

APPLICATION SPECIFIC POWER DISTRIBUTION UNITS (PDUs)





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Alexander Schneider

Over Half a Century of Excellence

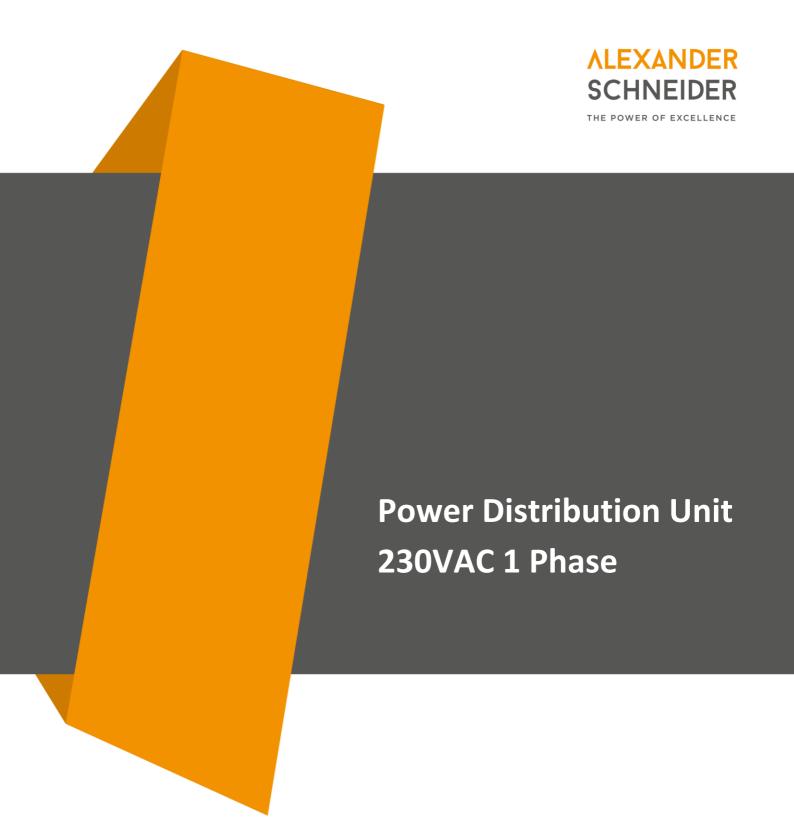
Alexander Schneider is a leading provider of outstanding IT and OT infrastructure solutions for OEMs, enterprise, and IT Data center.

400 loyal customers, countless successful projects, and a huge variety of the very best quality products are the reasons Alexander Schneider has continued to grow and develop maintaining its spirit of excellence since 1963.

We design and build PDUs specifically for your application. Our design team has successfully designed over 100 custom PDUs. Models include modular 48VDC PDUs for Telecom, Rugged MIL-STD 810G, PDUs for ATE with front access EPO and many more.

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Overview

The ELC1 family is a Rack mount Power Distribution Unit with front access for safety and control.

This 230VAC 1 Phase PDU family features main circuit breakers, on/off switch and an Emergency Power Off switch at the front panel control.

The outlets are located on the rear panel and are customer defined.



ELECTRICAL	
No. of phases	1 PH
Main circuit breaker	16A
Nominal input voltage	110/230 VAC
Acceptable input voltage	± 10% of nominal voltage
Inlet frequency	50 Hz/ 60 Hz
Residual-current device	30mA
CONTROL	
Start/Stop operation	Yes
Main circuit breaker	Yes
Emergency Off (EMO)	Yes
PHYSICAL	
Dimensions (H \times W \times D)	2U/88.1 x 483 x 130 mm
	19" Rackmount
Front panel handle	Yes
ENVIRONMENTAL	
Temperature	
> Operating	-10°C to 55°C
> Storage	-40°C to 80°C
Humidity	
> Operating	10 - 90% RH non-condensing
> Storage	10 - 95% RH
COMPLIANCE	
Safety	IEC 61010







(Electrical & Electronics Laboratory)

August 25, 2020

Att.: Shimon Meshulam,

Yaniv Tahar Alexander Schneider

Subject: Safety Evaluation of Power Distribution Unit models ELC-30-0002, ELC-30-0004 by Alexander Schneider

SII P.O.: 7012317158

Dear Sirs.

Please be advised that the Power Distribution Unit, models ELC-30-0002, ELC-30-0004 by Alexander Schneider, has successfully passed Safety tests at the Electrical Safety Branch of the Electrical and Electronics Laboratory of the Standards Institution of Israel according to the requirements of the standards listed below.

Model ELC-30-0002

SI 61010 part 1:2013

Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 1: General requirements

Model ELC-30-0004

IEC 61010-1: 2010 + A1:2016 / EN 61010-1: 2010 + A1:2019

Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 1: General requirements

The detailed test report is in the process of preparation and will be provided to you as soon as it is completed.

Should you have any questions, please do not hesitate to contact us.

Sincerely Yours,

Vladimir Chernikh Senior Safety Compliance Engineer Electrical Safety Sector

Medical Devices, Laser and Electrical Safety Branch

Electrical and Electronics Laboratory The Standards Institution of Israel

Phone: +972 3 6465244 E-mail: vladimirc@sii.org.il



Please create the requested part number by selecting the relevant code letters from the list:

ELC1	-	-		-		-	
1	2		3		4		5
Series	Voltage Code		No. of Outlets		Outlet Type		Inlet Cable Type

For example:

ELC1	-	230	-	8	-	С	-	I
1		2		3		4		5
Series		Voltage Code		No. of Outlets		Outlet Type		Inlet Cable Type

1 Series

ELC1

4 Outlet Type

C - IEC-320-C13

I - Israeli socket

2 Voltage Code

230 - 230 VAC (50 Hz)

110 - 110 VAC (60 Hz)

5 Inlet Cable Type

C - IEC-320-C20 to IEC-309 (5 Meters)

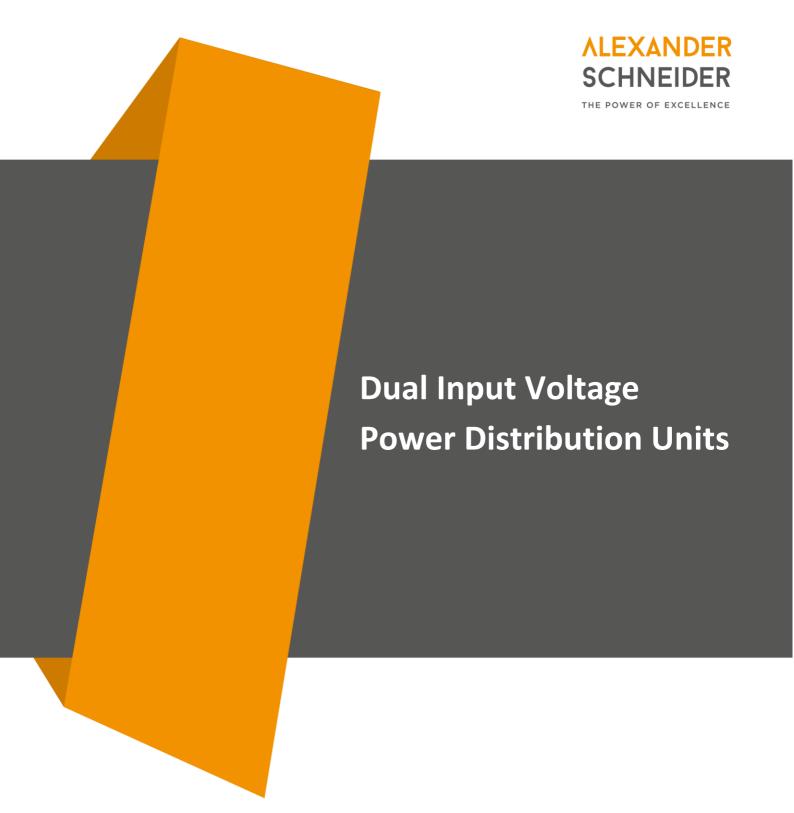
I - IEC-320-C20 to Israeli cable type (5 Meters)

3 No. of Outlets

4 - 4 outlets (IEC only)

8 - 8 outlets (IEC only)

6 - 6 outlets (Israeli only)



Overview

The ELC2 family is designed for ATE systems for Avionic applications.

This ELC2 family is a Rack mount Power Distribution Unit with Dual input voltages and a front access for safety and control. The front panel control also includes two main circuit breakers, on/off switches and shared Emergency Power Off Operation.

The ELC2 family features 115VAC-400HZ inputs, and a second input that can be either 230VAC-50HZ or 110VAC-60HZ.

The outlets are located on the rear panel.



ELECTRICAL	
No. of phases	1 PH
Main circuit breaker	10A, 16A
Nominal input voltage	110/230 VAC and 115 VAC
Acceptable input voltage	± 10% of nominal voltage
Input frequency	50 Hz /60 Hz and 400 Hz
Residual-current device	30mA (110/230 VAC only)
CONTROL	
Start/Stop operation	Yes
Main circuit breaker	Yes
Emergency Off (EMO)	Yes
INLETS & OUTLETS	
(1) IEC-320-C20	110/230 VAC Inlet socket
(4) IEC-320-C13	110/230 VAC Outlet socket
(1) D38999/20W D4PN	115 VAC Inlet socket
(1) D38999/20W D4SN	115 VAC Outlet socket
PHYSICAL	
Dimensions (H × W × D)	2U/88.1 x 483 x 400 mm
	19" Rackmount
Front panel handle	Yes
ENVIRONMENTAL	
Temperature	
> Operating	-10°C to 55°C
> Storage	-40°C to 80°C
Humidity	
> Operating	10 - 90% RH non-condensing
> Storage	10 - 95% RH
DESIGN ACCORDING TO	IEC 61010



Rear View





Please create the requested part number by selecting the relevant code letters from the list:

ELC2	-		-		-		-	
1 Series		2 Voltage Code		3 Current Rating		4 Input 1 Cable Type		5 Input 2 Cable Type

For example:

ELC2	-	230	-	10	-	I	-	D5
1 Series		2 Voltage Code		3 Current Rating		4 Input 1 Cable Type		5 Input 2 Cable Type

1 Series

ELC2

4 Input 1 Cable Type (110/230)

C - IEC-320-C20 to IEC-309 (5 Meters)

I - IEC-320-C20 to Israeli cable type (5 Meters)

2 Voltage Code

230 - 230 VAC (50 Hz) / 115 VAC (400 Hz)

110 - 110 VAC (60 Hz) / 115 VAC (400 Hz)

5 Input 2 Cable Type (115)

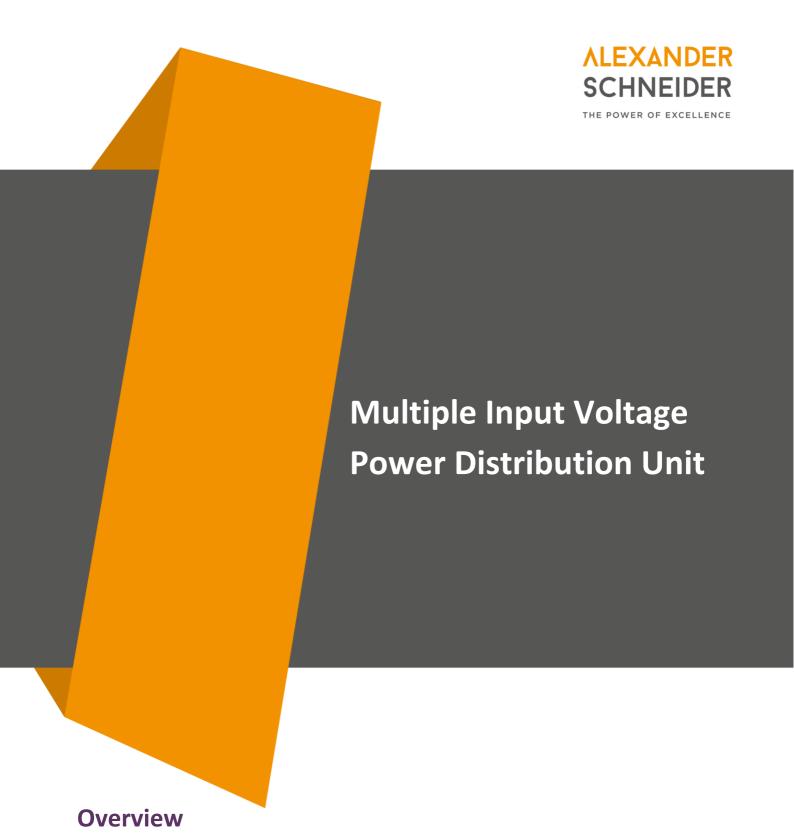
D3 - D38999 to IEC-309 (3 Meters)

D5 - D38999 to IEC-309 (5 Meters)

3 Current Rating (Ampere)

10 - 10 Amp

16 - 16 Amp



The ELC3 family is designed for ATE systems for Avionic applications.

This family features 28VDC on 230VAC-50HZ inputs, and a third input that can be either 230VAC-50HZ or 110VAC-60HZ.

The ELC3 family is a Rack mount Power Distribution Unit with front access for safety and control. The front panel control is divided to AC and DC with main circuit breakers, on/off switches and shared Emergency Power Off Operation.

The outlets are located on the rear panel.



ELECTRICAL	
No. of phases	1 PH
Main circuit breaker	Up to 25A each Input
Nominal input voltage	28VDC, 115VAC, 110/230VAC
Acceptable input voltage	± 10% of nominal voltage
Input frequency	50 Hz /60 Hz and 400 Hz
Residual-current device	30mA (110/230 VAC only)
CONTROL	
Start/Stop operation	Yes
Main circuit breaker	Yes
Emergency Off (EMO)	Yes
INLETS & OUTLETS	
(1) IEC-320-C20	110/230 VAC Inlet socket
(3) IEC-320-C19	110/230 VAC Outlet socket
(1) D38999/20W D4PN	115 VAC Inlet socket
(2) D38999/20W D4SN	115 VAC Outlet socket
(4) D38999/20W C4PN	28 VDC Inlet socket
(2) D38999/20W C4SN	28 VDC Outlet socket
PHYSICAL	
Dimensions (H \times W \times D)	4U/178 x 483 x 400 mm
	19" Rackmount
Front panel handle	Yes
ENVIRONMENTAL	
Temperature	
OperatingStorage	-10°C to 55°C -40°C to 80°C
Humidity	.5 0 10 00 0
> Operating > Storage	10 - 90% RH non- 10 - 95% RH
DESIGN ACCORDING TO IE	C 61010





Please create the requested part number by selecting the relevant code letters from the list:

ELC3	-	-	-	-	- E	5
1 Series	2 Voltage Code	3 Current Rating	4 Input 1 Cable Type	5 Input 2 Cable Type		nput 3 Cable Type

For example:

ELC3	-	230	-	10	-	C3	-	D5	-	E5
1 Series		2 Voltage Code		3 Current Rating		4 Input 1 Cable Type		5 Input 2 Cable Type		6 Input 3 Cable Type

1 Series

ELC3

4 Input 1 Cable Type (110/230)

C3 - Israeli cable type (up to 16 A) (5 Meters)

C5 - IEC-309 (5 Meters)

2 Voltage Code

230 - 230 VAC (50 Hz) / 115 VAC (400 Hz) / 28 VDC **110** - 110 VAC (60 Hz) / 115 VAC (400 Hz) / 28 VDC 5 Input 2 Cable Type (115)

D3 - D38999 to IEC-309 (3 Meters)

D5 - D38999 to IEC-309 (5 Meters)

3 Current Rating (Ampere)

10 - 10 Amp

16 - 16 Amp

20 - 20 Amp

6 Input 3 Cable Type (28)

E3 - D38999 to Open Wire (3 Meters)

D5 - D38999 to Open Wire (5 Meters)



Power Distribution Unit With a Circuit Breaker Per Outlet

Overview

The ELC4-I (Industrial) and the ELC4-M (Military) PDUs are designed with a dedicated circuit breaker per outlet.

The user can easily and safely access all circuit breakers and view all indicator lights from the front of the cabinet.



ELECTRICAL	
No. of phases	1 PH
Main circuit breaker	Up to 63A (2 Pole)
Nominal input voltage	110/230 VAC
Acceptable input voltage	± 10% of nominal voltage
Input frequency	50 Hz / 60 Hz
CONTROL	
Start/Stop operation	No – Optional only
Main circuit breaker	Yes
Emergency Off (EMO)	No – Optional only
PHYSICAL	
Dimensions (H \times W \times D)	2U/4U* x 483 x 300 mm
	19" Rackmount
Front panel handle	Yes
ENVIRONMENTAL	
Temperature	
> Operating	-10°C to 55°C
> Storage	-40°C to 80°C
Humidity	
> Operating	10 - 90% RH non-condensing
> Storage	10 - 95% RH
DESIGN ACCORDING TO I	EC 61010

With industrial circuit breakers

POWER DISTRIBUTION UNIT

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With military circuit breakers



^{* 4}U Industrial , 2U Military



Please create the requested part number by selecting the relevant code letters from the list:

	-	-		-
1	2	3	4	5
Series	Voltage Code	Current Rating	No. of Outlet.	Outlet Type

For example:

ELC4-I	-	230	-	10	-	10	-	С
1		2		3		4		5
Series		Voltage Code		Current Rating		No. of Outlet:		Outlet Type

1 Series

ELC4-I - Industrial **ELC4-M** - Military

2 Voltage Code

230 - 230 VAC (50 Hz) **110** - 110 VAC (60 Hz)

3 Current Rating (Ampere) **10** - 10 Amp

16 - 16 Amp

20 - 20 Amp

25 - 25 Amp

32 - 32 Amp

40 - 40 Amp

50 - 50 Amp

63 - 63 Amp

4 No. of Outlets

6 - 6 Outlets IEC-320-C13/ IEC-320-C19 8 - 6 Outlets IEC-320-C13/ IEC-320-C19 10 - 10 Outlets IEC-320-C13/ IEC-320-C19

5 Outlet Type

C - IEC-320-C13

D - IEC-320-C19

^{*}Input cable is not included



Overview

The ELC5 family features easy and safe access to the main circuit breakers located on the front panel.

The front panel also includes the On/Off switch, indicator lights and an Emergency Power Off switch.

The outlets are located on the rear panel and are customer defined. The outlets are single phase.



ELECTRICAL	
No. of phases	3 PH
Main circuit breaker	63A
Nominal input voltage	110/230 VAC
Acceptable input voltage	± 10% of nominal voltage
Input frequency	50 Hz/60Hz
Outlet	IEC-320-C19
Inlet	Hard wire
CONTROL	
Start/Stop Operation	Yes
Main circuit breaker	Yes
Emergency Off (EMO)	Yes
PHYSICAL	
Dimensions (H \times W \times D)	4U/178 x 483 x 450 mm
	19" Rackmount
Front panel handle	Yes
ENVIRONMENTAL	
Temperature	
> Operating	-10°C to 55°C
> Storage	-40°C to 80°C
Humidity	
> Operating	10 - 90% RH non-
> Storage	10- 95% RH
DESIGN ACCORDING TO I	EC 61010





Please create the requested part number by selecting the relevant code letters from the list:

ELC5	-		-		-		-	
1 Series		2 Voltage Code		3 Current Rating		4 No. of Single Pole Outlet C.B		5 No. of Outlets (per C.B)

For example:

ELC5	-	230	-	63	-	2	-	2
1 Series		2 Voltage Code		3 Current Rating		4 No. of Single Pole Outlet C.B		5 No. of Outlets (per C.B)

1 Series

ELC5

4 No. of Single Pole Outlet C.B

3 - 3 Circuit Breakers

6 - 6 Circuit Breakers

2 Voltage Code

230 - 230 VAC (50 Hz)

110 - 110 VAC (60 Hz)

5 No. of Outlets (per C.B)

1 - 1 Outlets IEC-320-C19

2 - 2 Outlets IEC-320-C19

3 - 3 Outlets IEC-320-C19

3 Current Rating (Ampere)

10 - 10 Amp

16 - 16 Amp

20 - 20 Amp

25 - 25 Amp

32 - 32 Amp

40 - 40 Amp

50 - 50 Amp

63 - 63 Amp

*Input cable is not included



Military Power Distribution
Unit for Uninterruptible
Power Supply (UPS) with a
Changeover Function

Overview

The ELC6 family is designed for military power distribution in cabinets with critical load and UPS backup.

The ELC6 PDU powers the cabinet UPS while providing change over selector circuit breakers protection. In addition, it distributes the UPS output power to the critical loads.

The ELC6 front panel provides easy and safe access to all circuit breakers and indicators. The front panel LED indicators monitor the MAIN and UPS input and output.



ELECTRICAL	
No. of phases	1 PH
Main circuit breaker	Up to 5KW
Nominal input voltage	110/230 VAC
Acceptable input voltage	± 10% of nominal voltage
Input frequency	50 Hz, 60 Hz
CONTROL	
Main circuit breaker	Yes
Indication lamps	Yes
1-0-2 switch	Yes (changer over unit)
PHYSICAL	
Dimensions (H \times W \times D)	2U/3U x 483 x 400 mm
	19" Rackmount
Front panel handle	Yes
ENVIRONMENTAL	
Temperature	
> Operating	-10°C to 55°C
> Storage	-40°C to 80°C
Humidity	
> Operating	10 - 90% RH non-condensing
> Storage	10 - 95% RH
DESIGN ACCORDING TO I	EC 61010





Please create the requested part number by selecting the relevant code letters from the list:

ELC6	-	-	-	-
1	2	3	4	5
Series	Voltage Code	Power	No. of Outlets	Outlet Type

For example:

ELC6	-	230	-	3	-	2	-	D
1		2		3		4		5
Series		Voltage Code		Power		No. of Outlets		Outlet Type

1 Series

ELC6

4 No. of Outlets

2 - 2 Outlets IEC-320-C13/ IEC-320-C19

4 - 4 Outlets IEC-320-C13/ IEC-320-C19

2 Voltage Code

230 - 230 VAC (50 Hz)

110 - 110 VAC (60 Hz)

5 Outlet Type

C - IEC-320-C13

D - IEC-320-C19

3 Power

1 - 1 KW

2 - 2 KW

3 - 3 KW

4 - 4 KW **5** - 5 KW

*Input cable is not included



Industrial Power Distribution Unit for Uninterruptible Power Supply (UPS)

Overview

The ELC7 family is designed for industrial power distribution in cabinets with critical load and UPS backup.

The ELC7 PDU powers the cabinet UPS while providing circuit breakers protection. In addition, it distributes the UPS output power to the critical loads.

The ELC7 front panel provides easy and safe access to all circuit breakers and indicators. The front panel LED indicators monitor the MAIN and UPS input and output.



ELECTRICAL	
No. of phases	1 PH
Main circuit breaker	Up to 5KW
Nominal input voltage	110/230 VAC
Acceptable input voltage	± 10% of nominal voltage
Input frequency	50/60 Hz
CONTROL	
Main circuit breaker	Yes
Start/Stop Operation	Yes
PHYSICAL	
Dimensions (H \times W \times D)	3U x 483 x 400 mm
	19" Rackmount
Front panel handle	Yes
ENVIRONMENTAL	
Temperature	
> Operating	-10°C to 55°C
> Storage	-40°C to 80°C
Humidity	
> Operating	10 - 90% RH non-condensing
> Storage	10 - 95% RH
DESIGN ACCORDING TO I	EC 61010





Please create the requested part number by selecting the relevant code letters from the list:

ELC7	-	-	-	-
1	2	3	4	5
Series	Voltage Code	Power	No. of Outlets	Outlet Type

For example:

ELC7	-	230	-	3	-	2	-	D
1		2		3		4		5
Series		Voltage Code		Power		No. of Outlets		Outlet Type

1 Series

ELC6

4 No. of Outlets

2 - 2 Outlets IEC-320-C13/ IEC-320-C19

4 - 4 Outlets IEC-320-C13/ IEC-320-C19

2 Voltage Code

230 - 230 VAC (50 Hz)

110 - 110 VAC (60 Hz)

5 Outlet Type

C - IEC-320-C13

D - IEC-320-C19

3 Power

1 - 1 KW

2 - 2 KW

3 - 3 KW

4 - 4 KW

5 - 5 KW

*Input cable is not included



MIL-STD-810G DC Power Distribution Unit

Overview

A rugged, military grade, Rack mount Power Distribution Unit certified to MIL-STD-810G with front access for safety and control.

Applications:

- Military Land Vehicles
- Trucks
- Industrial Controls
- Primary Power Switching
- Generators

- Batteries
- Military and Civil Ships
- Weapon Systems
- Unmanned Vehicles



MIL-STD-810G

ELECTRICAL	
Source	DC
Main circuit breaker	30A
Nominal input voltage	< 48 VDC
CONTROL	
Main circuit breaker	Yes
Outlets circuit breakers	Yes
PHYSICAL	
Dimensions ($H \times W \times D$)	1U/44.45 x 483 x 397 mm
	19" Rackmount
Front panel handle	Yes
ENVIRONMENTAL	
Temperature - Method 501.6	& 502.6, Procedure I & II
> Operating	-40°C to 49°C
> Storage	-46°C to 63°C
Humidity - Method 507.6, Pro	ocedure I
> Operating	5 - 95% RH condensing
> Storage	5 - 95% RH condensing
Altitude - Method 500.5, Pro	cedure I & II
> Operating	Up to 10 kft.
> Storage	Up to15 kft.
Thermal shock - Method 503.6 Procedure I-D	+25°C to -40°C
Drip - Method 506.6, Procedure III	140 L/m2/hr
Vibrations - Method 514.7, Procedure III	5 ÷ 500Hz @ 0.03 g^2/Hz.
Mechanical shock - Method 516.5 Procedure I	20G 11ms Saw tooth
Acceleration - Method 513.5	Longitude 3.0 [g] Vertical 2.5[g] Lateral 1.0 [g]
Settling Dust - Method 510.6, Procedure I	Dust concentration of 10.6 g/m3 with wind speeds of less than 0.2 m/s
CERTIFIED	







Please create the requested part number by selecting the relevant code letters from the list:

ELC8	-		-		-		-	
1 Series		2 Voltage Code		3 Current Rating		4 No. of C.B per Outlet		5 Outlet Type

For example:

ELC8	-	28	-	10		- 19		L
1 Series		2 Voltage Code		3 Current Rating		4 No. of C.B per Outlet		5 Outlet Type

1 Series

ELC8

4 No. of C.B per Outlet

6 - 6 Circuit Breakers

8 - 8 Circuit Breakers

10 - 10 Circuit Breakers

2 Voltage Code

12 - 12 VDC

28 - 28 VDC

48 - 48 VDC

5 Outlet Type

L - MIL-DTL-5015

M - D38999

3 Current Rating (Ampere)

10 - 10 Amp

20 - 20 Amp

30 - 30 Amp



A modular Telecom Rack mount DC power distribution unit.

Overview

The DC4x125 is a dual input (A,B) or a four input (A,B,C,D) configurable redundant power distribution unit, where each input is rated for 125Amp (Max Total rated PDU=250A) with voltage range of -36VDC to 72VDC.

There are 5 circuit breakers on each input of the PDU, for a total of 20 circuit breakers.

The outlet circuit breakers vary from 5A to 63A and are populated on the integration floor according to the project and load.



ELECTRICAL							
Inlet	-36VDC to 72VDC						
Outlet	-36VDC to 72VDC						
Max current per input	125A						
No. of outlets	20						
CONTROL							
Circuit breaker	Up to 20 circuit breakers						
PHYSICAL							
Dimensions ($H \times W \times D$)	2Ux 480 x 420 mm						
	19" Rackmount						
Front panel handle	Yes						
ENVIRONMENTAL							
Temperature							
> Operating	Up to 65°C						
Humidity							
> Operating	According to GR-63-CORE						

CERTIFIED (IEC-IEN, UL. CSA)

IEC 60950-1:2005

IEC 60950-1:2005/AMD1:2009

IEC 60950-1:2005/AMD2:2013

EN 60950-1:2006/A11:2009/A1:2010/A12:2011/A2:2013

UL 60950-1/CSA C22.2 No. 60950-1 Second Edition

GR 1089 - Safety part for equipment type 2.

Resistance to fire; all plastic parts flammability is 94 V-0.



Rear View





Please create the requested part number by selecting the relevant code letters from the list:

DC4x125	-	-	-	-	-
1 Series	2 Voltage Code	3 No. of C.B	4 Total Current Rating	5 Packaging	6 Color

For example:

DC4x125	- A	-	5	-	60	-	Υ	-	BL
1 Series	2 Voltage Code		3 No. of C.B		4 Total Current Rating		5 Packaging		6 Color

1 Series ELC9		4 Total Current Rating (Ampere) 20 - 20 Amp 40 - 40 Amp
		60 - 60 Amp
		80 - 80 Amp
2 Voltage Co	de	120 - 120 Amp
A 36 VDC to	72 VDC	160 - 160 Amp
		180 - 180 Amp
3 No. of Circu	uit Breakers	
2 - 2 C.B	12 - 12 C.B	5 Packaging
3 - 3 C.B	13 - 13 C.B	Y - Yes
4 - 4 C.B	14 - 14 C.B	N - No
5 - 5 C.B	15 - 15 C.B	
6 - 6 C.B	16 - 16 C.B	
7 - 7 C.B	17 - 17 C.B	6 Color
8 - 8 C.B	18 - 18 C.B	BL - RAL 7035
9 - 9 C.B	19 - 19 C.B	GR - RAL 7021
10 - 10 C.B	20 - 20 C.B	
11 - 11 C.B		

ALEXANDER SCHNEIDER

THE POWER OF EXCELLENCE



For more information please contact us



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