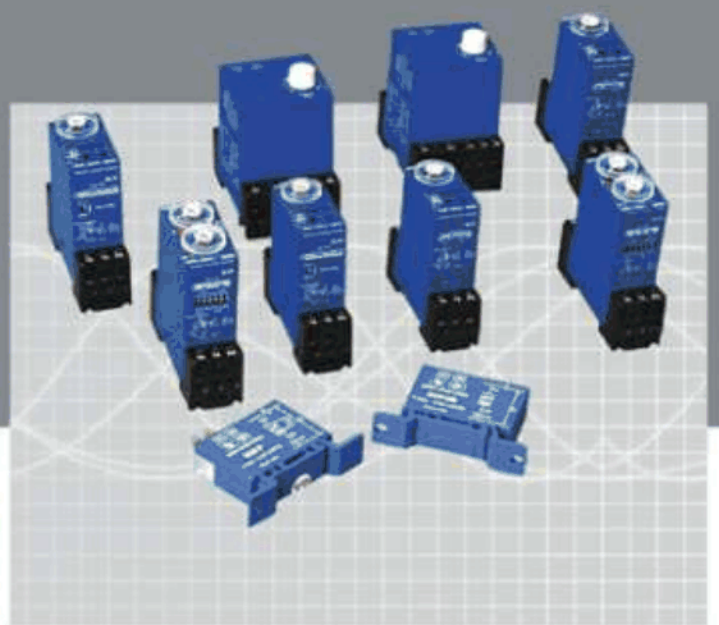




ELECTRONIC TIMERS



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

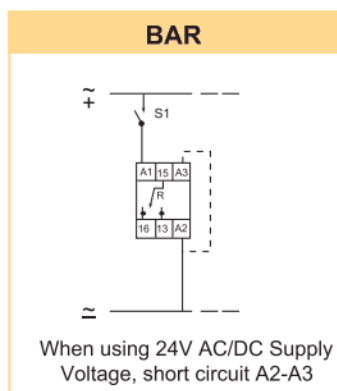
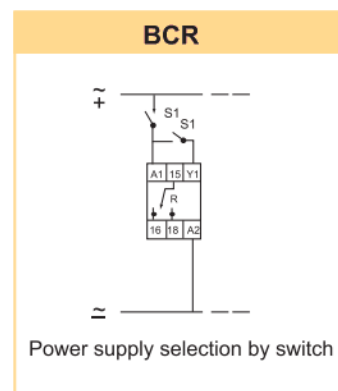
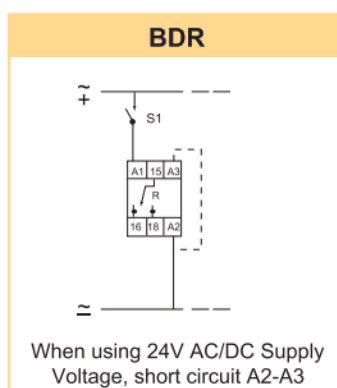
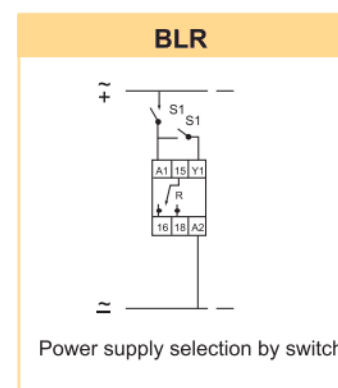
	BAR	BCR	BDR	BLR
Function	Delay on Make Function A	Delay on Break Function C	Asymmetric Cycler Function D & Di	Multifunction Function A, B, C & H
Power Supply	24V AC/DC & 240V AC	24V AC/DC & 240V AC	24V AC/DC & 240V AC	24V AC/DC & 240V AC
	24V AC/DC & 110V AC	24V AC/DC & 110V AC	24V AC/DC & 110V AC	24V AC/DC & 110V AC
	12V DC	12V DC	12V DC	12V DC
	24V AC	24V AC	24V AC	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 Max	50ms after timing ON	100ms Max
	100ms during timing	20ms	100ms during timing OFF	20 ms
Minimum Impluse 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 ⁵ operations	1x10 ⁵ operations	1x10 ⁵ operations
	1x10 ⁷ operations	1x10 ⁷ operations	1x10 ⁷ 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

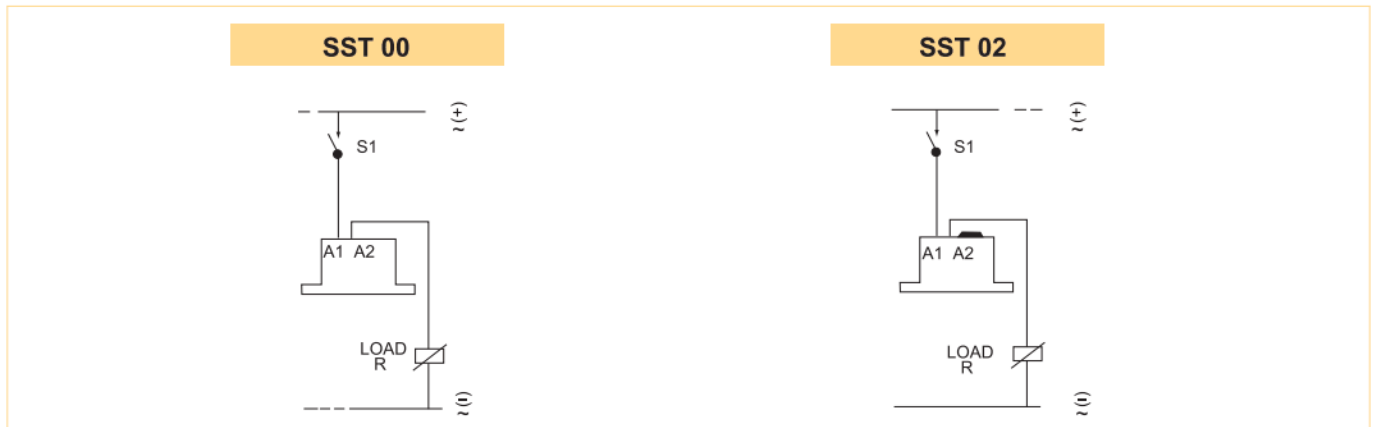
	SST 00	SST 02
Function	Delay on Make Function A	Special timer for compressor protection & heat pumps
Power Supply	220/240 V AC; 110V AC; 48V AC/DC; 24V AC/DC	220/240 V AC; 110V AC; 48V AC/DC; 24V AC/DC
Supply Tolerance	80% to 120% of rated supply	80% to 120% of rated supply
Frequency	50/60 HZ	50/60 HZ
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

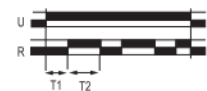


Encapsulated Timers



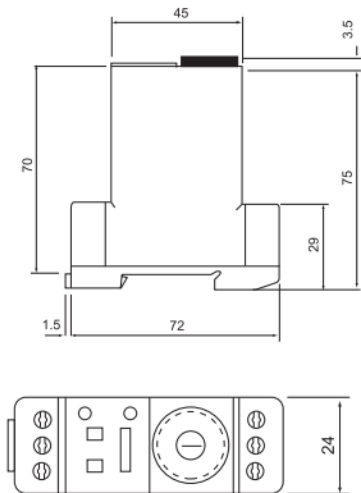
Curves

Function A	Function C	Function D & Di	Function B & Function H	Encapsulated Timer for Compressor and heat Pump
Delay on make timing commences with the supply on (S1). At the end of timing, the load R is energized.	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	The timer is permanently supplied. The load is alternatively de-energised and energised repeatedly to the set time. Function D : Pause start cycle (Standard Supply) Function Di : Pulse start cycle	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 energised and timing starts. At the end of timing, the load de-energised	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

Function A	Function C	Function D	Function B	Encapsulated Timer for Compressor and heat Pump
				
		Function Di	Function H	
				

Dimensions (mm)

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



ENCAPSULATED TIMERS

