

d5IO12R – I/O module

dasa5 is a control system developed for use in heavy-duty vehicles that operate in demanding environments.

The system is constructed around a centre control computer with separate display and distributed CAN nodes for connecting inputs and outputs. The system can be configured to control everything from simple vehicles to sophisticated machines with complex applications.

d5IO12R (d5 Input Output Relay)

Unit that handles 12 programmable inputs or outputs. Both inputs and outputs are digital and the outputs can be loaded with maximum 5 A per output, however not more than 25 A at the same time for all outputs.



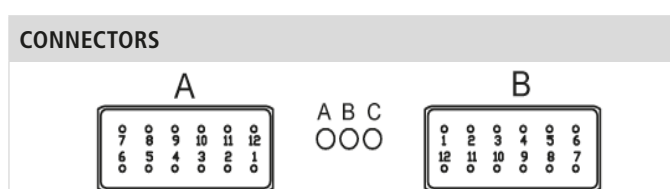
Technical data

GENERAL DATA	
Weight	0.4 kg
Ambient temperature in operation	- 40 to + 70 °C
in storage	- 40 to + 85 °C
Protection class	IP67
Supply voltage	10 - 30 V DC
Power consumption	55 mA (24 V DC)
Size	133 x 118 x 35 mm (incl. fixing lugs)
Case	Plastic
Connectors	2 Deutsch DTM

INPUTS	
Max number digital inputs	12
Switching level, digital input	6 V
Trip level	Half the supply voltage
The inputs have built-in pull-down resistors at 4.7 kohm.	

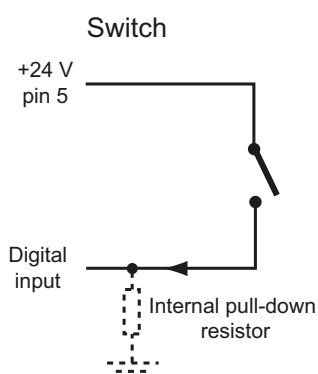
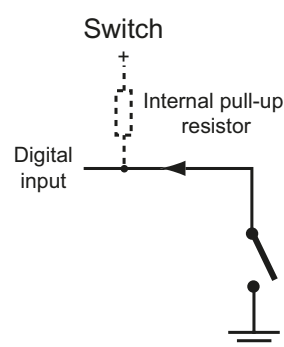
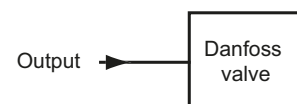
OUTPUTS	
Max number digital outputs	12
Output current, max	5 A / output
Short circuit current max	
< 5 ms	30 A
< 100 ms	10 A

OUTPUTS CONNECTED IN PARALLEL	
Two outputs within the same CAN message (see groups below) can be connected in parallel for a maximum output current of 10 A.	
Group 1:	Output 1, 2, 3, 4
Group 2:	Output 5, 6, 7, 8
Group 3:	Output 9, 10, 11, 12



EXAMPLES OF CONNECTION

Indicator lamp



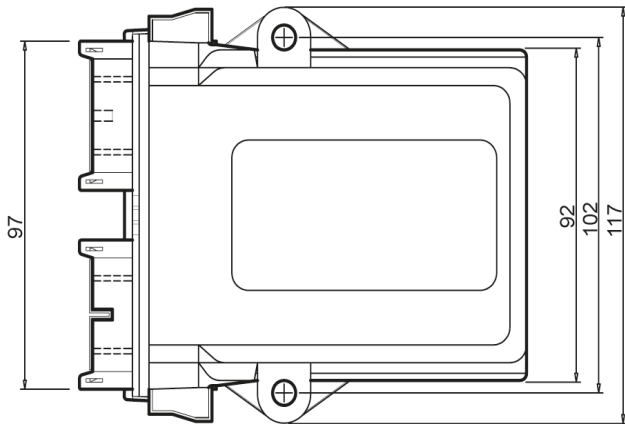
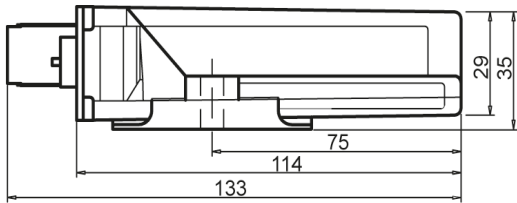
CONNECTOR A

Matching device: Deutsch DTM06-12SA

All connections can be configured as output, digital input, voltage input or current input. Furthermore, certain connections can be configured as frequency inputs, 2-channel pulse counters or enumerators according to the table below.

Conn No.	Danfoss out	Dig. in
1	YES	YES
2	YES	YES
3	YES	YES
4	YES	YES
5	YES	YES
6	YES	YES
7	YES	YES
8	YES	YES
9	YES	YES
10	YES	YES
11	YES	YES
12	YES	YES

DIMENSIONS



CONNECTOR B

NOTE. To enable loading of the unit with maximum current 25 A all of the four inputs 3, 5, 8 and 10 must be connected to the feed voltage.

Matching device: Deutsch DTM06-12SC

Conn No.	Function	Comment
1	CAN-H	Ansl 1 & 2 are interconnected internally
2	CAN-H	
3	+10-30 V in	Conn. 3, 5, 8 & 10 are interconnected internally, max 7.5 A
4	ID-Tag	The ID tag is connected between 4 and optional gnd connection (6, 7 or 9).
5	+10-30 V out	Conn. 3, 5, 8 & 10 are interconnected internally, max 7.5 A
6	gnd	Conn 6,7 & 9 are interconnected internally
7	gnd	
8	+10-30 V in	Conn. 3, 5, 8 & 10 are interconnected internally, max 7.5 A
9	gnd	
10	+10-30 V in	Conn. 3, 5, 8 & 10 are interconnected internally, max 7.5 A
11	CAN-L	Conn. 11 & 12 are interconnected internally
12	CAN-L	

LIGHT EMITTING DIODES

LED	FUNCTION
R	ERROR, red lights for fault
Y	CAN, yellow lights on contact with CAN bus
G	POWER, green lights when unit is powered

Dasa is a leading supplier of advanced computerized control and communication systems for heavy vehicles. We develop and manufacture systems, based on high technical expertise, for control and information management together with complete applications for forest harvesting.

