eddicy A Schaltbau Brand

Enabling Energy Storage

DC contactors overview

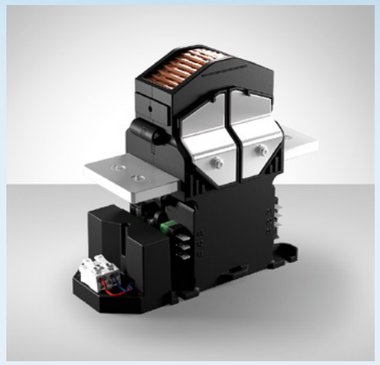
DC

Our energy storage contactor portfolio at a glance

Contactors up to 250 amps

Contactors up to 500 amps

Contactors up to 1,500 amps



Contactors up to 3,000 amps

Contactors up to 250 amps

	C294	C193	C295	AFS
				
Contact configuration	2x SPST-NO	1x SPST-NO	2x SPST-NO	1x SPST-NO
Use as:				
Main contactor **Pole-grounding contactor**	• / uni-directional	• / uni-directional	• / uni-directional	• / bi-directional • / uni-directional
Type of Voltage	DC, uni-directional	DC, uni-directional	DC, uni-directional	DC, bi- or uni-directional
Nominal voltage Un / **Rated op. voltage Ue**	U_n = 1,000 V	U_n = 1,000 V	U_n = 1,200 V	U_n = 80 V
Conv. thermal current I_{th} / **Rated operating current I_e**	40 A	50 A	120 A	I_{th} = 100 A / 150 A / 250 A
Pollution degree	PD3	PD3	PD3	PD3
Overvoltage category	OV3	OV3	OV3	OV3
Coil Voltage	24 / 36 / 72 / 110 V DC	24 / 36 / 72 / 110 V DC	24 / 36 / 48 / 60 / 72 / 84 / 96 / 110 V DC	12 ... 130 V DC
Coil suppression	Varistor	Varistor	Varistor	Diode, diode/resistor or varistor
Coil Power (Holding)	13 W	9 W	13.5 W	11 ... 16 W
Aux Contact(s)	1x / SPDT S870	1x / SPDT S870	2x / SPDT S870	1x max. / DPST
Mechanical	> 3.000.000 operating cycles	> 5.000.000 operating cycles	> 3.000.000 operating cycles	> 100.000 operating cycles
Operating temperature	-40° C ... +70° C	-40° C ... +70° C	-40° C ... +70° C	-25° C ... +40° C up to 60° C upon request
Standards	IEC 60947-4-1, IEC 60077-2	IEC 60947-4-1, IEC 60077-2	IEC 60947-4-1, IEC 60077-2	IEC 60947-4-1

Contactors up to 500 amps

	C195	C110B	C300	C303	C310
					
Contact configuration	1x SPST-NO	1x SPST-NO	1x SPST-NO	1x SPST-NO	1x SPST-NO
Use as:					
Main contactor **Pole-grounding contactor**	• / bi-directional • / uni-directional	• / bi-directional	• / bi-directional	• / bi-directional	• / bi-directional
Type of Voltage	DC, uni-/bi-directional	DC, bi-directional	DC, bi-directional	DC, bi-directional	DC, bi-directional
Nominal voltage Un / **Rated op. voltage Ue**	U_n = 1,500 V	U_e = 48 V	U_e = 1,000 V (1,500 V max. for occasional switching)	U_e = 1,000 V	U_e = 1,000 V
Conv. thermal current I_{th} / **Rated operating current I_e**	NO: 320 A / NC: 160 A	I_e = 80 / 120 / 200 / 300 / 400 A	I_{th} = 500 A	I_{th} = 350 / 500 A	I_{th} = 150 / 300 / 500 A
Pollution degree	PD3	PD3	PD3	PD3	PD3
Overvoltage category	OV3	OV3	OV3	OV3	OV3
Coil Voltage	24 / 36 / 48 / 60 / 72 / 84 / 96 / 110 V DC	24, 48 V DC	12 ... 24 V DC	12 / 12 ... 24 / 24 V DC	12 ... 24 / 48 V DC
Coil suppression	Varistor / Diode	---	PWM module	PWM module	PWM module
Coil Power (Holding)	13.5 W	5 ... 13 W	3.5 W	2 W	2.6 W
Aux Contact(s)	1x / SPDT S870	---	1x / NO	1x / SPDT S880	2x / SPDT S880
Mechanical	> 3.000.000 operating cycles	> 1.000.000 operating cycles	> 200.000 operating cycles	> 200.000 operating cycles	> 2.000.000 operating cycles
Operating temperature	-40° C ... +70° C	-25° C ... +40° C up to 60° C upon request	-40° C ... +70° C	-40° C ... +85° C	-40° C ... +85° C
Standards	IEC 60947-4-1, IEC 60077-2	IEC 60947-4-1	IEC 60947-4-1	IEC 60947-4-1	IEC 60947-4-1

Contactors up to 1,500 amps

	CT	C320	C305
			
Contact configuration	1 ... 2x SPST-NO	1x SPST-NO	1x SPST-NO
Use as:			
Main contactor / Pole-grounding contactor	• / bi-directional	• / bi-directional	• / bi-directional
Type of Voltage	DC, bi-directional	DC, bi-directional	DC, bi-directional
Nominal voltage Un / Rated op. voltage Ue	U_n = 1,500 / 3,000 V	U_e = 1,500 V	U_e = 1,500 V
Conv. thermal current I_{th}	I_{th} = 400 / 800 / 1,100 A	I_{th} = 1,500 A	I_{th} = 1,500 A
Pollution degree	PD3	PD3	PD2
Overvoltage category	OV2	OV3	OV2
Coil Voltage	24 / 36 / 48 / 72 / 110 V DC	24 V DC	12 / 24 V DC
Coil suppression	Double coil controller	PWM module	PWM module
Coil Power (Holding)	27 W	11 W	15 W
Aux Contact(s)	4x max. / SPDT 2x S870 + 2x S826 or 4x S826	4x max. / SPDT S870	1x / NO or NC
Mechanical	> 2.000.000 operating cycles	> 1.000.000 operating cycles	> 200.000 operating cycles
Temp Range	-40° C ... +70° C	-40° C ... +60° C	-40° C ... +85° C
Standards	IEC 60077-2	IEC 60947-1	IEC 60947-1

Contactors up to 3,000 amps

	CP	C330
		
Contact configuration	1x SPST-NO, SPST-NC or SPDT-DB	1x SPST-NO
Use as:		
Main contactor / Pole-grounding contactor	• / bi-directional	• / bi-directional
Type of Voltage	DC, bi-directional	DC, bi-directional
Nominal voltage Un / Rated op. voltage Ue	U_n = 1,500 / 3,000 V	U_e = 1,000 V
Conv. thermal current	600 / 800 / 1,000 / 1,200 / 1,500 / 2,000 A	2,000 A (3,000 A @ 95° C)
Pollution degree	PD3	PD2
Overvoltage category	OV3	OV2
Coil Voltage	24 / 36 ... 60 / 72 ... 110 V DC	24 V DC
Coil suppression	PWM module	PWM module
Coil Power (Holding)	10 W	14 W
Aux Contact(s)	4x max. / SPDT 2x S870 + 2x S826 or 4x S826	1x / SPDT S880
Mechanical	> 1.000.000 operating cycles	> 200.000 operating cycles
Temp Range	-40° C ... +70° C	-40° C ... +85° C
Standards	IEC 60077-2	IEC 60947-1

Modern DC contactors from Eddicy help make mobile and stationary energy storage safe and efficient. The compact yet powerful DC contactors disconnect the battery storage from inverters, which is essential for the safety of the system.

Our broad portfolio of switching devices from 250 amps up to 3,000 amps is suitable for small, medium and large battery storage systems. With an innovative main contact system, they have a high switching capacity under full load up to 10 megawatts. A low contact resistance increases the overall efficiency of energy transfer and minimizes heat generation. Furthermore, the bi-directionality of all Eddicy DC contactors reliably supports charging as well as discharging cycles.

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