

# Repair switch connecting diagram

Connecting diagram for repair switch



## Connecting diagram for standard three-phase motor

Motor cable		Switch Y (400 V)				Switch Δ (230 V)			
Cable no.	Winding	Pin	Motor cable no.	Mains	Pin	Motor cable no.	Mains		
1	U1	L1	-	(L1)	L1	-	(L1)		
2	V1	L2	-	(L2)	L2	-	(L2)		
3	W1	L3	-	(L3)	L3	-	(L3)		
4	U2	T1	1 (U1)	-	T1	1 (U1) + 6 (W2)			
5	V2	T2	2 (V1)	-	T2	2 (V1) + 4 (U2)			
6	W2	T3	3 (W1)	-	T3	3 (W1) + 5 (V2)			
7	PTC	Y-jumper {							
8	PTC	4 (U2)							
		5 (V2)							
		6 (W2)							

## Connection diagram for motors with two speeds | separate winding

Motor cable		Connections at repair switch					
Cable no.	Winding	Switch pins			Motor cable no.		
1	U1	on-site connection 380 V 3-phase	← L1	T1 →	1 (U1)	} low speed	
2	V1		← L2	T2 →	2 (V1)		
3	W1		← L3	T3 →	3 (W1)		
4	U2		← 2L1	2T1 →	4 (U2)	} high speed	
5	V2		← 2L2	2T2 →	5 (V2)		
6	W2		← 2L3	2T3 →	6 (W2)		
7	PTC						
8	PTC						

## Connection diagram for motors with two speeds | Dahlander pole changing motor

Motor cable		Connections at repair switch					
Cable no.	Winding	Switch pins			Motor cable no.		
1	U1	on-site connection 380 V 3-phase	← L1	T1 →	1 (U1)	} low speed	
2	V1		← L2	T2 →	2 (V1)		
3	W1		← L3	T3 →	3 (W1)		
4	U2		← 2L1	2T1 →	4 (U2)	} high speed U1 - V1 - W1 must be star connected	
5	V2		← 2L2	2T2 →	5 (V2)		
6	W2		← 2L3	2T3 →	6 (W2)		
7	PTC						
8	PTC						

## Connecting diagram for repair switch



### Connection 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					Motorkabel
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.