

# Assembly Instructions for: S1 to S9 Junction Boxes MS1 to MS9 Junction Boxes

**IMPORTANT:** This document should be read carefully before commencing installation

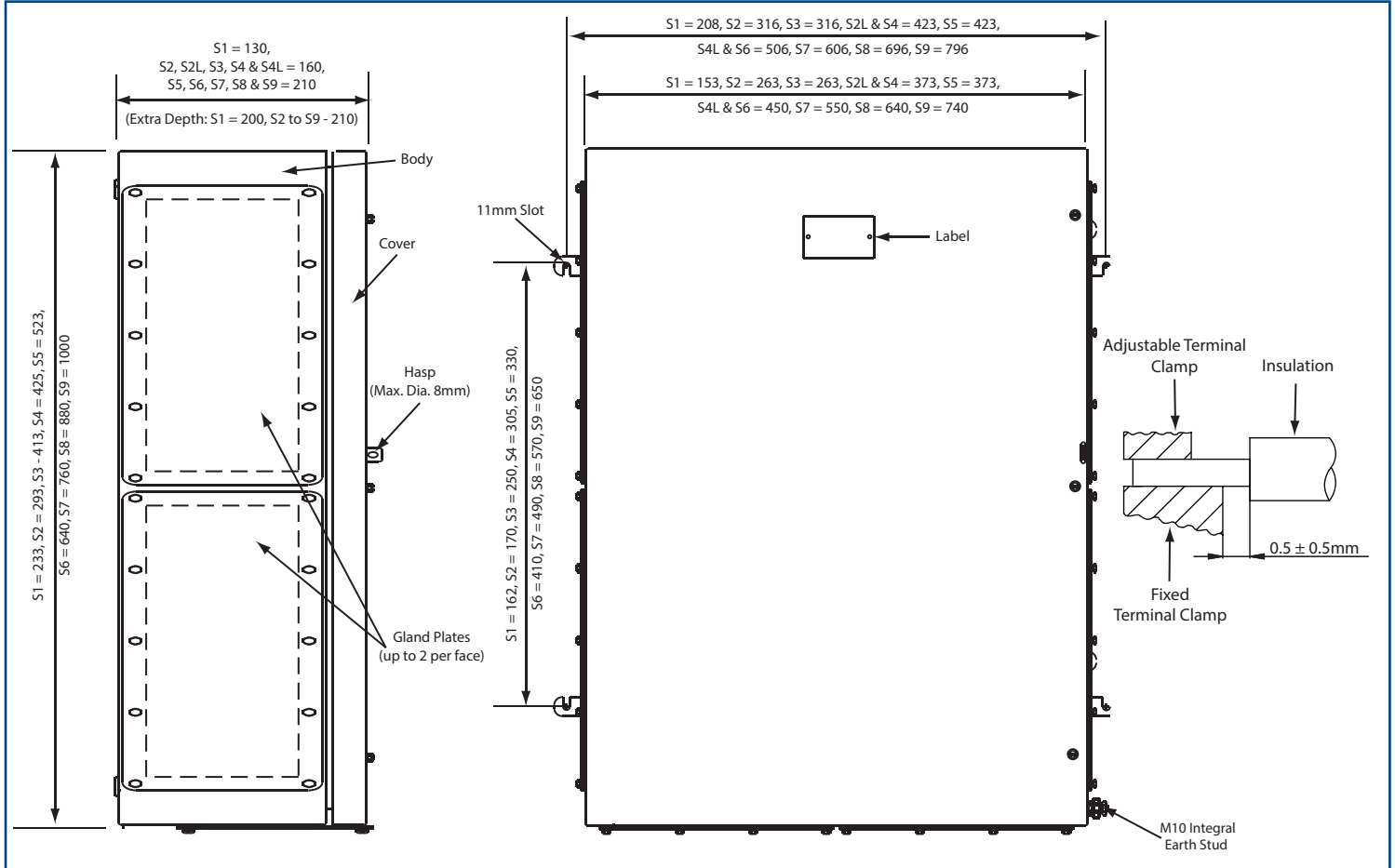
### Zones of Use of Terminal Box

CAT II 2G for use in Zone 1. Areas as defined in IEC/EN 60079-14.  
CAT II 2D for use in Zone 21 or 22. Areas as defined in IEC/EN 60079-31.

**Service Temperature** Minimum Installation Temperature: **-5°C**  
S1 - S9 -60°C to +80°C

### Certification Details

Box Type: S1 to S9 & MS1 to MS9  
 Ⓢ II 2 GD Exe IIC T\*\* Gb, Extb IIIC T\* Db IP66 Ⓒ  
 Baseefa No: 08ATEX0208X  
 IEC Ex No: BAS08.0065X



W = Maximum Dissipated Wattage      N = No. of Terminals Fitted      F = Combined Terminal Resistance      I = Maximum Current

$$W = N \times F \times I^2 \qquad N = W / F \times I^2 \qquad I = \text{Sqrt}(W / N \times F)$$

**Note:** Combined Terminal Resistance = Resistance of Maximum Conductor Length (see BS 6360 and table below) + Terminal Resistance

Box Type	Maximum Power Dissipation (Watts)																		Max. Cable Length Per Terminal (M)
	T*	T**	T***	T*	T**	T***	T*	T**	T***	T*	T**	T***	T*	T**	T***	T*	T**	T***	
	T6	80°C	-40/+40°C	T6	80°C	-40/+55°C	T6	80°C	-40/+65°C	T5	80°C	-40/+40°C	T5	80°C	-40/+55°C	T5	80°C	-40/+65°C	
Size 1		13.95			8.7			5.2			19.1			13.95			10.4		0.307
Size 2		18.15			11.3			6.8			24.9			18.15			13.6		0.425
Size 2L		18.15			11.3			6.8			24.9			18.15			13.6		0.495
Size 3		23.70			14.8			8.8			32.5			23.70			17.7		0.515
Size 4		29.95			18.7			11.2			41.1			29.95			22.4		0.579
Size 4L		29.95			18.7			11.2			41.1			29.95			22.4		0.653
Size 5		32.85			20.5			12.3			45.1			32.85			24.6		0.662
Size 6		40.00			25.0			15.0			55.0			40.00			30.0		0.792
Size 7		52.00			23.5			19.5			71.5			52.00			39.0		0.945
Size 8		65.00			40.6			24.3			89.3			65.00			48.7		1.090
Size 9		79.35			49.5			29.7			109.1			79.35			59.5		1.238

**EC Declaration of Conformity for S1 to S9 Junction Boxes**  
 We hereby declare that the products supplied on this order comply with the requirements of the ATEX Directive 94/9/EC and have been type approved by Notified Body Baseefa Limited, Buxton. SK17 9RZ UK. 1180. The products included on this Declaration of Conformity have been designed and manufactured in compliance with the following international standards: EN 60079-0: 2012, EN 60079-7: 2007, EN 60079-31:2009

*P. O'Connor*  
 P O'Connor  
 Head of Development/Technical

### **SPECIAL CONDITIONS FOR SAFE USE:**

1. Unused entry holes shall be fitted with stopping plugs as specified in the empty enclosure certificates Baseefa 08ATEX0207U and IECEx BAS 08.0064U. The operating temperature range of the enclosure is limited to that of the stopping plug fitted.
2. Only breather / drain devices as specified in the empty enclosure certificates Baseefa 08ATEX0207U and IECEx BAS 08.0064U may be used with these enclosures. The breather / drain devices must be installed in their correct orientation in either the bottom face or bottom face gland plate of the enclosure. The operating temperature range of the enclosure is limited to that of the breather / drain device fitted.
3. **Unused entries may be fitted with alternative stopping plugs and/or beather drains to those listed in the schedule. The user is responsible for ensuring that the protection concept temperature class and relevant IP rating are maintained.**
4. When used under dust layers the maximum depth shall be no greater than 50mm.
5. All terminal screws, used and unused, shall be tightened down by the end user.
6. Insulation of conductors must extend to within 1mm of the metal of the terminal throat unless specified otherwise on the terminal certificate.
7. No more than one single or multi-stranded lead shall be connected to either side of any terminal unless multiple conductors have been joined in a suitable manner e.g. two conductors into a single insulated bootlace ferrule, or any method indicated on the terminal certificate.
8. Terminals shall be installed in such a manner that the creepage and clearance distances between the terminal and adjacent components, enclosure walls and covers comply with the requirements of EN 60079-7 : 2007 for the rated voltage of the equipment.
9. Terminal temperatures must not exceed the operating range specified on the component certificate.
10. All terminals and accessories such as cross-connectors, shall be installed in accordance with the terminal manufacturers instructions.
11. The maximum voltage, current and dissipated power shown on the rating label must not be exceeded.
12. When connecting conductors of cross section below the maximum allowed for the particular terminal then the maximum amps per pole must be reduced in line with the maximum amps permitted for a terminal equivalent to the conductor size fitted e.g. if a terminal that can take a 6 sq. mm. conductor at 29 amps is fitted with a 2.5 sq. mm. conductor then the current shall be reduced to a maximum of 17 amps, or the rating marked on the apparatus label, whichever is the lower.
13. When metallic and non-metallic trunking is provided inside the junction box, the trunking shall be suitable for use at 80°C, meet the creepage and clearance requirements of EN 60079 : 2007 and not affect the IP rating of the junction box, and the maximum current in any circuit will be limited to 1A.
14. When a self adhesive certification label is fitted, the minimum ambient temperature shall be -40°C.
15. When a document pocket is fixed to the inside of the lid, care must be taken by the installer / end user to prevent static build up i.e. plastic wallets must not be used to contain documents inside the enclosure.
16. Only those terminals shown on Drg. No: D9160 terminal schedule may be incorporated in the box.
17. Creepage and clearance distances in line with EN 60079-7 must be maintained.1.
18. When one Intertec Anti Condensation Heater plate type SL Slimtherm DLA T4 Exd IIC II 2GD rated AC120/260V ambient +60°C – 50w Certificate No: PTB 02ATEX1116X / IEC Ex PTB07.0055X is fitted in to the enclosure, the enclosure temperature classification is T4. The anti-condensation heater plate must only be energised when the power to the terminals within the enclosure are de-energised, a warning label to be fitted to the outside of the enclosure lid to cover this. Label to be added to indicate more than one circuit inside the enclosure.
19. The installed cabling / terminals must be positioned at least 50mm away from the heater plate.
20. With the arrangement shown in Drg. No: 9685 in a Size 9 enclosure, it is permitted for the heater plate to be energised whilst the main terminals are energised.

### **TO OPEN THE LID:**

1. Disconnect power (isolate all circuits).
2. Unlock padlock (if fitted) and remove.
3. Untighten the M6 lid securing screws.
4. a) Carefully swing the lid back on its hinges ensuring the seal is not displaced or damaged.  
b) The lid may be removed completely by opening to approximately 110° and lifting off.  
c) Ensure correct gasket is fitted for area of use.

### **TO CLOSE THE LID:**

1. Check that the gasket is correctly secured to the underside of the lid and undamaged. If the lid has been removed, completely reverse the procedure at 4b) ensuring that the correct lid is refitted.
2. Locate and tighten all M6 lid securing screws into the box body.
3. Replace and lock the padlock on the lid, if required.

### **ENCLOSURE INSTALLATION (EI)**

- a) The IP rating of the enclosure must be maintained for the area of use (e.g. IP6\* for Zone 21 dust environment) by the use of correct arrangement of cable/gland/sealing arrangements and in accordance with the installation codes as detailed in IEC/EN 60079-14, IEC/EN 61241-0 and IEC/EN 61241-1 and these installation instructions.
- b) Where other certified components are part of the assembly, the user must take account of any limitations listed on relevant certificates.
- c) The enclosure may be ready supplied with cable entries. Where the customer drills cable entries they must be installed in accordance with the component certificates Baseefa 08ATEX0207U or IEC Ex BAS 08.0064U and enclosure limitations, these specify a maximum clearance on the entry thread of 0.7mm for plain holes and where adjacent cable entries are installed sufficient clearance must be maintained to allow for the fitting of sealing/retaining washers and the rotation of the cable gland hexagons, and leave a minimum of material between adjacent holes in line with the above certificate number(s).

## TERMINAL WIRING (TW)

- All wiring must be carried out in accordance with the relevant code of practice and/or instructions e.g. IEC/EN 60079-14, IEC/EN 61241-0 and IEC/EN 61241-1.
- When used as a general purpose junction box or marshalling box the circuits carrying currents  $\geq 1A$  shall be individually protected against over current such that the protective device operates effectively at no more than 1.45 times the current carrying capacity of the smallest conductor used in that circuit.
- Where a major portion of the terminals are carrying maximum rated current the temperature at the branching point of the conductors may exceed  $70^{\circ}C$ . Under these circumstances the installer must ensure that the limiting temperature for the cable insulation used is acceptable e.g.  $85^{\circ}C$  (T6) or  $100^{\circ}C$  (T5).

## EARTHING:

- Where there is a requirement for bonding of gland plate, this can be achieved by using earthtags on the outside of the enclosure in conjunction with cable glands or by use of gland plates and enclosure lids with factory fitted earth studs. In the case of painted boxes, consideration must be given to the removal of the paint. e.g. under a serrated washer on the inside of the box which may lead to corrosion of the enclosure and potential reduction in earthing protection. This area must be protected against corrosion following installation.

## SCHEDULE OF TERMINALS FITTED

Size 1 Terminal Capacity Data										
Terminal Type	Conductor Size mm <sup>2</sup>		Max. Volts	Maximum Physical Terminal Content		Reduced Terminal Content at Maximum Terminal Amps		Combined Terminal Resistance (Ohms)	Insulation Stripping Length (mm)	Terminal Tightening Torque (Nm)
	Min	Max		Term. Qty.	Amps	Term. Qty.	Amps			
WDU2.5	0.5	2.5	550	30	13	18	17	0.002605	10	0.4 - 0.6
WDU4	0.5	4.0	690	25	17	16	22	0.001725	10	0.5 - 1.0
WDU6	0.5	6.0	550	19	24	13	29	0.001226	12	0.8 - 1.6
WDU10	1.5	10.0	550	15	34	11	40	0.000762	12	1.2 - 2.4
WDU16	1.5	16.0	690	13	45	9	53	0.000503	16	2.0 - 4.0
WDU35	2.5	35.0	690	9	75	6	87	0.000261	18	4.0 - 5.0
SAKK4 **	0.5	6.0	275	19	20	19	20	0.001755	10	0.5 - 1.0
SAKK10 **	0.5	10.0	275	13	35	13	40	0.000642	12	1.2 - 2.4

**Note:** Terminals listed (with the exception of \*\*) are only suitable for a minimum operating temperature of  $-50^{\circ}C$   
SAKK terminals are suitable for  $-60^{\circ}C$

Size 2 Terminal Capacity Data										
Terminal Type	Conductor Size mm <sup>2</sup>		Max. Volts	Maximum Physical Terminal Content		Reduced Terminal Content at Maximum Terminal Amps		Combined Terminal Resistance (Ohms)	Insulation Stripping Length (mm)	Terminal Tightening Torque (Nm)
	Min	Max		Term. Qty.	Amps	Term. Qty.	Amps			
WDU2.5	0.5	2.5	550	78	8	17	17	0.003479	10	0.4 - 0.6
WDU4	0.5	4.0	690	50	12	16	22	0.002269	10	0.5 - 1.0
WDU6	0.5	6.0	550	42	16	13	29	0.001589	12	0.8 - 1.6
WDU10	1.5	10.0	550	36	22	11	40	0.000978	12	1.2 - 2.4
WDU16	1.5	16.0	690	28	31	10	53	0.006390	16	2.0 - 4.0
WDU35	2.5	35.0	690	20	52	7	87	0.000323	18	4.0 - 5.0
WDU70N	10	70.0	690	8	113	5	134	0.000174	22	8.0 - 12.0
WFF35 *	2.5	35.0	1100	6	76	6	76	0.000263	Bolt Size M6	3.0 - 6.0
SAKK4 **	0.5	6.0	275	38	14	19	20	0.002300	16	0.5 - 1.0
SAKK10 **	0.5	10.0	275	26	28	17	35	0.000858	16	1.2 - 2.4

\* Complete with cover

**Note:** Terminals listed (with the exception of \*\*) are only suitable for a minimum operating temperature of  $-50^{\circ}C$   
SAKK terminals are suitable for  $-60^{\circ}C$

### Size 2L Terminal Capacity Data

Terminal Type	Conductor Size mm <sup>2</sup>		Max. Volts	Maximum Physical Terminal Content		Reduced Terminal Content at Maximum Terminal Amps		Combined Terminal Resistance (Ohms)	Insulation Stripping Length (mm)	Terminal Tightening Torque (Nm)
	Min	Max		Term. Qty.	Amps	Term. Qty.	Amps			
WDU2.5	0.5	2.5	550	117	6	15	17	0.003998	10	0.4 - 0.6
WDU4	0.5	4.0	690	75	9	14	22	0.002592	10	0.5 - 1.0
WDU6	0.5	6.0	550	63	12	11	29	0.001805	12	0.8 - 1.6
WDU10	1.5	10.0	550	54	17	10	40	0.001106	12	1.2 - 2.4
WDU16	1.5	16.0	690	42	24	8	53	0.000719	16	2.0 - 4.0
WDU35	2.5	35.0	690	30	40	6	87	0.000359	18	4.0 - 5.0
WDU50N	6	50.0	690	24	53	8	88	0.000262	22	8.0 - 12.0
WDU70N	10	70.0	690	76	16	5	134	0.000193	22	8.0 - 12.0
WFF35 *	2.5	35.0	1100	6	76	6	76	0.000299	Bolt Size M6	3.0 - 6.0
SAKK4 **	0.5	6.0	275	56	11	17	20	0.002622	10	0.5 - 1.0
SAKK10 **	0.5	10.0	275	38	22	15	35	0.000985	12	1.2 - 2.4

\* Complete with cover

**Note:** Terminals listed (with the exception of \*\*) are only suitable for a minimum operating temperature of -50°C

SAKK terminals are suitable for -60°C

### Size 3 Terminal Capacity Data

Terminal Type	Conductor Size mm <sup>2</sup>		Max. Volts	Maximum Physical Terminal Content		Reduced Terminal Content at Maximum Terminal Amps		Combined Terminal Resistance (Ohms)	Insulation Stripping Length (mm)	Terminal Tightening Torque (Nm)
	Min	Max		Term. Qty.	Amps	Term. Qty.	Amps			
WDU2.5	0.5	2.5	550	126	6	19	17	0.004146	10	0.4 - 0.6
WDU4	0.5	4.0	690	94	9	17	22	0.002684	10	0.5 - 1.0
WDU6	0.5	6.0	550	72	13	15	29	0.001866	12	0.8 - 1.6
WDU10	1.5	10.0	550	56	19	12	40	0.001142	12	1.2 - 2.4
WDU16	1.5	16.0	690	48	25	11	53	0.007420	16	2.0 - 4.0
WDU35	2.5	35.0	690	36	41	8	87	0.000370	16	4.0 - 5.0
WDU70N	10	70.0	690	14	90	6	134	0.000198	22	8.0 - 12.0
WFF35 *	2.5	35.0	1100	11	76	11	76	0.000310	Bolt Size M6	3.0 - 6.0
SAKK4 **	0.5	6.0	275	72	11	21	20	0.002710	16	0.5 - 1.0
SAKK10 **	0.5	10.0	275	50	21	18	35	0.001020	22	1.2 - 2.4

\* Complete with cover

**Note:** Terminals listed (with the exception of \*\*) are only suitable for a minimum operating temperature of -50°C

SAKK terminals are suitable for -60°C

### Size 4 Terminal Capacity Data

Terminal Type	Conductor Size mm <sup>2</sup>		Max. Volts	Maximum Physical Terminal Content		Reduced Terminal Content at Maximum Terminal Amps		Combined Terminal Resistance (Ohms)	Insulation Stripping Length (mm)	Terminal Tightening Torque (Nm)
	Min	Max		Term. Qty.	Amps	Term. Qty.	Amps			
WDU2.5	0.5	2.5	550	189	5	22	17	0.004620	10	0.4 - 0.6
WDU4	0.5	4.0	690	141	8	20	22	0.002979	10	0.5 - 1.0
WDU6	0.5	6.0	550	108	11	17	29	0.002063	12	0.8 - 1.6
WDU10	1.5	10.0	550	84	16	14	40	0.001260	12	1.2 - 2.4
WDU16	1.5	16.0	690	72	22	13	53	0.000816	16	2.0 - 4.0
WDU35	2.5	35.0	690	54	36	9	87	0.000403	18	4.0 - 5.0
WDU70N	10.0	70.0	690	30	67	7	134	0.000215	22	8.0 - 12.0
WDU70/95	16.0	70.0	690	11	94	6	134	0.000225	30	6.0 - 12.0
WDU70/95	16.0	95.0	690	11	104	8	134	0.000182	30	6.0 - 12.0
WDU120/150	35.0	120.0	1100	9	144	7	162	0.000159	35	10.0 - 20.0
WDU120/150	35.0	150.0	1100	9	153	7	162	0.000142	35	10.0 - 20.0
WFF35 *	2.5	35.0	1100	11	76	11	76	0.000343	Bolt Size M6	3.0 - 6.0
WFF70 *	2.5	70.0	1100	9	116	9	116	0.000185	Bolt Size M8	6.0 - 12.0
WFF120 *	6.0	120.0	1100	7	162	7	162	0.000109	Bolt Size M10	10.0 - 20.0
SAKK4 **	0.5	6.0	275	108	9	24	20	0.003000	10	0.5 - 1.0
SAKK10 **	0.5	10.0	275	76	18	21	35	0.001140	12	1.2 - 2.4

\* Complete with cover

**Note:** Terminals listed (with the exception of \*\*) are only suitable for a minimum operating temperature of -50°C

SAKK terminals are suitable for -60°C

### Size 4L Terminal Capacity Data

Terminal Type	Conductor Size mm <sup>2</sup>		Max. Volts	Maximum Physical Terminal Content		Reduced Terminal Content at Maximum Terminal Amps		Combined Terminal Resistance (Ohms)	Insulation Stripping Length (mm)	Terminal Tightening Torque (Nm)
	Min	Max		Term. Qty.	Amps	Term. Qty.	Amps			
WDU2.5	0.5	2.5	550	252	4	19	17	0.005170	10	0.4 - 0.6
WDU4	0.5	4.0	690	188	6	18	22	0.003320	10	0.5 - 1.0
WDU6	0.5	6.0	550	144	9	15	29	0.002291	12	0.8 - 1.6
WDU10	1.5	10.0	550	112	13	13	40	0.001394	12	1.2 - 2.4
WDU16	1.5	16.0	690	96	18	11	53	0.000900	16	2.0 - 4.0
WDU35	2.5	35.0	690	72	30	8	87	0.000442	18	4.0 - 5.0
WDU50	6.0	50.0	690	60	39	11	88	0.000323	18	4.0 - 5.0
WDU70N	10.0	70.0	690	45	52	7	134	0.000235	22	8.0 - 12.0
WDU70/95	16.0	70.0	690	11	100	6	134	0.000245	30	6.0 - 12.0
WDU70/95	16.0	95.0	690	11	116	8	134	0.000196	30	6.0 - 12.0
WDU120/150	35.0	120.0	690	9	139	6	164	0.000170	35	10.0 - 20.0
WDU120/150	35.0	150.0	690	9	148	8	153	0.000151	35	10.0 - 20.0
WFF35 *	2.5	35.0	1100	22	58	13	76	0.000383	Bolt Size M6	3.0 - 6.0
WFF70 *	2.5	70.0	1100	9	116	9	116	0.000205	Bolt Size M8	6.0 - 12.0
WFF120 *	6.0	120.0	1100	7	163	7	163	0.000120	Bolt Size M10	10.0 - 20.0
SAKK4 **	0.5	6.0	275	140	7	21	20	0.003350	10	0.5 - 1.0
SAKK10 **	0.5	10.0	275	76	17	18	35	0.001275	12	1.2 - 2.4

\* Complete with cover

**Note:** Terminals listed (with the exception of \*\*) are only suitable for a minimum operating temperature of -50°C  
SAKK terminals are suitable for -60°C

### Size 5 Terminal Capacity Data

Terminal Type	Conductor Size mm <sup>2</sup>		Max. Volts	Maximum Physical Terminal Content		Reduced Terminal Content at Maximum Terminal Amps		Combined Terminal Resistance (Ohms)	Insulation Stripping Length (mm)	Terminal Tightening Torque (Nm)
	Min	Max		Term. Qty.	Amps	Term. Qty.	Amps			
WDU2.5	0.5	2.5	550	249	5	21	17	0.005235	10	0.4 - 0.6
WDU4	0.5	4.0	690	192	7	20	22	0.003362	10	0.5 - 1.0
WDU6	0.5	6.0	550	144	9	16	29	0.002319	12	0.8 - 1.6
WDU10	1.5	10.0	550	120	13	14	40	0.001411	12	1.2 - 2.4
WDU16	1.5	16.0	690	96	19	12	53	0.000911	16	2.0 - 4.0
WDU35	2.5	35.0	690	72	31	9	87	0.000447	18	4.0 - 5.0
WDU70N	10.0	70.0	690	40	58	7	134	0.000237	22	8.0 - 12.0
WDU70/95	16.0	70.0	690	15	93	7	134	0.000247	30	6.0 - 12.0
WDU70/95	16.0	95.0	690	15	105	9	134	0.000198	30	6.0 - 12.0
WDU120/150	35.0	120.0	1100	12	126	7	162	0.000171	35	10.0 - 20.0
WDU120/150	35.0	150.0	1100	12	134	8	162	0.000152	35	10.0 - 20.0
WFF35 *	2.5	35.0	1100	15	75	14	76	0.000387	Bolt Size M6	3.0 - 6.0
WFF70 *	2.5	70.0	1100	12	114	11	116	0.000207	Bolt Size M8	6.0 - 12.0
WFF120 *	6.0	120.0	1100	9	163	9	162	0.000121	Bolt Size M10	10.0 - 20.0
SAKK4 **	0.5	6.0	275	144	8	24	20	0.003400	10	0.5 - 1.0
SAKK10 **	0.5	10.0	275	100	15	20	35	0.001290	12	1.2 - 2.4

\* Complete with cover

**Note:** Terminals listed (with the exception of \*\*) are only suitable for a minimum operating temperature of -50°C  
SAKK terminals are suitable for -60°C

### Size 6 Terminal Capacity Data

Terminal Type	Conductor Size mm <sup>2</sup>		Max. Volts	Maximum Physical Terminal Content		Reduced Terminal Content at Maximum Terminal Amps		Combined Terminal Resistance (Ohms)	Insulation Stripping Length (mm)	Terminal Tightening Torque (Nm)
	Min	Max		Term. Qty.	Amps	Term. Qty.	Amps			
WDU2.5	0.5	2.5	550	416	3	22	17	0.006199	10	0.4 - 0.6
WDU4	0.5	4.0	690	320	5	20	22	0.003961	10	0.5 - 1.0
WDU6	0.5	6.0	550	240	7	17	29	0.002719	12	0.8 - 1.6
WDU10	1.5	10.0	550	200	11	15	40	0.001649	12	1.2 - 2.4
WDU16	1.5	16.0	690	160	15	13	53	0.001061	16	2.0 - 4.0
WDU35	2.5	35.0	690	120	25	10	87	0.000515	18	4.0 - 5.0
WDU70N	10.0	70.0	690	50	54	8	134	0.000272	22	8.0 - 12.0
WDU70/95	16.0	70.0	690	19	86	7	134	0.000282	30	6.0 - 12.0
WDU70/95	16.0	95.0	690	19	97	9	134	0.000223	30	6.0 - 12.0
WDU120/150	35.0	120.0	1100	16	114	7	162	0.000191	35	10.0 - 20.0
WDU120/150	35.0	150.0	1100	16	120	8	162	0.000168	35	10.0 - 20.0
WFF35 *	2.5	35.0	1100	38	48	15	76	0.000455	Bolt Size M6	3.0 - 6.0
WFF70 *	2.5	70.0	1100	16	100	12	116	0.000242	Bolt Size M8	6.0 - 12.0
WFF120 *	6.0	120.0	1100	12	152	10	162	0.000141	Bolt Size M10	10.0 - 20.0
WFF185 *	10.0	185.0	1100	9	212	7	234	0.000098	Bolt Size M12	14.0 - 31.0
WFF300 *	25.0	300.0	1100	9	255	5	316	0.000068	Bolt Size M16	25.0 - 60.0
SAKK4 **	0.5	6.0	275	240	6	25	20	0.003990	10	0.5 - 1.0
SAKK10 **	0.5	10.0	275	170	12	21	35	0.001530	12	1.2 - 2.4

\* Complete with cover

**Note:** Terminals listed (with the exception of \*\*) are only suitable for a minimum operating temperature of -50°C  
SAKK terminals are suitable for -60°C

### Size 7 Terminal Capacity Data

Terminal Type	Conductor Size mm <sup>2</sup>		Max. Volts	Maximum Physical Terminal Content		Reduced Terminal Content at Maximum Terminal Amps		Combined Terminal Resistance (Ohms)	Insulation Stripping Length (mm)	Terminal Tightening Torque (Nm)
	Min	Max		Term. Qty.	Amps	Term. Qty.	Amps			
WDU2.5	0.5	2.5	550	640	3	24	17	0.007332	10	0.4 - 0.6
WDU4	0.5	4.0	690	515	4	23	22	0.004666	10	0.5 - 1.0
WDU6	0.5	6.0	550	380	6	19	29	0.003191	12	0.8 - 1.6
WDU10	1.5	10.0	550	300	9	16	40	0.001929	12	1.2 - 2.4
WDU16	1.5	16.0	690	250	12	14	53	0.001237	16	2.0 - 4.0
WDU35	2.5	35.0	690	190	21	11	87	0.000595	18	4.0 - 5.0
WDU70N	10.0	70.0	690	93	42	9	134	0.000313	22	8.0 - 12.0
WDU70/95	16.0	70.0	690	23	83	8	134	0.000323	30	6.0 - 12.0
WDU70/95	16.0	95.0	690	23	94	11	134	0.000252	30	6.0 - 12.0
WDU120/150	35.0	120.0	1100	20	110	9	162	0.000215	35	10.0 - 20.0
WDU120/150	35.0	150.0	1100	20	117	10	162	0.000187	35	10.0 - 20.0
WFF35 *	2.5	35.0	1100	46	45	16	76	0.000535	Bolt Size M6	3.0 - 6.0
WFF70 *	2.5	70.0	1100	40	67	13	116	0.000283	Bolt Size M8	6.0 - 12.0
WFF120 *	6.0	120.0	1100	15	145	11	162	0.000165	Bolt Size M10	10.0 - 20.0
WFF185 *	10.0	185.0	1100	11	203	8	234	0.000114	Bolt Size M12	14.0 - 31.0
WFF300 *	25.0	300.0	1100	11	227	6	316	0.000077	Bolt Size M16	25.0 - 60.0
SAKK4 **	0.5	6.0	275	380	5	27	20	0.004696	10	0.5 - 1.0
SAKK10 **	0.5	10.0	275	268	10	23	35	0.001809	12	1.2 - 2.4

\* Complete with cover

**Note:** Terminals listed (with the exception of \*\*) are only suitable for a minimum operating temperature of -50°C  
SAKK terminals are suitable for -60°C

### Size 8 Terminal Capacity Data

Terminal Type	Conductor Size mm <sup>2</sup>		Max. Volts	Maximum Physical Terminal Content		Reduced Terminal Content at Maximum Terminal Amps		Combined Terminal Resistance (Ohms)	Insulation Stripping Length (mm)	Terminal Tightening Torque (Nm)
	Min	Max		Term. Qty.	Amps	Term. Qty.	Amps			
WDU2.5	0.5	2.5	550	912	2	26	17	0.008407	10	0.4 - 0.6
WDU4	0.5	4.0	690	720	4	25	22	0.005335	10	0.5 - 1.0
WDU6	0.5	6.0	550	540	5	21	29	0.003637	12	0.8 - 1.6
WDU10	1.5	10.0	550	438	8	18	40	0.002195	12	1.2 - 2.4
WDU16	1.5	16.0	690	360	11	16	53	0.001404	16	2.0 - 4.0
WDU35	2.5	35.0	690	270	18	12	87	0.000671	18	4.0 - 5.0
WDU70N	10.0	70.0	690	108	41	10	134	0.000352	22	8.0 - 12.0
WDU70/95	16.0	70.0	690	56	56	9	134	0.000362	30	6.0 - 12.0
WDU70/95	16.0	95.0	690	56	62	12	134	0.000280	30	6.0 - 12.0
WDU120/150	35.0	120.0	1100	46	77	10	162	0.000237	35	10.0 - 20.0
WDU120/150	35.0	150.0	1100	46	82	12	162	0.000205	35	10.0 - 20.0
WFF35 *	2.5	35.0	1100	84	35	18	76	0.000611	Bolt Size M6	3.0 - 6.0
WFF70 *	2.5	70.0	1100	46	66	14	116	0.000322	Bolt Size M8	6.0 - 12.0
WFF120 *	6.0	120.0	1100	36	98	13	162	0.000187	Bolt Size M10	10.0 - 20.0
WFF185 *	10.0	185.0	1100	13	197	9	234	0.000128	Bolt Size M12	14.0 - 31.0
WFF300 *	25.0	300.0	1100	13	221	7	316	0.000086	Bolt Size M16	25.0 - 60.0
SAKK4 **	0.5	6.0	275	540	4	30	20	0.005365	10	0.5 - 1.0
SAKK10 **	0.5	10.0	275	380	9	25	35	0.002075	12	1.2 - 2.4

\* Complete with cover

**Note:** Terminals listed (with the exception of\*\*) are only suitable for a minimum operating temperature of -50°C  
SAKK terminals are suitable for -60°C

### Size 9 Terminal Capacity Data

Terminal Type	Conductor Size mm <sup>2</sup>		Max. Volts	Maximum Physical Terminal Content		Reduced Terminal Content at Maximum Terminal Amps		Combined Terminal Resistance (Ohms)	Insulation Stripping Length (mm)	Terminal Tightening Torque (Nm)
	Min	Max		Term. Qty.	Amps	Term. Qty.	Amps			
WDU2.5	0.5	2.5	550	1232	2	28	17	0.009504	10	0.4 - 0.6
WDU4	0.5	4.0	690	980	3	27	22	0.006017	10	0.5 - 1.0
WDU6	0.5	6.0	550	735	5	23	29	0.004093	12	0.8 - 1.6
WDU10	1.5	10.0	550	595	7	20	40	0.002466	12	1.2 - 2.4
WDU16	1.5	16.0	690	490	10	17	53	0.001574	16	2.0 - 4.0
WDU35	2.5	35.0	690	371	16	13	87	0.000749	18	4.0 - 5.0
WDU70N	10.0	70.0	690	172	34	11	134	0.000392	22	8.0 - 12.0
WDU70/95	16.0	70.0	690	64	55	10	134	0.000402	30	6.0 - 12.0
WDU70/95	16.0	95.0	690	64	63	14	134	0.000309	30	6.0 - 12.0
WDU120/150	35.0	120.0	1100	54	75	11	162	0.000259	35	10.0 - 20.0
WDU120/150	35.0	150.0	1100	54	81	13	162	0.000224	35	10.0 - 20.0
WFF35 *	2.5	35.0	1100	96	34	19	76	0.000689	Bolt Size M6	3.0 - 6.0
WFF70 *	2.5	70.0	1100	81	52	16	134	0.000362	Bolt Size M8	6.0 - 12.0
WFF120 *	6.0	120.0	1100	42	94	14	162	0.000209	Bolt Size M10	10.0 - 20.0
WFF185 *	10.0	185.0	1100	32	131	10	234	0.000143	Bolt Size M12	14.0 - 31.0
WFF300 *	25.0	300.0	1100	32	162	8	316	0.000094	Bolt Size M16	25.0 - 60.0
SAKK4 **	0.5	6.0	275	735	4	32	20	0.006047	10	0.5 - 1.0
SAKK10 **	0.5	10.0	275	517	8	27	35	0.002345	12	1.2 - 2.4

\* Complete with cover

**Note:** Terminals listed (with the exception of\*\*) are only suitable for a minimum operating temperature of -50°C  
SAKK terminals are suitable for -60°C