



Bourns Releases Standard Kaschke Magnetic Components

- *Model 04770x Series Common Mode Chokes*
- *Model 0556xx Series Current Sense Transformers*
- *Model 063xxx and 093830 Series SP-E16/5 Flyback Transformers*
- *Model 0949xx Series SP-E 20/6 Flyback Transformers*
- *Model 071923 and 093267 EMC Filter Chokes*

Riverside, California – May 26, 2023 – In 2021, Bourns acquired Kaschke Components, a market leader in the field of customized magnetic components and ferrite cores. Their advanced capabilities to design and build ferrite core materials as well as manufacture complex inductive components has further strengthened Bourns' innovative magnetics product portfolio. In addition, the Kaschke team's extensive experience is a valuable resource in the development of application-specific solutions that help customers meet the challenging requirements of next generation high-power industrial, energy and wide-band gap electronic applications.

Today, Bourns Custom Magnetics Product Line is introducing several new standard products from Kaschke. Included with this introduction Bourns has set up the ability to seamlessly order part numbers within the Bourns SAP system and is providing easy access to these standard products via the Bourns website. These standard products are available through Bourns' authorized distribution channels and product samples can be requested through Bourns' Sales, FAE and customer service teams.

As our valued customer, we invite you to leverage Bourns' extended range of high-quality, advanced magnetic solutions designed to help you address requirements in a variety of applications.

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IC23012

Model 04770x Series Common Mode Chokes

This series is characterized by wide band performance of interference suppression with excellent attenuation of symmetric and asymmetric noise. These common mode chokes target applications such as Switched-Mode Power Supplies (SMPS), drives and control circuits, wall boxes, home appliances and industrial applications.

The Model 04770x Common Mode Choke Series has a current rating up to 14 A , an inductance range from 1.5 to 3.3 mH and an operating temperature range from -25 °C to +125 °C. All models are compliant with the EN 138100 standard and are RoHS compliant*. Please see the following table for additional information regarding the available part numbers for these common mode chokes.

Bourns Part Number	Inductance (mH ± 30 %)	Current Rating (A)	DC Resistance (Ohms)	Dielectric Strength (kVeff)
047700	2 x 1.5	14	0.0073	2.5
047701	2 x 1.8	13	0.008	2.5
047702	2 x 2.2	12	0.0092	2.5
047703	2 x 2.7	11	0.0104	2.5
047704	2 x 3.3	10	0.0115	2.5

0477xx Series Features

- Compact size
- Broadband damping characteristics
- Excellent attenuation for symmetric and asymmetric noise
- Compliant with EN 138100 standards
- Glue-free construction
- RoHS compliant*

Applications

- Frequency converters
- Wall boxes
- Power supplies
- Drives and control circuits

Model 0556xx Series Current Sense Transformers

This series is ideal for use in a variety of applications such as Switched-Mode Power Supplies (SMPS), motor control, overload sensing, and other AC applications.

The Model 0556xx Current Sense Transformers have a current rating of 0.1- 40 A, are ideal for frequencies from 50 Hz up to 3 MHz, and have an operating temperature range from -30 °C to +125 °C. The available turns ratio is from 1:50 to 1:2500. The isolation between windings is designed to provide reinforced insulation. This series is RoHS compliant*. Please see the table below for additional information regarding the available part numbers for these transformers.

Bourns Part Number	Turns Ratio Sec:Pri	Frequency Range	Current Rating (A)	Inductance	Volt-time Product on Secondary (Max.)	Secondary DC Resistance (Ohms)
055650	50:1	10-300 kHz	0.1 - 40	6 mH	180 V- μ s	0.140
055651	100:1	10-300 kHz		24 mH	360 V- μ s	0.47
055652	200:1	10-300 kHz		96 mH	715 V- μ s	1.8
055653	300:1	10-300 kHz		216 mH	1070 V- μ s	3.4
055654	400:1	10-300 kHz		384 mH	1430 V- μ s	5.7
055655	500:1	10-300 kHz		600 mH	1785 V- μ s	9.4
055656	600:1	10-300 kHz		864 mH	2140 V- μ s	13.5
055657	1000:1	10-300 kHz		2400 mH	3570 V- μ s	35
055658	1000:1	50 Hz		30 H	6.4 V-ms	25
055659	1500:1	50 Hz		67.5 H	9.5 V-ms	52
055660	2000:1	50 Hz		120 H	12.7 V-ms	100
055661	2500:1	50 Hz		187.5 H	15.9 V-ms	135
055662	50:1	0.2-3 MHz		0.77 mH	180 V- μ s	0.140
055663	100:1	0.2-3 MHz		3.1 mH	360 V- μ s	0.47
055664	200:1	0.2-3 MHz		12.4 mH	715 V- μ s	1.8

0556xx Series Features

- Rated current on primary up to 40 A
- Through-hole technology
- Frequency 50 Hz up to 3 MHz
- Operating temperature range: -30 to +125 °C
- RoHS compliant*

Applications

- Switched-mode power supplies (SMPS)
- Motor control
- Overload sensing
- AC applications

Model 063xxx and 093830 Series SP-E16/5 Flyback Transformers

Bourns Custom Magnetics Product Line is also introducing the new Model 063xxx/093830 SmartPower Safety Transformer Series. This concept is based on a standard E 16/4,7 power ferrite core with a high clearance, high creepage distance coil construction designed for various silicon controller families. All transformers are VDE approved.

The Model 063xxx Transformer Series is capable of transferring up to 9 watts and is optimized for a working frequency of 132 kHz. It offers two outputs with reinforced insulation which can be operated either individually, in parallel or in series and includes one shield winding for optimized EMC behavior. The input voltage range varies from 85 to 265 VAC with an operating temperature range from -25 °C to +125 °C. This series is RoHS compliant*. Please see the table below for additional information regarding the available part numbers for these transformers.

E 16/5 Platform

Bourns Part Number	Power** (W)	Input Voltage	Primary Inductance	Output 1	Output 2	Creepage	AUX	Shield
063929	3	85-265 VAC	3.9 mH ± 10 %	6V / 0.25 A	6V / 0.25 A	≥ 8 mm	--	--
063932	6		1.55 mH ± 15 %	12V / 0.25 A	12V / 0.25 A			X
093830	8		1.58 mH ± 12 %	6V / 0.65 A	6V / 0.65 A			X
063934	9		0.89 mH ± 10 %	12V / 0.37 A	12V / 0.37 A			X

** The "Power" shown is the nominal power of the supply. It may vary depending on the design of the circuit.

Model 0949xx Series SP-E 20/6 Flyback Transformers

The new Model 0949xx Series SmartPower Safety Transformers is based on a standard E20/6 power ferrite core shape with a high clearance and high creepage distance coil construction designed for various silicon controller families. All transformers are VDE approved.

The Model 0949xx Transformer Series is capable of transferring up to 22 watts and is optimized for a working frequency of 132 kHz. It offers two outputs with reinforced insulation which may be operated individually, parallel or in series connection and includes one bias winding for controller feedback. The input voltage range varies from 85 to 265 VAC with an operating temperature range from -25 °C to +125 °C. This series is RoHS compliant*. Please see the table below for additional information regarding the available part numbers for these transformers.

E 20/6 Platform

Bourns Part Number	Power** (W)	Input Voltage	Primary Inductance	Output 1	Output 2	Creepage	AUX	Shield
094932	22	85-265 VAC	0.94 mH ± 10 %	12V / 1.2 A	5V / 1.4 A	≥ 8 mm	X	--
094931				6V / 1.8 A	6V / 1.8 A		X	
094929				12V / 0.9 A	12V / 0.9 A		X	

** The "Power" shown is the nominal power of the supply. It may vary depending on the design of the circuit.

063xxx, 093xxx & 0949xx Series Features

- Can assist in compliance with EN 62368, EN 60335 and EN61558 standards
- Reinforced insulation – 400 V working voltage
- Operating temperature range: -25 to +125 °C
- VDE approved
- RoHS compliant*

Applications

- Safety insulated transformer for Switched-Mode Power Supplies (SMPS)
- Designed for use in SMPS applications based on semiconductors from various AC-DC conversion silicon manufacturers

Model 071923/093267 EMC Filter Chokes

These models are characterized by wide-band performance of interference suppression with excellent attenuation of symmetric and asymmetric noise. These EMC filter chokes, ideally designed for our SmartPower Safety Transformer series, also target applications such as low power Switched-Mode Power Supplies (SMPS), drives and control circuits, home appliances and industrial applications.

Bourns Part Number	Inductance (mH \pm 30 %)	Current Rating (A)	DC Resistance (Ohms)	Dielectric Strength (kVeff)
071923	2 x 22	0.28	3.0	1.0
093267	2 x 27	0.50	2.0	1.5

Model 071923 and 093267 Features

- Compact size
- Broadband damping characteristics
- Excellent attenuation for symmetric and asymmetric noise
- Compliant with DIN EN 60938-2
- RoHS compliant*

Applications

- Frequency converters
- Low power SMPS
- Drives and control circuits
- Home appliances

Samples and production quantities are now available.

For additional details on these new Common Mode Chokes, Current Sense Transformers, Flyback Transformers and EMC Filter Chokes, visit the Bourns website at www.bourns.com/products/magnetic-products.

If you have questions or need additional information, please feel free to contact [Bourns Customer Service/Inside Sales](#).

*RoHS Directive 2015/863, Mar 31, 2015 and Annex.