	1	0	CH7
0	1	1	1	CH8
1	0	0	0	CH9
1	0	0	1	CH10
1	0	1	0	CH11
1	0	1	1	CH12
1	1	0	0	CH13
1	1	0	1	CH14
1	1	1	0	CH15
1	1	1	1	CH16

0-60 Amp Proportional to 0-10 VDC (1 Amp = 0.166 VDC)

AMP	THEORY VDC	AMP	THEORY VDC
2	0.332	15	2.49
3	0.498	20	3.32
4	0.664	25	4.15
5	0.83	30	4.98
6	0.996	35	5.81
7	1.162	40	6.64
8	1.328	45	7.47
9	1.494	50	8.3
10	1.66	55	9.13
11	1.826	60	9.96

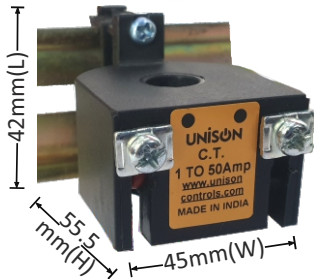
RS 485 CURRENT MONITORING MODULE

8 CHANNEL RS 485 CURRENT MONITORING MODULE

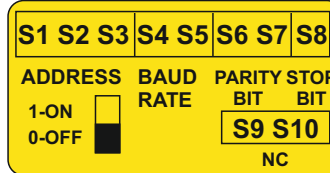
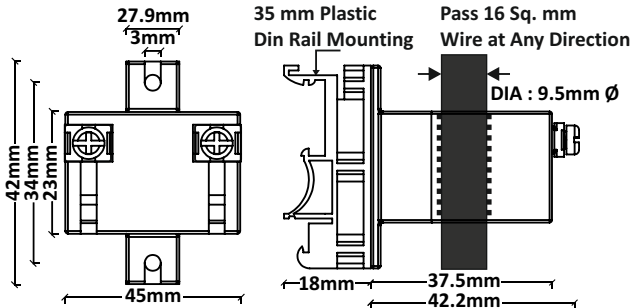
8 CHANNEL MODULE



- 1 to 50 AMPERE current can be detected via RS485 communication MODBUS.
- AC AVERAGE CURRENT is measured for ZERO CROSS OVER switching
- ADDRESS / BAUD RATE / PARITY and STOP bit is selectable on the module.
- Here wire can be passed in any direction from CTs and are interchangeable
- ON the GO current data is available for each channel.
- No need to scan individual channels and have delayed response time.
- Maximum 8 module can be connected per MODBUS Network. Module address range from 71 to 78 (Decimal) is selectable and must be unique
- 8 channel current module x 8 number = 64 CT can be connected
- 16 channel current module x 8 number = 128 CT can be connected
- I/P. Regulated Power Supply : 15 to 32 VDC/ 25 mA



8 or 16 X Nos. Included



Address Selection			
S1	S2	S3	Address in DEC
0	0	0	71
0	0	1	72
0	1	0	73
0	1	1	74
1	0	0	75
1	0	1	76
1	1	0	77
1	1	1	78

Baud Rate Selection		
S4	S5	Baud Rate bits/sec
0	0	9600
0	1	19200
1	0	57600
1	1	115200

Parity Bit Selection		
S6	S7	Parity Bit
0	0	None
0	1	Odd
1	0	Even
1	1	Not Application

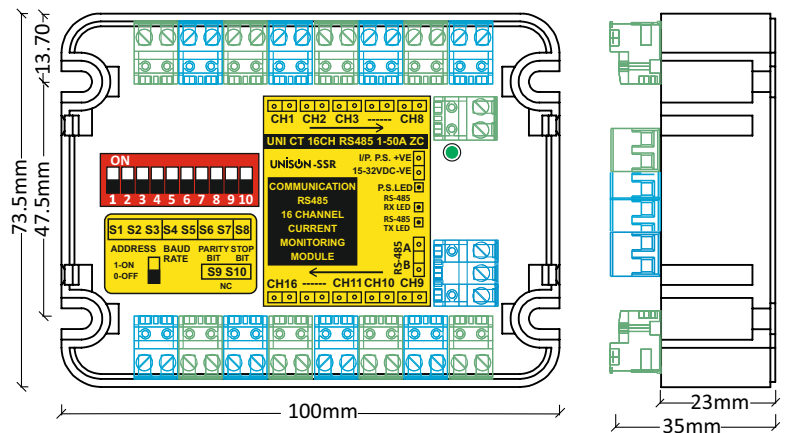
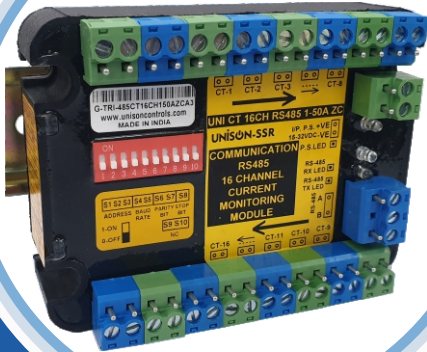
Stop Bit Selection	
S8	Stop Bit
0	1-bit
1	2-bits

INPUT REGISTER (READ ONLY)

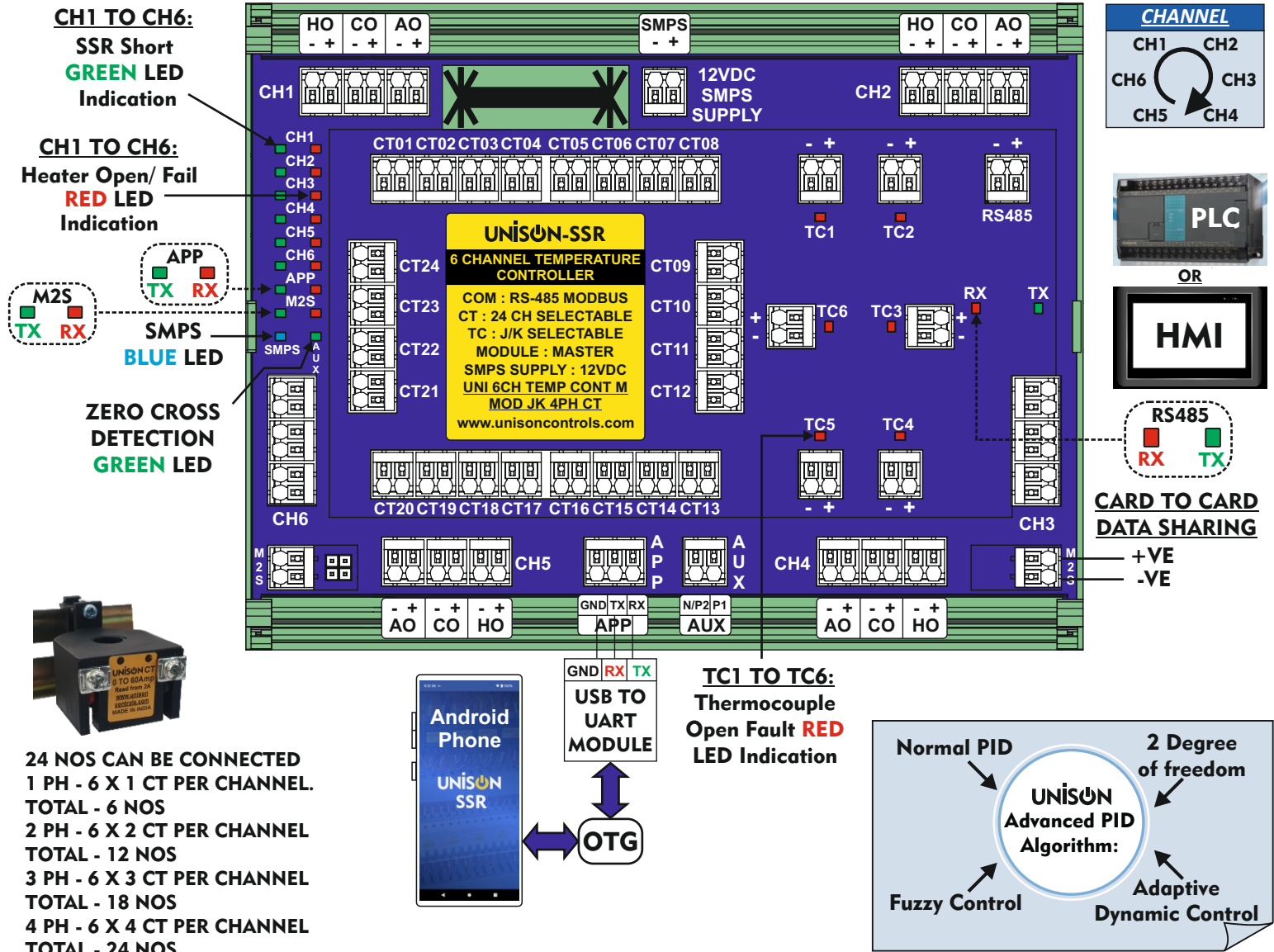
Address	Relative Address	Details	Value	Scaling
30001	0x0000	CT - 1 Measured Current	0.00 to 50.00	100:1
30002	0x0001	CT - 2 Measured Current	0.00 to 50.00	100:1
...
30008	0x0007	CT - 8 Measured Current	0.00 to 50.00	100:1
...
30015	0x0014	CT - 15 Measured Current	0.00 to 50.00	100:1
30016	0x0015	CT - 16 Measured Current	0.00 to 50.00	100:1

16 CHANNEL RS 485 CURRENT MONITORING MODULE

16 CHANNEL MODULE



6 CH TEMPERATURE CONTROLLER RS485 CARD

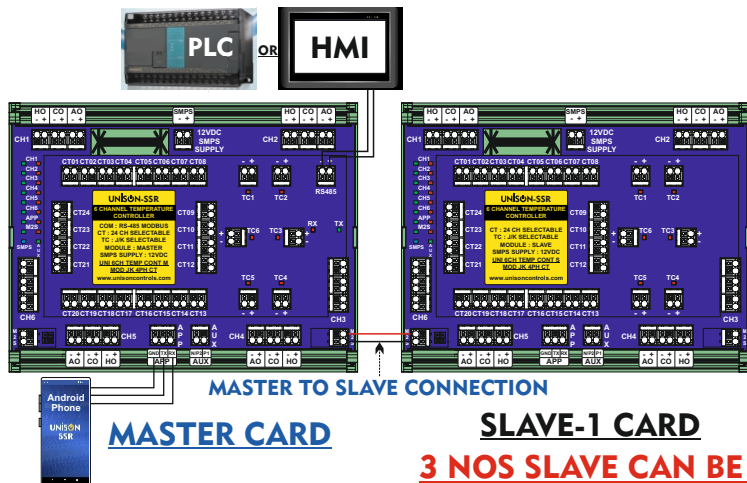


FEATURES:

- **6 CHANNEL INDIVIDUAL TEMPERATURE CONTROLLER CARD. J OR K THERMOCOUPLE SELECTION BASED ON CARD. GROUNDED OR UNGROUNDED TC CAN BE CONNECTED**
- **PID CONTROL + FUZZY CONTROL + 2 DEGREE OF FREEDOM + ADAPTIVE CONTROL ALONG WITH SHEAR HEAT DETECTION FOR MAINTAINING ACCURATE TEMPERATURES**
- **RS485 COMMUNICATION FOR DIRECT INTERFACE TO HMI OR PLC**
- **UNISON MOBILE ANDROID APPLICATION FOR CONTROL AND CONFIGURATION OF CARD**
- **24 CT CAN BE CONNECTED TO CARD. CURRENT INDICATION AND PROTECTION FOR EACH CHANNEL AVAILABLE**
- **HEATER FAILURE INDICATION, SSR SHORT INDICATION, TC FAILURE AND CONFIGURABLE ALARM IS AVAILABLE. COLD START FEATURE ALSO AVAILABLE**
- **SELECTABLE RAMP/SOAK CONTROL UP TO 8 PROFILES CAN BE SELECTED AND SET VIA HMI/PLC OR ANDROID APPLICATION**
- **EACH CHANNEL CAN BE CONFIGURED FOR HEAT ONLY OR HEAT+COOL CONTROL**
- **MASTER CARD CAN BE CONNECTED TO 3 SLAVE CARDS SO TOTAL 24 TEMPERATURES ZONES CAN BE CONTROLLED**

6 CH TEMPERATURE CONTROLLER RS485 CARD

MASTER WITH SLAVE CARD CONNECTION



**3 NOS SLAVE CAN BE
CONNECTED SIMILARLY**

Specifications

- Power Supply: 12 VDC SMPS dedicated
- Auxiliary Supply: 230 VAC to 440 VAC 50/60 Hz
- Operating Temperature: 0 °C to 75 °C

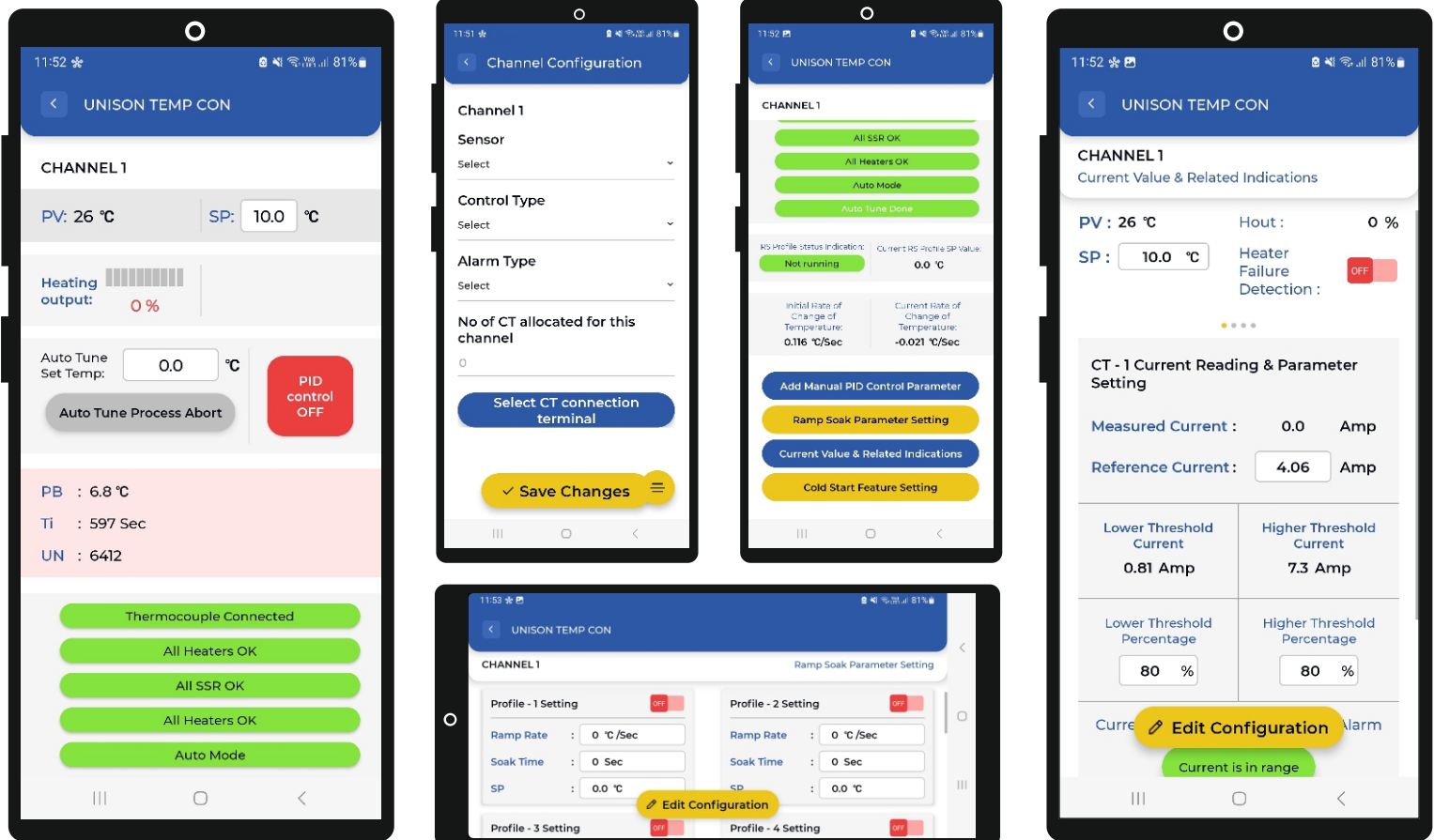
Communication

- Configurable Slave Address: From 1 to 247
- Configurable Baud Rate: 9600 bits/sec, 19200 bits/sec, 57600 bits/sec or 115200bits/sec
- Configurable Parity Bit: None, Even or Odd
- Configurable Stop Bit: 1 bit or 2 bits

ORDER FORMAT

UNI	6CH	TEMP CONT	M	MOD	JK	1PH CT
UNISON	6 CHANNEL	TEMPERATURE CONTROLLER	M : MASTER S : SLAVE	MODBUS	J OR K THERMO-COUPLE	$1PH CT \times 6 = 6$ $2PH CT \times 6 = 12$ $3PH CT \times 6 = 18$ $4PH CT \times 6 = 24$

UNISON MOBILE ANDROID APPLICATION SCREENS



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 Environmental & Dehumidifier Chamber	 Vending machine	 Pet Bottle Moulding Machine	 Plastic Dryer	 Rubber Molding Machine	 Blister Packing Machinery
 Plastic Extrusion	 Injection moulding	 Thermoforming machine	 Circular Looms	 Solenoid Valve Pneumatic Valve DC Plunger	

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