

# Jumpers

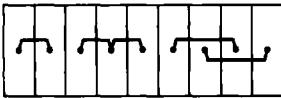
## ZQV, ZQS

Jumpers are used to distribute current to other terminal blocks within the rail assembly. ZQV, ZQS and WQV jumpers are fingersafe, fully insulated and inserted into the jumper recess in the middle of the terminal block. They are securely fastened to the block current bar.

To select the proper jumper, you must know the type of terminals being connected and the number of poles. The model number can then be used for the selection (e.g. ZQV 2.5/2 is for use in a ZDU 2.5 terminal and has 2 poles). Features include:

- Z series jumpers push into the blocks
- Pre-assembled jumpers between 2-10 poles with captive screws and screwdriver guides (WDU Blocks)
- Full terminal block current rating can be distributed through the jumper
- Individual jumper legs can be removed to skip terminals
- Jumpers can be installed in parallel to allow dual current distribution paths (ZDU 2.5 and WDU 2.5)

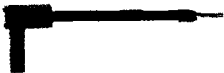
### Arrangement of 2 potentials



Simple

Parallel

## ZQW



ZQW jumpers interconnect tension clamp blocks with screw clamp blocks. The ZQW connects to the current bar of the screw clamp block. The other end of the ZQW is inserted into one of the tension clamps. Continuous current rating of the ZQW jumper is 27A.

	Type	Part No.
To tension clamp from:		
WDU 6/WDU 10	ZQW1	161143
WDU 16/WDU 35	ZQW2	161144

## ZQB 2.5

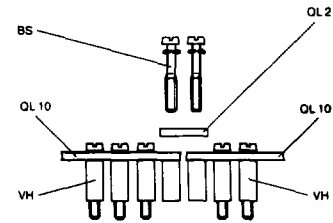
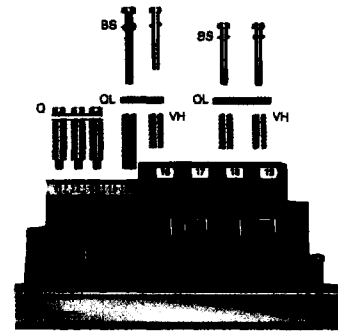


Used to jumper two blocks together when DIN-rail jumpering is not available. Maximum current: 20A.

	Type	Part No.
for 5mm wide blocks	ZQB 2.5	167712

For terminal type	Continuous current			
ZDK 1.5, ZDU 2.5,				
ZDU 2.5/3AN,				
ZDU 2.5/4AN,				
ZTR 2.5, ZTR 2.5/3AN,				
ZTR 2.5/D, ZTR 2.5/3AN/D				
Width: 5 mm	Amp	Type	Part No.	
	25	ZQV 2.5/2	160886	
	25	ZQV 2.5/3	160887	
	25	ZQV 2.5/4	160888	
	25	ZQV 2.5/5	160889	
	25	ZQV 2.5/6	160890	
	25	ZQV 2.5/7	160891	
	25	ZQV 2.5/8	160892	
	25	ZQV 2.5/9	160893	
	25	ZQV 2.5/10	160894	
	25	ZQV 2.5/50*	169754	
ZDU 4				
Width: 6 mm	33	ZQV 4/2	160895	
	33	ZQV 4/3	160896	
	33	ZQV 4/4	160897	
	33	ZQV 4/5	160898	
	33	ZQV 4/6	160899	
	33	ZQV 4/7	160900	
	33	ZQV 4/8	160901	
	33	ZQV 4/9	160902	
	33	ZQV 4/10	160903	
ZBH 2.5/2				
Width: 12 mm	16	ZQS 2.5/2	163320	
	16	ZQS 2.5/3	163321	
	16	ZQS 2.5/4	163322	
	16	ZQS 2.5/5	163323	
ZDU 6, ZBI 2.5				
Width: 8 mm	45	ZQV 6/2	162785	
	45	ZQV 6/3	162786	
	45	ZQV 6/4	162787	
WDU 2.5				
Width: 5 mm	25	ZQV 2.5/2	169380	
	25	ZQV 2.5/3	169381	
	25	ZQV 2.5/4	169382	
	25	ZQV 2.5/5	169383	
	25	ZQV 2.5/6	169384	
	25	ZQV 2.5/7	169385	
	25	ZQV 2.5/8	169386	
	25	ZQV 2.5/9	169387	
	25	ZQV 2.5/10	169388	
	25	ZQV 2.5/50*	169389	

## Jumping system Q/QL



### Q Preassembled jumpers

With preassembled jumpers, the jumpering link, jumpering sleeve, and fixing screw are already captively mounted with the corresponding number of poles. During assembly, the preassembled jumpers only require insertion into the individual terminal rows. These jumpering units are available in 2, 3, 4 and 10-pole versions.

### QL Jumpering links

Jumpering links are used to cross-connect several terminal blocks of the same potential. The jumpering links are made of copper or brass. The surface is tin-plated. These jumpering links are available in 2, 3, 4, and 10-pole lengths, matched to the respective terminal width. The jumpering link is electrically connected to the terminal block current bar via a connection sleeve.

### VH Connection sleeves

The length of the connection sleeves is matched to the respective terminal. They are made of copper or brass. The surface is SnPb. A connection sleeve must be used for each terminal to be jumpered.

### BS Fixing screws

A steel fixing screw is used to connect the jumpering link to the connection sleeve on the terminal block current bar. The purpose of the steel screw is to mechanically connect the jumpering unit firmly to the current bar. Two types of screw shape are used. The A-shape has a full-length thread and the B-shape has a threadless shank on its upper half. The B-shape also has a rolled lock washer.

### Jumping over more than 10 terminal blocks

For SAKD 2.5 N, SAK 2.5, SAK 4, SAK 6 N and AKZ 4, it is possible to construct a cross-connection of more than 10 poles, e.g. 20-pole: 2 x Q 10 and 1 x QL 2. The first and last fixing screws are removed from the connection sleeve of the Q 10. The QL 2 is inserted between and both fixing screws are screwed into the connection sleeve again. 20 poles can be cross-connected using this combination.

\*Jumpering over 32 blocks may not be possible due to additive tolerances of blocks. 50 pole versions do not have insulated ends.

Type	Rated current of the terminal blocks (VDE)	Q preassembled jumpers		QL Jumpering links					Cross-connection continuous current	VH Connection sleeves without threads					BS Fixing screws		SS Screw retainer			
		Type	Type	No. poles	Cat. No.	No. poles	Cat. No.	b		t	L	d1	l	Type	Length	Cat. No.		L	d2	d1
SAKD 2.5 N	26A	Q 2	36780	QL 2	21580	6	1.5	5.1	2.8	2.2	20A	VH 8.5	26690	8.5	4	2.8	36770	B	2.5x14	Incl.
SAKD 2.5/35	26A	Q 3	36790	QL 3	21590						20A									
WTR 2.5 (QL)	26A	Q 4	36800	QL 4	21600						20A						106270		2.5x14	Incl.
		Q 10	36810	QL 10	33800						20A									
SAK 2.5	26A	Q 2	33700	QL 2	15590	6	0.6	6	3.4	2.4	27A	VH 8	26670	8	4.9	3.5	35900	B	3x15	Incl.
SAK 2.5/35	26A	Q 3	33710	QL 3	15600						27A									
SAK 2.5 L. LL	18A	Q 4	33720	QL 4	15610						27A									
SAK 2.5 T	10A	Q 10	36870	QL 10	33810						27A									
SAKT 4	26A																			
SAK 2.5 ex	26A																			
KB 2.5/10	26A																			
AST 3/35	16A																			
AST 4/35	16A																			
SAK 4 and 4 T	34A	Q 2	33670	QL 2	13060	6	0.6	6.5	3.4	2.5	36A	VH 13.5	24850	13.5	5	3.5	30300	B	3x20	Incl.
KB 4/10	34A	Q 3	33680	QL 3	13070						36A									
SAK 4/35	34A	Q 4	33690	QL 4	13080						36A									
SAK 4 ex	34A	Q 10	36880	QL 10	33820						36A									
SAKH 4 ex	34A																			
AST 1 - 5	16A																			
AST 5 T																				
SAK 6 N	44A	Q 2	45670	QL 2	19430	6	1	8	3.4	3	47A	VH 12	24900	12	5	3.5	30300	B	3x20	Incl.
KB 6/10	44A	Q 3	45680	QL 3	19440						47A									
SAK 6/35	44A	Q 4	45690	QL 4	19450						47A									
SAK 6 ex	44A	Q 10	45700	QL 10	33830						36A									
SAKT 1 and 2	27A																			
WSI 6 (QL)	35A																105210		3x5	
SAK 10	61A	Q 2	45710	QL 2	47030	6	2	10	3.4	3.5	47A	VH 12	24900	12	5	3.5	30300	B	3x20	Incl.
SAK 10/35	61A	Q 3	45720	QL 3	47040						47A									
KB 10/15	61A	Q 4	45730	QL 4	47050						47A									
		Q 10	45740	QL 10	47060						36A									
SAK 16	82A	Q 2	45750	QL 2	47070	6	2	12	3.4	4	47 A	VH 12	24900	12	5	3.2	30300	B	3x20	Incl.
SAK 16/35	63A	Q 3	45760	QL 3	47080						47 A									
	82A	Q 4	45770	QL 4	47090						47 A									
		Q 10	45780	QL 10	47100						36 A									
SAK 35 N	135A			QL 2	56490	8	3	16	4.5	5	65A	VH 17	26700	17	8	5	26710	A	4x30	13640
SAK 35 N/35	135A			QL 3	56500						65A									
				QL 4	56510						65A									
				QL 10	56520						65A									
SAK 35	135A			QL 2	12360	8	3	16	4.5	5	65A	VH 17	26700	17	8	5	26710	A	4x30	13640
SAK 35 ex	115A			QL 3	12370						65A									
SAK 35/35	135A			QL 4	12380						65A									
				QL 10	33860						65A									
SAK 70	207A			QL 2	34530	14	4	22	5.5	7	180A	VH 30.5	34550	30.5	11	5.5	34560	A	5x45	34610
SAK 70/35	207A			QL 3	16700						180A									
SAK 70 ex	178A																			
SAK 95	250A			QL 2	55120	14	4	28	6	7	142A	VH 35	55110	35	11	5.5	63020	B	5x50	Incl.
SAK 95/35	250A																			
SAK 4 S	16A			QL 2	13060	6	0.6	6.5	3.4	2.4	36A						34620	B	3x6	Incl.
SAK 4 SS	16A			QL 3	13070						36A									
				QL 4	13080						36A									
				QL 10	33820						36A									
TOP 4 FF	16A			QL 2	15590	6	0.6	6.0	3.4	2.4		VH 16	30970	16	5	3.5	29250		3x25	16440
TOP 4 FF/35	16A			QL 3	15600															
TOP 4 SF	16A			QL 4	15610															
TOP 4 SF/35	16A			QL 10	33810															
FDS 1/35	16A	Q 2	63290	QL 2	13060	6	0.6	6.5	3.4	2.5		VH 8	26670	8	5	3.5	35900	B	3x15	Incl.
		Q 3	63300	QL 3	13070															
		Q 4	63310	QL 3	13080															
		Q 10	63320	QL 10	33820															
TOP 2.5 T	10A			QL 2	20730	6	2	7.4	3.5			VH 13.5	24850	13.5	5	3.5	30300	B	3x20	Incl.
TOP 2.5 T/35	10A																			
SAKA 10	47A			QL 2	13550	6	2	11.9	4.1	4		VH 23	34870	23	6	4.5	26710		4x30	13640
				QL 3	13560															
				QL 4	13570															
				QL 10	33850															