

**F**OCUSING ON POWER QUALITY.  
PROFESSION, CONCENTRATION.

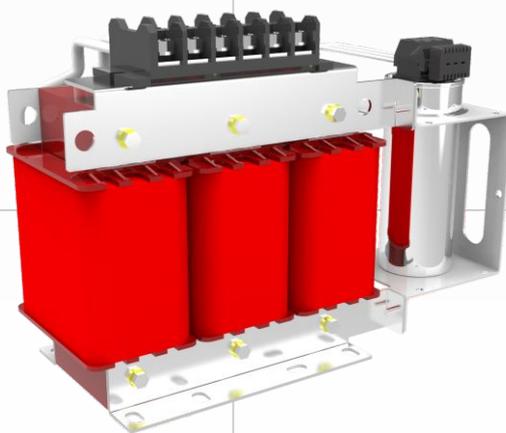
# DIRECT **SIKES**

Power Transformers / Harmonic Filter / Sine Wave Filter / EMC Filter/  
Reactor / Regenerative Brake / Braking Chopper / Power Braking Resistor/  
Load test for generator, electric vehicle driver, motor controller, charging  
station etc.

OSK 10%

## Harmonic filter

Whole product portfolios of power quality can be offered.



We are developing and producing in China for the world.



GUANGDONG SIKES Electric Co.,Ltd.

**SIKES**  
18 YEARS OF  
SUCCESS



## Passive Harmonic Filters

### Descriptions

Modern electrical equipment imposes stringent demands on voltage stability and power quality. The power network has to be free from harmonics and other electrical disturbances. This is why Sikes passive harmonic filter has come into being.

Sikes Harmonic filters have been specially designed to eliminate the harmonics from the current absorbed by 6-pulse power converters, such as frequency inverter for motors, UPS, etc.

These are essentially passive filters based on a series-parallel combination of inductances and capacitors, adapted to filter the input of power converters.

### Functions:

- Reduction of the current wave's distortion towards the network and the rest of the installation;
- Compliance with the IEC 61000-3-4, IEC 61000-3-12, IEC 61800-3 and IEEE-519;
- Energy savings with the reduction of the root mean square current (RMS), thus reducing the kV•A demand;
- Less strain on equipment and Increase of the working life of units above this location with the corresponding reduction of thermal losses generated;
- Limits current transients, preventing damages caused to the converter and overvoltage trips that affect production processes;
- Lower maintenance costs and saving cost for replacing worn-out machines.

### Technical Standards

- |  |  |
|--|--|
| ■ Capacitors: CEI EN 60831-1/2, IEC 831-1/2              | ■ Equipment: CEI EN 60439-1, IEC 439-1                                   |
| ■ Industrial network affected by harmonics: CEI EN 61642 | ■ Systems: IEEE-519, EN 60439, EN 60831, EN 50081-1, EN 50081-2, class A |

### Applications:

- DC fast chargers
- HVAC installations
- Fan and pump
- Industrial automation
- Robotic equipment
- AC/DC Motor drives
- Frequency inverters



**Features:**

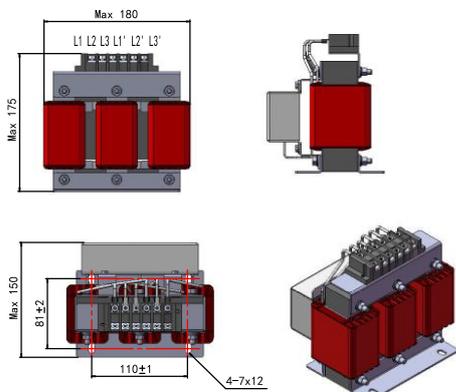
**Main Characteristics**

Nominal system voltage (ph-ph)	3x 380 to 500 Vac. (Others on request)
Frecuency	50 Hz (60Hz on request)
Ratedload power(P)	See table
Overload	1,5 times rated current @50Hz 1min
Rated load current (I)	See table
Residual THD	≤ 10 % at full load(5% on request)
Voltage drop at rated current	< 2 %

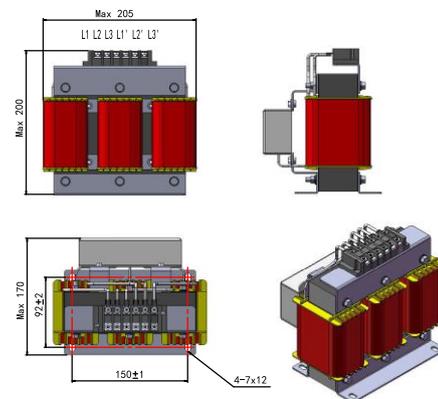
**Design features**

Degree of protection	IP00 indoor(IP20/IP54 on request)
Ventilation	Natural
Mounting	On the floor
Installation	Indoor standards
Operating temperature	Ambient : -25°C to +45°C
Relative humidity	80 %

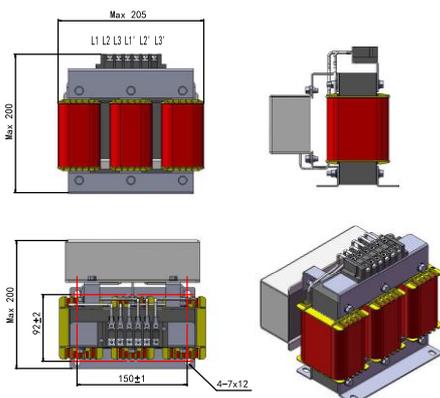
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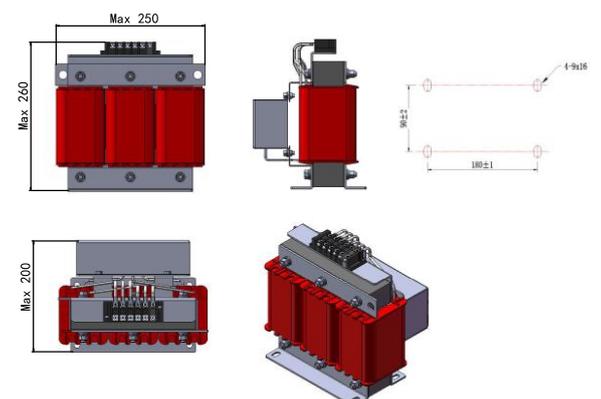
**Pic 1**



**Pic 2**

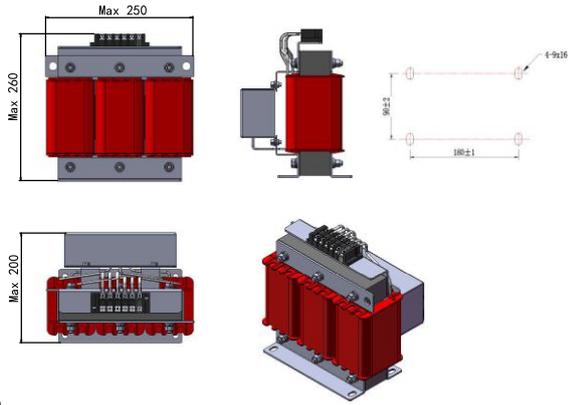


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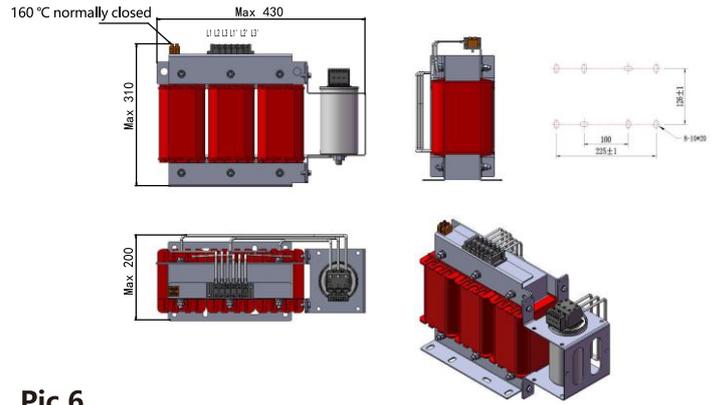


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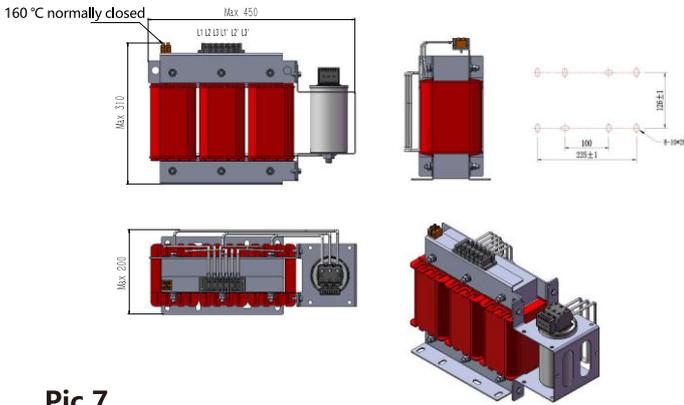
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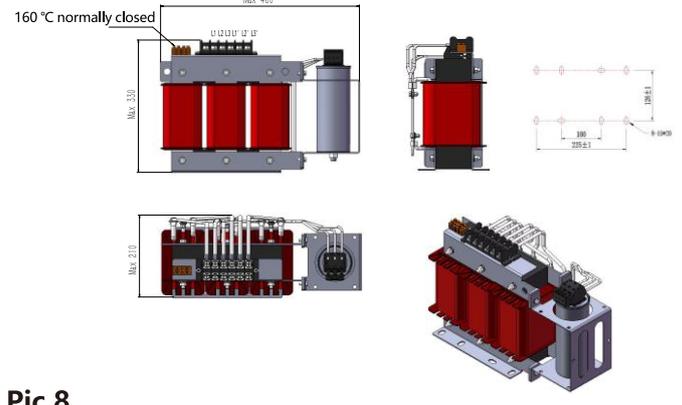
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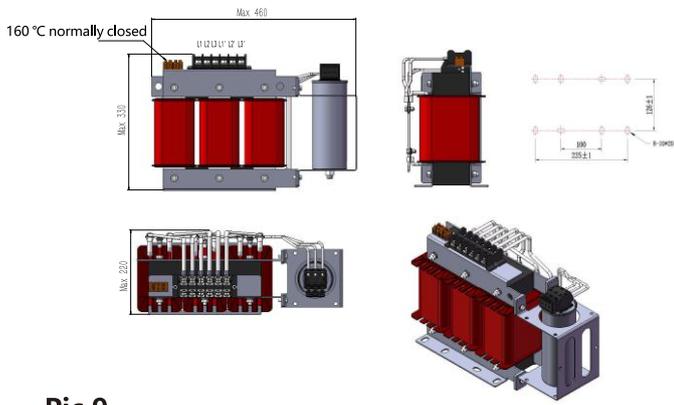
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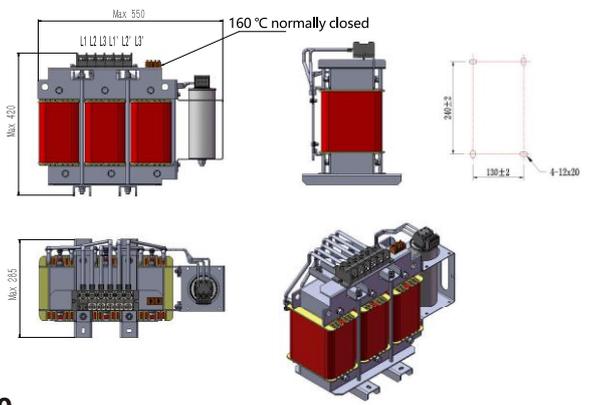
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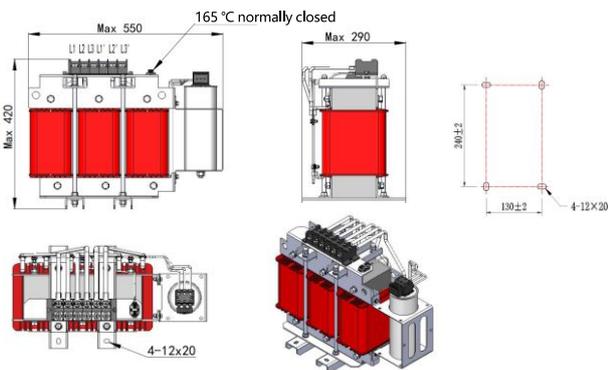
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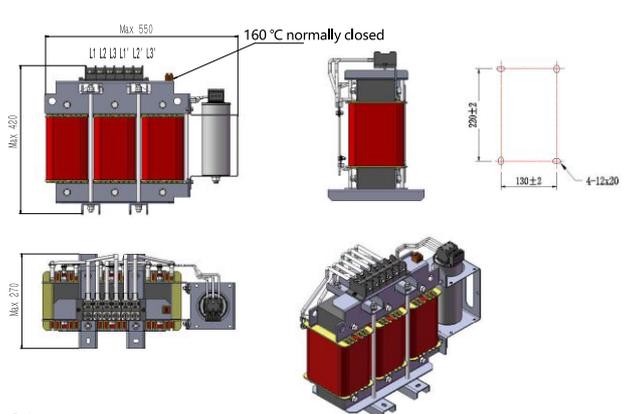
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**Pic 10**

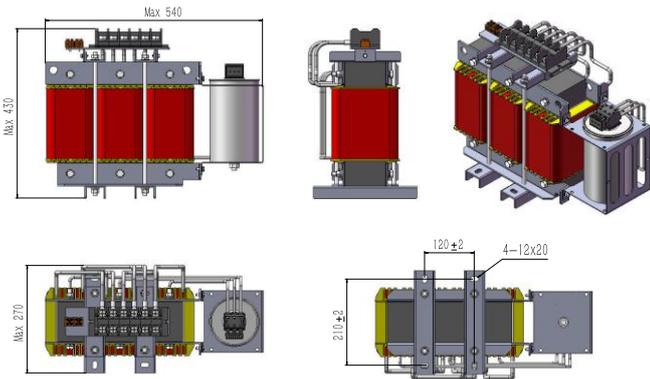


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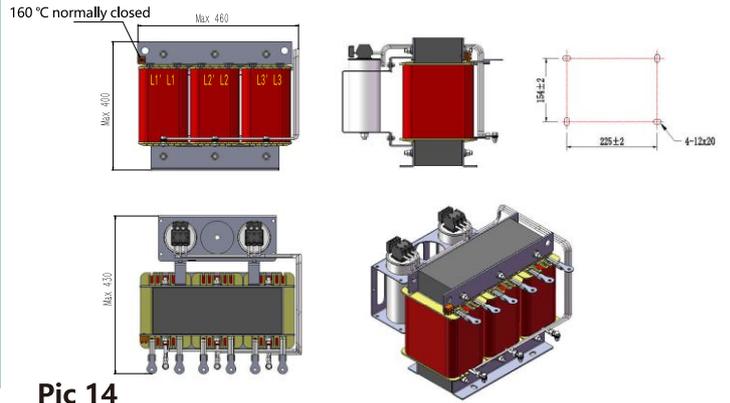


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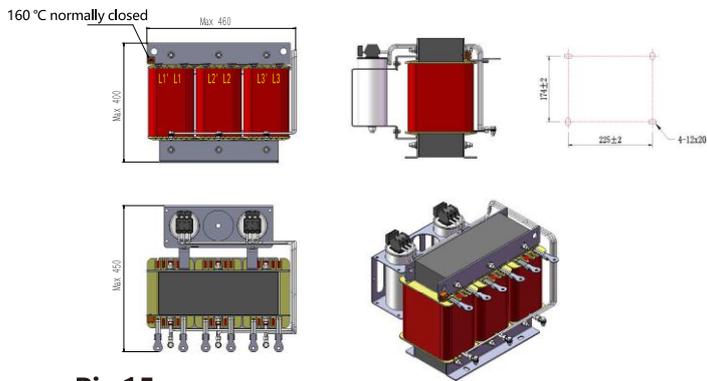
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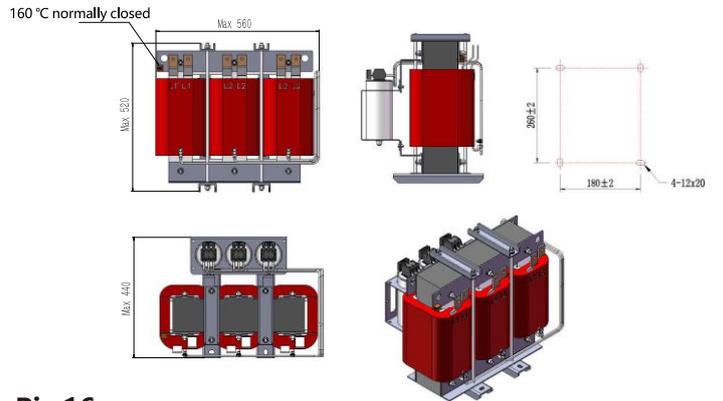
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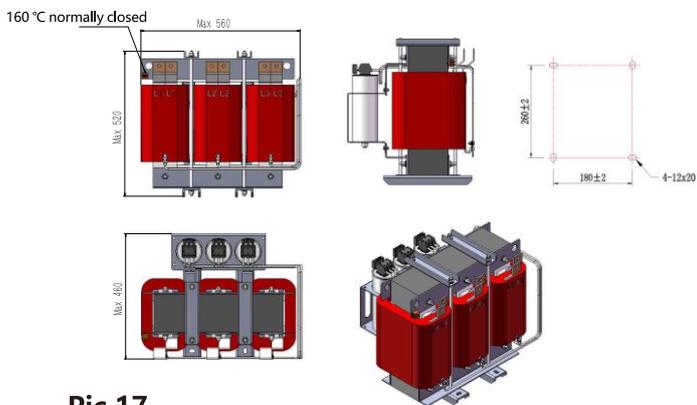
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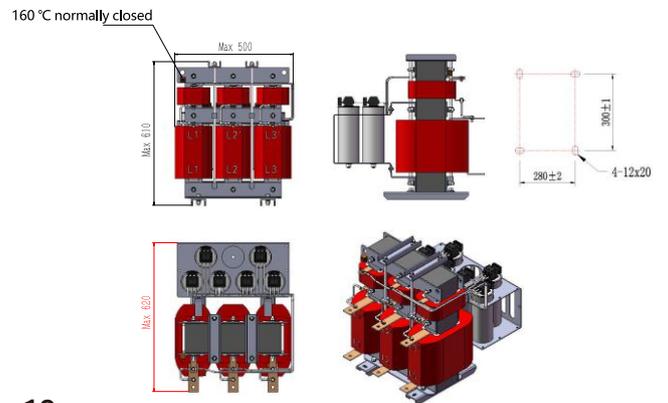
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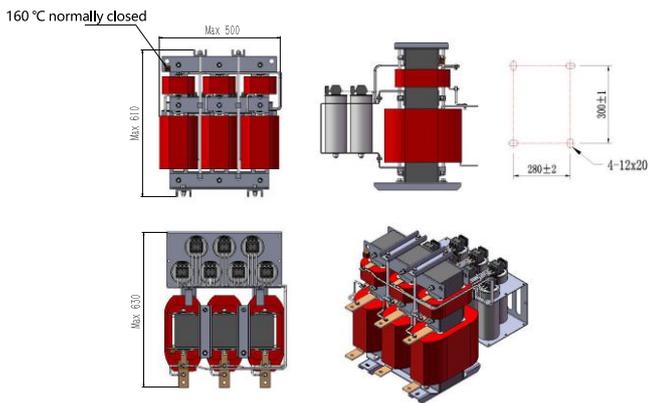
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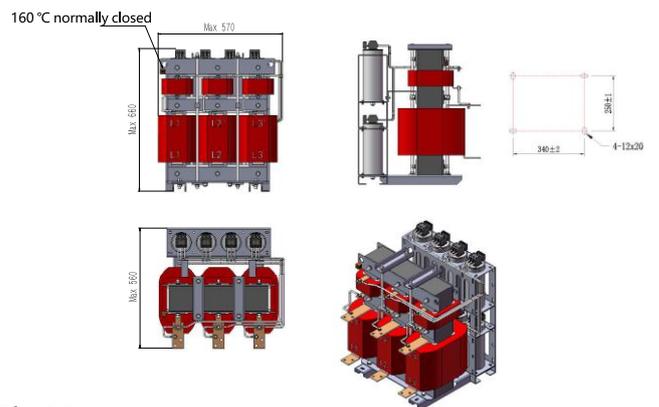
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**Pic 18**

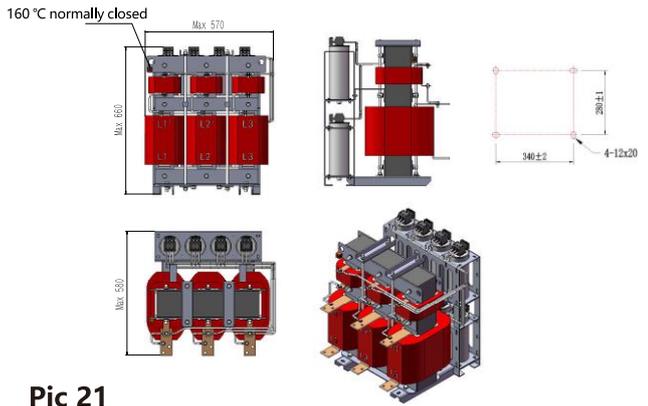


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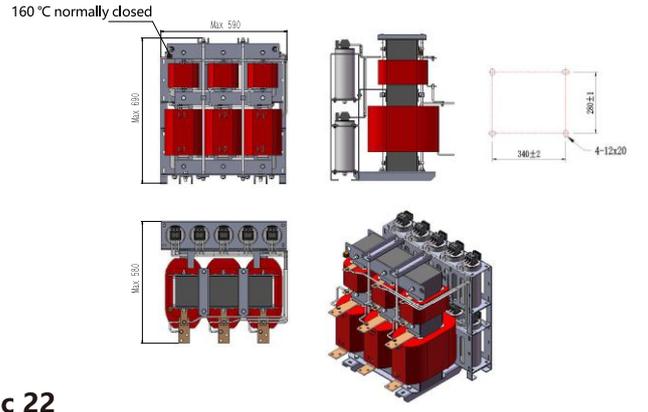


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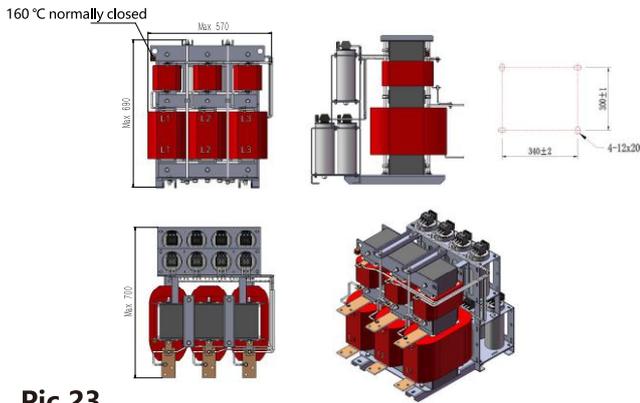
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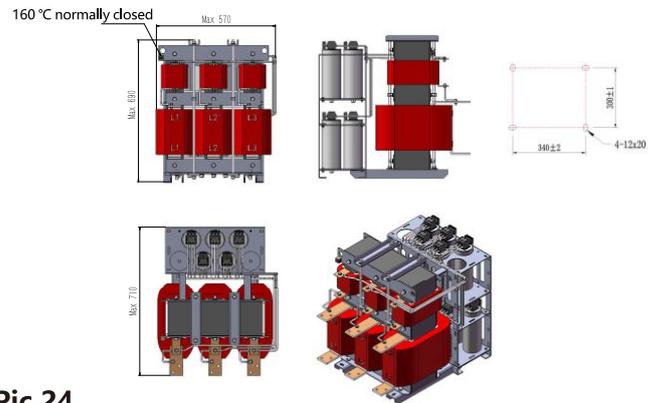
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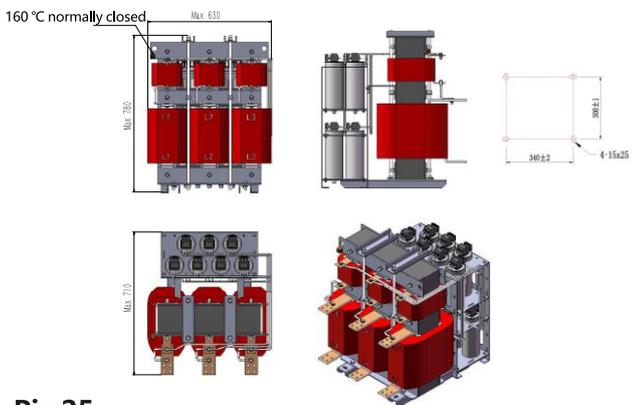
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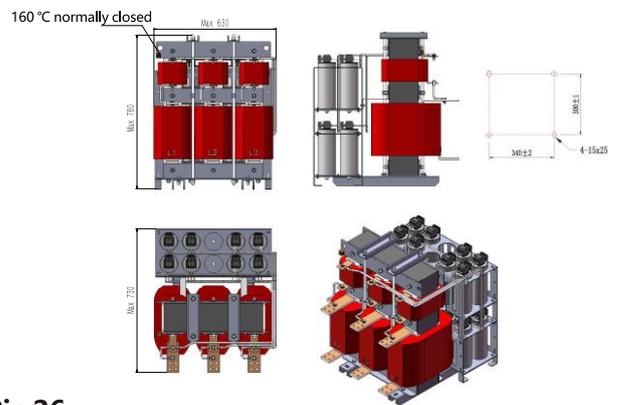
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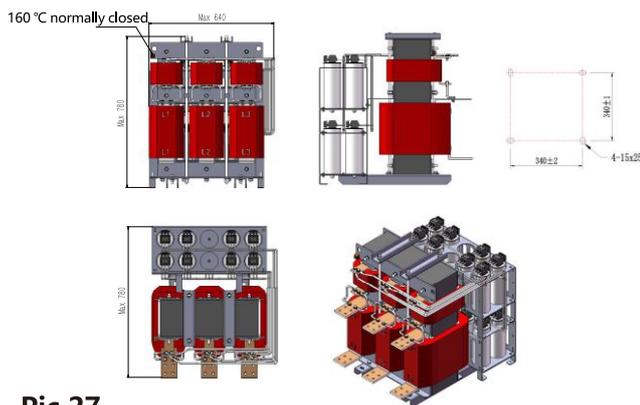
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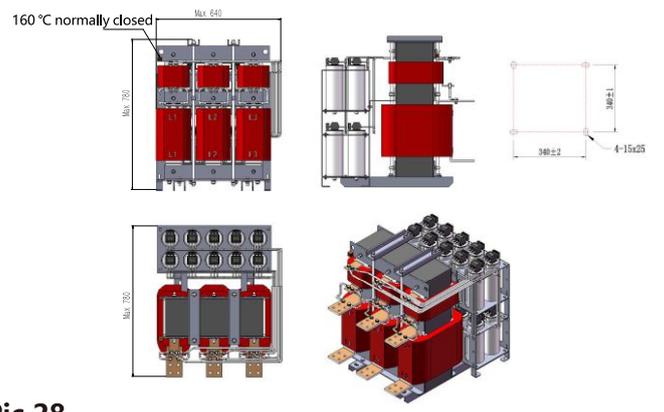
**Pic 25**



**Pic 26**



**Pic 27**



**Pic 28**

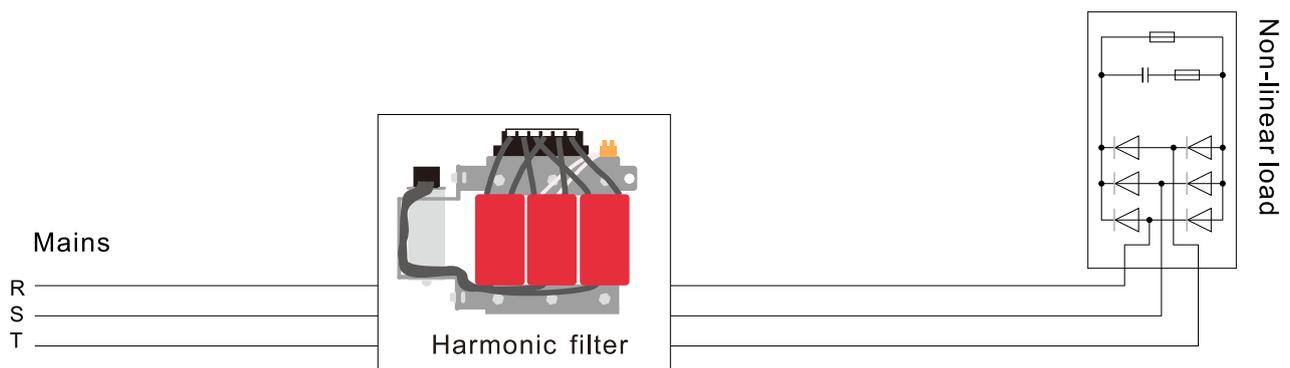
## Technical Data

Filter Model	System Voltage	Rated Power @ 400VAC (kw)	Rated Current @ 400VAC (A)	Insulation Class (H on request)	Weight (kg)	Pic.	Connections	
								
SKS-OSK-0003-4C5/10	3x380 to 500VAC	1.5	3	F/H	6.75	1	✓	
SKS-OSK-0005-4C5/10	3x380 to 500VAC	2.2	5	F/H	7.50	2	✓	
SKS-OSK-0008-4C5/10	3x380 to 500VAC	3.7	8	F/H	11.75	3	✓	
SKS-OSK-0011-4C5/10	3x380 to 500VAC	5.5	11	F/H	18.5	4	✓	
SKS-OSK-0014-4C5/10	3x380 to 500VAC	7.5	14	F/H	21.0	5	✓	
SKS-OSK-0020-4A5/10	3x380 to 500VAC	11	20	F/H	33	6	✓	
SKS-OSK-0027-4A5/10	3x380 to 500VAC	15	27	F/H	35.5	7	✓	
SKS-OSK-0031-4A5/10	3x380 to 500VAC	18.5	31	F/H	40.0	8	✓	
SKS-OSK-0038-4A5/10	3x380 to 500VAC	22	38	F/H	43.2	9	✓	
SKS-OSK-0052-4A5/10	3x380 to 500VAC	30	52	F/H	58.8	10	✓	
SKS-OSK-0064-4A5/10	3x380 to 500VAC	37	64	F/H	94	11	✓	
SKS-OSK-0082-4A5/10	3x380 to 500VAC	45	82	F/H	68.9	12	✓	
SKS-OSK-0100-4A5/10	3x380 to 500VAC	55	100	F/H	80.0	13	✓	
SKS-OSK-0129-4A5/10	3x380 to 500VAC	75	129	F/H	101.0	14	✓	
SKS-OSK-0154-4A5/10	3x380 to 500VAC	90	154	F/H	115.6	15	✓	
SKS-OSK-0188-4A5/10	3x380 to 500VAC	110	188	F/H	110.0	16	✓	
SKS-OSK-0224-4A5/10	3x380 to 500VAC	132	224	F/H	197.5	17		✓
SKS-OSK-0275-4A5/10	3x380 to 500VAC	160	275	F/H	210	18		✓
SKS-OSK-0316-4A5/10	3x380 to 500VAC	185	316	F/H	195	19		✓
SKS-OSK-0341-4A5/10	3x380 to 500VAC	200	341	F/H	218	20		✓
SKS-OSK-0375-4A5/10	3x380 to 500VAC	220	375	F/H	259	21		✓
SKS-OSK-0431-4A5/10	3x380 to 500VAC	250	431	F/H	272	22		✓
SKS-OSK-0489-4A5/10	3x380 to 500VAC	280	489	F/H	300	23		✓
SKS-OSK-0552-4A5/10	3x380 to 500VAC	315	552	F/H	318	24		✓
SKS-OSK-0629-4A5/10	3x380 to 500VAC	355	629	F/H	353	25		✓
SKS-OSK-0730-4A5/10	3x380 to 500VAC	400	730	F/H	372	26		✓
SKS-OSK-0787-4A5/10	3x380 to 500VAC	450	787	F/H	455	27		✓
SKS-OSK-0852-4A5/10	3x380 to 500VAC	500	852	F/H	460	28		✓

Selection Recommendation : It's compulsory to collect all network conditions:

- Rated values and service type of the load to the filter
- Indication of the point where the filter has to be installed
- Rated values of other non-linear loads
- Frequency and value of the harmonic value to be reduced
- Presence and type of the power factor equipment in the network
- Other optional voltages, frequencies and currents, on demand.

■ For more technical details, please contact our sales representatives.



**Block schematic (THDi ≤10%)**

