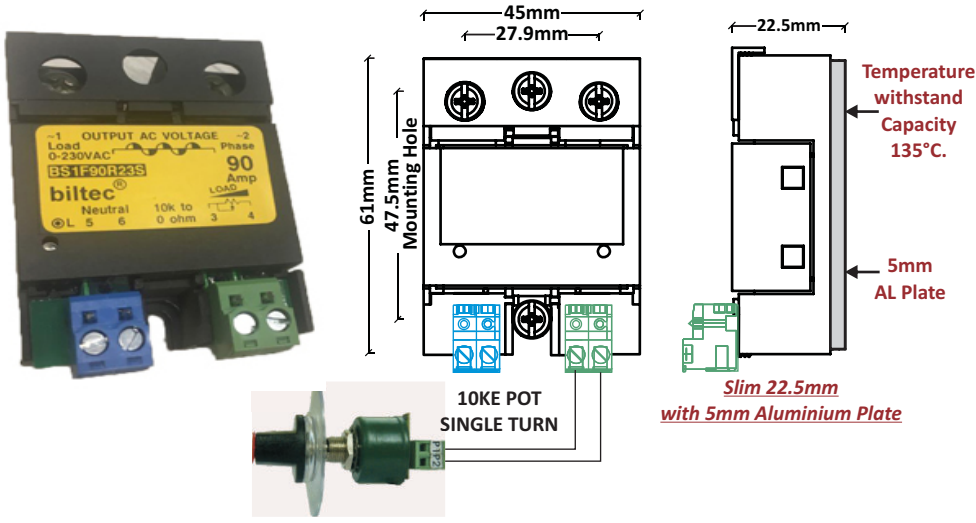


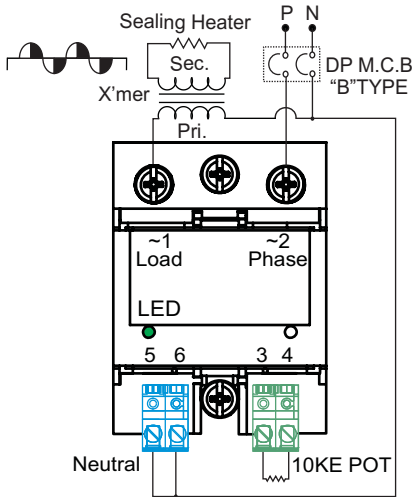
MODEL:BSR1F..90R23S 90A 25A,50,90,200 AMP



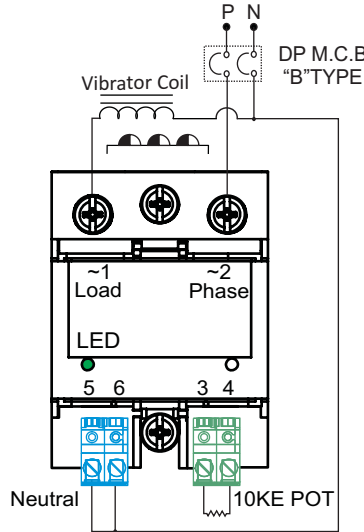
Phase Angle Control by POT with Neutral

- Product Temperature withstand 150°C.
- "22.5 MM SLIM Height" SSM Design.
- With easy open & lock IP 20 protection Flaps on O/P Terminals.
- Rating from 25 Amp,50 Amp & 90 Amp @25°C 230VAC/440VAC.
- Short Circuit Protected SSM up to 63 Amp per phase current by help of suitable "B" curve MCB.
- No need to use semiconductor Fuse due to short circuit protected SSM.
- Fire Retardant Plastic as per UL94 VO GRADE.
- New improved SEMS Screw - Washers Output terminals.
- Improved Direct Bonded Copper (DBC) for higher Amp MODULES.
- High resistance to aggressive chemicals and dust due to special Potting.
- Logic compatibility, Fast switching, Low coupling capacitance.
- Inbuilt transient voltage suppressor.

FULL CONTROL
Impulse Sealing Heater

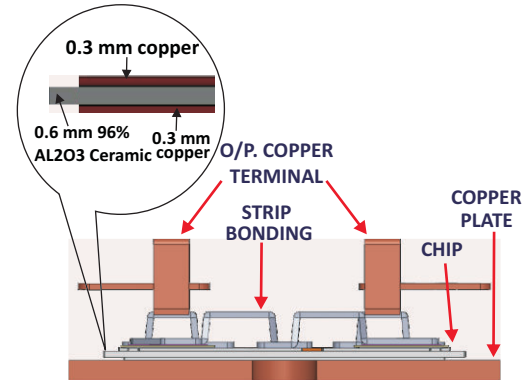


HALF CONTROL
Vibration Transformer without diode

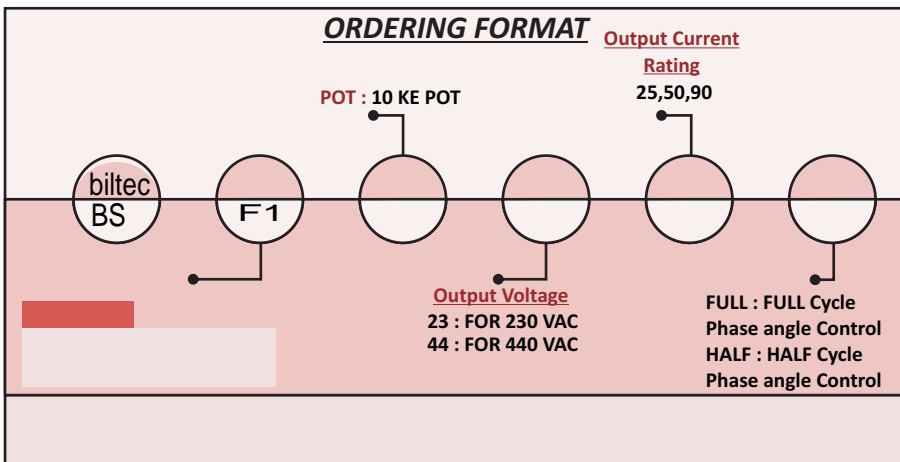


REZİSTANS KONTROL

VİBRASYON KONTROL



ORDERING FORMAT



Direct Copper Bonded (DCB) or Direct Bonded Copper (DBC) improves the conduction of heat from semiconductor chip to external heat sink as well as reduces mechanical stress in connection to major load changes. Here two layers of 0.3 mm copper is bonded to ceramic at temperature above 1020 °C. Coefficient of thermal expansion of copper is higher than ceramic (96% AL203) so a joint layer is generated between them at high temperature which will not cause thermal stress or fatigue on power output semiconductors.

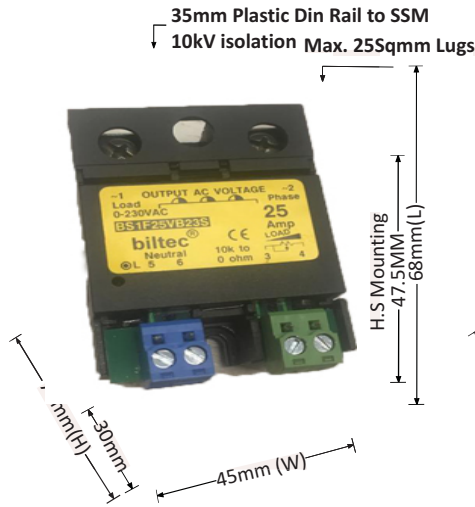
Note : BİLTEK ELEKTRİK OTOMASYON MALZEMELERİ DIŞ.TİC.SAN.

web:www.biltekelektrik.com Email : info@biltekelektrik.com

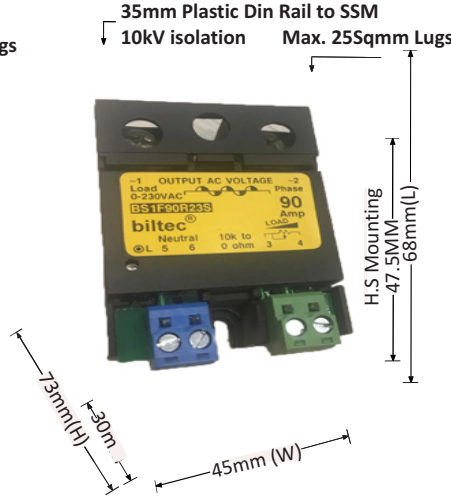
Tel: 0212 545 7349,0212 545 7349 Fax: 0212 545 7349



MODEL :BS1F25V23S 25 AMP



MODEL:BS1F..R23S90A



Max Barrier Layer Temperature (T _{max})	< 125 °C
Ambient Temperature Range (T _{amb})	0-85 °C
SSM Storage Temperature Range (T _{st})	-40°C to 80°C
Output Terminal Screw Torque Range	T = 2.5 N.m (Max.)
Power Factor COSφ @Max. Load @480VAC	> 0.55
Housing Material	UL-94 V0 Grade
Base Plate	Aluminium , Copper (Nickel Plated)
SSM Weight	≤ 120 grams
Control Input Electrical Wire Size (Max.)	Up to 2.1 sq mm(14 AWG)
Power Output Electrical Wire Size (Max.)	Up to 33.6 sq mm(2 AWG)
Test Standards:	ROHS,IP20
Pending Approvals:	UL 508,VDE ,TUV ,CSA 22-2 IEC 60947-5-1:2016 IEC 62314:2006

HEAT SINK SELECTION GUIDE

901 MODEL / HEATSINK	HEATSINK RATING	25 AMP HALF SSM	25 AMP FULL SSM	50 AMP FULL SSM
G-68	26	05	20	25
B-48	36	-	-	40

* As per UL 508 2 AWG (33.6 Sq. mm) wire can draw 115 Amp at 40°C.

PHASE ANGLE CONTROL WITH HELP OF POT

10KE POT
SINGLE TURN



Output Technical Specifications @ 25°C Unless Specified

Parameters	Symbol	Unit	25 Amp	50 Amp	90 Amp
Operating Voltage Range	V _{AC}	V _{RMS}	230 VAC / 440 VAC		
Operating Frequency Range	f	Hz	47-63 Hz		
Peak Inverse Voltage	PIV	V _{PK}	800	1200	1200
Max. Surge Voltage With Stand Capacity (<1 Second)	V _{surge}	V _{RMS}	2700 V_{RMS} (3800 V_{PK})		
Rated Operational Current AC51a @ 20°C (Resistive Load)	I _T	Amp	25	50	90
Maximum Load Short Circuit Protection Current @ 55°C	I _{sc}	Amp	-	15	63
"B" Curve D.P. MCB Rating for Short Circuit Protection	-	Amp	-	16	63
NON Repetitive Surge Peak ON-State Current @ Rated V _{RRM} applied for 1/2 Cycle t=10 mS / t=8.33 mS (50 Hz/60 Hz)	I _{TSM} @ 50 Hz	A _P	260	800	1200
	I _{TSM} @ 60 Hz	A _P	273	840	1260
Max. I²t for Fusing @ t=10 mS (50Hz)	I ² t	A ² s	340	3000	7200
Max. I ² t for Fusing @ t=8.33 mS (60Hz)	I ² t	A ² s	305	2750	6510
Max. Peak ON-state voltage Drop at Full Control	V _{TM}	V _{RMS}	≤1.2	≤1.2	≤1.2
Minimum Isolation Resistance between Input Terminals (3,4) to Output Terminals (~1,~2) @ 500 VDC	Ω	GΩ	50	50	50
Isolation Voltage Input & Output Terminal (3,4,~1,~2,5,6) to Body Isolation for 1 Minute	V _{ISO}	kV	2.5	2.5	2.5
Max. Rate of Rise OFF-State Voltage	dV/dt	V/μS	400	600	1000
Max. Rate of Rise OFF-State Current	di/dt	A/μS	22	100	150
Max. Peak Repetitive Forward OFF-State Voltage	V _{DRM}	V	800	1200	1600
Max. Peak Repetitive Forward OFF-State current	I _{DRM}	mA	0.05	0.1	0.05
Max. Peak repetitive reverse off-state Voltage	V _{RRM}	V	800	1200	1600
Max. Peak repetitive reverse off-state current	I _{RRM}	mA	0.05	0.1	0.05
Max. DC Gate Trigger Voltage	V _{GT}	V	1.2	1.5	1.5
Max. DC Gate Trigger Current	I _{GT}	mA	50	8.8	20
Turn OFF Time	t _q	μS	20	120	200
Maximum Latching Current	I _L	mA	100	160	200
Maximum Holding Current	I _H	mA	75	150	150
Thermal Resistance R _θ (Junction to case)	R _{θ(j-c)}	°C/W	0.6	0.35	0.2
OFF State SSM Leakage Current @ Rated Voltage & Frequency (Snubber Leakage)	I _{leak}	mA	For 230 VAC < 1 mA For 440 VAC < 2 mA	For 230 VAC < 1.5 mA For 440 VAC < 3 mA	
SCCR Current Rating (less than 100 μS)	I _{SCCR}	kA	-	10 kA	10 kA
Weight	W	gm	≤ 110	≤ 110	≤ 120

Digital Oscilloscope



SCR Parameter Tester



V_{TM} Tester



H.V. Insulation Break Down Tester



dv/dt Tester



I_{TSM} Tester



Note : BİLTEK ELEKTRİK OTOMASYON MALZEMELERİ DIŞ. TİC. SAN.

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