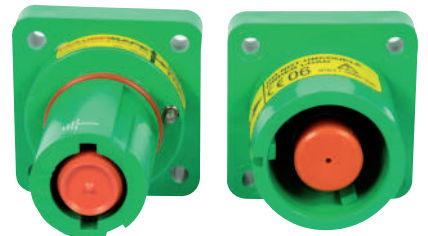


DAN CABLES

POWERSAFE



ALUKAFLEX® ALUMINUM CABLES AND POWERSAFE CONNECTORS

As an aluminum cable company, we have multiple times heard the saying that aluminum cables do not work, and bi-metal connectors are not reliable. However, with the right know-how and the right choice of products, the saying is simply not true. We have set out to prove this. DanCables are the manufacturer of highly flexible aluminum cables branded under the name of Alukaflex.

The aluminum conductor in Alukaflex is highly flexible, fine stranded aluminum and the cable is manufactured according to Class 5 IEC 60228 and DIN VDE 0295. Alukaflex can act as a perfect replacement for copper cables such as H07RN-F, which more and more customers are experiencing. We have been searching and testing all kinds of connectors to find the best match for our cables, and with Powersafe bi-metal connectors we found the perfect match. Powersafe bi-metal connectors are manufactured with the best raw materials, giving an impeccable friction weld process producing a conductor of high quality. Bi-metallic industrial plugs (which are Powerlock compatible) can be terminated onto flexible aluminum cables so lugs can be replaced with a safer and insulated termination.

A third-party test center has conducted a series of tests to verify that the Alukaflex cables and Powersafe bi-metal connectors provide a 100% satisfactory and safe connection. After 3500 hours of full load and additional 500 hours of Heat Cycle Test, it was found that neither cables, connectors nor crimping system showed signs of overheating, declining performance, or failure. This shows that Alukaflex together with Powersafe is a reliable solution for both temporary and long-term installation projects.

On the next pages you can read more about our Powersafe products.



ULTIMATE PROVIDER OF SAFE POWER MANAGEMENT



With increased demand for temporary high-power systems in entertainment & industrial applications, the choice of high current connectors is critical to ensure safety and reliability for every use. Designed to connect single & three phase high current power circuits, Powersafe single pole connectors are at the forefront of both safety and technical capability.

These connectors have been tried and tested in some of the harshest environments worldwide, from the oil fields of Canada to data centers in the Arctic Circle. Based on their impressive technical capabilities, added safety features, rugged construction, reliability, and quality, they are a popular choice for professional engineers.

Standard safety features include a secondary locking system which requires a key to unlock the connection. This is in addition to finger proof electrical contacts on all connectors, which reduces the risk of accidental contact when the connector is live.

Connectors are available in cable and panel-mount formats with either crimp or screw contacts. Rated at 500A and 800A for single core cables from 25 – 300 mm², Powersafe connectors are, at present, amongst the highest rated and safest connectors of their type on the market.





POWERSAFE CONNECTOR PROGRAM

Powersafe connectors are color coded and mechanically keyed to prevent connection errors. In addition, they are made from high-quality materials which makes them resistant to high temperature and frequent use.

Our Source and Drain Powersafe bi-metal connectors for **flexible aluminum cables** are available for cables with cross sections:

- 120 mm²
- 150 mm²
- 185 mm²
- 240 mm²

Our Source and Drain Powersafe connectors for **copper cables** are available for cables with cross sections:

- 25 mm² Set screw – 500A
- 35 mm² Set screw or Crimp – 500A
- 50 mm² Set screw or Crimp – 500A
- 70 mm² Set screw or Crimp – 500A
- 95 mm² Set screw or Crimp – 500A
- 120 mm² Set screw or Crimp – 500A
- 150 mm² Crimp – 500A
- 185 mm² Crimp – 500A
- 240 mm² Crimp – 800A
- 300 mm² Crimp – 800A

Item no.	EAN	Product name			
89000300	5714969008292	PowersafeALU 120 LDPEGN120mm ²	LINE DRAIN PE	GREEN	19-28mm Clamping Range
89000301	5714969008308	PowersafeALU 120 LDNBL120mm ²	LINE DRAIN N	BLUE	19-28mm Clamping Range
89000302	5714969008315	PowersafeALU 120 LDL1BN120mm ²	LINE DRAIN L1	BROWN	19-28mm Clamping Range
89000303	5714969008322	PowersafeALU 120 LDL2BK120mm ²	LINE DRAIN L2	BLACK	19-28mm Clamping Range
89000304	5714969008339	PowersafeALU 120 LDL3GY120mm ²	LINE DRAIN L3	GREY	19-28mm Clamping Range
89000305	5714969008346	PowersafeALU 150 LDPEGN150mm ²	LINE DRAIN PE	GREEN	22-32mm Clamping Range
89000306	5714969008353	PowersafeALU 150 LDNBL150mm ²	LINE DRAIN N	BLUE	22-32mm Clamping Range
89000307	5714969008360	PowersafeALU 150 LDL1BN150mm ²	LINE DRAIN L1	BROWN	22-32mm Clamping Range
89000308	5714969008377	PowersafeALU 150 LDL2BK150mm ²	LINE DRAIN L2	BLACK	22-32mm Clamping Range
89000309	5714969008384	PowersafeALU 150 LDL3GY150mm ²	LINE DRAIN L3	GREY	22-32mm Clamping Range
89000310	5714969008391	PowersafeALU 185 LDPEGN185mm ²	LINE DRAIN PE	GREEN	22-32mm Clamping Range
89000311	5714969008407	PowersafeALU 185 LDNBL185mm ²	LINE DRAIN N	BLUE	22-32mm Clamping Range
89000312	5714969008414	PowersafeALU 185 LDL1BN185mm ²	LINE DRAIN L1	BROWN	22-32mm Clamping Range
89000313	5714969008421	PowersafeALU 185 LDL2BK185mm ²	LINE DRAIN L2	BLACK	22-32mm Clamping Range
89000314	5714969008438	PowersafeALU 185 LDL3GY185mm ²	LINE DRAIN L3	GREY	22-32mm Clamping Range
89000315	5714969008445	PowersafeALU 240 LDPEGN240mm ²	LINE DRAIN PE	GREEN	30-38mm Clamping Range
89000316	5714969008452	PowersafeALU 240 LDNBL240mm ²	LINE DRAIN N	BLUE	30-38mm Clamping Range
89000317	5714969008469	PowersafeALU 240 LDL1BN240mm ²	LINE DRAIN L1	BROWN	30-38mm Clamping Range
89000318	5714969008476	PowersafeALU 240 LDL2BK240mm ²	LINE DRAIN L2	BLACK	30-38mm Clamping Range
89000319	5714969008483	PowersafeALU 240 LDL3GY240mm ²	LINE DRAIN L3	GREY	30-38mm Clamping Range
89000320	5714969008490	PowersafeALU 300 LDPEGN300mm ²	LINE DRAIN PE	GREEN	30-38mm Clamping Range
89000321	5714969008506	PowersafeALU 300 LDNBL300mm ²	LINE DRAIN N	BLUE	30-38mm Clamping Range
89000322	5714969008513	PowersafeALU 300 LDL1BN300mm ²	LINE DRAIN L1	BROWN	30-38mm Clamping Range
89000323	5714969008520	PowersafeALU 300 LDL2BK300mm ²	LINE DRAIN L2	BLACK	30-38mm Clamping Range
89000324	5714969008537	PowersafeALU 300 LDL3GY300mm ²	LINE DRAIN L3	GREY	30-38mm Clamping Range

Other benefits

- High impact bodies & high temperature resistant materials
- Color coded & mechanically keyed to prevent connection errors
- Rubber hand grip for ease of coupling and added impact protection
- Rubber protective caps to protect conductors from moisture, dirt and abrasion when uncoupled (optional)

Powersafe Range - Key Specifications

No of Contact:	1
Maximum Continious Current Rating:	Up to 800A
Surge Current:	75kA
Short Circuit Rating:	Up to 35.5kA
Cables Cross Sectional Area C.S.A.:	25mm ² to 300mm ²
Contact Termination:	Screw or Crimp
Mating Method:	Bayonet Lock
Operating Voltage:	1000V AC
Max Rated Voltage to Earth:	2kV AC / 3kV DC
Minimum Flashover:	9.5kV DC or AC Peak
Insulation Resistance:	>5M chms @500V DC
Ingress Protection:	IP67
Protection against Electrical Shock:	IP2X
Flammability:	UL94-VO
Mating Cycles:	>500
Shell Material:	High Temperature Thermoplastic
Contact Plating:	Silver

Item no.	EAN	Product name			
89000325	5714969008544	PowersafeALU 120 LSPEGN120mm ²	LINE SOURCE PE	GREEN	19-28mm Clamping Range
89000326	5714969008551	PowersafeALU 120 LSNBL120mm ²	LINE SOURCE N	BLUE	19-28mm Clamping Range
89000327	5714969008568	PowersafeALU 120 LSL1BN120mm ²	LINE SOURCE L1	BROWN	19-28mm Clamping Range
89000328	5714969008575	PowersafeALU 120 LSL2BK120mm ²	LINE SOURCE L2	BLACK	19-28mm Clamping Range
89000329	5714969008582	PowersafeALU 120 LSL3GY120mm ²	LINE SOURCE L3	GREY	19-28mm Clamping Range
89000330	5714969008599	PowersafeALU 150 LSPEGN150mm ²	LINE SOURCE PE	GREEN	22-32mm Clamping Range
89000331	5714969008605	PowersafeALU 150 LSNBL150mm ²	LINE SOURCE N	BLUE	22-32mm Clamping Range
89000332	5714969008612	PowersafeALU 150 LSL1BN150mm ²	LINE SOURCE L1	BROWN	22-32mm Clamping Range
89000333	5714969008629	PowersafeALU 150 LSL2BK150mm ²	LINE SOURCE L2	BLACK	22-32mm Clamping Range
89000334	5714969008636	PowersafeALU 150 LSL3GY150mm ²	LINE SOURCE L3	GREY	22-32mm Clamping Range
89000335	5714969008643	PowersafeALU 185 LSPEGN185mm ²	LINE SOURCE PE	GREEN	22-32mm Clamping Range
89000336	5714969008650	PowersafeALU 185 LSNBL185mm ²	LINE SOURCE N	BLUE	22-32mm Clamping Range
89000337	5714969008667	PowersafeALU 185 LSL1BN185mm ²	LINE SOURCE L1	BROWN	22-32mm Clamping Range
89000338	5714969008674	PowersafeALU 185 LSL2BK185mm ²	LINE SOURCE L2	BLACK	22-32mm Clamping Range
89000339	5714969008681	PowersafeALU 185 LSL3GY185mm ²	LINE SOURCE L3	GREY	22-32mm Clamping Range
89000340	5714969008698	PowersafeALU 240 LSPEGN240mm ²	LINE SOURCE PE	GREEN	30-38mm Clamping Range
89000341	5714969008704	PowersafeALU 240 LSNBL240mm ²	LINE SOURCE N	BLUE	30-38mm Clamping Range
89000342	5714969008711	PowersafeALU 240 LSL1BN240mm ²	LINE SOURCE L1	BROWN	30-38mm Clamping Range
89000343	5714969008728	PowersafeALU 240 LSL2BK240mm ²	LINE SOURCE L2	BLACK	30-38mm Clamping Range
89000344	5714969008735	PowersafeALU 240 LSL3GY240mm ²	LINE SOURCE L3	GREY	30-38mm Clamping Range
89000345	5714969008742	PowersafeALU 300 LSPEGN300mm ²	LINE SOURCE PE	GREEN	30-38mm Clamping Range
89000346	5714969008759	PowersafeALU 300 LSNBL300mm ²	LINE SOURCE N	BLUE	30-38mm Clamping Range
89000347	5714969008766	PowersafeALU 300 LSL1BN300mm ²	LINE SOURCE L1	BROWN	30-38mm Clamping Range
89000348	5714969008773	PowersafeALU 300 LSL2BK300mm ²	LINE SOURCE L2	BLACK	30-38mm Clamping Range
89000349	5714969008780	PowersafeALU 300 LSL3GY300mm ²	LINE SOURCE L3	GREY	30-38mm Clamping Range

POWERSAFE POWER DISTRIBUTION BOX



The Powersafe Sequential Mating box is a three-phase power distribution board designed for use with temporary electrical installations with a current rating of up to 800amps.

The sequence of connection and disconnection is controlled to ensure safety circuits are connected first and disconnected last (first mate last break). Furthermore, the keyed design eliminates the possibility of connection errors. The Powersafe box incorporates an integral shutter mechanism which controls the connection sequence.

The unit accepts connection of Powersafe line connectors and other branded single pole connectors. The power distribution box comes in both source and drain versions and in two panel sizes, 88mm and 108mm.



Item no.	EAN	Product name
89030008	5714969012138	Powersafe Power Distribution Box-Sourcesequential connection box PE+N+L1+L2+L3
89030009	5714969012145	Powersafe Power Distribution Box-Drainsequential connection box PE+N+L1+L2+L3
89030016	5714969014637	Power Distribution Box-Source PE+3Psequential connection box PE+L1+L2+L3
89030017	5714969014644	Power Distribution Box-Drain PE+3Psequential connection box PE+L1+L2+L3

POWERSAFE PANEL SOURCE AND DRAIN

Powersafe Panel Source and Drain connector is available in 500 A and 800 A versions.

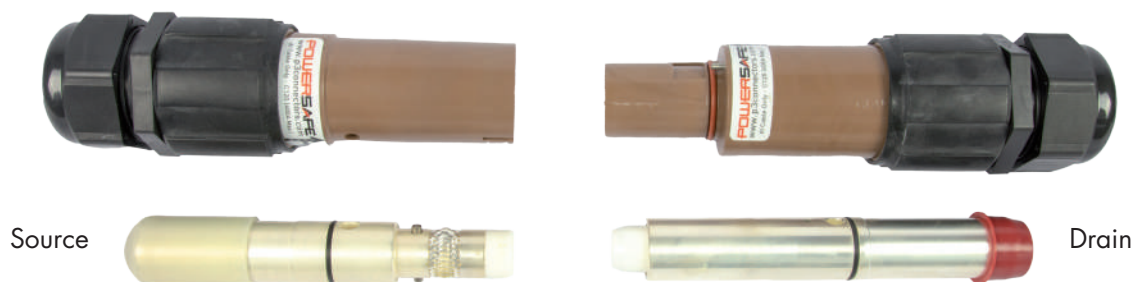


Item no.	EAN	Product name
89020600	5714969010998	Powersafe Panel 800A Drain PESPD-E GN T8 Earth Green T8 Threaded Post Termination
89020605	5714969011001	Powersafe Panel 800A Drain NSPD-N BL T8 Neutral Blue T8 Threaded Post Termination
89020610	5714969011018	Powersafe Panel 800A Drain L1SPD-1 BN T8 Line 1 Brown T8 Threaded Post Termination
89020615	5714969011025	Powersafe Panel 800A Drain L2SPD-2 BK T8 Line 2 Black T8 Threaded Post Termination
89020620	5714969011032	Powersafe Panel 800A Drain L3SPD-3 GY T8 Line 3 Grey T8 Threaded Post Termination
89020625	5714969011049	Powersafe Panel 800A Source PESPS-E GN-Earth Green T8 Threaded Post Termination
89020630	5714969011056	Powersafe Panel 800A Source NSPS-N BL-Neutral Blue T8 Threaded Post Termination
89020635	5714969011063	Powersafe Panel 800A Source L1SPS-1 BN-Line 1 Brown T8 Threaded Post Termination
89020640	5714969011070	Powersafe Panel 800A Source L2SPS-2 BK-Line 2 Black T8 Threaded Post Termination
89020645	5714969011087	Powersafe Panel 800A Source L3SPS-3 GY-Line 3 Grey T8 Threaded Post Termination
89020650	5714969011094	Powersafe Panel 500A Drain PESPD-E-GN-T5T5 Threaded Post Termination
89020655	5714969011100	Powersafe Panel 500A Drain NSPD-N-BL-T5T5 Threaded Post Termination
89020660	5714969011117	Powersafe Panel 500A Drain L1SPD-1-BN-T5T5 Threaded Post Termination
89020665	5714969011124	Powersafe Panel 500A Drain L2SPD-2-BK-T5T5 Threaded Post Termination
89020670	5714969011131	Powersafe Panel 500A Drain L3SPD-3-GY-T5T5 Threaded Post Termination
89020675	5714969011148	Powersafe Panel 500A Source PESPS-E-GN-T5T5 Threaded Post Termination
89020680	5714969011155	Powersafe Panel 500A Source NSPS-N-BL-T5T5 Threaded Post Termination
89020685	5714969011162	Powersafe Panel 500A Source L1SPS-1-BN-T5T5 Threaded Post Termination
89020690	5714969011179	Powersafe Panel 500A Source L2SPS-2-BK-T5T5 Threaded Post Termination
89020695	5714969011186	Powersafe Panel 500A Source L3SPS-3-GY-T5T5 Threaded Post Termination
89021141	5714969014620	45° Panel Adaptor Kit45 degrees adaptor for Powersafe panel mount

POWERSAFE GENDER SPECIFICATION

In an emergency power application, the generator is the source and would be fitted with Panel Source (panel-mount) connectors. A cable assembly is required to connect between the generator (source) and the item receiving the power (drain). This will usually have a drain connector on one end a source connector on the other, options are also available with M12 Lug connections.

The source connectors are intended to have their permanent connection at the supply of electrical energy (such as a connection to the electrical grid or an emergency generator), and the drain connectors are intended to have their permanent connection at the equipment receiving power. The role of male and female connectors is opposite to traditional usage in other designs of power connector - the Powerlock source connector has a male pin and the drain connector has a female receptacle.



This does not however compromise safety because the gap between the plastic insulating cap on the male pin of the source connector and the surrounding plastic housing is too small to insert a human finger. The female drain connector also has a spring-loaded plastic cap to prevent dirt ingress and casual contact with the electrical contact; however with sufficient pressure this can be displaced with a finger.

