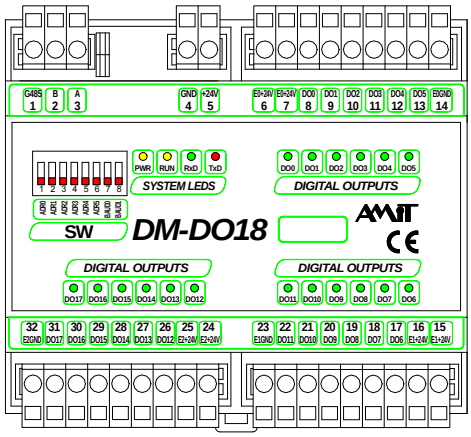
DM-DO18

Digital Outputs Module with ARION Protocol

- **18 digital outputs 24 V DC module**
- **Common galvanic separation (three groups per 6 outputs)**
- **Control over RS485 line (ARION protocol)**



TECHNICAL DATA

Outputs	3 × 6
Switch type	Switch Ex+24V
Switching element	MOS
Save state at connection drop out	0 V DC
User's defined save state	Not supported
Galvanic separation of outputs	Yes *)
Switched voltage Ex+24V	24 V DC ±20 %
Output voltage	(Ex+24V) – 1 V DC
Switched current (permanently)	300 mA DC
Max. current of current protection circuit	0.7 to 2.5 A DC
Max. current via common terminal	1 A DC
Switch on time	40 µs
Switch off time	100 µs
Short circuit protection	Electronic
Inductive load protection	Transil 600 W
Communication	
Serial interface	RS485
Galvanic separation of RS485	Yes *)
Serial interface overvoltage protection	Transil 600 W
Communication rates	9600 to 57600 Bd
Max. number of modules on RS485 line	63
Max. number of modules on RS485 segment	31
Power supply	24 V DC ±20 %
Power consumption (without outputs)	Max. 100 mA at 24 V DC
Others	
Signal connection	WAGO 231 cage clamp connectors
Cover protection rate	IP20
Operating temperature	0 to 50 °C
Max. ambient humidity	< 95 % non-condensing
Weight	250 g
Dimensions (w × h × d)	105 × 90 × 74 mm

*) Insulation strength 500 V AC / 1 minute, galvanic separation may not be used for safe and unsafe parts separation.

ORDERING INFORMATION

DM-DO18	Module of 18 digital outputs controlled over RS485 line, data sheet, warranty card

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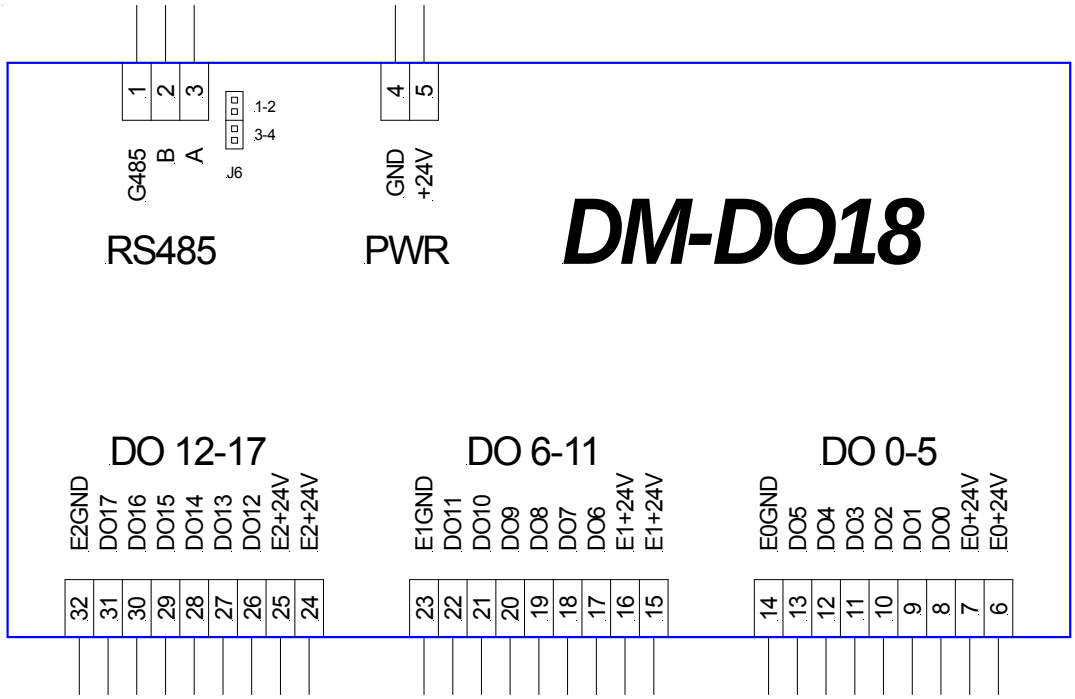
RECOMMENDED DIAGRAM SYMBOL



DIP SWITCH SETTING

Jumpers – RS485 line

J6, 1-2	Line state definition + A line termination
J6, 3-4	Line state definition + B line termination

Transmission rates

9600 Bd	BAUD0 = OFF, BAUD1 = OFF
19200 Bd	BAUD0 = ON, BAUD1 = OFF
38400 Bd	BAUD0 = OFF, BAUD1 = ON
57600 Bd	BAUD0 = ON, BAUD1 = ON

DIP SW8

SW8.1	Address, binary weight of 1
SW8.2	Address, binary weight of 2
SW8.3	Address, binary weight of 4
SW8.4	Address, binary weight of 8
SW8.5	Address, binary weight of 16
SW8.6	Address, binary weight of 32
SW8.7	BAUD0, transmission rate
SW8.8	BAUD1, transmission rate

An example of address construction: Addr = 39, switches 1, 2, 3 and 6 are ON (1 + 2 + 4+ 32).

TERMINALS ASSIGNMENT

Terminal	Label	Assignment
1	G485	RS485, shielding
2	B	RS485, B line
3	A	RS485, A line
4	GND	Power supply, ground
5	+24V	Power supply 24 V DC
6	E0+24V	Switched voltage DO0-5
7	E0+24V	Switched voltage DO0-5
8	DO0	Output 0
9	DO1	Output 1
10	DO2	Output 2
11	DO3	Output 3
12	DO4	Output 4
13	DO5	Output 5
14	E0GND	External GND
15	E1+24V	Switched voltage DO6-11
16	E1+24V	Switched voltage DO6-11

Terminal	Label	Assignment
17	DO6	Output 6
18	DO7	Output 7
19	DO8	Output 8
20	DO9	Output 9
21	DO10	Output 10
22	DO11	Output 11
23	E1GND	External GND
24	E2+24V	Switched voltage DO12-17
25	E2+24V	Switched voltage DO12-17
26	DO12	Output 12
27	DO13	Output 13
28	DO14	Output 14
29	DO15	Output 15
30	DO16	Output 16
31	DO17	Output 17
32	E2GND	External GND