

SB20

LEVEL CONTROLLER OR POWER INTERFACE MODULE WITH ALARM SOUNDER



The SB20 is a versatile level control or interface module that can also be used in many other process control applications.

One level switch can be connected for an alarm or two level switches to start and stop a submersible pump or a solenoid valve for emptying/filling function

It works with all kind of level switches, including conductive probes, as well as pressure switches or other limit switches. The module can be used as a dry-running protection, with a pressure switch or filling level control switch, to start and stop a pump.

Power supply 240/415 Vac.

Two outputs:

Main output SPCO 20(8) Amps 250V

Secondary output SPCO 10(4) Amps 250V

LED indicator and beeper for low level alarm

Features

- Primary output can directly control motors up to 2HP 0.4-0.5 single phase
- 2 SPCO relay outputs
- Alarm indicator LED and Beeper
- 1, 2 or 3 sensor inputs
- 240 or 415Vac supply
- DIN rail mounting

SPECIFICATIONS

Technical

Supply Voltage	V	240 or 415ac
Sensor Voltage	V	12Vac
Sensor Inputs	Switch contacts or conductive probes	

Output ratings

Output Ratings		Output 1	Output 2
Contact Form		SPCO	SPCO
Switching Power Max ac		1500	750
Switching Power Max dc		560	not approved
Switching Voltage AC Max		250	250
Switching Voltage DC Max		28	not approved
Switching Current Max Resistive	(n/o contact)	20	10
	(n/c contact)	10	10
Switching Current Max Inductive		8	4

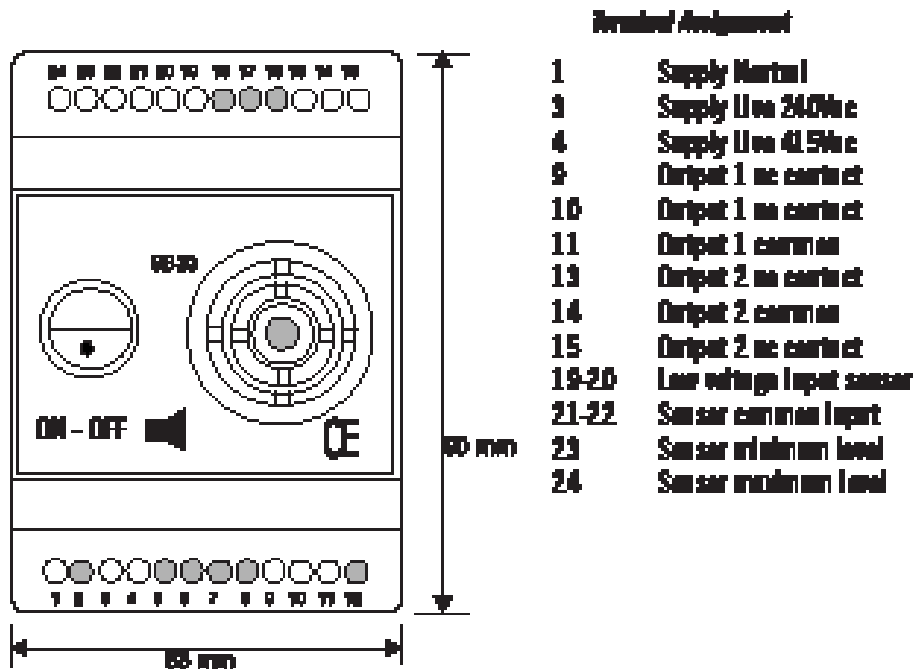
STANDARD PARTS

Standard Parts	Inputs	Outputs
SB20	1, 2 or 3	2

Other versions can be made for particular applications. Please contact Sensata with your requirements.

MECHANICAL DIAGRAM

Low voltage input 19-20 for pressure/float switch with contacts closed at minimum pressure or level switch with contacts closed when level low. NB These terminals must be bridged if no sensor is connected.



The SB20 can be used for many process control functions, including:

- Dry running control with 2 level switches
- Dry running control with 1 level switch
- Dry running control with conductive probes
- Pump control by pressure switch
- Pump control by level switch
- "No water" alarm and secondary control output

Example: Rainwater supply

Filling a vented roof tank from a rainwater tank.

The pump will operate when the roof tank level is not at max level and the water in the rainwater tank is above the low level.

The red alarm LED will illuminate and the Beeper will sound (with switch in ON position), if the level in the rainwater tank drops to the low level, and the secondary relay opens a solenoid valve to supply water from the mains water supply, which will remain operated until the rainwater tank fills to the high level. The Beeper alarm will, if switch is ON, sound until the tank is full.

The illustration is for 240Vac supply, which is connected to terminals 0 (neutral) and 3 (live).

Example: Process supply

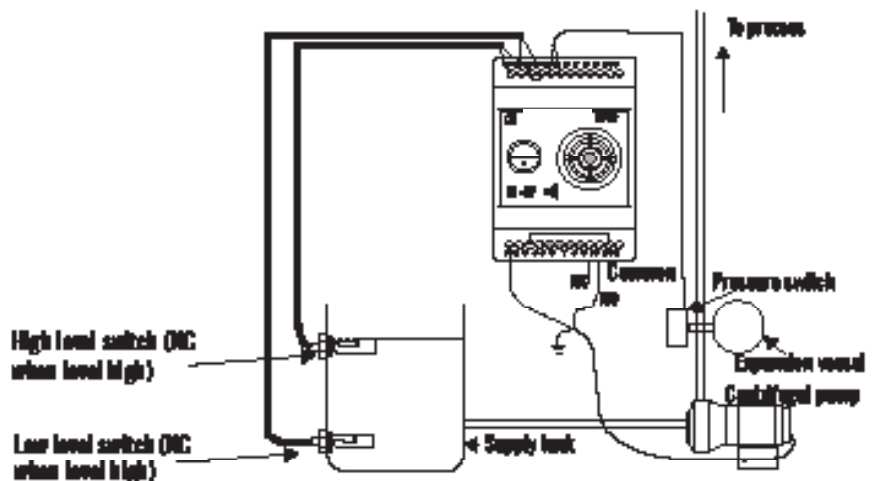
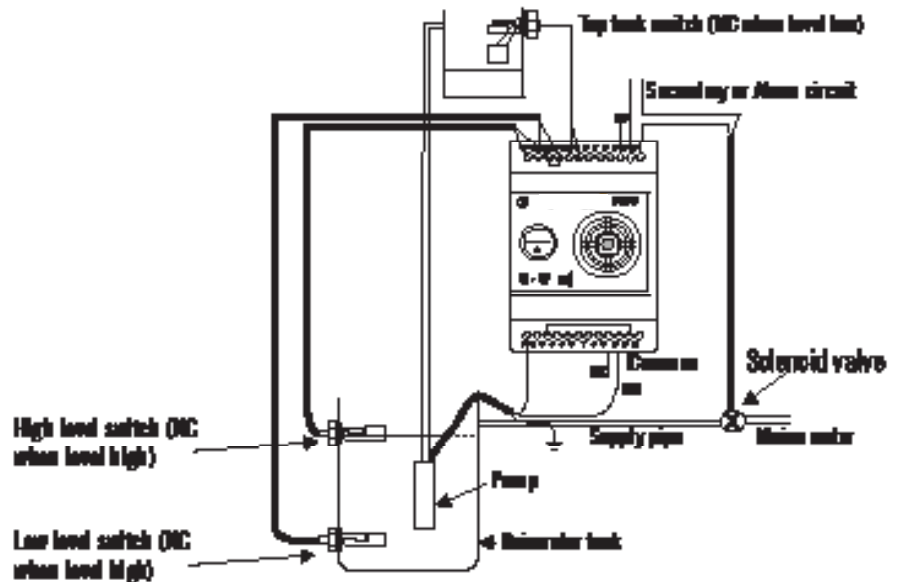
Maintaining a pressurised supply to a process.

The pump will operate when the pressure switch is below the set level and the water in the supply tank is above the low level.

The red alarm LED will illuminate and the Beeper will sound (with switch in ON position), if the level in the supply tank drops to the low level, and the secondary relay will operate. The alarm will remain operated until the tank fills to the high level. The Beeper alarm will, if switch is ON, sound until the tank is full.

The illustration is for 240Vac supply, which is connected to terminals 0 (neutral) and 3 (live).

NB The diagrams shown above are simplified illustrations of how the module may be used and do not include any necessary safety devices, such as fuses or thermal cutouts, or statutory requirements for installation of such electrical equipment.



Datasheets provided by Sensata Technologies, Inc., its subsidiaries and/or affiliates ("Sensata") are solely intended to assist third parties ("Buyers") who are developing systems that incorporate Sensata products (also referred to herein as "components"). Buyer understands and agrees that Buyer remains responsible for using its independent analysis, valuation, and judgment in designing Buyer's systems and products. Sensata datasheets have been created using standard laboratory conditions and engineering practices. Sensata has not conducted any testing other than that specifically described in the published documentation for a particular datasheet. Sensata may make corrections, enhancements, improvements, and other changes to its datasheets or components without notice. Buyers are authorized to use Sensata datasheets with the Sensata component(s) identified in each particular datasheet. HOWEVER, NO OTHER LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE TO ANY OTHER SENSATA INTELLECTUAL PROPERTY RIGHT, AND NO LICENSE TO ANY THIRD PARTY TECHNOLOGY OR INTELLECTUAL PROPERTY RIGHT, IS GRANTED HEREIN. SENSATA DATASHEETS ARE PROVIDED "AS IS". SENSATA MAKES NO WARRANTIES OR REPRESENTATIONS WITH REGARD TO THE DATASHEETS OR USE OF THE DATASHEETS, EXPRESS, IMPLIED, OR STATUTORY, INCLUDING ACCURACY OR COMPLETENESS. SENSATA DISCLAIMS ANY WARRANTY OF TITLE AND ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT, QUIET POSSESSION, AND NON-INFRINGEMENT OF ANY THIRD PARTY INTELLECTUAL PROPERTY RIGHTS WITH REGARD TO SENSATA DATASHEETS OR USE THEREOF.

All products are sold subject to Sensata's terms and conditions of sale supplied at www.sensata.com. SENSATA ASSUMES NO LIABILITY FOR APPLICATIONS ASSISTANCE OR THE DESIGN OF BUYERS' PRODUCTS. BUYER ACKNOWLEDGES AND AGREES THAT IT IS SOLELY RESPONSIBLE FOR COMPLIANCE WITH ALL LEGAL, REGULATORY, AND SAFETY-RELATED REQUIREMENTS CONCERNING ITS PRODUCTS, AND ANY USE OF SENSATA COMPONENTS IN ITS APPLICATIONS, NOTWITHSTANDING ANY APPLICATIONS-RELATED INFORMATION OR SUPPORT THAT MAY BE PROVIDED BY SENSATA.

Mailing Address: Sensata Technologies, Inc., 529 Pleasant Street, Attleboro, MA 02703, USA

CONTACT US

Sensata Technologies
Jan Tinbergenstraat 80
7559 SP Hengelo
The Netherlands
1-508-236-3800
+44 (0)1202 897969
cynergy3.enquiries@sensata.com