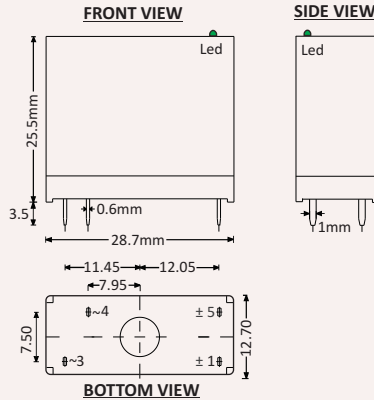
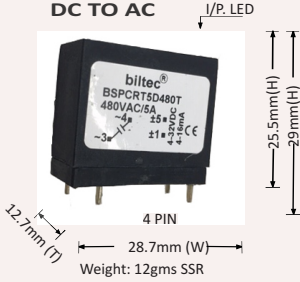


# SOLID STATE RELAY

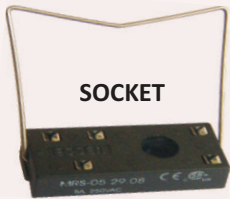
ISO 9001:2015 & ISO 14001:2015 CERTIFIED by InterConformity GmbH

5AMP-MODEL BSPCRT50480T  
BTC806ZDA480541  
DC TO AC

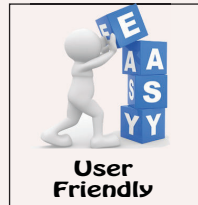
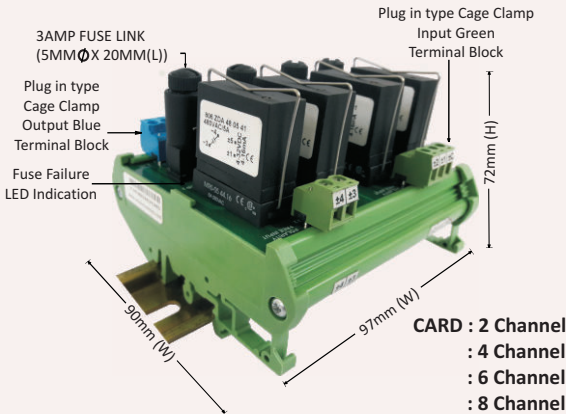


## OUTPUT AC CONTROL 3Q - TRIAC

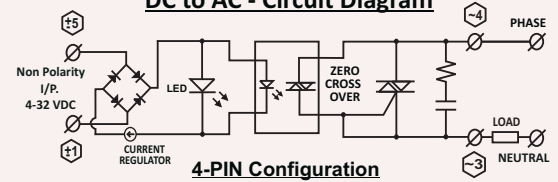
- Zero Voltage Turn-On SSR.
- Polarity free INPUT with Inbuilt Snubber.
- Rating 5Amp @25°C 24-480 VAC.
- Fire Retardant Plastic as per UL VO GRADE.
- No electro-mechanical or acoustical noise.
- Long life cycle . Up to 10<sup>11</sup> cycles
- No contact arcing, low electromagnetic interference, high surge capability
- Logic compatibility, Fast switching, Low coupling capacitance.
- SSRs can be provided as surface-mount technology (SMT)parts, which means lower cost and easier SMT printed-circuit board manufacture
- High resistance to aggressive chemicals and dust due to special Potting.



MODEL BSPCRT50480T  
BTC806 ERFACE RELAY CARD - 4 CHANNEL



## DC to AC - Circuit Diagram



## Output Technical Specifications @ 25°C Unless Specified

Parameters	Symbol	Unit	05 Amp
Operating Voltage Range	V <sub>AC</sub>	V <sub>RMS</sub>	24-480 VAC 3Q TRIAC
Operating Frequency Range	f	Hz	47-63 Hz
Peak Inverse Voltage	PIV	V <sub>PK</sub>	800
<b>Max. Surge Voltage With Stand Capacity (&lt;1 Second)</b>	V <sub>surge</sub>	V <sub>RMS</sub>	<b>2700 V<sub>RMS</sub></b> <b>(3800 V<sub>PK</sub>)</b>
<b>Rated Operational Current AC51a @ 20°C (Resistive Load)</b>	I <sub>T</sub>	Amp	<b>05</b>
Rated Operational Current AC51a @ 55°C (Resistive Load)	I <sub>T</sub>	Amp	2.5
<b>Rated Operational Current AC53a @ 55°C (Inductive Load-Motor)</b>	I <sub>T</sub>	Amp	<b>0.6</b>
NON Repetitive Surge Peak ON-State Current @ Rated V <sub>RRM</sub> applied for 1/2 Cycle t=10 mS/ t=8.33 mS (50 Hz/60 Hz)	I <sub>TSM</sub> @ 50 Hz	A <sub>P</sub>	<b>260</b>
	I <sub>TSM</sub> @ 60 Hz	A <sub>P</sub>	273
Maximum Single Phase Motor Rating	hp	hp	0.5
	kW	kW	0.372
Max. I <sup>2</sup> t for Fusing @ t=10 mS (50Hz)	I <sup>2</sup> t	A <sup>2</sup> s	<b>340</b>
Max. I <sup>2</sup> t for Fusing @ t=8.33 mS (60Hz)	I <sup>2</sup> t	A <sup>2</sup> s	305
Max. Peak ON-state voltage Drop	V <sub>TM</sub>	V <sub>RMS</sub>	≤ 1.2
Minimum Isolation Resistance between Input Terminals (±5,±1) to Output Terminals (~3,~4) @ 500 VDC	Ω	GΩ	50
Isolation Voltage Input Terminals (±5,±1) to Output Terminals (~3,~4) for 1 Minute	V <sub>ISO</sub>	kV	2.5
Max. Rate of Rise OFF-State Voltage	dV/dt	V/μS	400
Max. Rate of Rise OFF-State Current	di/dt	A/μS	22
Max. Peak Repetitive Forward OFF-State Voltage	V <sub>DRM</sub>	V	800
Max. Peak Repetitive Forward OFF-State current	I <sub>BRM</sub>	mA	0.05
Max. Peak repetitive reverse off-state Voltage	V <sub>RRM</sub>	V	800
Max. Peak repetitive reverse off-state current	I <sub>RRM</sub>	mA	0.05
Max. DC Gate Trigger Voltage	V <sub>GT</sub>	V	1.2
Max. DC Gate Trigger Current	I <sub>GT</sub>	mA	50
Turn OFF Time	t <sub>q</sub>	μS	20
Maximum Latching Current	I <sub>L</sub>	mA	100
Maximum Holding Current	I <sub>H</sub>	mA	80
Thermal Resistance R <sub>θ</sub> (Junction to case )	R <sub>θ(j-c)</sub>	°C/W	1.2
OFF state SSR Leakage current @ Rated Voltage & Frequency (Snubber Leakage)	I <sub>Leak</sub>	mA	< 0.5

## General Specification

Max Barrier Layer Temperature (T <sub>max</sub> )	< 125 °C
Ambient Temperature Range (T <sub>amb</sub> )	0-85 °C
SSR Storage Temperature Range (T <sub>st</sub> )	-40°C to 80°C
Power Factor COS φ @ Maximum Load @ 480 VAC	> 0.55
Housing Material	UL-94 V0 Grade
SSR Weight	12 grams
Test Standards:	ROHS,IP20
Pending Approvals:	UL 508,VDE ,TUV ,CSA 22-2 IEC 60947-5-1:2016 IEC 62314:2006

## Input Technical Specifications

Parameters	Unit	ZDA
Control Voltage Range	V	4-32 VDC
Reverse Polarity Protection	-	Polarity Free
Control Supply Current Consumption	mA	5-15 mA
Input Impedance (Current Regulator Circuit Impedance)	Ω	1 kΩ - 2 kΩ
Minimum Turn ON Voltage	VDC	3.5 VDC
Turn OFF Voltage	VDC	< 3.25 VDC
Control Input Status Indication	-	Green LED Indication
Maximum Turn ON Time	mS	≤ 1/2 Cycle (10 mS)
Maximum Turn OFF Time	mS	≤ 1/2 Cycle (10 mS)