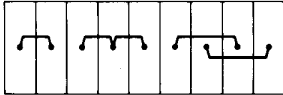


Cross-connection system WQV

- Preassembled units - 2-, 3-, 4- and 10-poles.
- Captive fixing screws. Screwdriver guidance due to counter sunk arrangement.
- Engageable in terminal moulding - simple overhead assembly
- Offset arrangement in terminal moulding - parallel use of two potentials possible
- No end plates or partitions for neighbouring cross-connections up to 400 V.
- The full terminal rated current can be fed across all numbers of poles.

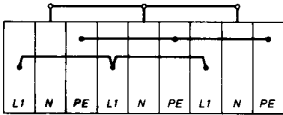
The insulated cross-connection units guarantee absolute finger and back-of-hand safety in conjunction with the W series terminal blocks, in accordance with the "Accident Prevention Regulations, Electrical Installations and Equipment" (VBG 4) and VDE 0106 Part100/3.83.

Arrangement of two potentials



Simple Parallel

The WQV cross-connection system cannot only be used for feed-through terminals, but also when these are combined with PE terminals and N-disconnect terminals. Highly economical terminal strips can be assembled in this way.



The individual cross-connection bridges can be easily broken off by bending once, after removing the screw. The WTA type test adapter can also be used for function testing with mounted cross-connections.

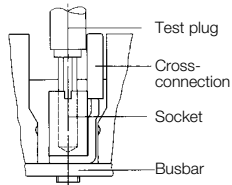
Cross-connections with more than 10-poles. In order to cross-connect more than 10 terminals, the screwdriver guides and the fixing screws on the end of the WQV to be connected and removed. A 2-pole WQV is set parallel against it.



WQV cross-connection with STB and PS

The fixing screw and the WQV insulation components must be removed. A socket serves to fix and receive the test plug. See page 3/14.

WDU construction with WQV and STB rated voltage 400 V.



Notching tool

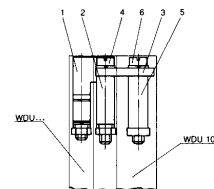


Tool for notching W series cross-connections. Cross-connection types WQV 2.5 to WQV 35

Type	Cat.No.
WAW 1	900450

for terminal type	Continuous current			
WDU 2.5 N	(A)	Type	Cat.No.	Qty
WDU 2.5...	35	WQV 2.5/2	105366	50
Width 5 mm	35	WQV 2.5/3	105376	50
	35	WQV 2.5/4	105386	50
	35	WQV 2.5/10	105446	20
WDU 4				
Width 6 mm	46	WQV 4/2	105196	50
	46	WQV 4/3	105456	50
	46	WQV 4/4	105466	50
	46	WQV 4/10	105206	20
WDU 6				
Width 8 mm	63	WQV 6/2	105236	50
	63	WQV 6/3	105476	50
	63	WQV 6/4	105486	50
	63	WQV 6/10	105226	20
WDU 10				
Width 10 mm	85	WQV 10/2	105256	50
	63	WQV 10/3	105496	50
	63	WQV 10/4	105506	50
	63	WQV 10/10	105246	20
WDU 16				
Width 12 mm	85	WQV 16/2	105326	50
	63	WQV 16/3	105516	50
	63	WQV 16/4	105526	50
	63	WQV 16/10	105336	10
WDU 35				
Width 16 mm	138	WQV 35/2	105306	50
	112	WQV 35/3	105536	50
	112	WQV 35/4	105546	50
	112	WQV 35/10	105316	10
WDU 70				
Width 27 mm	207	WQV 70/2	106350	5
	207	WQV 70/3	106360	5
WDU 120				
Width 32 mm	292	WQV 120/2	106330	5
	292	WQV 120/3	106340	5

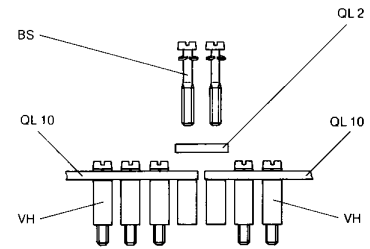
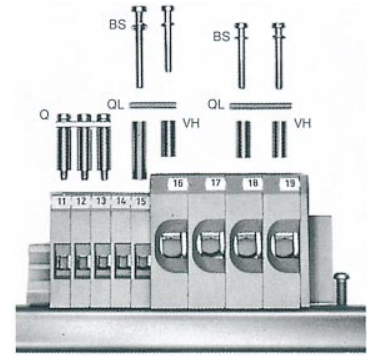
Jumpering different terminal widths



Touchproof construction by covering the QL 2 by WAD

	Pos.	Type	Cat.No.
WDU 10 to WDU 2.5	1	WQV 2.5	2...10pole
	2	WQL 2	105660
	3	VH 12.2	105650
	4	BS M2.5x20	034310
	5	VH 13	030400
	6	BS M3x20	030300
WDU 10 to WDU 4	1	WQV 4	2...10pole
	2	VH 12	024900
	3	QL 2	019430
	4	BS M3x20	030300
	5	VH 13	030400
	6	BS M3x20	030300
WDU 16 to WDU 2.5		WQV 16 - 2.5	106390
WDU 16 to WDU 4 or 6		WQV 16 - 4/6	106400
WDU 35 to WDU 2.5		WQV 35 - 2.5	106410
WDU 35 to WDU 4 or 6		WQV 35 - 4/6	106420
WDU 35 to WDU 10		WQV 35 - 10	106800
WDU 16 N to WDU 2.5		WQV 16 N - 2.5	107310
WDU 16 N to WDU 4 or 6		WQV 16 N - 4/6	107250

Jumpering system Q/QL



Q Preassembled jumpers

With preassembled jumpers, the jumpering link, jumpering sleeve and the 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. 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

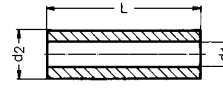
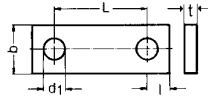
The length of the connection sleeve is matched to the respective terminal. They are made of copper or brass. The surface is SnPb. A connection sleeve must be used for each terminal to be jumpered.

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.

Jumpering over more than 10 terminals

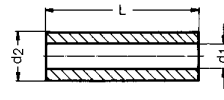
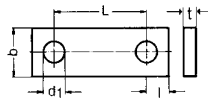
For SAKD 2.5 N, SAK 2.5, SAK 4, SAK 6 N and AKZ 4 it is possible to construct a cross-connection of more than 10 poles, e.g. 20-pole: 2 x Q10 and 1 x QL 2. The first and last fixing screws are removed from the corrosion sleeve of the Q 10. The QL 2 is inserted between, and both fixing screws are screwed into the connection sleeve again. 20 poles can be cross-connected using this combination.



Type	Q		QL		VH		BS		SS											
	Rated current of rail-mounted terminal	Preassembled cross-connection	Cross-connection links	Cross-conn. cont. current	Connection sleeves without thread	Fixing screws	Screw retainers	Size	Screw retainers											
Type	A	Type	Type	Type	Type	Length	Cat.No.	L	d2	d1	Cat.No.	Shape	M	Size	Screw retainers					
SAKD 2.5 N	26 A	Q 2	036780	QL 2	021580	6	1.5	5.1	2.8	2.2	20 A	VH 8.5	026690	8.5	4	2.8	036770	B	2.5x15	incl.
WTR 2.5 (QL)	26 A	Q 3	036790	QL 3	021590						20 A									
		Q 4	036800	QL 4	021600						20 A						106270		2.5x4.5	incl.
		Q 10	036810	QL 10	033800						20 A									
SAK 2.5	26 A	Q 2	033700	QL 2	015590	6	0.6	6	3.4	2.4	27 A	VH 8	026670	8	4.9	3.2	035900	B	3x15	incl.
SAK 2.5 LL	18 A	Q 3	033710	QL 3	015600						27 A									
SAK 2.5 T	10 A	Q 4	033720	QL 4	015610						27 A									
SAKT 4	26 A	Q 10	036870	QL 10	033810						27 A									
SAK 2.5 ex	26 A																			
KB 2.5/10	26 A																			
SAK 4 u. 4 T	34 A	Q 2	033670	QL 2	013060	6	0.6	6.5	3.4	2.5	36 A	VH 13.5	024850	13.5	5	3.2	030300	B	3x20	incl.
KB 4/10	34 A	Q 3	033680	QL 3	013070						36 A									
SAK 4 ex	34 A	Q 4	033690	QL 4	013080						47 A									
SAKH 4 ex	34 A	Q 10	036880	QL 10	033820						36 A									
AST 1...5	16 A																			
AST 5 T																				
SAK 6 N	44 A	Q 2	045670	QL 2	019430	6	1	8	3.4	3	47 A	VH 12	024900	12	5	3.2	030300	B	3x20	incl.
KB 6/10	44 A	Q 3	045680	QL 3	019440						47 A									
SAK 6 ex	44 A	Q 4	045690	QL 4	019450						47 A									
SAKT 1 u. 2	27 A	Q 10	045700	QL 10	033830						36 A									
WSI 6 (QL)	35 A																			
																	105210		3x5	
SAK 10	61 A	Q 2	045710	QL 2	047030	6	2	10	3.4	3.5	47 A	VH 12	024900	12	5	3.2	030300	B	3x20	incl.
KB 10/15	61 A	Q 3	045720	QL 3	047040															
		Q 4	045730	QL 4	047050						47 A									
		Q 10	045740	QL 10	047060						36 A									
SAK 16	82 A	Q 2	045750	QL 2	047070	6	2	12	3.4	4	47 A	VH 12	024900	12	5	3.2	030300	B	3x20	incl.
SAK 16 ex	63 A	Q 3	045760	QL 3	047080						47 A									
		Q 4	045770	QL 4	047090															
		Q 10	045780	QL 10	047100						36 A									
SAK 35 N	135 A			QL 2	056490	8	3	16	4.5	5	65 A	VH 17	026700	17	8	5	026710	A	4x30	013640
				QL 3	056500						65 A									
				QL 4	056510						65 A									
				QL 10	056520						65 A									
SAK 35	135 A			QL 2	012360	8	3	18	4.5	5	65 A	VH 17	026700	17	8	5	026710	A	4x30	013640
SAK 35 ex	115 A			QL 3	012370						65 A									
				QL 4	012380						65 A									
				QL 10	033860						65 A									
SAK 70	207 A			QL 2	034530	14	4	22	5.5	7	180 A	VH 30.5	034550	30.5	11	5.5	034560	A	5x45	034610
SAK 70 ex	178 A			QL 3	016700						180 A									
SAK 95	250 A			QL 2	055120	14	4	28	6	7	142 A	VH 35	055110	35	11	5.5	063020	B	5x50	incl.
SAK 4 S	16 A			QL 2	013060	6	0.6	6.5	3.4	2.5	36 A						034620	B	3x6	incl.
SAK 4 SS	16 A			QL 3	013070						36 A									
				QL 4	013080						36 A									
				QL 10	033820						36 A									
TOP 4 FF	16 A			QL 2	015590	6	0.6	6.0	3.4	2.4		VH 16	030970	16	5	3.2	029250	A	3x25	016440
TOP 4 SF	16 A			QL 3	015600															
				QL 4	015610															
				QL 10	033810															
SAKA 10				QL 2	013550	6	2	11.9	4.1	4		VH 23	034870	23	6	4.2	026710	A	4x30	013640
				QL 3	013560															
				QL 4	013570															
				QL 10	033850															

Cross-connections (jumpers)

Q/QL



Q

QL

VH

BS

SS

Preassembled cross-connections

Cross-connection link

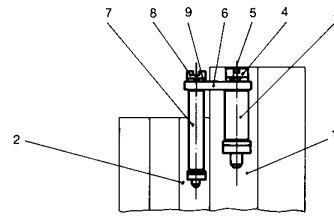
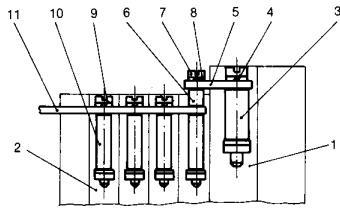
Connection sleeves without thread

Fixing screws

Type	Rated current of the terminal blocks	Type	Type	Dimensions						Cross-connection continuous current	Type	Length	Cat.No.	L	d2	d1	Cat.No.	Form	M	Screw retainer	
				Poles	Cat.No.	b	t	L	d1												l
SAK B 10	47 A		QL 2	011410	6	2	10	4.1	3.5	47 A							010330	A	4 x 9	013640	
			QL 3	011430						47 A											
			QL 4	011450						47 A											
			QL 10	033840						36 A											
SAKC 10	27 A		QL 2	013550	6	2	12	4.1	4.0	47 A	VH 14	029970	14	7	4.2		036280	A	4 x 20	013640	
			QL 3	013560						47 A											
			QL 4	013570						47 A											
			QL 10	033850						36 A											
SAK H 6			QL 2	013140	6	2	14	3.4	3.4	47 A											
SAK H 10			QL 3	013150						47 A											
			QL 4	013160						47 A											
			QL 10	033870						36 A											
SAKS 1	10 A		QL 2	019140	6	2	12.9	3.4	3	47 A							034620	B	3 x 6	incl.	
SAKS 3	10 A		QL 3	019150						47 A											
SAKS 6	10 A		QL 4	019160						47 A											
SAKS 7	10 A		QL 10	033880						36 A											
KSK 1, 2 and 3																	019970	A	3 x 7	016440	
SAKS 4	16 A		QL 2	032800	10	4	24	4.8	5	47 A							010330	A	4 x 9	013640	
			QL 3	032810						47 A											
			QL 4	032820						47 A											
			QL 10	033900						36 A											
SAKS 2	10 A		QL 2	020780	10	4	27.6	4.8	6.5	47 A							010330	A	4 x 9	013640	
SAKS 5	63 A		QL 3	020790						47 A											
			QL 4	020800						47 A											
			QL 10	033890						36 A											
AKZ 1.5	17.5 A	Q 2	036820	QL 2	033020	4	1.5	5	2.8	2.0	10 A	VH 5	029680	5	4	2.7		040010	B	2.5 x 11	incl.
AKZ 1.5 T		Q 3	036830	QL 3	033030						10 A										
AKZ 1.5 W		Q 4	036840	QL 4	033040						10 A										
AKZ 2.5	24 A	Q 10	036850	QL 10	033910						20 A										
DK 4 Q	32 A	Q 2	033640	QL 2	029720	4	0.8	6.1	2.8	2.5	20 A	VH 5	029680	5	4	2.7		040010	B	2.5 x 11	incl.
DKB 4 Q/10	32 A	Q 3	033650	QL 3	029730						20 A										
DKI 4	32 A	Q 4	033660	QL 4	029740						20 A										
DKI T 4	32 A	Q 10	036860	QL 10	033920						20 A										
DKI S 4	32 A																				
AKZ 4	32 A																				
AKZ 4 S	8 A																				
AKB 4	32 A																				
AKZ 4 L, LL	16 A																				
AKZ 4 SS	8 A	Q 2	036900	QL 2	029720	4	0.8	6.1	2.8	2.5	20 A	VH 8.5	026690	8.5	4	2.7		036770	B	2.5 x 14	incl.
AK 4/10	32 A	Q 3	036910	QL 3	029730						20 A										
		Q 4	036920	QL 4	029740						20 A										
		Q 10	036930	QL 10	033920						20 A										
SAKG 28	125 A		QL 2	019390	14	4	28	6.4	7	110 A											
			QL 3	040760																	
			QL 4	040770																	
SAKG 32	150 A		QL 2	019400	18	5	32	8.4	9	170 A											
SAKG 70	192 A		QL 3	044150																	
			QL 4	044160																	
SAKG 40	232 A		QL 2	019400	18	5	32	8.4	9	250 A											
			QL 3	044150																	
			QL 4	044160																	
SAKG 40/35	232 A		QL 2	021140	25	5	46	10.5	12.5	250 A											
			QL 3	044490																	
			QL 4	044500																	
SAKG 46	309 A		QL 2	024700	32	6	46	13.0	16	415 A											
			QL 3	044440																	
			QL 4	044450																	
SAKG 54	415 A		QL 2	026440	40	6	54	17.0	20	600 A											
			QL 3	040800																	
			QL 4	024740																	

Cross-connecting terminals of different sizes

for increasing cross-section!



Terminal	Position	Type	Cat.No.	Current
from SAK 16	1	-	-	-
Sleeve	3	VH 12	024900	-
Screw	4	BS M 3 x 20	030300	-
to SAK 6 N	2	-	-	-
QV link	5	QL 2	047030	-
Sleeve	6	VH 4.5	030320	-
Screw	7	BS M 3 x 26	416661	-
Lock.-Washer	8	SS M 3	016440	-
Screw	9	BS M 3 x 20	030300	-
Sleeve	10	VH 12	024900	-
Cross-con. link	11	QL 2	019430	47 A
Cross-con. link	11	QL 3	019440	47 A
Cross-con. link	11	QL 4	019450	47 A
Cross-con. link	11	QL 10	033830	36 A
to SAK 4	2	-	-	-
Cross-con. link	5	QL 2	028150	-
Sleeve	6	VH 6.5	028640	-
Screw	7	BS M 3 x 26	416661	-
Lock.-Washer	8	SS M 3	016440	-
Screw	9	BS M 3 x 20	030300	-
Sleeve	10	VH 13.5	024850	-
Cross-con. link	11	QL 2	013060	36 A
Cross-con. link	11	QL 3	013070	36 A
Cross-con. link	11	QL 4	013080	36 A
Cross-con. link	11	QL 10	033820	36 A
to SAK 2.5	2	-	-	-
Cross-con. link	5	QL 2	047030	-
Sleeve	6	VH 12	024900	-
Screw	7	BS M 3 x 30	029620	-
Lock.-Washer	8	SS M 3	016440	-
Screw	9	BS M 3 x 15	035900	-
Sleeve	3	VH 12.5	030080	-
Sleeve	10	VH 8	026670	-
Cross-con. link	11	QL 2	015590	27 A
Cross-con. link	11	QL 3	015600	27 A
Cross-con. link	11	QL 4	015610	27 A
Cross-con. link	11	QL 10	033810	27 A
from SAK 10	1	-	-	-
Screw	4	BS M 3 x 20	030300	-
to SAK 4	2	-	-	-
Sleeve	3	VH 13.5	024850	-
Cross-con. link	5	QL 2	019430	-
Screw	7	BS M 3 x 20	030300	-
Screw	9	BS M 3 x 20	030300	-
Sleeve	10	VH 13.5	024850	-
Cross-con. link	11	QL 2	013060	36 A
Cross-con. link	11	QL 3	013070	36 A
Cross-con. link	11	QL 4	013080	36 A
Cross-con. link	11	QL 10	033820	36 A
to SAK 2.5	2	-	-	-
Cross-con. link	5	QL 2	019430	-
Sleeve	6	VH 6.5	028640	-
Screw	7	BS M 3 x 20	030300	-
Screw	9	BS M 3 x 15	035900	-
Sleeve	10	VH 8	026670	-
Cross-con. link	11	QL 2	015590	27 A
Cross-con. link	11	QL 3	015600	27 A
Cross-con. link	11	QL 4	015610	27 A
Cross-con. link	11	QL 10	033810	27 A
Sleeve	3	VH 13	030400	-

Terminal	Position	Type	Cat.No.	Current
from SAK 35	1	-	-	-
Sleeve	3	VH 17	026700	-
Screw	4	BS M 4 x 30	026710	-
Lock.-Washer	5	SS M 4	013640	-
to SAK 10	2	-	-	-
Cross-con. link	6	QL 2	013230	47 A
Sleeve	7	VH 27	030940	-
Screw	8	BS M 3 x 35	029250	-
Lock.-Washer	9	SS M 3	016440	-
to SAK 6 N	2	-	-	-
Cross-con. link	6	QL 2	020740	47 A
Sleeve	7	VH 27	030940	-
Screw	8	BS M 3 x 35	030980	-
Lock.-Washer	9	SS M 3	016440	-
from SAK 35 N-	1	-	-	-
Sleeve	3	VH 17	026700	-
Screw	4	BS M 4 x 30	026710	-
Lock.-Washer	5	SS M 4	013640	-
to SAK 10	2	-	-	-
Cross-con. link	6	QL 2	020740	47 A
Sleeve	7	VH 27	030940	-
Screw	8	BS M 3 x 35	030980	-
Lock.-Washer	9	SS M 3	016440	-
to SAK 6 N	2	-	-	-
Cross-con. link	6	QL 2	013550	47 A
Sleeve	7	VH 27	030940	-
Screw	8	BS M 3 x 35	030980	-
Lock.-Washer	9	SS M 3	016440	-
from SAK 16	1	-	-	-
Sleeve	3	VH 12	024900	-
Screw	4	BS M 3 x 20	030300	-
Lock.-Washer	5	SS M 3	included	-
to SAK 6 N	2	-	-	-
Cross-con. link	6	QL 2	028160	47 A
Sleeve	7	VH 17.5	028520	-
Screw	8	BS M 3 x 25	029250	-
Lock.-Washer	9	SS M 3	016440	-
to SAK 2.5	2	-	-	-
Cross-con. link	6	QL 2	019430	27 A
Sleeve	7	VH 19	028510	-
Screw	8	BS M 3 x 25	029250	-
Lock.-Washer	9	SS M 3	016440	-
from SAK 10	1	-	-	-
Sleeve	3	VH 12.5	030080	-
Screw	4	BS M 3 x 20	030300	-
Lock.-Washer	5	SS M 3	included	-
from SAK 4	2	-	-	-
Cross-con. link	6	QL 2	019430	36 A
Sleeve	7	VH 13.5	024850	-
Screw	8	BS M 3 x 20	030300	-
Lock.-Washer	9	SS M 3	included	-
to SAK 6 N	1	-	-	-
Sleeve	3	VH 12.5	030080	-
Screw	4	BS M 3 x 20	030300	-
Lock.-Washer	5	SS M 3	included	-
to SAK 2.5	2	-	-	-
Cross-con. link	6	QL 2	019430	27 A
Sleeve	7	VH 15	069050	-
Screw	8	BS M 3 x 20	030300	-
Lock.-Washer	9	SS M 3	included	-