

## DC interference suppression filters

### series: C

#### **Description:**

It is a simple LC circuit consisting of chokes and condensers. In DC filters of series SKY1FLDCxxC is a composed choke with bigger inductance than in series SKY1FLDCxxB. The used safety condensers of type X are being wired among positive and negative pole for filtration of symmetrical component. The condensers of type Y are being wired towards the ground for filtration of asymmetric component.

**SKY1FLDC25C**



#### **TECHNICAL PARAMETERS :**

Nominal operating voltage	Un : 1200Vdc
Extent of operating currents	In : 25A
Short-term overcurrent capacity : 50% In	
Protection class : IP20	
Extent of operating temperature : 0°C + 40°C	

**SKY1FLDC32C**



#### **TECHNICAL PARAMETERS :**

Nominal operating voltage	Un : 1200Vdc
Extent of operating currents	In : 32A
Short-term overcurrent capacity : 50% In	
Protection class : IP20	
Extent of operating temperature : 0°C + 40°C	

**SKY1FLDC50C**



#### **TECHNICAL PARAMETERS :**

Nominal operating voltage	Un : 1200Vdc
Extent of operating currents	In : 50A
Short-term overcurrent capacity : 50% In	
Protection class : IP00	
Extent of operating temperature : 0°C + 40°C	

**SKY1FLDC60C**



#### **TECHNICAL PARAMETERS :**

Nominal operating voltage	Un : 1200Vdc
Extent of operating currents	In : 60A
Short-term overcurrent capacity : 50% In	
Protection class : IP00	
Extent of operating temperature : 0°C + 40°C	

SKY1FLDC75C



**TECHNICAL PARAMETERS :**

Nominal operating voltage Un : 1200Vdc  
Extent of operating currents In : 75A  
Short-term overcurrent capacity : 50% In  
Protection class : IP00  
Extent of operating temperature : 0°C + 40°C

SKY1FLDC90C



**TECHNICAL PARAMETERS :**

Nominal operating voltage Un : 1200Vdc  
Extent of operating currents In : 90A  
Short-term overcurrent capacity : 50% In  
Protection class : IP00  
Extent of operating temperature : 0°C + 40°C

SKY1FLDC100C



**TECHNICAL PARAMETERS :**

Nominal operating voltage Un : 1200Vdc  
Extent of operating currents In : 100A  
Short-term overcurrent capacity : 50% In  
Protection class : IP00  
Extent of operating temperature : 0°C + 40°C

SKY1FLDC150C



**TECHNICAL PARAMETERS :**

Nominal operating voltage Un : 1200Vdc  
Extent of operating currents In : 150A  
Short-term overcurrent capacity : 50% In  
Protection class : IP00  
Extent of operating temperature : 0°C + 40°C

SKY1FLDC200C



**TECHNICAL PARAMETERS :**

Nominal operating voltage Un : 1200Vdc  
Extent of operating currents In : 200A  
Short-term overcurrent capacity : 50% In  
Protection class : IP00  
Extent of operating temperature : 0°C + 40°C

SKY1FLDC250C



**TECHNICAL PARAMETERS :**

Nominal operating voltage Un : 1200Vdc  
Extent of operating currents In : 250A  
Short-term overcurrent capacity : 50% In  
Protection class : IP00  
Extent of operating temperature : 0°C + 40°C

SKY1FLDC300C



**TECHNICAL PARAMETERS :**

Nominal operating voltage Un : 1200Vdc  
Extent of operating currents In : 300A  
Short-term overcurrent capacity : 50% In  
Protection class : IP00  
Extent of operating temperature : 0°C + 40°C

SKY1FLDC320C



**TECHNICAL PARAMETERS :**

Nominal operating voltage Un : 1200Vdc  
Extent of operating currents In : 320A  
Short-term overcurrent capacity : 50% In  
Protection class : IP00  
Extent of operating temperature : 0°C + 40°C

SKY1FLDC400C



**TECHNICAL PARAMETERS :**

Nominal operating voltage Un : 1200Vdc  
Extent of operating currents In : 400A  
Short-term overcurrent capacity : 50% In  
Protection class : IP00  
Extent of operating temperature : 0°C + 40°C

SKY1FLDC500C



**TECHNICAL PARAMETERS :**

Nominal operating voltage Un : 1200Vdc  
Extent of operating currents In : 500A  
Short-term overcurrent capacity : 50% In  
Protection class : IP00  
Extent of operating temperature : 0°C + 40°C

SKY1FLDC600C



**TECHNICAL PARAMETERS :**

Nominal operating voltage Un : 1200Vdc  
Extent of operating currents In : 600A  
Short-term overcurrent capacity : 50% In  
Protection class : IP00  
Extent of operating temperature : 0°C + 40°C

SKY1FLDC800C



**TECHNICAL PARAMETERS :**

Nominal operating voltage Un : 1200Vdc  
Extent of operating currents In : 800A  
Short-term overcurrent capacity : 50% In  
Protection class : IP00  
Extent of operating temperature : 0°C + 40°C

SKY1FLDC1000C



**TECHNICAL PARAMETERS :**

Nominal operating voltage Un : 1200Vdc  
Extent of operating currents In : 1000A  
Short-term overcurrent capacity : 50% In  
Protection class : IP00  
Extent of operating temperature : 0°C + 40°C

SKY1FLDC1200C



**TECHNICAL PARAMETERS :**

Nominal operating voltage Un : 1200Vdc  
Extent of operating currents In : 1200A  
Short-term overcurrent capacity : 50% In  
Protection class : IP00  
Extent of operating temperature : 0°C + 40°C

SKY1FLDC1500C



**TECHNICAL PARAMETERS :**

Nominal operating voltage Un : 1200Vdc  
Extent of operating currents In : 1500A  
Short-term overcurrent capacity : 50% In  
Protection class : IP00  
Extent of operating temperature : 0°C + 40°C

**SKY1FLDC1600C**



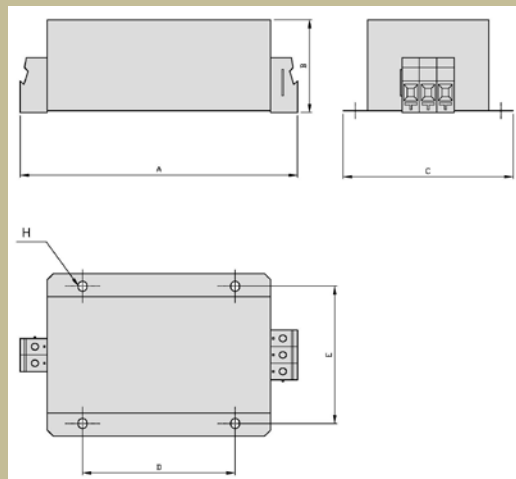
**TECHNICAL PARAMETERS :**

Nominal operating voltage Un : 1200Vdc  
 Extent of operating currents In : 1600A  
 Short-term overcurrent capacity : 50% In  
 Protection class : IP00  
 Extent of operating temperature : 0°C + 40°C

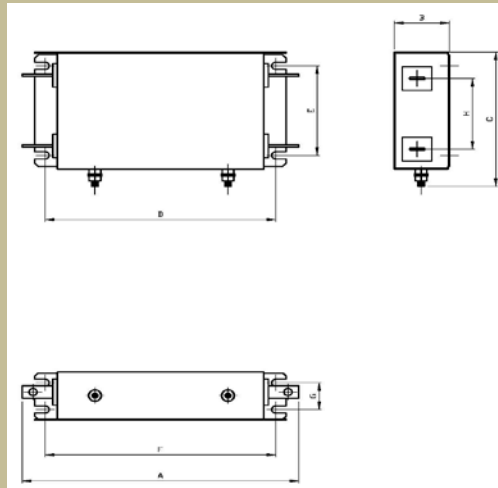
Type	Nominal current [A]	Power loss [W]	Weight [kg]	Conductor cross section [mm]	basic dimensions [mm]							
					A	B	C	D	E	F	G	H
					length	height	width	pitch	pitch	pitch	pitch	other
SKY1FLDC25C	25	9	1	4 - 6	160	56	98	88	83	-	-	5x6
SKY1FLDC32C	32	9	1	6 - 10	160	56	98	88	83	-	-	5x6
SKY1FLDC50C	50	24	3,5	20x3	357	61,5	176	302	114	333	34,5	87,5
SKY1FLDC60C	60	24	3,8	20x3	357	61,5	176	302	114	333	34,5	87,5
SKY1FLDC75C	75	24	3,8	20x3	357	61,5	176	302	114	333	34,5	87,5
SKY1FLDC90C	90	24	3,8	20x3	357	61,5	176	302	114	333	34,5	87,5
SKY1FLDC100C	100	24	3,8	20x3	364	61,5	176	302	114	333	34,5	87,5
SKY1FLDC150C	150	24	3,8	20x3	364	61,5	176	302	114	333	34,5	87,5
SKY1FLDC200C	200	24	3,8	20x3	364	61,5	176	302	114	333	34,5	87,5
SKY1FLDC250C	250	24	5,2	20x3	364	61,5	176	302	114	333	34,5	87,5
SKY1FLDC300C	300	24	5,2	20x3	364	61,5	176	302	114	333	34,5	87,5
SKY1FLDC320C	320	24	5,2	20x3	364	61,5	176	302	114	333	34,5	87,5
SKY1FLDC400C	400	24	5,2	20x3	364	61,5	176	302	114	333	34,5	87,5
SKY1FLDC500C	500	40	14	40x5	390	130	221	200	194	350	-	90
SKY1FLDC600C	600	40	14	40x5	390	130	221	200	194	350	-	90
SKY1FLDC800C	800	40	14	40x10	390	130	221	200	194	350	-	85
SKY1FLDC1000C	1000	40	14	40x10	390	130	221	200	194	350	-	85
SKY1FLDC1200C	1200	40	14	50x10	410	130	231	200	204	370	-	85
SKY1FLDC1500C	1500	40	16	60x10	480	130	231	200	204	360	446	85
SKY1FLDC1600C	1600	40	16	60x10	480	130	231	200	204	360	446	85

\* After a deal there is a possibility of modification of the filter construction according to the customer's request.

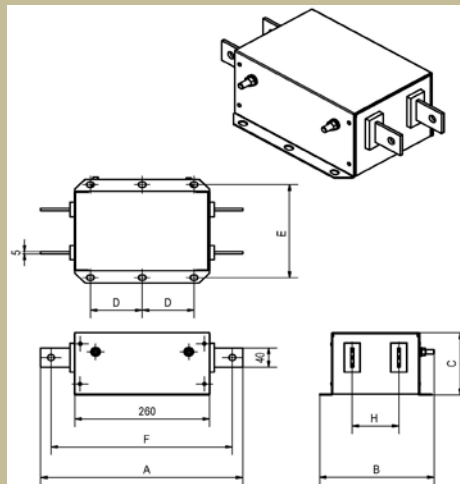
**Dimensional drawing : SKY1FLDC25C - SKY1FLDC32C**



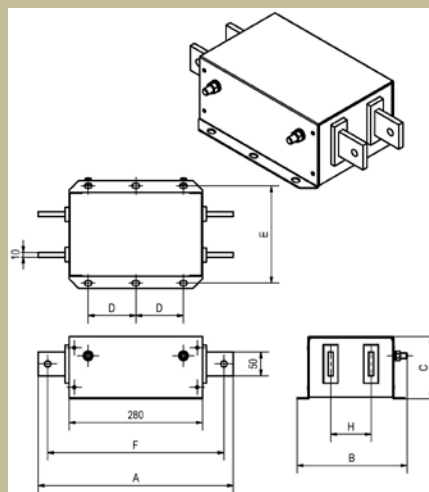
**Dimensional drawing : SKY1FLDC50C - SKY1FLDC400C**



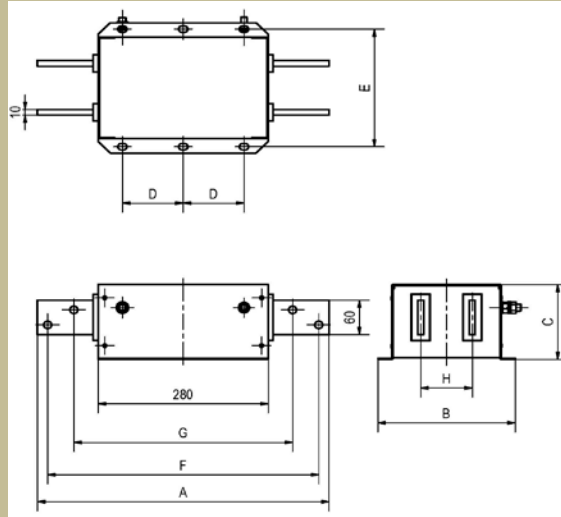
**Dimensional drawing : SKY1FLDC500C - SKY1FLDC1000C**



**Dimensional drawing : SKY1FLDC1200C**

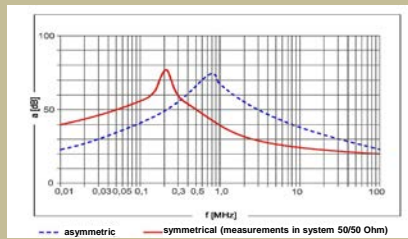


### Dimensional drawing : SKY1FLDC1500C - SKY1FLDC1600C



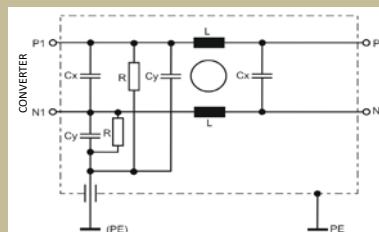
### Attenuation characteristics:

#### SKY1FLDC25C - SKY1FLDC1600C



### Diagram:

#### SKY1FLDC32C - 1600C



### Use:

The filters are mainly designed for photovoltaic power stations but they can be also used in other applications.

### Dimensioning, wiring:

It is supposed to be wired into DC circuit between the inverter and solar panels. The filter is equipped with an insulated PE terminal with possibility of connection according to type of voltage system. It is dimensioned according to the indicated label values. When installing into switchboards it is necessary to count with power loss of the filter and provide removal of heat loss.