



**CORNELL  
DUBILIER**

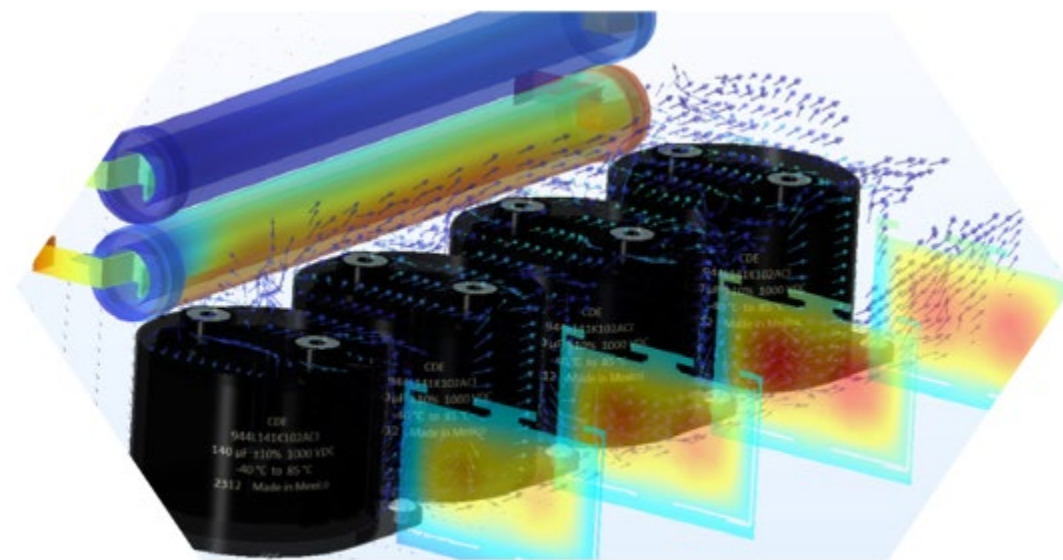


*High Current Capability with  
Low Inductance*

## **Series 944L Low Inductance DC Link Film Capacitors**

# 944L Series Film Capacitors

- Designed for DC Link applications in fast switching inverters, converters, and switching power supplies
- Unique construction provides lower inductance and higher ripple current compared to our 944U and competitive series



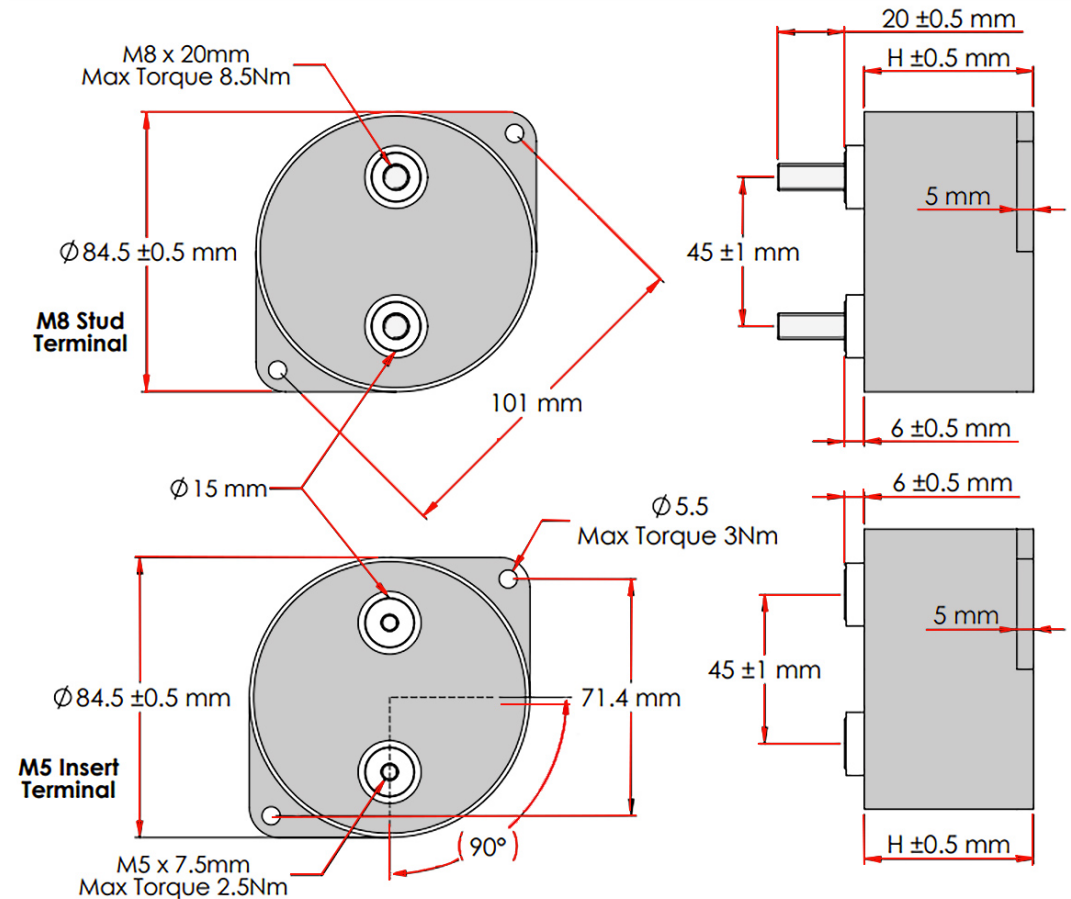
# 944U and 944L Comparisons



	944U	944L
Capacitance Range	33 $\mu$ F to 220 $\mu$ F	33 $\mu$ F to 220 $\mu$ F
Voltage Range	800 to 1400 Vdc	800 to 1400 Vdc
Inductance Range	20 to 40 nH	10 to 15 nH
Resonant Frequency Range	53 to 196 kHz	100 to 278 kHz
ESR Range	0.5 to 1.4 m $\Omega$	0.5 to 1.0 m $\Omega$
Ripple Current Range	60 to 70 Arms, @ 55°C Ta	65 to 90 Arms, @ 55°C Ta

# Mechanical Design Characteristics

- Low-profile, “hockey puck”, 84.5mm Dia. 40 to 64mm height (depending on value)
- Stud or insert tin-plated brass terminals
- Integral mounting flanges
- UL94V-0 rated flame-retardant plastic case and solid resin fill



# 944L Series, Standard Ratings

- Custom ratings available for production quantities
- Equal performance with either M8 stud or M5 insert terminal option
- 800 Vdc to 1400 Vdc standard ratings

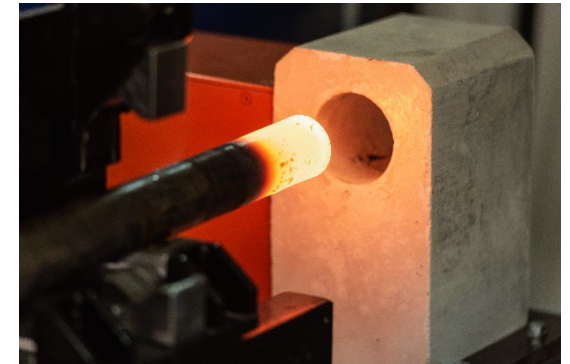
**NOTE:** Other ratings, sizes and performance specifications are available. Contact us.

Catalog Part Number	Cap (μF)	Voltage (Vdc)	H Height (mm)	Case Area (mm <sup>2</sup> )	Typical ESR 10kHz (mΩ)	Typical ESL (nH)	Current T <sub>A</sub> =55 °C I <sub>rms</sub> (A)	Thermal Resistance		Resonant Frequency (kHz)
								Θ <sub>cc</sub> (°C/W)	Θ <sub>ca</sub> (°C/W)	
944L101K801AA*	100	800	40	21835	0.5	10	90	1.9	3.8	160
944L161K801AB*	160	800	51	24755	0.6	12	84	2.1	3.4	115
944L221K801AC*	220	800	64	28206	0.7	15	78	2.4	3.0	88
944L660K102AA*	66	1000	40	21835	0.5	10	90	1.9	3.8	196
944L101K102AB*	100	1000	51	24755	0.7	12	77	2.1	3.4	146
944L141K102AC*	140	1000	64	28206	0.8	15	73	2.4	3.0	110
944L470K122AA*	47	1200	40	21835	0.6	10	82	1.9	3.8	233
944L700K122AB*	70	1200	51	24755	0.8	12	72	2.1	3.4	174
944L101K122AC*	100	1200	64	28206	0.9	15	69	2.4	3.0	130
944L330K142AA*	33	1400	40	21835	0.7	10	84	0.9	3.8	278
944L520K142AB*	52	1400	51	24755	0.9	12	68	2.1	3.4	202
944L700K142AC*	70	1400	64	28206	1.0	15	65	2.4	3.0	156

\* M = M8 Stud I = M5 Insert

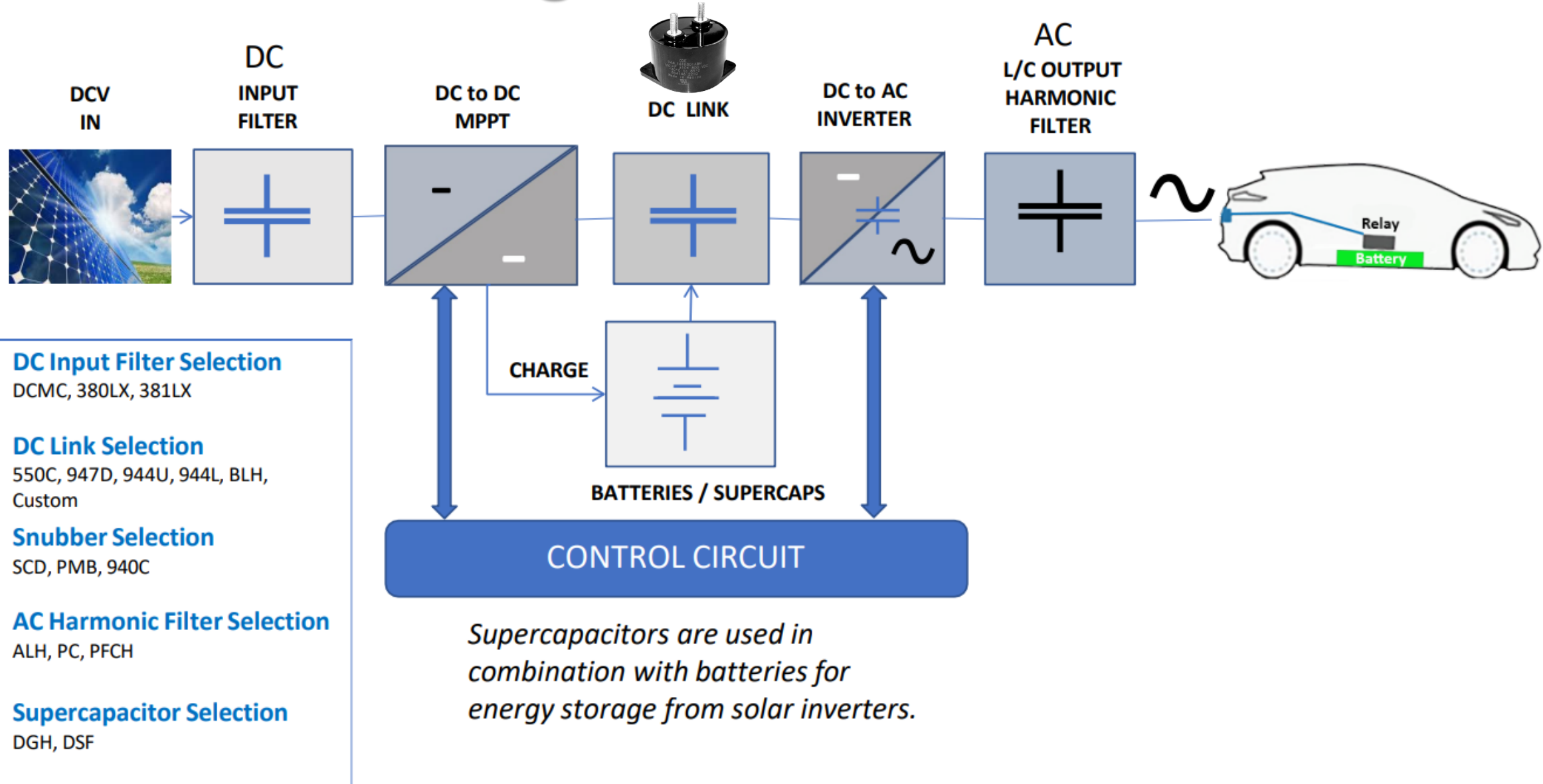
# Typical Applications

- DC Link for fast switching inverters and converters
- DC output filter
- Solar power inverters
- Electric vehicle chargers
  - Level 3: DC, fast charging
- Motor drives, esp. off-road, heavy equipment
- High-power lasers
- Induction heating

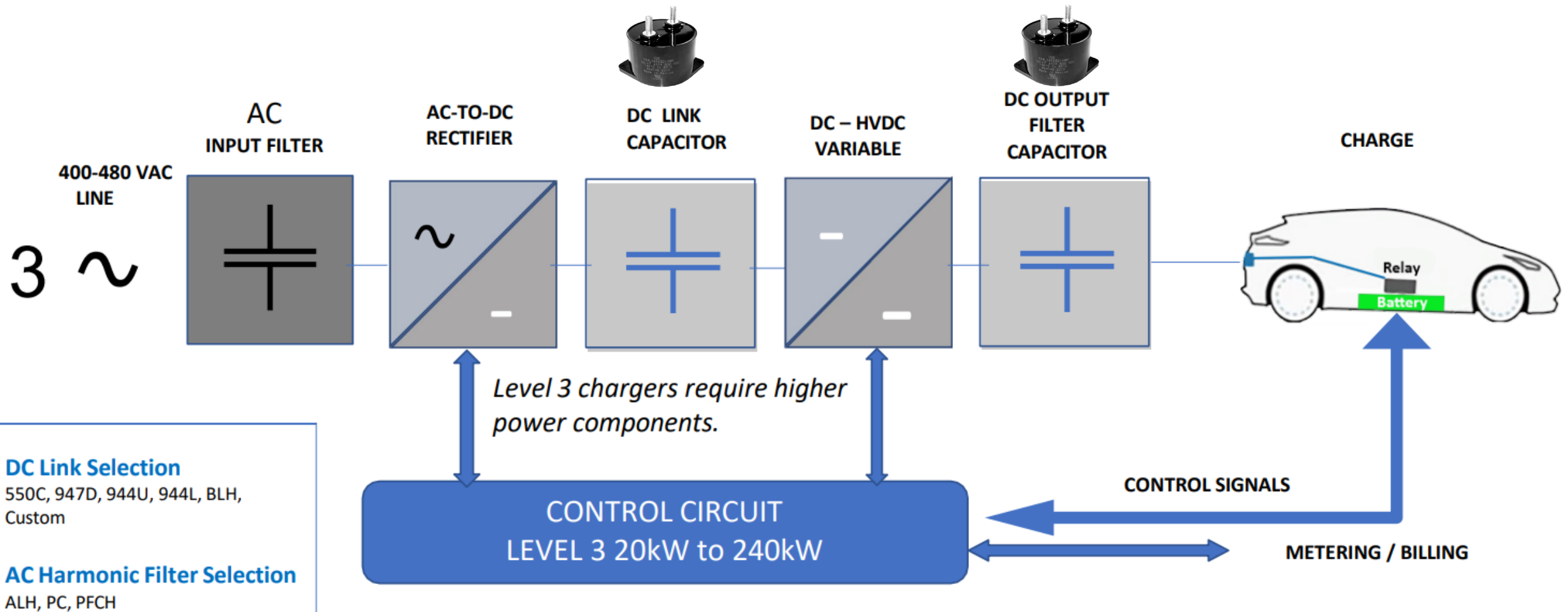




# Application Example: Solar Inverter for EV Charging, DC Link



# Application Example: EV Fast Charging Converter, DC Link and DC Output Filtering





# 944L Product Series Summary

- Low inductance DC Link capacitors designed for the next generation of fast switching inverters and converters
  - EV charging
  - Renewable energy inverters
  - Motor drives
  - Induction heating
  - High power lasers
- Low-profile form factor with high current terminations and built-in mounting flanges.

