Description
SpeedControl 0-10V interface for SpeedControl 1002 or 1145 is a small add-on PCB making it possible to control the SpeedControl 1002 or 1145 inverter by use of a 0-10V signal.

Furthermore it makes it possible to choose motor profile by dip-switch.
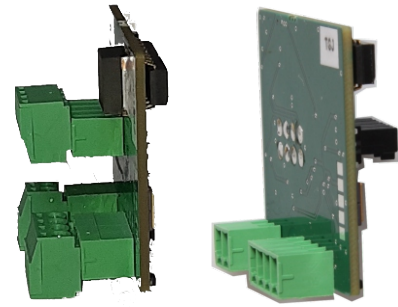**Note;** dip-switchfor correct motor profile must be set *before* attaching the PCB to the inverter.

To learn more abot the options of SpeedControl 1145 and 1002, and the use of add-on PCB SpeedControl 0-10V interface, please refer to the manual for the inverter in question.
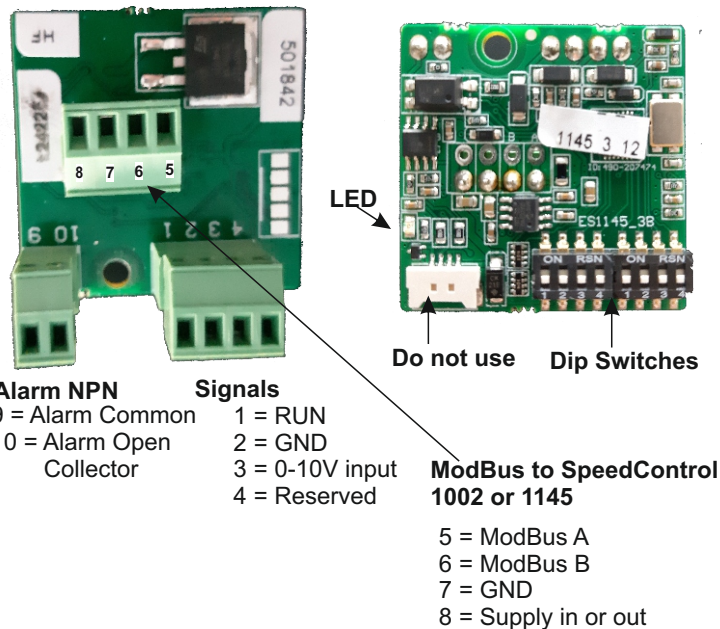
Warning

ESD-Sensitive. Make sure to be ESD discharged before handling the product.
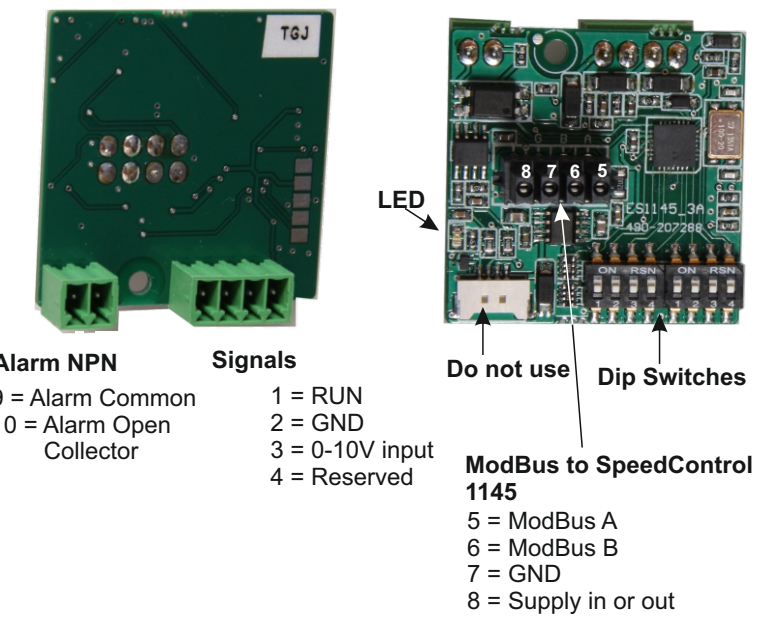
Mounting
Must be mounted on a SpeedControl 1145 or 1002 in a non-condensing environment, where not exposed to direct sunlight.

Connection Diagram 0-10V interface for both SpeedControl 1145 and 1002 (item No. 28616)

LED

Do not use   Dip Switches

Alarm NPN
9 = Alarm Common
10 = Alarm Open
    Collector

Signals
1 = RUN
2 = GND
3 = 0-10V input
4 = Reserved

ModBus to SpeedControl 1002 or 1145

5 = ModBus A
6 = ModBus B
7 = GND
8 = Supply in or out

Connection Diagram 0-10V interface for SpeedControl 1145 only (item No. 28615)

LED

Do not use   Dip Switches

Alarm NPN
9 = Alarm Common
10 = Alarm Open
    Collector

Signals
1 = RUN
2 = GND
3 = 0-10V input
4 = Reserved

ModBus to SpeedControl 1145
5 = ModBus A
6 = ModBus B
7 = GND
8 = Supply in or out

Small orange LED flashes slowly when no error - PCB functions correctly.
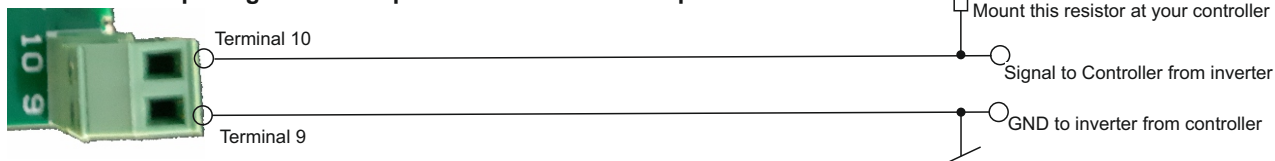In case of error the orange LED will flash rapidly to indicate an error. The fashing will come in waves and the number of flashes in each waves can be counted and translated into an error (refer to SpeedControl 1145 Manual for errorcodes).

To run motor with 0-10V input, the RUN terminal (1) must be shortened to GND (2), otherwise motor will not run. If shorting between RUN and GND is removed while motor is running, the motor will stop.

0-10V input (Vinput)
- For motor to start 0-10V input must be higher than 1.0V
- 0.0-0.5V Motor will stop
- 0.5-1.0V Motor will run at minimum RPM (RPMmin.)
- 1.0-10.0V Motor will run from minimum to maximum RPM (RPMmax.)

The Alarm output signal is an "Open collector". See example on how to connect.

Terminal 10

Terminal 9

Vcc at Controller. Max 48Vdc

Resistor 4K7 Ohm.
Mount this resistor at your controller

Signal to Controller from inverter

GND to inverter from controller

Technical Specifications

Enclosure:	IP00
Dimension (HxWxD):	40x40x25mm
Working Temperature	0ºC to +50ºC
Communication Protocol:	ModBus
Communication Interface:	Clamps

CE

Date:	04-07-2023
Drawn by	DF
Document No.:	950-208600 0-10V interface for SpeedControl 1002&1145
Rev.:	1.1
Manufacturer:	**LS Control A/S,** Industrivej 12, DK-4160 Herlufmagle

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LSCONTROL

Motor Selection
Setup the DIPS on the PCB before mounting it on the SpeedControl

Motor Profile	DIP1	DIP2	DIP3	DIP4	DIP5	DIP6	DIP7	DIP8
0	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
1	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON
2	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF
3	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON
4	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF
5	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON
6	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF
7	OFF	OFF	OFF	OFF	OFF	ON	ON	ON
8	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF
9	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON
10	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF
11	OFF	OFF	OFF	OFF	ON	OFF	ON	ON
12	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF
13	OFF	OFF	OFF	OFF	ON	ON	OFF	ON
14	OFF	OFF	OFF	OFF	ON	ON	ON	OFF
15	OFF	OFF	OFF	OFF	ON	ON	ON	ON
16	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF
17	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON
18	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF
19	OFF	OFF	OFF	ON	OFF	OFF	ON	ON
20	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF
21	OFF	OFF	OFF	ON	OFF	ON	OFF	ON
22	OFF	OFF	OFF	ON	OFF	ON	ON	OFF
23	OFF	OFF	OFF	ON	OFF	ON	ON	ON
24	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF
25	OFF	OFF	OFF	ON	ON	OFF	OFF	ON
26	OFF	OFF	OFF	ON	ON	OFF	ON	OFF
27	OFF	OFF	OFF	ON	ON	OFF	ON	ON
28	OFF	OFF	OFF	ON	ON	ON	OFF	OFF
29	OFF	OFF	OFF	ON	ON	ON	OFF	ON

Manuals for download

Manual for SpeedControl 1002

Manual for SpeedControl 1145

ModBus Protocol for SpeedControl 1002 and1145