



Inductive Components and EMC Filters for Power Electronics

Customised and Standard Solutions

Besides our standard components series, PRAX offers a wide range of customer specific designs.





Input and Output Chokes Common-Mode Chokes Pulse Transformers Current Transformers SMPS Transformers Planar Transformers Power Inductors PFC Chokes







Design / Development

PRAX focus is for strong R&D support. Our engineering team optimise your inductive component, either from well defined parameters or your own component specification. Specific design software tools are available.

Samples / Prototypes

Quick-turn functional samples are provided in order to test our developments. Smooth transition is assured to production series.

Industrialisation

Custom designs are industrialised in the most optimal manner. Winding technology is chosen specially for every component. Manual operations or fully automated processes are available.

Automation

Large quantity projects, even for non-standard solutions, can be automated with special solutions.

Mechanical Solution

Customised mechanical mounting solutions, vacuum impregnation, tailored bobbins or plastic housings are part of our component design.

Testing

100% of samples, trials and production components are tested mechanically and electrically. Under request or in a need-basis, component production control plans are implemented.



EMC Filters

Single-Phase Filters



• Single stage filter

- Chassis Mounting
- Good attenuation in differential and common mode
- Rated Current from 1 to 16A @ 40°C
- Maximum continuous operation voltage: 250Vac
- I ow Leakage Current version available
- onligations
- Electrical/Electronic equipn Consumer goods Household equipment Automation

PX-1B46 General Purpose EMC Single-Phase Filter



- Double stage filter
- · Chassis Mounting
- High attenuation in differ
- Designed with two-stages for high frequency attenuation
- Rated current from 1 to 16A @ 40°C
- Maximum continuous operation voltage: 250Vac
- Low Leakage Current version available

Applications:

Electrical /electronic equipment / Consumer goods Household equipment / Industrial / Machinery Telecom / Automation / Especially noisy applications

Three-Phase Filters With Neutral

PX-4A60

General Purpose Three-phase and Neutral Line Filter



- Cost effective solution for EMI attenuation in a wide variety of applications.
- wide variety of applications.
- Low operation leakage current.
- Good attenuation in differential and common n
- Rated current from 3 to 150A @ 40°C.
- Maximum continuous operation voltage: 520Vac.

Applications:

General purpose four-wire filtering High power office equipment UPS

PX-4B62 High-end Three-phase

and Neutral Line Filter



 Cost effective solution for EMI attenuation in a wid variety of industrial applications.

- Low operation leakage current.
- Very high attenuation in differential and common mode
- Compact design.
- Safety terminal block connection in the whole range
- Rated current from 8 to 200A @ 50°C.
- Maximum continuous operation voltage: 520vac

pplications: Industrial equipment / A

dV/dT Filters

PX-2A80 dV/dT Output Filter

- dV/dT output filter for PMW frequency inverters
- Reduces frequency inverter dV/d1 val
- Limits inverter output peak voltage.
- Increases motor life while reducing motor heating and audible noise.
- Rated current from 8 to 36A @ 50°C.
- Maximum continuous operation voltage: 550Vac ±15.

DC Filters

PX-5B70 (-L) EMC DC Filter for PV inverters



- Installation between PV solar panels (DC side) and DC/AC inverter.
- EMC standard easier to meet for the whole PV system
 Prevention of premature PV panel aging.
- Increases immunity in the DC/AC inverters control phase.
 Available without capacitors to ground (-L versions).
- Rated current from 25 to 1500A @ 50°C.
 Maximum continuous operation voltage: 1200Vdc
- Operating frequency DC.

Applications:

- PV inverters / UPS / DC motor drives DC quick chargers
- oplies / Renewable energy

Three-Phase Filters

PX-3A50

Three-phase EMC Filter for Industrial Motor **Drive Applications**



- Compact and light design for easy installation.
- Rated current from 10 to 1000A @ 50°C
- Maximum continuous operation voltage: 520 Vac.

PX-3A52

Three-phase EMC Filter for Regenerative Motor Drive



• For compliancy with class B limits

• Rated current from 35 to 300A @ 50°C

PX-3A54

General Purpose EMC Filter for **Three-Phase Applications**



- Rated current from 8 to 660A @ 50°C.
- Maximum continuous operation voltage: 520Vac.

PX-3B51 Compact EMC Filter for





• Three-phase book-style EMC filter.

- Rated current from 7 to 180A @ 50°C.
- Maximum continuous operation voltag.e: 520 Vac.



- Three-phase book-style EMC filter.

- Rated current from 7 to 250A @ 50°C.

Applications: Three-phase variable speed drives and power drive systems / Inverters and converters Automation equipment / UPS and SMPS



- Designed for high power with very high insertion loss.
- performance.
- Rated current from 150 to 2500A @ 50°C

Inductive Components

Input and Output Chokes

DX-01 Differential Mode Chokes - Toroid Format



Common-Mode Chokes

CX-01

Common Mode Chokes - Encapsulated



- Five different sizes and two mounting versions.
- Design complies with EN 60938-2 and UL 1283.

FX-02



CX-02

- Five different sizes.
- Design complies with EN 60938-2 and UL 1283.

PFC Chokes





- Linear inductance value up to Ipk Current.



• Toroidal low loss powder core construction PFC chokes.

- Low parasitic capacitance winding.

Pulse Transformers



• Potted pulse transformers.

- Operating temperature: -25°C to 85°C.





- Operating frequency: 20kHz to 500kHz.



- Isolation 4500 Vrms Gate to Drive & 2500 Vrms.
- Operating frequency: 20kHz to 500kHz.

Current Transformers

SX-01 SMT Current Sense Transformers Up to 15Amps



- Small footprint and low profile SMT component

- Two primary wire for series or parallel configuration

SX-02

Current Sense Transformers Up to 20 Amps



• Low profile THT current sense transformer.

SX-03 Current Sense Transformers Up to 20 Amps



- Operating temperature: -40°C to 125°C

Markets

Renewable Energies



1-Phase and 3-Phase systems for domestic applications and central inverter systems for industrial applications.



Electricity generation by converting hydrogen and oxygen into water.



3-Phase converter systems for wind power electricity generation. AC drivers for yaw, pitch, and auxiliary controls.

Industrial



Electric arc welding devices.



Motor speed control.



Industrial and domestic kWh meters.



Uninterruptable Power Supplies.



Lifts, escalators and autowalks.



Switched Mode Power Supplies and DC-DC Converters.

Telecommunication



DC-DC Converters for Network Backbones.



UPS for Server Farms.



AC-DC Converters for Communication Cards.

Medical



High frequency surgical instruments.



Electrotherapy medical devices.



Plain X-ray, computed tomography, fluoroscopy or radiotherapy devices.

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