

C O D I C O[®]

Inductors & Transformers

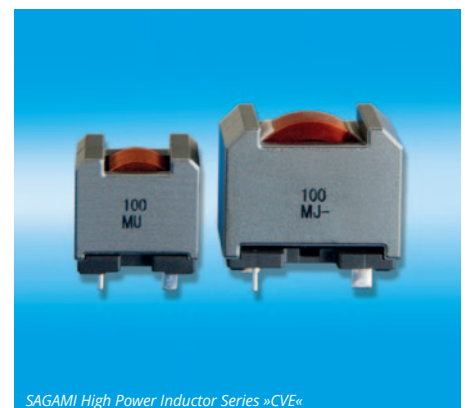
ACTIVE COMPONENTS | **PASSIVE COMPONENTS** | CONNECTORS

FIXED INDUCTORS



TYPE		SUPPLIER				FEATURES	APPLICATION
		EATON	PANASONIC	SAGAMI	SUMIDA		
Standard	SMD	DRxx		7E03xx~7E06xx CERxx-B HERxx CJDXx CHVRxx	CDRHxx CDRRxx	11mA~56A 200nH~120mH -55 to +165°C	Consumer Industry DC/DC Converter Noise Filtering
	THT	RLxx		72xx 73xx 76xx	RCHxx	11mA~56A 200nH~120mH -55 to +165°C	
Audio	SMD			7G08xx 7G09xx DBExx DBLxx DBKxx DER7052 DRP9210C		1.4A~50A 3.3µH~33µH 10W~300W -40 to +125°C	2 in 1, 4 in 1 Automotive Class-D Audio Home Audio Systems Industry Mobile Radio and Portable Consumer Products Sound Card Stereo System
	THT			7G1xx 7G2xx 7G31A 7Wxx 7X13A DLMxx DVKxx DVPxx		1.4A~50A 3.3µH~33µH 10W~300W -40 to +125°C	
High Reliability	SMD	DRAxx MPIAxx-V2 HCMAxx HCM1Axx	ETQP3M ETQP4M ETQP5M ETQP6M ETQP8M	HERxx-C CERxx-C CVExx-HA/C	CDRHxx/A CDRHxx/x125 CDRHxx/T150	100mA~118A 290nH~1mH -55 to +165°C	Automotive DC/DC Converter High Temperature Industrial Noise Filter
Metal Composite	SMD	HCxx HCM1xx MPIxx-V2 HCMxx-V2	ETQP3M ETQP4M ETQP5M ETQP6M ETQP8M		CDMCxx CDMTxx	130mA~118A 100nH~100µH -40 to +155°C	High-Current DC/DC Converter Noise Filter
Coupled Inductors	SMD	DRQxx DRAQxx		SQRxx SQRxxCA	CDRCH12D78B CLSxx	130mA~56A 300nH~4mH -40 to +125°C	Automotive DC/DC Converter (e.g. SEPIC, ZETA etc.)
High Power Inductors	SMD THT			CVExx CBHxx CBExx	CDEPxx CDPQxx	2.8A~100A 150nH~33µH -40 to +150°C	Flatwire Technology Automotive High-Current DC/DC Converter Bi-Directional DC/DC Converter Noise Filter

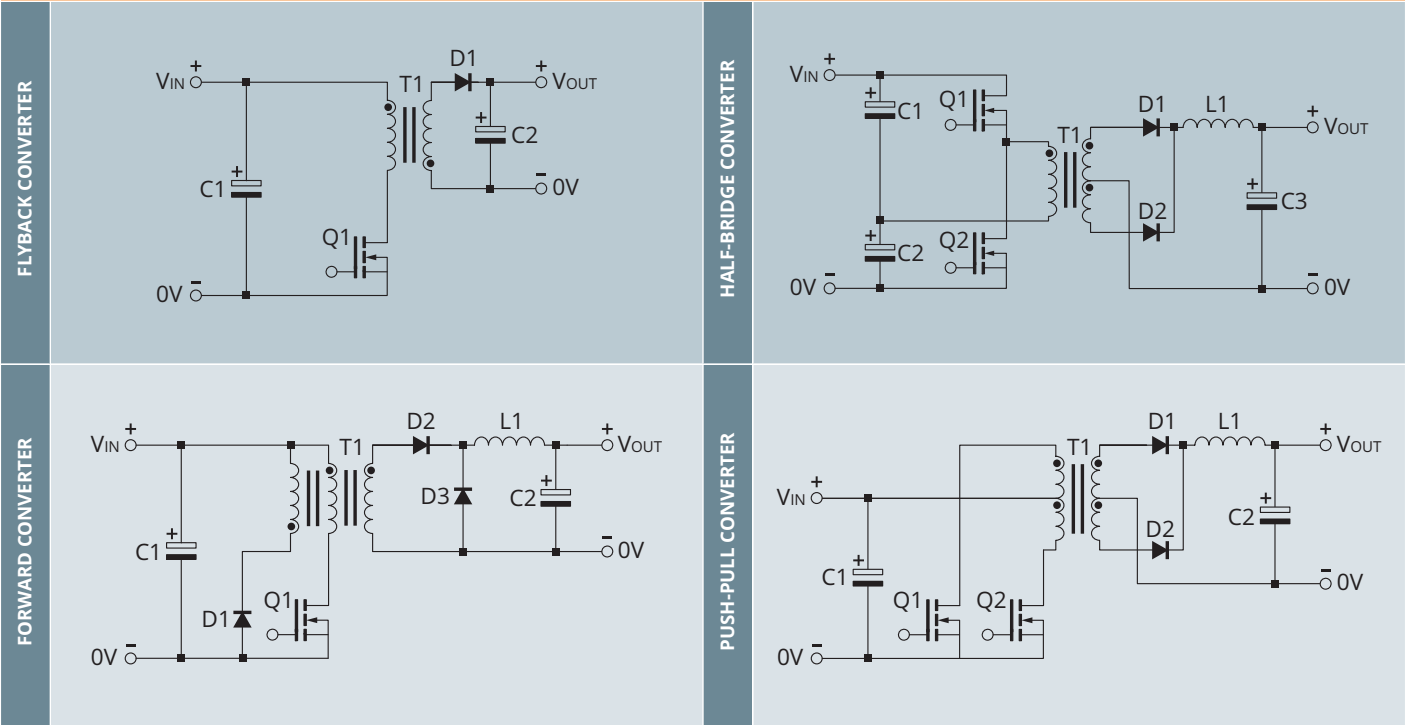
All series values have been summarized



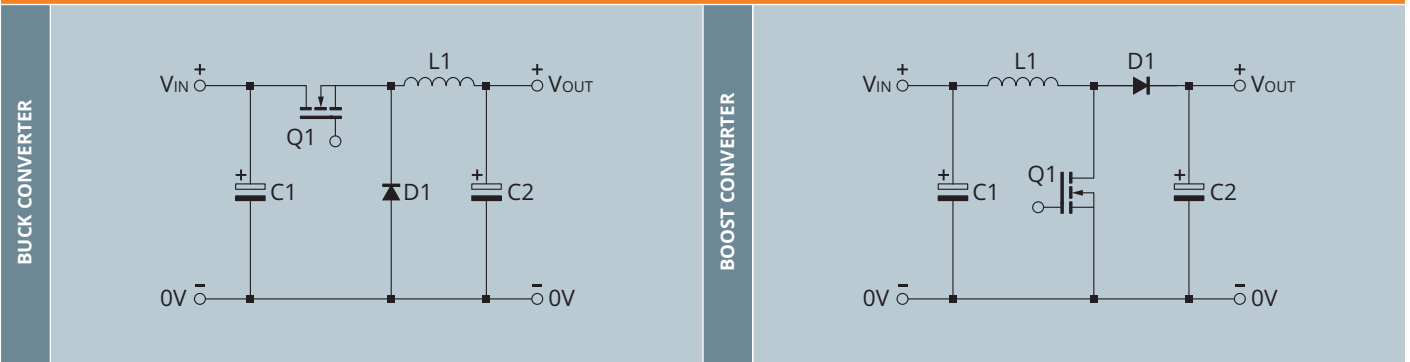
TRANSFORMERS



TRANSFORMERS FOR ISOLATED POWER SUPPLIES



CHOKES FOR NON-ISOLATED POWER SUPPLIES



Transformatoren

In den meisten Fällen sind Leistungstransformatoren individuell gestaltet und auf die Bedürfnisse der Kunden abgestimmt. Die Berücksichtigung aller erforderlichen Spezifikationen, Anforderungen und gesetzlichen Normen gehört zur sorgfältigen Planung dazu. Folgende Parameter helfen beim Gestalten eines Transformators*:

- Topologie (Sperrwandler, Push-Pull)
- Eingangsspannung (V), Ausgangsspannung (V), Ausgangsleistung (VA), Ausgangsstrom (A)
- Schaltfrequenz (kHz)

- Temperaturanstieg (°C)
- Abmessungen (mm) (LxBxH)
- Sicherheit, Isolierung und Systemanforderungen (zB IEC, UL, Funktions- oder Basisisolierung)

* Auf Wunsch kann eine Checkliste von CODICO bereitgestellt werden.

Transformers

In nearly all cases power transformers are custom-designed and need to be planned very carefully. To meet all required specifications and demands, following features* have to be taken into consideration:



- Topology (Flyback, Forward, Push-Pull)
- Input Voltage Range (V), Output Voltage (V), Output Power (VA), Output Current Range (A)
- Switching Frequency (kHz)
- Temperature Rise (°C)
- Mechanical Dimension (mm) (LxWxH)
- Safety and Insulation System Requirements

*On request, a checklist/design worksheet can be provided by CODICO.

FILTER CHOKES



TYPE		SUPPLIER					APPLICATION	
		EATON	ELYTONE	KEMET	SAGAMI	SUMIDA		
EXAMPLE		 EATON CMS3	 ELYTONE Customized	 KEMET SSR21	 SAGAMI TDG	 SUMIDA NFC1825		
Power Line		SMD	CMS1 CMS2 CMS3	ET-52300A ET-52600		TDG6029C (Audio) TQRxx	DP-F14	AC/DC DC/DC Automotive Power Supply
		THT		ET-52300 ET-52400 ET-52500 ET-52800 ET-52900	SSxx SSR21Hxx SSR21HSxx SCxx SCRxx SUxx		DP-xx LFxx NFCxx UUxx PFCxx	
FEATURES	Rated Current		0.75A~7A	0.1A~10A	100mA~40A	1.4A~7A	0.2A~16A	
	Inductance		4.5μH~1.3mH	0.5mH~30mH	250μH~138mH		3.3mH~112mH	
	DC Resistance		2.7mΩ~620mΩ	0.07Ω~8Ω	1.8mΩ~5.9Ω	2mΩ~40mΩ	0.027Ω~5.2Ω	
	Operating Temp.		-40 to +160°C	-40 to +130°C	-40 to +120°C	-40 to +125°C	-40 to +125°C	
Signal/Data Line		SMD	ACE1Vxxxx	ET-52700		TQRxx	CBMxx CPFCxx CRRxx CSxx	CAN-BUS IEEE1394 USB LVDS DVI HDMI Smart Entry System
		THT					SFCxx	
FEATURES	Rated Current		70mA~400mA	4A~7A		1.4A~5.6A	0.2A~6A	
	Impedance		90Ω~50kΩ	250Ω~550Ω		100Ω~1kΩ	100Ω~1000Ω	
	DC Resistance		0.3Ω~4.8Ω	0.016Ω~0.020Ω		3mΩ~40mΩ	0.0195Ω~5.32Ω	
	Operating Temp.		-40 to +105/125°C	-25 to +120°C		-40 to +125°C	-40v to +125°C	

All series values have been summarized

Filter Chokes

Während Funkentstörung bei AC/DC Konvertern hauptsächlich ein Thema am Eingang ist, muss man bei Invertern an Ein- und Ausgang mit unerwünschte symmetrische und asymmetrische Störungen rechnen.

Während Katalogtypen von Gleichtakt- und Gegentaktrosseln hauptsächlich auf 1-phasige Anwendungen abzielen, erfordern 3-phasige Applikationen oder besondere Lastströme häufig kundenspezifische Lösungen. Um das beste Filterresultat erzielen zu können, müssen sowohl Gleich-

takt- als auch Gegentaktrosseln entsprechend Ihrer Anforderungen designed werden. CODICO deckt ein weites Spektrum von Katalogtypen von EATON, KEMET, SAGAMI und SUMIDA ab, ebenso wie kundenspezifische und semi-kundenspezifische Lösungen von ELYTONE und KEMET.

Filter Chokes

While noise suppression is mainly a topic at the input in AC/DC converters, inverters need to handle undesirable symmetric and asymmetric interferences even



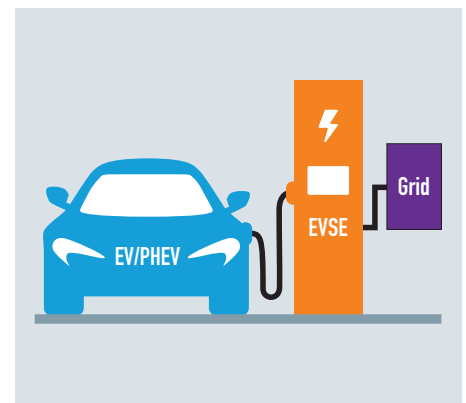
at input and output. Whilst catalogue Common and Differential Mode Chokes are mainly for 1-phase systems, 3-phase applications or particular load currents require customer specific chokes. To achieve the best filter result Common and Differential Mode Chokes need to be designed according to your requirements.

CODICO can cover a wide range of catalogue solutions from EATON, KEMET, SAGAMI and SUMIDA as well as customized and semi customized solutions from ELYTONE and KEMET.

NICHE MARKET



POWER LINE COUPLING TRANSFORMER					
ITEM NUMBER	YT-35935	YT-62218-1	YT-61083-1	YT-34784	YT-35636
Ratio (Tx:Line:Rx)	1:4:5	1:4:5	1:1:1	1:1:1	1:1:1
Isolation Voltage	4kV	6kV	500V	500V	4kV
Dimensions (WxDxH)	11x13.5x8	11x13.5x8	11x13.5x8	11x13.5x8	11x13.5x8
PCB Mounting	SMD	SMD	SMD	SMD	SMD
Operating Temp.	-40 to +125°C	-40 to +125°C	-40 to +125°C	-40 to +125°C	-40 to +125°C
For Coupling	to the mains	to the mains	to the CP wire	to the CP wire	to the CP wire
Additional Standards	AEC-Q200, IEC 60950-1	IEC 60950-1, IEC 62368-1	AEC-Q200	AEC-Q200	AEC-Q200 on request
Remarks/Features	Standard for: EVSE to Grid communication	EVSE to Grid communication with extended Hi-Pot requirements	Standard for: EV to EVSE communication	For EVs with Heavy Duty (25k Shocks in Z-Axis) requirements	EVSE to EV communication with extended Hi-Pot requirements



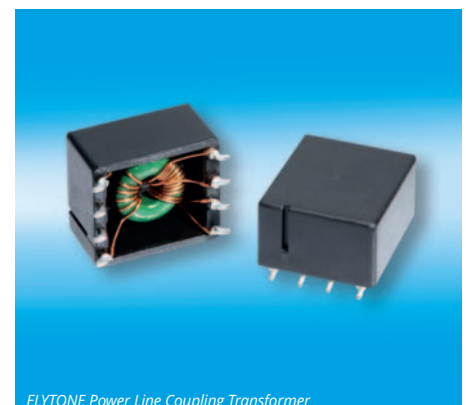
PLC Koppeltransformatoren

CODICO bietet ein weites Spektrum an kundenspezifischen PLC Koppeltransformatoren von ELYTONE. Einige haben, auf Grund der Beliebtheit, bereits einen ähnlichen Status wie Standardartikel erreicht. Die Transformatoren erfüllen die Anforderungen von HomePlug GreenPHY™ und anderen gängigen Standards auf Anfrage. Die Anwendungen reichen von Home Automation bis hin zur Kommunikation von Elektroautos mit der Ladestation während des Ladevorgangs.

PLC Coupling Transformer



CODICO offers a wide range of customized power line coupling transformers from ELYTONE. Some of them already received a similar status as standard items. The transformers comply with the requirements of HomePlug GreenPHY™ and other standards on request. Applications reach from Home Automation up to the communication of Electric Vehicles with their charging station while charging.



ELYTONE Power Line Coupling Transformer



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