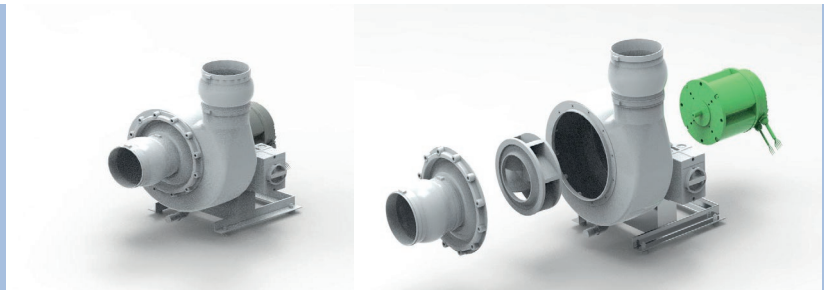


Wiring diagram for  
EC-motors with  
alternating current /  
single-phase motors



Motor cable	
black	phase
blue	neutral
yellow-green	equipotential bonding

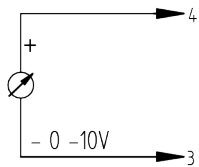
Connections at repair switch					
Switch pins				Motor cable	
on-site connection 230 V single-phase	←	L1	T1	→	black
	←	L2	T2	→	blue (neutral)

1. Connection only by trained and qualified electrician.
2. Before installation, check motor and motor connecting cable for damage. Replace defective cables by new cables, **don't repair** them.
3. Check, if the end crimps are firmly seated and replace them, if necessary.
4. Tighten the cable glands firmly, withdrawal of the cable must not be possible.
5. Connect the conductors to the repair switch according to the pin allocation table, **note the information given on the motor type label**.
6. The conductors must be put on correctly without squeezing or distortion in the repair switch.
7. The maximum cable length between potentiometer and EC motor is approximately 15 m .
8. Potential free status signaling contacts in the repair switch for on-site wiring on Wago connectors.



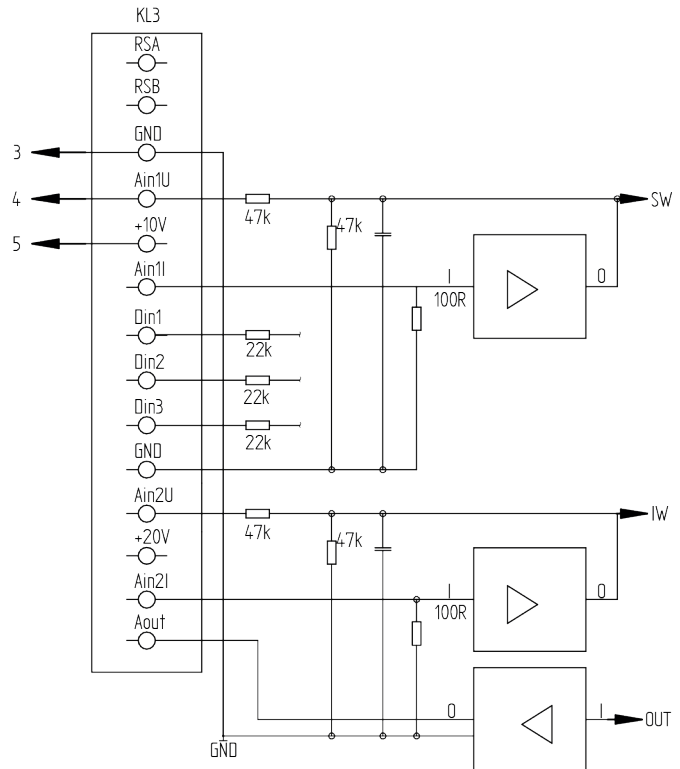
# Wiring diagram 1,1 kW EC-Motor

Customer circuit

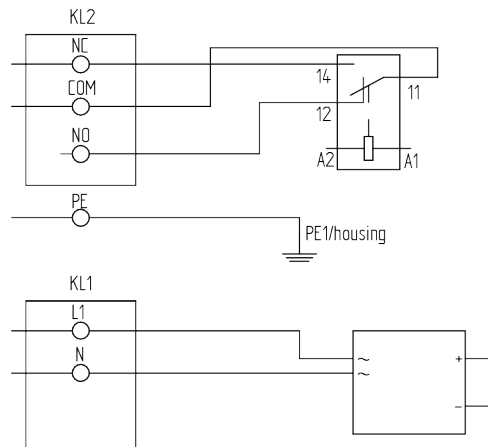
 adjustable speed  
(set value)

 10V → n = max  
 1V → n = min  
 >1.2V → Start  
 <0.8V → Stop

 Curve of control  
voltage versus speed  
adjustable via BUS

Connection

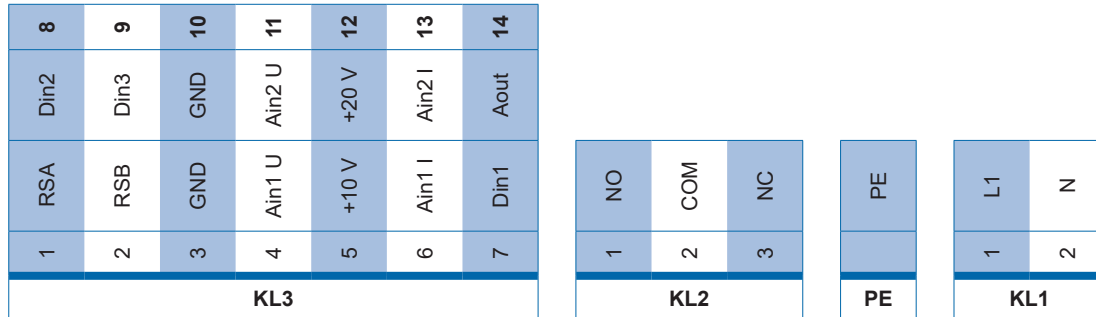


Fan / motor



# Wiring diagram 1,1 kW EC-Motor

## Clamping Modbus



No.	Conn.	Desig.	Function / assignment
KL1	1	L1	Supply connection, power supply 1-phase 200-277 V AC; 50/60 Hz
KL1	2	N	Supply connection, power supply 1-phase 200-277 V AC; 50/60 Hz
PE		PE	Ground connection, PE connection
KL2	1	NO	Status relay, floating status contact; Option 1: Make for failure; Option 2: Make for run monitoring error message
KL2 (cable 1 white)	2	COM	Status relay, floating status contact; changeover contact; common connection; contact rating 250 V AC / 2 A (AC1)
KL2 (cable 2 white)	3	NC	Status relay, floating status contact; Option 1: Break for failure; Option 2: Break for run monitoring error message
KL3	1	RSA	Bus connection RS485; RSA; MODBUS RTU
KL3	2	RSB	Bus connection RS485; RSB; MODBUS RTU
KL3	3	GND	Reference ground for control interface
KL3	4	Ain1 U	Analog input 1 (set value); 0 - 10 V; Ri = 100 kohms; adjustable curve; only for use as alternative to input Ain1 I
KL3	5	+10 V	Fixed voltage output 10 VDC; +10 V +/- 3 %; max. 10 mA; short-circuit-proof power supply for ext. Devices (e.g. potentiometer)
KL3	6	Ain1 I	Analog input 1 (set value); 4 - 20 mA; Ri = 100 ohms; adjustable curve; only for use as alternative to input Ain1 U
KL3	7	Din1	Digital input 1: Enable electronics; Enable: Pin open or applied voltage 5...50 VDC; Disable: Bridge to GND or applied voltage < 0,8 VDC; Reset function: Triggering of software reset after level change to < 0,8 V
KL3	8	Din2	Digital input 2: Parameter set 1/2 switching; Depending on EEPROM setting, the valid / used parameter set can be selected via BUS or digital input DIN2. Parameter set 1: Pin open or applied voltage 5...50 VDC; Parameter set 2: Bridge to GND or applied voltage < 0,8 VDC
KL3	9	Din3	Digital input 3: Direction of action of integrated controller; According to EEPROM setting, the direction of action of the integrated controller can be selected as normal / inverse via bus or digital input; Normal: Pin open or applied voltage 5...50 VDC; Inverse: Bridge to GND or applied voltage < 0,8 VDC
KL3	10	GND	Reference ground for control interface
KL3	11	Ain2 U	Analog input 2; Measured value 0 - 10 V; Ri = 100 kohms; adjustable curve; only for use as alternative to input Ain2 I
KL3	12	+20 V	Fixed voltage output 20 VDC; +20 V +/- 25 / -10 %; max. 50 mA; short-circuitproof power supply for ext. devices (e.g. sensors)