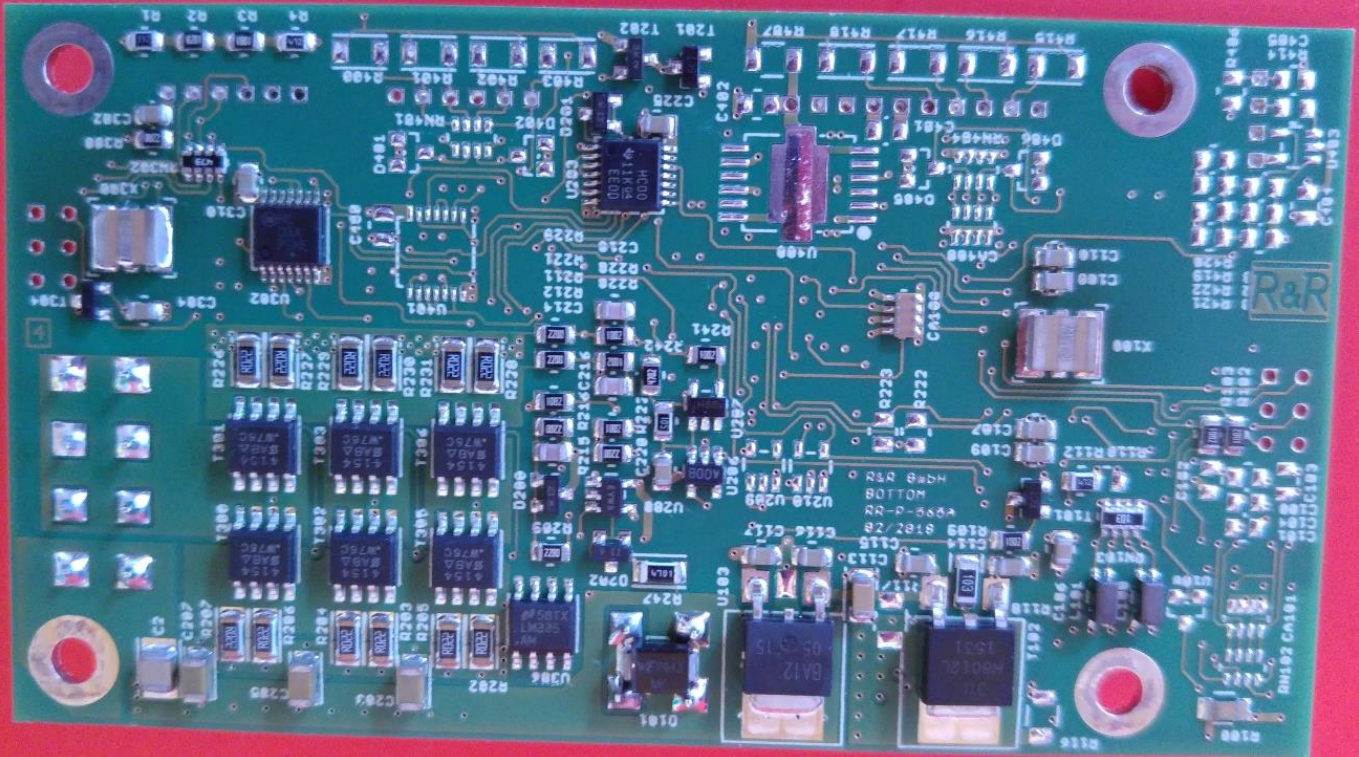


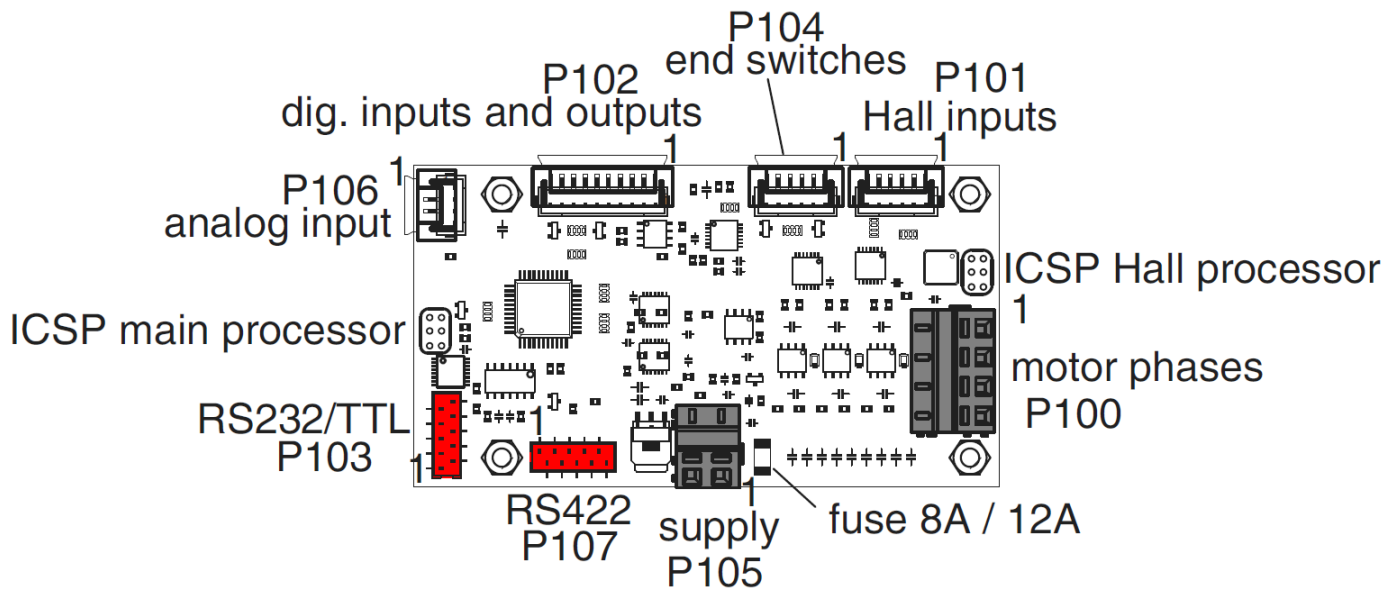
## RR-P-565 motor-controller for BLDC-motors ( brushless DC-motors )

drawing	DNR24276
dimensions	100 x 55 mm
mounting holes	80 x 45 mm
supply voltage	12..50V V DC fused
serial interface 1	RS422
serial interface 2	RS232C or TTL level
digital inputs	4x 0/5 V level or 0/24V
digital outputs	2x TTL-Pegel or 0/24V low-side Switches or 0/24V high-side Switches
position sensing	2 x inputs for limit switches (hardware debounced) 1 x analog-input for potentiometer
setup	software controlled adjustment via digital potentiometers
over current shutdown	by hardware 0..6A for both directions separately adjustable delay 0..500ms
current sensing motor output stage	high side and low side
peak current shutdown (output stage protection)	by hardware 20A (30A)
options	moisture protection coated with 3M NOVEC1700 (see datasheet DNR23114, DNR23115)



**RR-P-565 BOTTOM VIEW**

NAME	DESCRIPTION
RRP565A1-V1	PUMP CONTROL 36V / 6A
RRP565A1-V2	LIFT MECHANISM, DIG. OUTPUTS TTL
RRP565A1-V3	LIFT MECHANISM, DIG. OUTPUTS 24V
RRP565A1-V4	PUMP CONTROL 24V / 9A
....	



## pin assignment

P100 supply and motors	
Connector type	WAGO series 236 5.08mm pin spacing or Würth elektronik series 4137-5.00mm
PIN	SIGNAL
1	W
2	V
3	U
4	SHIELD (PE)

P101 hall sensors	
Connector type	JST series PH 2mm spacing
PIN	SIGNAL
1	+SUPPLY HALLS (+5V)
2	HALL A
3	HALL B
4	HALL C
5	0V (GND)
6	0V (GND)

<b>P102 digital I/O</b>			
Connector type	JST series PH 2mm spacing		
PIN	SIGNAL		
1	+SUPPLY	+5V	+24V
2	DIG. OUTPUT 0	5V	24V
3	DIG. OUTPUT 1	5V	24V
4	0V (GND)		
5	+SUPPLY	+5V	
6	DIG. INPUT 0	5V	24V
7	DIG. INPUT 1	5V	24V
8	DIG. INPUT 2	5V	24V
9	DIG. INPUT 3	5V	24V
10	0V (GND)		

<b>P103 RS232C interface</b>			
Connector type	Würth Electronic series WR-MM		
PIN	SIGNAL		
1	NC	+BUS	+5V
2	NC	+BUS	
3	RX		
4	RTS		
5	TX		
6	CTS		
7	NC		
8	NC		
9	0V (GND)		
10	0V (GND)		

<b>P104 end switches</b>	
Connector type	JST series PH 2mm spacing
PIN	SIGNAL
1	COM (UP)
2	NO (UP)
3	NC (UP)
4	COM (DOWN)
5	NO (DOWN)
6	NC (DOWN)

<b>P105 alternate power supply</b>	
Connector type	WAGO series 236 5.08mm pin spacing or Würth elektronik series 4137-5.00mm
PIN	SIGNAL
1	+SUPPLY
2	0V (GND)

<b>P106 ANALOG INPUT (position sensor)</b>	
Connector type	JST series PH 2mm spacing
PIN	SIGNAL
1	+SUPPLY (+5V)
2	INPUT-SIGNAL (0..5V)
3	0V (GND)
4	0V (GND)

<b>P107 RS422 INTERFACE</b>			
Connector type	Würth Electronic series WR-MM		
PIN	SIGNAL		
1	NC	+BUS	+5V
2	NC	+BUS	
3	RS422-Y		
4	RS422-A		
5	RS422-Z		
6	RS422-B		
7	NC		
8	NC		
9	0V (GND)		
10	0V (GND)		

Pin assignment 1:1 with IDC connectors to RR-P-456