



ELECTRONIC TIMERS



BCH

BCH
ELECTRIC
LIMITED

Electronic Timers

- Multi Function or Mono Function
- Multi Time Range
- Multi Voltage
- Large calibrated dial for easy and accurate time setting
- Compact Design
- LED indications for Input supply and Output status
- Surface mounting & DIN rail mounting
- Confirms to IEC 1000-4-2; IEC 1000-4-3; IEC 1000-4-4; IEC 1000-4-5; IEC 1000-4-6; IEC 1000-4-11, CISPR-22
- 1 changeover relay output (SPDT)
- Suitable for Sequence Control and other applications

Encapsulated Timers

- Mono Function
- Single time Range - Fixed or variable through potentiometer
- Fixed Voltage
- Solid State Output
- Surface mounting & DIN rail mounting
- Totally sealed with polyurethane resin for better protection
- General purpose On Delay timer
- Specially designed timer for compressor/Heat Pump applications also available

Ordering Information

SST00■0+	Encapsulated ON delay Timer
SST02■00	Encapsulated ON delay Timer for Compressor/Heat Pump
SBT00■00N	Delay On Make (BAR)
SBT01■00N	Delay On Break (BCR)
SBT02■00N	Asymmetric Cycler (BDR)
SBT03■00N	Multifunction (BLR)

■ Voltage code, + Timing range,

Voltage Codes

Type	Voltage	Code
BAR, BCR, BDR, BLR	24V AC/DC & 240V AC	1
	24V AC/DC & 110V AC	2
	24V AC	4
	12V DC	5
SST	240V AC	1
	110V AC	2
	48V AC/DC	3
	24V AC/DC	4

Time Ranges

Type	Timing	Code
Encapsulated - SST (+)	0.1 - 10 Sec.	1
	1 - 100 Sec.	2
	3 - 300 Sec.	3

Electronic Timers

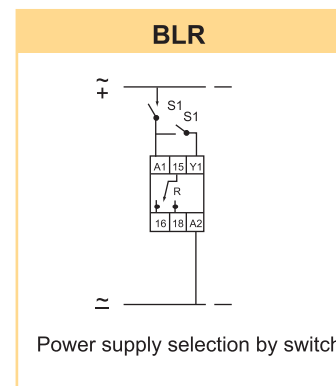
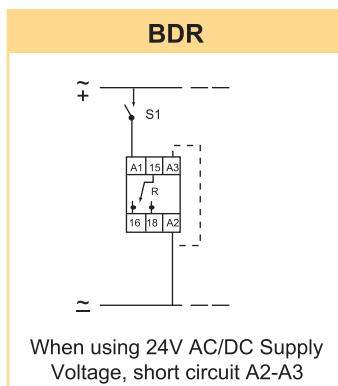
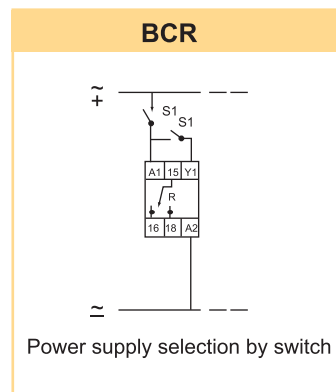
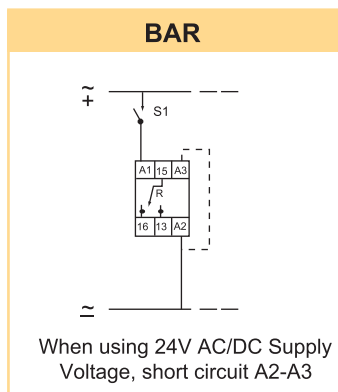
	BAR	BCR	BDR	BLR
Function	Delay on Make Function A	Delay on Break Function C	Asymmetric Cycler Function D & Di	Multifunction Function A, B, C & H
Power Supply	24V AC/DC & 240V AC 24V AC/DC & 110V AC 12V DC 24V AC	24V AC/DC & 240V AC 24V AC/DC & 110V AC 12V DC 24V AC	24V AC/DC & 240V AC 24V AC/DC & 110V AC 12V DC 24V AC	24V AC/DC & 240V AC 24V AC/DC & 110V AC 12V DC 24V AC
Supply Tolerance	85% to 110% of rated supply	85% to 110% of rated supply	85% to 110% of rated supply	85% to 110% of rated supply
Frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Time Range	0.1 Sec to 10 Hours	0.1 Sec to 10 Hours	0.1 Sec to 10 Hours	0.1 Sec to 10 Hours
Repeat accuracy	± 0.2 % at constant ambient ± 1.5% within temp. variation	± 0.2 % at constant ambient ± 1.5% within temp. variation	± 0.2 % at constant ambient ± 1.5% within temp. variation	± 0.2 % at constant ambient ± 1.5% within temp. variation
Reset Time	50ms after timing 100ms during timing	100ms Max 20ms	50ms after timing ON 100ms during timing OFF	100ms Max 20 ms
Minimum Impulse Time				
Output	SPDT relay, 10A @ 240V AC resistive load	SPDT relay, 10A @ 240V AC resistive load	SPDT relay, 10A @ 240V AC resistive load	SPDT relay, 10A @ 240V AC resistive load
Life expectancy -Electrical - Mechanical	1x10 ⁵ operations 1x10 ⁷ operations	1x10 ⁵ operations 1x10 ⁷ operations	1x10 ⁵ operations 1x10 ⁷ operations	1x10 ⁵ operations 1x10 ⁷ operations
No. of Operations	1200 operations/hour at full load	1200 operations/hour at full load	1200 operations/hour at full load	1200 operations/hour at full load
Power Consumption	7 VA at 220V AC	7 VA at 220V AC	7 VA at 220V AC	7 VA at 220V AC
Operating Temp	-20°C to +60°C	-20°C to +60°C	-20°C to +60°C	-20°C to +60°C
Peak Current	15A < 0.01 Sec	15A < 0.01 Sec	15A < 0.01 Sec	15A < 0.01 Sec
Max. Switching Voltage	240V AC	240V AC	240V AC	240V AC
Approx. weight	80g	80g	80g	80g

Encapsulated Timers

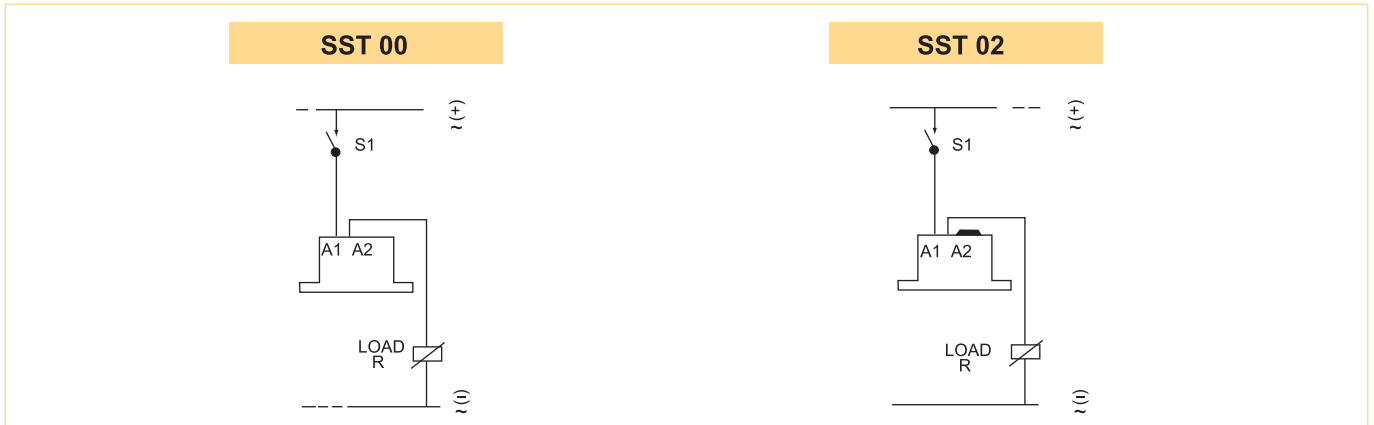
	SST 00	SST 02
Function	Delay on Make Function A	Special timer for compressor protection & heat pumps
Power Supply	220/240 V AC; 110V AC; 48V AC/DC; 24V AC/DC	220/240 V AC; 110V AC; 48V AC/DC; 24V AC/DC
Supply Tolerance	80% to 120% of rated supply	80% to 120% of rated supply
Frequency	50/60 HZ	50/60 HZ
Time Range	0.1-10 Sec; 1-100 Sec; 3-300 Sec	Fixed Timing - 3 min / 5 min
Repeat accuracy	± 0.5% at constant ambient ± 5% within temp. variation	± 0.4% at constant ambient ±10% within temp. variation
Reset Time	25ms after timing 150ms during timing	25ms after timing
Output	Solid State Output $I_{max} : 0.6 \text{ A (at } 40^{\circ}\text{C)}$	Solid State Output $I_{max} : 0.6 \text{ A (at } 40^{\circ}\text{C)}$
Leakage current	5 mA Max	6 mA Max
Voltage drop	3.5V	3.5V
Operating Temp	-20°C to + 60°C	-20°C to + 60°C
Peak Current	20A < 10ms	20A < 10ms
Max. Switching Voltage	250V AC/DC	250V AC/DC
Approx. weight	55g	55g

Connection Diagrams

Electronic Timers

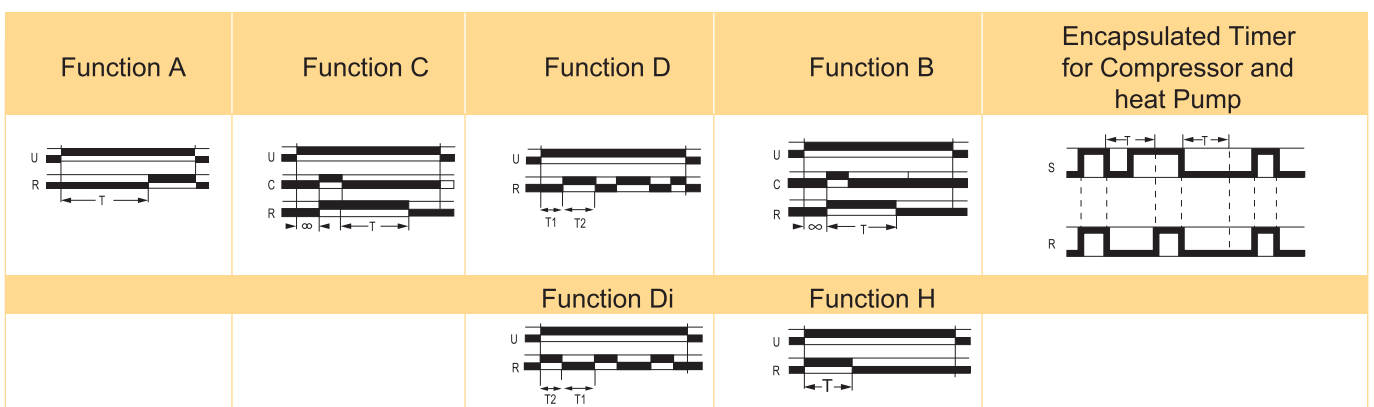


Encapsulated Timers



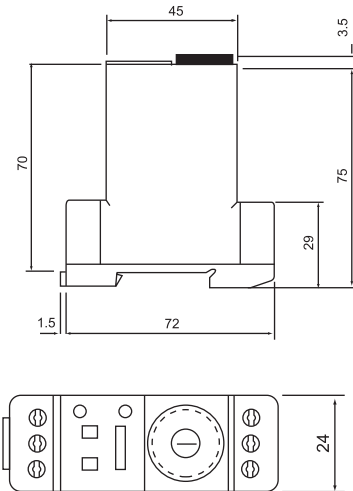
Curves

Function A	Function C	Function D & Di	Function B & Function H	Encapsulated Timer for Compressor and heat Pump
<p>Delay on make timing commences with the supply on (S1). At the end of timing, the load R is energized.</p>	<p>The timer is permanently supplied. At the closure of contact S2, the load is energized until the set time has elapsed, after the opening of S2. If S2 is reclosed during timing, the output will remain energized. Command contact S2 should be isolated from any other circuit. Power supply S1 has to be closed when operating S2</p>	<p>The timer is permanently supplied. The load is alternatively de-energised and energised repeatedly to the set time. Function D : Pause start cycle Function Di : Pulse start cycle</p>	<p>Function B : Single Shot The timer is permanently supplied. At the closure of the command contact S2 (either fleeting or maintained contact), the load R is energized. The load de-energized at the end of timing. Function H : Interval Timer At the closure of S1(Supply ON), the load is energized and timing starts. At the end of timing, the load de-energised</p>	<p>When a compressor is stopped by the Thermostat, it should not restart immediately on full load. A timer of 3 to 5 minutes is needed to equalise the Interior pressure in the system, or to avoid a sudden drop in the latter. In other words, the timer is needed to prevent reset of the thermostat and to ensure optimal operation of the equipment. For this application. BIL has developed a special low-cost timer with only 2 terminals, the SAS-CB (load in series with timer) Note : At the first supply "ON" the compressor starts instantaneously without loss of time</p>

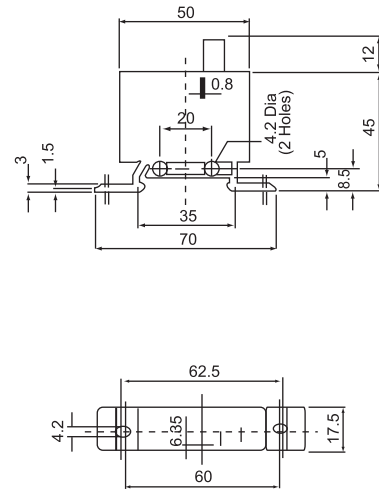


Dimensions (mm)

DIN RAIL MOUNTING OR BASE-MOUNTING
BAR/BCR/BDR/BLR Timers



ENCAPSULATED TIMERS



BCH ELECTRIC LIMITED



www.bchindia.com



1800-103-9262
customer care@bchindia.com

Visit us at : www.bchindia.com

Corporate Office : 1105, New Delhi House, 27, Barakhamba Road, New Delhi-110 001 Tel. : 91-11- 43673100

CIN : U31103WB1965PLC026427, **Customercare No.** 1800-103-9262, **E-mail :** marketing@bchindia.com

Registered Office : Block 1E, 216, Acharya Jagadish Chandra Bose Road, Kolkata - 700 017

Works 1 : 20/4, Mathura Road, Faridabad-121 006 (Haryana) Tel. : 0129-4063000/4293000 Fax : 0129-2304016

Works 2 : 64-68, Sector-7, IIE, Pant Nagar, Rudrapur, Udham Singh Nagar - 263 153 (Uttarakhand) Tel. : 05944-250214/16 Fax : 05944-250215

Sales Offices :

Ahmedabad

801, Akash Zeveri,
Beside Shyamal Iconic,
Above Westside,
Shyamal Cross Road,
Ahmedabad - 380015
E-mail : ahmedabad@bchindia.com

Bangalore

2nd Floor, 130/5,
K.H. Road (Double road),
Bangalore - 560 027
Tel. : 080-41144879 / 22236759
E-mail : bangalore@bchindia.com

Bhubaneswar

Mallick Commercial
Complex Plot No. : A/69, unit - 3
Bhubaneswar - 751 001
Tel. : 0674-2380988
E-mail : bhubaneswar@bchindia.com

Chandigarh (Panchkula)

SCO -129, 2nd Floor,
MDC, Sector-5 Panchkula,
Haryana-134 114
Tel. : 0172-5078957 / 5049905
E-mail : chandigarh@bchindia.com

Chennai

Flat No. 3A, 3rd Floor,
Sree Apartments,
No.508, TTK Road,
Alwarpet, Chennai 600 018
Tel. : 044-24337046, 24337047
E-mail : chennai@bchindia.com

Coimbatore

87, Dr. Nanjappa Road,
Coimbatore - 641 018
Tel. : 0422-2305311 / 2302599
E-mail : coimbatore@bchindia.com

Delhi 1

801, Akash Deep Building,
26A, Barakhamba Road,
New Delhi - 110 001
Tel. : 011-23313878 / 43518200
E-mail : delhi1@bchindia.com

Delhi 2

710, Deepali Building, 92
Nehru Place, New Delhi - 110 019
Tel. : 011-45720334
E-mail : delhi2@bchindia.com

Dehradun

8, Co-operative Industrial Estate,
Patel Nagar, Dehradun-248001
E-mail : dehradun@bchindia.com

Faridabad

20/4, Mathura Road,
Faridabad - 121 006 (Haryana)
Tel. : 0129-4293009
E-mail : faridabad@bchindia.com

Hyderabad

1-8-303/48/13/102, Arya One,
2nd Floor, P. G. Road,
Secunderabad - 500 003
Tel. : 040-66206263/27890306
Fax : 040-66207273
E-mail : hyderabad@bchindia.com

Indore

330-331, Indraprastha Tower,
3rd Floor, 6, M.G. Road,
Indore - 452 001
Tel. : 0731-2510011 / 2510012
E-mail : indore@bchindia.com

Jaipur

25, Hathroi, Gopalbari,
Jaipur - 302 001
Tel. : 0141-2363521
E-mail : jaipur@bchindia.com

Jamshedpur

3rd Floor, Aastha Trade Centre,
'Q' Road, Bistupur,
Jamshedpur - 831 001
Tel. : 0657-2321097/2321481
E-mail : jamshedpur@bchindia.com

Kolkata

Block 1E, 216,
Acharya Jagadish Chandra Bose Road,
Kolkata - 700 017
Tel. : 033-22871728 / 46021884
E-mail : kolkata@bchindia.com

Lucknow

Madan Plaza, 3rd Floor,
14, Station Road,
Lucknow - 226 001
Tel. : 0522-4025597/4025997
E-mail : lucknow@bchindia.com

Ludhiana

S.C.O. - 18, 2nd Floor,
Feroze Gandhi Market,
Ludhiana - 140 001
Tel. : 0161-5021807/5022808
E-mail : ludhiana@bchindia.com

Mumbai

A-151, Mittal Tower,
Nariman Point,
Mumbai - 400 021
Tel. : 022-22822947/22850162
Fax : 022-22822858
E-mail : mumbai@bchindia.com

Pune

8, Sarosh Bhavan,
16-B/1, Dr. Ambedkar Road,
Pune - 411 001
Tel. : 020-41210002
E-mail : pune@bchindia.com

Raipur

6th Floor, Office No. 607,
Babylon Capital, Near Oswal
Petrol Pump, VIP Chowk,
G.E. Road, Raipur - 492 006
Tel. : 0771- 4045053
E-mail : raipur@bchindia.com

Trichy

2B, Kannagi Street,
Ayyappa Nagar, K.K.Nagar
Trichy - 620 021, Tamilnadu
Tel. : 0431-4040497
E-mail : trichy@bchindia.com

Vadodara

301, Third Floor, "Florence Classic",
10, Ashapuri Co-Op. Hsg. Soc. Ltd., Opp. VUDA Housing,
Near Cow Circle, Akota, Vadodara - 390 020
Tel. : 0265-2345068/2345069
Telefax : 0265-2345068,
E-mail : vadodara@bchindia.com

Other Branch Locations

Cochin : cochin@bchindia.com, **Guwahati :** guwahati@bchindia.com, **Vishakapatnam :** vizag@bchindia.com, **Surat :** surat@bchindia.com

Resident Engineer Locations

Anantapur	Kanpur	Nashik	Salem	Yamunanagar
Bhopal	Katni	Patna	Siliguri	
Calicut	Karimnagar	Puducherry	Surat	
Gurgaon	Kota	Rajkot	Tirunelveli	
Jalandhar	Midnapur	Ranchi	Udaipur	
Jalgaon	Muzaffarnagar	Rourkela	Vapi	
Jodhpur	Nagpur	Rudrapur	Vijayawada	