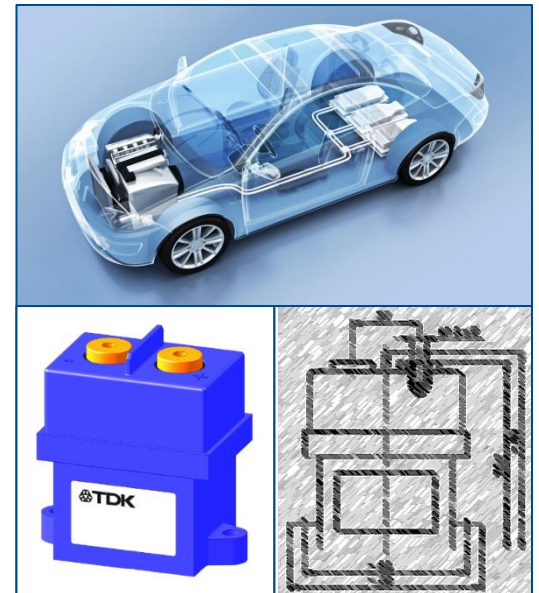


PPD Product Presentation

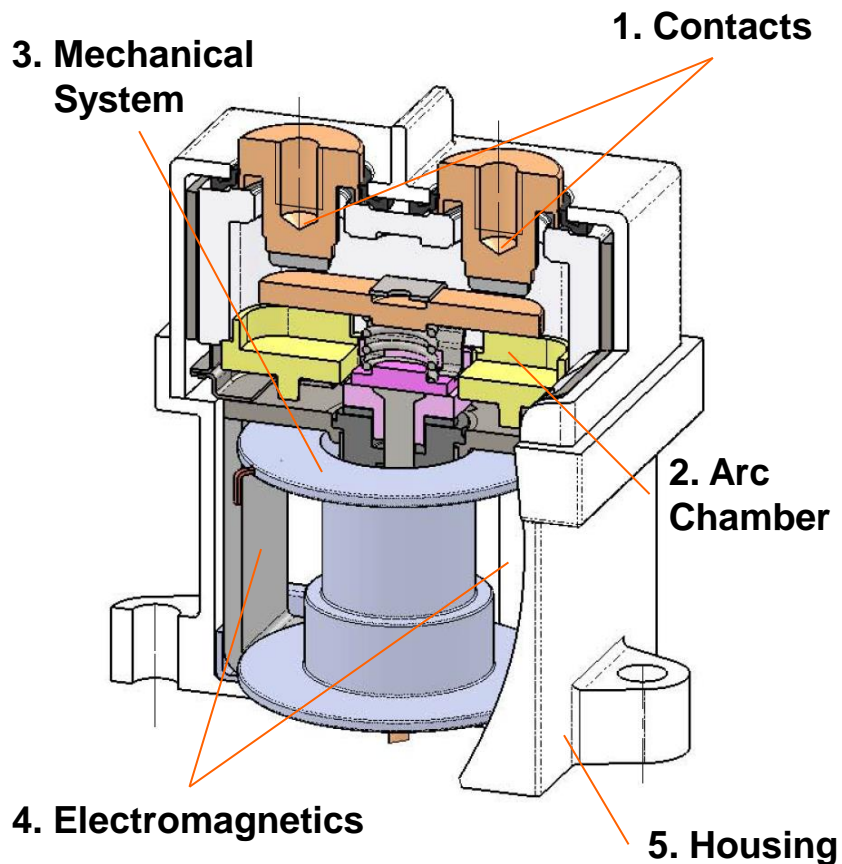
» HVC Series

Gas-Filled Contactor for
**Safety Disconnect
Applications**



Series Overview | HVC Series

BASIC CONSTRUCTION



FEATURES

- Robust Design
- Exceptional Electrical & Mechanical Reliability
- Gas-Filled & Hermetically Sealed
- Stable Performance Over Lifetime
- Customizable Connection Configuration
- RoHS Compatible

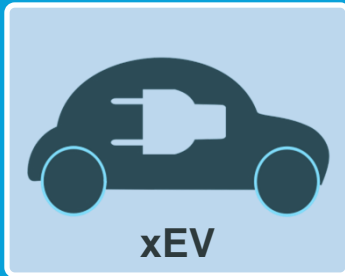
SPECIFICATIONS

Characteristics	Parameters
Coil Rated Voltage	12V _{DC}
Carry Current Rating (@85°C)	200A, 400V _{DC}
Max. Cut-Off Current (1 Cycle)	2,000A, 400V _{DC}
Coil Resistance	<50Ω
Coil Power Consumption	< 5W

Series Overview | DC Contactor Applications

MARKETS FOR GAS-FILLED CONTACTORS

HVC SERIES APPLICATIONS



- Electric, Hybrid, Fuel-Cell Vehicles, etc.
- Voltage: 300 to 750VDC
- Current: 10 to 400A (3kW to 120kW)
- Short Circuit: 15x to 30x current



- Photovoltaic, Wind, Fuel-Cell Cogeneration system, etc.
- Voltage: 300 to 800VDC
- Current: 200 to 1,000A (100kW to 1MW)
- Short Circuit: 10x to 50x current



- | | | |
|-------------------------|---------------|----------------|
| • Forklift | • Light Rails | • E-Motorcycle |
| • Energy Storage System | • Wheelchairs | • Construction |
| • UPS | • Marine | |
| • Medical Equipment | • Telecom | |

Series Overview | HVC200A-12 Parameters*

CONTACT & COIL RATING

Contact Rating	Parameters	Unit
Nominal Current	200	A
Temporary Overcurrent (15 min)	300	A
Temporary Overcurrent (2 min)	400	A
Contact Resistance	<1	mΩ
Maximum Cut-off Current @ 400V (1 Operation)	2000	A
Nominal Cut-off Current @ 400V (10 Operations 5x(+) & 5x(-))	400	A

Coil Rating	Parameters	Unit
Rated Voltage	12	V _{DC}
Operating Voltage Range	7 ... 18	V _{DC}
Pick-Up Voltage (max.)	7	V _{DC}
Drop-out Voltage (min.)	3	V _{DC}
Resistance	< 50	Ω
Power Consumption @ 12V	< 5	W

* Parameters measured at 25°C ambient temperature

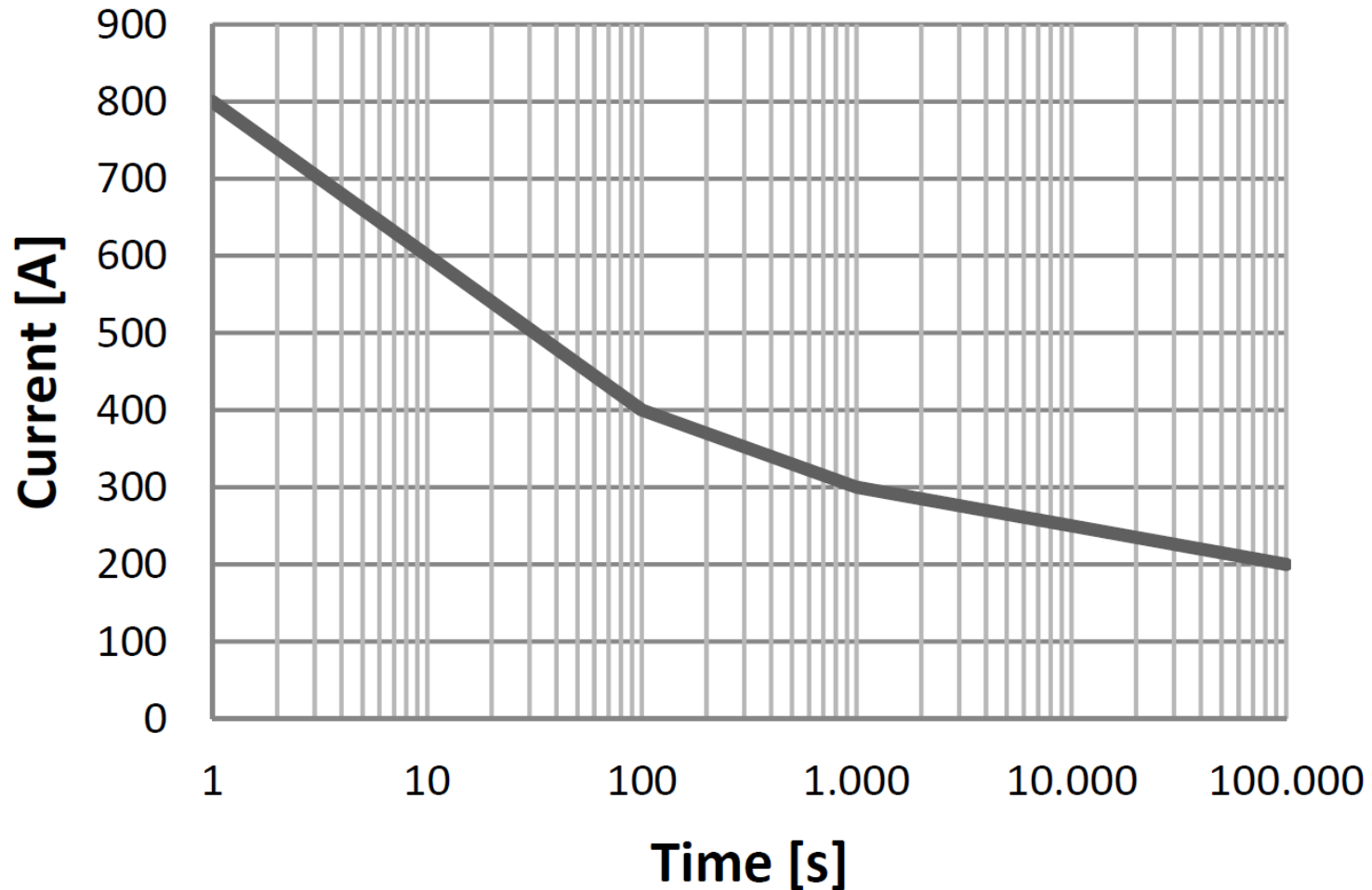
ELECTRICAL CHARACTERISTICS & LIFE

Electrical Characteristics	Parameters	Unit
Operating Time	- Make	< 40 ms
	- Break	< 20 ms
Insulation Resistance	- Contact to Contact	> 1 GΩ
	- Contact to Coil	> 1 GΩ
Dielectric Strength	- Contact to Contact	> 3,400 V _{AC}
	- Contact to Coil	> 3,400 V _{AC}

Expected Life	Parameters	Unit
Mechanical (Min.)	200,000	cycles
Electrical (Min.)	@ 10A, 400 V _{DC}	50,000 cycles
	@ 50A, 400 V _{DC}	20,000 cycles
	@ 100A, 400 V _{DC}	1,000 cycles
	@ 200A, 400 V _{DC}	50 cycles
	@ 410A, 400 V _{DC}	10 cycles
	@ 2000A, 400 V _{DC}	1 cycle

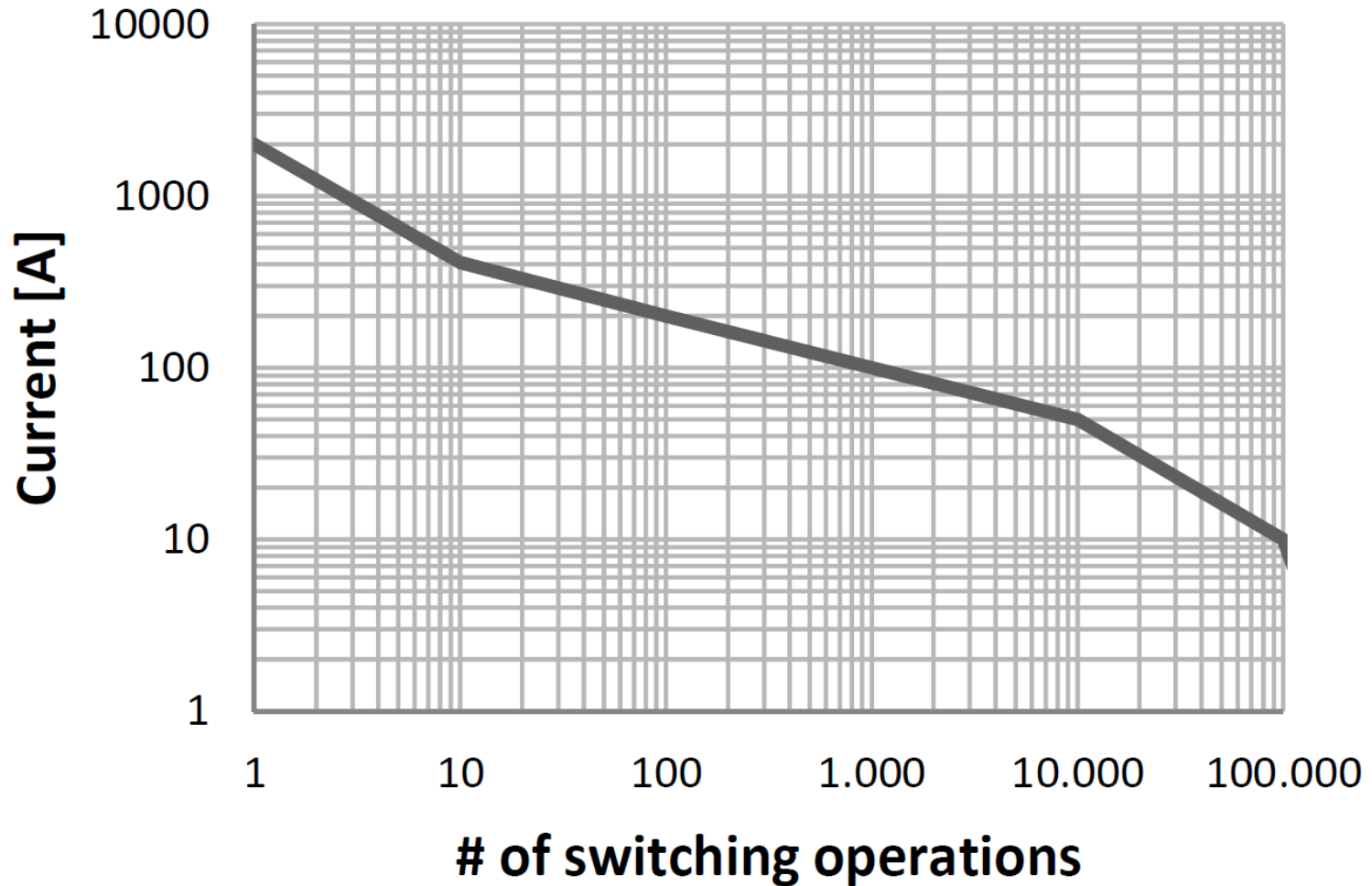
Series Overview | HVC200A-12 Reference Data

CURRENT HANDLING CAPABILITY @ 400V



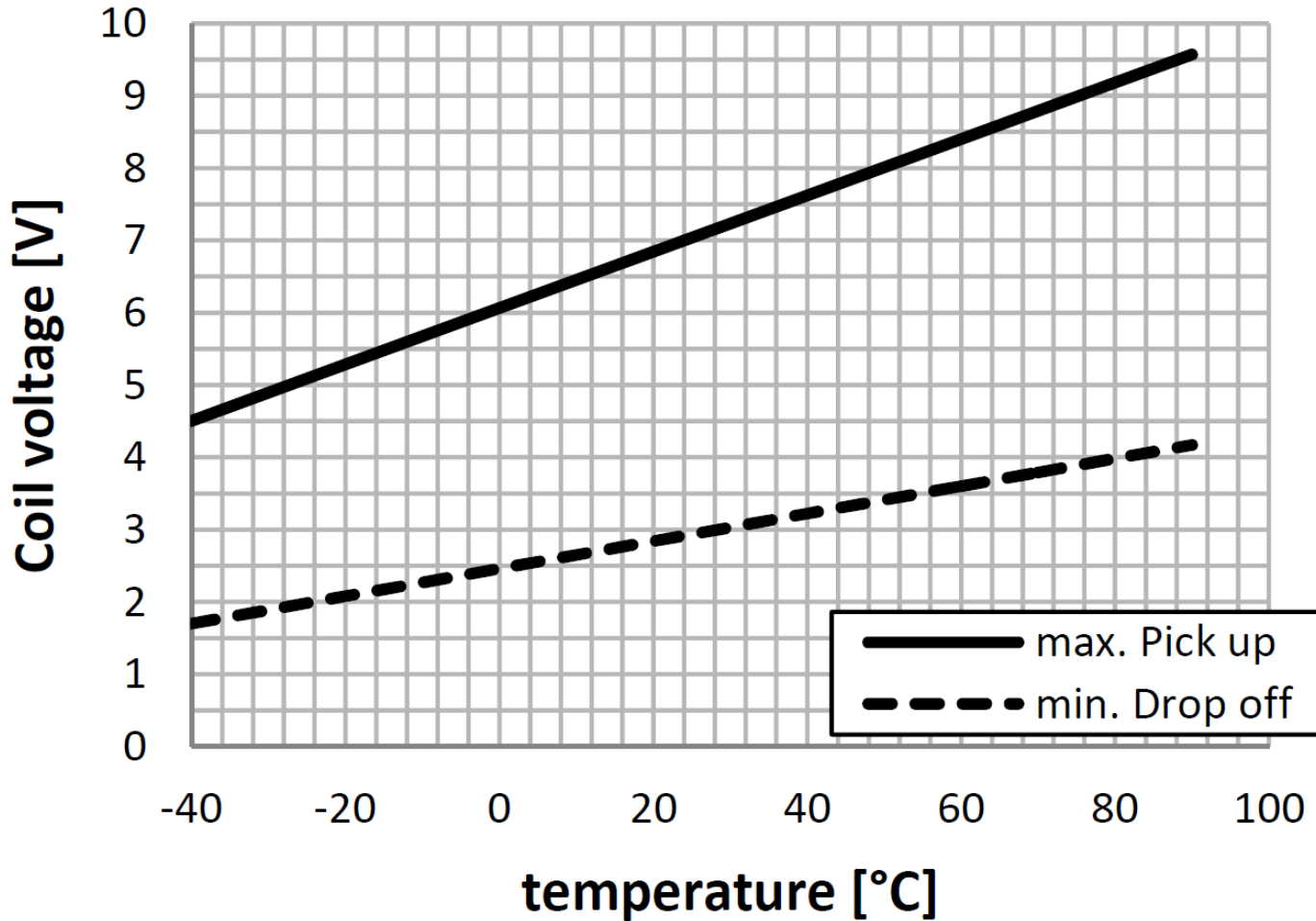
Series Overview | HVC200A-12 Reference Data

SWITCHING CYCLES @ 400V



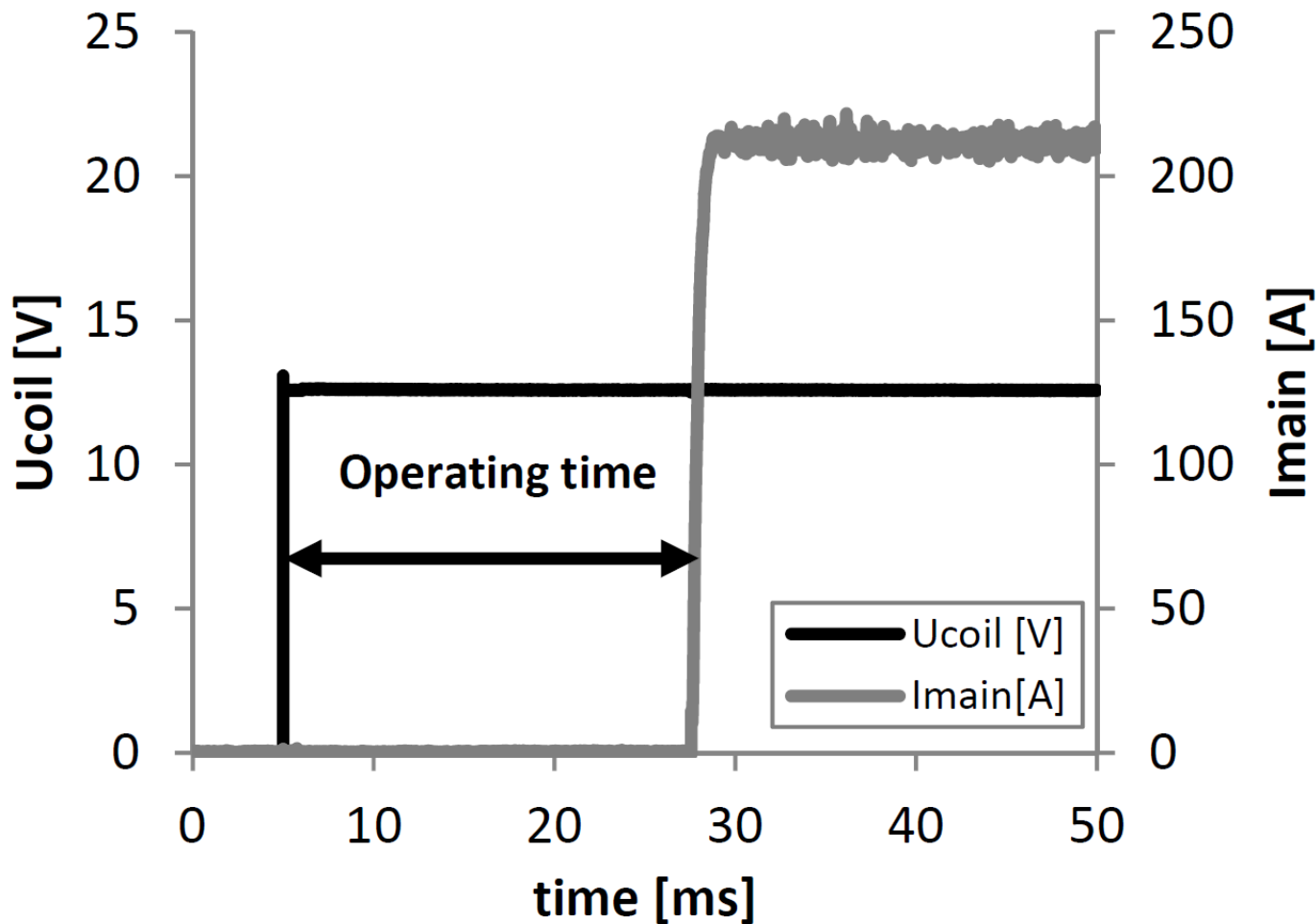
Series Overview | HVC200A-12 Reference Data

OPERATING VOLTAGE CHARACTERISTICS



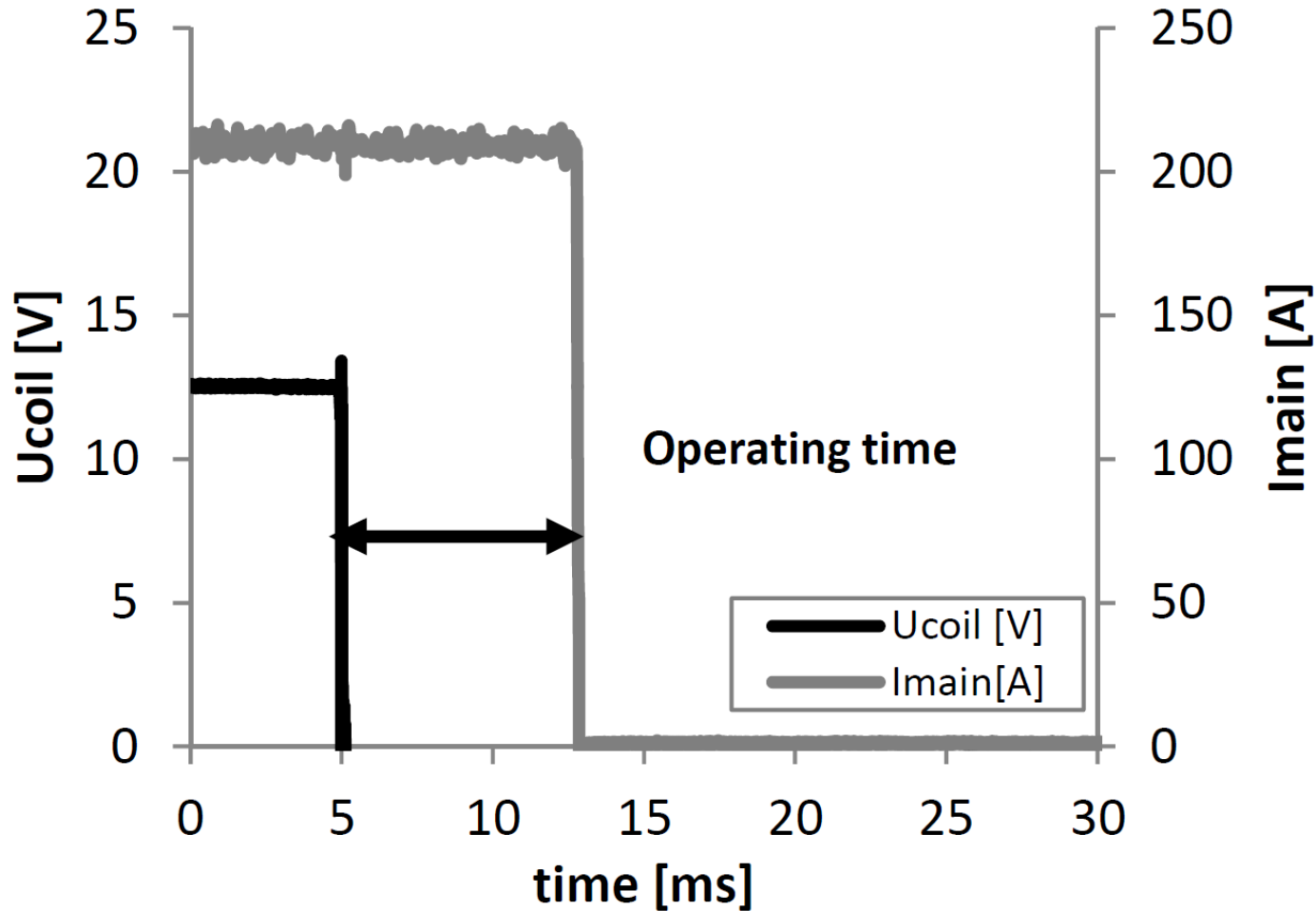
Series Overview | HVC200A-12 Reference Data

OPERATING TIME | MAKE



Series Overview | HVC200A-12 Reference Data

OPERATING TIME | BREAK





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