

# Jumpers

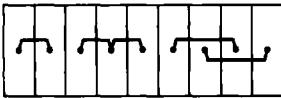
## ZQV, ZQS

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)

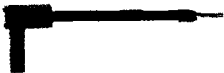
### Arrangement of 2 potentials



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

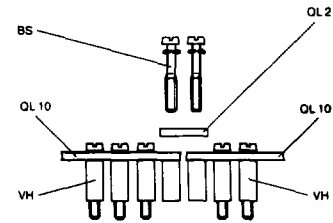
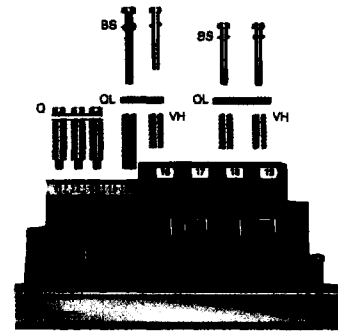


Used to jumper two blocks together when DIN-rail jumpering is not available. Maximum current: 20A.

	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
ZBI 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	<b>36780</b>	QL 2	<b>21580</b>	6	1.5	5.1	2.8	2.2	20A	VH 8.5	<b>26690</b>	8.5	4	2.8	<b>36770</b>	B	2.5x14	Incl.
SAKD 2.5/35	26A	Q 3	<b>36790</b>	QL 3	<b>21590</b>						20A									
WTR 2.5 (QL)	26A	Q 4	<b>36800</b>	QL 4	<b>21600</b>						20A						<b>106270</b>		2.5x14	Incl.
		Q 10	<b>36810</b>	QL 10	<b>33800</b>						20A									
SAK 2.5	26A	Q 2	<b>33700</b>	QL 2	<b>15590</b>	6	0.6	6	3.4	2.4	27A	VH 8	<b>26670</b>	8	4.9	3.5	<b>35900</b>	B	3x15	Incl.
SAK 2.5/35	26A	Q 3	<b>33710</b>	QL 3	<b>15600</b>						27A									
SAK 2.5 L. LL	18A	Q 4	<b>33720</b>	QL 4	<b>15610</b>						27A									
SAK 2.5 T	10A	Q 10	<b>36870</b>	QL 10	<b>33810</b>						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	<b>33670</b>	QL 2	<b>13060</b>	6	0.6	6.5	3.4	2.5	36A	VH 13.5	<b>24850</b>	13.5	5	3.5	<b>30300</b>	B	3x20	Incl.
KB 4/10	34A	Q 3	<b>33680</b>	QL 3	<b>13070</b>						36A									
SAK 4/35	34A	Q 4	<b>33690</b>	QL 4	<b>13080</b>						36A									
SAK 4 ex	34A	Q 10	<b>36880</b>	QL 10	<b>33820</b>						36A									
SAKH 4 ex	34A																			
AST 1 - 5	16A																			
AST 5 T																				
SAK 6 N	44A	Q 2	<b>45670</b>	QL 2	<b>19430</b>	6	1	8	3.4	3	47A	VH 12	<b>24900</b>	12	5	3.5	<b>30300</b>	B	3x20	Incl.
KB 6/10	44A	Q 3	<b>45680</b>	QL 3	<b>19440</b>						47A									
SAK 6/35	44A	Q 4	<b>45690</b>	QL 4	<b>19450</b>						47A									
SAK 6 ex	44A	Q 10	<b>45700</b>	QL 10	<b>33830</b>						36A									
SAKT 1 and 2	27A																			
WSI 6 (QL)	35A																<b>105210</b>		3x5	
SAK 10	61A	Q 2	<b>45710</b>	QL 2	<b>47030</b>	6	2	10	3.4	3.5	47A	VH 12	<b>24900</b>	12	5	3.5	<b>30300</b>	B	3x20	Incl.
SAK 10/35	61A	Q 3	<b>45720</b>	QL 3	<b>47040</b>						47A									
KB 10/15	61A	Q 4	<b>45730</b>	QL 4	<b>47050</b>						47A									
		Q 10	<b>45740</b>	QL 10	<b>47060</b>						36A									
SAK 16	82A	Q 2	<b>45750</b>	QL 2	<b>47070</b>	6	2	12	3.4	4	47 A	VH 12	<b>24900</b>	12	5	3.2	<b>30300</b>	B	3x20	Incl.
SAK 16/35	63A	Q 3	<b>45760</b>	QL 3	<b>47080</b>						47 A									
	82A	Q 4	<b>45770</b>	QL 4	<b>47090</b>						47 A									
		Q 10	<b>45780</b>	QL 10	<b>47100</b>						36 A									
SAK 35 N	135A			QL 2	<b>56490</b>	8	3	16	4.5	5	65A	VH 17	<b>26700</b>	17	8	5	<b>26710</b>	A	4x30	<b>13640</b>
SAK 35 N/35	135A			QL 3	<b>56500</b>						65A									
				QL 4	<b>56510</b>						65A									
				QL 10	<b>56520</b>						65A									
SAK 35	135A			QL 2	<b>12360</b>	8	3	16	4.5	5	65A	VH 17	<b>26700</b>	17	8	5	<b>26710</b>	A	4x30	<b>13640</b>
SAK 35 ex	115A			QL 3	<b>12370</b>						65A									
SAK 35/35	135A			QL 4	<b>12380</b>						65A									
				QL 10	<b>33860</b>						65A									
SAK 70	207A			QL 2	<b>34530</b>	14	4	22	5.5	7	180A	VH 30.5	<b>34550</b>	30.5	11	5.5	<b>34560</b>	A	5x45	<b>34610</b>
SAK 70/35	207A			QL 3	<b>16700</b>						180A									
SAK 70 ex	178A																			
SAK 95	250A			QL 2	<b>55120</b>	14	4	28	6	7	142A	VH 35	<b>55110</b>	35	11	5.5	<b>63020</b>	B	5x50	Incl.
SAK 95/35	250A																			
SAK 4 S	16A			QL 2	<b>13060</b>	6	0.6	6.5	3.4	2.4	36A						<b>34620</b>	B	3x6	Incl.
SAK 4 SS	16A			QL 3	<b>13070</b>						36A									
				QL 4	<b>13080</b>						36A									
				QL 10	<b>33820</b>						36A									
TOP 4 FF	16A			QL 2	<b>15590</b>	6	0.6	6.0	3.4	2.4		VH 16	<b>30970</b>	16	5	3.5	<b>29250</b>		3x25	<b>16440</b>
TOP 4 FF/35	16A			QL 3	<b>15600</b>															
TOP 4 SF	16A			QL 4	<b>15610</b>															
TOP 4 SF/35	16A			QL 10	<b>33810</b>															
FDS 1/35	16A	Q 2	<b>63290</b>	QL 2	<b>13060</b>	6	0.6	6.5	3.4	2.5		VH 8	<b>26670</b>	8	5	3.5	<b>35900</b>	B	3x15	Incl.
		Q 3	<b>63300</b>	QL 3	<b>13070</b>															
		Q 4	<b>63310</b>	QL 3	<b>13080</b>															
		Q 10	<b>63320</b>	QL 10	<b>33820</b>															
TOP 2.5 T	10A			QL 2	<b>20730</b>	6	2	7.4	3.5			VH 13.5	<b>24850</b>	13.5	5	3.5	<b>30300</b>	B	3x20	Incl.
TOP 2.5 T/35	10A																			
SAKA 10	47A			QL 2	<b>13550</b>	6	2	11.9	4.1	4		VH 23	<b>34870</b>	23	6	4.5	<b>26710</b>		4x30	<b>13640</b>
				QL 3	<b>13560</b>															
				QL 4	<b>13570</b>															
				QL 10	<b>33850</b>															