

Assembly Instructions for junction boxes type: S1 to S9 / SFI1 to SFI9 / SFE1 to SFE9 M1 to M9 / MFI1 to MFI9 / MFE1 to MFE9

If combining terminals and fibre optics see AI 2048



AI 266 / Issue AD - 12/21

Zones of Use for Terminal Box - as defined in IEC/EN 60079-0 and IEC/EN 60079-10-1/60079-10-2
 Group II Category 1G, for use in Zone 0 (plus Zone 1 and Zone 2).
 Group II Category 1D, for use in Zone 20 (plus Zone 21 and Zone 22).
 Group II Category 2G, for use in Zone 1 (plus Zone 2).
 Group II Category 2D, for use in Zone 21 (plus Zone 22).

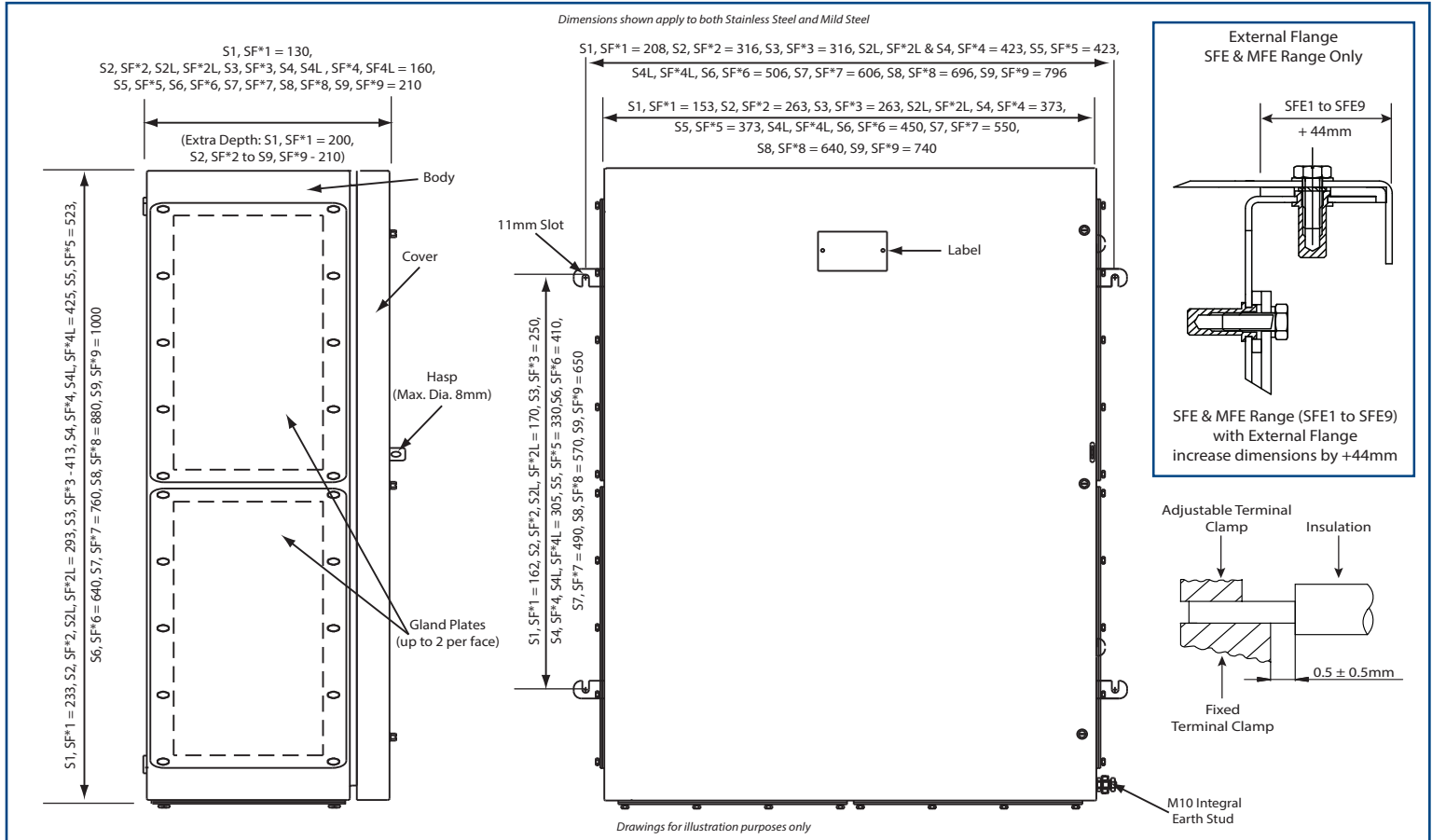
Service Temperature: -60°C to +80°C

Minimum Installation Temperature: -5°C

IMPORTANT: This document should be read carefully before commencing installation
This is a certified product which should be installed in line with the Assembly Instructions provided with the product. Failure to follow the Assembly Instructions, or making any changes to the product, may invalidate the product certification.

Certification Details

Box Type: S1 to S9, SFI1 to SFI9, SFE1 to SFE9 & MF1 to MF9, MFI1 to MFI9, MFE1 to MFE9
 Ex II 2G Ex eb IIC T* Gb Ex tb IIIC T**C Db IP66
 Ex II 2G Ex ib IIC T* Gb Ex ib IIIC T**C Db IP66
 Ex II 1G Ex ia IIC T* Ga Ex ia IIIC T**C Da IP66
 Baseefa08ATEX0208X / IECEx BAS08.0065X
 BAS21UKEX0042X / IEx 16.0144X
 No EA3C RU C-GB.HA91.B.00260/21
 c CSA us No: 70039997
 Class I Zone 1 AExe IIC Gb, T5 or T6; AExtb IIIC T**C Db; IP66, Type 4X
 Class 1 Div 2 Group A, B, C, D, T4, T5 or T6; Type 4X



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

$$W = N \times F \times I^2 \qquad N = W / F \times I^2 \qquad I = \sqrt{W / N \times F}$$

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***			
	T6	80°C	+40°C	T6	80°C	+55°C	T6	80°C	+65°C	T5	80°C	+40°C	T5	80°C	+55°C		T5	80°C
S1, SFI1, SFE1		13.95			8.7			5.2			19.1			13.95			10.4	0.307
S2, SFI2, SFE2		18.15			11.3			6.8			24.9			18.15			13.6	0.425
S2L, SFI2L, SFE2L		18.15			11.3			6.8			24.9			18.15			13.6	0.495
S3, SFI3, SFE3		23.70			14.8			8.8			32.5			23.70			17.7	0.515
S4, SFI4, SFE4		29.95			18.7			11.2			41.1			29.95			22.4	0.579
S4L, SFI4L, SFE4L		29.95			18.7			11.2			41.1			29.95			22.4	0.653
S5, SFI5, SFE5		32.85			20.5			12.3			45.1			32.85			24.6	0.662
S6, SFI6, SFE6		40.00			25.0			15.0			55.0			40.00			30.0	0.792
S7, SFI7, SFE7		52.00			23.5			19.5			71.5			52.00			39.0	0.945
S8, SFI8, SFE8		65.00			40.6			24.3			89.3			65.00			48.7	1.090
S9, SFI9, SFE9		79.35			49.5			29.7			109.1			79.35			59.5	1.238

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 BAS08.0064U. 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. All terminal screws, used and unused, shall be tightened down by the end user.
4. Insulation of conductors must extend to within 1mm of the metal of the terminal throat unless specified otherwise on the terminal certificate.
5. 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.
6. 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 for Exe IIC junction boxes, or IEC 60079-11 for Exia IIC / Exib IIC junction boxes, for the rated voltage of the equipment.
7. Terminal temperatures must not exceed the operating range specified on the component certificate.
8. All terminals and accessories such as cross-connectors, shall be installed in accordance with the terminal manufacturers instructions.
9. The maximum voltage, current and dissipated power shown on the rating label must not be exceeded.
10. 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.
11. 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 60079-7 and not affect the IP rating of the junction box, and the maximum current in any circuit will be limited to 90%.
12. When a self adhesive certification label is fitted, the minimum ambient temperature shall be -40°C.
When optional additional non-metallic labels greater than 0.2mm thick are fitted, they shall be mounted direct on to the metal enclosure and there shall be at least 10mm between adjacent non-metallic labels.
13. **Unused entries may be fitted with alternative stopping plugs and/or breather 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.**
14. When the junction box is coated with K-MASS, the maximum permitted current is limited to 80% and there shall be a label stating "Warning: Static Hazard, clean only with a damp cloth".
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. When fuse terminals are fitted, the low ambient temperature is limited to -25°C and the junction box becomes a defined arrangement.
17. For dust applications, when a non metallic coating is applied to the enclosure the label must include "WARNING: Electrostatic hazard, clean with a damp cloth."

EXTERNAL EFFECTS AND AGGRESSIVE SUBSTANCES:

The end user shall take into consideration for health and safety regulations when changing environmental conditions and in the presence of extraneous voltages, humidity, vibrations, contamination and other external effects, take into account the limits of the operating conditions established by Hawke International.

Equipment parts used must be appropriate to the intended mechanical and thermal stresses and capable of withstanding attack by existing or foreseeable aggressive substances.

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 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.
- 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°C. Under these circumstances the installer must ensure that the limiting temperature for the cable insulation used is acceptable e.g. 85°C (T6) or 100°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

S1, SFI1 & SFE1 (130dp) Terminal Capacity Data										
Terminal Type	Conductor Size mm ²		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			
WDU 2.5	0.5	2.5	690	30	13	17	17	0.00264487	10	0.4 - 0.8
UT 2.5	0.14	2.5	690	30	13	21	15	0.00268487	9	0.5 - 0.6
WDU 4	0.5	4	690	25	18	16	22	0.0017053	10	0.5 - 1.0
UT 4	0.14	4	690	25	18	20	20	0.00167527	9	0.6 - 0.8
WDU 6	0.5	6	690	19	26	14	29	0.0011216	12	0.8 - 1.6
UT 6	0.2	6	690	19	25	15	28	0.00114556	10	1.5 - 1.8
WDU 10	1.5	10	690	15	36	11	40	0.0007138	12	1.2 - 2.4
UT 10	0.5	10	690	15	36	12	39	0.00070181	10	1.5 - 1.8
WDU 16	1.5	16	690	12	47	9	53	0.0005141	16	3.0 - 4.0
UT 16	1.5	16	690	12	47	9	53	0.00051305	14	2.5 - 3.0
WDU 35	2.5	35	690	9	71	7	80	0.0003059	18	4.0 - 5.0
UT 35	1.5	35	690	9	70	9	70	0.000220868	18	3.2 - 3.7

S2, SFI2 & SFE2 Terminal Capacity Data												
Terminal Type	Conductor Size mm ²		Max. Volts	Rail Orientation	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	160dp	210dp		
WDU 2.5	0.5	2.5	690	V	78	7	16	17	0.00351925	0.00367486	10	0.4 - 0.8
				H	66	8						
UT 2.5	0.14	2.5	690	V	78	7	21	15	0.00355925	0.00371486	9	0.5 - 0.6
				H	66	8						
WDU 4	0.5	4	690	V	62	11	15	22	0.0022493	0.0023461	10	0.5 - 1.0
				H	52	12						
UT 4	0.14	4	690	V	64	11	19	20	0.00221925	0.00231606	9	0.6 - 0.8
				H	54	12						
WDU 6	0.5	6	690	V	48	15	13	29	0.0014850	0.0015497	12	0.8 - 1.6
				H	40	17						
UT 6	0.2	6	690	V	48	15	14	28	0.001509	0.00157368	10	1.5 - 1.8
				H	40	17						
WDU 10	1.5	10	690	V	38	22	11	40	0.0009298	0.0009682	12	1.2 - 2.4
				H	32	24						
UT 10	0.5	10	690	V	38	22	12	39	0.00091775	0.00095618	10	1.5 - 1.8
				H	32	24						
WDU 16	1.5	16	690	V	28	31	9	53	0.0006498	0.0006739	16	3.0 - 4.0
				H	24	33						
UT 16	1.5	16	690	V	30	29	9	53	0.00064875	0.0006729	14	2.5 - 3.0
				H	26	32						
WDU 35	2.5	35	690	V	20	48	7	80	0.0003677	0.0003787	18	4.0 - 5.0
				H	16	54						
UT 35	1.5	35	690	V	22	52	12	70	0.0002827	0.000293704	18	3.2 - 3.7
				H	18	58						
WDU 50N	6	50	690	V	18	55	6	88	0.000314475	0.000322602	24	3.5 - 6.0
UKH 50	16	50	690	V	18	60	8	87	0.000264475	0.000272602	24	6.0 - 8.0
WDU 70N	10	70	690	V	8	93	4	129	0.0002559	0.000261528	22	9.0 - 12.0
WFF 35/AH	2.5	35	1100	V	7	76	7	76	N/A	0.000273704	N/A*	3.0 - 6.0

*Insulation stripping length dependent on cable lug specification

S2L, SFI2L & SFE2L Terminal Capacity Data

Terminal Type	Conductor Size mm ²		Max. Volts	Rail Orientation	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	160dp	210dp		
WDU 2.5	0.5	2.5	690	V	117	6	14	17	0.0040380	0.0042232	10	0.4 - 0.8
				H	102	6						
UT 2.5	0.14	2.5	690	V	117	6	18	15	0.00407795	0.0042632	9	0.5 - 0.6
				H	102	6						
WDU 4	0.5	4	690	V	93	8	13	22	0.0025720	0.0026872	10	0.5 - 1.0
				H	82	9						
UT 4	0.14	4	690	V	96	8	16	20	0.00254195	0.0026572	9	0.6 - 0.8
				H	84	9						
WDU 6	0.5	6	690	V	72	11	11	29	0.0017006	0.0017776	12	0.8 - 1.6
				H	64	12						
UT 6	0.2	6	690	V	72	11	12	28	0.0017246	0.0018016	10	1.5 - 1.8
				H	62	12						
WDU 10	1.5	10	690	V	57	16	10	40	0.0010579	0.0011036	12	1.2 - 2.4
				H	50	18						
UT 10	0.5	10	690	V	57	17	10	39	0.00104585	0.0010916	10	1.5 - 1.8
				H	50	18						
WDU 16	1.5	16	690	V	42	23	8	53	0.0007303	0.0007590	16	3.0 - 4.0
				H	38	25						
UT 16	1.5	16	690	V	45	23	8	53	0.00072925	0.000758	14	2.5 - 3.0
				H	40	24						
WDU 35	2.5	35	690	V	30	38	6	80	0.0004044	0.0004175	18	4.0 - 5.0
				H	28	39						
UT 35	1.5	35	690	V	33	40	11	70	0.00031938	0.00033248	18	3.2 - 3.7
				H	30	42						
WDU 50N	6	50	690	V	18	52	6	88	0.000341565	0.00035124	24	3.5 - 6.0
UKH 50	16	50	690	V	18	57	7	87	0.000291565	0.00030124	24	6.0 - 8.0
WDU 70N	10	70	690	V	16	63	3	129	0.00027466	0.00028136	22	9.0 - 12.0
WFF 35/AH	2.5	35	1100	V	7	76	7	76	N/A	0.00031248	N/A*	3.0 - 6.0

S3, SFI3 & SFE3 Terminal Capacity Data

Terminal Type	Conductor Size mm ²		Max. Volts	Rail Orientation	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	160dp	210dp		
WDU 2.5	0.5	2.5	690	V	126	6	18	17	0.0041862	0.00431953	10	0.4 - 0.8
				H	99	7						
UT 2.5	0.14	2.5	690	V	126	6	23	15	0.00422615	0.00435953	9	0.5 - 0.6
				H	102	7						
WDU 4	0.5	4	690	V	102	9	17	22	0.0026642	0.0027471	10	0.5 - 1.0
				H	78	10						
UT 4	0.14	4	690	V	102	9	22	20	0.00263415	0.00271713	9	0.6 - 0.8
				H	81	10						
WDU 6	0.5	6	690	V	78	12	15	29	0.0017622	0.0018176	12	0.8 - 1.6
				H	60	14						
UT 6	0.2	6	690	V	78	12	15	28	0.0017862	0.00184164	10	1.5 - 1.8
				H	60	14						
WDU 10	1.5	10	690	V	62	18	12	40	0.0010945	0.0011274	12	1.2 - 2.4
				H	48	20						
UT 10	0.5	10	690	V	62	18	13	39	0.00108245	0.00111539	10	1.5 - 1.8
				H	48	21						
WDU 16	1.5	16	690	V	50	24	10	53	0.0007533	0.0007740	16	3.0 - 4.0
				H	36	29						
UT 16	1.5	16	690	V	50	24	10	53	0.00075225	0.00077295	14	2.5 - 3.0
				H	39	28						
WDU 35	2.5	35	690	V	34	40	8	80	0.0004149	0.0004243	18	4.0 - 5.0
				H	24	48						
UT 35	1.5	35	690	V	36	44	14	70	0.00032986	0.000339292	18	3.2 - 3.7
				H	27	50						
WDU 50N	6	50	690	V	32	44	8	88	0.0003493	0.000356271	24	3.5 - 6.0
UKH 50	16	50	690	V	30	50	10	87	0.0002993	0.00030627	24	6.0 - 8.0
WDU 70N	10	70	690	V	14	77	4	129	0.00028	0.000284844	22	9.0 - 12.0
WFF 35/AH	2.5	35	1100	V	11	76	11	76	N/A	0.000319292	N/A*	3.0 - 6.0

*Insulation stripping length dependent on cable lug specification

S4, SFI4 & SFE4 Terminal Capacity Data

Terminal Type	Conductor Size mm ²		Max. Volts	Rail Orientation	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	160dp	210dp		
WDU 2.5	0.5	2.5	690	V	189	5	20	17	0.00466039	0.00483823	10	0.4 - 0.8
				H	153	6						
UT 2.5	0.14	2.5	690	V	189	5	26	15	0.00470039	0.00487823	9	0.5 - 0.6
				H	153	6						
WDU 4	0.5	4	690	V	153	7	19	22	0.0029592	0.0030698	10	0.5 - 1.0
				H	123	8						
UT 4	0.14	4	690	V	153	8	24	20	0.00292919	0.00303983	9	0.6 - 0.8
				H	126	8						
WDU 6	0.5	6	690	V	117	11	16	29	0.0019593	0.0020332	12	0.8 - 1.6
				H	96	12						
UT 6	0.2	6	690	V	117	11	18	28	0.00198332	0.00205724	10	1.5 - 1.8
				H	93	12						
WDU 10	1.5	10	690	V	93	16	14	40	0.0012116	0.0012555	12	1.2 - 2.4
				H	75	17						
UT 10	0.5	10	690	V	93	16	15	39	0.00119957	0.00124349	10	1.5 - 1.8
				H	75	17						
WDU 16	1.5	16	690	V	75	21	12	53	0.0008269	0.0008545	16	3.0 - 4.0
				H	57	24						
UT 16	1.5	16	690	V	75	21	12	53	0.00082585	0.00085345	14	2.5 - 3.0
				H	60	24						
WDU 35	2.5	35	690	V	51	35	10	80	0.0004484	0.0004610	18	4.0 - 5.0
				H	42	39						
UT 35	1.5	35	690	V	54	38	16	70	0.000363396	0.000375972	18	3.2 - 3.7
				H	45	42						
WDU 50N	6	50	690	V	48	39	9	88	0.000374073	0.000383361	24	3.5 - 6.0
				H	24	56						
UKH 50	16	50	690	V	45	44	11	87	0.0003241	0.0003334	24	6.0 - 8.0
				H	24	61						
WDU 70N	10	70	690	V	28	59	6	127	0.000297172	0.000303604	22	9.0 - 12.0
				H	22	67						
WDU 70/95	16	95	1100	V	11	112	7	134	N/A	0.000169379	30	6.0 - 12.0
UKH 95	25	95	880	V	11	117	6	151	N/A	0.000196679	33	15.0 - 20.0
WDU 120/150	35	120	1100	V	9	156	8	162	N/A	0.000136259	35	10.0 - 20.0
WDU 120/150	35	150	1100	V	9	162	9	162	N/A	0.000118772	35	10.0 - 20.0
UKH 150	50	150	1100	V	9	166	8	176	N/A	0.000120072	33	25.0 - 30.0
WFF 35/AH	2.5	35	1100	V	11	76	11	76	N/A	0.000355972	N/A*	3.0 - 6.0
WFF 70/AH	2.5	70	1100	V	9	116	9	116	N/A	0.000191604	N/A*	6.0 - 12.0
RBO 8-HC	6	70	690	V	9	122	8	130	N/A	0.000221604	N/A*	6.0 - 12.0
WFF 120/AH	6	120	1100	V	7	162	7	162	N/A	0.000112259	N/A*	10.0 - 20.0
RBO 10-HC	6	150	1100	V	7	185	5	216	N/A	0.000124772	N/A*	10.0 - 20.0

*Insulation stripping length dependent on cable lug specification

S4L, SFI4L & SFE4L (210dp) Terminal Capacity Data

Terminal Type	Conductor Size mm ²		Max. Volts	Rail Orientation	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			
WDU 2.5	0.5	2.5	690	V	252	4	18	17	0.00520873	10	0.4 - 0.8
				H	198	5					
UT 2.5	0.14	2.5	690	V	252	4	23	15	0.00524873	9	0.5 - 0.6
				H	198	5					
WDU 4	0.5	4	690	V	204	6	17	22	0.0033003	10	0.5 - 1.0
				H	162	7					
UT 4	0.14	4	690	V	204	6	22	20	0.00327033	9	0.6 - 0.8
				H	162	7					
WDU 6	0.5	6	690	V	156	9	15	29	0.0021872	12	0.8 - 1.6
				H	123	10					
UT 6	0.2	6	690	V	156	9	16	28	0.00221124	10	1.5 - 1.8
				H	120	10					
WDU 10	1.5	10	690	V	124	13	13	40	0.0013470	12	1.2 - 2.4
				H	99	14					
UT 10	0.5	10	690	V	124	13	14	39	0.00133499	10	1.5 - 1.8
				H	96	15					
WDU 16	1.5	16	690	V	100	18	11	53	0.0009120	16	3.0 - 4.0
				H	78	20					
UT 16	1.5	16	690	V	100	18	11	53	0.00091095	14	2.5 - 3.0
				H	78	20					
WDU 35	2.5	35	690	V	68	30	9	80	0.0004872	18	4.0 - 5.0
				H	54	33					
UT 35	1.5	35	690	V	72	32	14	70	0.000402172	18	3.2 - 3.7
				H	57	36					
WDU 50N	6	50	690	V	64	33	9	88	0.000402711	24	3.5 - 6.0
				H	32	47					
UKH 50	16	50	690	V	60	37	11	87	0.00035271	24	6.0 - 8.0
				H	30	53					
WDU 70N	10	70	690	V	42	47	5	129	0.000317004	22	9.0 - 12.0
				H	30	56					
WDU 70/95	16	95	1100	V	11	109	7	134	0.000179029	30	6.0 - 12.0
UKH 95	25	95	880	V	12	109	6	151	0.000206329	33	15.0 - 20.0
WDU 120/150	35	120	1100	V	9	152	7	162	0.000143909	35	10.0 - 20.0
WDU 120/150	35	150	1100	V	9	162	9	162	0.000124972	35	10.0 - 20.0
UKH 150	50	150	1100	V	9	162	7	176	0.000126272	33	25.0 - 30.0
WFF 35/AH	2.5	35	1100	V	22	59	13	76	0.000382172	N/A*	3.0 - 6.0
WFF 70/AH	2.5	70	1100	V	9	116	9	116	0.000205004	N/A*	6.0 - 12.0
RBO 8-HC	6	70	690	V	10	112	7	130	0.000235004	N/A*	6.0 - 12.0
WFF 120/AH	6	120	1100	V	7	162	7	162	0.000119909	N/A*	10.0 - 20.0
RBO 10-HC	6	150	1100	V	7	180	5	216	0.000130972	N/A*	10.0 - 20.0

*Insulation stripping length dependent on cable lug specification

S5, SF15 & SFE5 (210dp) Terminal Capacity Data

Terminal Type	Conductor Size mm ²		Max. Volts	Rail Orientation	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			
WDU 2.5	0.5	2.5	690	V	249	4	20	17	0.00527542	10	0.4 - 0.8
				H	104	5					
UT 2.5	0.14	2.5	690	V	246	5	25	15	0.00531542	9	0.5 - 0.6
				H	204	5					
WDU 4	0.5	4	690	V	204	6	19	22	0.0033418	10	0.5 - 1.0
				H	164	7					
UT 4	0.14	4	690	V	204	6	23	20	0.00331182	9	0.6 - 0.8
				H	168	7					
WDU 6	0.5	6	690	V	156	9	17	29	0.0022150	12	0.8 - 1.6
				H	128	10					
UT 6	0.2	6	690	V	153	9	18	28	0.00223896	10	1.5 - 1.8
				H	124	10					
WDU 10	1.5	10	690	V	126	13	14	40	0.0013635	12	1.2 - 2.4
				H	100	15					
UT 10	0.5	10	690	V	123	14	15	39	0.00135146	10	1.5 - 1.8
				H	100	15					
WDU 16	1.5	16	690	V	99	18	12	53	0.0009223	16	3.0 - 4.0
				H	76	21					
UT 16	1.5	16	690	V	99	18	12	53	0.0009213	14	2.5 - 3.0
				H	80	21					
WDU 35	2.5	35	690	V	72	30	10	80	0.0004919	18	4.0 - 5.0
				H	56	34					
UT 35	1.5	35	690	V	75	32	16	70	0.000406888	18	3.2 - 3.7
				H	60	36					
WDU 50N	6	50	690	V	63	35	10	88	0.000406194	24	3.5 - 6.0
				H	24	57					
UKH 50	16	50	690	V	60	39	12	87	0.0003562	24	6.0 - 8.0
				H	24	61					
WDU 70N	10	70	690	V	38	52	6	129	0.000319416	22	9.0 - 12.0
				H	22	68					
WDU 70/95	16	95	1100	V	15	97	7	134	0.000180766	30	6.0 - 12.0
UKH 95	25	95	880	V	16	99	6	151	0.000208066	33	15.0 - 20.0
WDU 120/150	35	120	1100	V	12	137	8	162	0.000145286	35	10.0 - 20.0
WDU 120/150	35	150	1100	V	12	147	9	162	0.000126088	35	10.0 - 20.0
UKH 150	50	150	1100	V	13	140	8	176	0.000127388	33	25.0 - 30.0
WFF 35/AH	2.5	35	1100	V	15	75	14	76	0.000386888	N/A*	3.0 - 6.0
WFF 70/AH	2.5	70	1100	V	12	114	11	116	0.000207416	N/A*	6.0 - 12.0
RBO 8-HC	6	70	690	V	14	99	8	130	0.000237416	N/A*	6.0 - 12.0
WFF 120/AH	6	120	1100	V	9	162	9	162	0.000121286	N/A*	10.0 - 20.0
RBO 10-HC	6	150	1100	V	9	166	5	216	0.000132088	N/A*	10.0 - 20.0

*Insulation stripping length dependent on cable lug specification

S6, SFI6 & SFE6 (210dp) Terminal Capacity Data

Terminal Type	Conductor Size mm ²		Max. Volts	Rail Orientation	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			
WDU 2.5	0.5	2.5	690	V	412	3	20	17	0.00623872	10	0.4 - 0.8
				H	396	4					
UT 2.5	0.14	2.5	690	V	408	3	27	15	0.00627872	9	0.5 - 0.6
				H	396	4					
WDU 4	0.5	4	690	V	340	5	20	22	0.0039411	10	0.5 - 1.0
				H	324	5					
UT 4	0.14	4	690	V	336	5	24	20	0.00391112	9	0.6 - 0.8
				H	324	5					
WDU 6	0.5	6	690	V	260	7	17	29	0.0026154	12	0.8 - 1.6
				H	246	7					
UT 6	0.2	6	690	V	256	7	18	28	0.00263936	10	1.5 - 1.8
				H	240	8					
WDU 10	1.5	10	690	V	208	10	15	40	0.0016014	12	1.2 - 2.4
				H	198	11					
UT 10	0.5	10	690	V	204	11	16	39	0.00158936	10	1.5 - 1.8
				H	192	11					
WDU 16	1.5	16	690	V	168	14	13	53	0.0010718	16	3.0 - 4.0
				H	156	15					
UT 16	1.5	16	690	V	168	14	13	53	0.0010708	14	2.5 - 3.0
				H	156	15					
WDU 35	2.5	35	690	V	120	24	11	80	0.0005600	18	4.0 - 5.0
				H	108	25					
UT 35	1.5	35	690	V	124	26	16	70	0.000475008	18	3.2 - 3.7
				H	114	27					
WDU 50N	6	50	690	V	108	28	10	88	0.000456504	24	3.5 - 6.0
				H	32	51					
UKH 50	16	50	690	V	100	31	12	87	0.00040650	24	6.0 - 8.0
				H	30	57					
WDU 70N	10	70	690	V	48	48	6	129	0.000354256	22	9.0 - 12.0
				H	30	61					
WDU 70/95	16	95	1100	V	19	89	8	134	0.000205856	30	6.0 - 12.0
UKH 95	25	95	880	V	20	92	7	151	0.000233156	33	15.0 - 20.0
WDU 120/150	35	120	1100	V	16	123	9	162	0.000165176	35	10.0 - 20.0
WDU 120/150	35	150	1100	V	16	132	10	162	0.000142208	35	10.0 - 20.0
UKH 150	50	150	1100	V	16	131	8	176	0.000143508	33	25.0 - 30.0
WFF 35/AH	2.5	35	1100	V	38	48	15	76	0.000455008	N/A*	3.0 - 6.0
WFF 70/AH	2.5	70	1100	V	16	101	12	116	0.000242256	N/A*	6.0 - 12.0
RBO 8-HC	6	70	690	V	17	92	8	130	0.000272256	N/A*	6.0 - 12.0
WFF 120/AH	6	120	1100	V	12	153	10	162	0.000141176	N/A*	10.0 - 20.0
RBO 10-HC	6	150	1100	V	12	149	5	216	0.000148208	N/A*	10.0 - 20.0
WFF 185/AH	10	185	1100	V	9	210	8	215	0.000099992	N/A*	14.0 - 31.0
RBO 12-HC	10	240	1100	V	10	189	4	290	0.000111380	N/A*	14.0 - 30.0
WFF 300/AH	25	300	1100	V	9	253	5	316	0.000069104	N/A*	25.0 - 60.0
RBO 16-HC	25	300	1100	V	9	253	4	364	0.000069104	N/A*	25.0 - 35.0

*Insulation stripping length dependent on cable lug specification

S7, SFI7 & SFE7 (210dp) Terminal Capacity Data

Terminal Type	Conductor Size mm ²		Max. Volts	Rail Orientation	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			
WDU 2.5	0.5	2.5	690	V	630	3	23	17	0.00737245	10	0.4 - 0.8
				H	595	3					
UT 2.5	0.14	2.5	690	V	625	3	29	15	0.00741245	9	0.5 - 0.6
				H	595	4					
WDU 4	0.5	4	690	V	520	4	22	22	0.0046465	10	0.5 - 1.0
				H	490	4					
UT 4	0.14	4	690	V	520	4	26	20	0.00461645	9	0.6 - 0.8
				H	490	4					
WDU 6	0.5	6	690	V	405	6	19	29	0.0030866	12	0.8 - 1.6
				H	378	6					
UT 6	0.2	6	690	V	390	6	20	28	0.0031106	10	1.5 - 1.8
				H	371	6					
WDU 10	1.5	10	690	V	320	9	16	40	0.0018814	12	1.2 - 2.4
				H	301	9					
UT 10	0.5	10	690	V	315	9	17	39	0.00186935	10	1.5 - 1.8
				H	294	9					
WDU 16	1.5	16	690	V	260	12	14	53	0.0012478	16	3.0 - 4.0
				H	238	13					
UT 16	1.5	16	690	V	260	12	14	53	0.00124675	14	2.5 - 3.0
				H	238	13					
WDU 35	2.5	35	690	V	190	20	12	80	0.0006402	18	4.0 - 5.0
				H	175	21					
UT 35	1.5	35	690	V	195	21	19	70	0.00055518	18	3.2 - 3.7
				H	182	22					
WDU 50N	6	50	690	V	165	24	12	88	0.000515715	24	3.5 - 6.0
				H	66	38					
UKH 50	16	50	690	V	155	26	14	87	0.000465715	24	6.0 - 8.0
				H	60	43					
WDU 70N	10	70	690	V	90	38	7	129	0.00039526	22	9.0 - 12.0
				H	40	57					
WDU 70/95	16	95	1100	V	23	85	9	134	0.000235385	30	6.0 - 12.0
UKH 95	25	95	880	V	25	88	8	151	0.000262685	33	15.0 - 20.0
WDU 120/150	35	120	1100	V	19	120	10	162	0.000188585	35	10.0 - 20.0
WDU 120/150	35	150	1100	V	19	130	12	162	0.00016118	35	10.0 - 20.0
UKH 150	50	150	1100	V	20	126	10	176	0.00016248	33	25.0 - 30.0
UKH 240	95	240	1100	V	17	164	7	245	0.0001129375	40	25.0 - 30.0
WFF 35/AH	2.5	35	1100	V	46	45	16	76	0.00053518	N/A*	3.0 - 6.0
WFF 70/AH	2.5	70	1100	V	38	69	13	116	0.00028326	N/A*	6.0 - 12.0
RBO 8-HC	6	70	690	V	44	61	9	130	0.000313260	N/A*	6.0 - 12.0
WFF 120/AH	6	120	1100	V	15	145	11	162	0.000164585	N/A*	10.0 - 20.0
RBO 10-HC	6	150	1100	V	15	144	6	216	0.000167180	N/A*	10.0 - 20.0
WFF 185/AH	10	185	1100	V	11	202	9	215	0.000115445	N/A*	14.0 - 31.0
RBO 12-HC	10	240	1100	V	13	180	4	290	0.000123238	N/A*	14.0 - 30.0
WFF 300/AH	25	300	1100	V	11	245	6	316	0.000078590	N/A*	25.0 - 60.0
RBO 16-HC	25	300	1100	V	11	245	4	364	0.000078590	N/A*	25.0 - 35.0

*Insulation stripping length dependent on cable lug specification

S8, SFI8 & SFE8 (210dp) Terminal Capacity Data

Terminal Type	Conductor Size mm ²		Max. Volts	Rail Orientation	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			
WDU 2.5	0.5	2.5	690	V	900	2	25	17	0.0084469	10	0.4 - 0.8
				H	824	3					
UT 2.5	0.14	2.5	690	V	888	2	31	15	0.0084869	9	0.5 - 0.6
				H	816	3					
WDU 4	0.5	4	690	V	744	4	24	22	0.0053149	10	0.5 - 1.0
				H	680	4					
UT 4	0.14	4	690	V	738	4	29	20	0.0052849	9	0.6 - 0.8
				H	672	4					
WDU 6	0.5	6	690	V	576	5	21	29	0.0035332	12	0.8 - 1.6
				H	520	5					
UT 6	0.2	6	690	V	558	5	22	28	0.0035572	10	1.5 - 1.8
				H	512	5					
WDU 10	1.5	10	690	V	456	8	18	40	0.0021467	12	1.2 - 2.4
				H	416	8					
UT 10	0.5	10	690	V	450	8	19	39	0.0021347	10	1.5 - 1.8
				H	408	8					
WDU 16	1.5	16	690	V	372	11	16	53	0.0014145	16	3.0 - 4.0
				H	336	11					
UT 16	1.5	16	690	V	366	11	16	53	0.0014135	14	2.5 - 3.0
				H	336	11					
WDU 35	2.5	35	690	V	270	18	14	80	0.0007162	18	4.0 - 5.0
				H	240	19					
UT 35	1.5	35	690	V	276	19	20	70	0.00063116	18	3.2 - 3.7
				H	248	20					
WDU 50N	6	50	690	V	240	21	14	88	0.00057183	24	3.5 - 6.0
				H	81	37					
UKH 50	16	50	690	V	222	23	16	87	0.00052183	24	6.0 - 8.0
				H	75	40					
WDU 70N	10	70	690	V	108	37	8	129	0.00043412	22	9.0 - 12.0
				H	48	55					
WDU 70/95	16	95	1100	V	54	59	10	134	0.00026337	30	6.0 - 12.0
UKH 95	25	95	880	V	60	61	9	151	0.00029067	33	15.0 - 20.0
WDU 120/150	35	120	1100	V	46	81	11	162	0.00021077	35	10.0 - 20.0
WDU 120/150	35	150	1100	V	46	88	13	162	0.00017916	35	10.0 - 20.0
UKH 150	50	150	1100	V	48	86	11	176	0.00018046	33	25.0 - 30.0
UKH 240	95	240	1100	V	42	111	8	245	0.000124175	40	25.0 - 30.0
WFF 35/AH	2.5	35	1100	V	81	36	18	76	0.00061116	N/A*	3.0 - 6.0
WFF 70/AH	2.5	70	1100	V	46	66	14	116	0.00032212	N/A*	6.0 - 12.0
RBO 8-HC	6	70	690	V	50	60	10	130	0.000352120	N/A*	6.0 - 12.0
WFF 120/AH	6	120	1100	V	34	101	13	162	0.00018677	N/A*	10.0 - 20.0
RBO 10-HC	6	150	1100	V	36	98	7	216	0.000185160	N/A*	10.0 - 20.0
WFF 185/AH	10	185	1100	V	13	196	10	215	0.000130090	N/A*	14.0 - 31.0
RBO 12-HC	10	240	1100	V	15	179	5	290	0.000134475	N/A*	14.0 - 30.0
WFF 300/AH	25	300	1100	V	13	238	7	316	0.000087580	N/A*	25.0 - 60.0
RBO 16-HC	25	300	1100	V	13	238	5	364	0.000087580	N/A*	25.0 - 35.0

*Insulation stripping length dependent on cable lug specification

S9, SF19 & SFE9 (210dp) Terminal Capacity Data

Terminal Type	Conductor Size mm ²		Max. Volts	Rail Orientation	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			
WDU 2.5	0.5	2.5	690	V	1218	2	27	17	0.0095436	10	0.4 - 0.8
				H	1107	2					
UT 2.5	0.14	2.5	690	V	1197	2	34	15	0.00958358	9	0.5 - 0.6
				H	1089	2					
WDU 4	0.5	4	690	V	1008	3	26	22	0.0059972	10	0.5 - 1.0
				H	909	3					
UT 4	0.14	4	690	V	994	3	31	20	0.00596718	9	0.6 - 0.8
				H	900	3					
WDU 6	0.5	6	690	V	777	5	22	29	0.0039890	12	0.8 - 1.6
				H	702	5					
UT 6	0.2	6	690	V	749	5	24	28	0.00401304	10	1.5 - 1.8
				H	684	5					
WDU 10	1.5	10	690	V	616	7	20	40	0.0024175	12	1.2 - 2.4
				H	558	7					
UT 10	0.5	10	690	V	602	7	20	39	0.00240554	10	1.5 - 1.8
				H	549	7					
WDU 16	1.5	16	690	V	504	9	17	53	0.0015847	16	3.0 - 4.0
				H	450	10					
UT 16	1.5	16	690	V	497	10	17	53	0.0015837	14	2.5 - 3.0
				H	450	10					
WDU 35	2.5	35	690	V	371	16	15	80	0.0007937	18	4.0 - 5.0
				H	333	17					
UT 35	1.5	35	690	V	378	17	22	70	0.000708712	18	3.2 - 3.7
				H	333	18					
WDU 50N	6	50	690	V	322	19	15	88	0.000629106	24	3.5 - 6.0
				H	96	35					
UKH 50	16	50	690	V	301	21	17	87	0.00057911	24	6.0 - 8.0
				H	90	39					
WDU 70N	10	70	690	V	168	31	9	129	0.000473784	22	9.0 - 12.0
				H	58	53					
WDU 70/95	16	95	1100	V	64	56	11	134	0.000291934	30	6.0 - 12.0
UKH 95	25	95	880	V	70	59	10	151	0.000319234	33	15.0 - 20.0
WDU 120/150	35	120	1100	V	54	79	12	162	0.000233414	35	10.0 - 20.0
WDU 120/150	35	150	1100	V	54	86	15	162	0.000197512	35	10.0 - 20.0
UKH 150	50	150	1100	V	56	84	12	176	0.000198812	33	25.0 - 30.0
UKH 240	95	240	1100	V	48	110	9	245	0.000135645	40	25.0 - 30.0
WFF 35/AH	2.5	35	1100	V	96	34	19	76	0.000688712	N/A*	3.0 - 6.0
WFF 70/AH	2.5	70	1100	V	81	52	16	116	0.000361784	N/A*	6.0 - 12.0
RBO 8-HC	6	70	690	V	87	48	11	130	0.000391784	N/A*	6.0 - 12.0
WFF 120/AH	6	120	1100	V	40	97	14	162	0.000209414	N/A*	10.0 - 20.0
RBO 10-HC	6	150	1100	V	42	96	8	216	0.000203512	N/A*	10.0 - 20.0
WFF 185/AH	10	185	1100	V	30	135	11	215	0.000145038	N/A*	14.0 - 31.0
RBO 12-HC	10	240	1100	V	34	126	6	290	0.000145945	N/A*	14.0 - 30.0
WFF 300/AH	25	300	1100	V	30	165	8	316	0.000096756	N/A*	25.0 - 60.0
RBO 16-HC	25	300	1100	V	30	165	6	364	0.000096756	N/A*	25.0 - 35.0

*Insulation stripping length dependent on cable lug specification

EU Declaration of Conformity in accordance with European Directive 2014/34/EU and UK Statutory Instrument 2016/1107

**Equipment: Range of Stainless and Mild Steel Terminal Boxes
S1 to S9 & M1 to M9; SF11 to SF19 & MF11 to MF19; SFE1 to SFE9 & MFE1 to MFE9**

Provisions of the Directive fulfilled by the Equipment:

Group II Category 2G Ex eb IIC T* Gb, II 2D Ex tb IIIC T***C Db IP66

Group II Category 2G Ex ib IIC T* Gb, II 2D Ex ib IIIC T***C Db IP66

Group II Category 1G Ex ia IIC T* Ga, II 1D Ex ia IIIC T***C Da IP66

Harmonized Standards used: EN 60079-0:2018, EN60079-7:2007, EN60079-11:2012 EN60079-31:2014

Notified Body for EU-Type Examination: SGS-Fimko 0598 Helsinki, Finland

EU-type Examination Certificate: Baseefa08ATEX0208X

Notified Body for production: SGS-Fimko 0598 Helsinki, Finland

Approved Body for UK-Type Examination: SGS Baseefa 1180 Buxton, UK

UK-type Examination Certificate: BAS21UKEX0042X

Approved Body for production: 1180

On behalf of the above named company, I declare that, on the date the equipment accompanied by this declaration is placed on the market, the equipment conforms with all technical and regulatory requirements of the above listed directives.



A. Reid, Technical Manager