Local regulations may restrict the use of this product to below the conditions quoted.
In the interests of development and improvement of the product, we reserve the right to change the specification without notice. © Copyright 2020

BTS1050
Boiler Blowdown Timer

Description

The BT1050 is a timer for the control of a bottom blowdown valve. It allows the bottom blowdown valve to open, removing precipitated solids that could otherwise build up and eventually cause damage.

The BT1050's timers are controlled from a battery backed up Real Time Clock.

A separate blowdown timer can be enabled for each weekday with different start, stop and repeat times.
A simple copy feature allows the parameters to be copied to all days if required.

A test function provides the operator with a diagnostic tool.

Up to nine BTS1050 (or BCR3250) units can be installed and priority linked for multi-boiler installations.

A limit switch box can be connected to monitor proper valve opening / closing action.

Principal features:

- Purpose designed for bottom blowdown duties
- Comprehensive timer options
- Straightforward to commission – quick set-up option, using copy function
- Power supply: 24V dc
- Priority link and a recovery timer prevent boilers from blowing down in rapid succession
- Warns if valve fails to open or close
- Standby input to reduce boiler water loss if the boiler is on standby or low demand

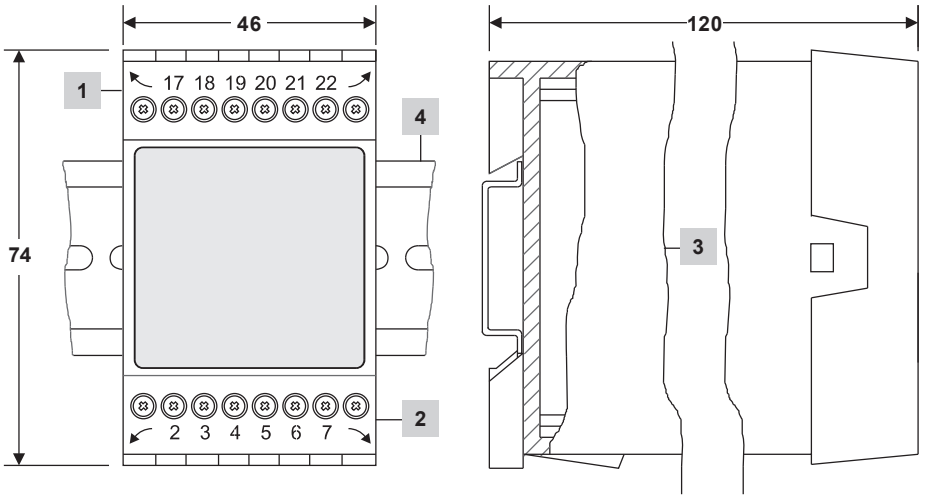
Directives and standards

LV (Low Voltage Directive) and EMC (Electromagnetic Compatibility)
The equipment conforms to the requirements of the Low Voltage Directive 2014/35/EU and the EMC Directive 2014/30/EU.



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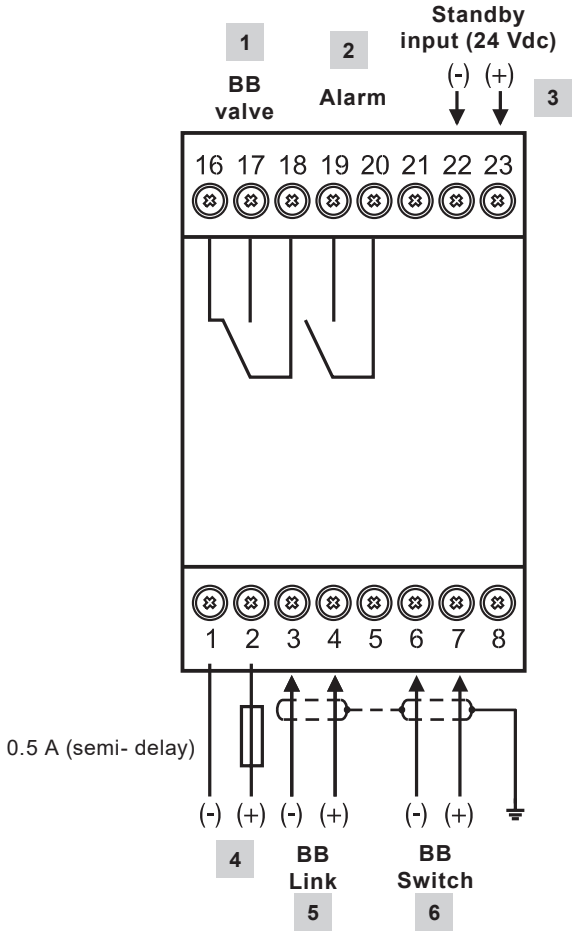
Dimensions (approximate) in mm



Item	
1	Upper terminal strip
2	Lower terminal strip
3	Housing
4	Support rail TH 35, EN 60715

Installation in control cabinet
The BTS1050 Boiler Blowdown Timer is clipped onto a type TH 35, EN 60715 support rail in a control cabinet, see item 4.

Wiring diagram



Item	
1	Bottom Blowdown (BB) output contacts
2	Alarm output contact
3	Standby input (24 Vdc), ON = standby, OFF = normal operation
4	Connection of supply voltage 24 Vdc with fuse 0.5 A (semi-delay) provided on site
5	Bottom Blowdown link input
6	Bottom Blowdown switch input

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Technical data

Supply voltage	24 Vdc +/– 20%
Fuse	External 0.5 A (semi-delay)
Power consumption	4 W
Inputs	1 two-wire connection to Bottom Blowdown Link 1 two-wire connection to Bottom Blowdown Switch 1 two-wire standby connection (24Vdc +/– 20%, 10mA)
Outputs:	1 volt-free change-over contacts, 8 A 250 Vac/30 Vdc cos ϕ = 1 (Bottom Blowdown valve) 1 floating open/closed contact, 8 A 250 Vac/30 Vdc cos ϕ = 1 (Alarm Relay)
Displays and controls	3 push-buttons for parameter setting 1 green 4 digit 7-segment LED display 2 red LEDs for Bottom Blowdown Delayed and Alarm indication 2 amber LEDs for Bottom Blowdown Valve and Standby Input activity indication
Housing	Housing material, base: black polycarbonate; front: grey polycarbonate Maximum Conductor size*: 1 x 4.0 mm^2 solid, per wire, or 1 x 2.5 mm^2 per stranded wire with sleeve to DIN 46228, or 2 x 1.5 mm^2 per stranded wire with sleeve to DIN 46228 (min. Ø 0.1 mm) *Please see IMI for recommended cable specifications Terminal strips can be detached separately Housing attachment: Mounting clip on support rail TH 35, EN 60715
Electrical safety	Pollution degree 2 for installation in control cabinet with degree of protection IP 54, fully insulated
Protection	Housing: IP 40 to EN 60529 Terminal strip: IP 20 to EN 60529
Weight	approx. 0.2 kg
Ambient temperature	when system is switched on: 0° ... 55 °C during operation: –10 ... 55°C
Transport temperature	–20 ... +80 °C (<100 hours), defrosting time of the de-energised equipment before it can be put into operation: 24 hours
Storage temperature	–20 ... +70 °C, defrosting time of the de-energised equipment before it can be put into operation: 24 hours
Relative humidity	max. 95%, no moisture condensation

How to specify
Boiler Blowdown Timer, 2 volt-free contacts for Alarm & bottom blowdown valve, supply voltage 24V DC 4W.

How to order
Example: 1 off Spirax Sarco BTS1050 Boiler Blowdown Timer.

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